

NDA-24300 ISSUE 1 STOCK # 200787

NEAX[®]2400 IPX

System Operations and Maintenance Manual

OCTOBER, 2000

NEC America, Inc.

LIABILITY DISCLAIMER

NEC America, Inc. reserves the right to change the specifications, functions, or features, at any time, without notice.

NEC America, Inc. has prepared this document for use by its employees and customers. The information contained herein is the property of NEC America, Inc. and shall not be reproduced without prior written approval from NEC America, Inc.

NEAX and D^{term} are registered trademarks of NEC Corporation.

Copyright 2000

NEC America, Inc.

Printed in U.S.A.

				ISSUE	E No.								ISSU	E No.			
PAGE NO.	1	2	3	4	5	6	7	8	PAGE NO.	1	2	3	4	5	6	7	8
i	1								23	1							
ii	1								24	1							
iii	1								25	1							
iv	1								26	1							
v	1								27	1							
vi	1								28	1							
vii	1								29	1							
viii	1								30	1							
ix	1								31	1							
х	1								32	1							
xi	1								33	1							
xii	1								34	1							
xiii	1								35	1							
xiv	1								36	1							
xv	1								37	1							
xvi	1								38	1							
1	1								39	1							
2	1								40	1							
3	1								41	1							
4	1								42	1							
5	1								43	1							
6	1								44	1							
7	1								45	1							
8	1								46	1							
9	1								47	1							
10	1								48	1							
11	1								49	1							
12	1								50	1							
13	1								51	1							
14	1								52	1							
15	1								53	1							
16	1								54	1							
17	1								55	1							
18	1								56	1							
19	1								57	1							
20	1								58	1							
21	1								59	1							
22	1								60	1							
IS	SUE 1				1	SSUE 2	2		ISS	SUE 3				15	SUE 4	ļ	
DATE C	CTOB	ER, 200	00	DATE					DATE				DATE				
IS	SUE 5				1	SSUE	6		ISS	SUE 7				15	SUE 8	3	
DATE				DATE					DATE				DATE				
NEAX240	0 IP>	<															
System O	perat	tions	and	Mair	tena	ance	Mar	nual							Revis	ion She	eet 1/9
															ND	A-24	1300

				ISSU	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
61	1								99	1							
62	1								100	1							
63	1								101	1							
64	1								102	1							
65	1								103	1							
66	1								104	1							
67	1								105	1							
68	1								106	1							
69	1								107	1							
70	1								108	1							
71	1								109	1							
72	1								110	1							
73	1								111	1							
74	1								112	1							
75	1								113	1							
76	1								114	1							
77	1								115	1							
78	1								116	1							
79	1								117	1							
80	1								118	1							
81	1								119	1							
82	1								120	1							
83	1								121	1							
84	1								122	1							
85	1								123	1							
86	1								124	1							
87	1								125	1							
88	1								126	1							
89	1								127	1							
90	1								128	1							
91	1								129	1							
92	1								130	1							
93	1								131	1							
94	1								132	1							
95	1								133	1							
96	1								134	1							
97	1								135	1							
98	1		<u> </u>						136	1						<u> </u>	
IS	SUE 1			P ·		SSUE	2		ISS	SUE 3			D ·	IS	SUE 4	ŀ	
DATE C		=R, 200	JÜ	DATE					DAFE				DATE				
IS	SUE 5			D + T -		SSUE	Ó		ISS	5UE 7			D 4 7 -	IS	SUE 8	5	
	0 10)	/		DATE					DAIE				DATE				
NEAX240 System O	perat	tions	and	Mair	ntena	ance	Mar	nual							Revisi	ion She	eet 2/9
1															ND	PA-24	1300

				ISSU	E No.				DAGEN				ISSU	E No.			
PAGE NO.	1	2	3	4	5	6	7	8	PAGE NO.	1	2	3	4	5	6	7	8
137	1								175	1							
138	1								176	1							
139	1								177	1							
140	1								178	1							
141	1								179	1							
142	1								180	1							
143	1								181	1							
144	1								182	1							
145	1								183	1							
146	1								184	1							
147	1								185	1							
148	1								186	1							
149	1								187	1							
150	1								188	1							
151	1								189	1							
152	1								190	1							
153	1								191	1							
154	1								192	1							
155	1								193	1							
156	1								194	1							
157	1								195	1							
158	1								196	1							
159	1								197	1							
160	1								198	1							
161	1								199	1							
162	1								200	1							
163	1								201	1							
164	1								202	1							
165	1								203	1							
166	1								204	1							
167	1								205	1							
168	1								206	1							
169	1								207	1							
170	1								208	1							
171	1								209	1							
172	1								210	1							
173	1								211	1							
174	1								212	1							
	ISSUE 1				1	SSUE	2		IS	SUE 3				IS	SUE 4	ŀ	
DATE	OCTOBE	ER, 200	00	DATE					DATE				DATE				
I	ISSUE 5				1	SSUE	6		IS	SUE 7				IS	SUE 8	3	
DATE				DATE					DATE				DATE				
NEAX24	00 IP>	<															
System (Operat	tions	and	Mair	ntena	ance	Mar	nual							Revis	ion She	et 3/9
															ND	A-24	300

				ISSU	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
213	1								251	1							
214	1								252	1							
215	1								253	1							
216	1								254	1							
217	1								255	1							
218	1								256	1							
219	1								257	1							
220	1								258	1							
221	1								259	1							
222	1								260	1							
223	1								261	1							
224	1								262	1							
225	1								263	1							
226	1								264	1							
227	1								265	1							
228	1								266	1							
229	1								267	1							
230	1								268	1							
231	1								269	1							
232	1								270	1							
233	1								271	1							
234	1								272	1							
235	1								273	1							
236	1								274	1							
237	1								275	1							
238	1								276	1							
239	1								277	1							
240	1								278	1							
241	1								279	1							
242	1								280	1							
243	1								281	1							
244	1								282	1							
245	1								283	1							
246	1								284	1							
247	1								285	1							
248	1								286	1							
249	1								287	1							
250	1								288	1							
IS	SUE 1				۱۱ ۱۱	SSUE 2	2		ISS	SUE 3				IS	SUE 4		
DATE C	OCTOBE	=R, 200	00	DATE	:				DATE				DATE		<u></u>		
IS	SUE 5				۱۱ ۱۱	SSUE 6	5		ISS	SUE 7				IS	SUE 8		
DATE		,		DATE	:				DATE				DATE				
NEAX240 System O	perat	tions	and	Maiı	ntena	ance	Mar	nual							Revisi	on She	et 4/9

				ISSUE	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
289	1								327	1							
290	1								328	1							
291	1								329	1							
292	1								330	1							
293	1								331	1							
294	1								332	1							
295	1								333	1							
296	1								334	1							
297	1								335	1							
298	1								336	1							
299	1								337	1							
300	1								338	1							
301	1								339	1							
302	1								340	1							
303	1								341	1							
304	1								342	1							
305	1								343	1							
306	1								344	1							
307	1								345	1							
308	1								346	1							
309	1								347	1							
211	1								348	1							
212	1								349	1							
312	1								351	1							
31/	1								352	1							
315	1								353	1							
316	1								354	1							
317	1								355	1							
318	1								356	1							
319	1								357	1							
320	1								358	1							
321	1								359	1							
322	1				_				360	1							
323	1								361	1							
324	1								362	1							
325	1								363	1							
326	1								364	1	1				1		
IS	SUE 1				l:	SSUE	2		ISS	SUE 3				IS	SUE 4	ŀ	
DATE C	ОСТОВЕ	ER, 20	00	DATE					DATE				DATE				
IS	SUE 5				İ	SSUE (6		ISS	SUE 7				IS	SUE 8	}	
DATE				DATE					DATE				DATE				
NEAX240	0 IP>	<															
System O	perat	tions	and	Mair	ntena	ance	Mar	nual							Revis	ion She	eet 5/9
															ND	A-24	300

				ISSU	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
365	1								403	1							
366	1								404	1							
367	1								405	1							
368	1								406	1							
369	1								407	1							
370	1								408	1							
371	1								409	1							
372	1								410	1							
373	1								411	1							
374	1								412	1							
375	1								413	1							
3/6	1								414	1							
377	1								415	1							
3/8	1								410	1							
379	1								417	1							
291	1								418	1							
382	1								419	1							
383	1								420	1							
384	1								422	1							
385	1								423	1							
386	1								424	1							
387	1								425	1							
388	1								426	1							
389	1								427	1							
390	1								428	1							
391	1								429	1							
392	1								430	1							
393	1								431	1							
394	1								432	1							
395	1								433	1							
396	1								434	1							
397	1								435	1							
398	1								436	1							
399	1								437	1							
400	1								438	1							
401	1								439	1							
402	1								440	1							
15	SSUE 1				18	SSUE 2	2		ISS	SUE 3				IS	SUE 4		
DATE (OCTOBE	ER, 200	00	DATE					DATE				DATE				
15	SSUE 5				18	SSUE 6	5		ISS	SUE 7				IS	SUE 8		
	<u>, , , , , , , , , , , , , , , , , , , </u>	,		DATE	:				DAFE				DATE				
NEAX240 System C	Derat	tions	and	Maiı	ntena	ance	Mar	nual							Revisi	on She	et 6/9

				ISSUE	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
441	1								479	1							
442	1								480	1							
443	1								481	1							
444	1								482	1							
445	1								483	1							
446	1								484	1							
447	1								485	1							
448	1								486	1							
449	1								487	1							
450	1								488	1							
451	1								489	1							
452	1								490	1		_					
455	1								491	1							
455	1								493	1							
456	1								494	1							
457	1								495	1							
458	1								496	1							
459	1								497	1							
460	1								498	1							
461	1								499	1			1				
462	1								500	1							
463	1								501	1							
464	1								502	1							
465	1								503	1							
466	1								504	1							
467	1								505	1							
468	1								506	1							
469	1								507	1							
470	1								508	1							
471	1								509	1							
472	1								510	1							
473	1								511	1							
474	1								512	1							
475	1								513	1							
476	1								514	1							
477	1								515	1							
4/0					14		2		100					10			
		-R 200	0	DATE		500L /							DATE		001 4		
IS	SUE 5	, 200			!:	SSUE	6		188	UE 7			2.116	1.5	SUE 8		
DATE				DATE			-		DATE				DATE				
NEAX240	0 IP>	<							<u> </u>					- 1			
System O	perat	tions	and	Mair	tena	ance	Mar	nual							Revisi	on She	eet 7/9
															ND	A-24	300

DAGEN				ISSU	E No.								ISSU	E No.			
PAGE NO.	1	2	3	4	5	6	7	8	PAGE NO.	1	2	3	4	5	6	7	8
517	1								555	1							
518	1								556	1							
519	1								557	1							
520	1								558	1							
521	1								559	1							
522	1								560	1							
523	1								561	1							
524	1								562	1							
525	1								563	1							
526	1								564	1							
527	1								565	1							
528	1								566	1							
529	1								567	1							
530	1								568	1							
531	1								569	1							
532	1								570	1							
533	1								571	1							
534	1								572	1							
535	1								573	1							
536	1								574	1							
537	1								575	1							
538	1								576	1							
539	1								577	1							
540	1								578	1							
541	1								579	1							
542	1								580	1							
543	1								581	1							
544	1								582	1							
545	1								583	1							
546	1								584	1							
547	1								585	1							
548	1								586	1							
549	1								587	1							
550	1								588	1							
551	1								589	1							
552	1								590	1							
553	1								591	1							
554			<u>Г</u>		14		 -		592								
		=D 204	00		13 :	SOUE	<u> </u>			50E 3					50E 4	•	
		_17, 200	00	DATE	·	20115 /	3						DATE				
	000E 0				:	530E (J			JUE /						•	
	יםו חר	/		DAIE	•				DATE				DATE				
System (Operat	tions	and	Maiı	ntena	ance	Mar	nual							Revisi	ion She	et 8/9

				ISSU	E No.								ISSU	E No.			
PAGE No.	1	2	3	4	5	6	7	8	PAGE No.	1	2	3	4	5	6	7	8
593	1																
594	1																
595	1																
596	1																
597	1																
598	1																
599	1																
600	1																
601	1																
602	1																
603	1																
604	1																
605	1																
606	1																
607	1																
608	1																
609	1																
610	1																
611	1																
612	1																
613	1																
614	1																
615	1																
616	1																
617	1																
618	1																
619	1																
620	1																
621	1																
622	1																
623	1																
624	1																
620	1																
627	1																
629	1																
620	1																
630	1																
19	SUF 1				19	SSUE 1	>		19	SUF 3		l		1.5			
DATE		ER. 200	20	DATE		2001 /			DATE	0020			DATE				
19	SUF 5	, 200		57 G L	· !!	SSUF 6	3		19	SUF 7				1.5	SUF 8		
DATE	552 0			DATE			-		DATE	5027			DATE	.0	552 0		
NEAX240	0 IP>	<							<u> </u>			1		1			
System C	perat	tions	and	Mair	ntena	ance	Mar	nual							Revisi	on She A-24	et 9/9

NEAX2400 IPX System Operations and Maintenance Manual

TABLE OF CONTENTS

D	20	0
	ay	c

LIST OF FIGURES	< /
CHAPTER 1 INTRODUCTION	1
CHAPTER 2 SYSTEM MAINTENANCE OUTLINE	3
1. GENERAL 1.1 Purpose 1.2 Administrative Management Procedures 1.3 Summary of This Manual's Contents	s 3 3 4
2. BASIC KNOWLEDGE 4 2.1 System Configuration 5 2.2 Line Equipment Numbers (LENS) 9 2.2.1 Module Group 9 2.2.2 Unit 10 2.2.3 Group 11 2.2.4 Level 12 2.3 Local Partition (LP) Number 12 2.4 System Messages 14 2.5 Fault Detecting Function 16 2.6 Range of Faults Specification. 18 2.7 Explanation of Terms 26	1 2 3 1 5 8 5
3. HOW TO READ PRECAUTIONS, DIAGNOSTIC, AND FAULT REPAIR INFORMATION 26 3.1 Precaution about Diagnostic Procedure/Fault Repair Procedure. 26 3.2 How to Follow Diagnostic Procedure/Fault Repair Procedure. 30	։ Տ
4. REPORTING FAULT TO NEC. 33 4.1 Fault Reporting Method 33 4.2 Forwarding Faulty Circuit Card Method 35	335
CHAPTER 3SYSTEM MESSAGES370-CReset Interrupt420-DCPU Clock Down440-EC-Level Infinite Loop450-FMemory Failure470-GB1-Level Infinite Loop (Permanent)450-HB1-Level Infinite Loop (Temporary)50	7215790

Page

0-1	Mate CPU Failure	51
0-J	Abnormal Interrupt	52
1-A	Both TSW Failure (Permanent)	53
1-B	TSW Failure (Permanent)	54
1-C	Both TSW Write Failure	55
1-D	TSW Write Failure	56
1-E	Both TSW Clock Failure	57
1-F	TSW Clock Failure	58
1-0	Both PLO Failure	59
1-P	PLO Failure	61
1-S	Module Group Down Failure	63
1-T	TSW ACT Change Report	64
1-U	DLKC Data Transfer Failure (Permanent)	66
1-V	DLKC Data Transfer Failure (Temporary)	67
1-W	PLO Restore	68
3-B	C-I evel Infinite Loop (Permanent)	69
3-0	C-Level Infinite Loop (Temporary)	70
3-D	Lock-In Failure (Permanent)	71
3-E	Lock-Un Failure (Temporany)	72
3-E		73
3.0	Ground Epiluro	73
3-G 2 L	Digital Line Warning	74
S-⊓		70
3-1		70
3-J		71
4-0		78
4-D		79
4-Q		80
4-S	MUX Ready Failure	81
4-T	Both MUX Ready Failure	82
4-0	PCI Card Failure	83
4-V	PCI Card Failure Recovered	85
6-A	System Failure	87
6-B	RGU & Howler Failure	88
6-C	Line Load Control Start	89
6-D	Line Load Control Stop	90
6-H	Bad Call Notification	91
6-I	STA-Test Connection Data	96
6-J	Emergency Call	99
6-L	Emergency Control Start	100
6-M	Emergency Control Stop	101
6-N	Abnormal Call Duration Data	102
6-O	SMDR Output Buffer Overflow Alarm.	105
6-P	SMDR Output Buffer Overflow Release	108
7-A	System Initialize With Data Load	109
7-B	System Initialize	111
7-C	CPU MBR Key Turn ON	112
7-D	CPU MBR Key Turn OFF	113
7-F	TSW MBR Key Turn ON	114
7-F	TSW MBR Key Turn OFF	115

Page

7-G	TSW PLO Key Turn ON.	116
7-H	TSW PLO Key Turn OFF	117
7-I	ALMC MB Key Turn ON	118
7-J	ALMC MB Key Turn OFF	119
7-K	PM MB Key Turn ON	120
7-L	PM MB Key Turn OFF	121
7-M	NCU MB Key Turn ON.	122
7-N	NCU MB Key Turn OFF	123
7-0	Cyclic Diagnosis Normal	124
7-P	Cyclic Diagnosis Information (Error Detected)	134
7-U	PLO MB Key Turn ON	156
7-V	PLO MB Key Turn OFF	157
13-A	CCH Clock Failure	158
13-B	CCH C-Level Infinite Loop Failure (Permanent)	159
13-C	CCH C-Level Infinite Loop Failure (Temporary).	160
13-D	CCH Lock-Up Failure (Permanent)	161
13-E	CCH Lock-Up Failure (Temporary)	162
13-F	CCH B-Level Infinite Loop Failure (Permanent).	163
13-G	CCH B-Level Infinite Loop Failure (Temporary)	164
13-H	CCS Link Failure (Permanent).	165
13-I	CCS Link Failure (Temporary)	167
13-J	Restoration From CCS Link Failure	169
13-K	CCH Reset Interrupt Failure.	170
13-N	Digital Line Warning.	171
13-O	Digital Line Failure	172
13-P	Digital Line Restore	173
13-Q	DRU Battery Operation	174
13-R	DRU Line Operation.	175
13-Z	Power Failure	176
15-A	VPS Failure (Temporary)	177
15-B	VPS Failure (Permanent)	178
15-C	VPS Restore	179
16-A	Inside Trunk All Busy	180
16-B	Virtual Tie Line Set Report.	182
16-C	Virtual Tie Line Cancel Report	183
16-E	Virtual Tie Line Set Time Out	184
16-F	Sender Start Time Out	187
16-K	I/O Port Line OFF	194
16-L	I/O Port Line Restore	195
16-M	Hard Clock Failure	196
16-N	Hard Clock Restore	197
16-T	IOC Failure (Temporary)	198
16-U	IOC Failure (Permanent)	199
16-X	Station Exchanged Report	200
17-A	CCH MBR Key Turn ON	203
17-B	CCH MBR Key Turn OFF	204
17-C	CCH MB Key Turn ON	205
17-D	CCH MB Key Turn OFF	206
17-H	Day/Night Change Information	207

Page

17- 17- 17- 23- 23- 23- 23- 23- 23-	 O IOC MB Key Turn ON P IOC MB Key Turn OFF. Q IOC MBR Key Turn ON R IOC MBR Key Turn OFF P DCH Back-Up Automatic Change Start/End Q DCH Back-Up Manual Change Start/End Y MUX Clock Failure. Z Both MUX Clock Failure. 	209 210 211 212 213 215 217 218
26-	N MAT Log.	219
20- 26-	V I AN Interface Error Report	220
26-	W LAN Interface Release Report	228
33-	A MUX Clock Restore	230
33-	B SDT Alarm Warning	231
33-	D SDT Alarm Restore	235
33-	E SDT Interface Change Notify	237
СНАРТ	ER 4 UNIT/CIRCUIT CARD REPLACEMENT PROCEDURE	239
1.	LPM ACCOMMODATING UNIT/CIRCUIT CARD REPLACEMENT PROCEDURE	239
	1.2 Circuit Card Mounting Face Layout	239
	1.3 Operating Procedures	241
	1.3.1 ČPR Replacement Procedure	242
	1.3.2 EMA Card Replacement Procedure	258
	1.3.3 IOC Card Replacement Procedure	261
	1.3.4 Power Supply Unit Replacement Procedure	263
-		265
2.	TSWM ACCOMMODATING CIRCUIT CARD REPLACEMENT PROCEDURE	266
	2.1 Precaution	266
	2.3 Operating Procedures	267
	2.3.1 GT Card Replacement Procedure.	268
	2.3.2 TSW Card Replacement Procedure	272
	2.3.3 DLKC Card Replacement Procedure	277
	2.3.4 PLO Card Replacement Procedure.	279
	2.3.5 PWR SW Card Replacement Procedure	281
0		202
3.	2.1 Proception	283
	32 Circuit Card Mounting Face Layout	283
	3.3 Operating Procedures	284
	3.3.1 LC/TRK Circuit Card Replacement Procedure	285
	3.3.2 MUX Card Replacement Procedure	286
	3.3.3 SDT Card Replacement Procedure.	289
	3.3.4 PWK Card Replacement Procedure	294
4.	FAN UNIT REPLACEMENT	296
5.	CPR COOLING FAN REPLACEMENT	301

Page

6.	FUSE REPLACEMENT	304
СНАРТ	ER 5 FAULT REPAIR PROCEDURES	309
1.	LINE FAULT. 1.1 Check Point 1.2 Line Control 1.3 Line Fault - When Dial Tone (DT) Cannot Be Heard 1.4 Line Fault - When Dialing Results in Wrong Connection 1.5 Line Fault - When Bell Does Not Ring 1.6 When Call Cannot Be Answered and Speech Cannot Be Made 1.7 D ^{term} Fault	311 312 312 313 315 316 317 318
2.	TRUNK FAULT 2.1 Check Point 2.2 Trunk Control 2.3 Trunk (ORT, SND, CFT) Fault 2.4 Trunk (COT, TLT, DTI) Fault	320 320 323 324 325
3.	ATTCON/DESKCON FAULT. 3.1 Check Point 3.2 ATTCON/DESKCON Control. 3.3 ATTCON/DESKCON Fault.	329 329 329 331
4.	 UNIT FAULT 4.1 Check Point 4.2 Unit Fault - Fault Related to Speech 4.3 Unit Fault - When Dial Tone (DT) Cannot Be Heard 4.4 Unit Fault - ACT-Side MUX Card Is Faulty and System Has Changed Over 	333 334 336 340 344
5.	SPEECH PATH (TSW) SYSTEM FAULT5.1Check Point5.2Speech Path System Fault - Fault Related to Speech5.3Speech Path System Fault - When Dial Tone (DT) Cannot Be Heard5.4Speech Path System Fault - STBY Side Has Become Faulty	346 346 349 353 354
6.	CONTROL SYSTEM FAULT. 6.1 Check Point . 6.2 Control System Fault - Fault Occurs Intermittently. 6.3 Control System Fault - STBY Side Is Faulty .	356 356 359 361
7.	ALARM INDICATION FAULT. 7.1 Check Point 7.2 Fault of Alarm Indicating Panel 7.3 Fault That Cannot Be Detected	364 364 364 366
8.	POWER SUPPLY FAULT8.1Check Point8.2Fuse Blown Fault8.3Circuit Breaker OFF Fault in PWR Supply8.4Fault of Alarm Lamps on PWR Supply	367 367 371 372 373
9.	FAN UNIT FAULT 9.1 Check Point 9.2 Fan Unit Fault.	374 374 375

Page

10.	TONE FAULT. 10.1 Check Point	376 376
	10.2 Tone Fault	377
11.	SYSTEM DOWN FAULT	379
	11.1 When Cause for Fault Cannot Be Identified	380
10		302
12.	COMMON CHANNEL INTEROFFICE SIGNALING (CCIS) LINE FAULT	383
	12.2 CCIS Line Control	383
	12.3 Specific CCH/CCT Card Is Faulty	384
	12.4 Fault of CCH, DTI and Related Flat Cable	385
13.	INTEGRATED SERVICE DIGITAL NETWORK (ISDN) LINE FAULT	386
	13.1 Check Point	386
	13.2 ISDN Line Control	386
	13.3 Specific DCH/PRT Card IS Faulty	387
1.1		200
14.		309
СНАРТ	ER 6 SYSTEM OPERATIONS	391
1.	ALARM INDICATIONS	391
	1.1 Kinds of Alarm Indications	391
	1.2 How to Stop Alarm Indications	392
	1.3 Alarm Indications on TOPU	392
		393
2.	COLLECTION OF SYSTEM MESSAGES	393
	2.1 Automatic Printout to System Message Dedicated Printer	393
З		394
0.	3.1 Indicating Method.	394
	3.2 Recovery Procedure	394
4.	LINE LOAD CONTROL	396
5.		400
6.		401
•	6.1 Make-Busy/Make-Busy Cancel of Station and Data Terminal	401
	6.2 Class Change and Number Change of Station and Data Terminal	402
	6.3 Make-Busy/Make-Busy Cancel of C.O. Line/Tie Line	402
	6.4 Line Management Commands	403
7.	STATION MESSAGE DETAIL RECORDING SYSTEM (SMDR)	403
	7.1 Hansmission Data to SWDK Equipment 7.2 Details on Transmission Data	404 409
	7.2.1 Calling Party Information/Called Party Information	409
	7.2.2 Call Start/Call End Time Information	410
	7.2.3 Called Number	411
	7.2.4 Account Code/Authorization Code	412
	7.2.5 KOUTE Advance Information	413
		413

Page

	7.2.7 Call Metering Information	414
	7.2.8 Office Code of Calling (Called) Party and Billing Process Office	414
	7.2.9 Text Format of Centralized Billing - Fusion	415
	7.2.10 Text Format of SMDR - TCP/IP Interface	423
8.	TRAFFIC MANAGEMENT	425
	8.1 Kind of Traffic Measurement	425
	8.2 Operating Procedure	427
9.	OFFICE DATA MANAGEMENT.	433
	9.1 Office Data Stored Locations	433
	9.2 Office Data Preservation	433
	9.3 Office Data Management Procedure	434
	9.4 Call Forwarding Data/Individual Speed Calling Data Management	437
	9.5 One-Touch Speed Call Memory Data Management	437
	9.6 Data Management Commands	437
10.	TEST OPERATIONS OF VARIOUS KINDS	438
	10.1 Designated Connection Test (Station)	439
	10.2 Designated Connection Test (DESKCON/ATTCON)	449
	10.3 Bad Call Notification	451
11.	ROUTINE DIAGNOSIS	452
	11.1 Related System Data	452
	11.2 Routine Diagnosis Result	454
12.	SYSTEM CONTROL PROCEDURES	455
	12.1 Changeover/Make-Busy/Make-Busy Cancel of Equipment	455
	12.1.1 General	455
	12.1.2 How to Control CPU Block	461
	12.1.3 Manual System Changeover of CPU	463
	12.1.4 Forced Changeover of CPU	465
	12.1.5 How to Control Switching Block	466
	12.1.6 Manual System Changeover of Speech Path System	467
	12.1.7 Manual System Changeover of PLO.	472
		4/4
	12.2.1 General	474
	12.2.2 System Initialization by Furning ON Power Supply	475
	12.2.3 System Initialization by Keys on CPU Front Panel	470
	12.2.5 System Initialization by SINZ Command	485
	12.2.6 Peripheral Equipment Initialization (Line/Trunk Initialization)	486
	12.3 How to Turn ON/OFF Whole System	487
	12.3.1 How to Turn On Whole System	487
	12.3.2 How to Turn OFF Whole System	488
	12.4 System Start-Up	489
		105
СНАРТ		495
1.	GENERAL	495
	1.1 Flow of Procedures	495
	1.2 Required Test Equipment and Tools	496
2.	ROUTINE MAINTENANCE PROCEDURES	497

Page

2.1 2.2 2.3 2.4 2.5 2.6	Ambient Conditions in Switch Room Check. Alarm Check. MAT/Printer Check. Collection of System Messages. Display of Locked-out Station. Fan Unit Check.	498 499 500 501 502 503
2.7	AldIII Tests	505
2.0	Trunk RGU Check	506
2.10	ATTCON/DESKCON Check	507
2.11	System Check	509
3. ROU		510
CHAPTER 8	MAINTENANCE COMMANDS	519
1. GEN	ERAL	519
ALLC	Assignment of Line Load Control	522
ALMG	Assignment of Alarm Grade Data	523
ATRF	Assignment of Traffic Measurement Order	524
ATRFN	Assignment of Traffic Measurement Order for Fusion Network.	525
BOSD	Back Up One-Touch Speed Call Memory Data	526
CADSD	Continuous Assignment of Station Data	527
CATK	Continuous Assignment of Trunk Data	530
CBCN	Control of Broadcasting for NDM	537
CCSE	Change of Common Signaling Channel Equipment	538
CDBU	Change of Dch Backup	539
CMOD	Change of System Mode	540
CMWL	Control Message Waiting Lamp	541
CMWL_T	Control Message Waiting Lamps – Telephone Number	542
CPRS	Controlled Alternate PRSCs	543
CSCL	Continuous Change of Station Class.	544
CSIN	Continuous Change of Station Number	545
DCBD		546
DCEN	Display of Connection Trunk LENS Data for LDM.	548
DCON	Display of Connection Status	549
DFTD	Display of System Message Details	550
DISS		551
DLEN	Display of Lens Data	552
DLSL	Display of Lockout Station Number	554
DLSS T	Display of Lock Out Station – Number – Telephone Number	556
	Display of Telephone Number from LENS for LDM	557
	Display of Telephone Number from LENS for NDM	558
DPKG	Display of Setting Port Package	559
DPSW	Display Package Switch Status	560
DSTN	Display of Station Data	561
DTELN	Display of Telephone Number Data for NDM	562
DTF101	Display of Terminal Traffic Data	564
DTF102	Display of Route Traffic Data	565
DTF103	Display of Station Peg Count Data	566

Page

DTF104	Display of Attendant Peg Count Data	567
DTF105	Display of Route Peg Count Data	568
DTF201	Display of Service Peg Count Data	569
DTF301	Display of UCD Route Peg Count Data	570
DTF302	Display of UCD Group Peg Count Data.	571
DTF303	Display of Station Peg Count Data	572
DTF501	Display of Attendant Answering Peg Count Data	573
DTF601	Display of Connection Route Peg Count Data	574
DTF602	Display of Connection Route Traffic Data	575
DTF101N	Display of Terminal Traffic Data for Fusion Network	576
DTF102N	Display of Route Traffic Data for Fusion Network	577
DTF103N	Display of Station Peg Count Data for Fusion Network	578
DTF104N	Display of Attendant Peg Count Data for Fusion Network	579
DTF105N	Display of Route Peg Count Data for Fusion Network.	580
DTF201N	Display of Service Peg Count Data for Fusion Network	581
DTF301N	Display of UCD Route Peg Count Data for Fusion Network	582
DTF302N	Display of UCD Group Peg Count Data for Fusion Network	583
DTF303N	Display of UCD Station Peg Count Data for Fusion Network	584
DTF501N	Display of Attendant Answering Peg Count Data for Fusion Network	585
DTF601N	Display of Connection Route Peg Count Data for Fusion Network	586
DTF602N	Display of Connection Route Traffic Data for Fusion Network	587
FLINST	File Install	588
HDD_FDD	Data Control Between HDD and FDD	589
HDD_MAT	Data Control Between HDD and MAT	591
HDD_MAT_N	Data Control Between HDD and MAT for NDM.	592
HDFP	HDD Format of PBX	593
MBCT	Make Busy of Connection Trunk for LDM	594
MBLE	Make Busy of LENS	595
MBPM	Make Busy of Port Microprocessor	596
MBRT	Make Busy of Route	597
MBSM	Make Busy of System Message Printout	598
MBST	Make Busy of Station.	599
MBST_T	Make Busy of Station – Telephone Number	600
MBTC	Make Busy of Trunk-Continuous	601
MBTK	Make Busy of Trunk.	602
MEM_HDD	Data Control Between Memory and HDD	603
MEM_HDD_N	Data Control Between Memory and HDD for NDM	604
MFCH	Make Busy of FCCH	605
PMBU	Port Microprocessor Back Up	606
RALM	Release Alarm	607
RALMN	Release Alarm for NDM.	608
RLST	Release Station/Trunk	609
RLST_T	Release of Station/Trunk – Telephone Number	610
SINZ	System Initialization	612
SPTS	Scanning of Port Status	613
SRTS	Scanning of Route Status	618
XHFD	X-RAY HD or FDD Diagnosis	619

LIST OF FIGURES

Figure	Title	Page
Figure 2-1	Flow of Administrative Management Procedures.	3
Figure 2-2	System Configuration.	5
Figure 2-3	Face Layout of IMG0	6
Figure 2-4	Face Layout of IMG1	7
Figure 2-5	Face Layout of IMG2/3.	8
Figure 2-6	LENS Format	9
Figure 2-7	Module Group Allocations	9
Figure 2-8	Unit Number Allocations.	10
Figure 2-9	Group Number Allocations.	11
Figure 2-10	Level Number Allocations	12
Figure 2-11	LP Number Allocations.	13
Figure 2-12	System Message Example	14
Figure 2-13	Fault Detection General Diagram.	15
Figure 2-14	Fault Detection Block Diagram.	16
Figure 2-15	General System Block Diagram	19
Figure 2-16	CPU Controlling Block Diagram	20
Figure 2-17	Speech Path Block Diagram	22
Figure 2-18	Speech Path Range of Fault	24
Figure 2-19	3M [®] Model 8012 Portable Field Service Kit.	27
Figure 2-20	How to Hold a Circuit Card.	27
Figure 2-21	How to Set the ROM in IC Socket	28
Figure 2-22	How to Clean the Connector Portion	29
Figure 2-23	How to Clean Gold-Plated Terminal.	29
Figure 2-24	Diagnostic Work Items and Symbols Example	32
Figure 2-25	Recovery Procedure Example	33
Figure 2-26	Circuit Card Version Number, Program Name, and Program Package Version Number	34
Figure 4-1	Circuit Card Mounting Face Lavout of LPM	240
Figure 4-2	CPR Face Lavout.	242
Figure 4-3	How to Replace the CPU	243
Figure 4-4	Removal of Front Panel and Top Cover from CPR	244
Figure 4-5	Insertion of ISAGT and LANI Cards	245
Figure 4-6	Reattachment of CPR Top Cover and Front Panel	246
Figure 4-7	Accommodation of New CPR into LPM	247
Figure 4-8	Insertion of New HFD into CPR	248
Figure 4-9	Removal of Front Panel and Top Cover From CPR.	254
Figure 4-10	Insertion of ISAGT and LANI Cards	255
Figure 4-11	Reattachment of CPR Top Cover and Front Panel	256
Figure 4-12	Location of New CPR Into LPM	257
Figure 4-13	Insertion of New HFD Into CPR	258
Figure 4-14	Circuit Card Mounting Face Lavout of TSWM	266
Figure 4-15	System Block Diagram (Connections Between GT and CPU)	268
Figure 4-16	System Block Diagram (TSW and Other Speech Path Echelons)	273
Figure 4-17	LEDs and Switches for TSW Changeover	274
Figure 4-18	Circuit Card Mounting Face Layout of PIM	283
Figure 4-19	FANU Locations.	296
Figure 4-20	Preparation for FANU Replacement (Fans on TOPU)	297
Figure 4-21	How to Replace FANU (Fans on TOPU)	298
Figure 4-22	Preparation for FANU Replacement (Fans in Fan Box).	299
Figure 4-23	How to Replace FANU (Fans in Fan Box).	300

LIST OF FIGURES (CONTINUED)

Figure	Title	Page
Figure 4-24	CPR Face Layout.	301
Figure 4-25	Extraction of CPR from LPM	. 302
Figure 4-26	Rear View of CPR	. 302
Figure 4-27	How to Remove the Cooling FAN	303
Figure 4-28	Fuses Used by System	. 304
Figure 4-29	Blown Fault Example	. 304
Figure 4-30	Fuse Locations Within System.	305
Figure 4-31	Fuse Location Within TSWM	. 306
Figure 4-32	RGU Fuse Blown Fault Flowchart	307
Figure 4-33	DC -48V Fuse Blown Fault Flowchart	. 308
Figure 5-1	Controlling LC/ELC Circuit Cards and Speech Path	. 312
Figure 5-2	Controlling Trunk Circuit Cards and Speech Path	. 323
Figure 5-3	ATT Connector Cabling and Connector Leads Accommodation	. 330
Figure 5-4	Range of Units	. 333
Figure 5-5	Unit Control Block Diagram (Dual Configuration).	. 334
Figure 5-6	Unit Control Block Diagram (Single Configuration)	335
Figure 5-7	MUX Card Locations	. 335
Figure 5-8	Speech Path Block Diagram	. 347
Figure 5-9	CPU Controlling Block Diagram	. 357
Figure 5-10	Alarm Bus Cable Connections Diagram.	. 362
Figure 5-11	Cable Routing for Alarm Indications.	. 365
Figure 5-12	Cabling Related to Alarm Indicating Panel.	. 365
Figure 5-13	Block Diagram of Power Supply System (IMG0)	. 367
Figure 5-14	Block Diagram of Power Supply System (IMG1)	. 368
Figure 5-15	Block Diagram of Power Supply System (IMG2/3)	368
Figure 5-16	Power Supply to PIM	. 369
Figure 5-17	Power Supply to LPM.	. 369
Figure 5-18	Power Supply to TSWM	. 370
Figure 5-19	Circuit Diagram of Fan Unit and Thermal Unit	. 374
Figure 5-20		. 376
Figure 5-21	External Hold Tone Supply Block Diagram	. 378
Figure 5-22	System Down Fault Repair Sequence.	. 379
Figure 5-23	Controlling CCIS Line.	. 383
Figure 5-24	Controlling ISDN Line.	. 386
Figure 6-1	System Status Monitor	. 391
Figure 6-2	Alarm Indications	391
Figure 6-3	Alarm Indications on TOPU	. 392
Figure 6-4	Automatic Printout to System Message Dedicated Printer Operating Procedure	. 393
Figure 6-5	Recovery Procedure From Lockout Station	. 394
Figure 6-6	Line Load Control Operations on ATTCON—Setting	. 396
Figure 6-7	Line Load Control Operations on ATTCON—Cancelling	. 397
Figure 6-8	Locations of Lamps (ATTCON)	. 397
Figure 6-9	Line Load Control Key Operations on DESKCON—Setting	. 398
Figure 6-10	Line Load Control Key Operations on DESKCON—Cancelling	. 398
Figure 6-11	Line Load Control Indication (DESKCON)	. 399
Figure 6-12	Class Change and Number Change of Station and Data Terminal Procedure	. 402
Figure 6-13	Make-Busy/Make-Busy Cancel of C.O. Line/Tie Line Procedure	. 402
Figure 6-14	Message Format for Outgoing Call	. 406
Figure 6-15	Message Format for Incoming Call	. 407

LIST OF FIGURES (CONTINUED)

Figure	Title	Page
Figure 6-16	Message Format for Station-to-Station Call.	408
Figure 6-17	Message Format for Outgoing Call - Fusion	417
Figure 6-18	Message Format for Incoming Call - Fusion	418
Figure 6-19	Message Format for Station-to-Station Call - Fusion	419
Figure 6-20	SMDR—TCP/IP Interface Billing Output Devices	423
Figure 6-21	IPX "MAT Menu" Display Image (Example)	428
Figure 6-22	DTFD Command Display Image (Example)	430
Figure 6-23	"Listup Report" Window when "View Database" is Selected (Example)	431
Figure 6-24	"Export" Dialog for Traffic Report Text File Saving	431
Figure 6-25	Office Data Change Procedure (for Release 1 or 2)	434
Figure 6-26	Office Data Change Procedure (for Release 3 or Later)	435
Figure 6-27	Backup Commands	436
Figure 6-28	Test Operation Method Examples	438
Figure 6-29	Register Test Procedure/Connection Diagram	440
Figure 6-30	Sender Test Procedure/Connection Diagram	441
Figure 6-31	3-Party Conference Test Procedure	442
Figure 6-32	3-Party Conference Test Connection Diagram	443
Figure 6-33	Tone Test Procedure/Connection Diagram	444
Figure 6-34	Interrupt Ringing (IR) Test Procedure/Connection Diagram	446
Figure 6-35	Trunk Test Procedure	447
Figure 6-36	Trunk Test Connection Diagram	448
Figure 6-37	Switching Network General Block Diagram	456
Figure 6-38	How to Check I EDs and SW Keys for System Changeover (IMG0)	457
Figure 6-39	How to Check LEDs and SW Keys for System Changeover (IMG1)	458
Figure 6-40	How to Check LEDs and SW Keys for System Changeover (IMG2/3)	459
Figure 6-41	How to Check STATUS LEDs	460
Figure 6-42	System Block Diagram (Switching Network Between CPU and GT)	462
Figure 6-43	CPU in ACT/STBY Mode	463
Figure 6-44	GT in ACT/STBY Mode	463
Figure 6-45	CPU Changeover via MBR Key	464
Figure 6-46	LED Indications Before and After CPU Changeover	464
Figure 6-47	Forced CPU Changeover	465
Figure 6-48	System Block Diagram (Switching Network for Speech Path System)	468
Figure 6-49	TSW/DLKC/MLIX in ACT Mode	469
Figure 6-50	TSW/DLKC/MUX in STBY Mode	469
Figure 6-51	Speech Path System Changeover via Active GT MBR Key	470
Figure 6-52	LED Indications Before and After Speech Path System Changeover	470
Figure 6-53	Check of Active PLO	471
Figure 6-54	PLO in ACT/STBY Mode	472
Figure 6-55	PLO Changeover via MB Key	473
Figure 6-56	LED Indications Refore and After PLO Changeover	473
Figure 6-57	Conceptional Diagram of Initial Program Load	470
Figure 6-58	Related Keys and LEDs for System Initialization	478
Figure 6-59	How to Turn ON the Whole System	487
Figure 6-60	How To Turn OFF the Whole System	488
Figure 7-1	Flow of Procedures	<u>405</u>
Figure 7-2		507
Figure 7-3	Desk Console	502
Figure 8-1	Port Status Report (MG) Display	61/
		014

LIST OF FIGURES (CONTINUED)

Figure	Title	Page
Figure 8-2	Port Status Report (MG, Unit) Display	615
Figure 8-3	Port Status Report (MG, Unit, Group) Display—Designating Group	616
Figure 8-4	Port Status Report (MG, Unit, Group) Display—Designating Group-Trunk	617

LIST OF TABLES

Table	Title	Page
Table 2-1	Summary of This Manual's Contents	4
Table 2-2	Kinds of Circuit Card Front Restart	26
Table 3-1	System Messages List	37
Table 3-2	Error Code	225
Table 3-3	Error Kind (ERRK)	227
Table 4-1	LPM Unit/Circuit Cards and Reference Items	241
Table 4-2	TSWM Circuit Cards and Reference Items	267
Table 4-3	PIM Circuit Cards and Reference Items	284
Table 5-1	Fault Repair Procedure Quick Reference	309
Table 5-2	Line Fault Situation	311
Table 5-3	Trunk Fault Situation	320
Table 5-4	Timings for Trunks	321
Table 5-5	Timings for Senders	322
Table 5-6	Unit Fault Situation	333
Table 5-7	Speech Path (TSW) System Fault Situation	346
Table 5-8	Control System Fault Situation	356
Table 5-9	Alarm Indication Fault Situation	364
Table 5-10	PWR Supply Fault Situation	367
Table 5-11	CCIS Line Fault Situation	383
Table 5-12	ISDN Line Fault Situation	386
Table 6-1	Description of Alarm Indications on TOPU	392
Table 6-2	Message Judgment Criteria	400
Table 6-3	ASCII Code	405
Table 6-4	Centralized Billing—Fusion Kinds of Data	415
Table 6-5	Traffic Measurement Types	425
Table 6-6	Designated Connection Test (Station) Operations	. 439
Table 6-7	Tone Numbers	445
Table 6-8	Changeover of CPU Block	461
Table 6-9	Changeover of Switching Block	466
Table 6-10	System Initialization by Turning On Power Supply Procedure	475
Table 6-11	System Initialization Procedure Types	476
Table 6-12	System Initialization Without Loading [Procedure #1]	479
Table 6-13	System Initialization With Office Data Loading From HD [Procedure #2]	480
Table 6-14	System Initialization with Program Loading From HD [Procedure #3]	481
Table 6-15	System Initialization With Office Data And Program Loading From HD [Procedure #4]	482
Table 6-16	System Initialization by Phase 1 Restart [Procedure #5]	483
Table 6-17	System Initialization by Keys on CPU Front Panel Procedure	484
Table 6-18	System Initialization by SINZ Command Procedure	485
Table 6-19	Line/Trunk Initialization Procedure	486
Table 6-20	Start-Up When Basic & Application Software Is Installed [Procedure #1]	490
Table 6-21	Start-Up When Basic, Application Software, and Office Data Installed [Procedure #2]	492
Table 7-1	Test Equipment and Tools	496
Table 7-2	List of Routine Maintenance Procedures	497
Table 8-1	Command List	519
Table 8-2	Type of Traffic Measurement Explanation	524
Table 8-3	Type of Traffic Measurement Explanation	525
I able 8-4	I elephone Equipment Number Explanation	552

LIST OF TABLES (CONTINUED)

Table	Title	Page
Table 8-5	Internal Route Number Explanation	553
Table 8-6	Route Number Explanation	597
Table 8-7	Type of Circuit Cards	614
Table 8-8	Route Number Explanation	617

This page is for your notes.

CHAPTER 1 INTRODUCTION

1. GENERAL

This manual describes routine system maintenance procedures and fault repair procedures. This chapter explains how to follow the manual and provides precautions pertaining to maintenance jobs as a whole. Be sure to read this chapter thoroughly before starting the required maintenance project.

2. HOW TO FOLLOW THIS MANUAL

If technicians engage in a fault repair with a sufficient amount of knowledge of the system (system configurations, controlling systems, functions, etc.), the time spent repairing the system is minimized. This manual provides explanations about the system, while placing emphasis on system configurations, controlling systems, and functions. If faults of all conceivable cases are to be assumed for the explanations, the explanations may lack reality and be more difficult to understand. Therefore, this manual provides the explanations on the basis of the following points:

- (1) It is very important to determine whether the fault occurred in the PBX or at any of the peripheral equipment.
- (2) In case the PBX is faulty, explanations are provided about the actions to take until the faulty circuit card/ cards are identified.
- (3) Explanations will be omitted pertaining to the following faults:
 - Fault of peripheral equipment (MAT, telephone sets, etc.)
 - Fault due to an error in office data assignment
 - Fault due to an error in installation procedure (an error in circuit card switch setting, cross-connection, etc.)
- (4) How to Read This Manual
 - When a fault is to be repaired for the first time



INTRODUCTION

• When only the contents of a system message needs to be known, or when a fault is to be diagnosed from a system message

Chapter 5

• When the range of faulty conditions has been specified and a faulty circuit card can be assumed



• When investigating the system for the purpose of a fault repair



• When replacing a unit/circuit card with a spare



• When performing routine maintenance

Chapter 7

CHAPTER 2 SYSTEM MAINTENANCE OUTLINE

1. GENERAL

1.1 Purpose

This chapter explains the outline of fault diagnosis and duties necessary to maintain the PBX.

1.2 Administrative Management Procedures

Figure 2-1 shows the work flow of the administrative management procedures.





1.3 Summary of This Manual's Contents

Table 2-1 provides a brief description of the contents for each chapter in this manual.

CHAPTER	DESCRIPTION
2	See Section 2, Basic Knowledge. Explains basic knowledge of fault detection and indication, functions and fault range of the system, etc.
	See Section 3, How to Read Precautions, Diagnostic, and Fault Repair Information. Explains the methods of procedure performance and various symbols used in the description.
	See Section 4, Reporting Fault to NEC. Explains the method of forwarding faulty circuit cards, the method of creating a history record for fu- ture fault repair, and the method of reporting faults to NEC.
3	Explains how to read and analyze system messages.
4	Explains the method of replacing a unit/circuit card due to a fault.
5	Explains repair procedures corresponding to the faults of processors or equipment.
6	Explains how to control the system in service management functions and precautions required in the system control process.
7	Explains routine maintenance.
8	Explains the commands used in the system administrative management procedure.

Table 2-1 Summary of This Manual's Contents

2. BASIC KNOWLEDGE

This section identifies the information necessary for the system operations and maintenance procedures.

- 2.1 System Configuration
- 2.2 Line Equipment Numbers (LENS)
- 2.3 Local Partition (LP) Number
- 2.4 System Messages
- 2.5 Fault Detecting Function
- 2.6 Range of Faults Specification
- 2.7 Explanation of Terms

2.1 System Configuration

Figure 2-2 shows the system configuration of the fully expanded 4-IMG type. For details on each module accommodation, see Figure 2-3 through Figure 2-5.



Figure 2-2 System Configuration

SYSTEM MAINTENANCE OUTLINE



Figure 2-3 Face Layout of IMG0



Figure 2-4 Face Layout of IMG1



Figure 2-5 Face Layout of IMG2/3

2.2 Line Equipment Numbers (LENS)

The Line Equipment Numbers (LENS) are used to specify the location of a circuit (trunk/port) in any of the PIM universal slots. Refer to the figures in this section, and confirm the LENS format used in the system.

As shown in Figure 2-6, the LENs consists of six digits: two digits for MG, one digit for U, two digits for G, and one digit for Lv.



Figure 2-6 LENS Format

2.2.1 Module Group

Figure 2-7 explains the Module Group (MG). In a fully expanded system, the MG number ranges from 00 to 07.



Figure 2-7 Module Group Allocations
SYSTEM MAINTENANCE OUTLINE

2.2.2 Unit

Figure 2-8, which represents a fully expanded system, explains the Unit (U) numbers. The numbers range from 0 to 3, and each unit represents the PIM universal slots, No. 04-12 (U 0/2) or No. 15-23 (U 1/3).



Figure 2-8 Unit Number Allocations

2.2.3 Group

The Group (G) numbers are allocated as shown in Figure 2-9. A total of two Groups are assigned on each universal slots within the PIM. Slot numbers 10, 11, 12, 21, 22, 23 can contain a total of four Groups as an exception.



Figure 2-9 Group Number Allocations

2.2.4 Level

Figure 2-10 explains the Level (Lv) numbers. There are a total of eight Levels (Lv0 - Lv7) on every Group number, which ranges from 00 to 31.





2.3 Local Partition (LP) Number

The Local Partition (LP) number refers to a logical local processor number, theoretically assigned for each IMG that consists of four (or less) Port Interface Modules (PIM). Though the local processor does not actually exist in any of the IMGs, except for IMG0, the system can apply the two-digit LP number to each IMG (see Figure 2-11) on its data memory program. The LP numbers are used primarily in the following cases:

- Display of system messages
- Assignment of line load control data (ALLC command)
- Backup for Call Forwarding/Speed Calling data (MEM_HDD command), etc.



Figure 2-11 LP Number Allocations

SYSTEM MAINTENANCE OUTLINE

2.4 System Messages

System messages display during routine diagnosis, system operation status controlling, and fault occurrence. Figure 2-12 shows an example of a system message.

Refer to Chapter 3 for details on each message.



Figure 2-12 System Message Example

2.5 Fault Detecting Function

The system finds a fault by its fault detecting circuit and the fault detecting program. Once a fault occurs, the system initiates a remedial action such as system changeover, make-busy setting, or restart processing by the automatic diagnosis function. This action reduces the influence of the fault so that system servicing may be minimized. The result of the process taken and the fault situation are indicated for equipment concerned.

Among the faults, those related to speech path (noise, one-way speech, speech inability, etc.) are not detectable. Since these fault reports are to be obtained from a station or operator, periodic trunk tests must be performed without failure to detect the faults related to speech path.

Figure 2-13 shows an outline of fault detection, and Figure 2-14 shows a block diagram of fault detection.



Figure 2-13 Fault Detection General Diagram



Figure 2-14 Fault Detection Block Diagram

(a) Main Faults

Faults that may occur in the system can be generally categorized into Processor System Fault, Speech Path System Fault, Line/Trunk Fault, etc.

• Processor System Fault

The CPU alarm detecting circuit continuously monitors whether the CPU is working normally. If a fault is detected, the CPU calls up the diagnostic program, which identifies the cause of the fault and determines whether the fault is temporary or permanent. When the fault affects system operations, Active/Standby status of the CPU is changed over (provided that the system has dual configuration).

• Bus System Fault

The CPU transfers line/trunk card control information to the associated peripheral circuits via IO Bus. When a parity error is detected in the transfer data or when the required information cannot be transferred from a circuit card, the CPU identifies the cause of the fault, changes over the CPU so that system operation is not affected, and executes restart processing.

• Speech Path Fault

The CPU monitors the operating status of the TSW card, the occurrence of errors in writing data to the switch memory, and the basic clocks supplied to the speech path. Upon detecting a fault, the CPU identifies the cause of the fault, determines whether the fault is temporary or permanent, and executes required processing such as changeover of the TSW card.

• Others

The alarm detecting circuit on the EMA card continuously monitors the occurrence of faults in the PWR supply cards, such as abnormal temperatures within the equipment frame, and lights the alarm lamp on the TOPU when a fault is detected.

(b) Lamp Indications on the TOPU

When a fault occurs, the corresponding lamp on the TOPU indicates the location of the fault. For the meaning of each lamp indication, refer to Chapter 6.

2.6 Range of Faults Specification

- (1) Upon receiving a fault report from a station user or an operator, the technician can assume a faulty card exists if the range to be affected by the fault can be determined. For the detailed procedure, refer to Chapter 5. Use the following actions to check the MDF:
 - (a) Check the LENS of the reporter (Station or ATTCON/DESKCON).
 - (b) Check other circuits of the circuit card in which the reporter (station lineor ATTCON/DESKCON) is located.
 - (c) Check the other groups (other circuit cards mounted in the same module) in the module in which the reporter is located.
 - (d) Check lines in each of the other modules on the basis of plural lines.
- (2) If the fault cannot be detected by the system (a fault related to the speech path such as noise during speech, one-way speech, speech inability), the range of (a) through (d) (itemized above) should be limited.
- (3) When a major fault is detected in the dual systems, the CPU or TSW system automatically changes over if the fault range is (c) and (d). In this case, the whole module involved is placed into make-busy status even if the fault is partial, and the station lines currently operating normally become faulty status. Diagnose the fault from the content of the system message displayed and repair the fault as required.
- (4) When limiting the range of faults, consider the system circuitry that consists of the control (see Figure 2-16, where CPU 0 is active) and speech path systems (see Figure 2-17).
- (5) As seen from the block diagrams in Figure 2-15 through Figure 2-18, if a fault occurs within the common portions to be controlled, all other associated portions are affected by that fault occurrence. If the range of faults is outside PIM fault, CPU/TSW system changeover is executed (only when the fault is detectable by the system).



Figure 2-15 General System Block Diagram



Note 3: Though an external cable is physically connected between ISAGT0 and GT1, the actual control signal is sent/received only between ISAGT0 and GT0. This is because GT0 and GT1 are having a multiple connection on the backboard side. (Refer to Chapter 6, Section 12.)



CHAPTER 2 Page 20 Issue 1



Figure 2-16 CPU Controlling Block Diagram (Continued)



Figure 2-17 Speech Path Block Diagram



Figure 2-17 Speech Path Block Diagram (Continued)



Figure 2-18 Speech Path Range of Fault

2.7 Explanation of Terms

• C-Level Infinite Loop

The program repeatedly executes specific routines due to a fault of the main memory, data destruction, etc. The program is not able to be processed normally. This faulty condition is referred to as Program Infinite Loop. C-Level infinite loop is a state where a clock-level program, which runs under clock interrupt disable state, is in an infinite loop status.

• B-Level Infinite Loop

This is a state where a program infinite loop has occurred during a connection processing and the connection for the next call is not able to be processed.

• Port Microprocessor (PM)

Each line/trunk card mounted in the PIM is equipped with a processor called Port Microprocessor (PM), which continuously supervises the lines/trunks.

Ready Error

For acknowledging the connection between the CPU and a circuit card, an interface signal called Ready Signal is used. When the CPU has accessed a specific circuit card and the normality of the connection is acknowledged, the Ready Signal is returned to the CPU within 6 μ s. If the Ready signal is not returned to the CPU within 6 μ s after access, the situation is referred to as Ready Error.

• Parity Error

For confirming the normality of data transfer between the CPU and the circuit card under the control of the CPU, parity check is made. When an error is detected in a parity check, it is referred to as Parity Error. Parity check means to confirm the normality of data by adding an error detecting parity bit to a set of data to be transferred.

When a set of data is transferred, a parity bit is added to the data so that the data has an even-number of "1" bits (it is referred to as Even Parity). When there is an odd-number of "1" bits in the received one set of data, it is detected as an error.

• Monitor Restart

Monitor restart processing suspends current processings in progress without applying any hardware controlling, allowing the system to restart its operations from the monitor program.

The system abandons only the processings of the calls being handled by the program, and maintains all the connections that have already been established.

Circuit Card Front Initializing Restart

The whole system is forcibly initialized. However, the initialization varies with the setting of the SENSE switch on the DSP of CPU (see Table 2-2).

SENSE (0~F)	KIND OF RESTART	REMARKS
1	DM Clear Restart	
2	DM Load Restart	When the system is in operation
5	OAI Memory Clear Restart	
С	OFF-line Restart	

Table 2-2 Kinds of Circuit Card Front Restart

• PM (Line/Trunk Card) Make-Busy Restart

In this processing, the faulty PM (Line/Trunk Card) is isolated from the system and, at the same time, the calls associated with that faulty PM (Line/Trunk Card) are released. No calls related to the faulty PM (Line/Trunk Card) are processed and the system normally runs without the faulty PM (Line/Trunk Card).

• Data Copy Restart

In a system of dual CPU configuration, the RAM memory (including the data memory) is copied from the ACT side CPU into the STBY side CPU, and ACT/STBY is changed over and monitor restart is executed.

In the case of this restart processing, only the ACT side CPU and the STBY side CPU are changed over without any effect on the current connections. However, no call processings are executed while the restart processing is in progress (from copying until the end of the changeover).

3. HOW TO READ PRECAUTIONS, DIAGNOSTIC, AND FAULT REPAIR INFORMATION

3.1 Precaution about Diagnostic Procedure/Fault Repair Procedure

When performing diagnostic procedures/fault repair procedures, *always* adhere to the following actions:

- (1) When replacing a circuit card with a spare, handle the circuit card using the Field Service Kit.
 - (a) To protect the circuit card from static electricity, wear a wrist strap before handling the circuit card.
 - (b) Before extracting the circuit card from its mounting slot, set its MB switch to the UP side (ON).
- (2) When holding a circuit card by hand, wear gloves and be careful not to touch mounted parts, gold-plated terminal, etc., on the circuit card.

The 3M[®] Model 8012 Portable Field Service Kit, shown in Figure 2-19, is recommended as an effective countermeasure against static electricity.



Figure 2-19 3M[®] Model 8012 Portable Field Service Kit



Figure 2-20 How to Hold a Circuit Card

- (3) When a circuit card appears to be faulty, check the following items before replacing it with a spare:
 - (a) Poor connector contact at the circuit card may be responsible for the fault. Repeat insertion and extraction of the circuit card a few times. Clean the connector portion, and recheck for proper operation.
 - (b) Check the lead wires of vertically-mounted parts (resistors, capacitors, etc.) to ensure they have not shorted each other or broken.
 - (c) Check the back side of the circuit card to see if there is any short-circuited soldered portion, or modified cross connection wires erroneously left unconnected.
 - (d) Check the ROMs to ensure proper seating in the IC socket. Figure 2-21 shows a leg that is bent and not set in the socket.



Figure 2-21 How to Set the ROM in IC Socket

- (4) How to clean the connector portion (gold-plated terminal):
 - (a) Dip the gold-plated terminal portion in the cleaning fluid for 3 to 5 seconds (only PA-XX type circuit card), as shown in Figure 2-22.



Figure 2-22 How to Clean the Connector Portion

- **Note 1:** Some of the parts are subject to damage if they come in contact with the cleansing liquid. Be careful to allow only the connector portion (gold-plated terminal) to contact the cleaning liquid.
- Note 2: Be sure to use fresh cleaning fluid (FREON or isopropyl alcohol).
 - (b) Using a soft cotton cloth, wipe both sides of the connector portion (gold-plated terminal) clean (only PA-XX type circuit card), as shown in Figure 2-23.



Figure 2-23 How to Clean Gold-Plated Terminal

Note 1: Use cloth (gauze, etc.) to clean.

Note 2: *After wiping, be careful not to leave lint on the surface of the circuit card.*

- (5) When a check on the flat cable or LT cable is directed in the tree, check the following items:
 - (a) Make a visual check to see if the connector is properly connected.
 - (b) Poor connector contact may be responsible for the fault. Repeat connection and disconnection a few times, and check again to see if the connector is properly connected.
 - (c) Perform continuity test on the flat cable.
- (6) When replacing the circuit card is directed in the tree, replace the circuit card with a spare as per Chapter 4.
- (7) When multiple circuit cards appear to be faulty, before replacing them with spares, remount them (one at a time) into their slots, to determine which cards should be replaced.

SYSTEM MAINTENANCE OUTLINE

•••		
CTT A	DT	• The following is an example where the fault was recovered after the replacement of circuit cards:
<u>51A</u>	<u>KI</u>	
_	_	Set the 1st circuit card back into its mounting slot
		If the fault recurs: Replace the circuit card.
		I man in the second
_		Set the 2nd circuit card back into its mounting slot
		If the fault recurs. Replace the circuit card
		in the funct recurs. Replace the chould card.
-		Set the 3rd circuit card back into its mounting slot
		If the fault recurs: Replace the circuit card.
		Ĩ
-		If a circuit card is found to be faulty, send the faulty circuit card for repair.
		The fact was been to see the tensor and of the simple of the simple of the
		situation for a while.
END)	

(8) When a fault recovery is completed, use the RALM command to clear all the alarm indications and registered system messages. If required, restore temporary cross connections and transient data for testing to the original ones.

3.2 How to Follow Diagnostic Procedure/Fault Repair Procedure

(a) Diagnostic Work

A fault diagnostic procedure by system message is explained in the "TREE" format on an individual system message basis.

- Proceed with judgment as to whether the fault status coincides with the indicated status, following the sequence beginning from START.
- How to proceed with the diagnosis work is explained in Figure 2-24.
- STEP 1 Determine whether the fault coincides with the fault status (1) in Figure 2-24.
- STEP 2 If the fault status does coincide, the fault is indicated by (2). Repair the fault by referring to the relevant section in Chapter 5. Otherwise, proceed to (3).
- STEP 3 Perform the work indicated by (3). The result of the work (3) is broken down as indicated by (4).
- STEP 4 Determine whether the result of work (3) coincides with the status indicated by (5). If so, the fault(s) is/are indicated either by (6) or by (7). If not, proceed to the next Step.

- STEP 5 Perform the work indicated by (8), and if the result of the work is the same as the status indicated, the fault is indicated by (9). If the fault repair work indicated by (9) affects another normal line, recheck the work as indicated by (10).
- (b) Fault Repair Procedure

A fault repair procedure is explained by means of "TREE" format in Chapter 5. The following explains how to follow the "TREE" format and proceed with designated work. See Figure 2-25.

- Begin from START and proceed with the necessary repair work following the sequence.
- When a faulty circuit card (or circuit cards) is suspected, replace the faulty circuit card with a spare in accordance with the work procedure pertaining to that specific circuit card.
- STEP 1 Replace the circuit card indicated by (A) with a spare and check it. Perform the detailed work as per (B). If the fault status is beyond repair, proceed to the next step.
- STEP 2 If the range of the fault or the system configuration is as indicated by (C), perform a check as indicated by (D). If the fault status is beyond repair, proceed to the next step.
- STEP 3 Replace the circuit card indicated by (E) with a spare and check it. The detailed procedure indicated by (G) varies with the system configuration indicated by (F).



Figure 2-24 Diagnostic Work Items and Symbols Example



Figure 2-25 Recovery Procedure Example

4. REPORTING FAULT TO NEC

When the cause of a fault is uncertain, make note of the situation involved and report it to NEC. When forwarding faulty circuit cards to NEC, exercise caution to protect from static electricity.

4.1 Fault Reporting Method

The following three items must be included in the report without fail:

- (1) Faulty situation (reports should be similar to "dial tone is not heard only on individual lines," "incoming C.O. line calls are not able to be terminated only to a specific ATTCON/DESKCON," etc.)
 - Faulty phenomena

On lifting the handset, dial tone is not heard but side tone is heard, etc.

SYSTEM MAINTENANCE OUTLINE

• History of fault

When did the fault occur? What kind of repair procedure has been executed? Does the fault still exist or not exist? etc.

• Range of fault

Range of fault should be reported: Single line?, Specific trunk?, Specific circuit card?, Specific PIM?, Whole system?, etc.

(2) Circuit Card Version Number, Program Name, and Program Package Version Number of the circuit card. See Figure 2-26.



Figure 2-26 Circuit Card Version Number, Program Name, and Program Package Version Number

4.2 Forwarding Faulty Circuit Card Method

Send the faulty circuit card to the NEC agent to whom a request is made for a replacement card. Adhere to the following procedure for sending the faulty circuit card:

- (1) Insert connector covers onto the circuit card terminals.
- (2) Put the circuit card into a static electricity protective bag.
- (3) Pack the circuit card with air cap, etc.
- (4) Set the circuit card into the cardboard box for that specific circuit card.
- (5) If multiple circuit cards are to be sent, set each circuit card in a separate cardboard box and stuff the box with shock absorbing material.
- **Note:** When sending a faulty circuit card, put it in a static guard bag. To prevent damage, **never** place the circuit card in a vinyl bag or ship it without a protective bag.

This page is for your notes.

CHAPTER 3 SYSTEM MESSAGES

This chapter explains how to read and analyze system messages displayed during routine diagnosis, system operation status controlling, and occurrence of a fault within the system. Table 3-1 provides a list of system messages.

MESSAGE NO.	SYSTEM MESSAGE				
0-C	Reset Interrupt				
0-D	CPU Clock Down				
0-E	C-Level Infinite Loop				
0-F	Memory Failure				
0-G	B1-Level Infinite Loop (Permanent)				
0-Н	B1-Level Infinite Loop (Temporary)				
0-I	Mate CPU Failure				
0-J	Abnormal Interrupt				
1-A	Both TSW Failure (Permanent)				
1-B	TSW Failure (Permanent)				
1-C	Both TSW Write Failure				
1-D	TSW Write Failure				
1-E	Both TSW Clock Failure				
1-F	TSW Clock Failure				
1-0	Both PLO Failure				
1-P	PLO Failure				
1- S	Module Group Down Failure				
1-T	TSW ACT Change Report				
1-U	DLKC Data Transfer Failure (Permanent)				
1-V	DLKC Data Transfer Failure (Temporary)				
1-W	PLO Restore				
2-T	AP-INT Data Transfer Failure (Permanent) Note 4				
2-U	AP-INT Data Transfer Failure (Temporary) Note 4				
2-V	IP Data Transfer Failure (Permanent) Note 4				
2-W	IP Data Transfer Failure (Temporary) Note 4				

Table 3-1 System Messages Lis t

MESSAGE NO.	SYSTEM MESSAGE			
3-B	C-Level Infinite Loop (Permanent)			
3-C	C-Level Infinite Loop (Temporary)			
3-D	Lock-Up Failure (Permanent)			
3-Е	Lock-Up Failure (Temporary)			
3-F	-48V Over Current			
3-G	Ground Failure			
3-Н	Digital Line Warning			
3-I	Digital Line Failure			
3-J	Digital Line Restore			
4-C	Both TSW Ready Failure			
4-D	TSW Ready Failure			
4-Q	DLKC Ready Failure			
4-R	IO Ready Failure for UAP Note 4			
4-S	MUX Ready Failure			
4-T	Both MUX Ready Failure			
4-U	PCI Card Failure			
4-V	PCI Card Failure Recovered			
6-A	System Failure			
6-B	RGU & Howler Failure			
6-C	Line Load Control Start			
6-D	Line Load Control Stop			
6-H	Bad Call Notification			
6-I	STA-Test Connection Data			
6-J	Emergency Call			
6-L	Emergency Control Start			
6-M	Emergency Control Stop			
6-N	Abnormal Call Duration Data			
6-0	SMDR Output Buffer Overflow Alarm			
6-P	SMDR Output Buffer Overflow Release			
7-A	System Initialize With Data Load			

Table 3-1 System Messages List (Continued)

SYSTEM MESSAGES

MESSAGE NO.	SYSTEM MESSAGE			
7-B	System Initialize			
7-C	CPU MBR Key Turn ON			
7-D	CPU MBR Key Turn OFF			
7-E	TSW MBR Key Turn ON			
7-F	TSW MBR Key Turn OFF			
7-G	TSW PLO Key Turn ON			
7-H	TSW PLO Key Turn OFF			
7-I	ALMC MB Key Turn ON			
7-J	ALMC MB Key Turn OFF			
7-K	PM MB Key Turn ON			
7-L	PM MB Key Turn OFF			
7-M	NCU MB Key Turn ON			
7-N	NCU MB Key Turn OFF			
7-0	Cyclic Diagnosis Normal			
7-P	Cyclic Diagnosis Information (Error Detected)			
7-U	PLO MB Key Turn ON			
7-V	PLO MB Key Turn OFF			
13-A	CCH Clock Failure			
13-B	CCH C-Level Infinite Loop Failure (Permanent)			
13-C	CCH C-Level Infinite Loop Failure (Temporary)			
13-D	CCH Lock-Up Failure (Permanent)			
13-E	CCH Lock-Up Failure (Temporary)			
13-F	CCH B-Level Infinite Loop Failure (Permanent)			
13-G	CCH B-Level Infinite Loop Failure (Temporary)			
13-H	CCS Link Failure (Permanent)			
13-I	CCS Link Failure (Temporary)			
13-J	Restoration From CCS Link Failure			
13-K	CCH Reset Interrupt Failure			
13-N	Digital Line Warning			
13-0	Digital Line Failure			

Table 3-1 System Messages List (Continued)

MESSAGE NO.	SYSTEM MESSAGE
13-P	Digital Line Restore
13-Q	DRU Battery Operation
13-R	DRU Line Operation
13-Z	Power Failure
15-A	VPS Failure (Temporary)
15-B	VPS Failure (Permanent)
15-C	VPS Restore
16-A	Inside Trunk All Busy
16-B	Virtual Tie Line Set Report
16-C	Virtual Tie Line Cancel Report
16-E	Virtual Tie Line Set Time Out
16-F	Sender Start Time Out
16-K	I/O Port Line OFF
16-L	I/O Port Line Restore
16-M	Hard Clock Failure
16-N	Hard Clock Restore
16-T	IOC Failure (Temporary)
16-U	IOC Failure (Permanent)
16-X	Station Exchanged Report
17-A	CCH MBR Key Turn ON
17-B	CCH MBR Key Turn OFF
17-C	CCH MB Key Turn ON
17-D	CCH MB Key Turn OFF
1 7-H	Day/Night Change Information
17-O	IOC MB Key Turn ON
17-P	IOC MB Key Turn OFF
17-Q	IOC MBR Key Turn ON
17-R	IOC MBR Key Turn OFF
23-J	ATM Interface Warning Note 2
23-К	ATM Interface Failure Note 2

Table 3-1 System Messages List (Continued)

SYSTEM MESSAGES

MESSAGE NO.	SYSTEM MESSAGE			
23-L	ATM Interface Recovered Note 2			
23-Р	DCH Back-Up Automatic Change Start/End			
23-Q	DCH Back-Up Manual Change Start/End			
23-R	ATM Interface Change Report Note 2			
23-S	FCCH Failure Note 1			
23-Т	FCCH Failure Recovered Note 1			
23-U	FCCH Status Notice Note 1			
23-W	FCCH Advancing Start Note 1			
23-X	FCCH Advancing End Note 1			
23-Y	MUX Clock Failure			
23-Z	Both MUX Clock Failure			
25-J	ZT Operation Start Note 3			
25-К	ZT Set Up NG Note 3			
25-L	ZT Fault Note 3			
25-M	ZT Fault Recovery Note 3			
25-N	ZT Carrier Fault Note 3			
26-N	MAT Log			
26-R	Call Trace			
26-V	LAN Interface Error Report			
26-W	LAN Interface Release Report			
27-С	ATM Interface Port MB Key ON Note 2			
27-D	ATM Interface Port MB Key OFF Note 2			
33-A	MUX Clock Restore			
33-B	SDT Alarm Warning			
33-C	SDT Alarm Trouble			
33-D	SDT Alarm Restore			
33-Е	SDT Interface Change Notify			

Table 3-1 System Messages List (Continued)

Note 1: Refer to Fusion Network System Manual.

Note 2: *Refer to the manual related to ATM.*

Note 3: *Refer to Wireless System Manual.*

Note 4: Refer to the manual related to OAI.

0-C	Reset Interrupt						
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:			

This message displays when the processor is reset due to a failure in the system.

1:	XXXX	<u>xx</u> 00	XXXX	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	12 0000	③ 0000	④ 0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Self-CPU Restart Information



b0:	0/1 = -/Monitor Restart
b1:	0/1 = -Phase 1 Restart Note 1
b3:	0/1 = -/Initialization
b4:	0/1 = -/Data Copy Restart executed (for Dual-CPU system only)
b6:	0/1 = Program Load not executed/executed
b7:	0/1 = ACT/STBY (active system indication after restart)

2 Mate-CPU Restart Information (FF H: not mounted)

b7	b6	 b4	b3	b1	b0	

- b0: 0/1 = -/Monitor Restart
 b1: 0/1 = -Phase 1 Restart Note 1
 b3: 0/1 = -/Initialization
 b4: 0/1 = -/Data Copy Restart executed (for Dual-CPU system only)
 b6: 0/1 = Program Load not executed/executed
 b7: 0/1 = ACT/STBY (active system indication after restart)
- ③ Related-call Release Result



b7: 0/1 = Call Release Processing after restart ->"Normal End"/"Abnormal End"

Reference: See Chapter 5, Section 6.2 and Section 6.3, for the repair procedure.

SYSTEM MESSAGES

Data Load Result after restart
 processing



- 0/1 = Office Data Load ->"Normal End"/"Abnormal End"
- 0/1 = Data Load ->"Normal End"/"Abnormal End"
- 0/1 = Individual Speed Calling data load is "Normal End"/"Abnormal End"
- 0/1 = PS transfer service data load is "Normal End"/"Abnormal End"
- 0/1 = PS Name Display service data load is "Normal End"/"Abnormal End"
- 0/1 = -/Network DM Load ->"Normal End"/"Abnormal End"
- 0/1 = -/Local DM Load ->"Normal End"/"Abnormal End"
- 0/1 = -/DM Non Load
 - 0/1 = User Assign Soft Key data load is "Normal End"/"Abnormal End"
- b9: 0/1 = Number Sharing data load is "Normal End"/"Abnormal End" Note 2
- b11: 0/1 = Call Block data load is "Normal End"/"Abnormal End"
- **Note 1:** *Phase 1 Restart is executed when initializing the system without disrupting the following two-way connections that have already been established:*
 - Basic two-way connections (STN-STN, STN-TRK, TRK-TRK)

b0:

b1:

- Fixed connections
- Two-way connections established on a Fusion link

For more details, see Chapter 6, Section 12.2.3.

Note 2: Number sharing data load also affects the data load of Dual Station Calling Over-FCCS.

0-D	CPU Clock Down						
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:			

This message displays when a fault has occurred to the clock oscillator in the CPU.

b0:

b0:

b3:

1:	xxxx + (1 (2)	xx00 Ƴ	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Self-CPU Restart Information

b7	b5	b4	b3	_	b0	b3: b4:
						b5: b7:

0/1=-/Monitor Restart
0/1=-/Initialization
0/1=Data Copy restart (for Dual-CPU system only)
0/1=-/MB control
0/1=ACT/STBY (active system indication after restart)

2 Male-CPU Restart Information (FF H: not mounted)

b7	_	b5	b4	b3	_	b0	b4: b5:
							b7:

- 0/1=-/Monitor Restart 0/1=-/Initialization
- 0/1=-/Data Copy restart (for Dual-CPU system only)
- b5: 0/1 = -/MB control
 - 0/1=ACT/STBY (active system indication after restart)

3 Relat	ted Call	Information
---------	----------	-------------



b7: 0/1=Released/Not released

Reference: See Chapter 5, Section 6.2, for the repair procedure.

0-E		C-Level Infi	inite Loop	
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:

C-level infinite loop is a state where a clock-level program, running under clock interrupt disable state, is in an infinite loop. This message displays when the counter value to check the normality of the processing has become abnormal.

0 – E	0-E C-level Infinite Loop														
1:	XXXX	XXXX	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	XXXX	XXXX	XXXX	XXXX	
	12	34	56	\bigcirc					8						
4:	XXXX	XXXX	XXXX	XXXX	5:	XXXX	XXXX	XXXX	XXXX	6:	XXXX	XXXX	XXXX	XXXX	
	8														
7:	XXXX	XXXX	XXXX	XXXX	8:	XX00	0000	0000	0000	9:	0000	0000	0000	0000	
			8												

① Self-CPU Restart Information after clock fault occurrence



- b0: 0/1 = -/Monitor Restartb3:
 - 0/1 = -/Initialization

0/1 = -/Data Copy Restart (for Dual-CPU system only)

0/1 = -/MBcontrol

b0:

0/1 = ACT/STBY (active system indication after restart)

⁽²⁾ Mate-CPU Restart Information

b7	b5	b4	b3	_	b0	b3: b4:
						b5: b7:

0/1 = -/Monitor Restart0/1 = -/Initialization 0/1 = -/Data Copy Restart (for Dual-CPU system only)0/1 = -/MBcontrol0/1 = ACT/STBY (active system indication after restart)

③ NMI Factor

U I														
b7	b6	b5	b4	h3	b2	b1	b0	b1:						
07	00				-02		00	b2:						
								b3:						
								b4:						
								b5:						

0/1 = -/Reset by Power On 0/1 = -/Watchdog Timer timeout0/1 = ISAGT is mounted/ISGAT is not mounted 0/1 = -/OSC clock interrupt on ISGAT 0/1 = -/IO parity Alarm 0/1 = -/IO ready Alarm 0/1 = -/External NMIb6:

Reference: See Chapter 5, Section 6.2, for the repair procedure.
SYSTEM MESSAGES



- 0/1 = Timer 2 Gate ON/OFF
- 0/1 = Speaker Gate ON/OFF
- 0/1 = Parity Check Enable/MASK
- 0/1 = Channel Check Enable/MASK
- 0/1 = -/RAM Refresh Pulse Output State
- 0/1 = -/Timer 2 Output State
- 0/1 = -/Channel Check Error Detected b6:
- b7: 0/1 = -/Parity Error Detected

b0:

b3:

b4: b5:

(5)	CPU	Alarm
-----	-----	-------



- 0/1 = -/ACT-side Processor CLK Alarm
 - 0/1 = -/ACT-side Processor COP Alarm
- 0/1 = -/ACT-side Processor MEM Alarm
- 0/1 = -/ACT-side Processor Emergency Timer Overflow
- 0/1 = -/STBY-side Processor CLK Alarm
- 0/1 = -/STBY-side Processor COP Alarm
- b6: 0/1 = -/STBY-side Processor MEM Alarm
- b7: 0/1 = -/STBY-side Processor Emergency Timer Overflow

6	CPU	Changeover	Factors	
---	-----	------------	---------	--



- b0: 0/1 = -/CLK Alarm
 - 0/1 = -/Emergency Timer Overflow
 - 0/1 = -/SOFT EMA
 - 0/1 = -/SOFT changeover
 - 0/1 = -/Emergency Counter Overflow
 - 0/1 = STBY/ACT
- 0/1 = Dual/Singleb6:
- b7: 0/1 = CPU #0/CPU#1

(7) S	⁽⁷⁾ System ALM												
b7	b6	b5	b4	b3	b2	b1	b0						

- 0/1 = -/Main Power Alarm b0:
- b1: 0/1 = -/Power Alarmb2:
 - 0/1 = -/FUSE Alarm
 - 0/1 = -/TEMP MJ Alarm
 - 0/1 = -/TEMP MN Alarm
 - 0/1 = -/Parity Alarm
- b6: 0/1 = Card is not mounted/mounted
- b7: 0/1 = -/EMA CLK Alarm

⁽⁸⁾ Data Analyzed by NEC Engineers

0-F		Memory	Failure	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a CPU memory read/write error occurs.

	0 -	Marri	-	ام ڈ ا												
	1:	XXXX	XXX XXX	aιιυ X XX	ire (XX	XXXX	2:	xxxx	XXXX	xxxx	XXXX	3:	XXXX	xxxx	xxxx	XXXX
		12	3 (4 5	6	7					8					
	4:	XXXX	XXX	х хх	XXX	XXXX	5:	XXXX	XXXX	XXXX	XXXX	6:	XXXX	XXXX	XXXX	XXXX
									(8						
	7:	XXXX	XXX	х хх	xxx	XXXX	8:	XX00	0000	0000	0000	9:	0000	0000	0000	0000
					8											
 ① I: b7 ② M b7 	nform fter c	b5 CPU R	on Se on of b4 b	If-CP a cloo 3 Infor 3	rmati	ion		b0: 0, b3: 0, b4: 0, b5: 0, b7: 0, b0: 0, b3: 0, b4: 0, b5: 0, b5: 0, b5: 0, b5: 0, b5: 0,	/1 = -/Mq /1 = -/Ini /1 = -/Da /1 = -/Mq /1 = ACT /1 = -/Mq /1 = -/Ini /1 = -/Da /1 = -/Da	onitor Re tializatio tta Copy Bcontrol C/STBY	estart Restart (active s estart on Restart	(for]	Dual-CP m indica Dual-CP	PU systen tion afte PU systen	m only) er restart m only))
③ N b7	MI F b6	Factor	b4 b	3 b.	2 t	o1 b0		b7: 0, b0: 0, b1: 0, b2: 0, b3: 0, b4: 0,	/1 = ACT /1 = -/Re /1 = -/Wa /1 = ISG /1 = -/OS /1 = -/IO	E/STBY eset by Po atchdog AT is mo SC clock parity A	(active s ower On Timer tin ounted/I interrup Alarm	meou SGA ot on	m indica 1t T is not 1 ISGAT	tion afte	er restart)

Reference: See Chapter 5, Section 6.2, for the repair procedure.

SYSTEM MESSAGES



- 0/1 = Timer 2 Gate ON/OFF
- 0/1 = Speaker Gate ON/OFF
- 0/1 = Parity Check Enable/MASK
- 0/1 = Channel Check Enable/MASK
- 0/1 = -/RAM Refresh Pulse Output State
- 0/1 = -/Timer 2 Output State
- b6: 0/1 = -/Channel Check Error Detected
- b7: 0/1 = -/Parity Error Detected

b0:

b1:

b2:

b4:

5 CPU	Alarm
-------	-------



- 0/1 = -/ACT-side Processor CLK Alarm
- 0/1 = -/ACT-side Processor COP Alarm
- 0/1 = -/ACT-side Processor MEM Alarm
- 0/1 = -/ACT-side Processor Emergency Timer Overflow
- 0/1 = -/STBY-side Processor CLK Alarm
- 0/1 = -/STBY-side Processor COP Alarm
- b6: 0/1 = -/STBY-side Processor MEM Alarm
- b7: 0/1 = -/STBY-side Processor Emergency Timer Overflow

⁽⁶⁾ CPU Changeover Factors

b7	b6	b5	b4	b3	b2	b1	b0

- b0: 0/1 = -/CLK Alarm
 - 0/1 = -/Emergency Timer Overflow
 - 0/1 = -/SOFT EMA
- b3: 0/1 = -/SOFT changeover
 - 0/1 = -/Emergency Counter Overflow
- b5: 0/1 = STBY/ACT
- b6: 0/1 = Dual/Single
- b7: 0/1 = CPU #0/CPU #1



- 0/1 = -/Main Power Alarm
- 0/1 = -/Power Alarm
- 0/1 = -/FUSE Alarm
- : 0/1 = -/TEMP MJ Alarm
- 0/1 = -/TEMP MN Alarm
- b5: 0/1 = -/Parity Alarm
- b6: 0/1 = Card is not mounted/mounted
- b7: 0/1 = -/EMA CLK Alarm

⁽⁸⁾ Data Analyzed by NEC Engineers

0-G	B1·	-Level Infinite L	oop (Permanen	t)
	Default Alarm: MN	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when a B-level infinite loop failure occurs.

	0-F	Memc	ry Fai	ilure	YYVV	· ·	vvvv	~ ~~~~	YYYY	vvvv	3.	vvvv	vvvv	YYVV	vvvv
	1.		, <u>~~~</u> 3	ΛΛΛΛ	ΛΛΛΛ	2.	AAA2				3.	ΛΛΛΛ	ΛΛΛΛ	ΛΛΛΛ	
	4 :	vxxx	w x x x x	xxxx	XXXX	5:	XXXX		(4) XXXX	XXXX	6:	XXXX	XXXX	xxxx	xxxx
	1.		71717171		21212121	5.					0.	21212121	21212121	21212121	mm
	7:	xxxx	xxxx	xxxx	xxxx	8:	XX0(0000	+) 0000	0000	9:	0000	0000	0000	0000
		_		 (4)		-									
_															
1) Ii	iforn	nation (on Self-	-CPU R	lestart	t	b0: ($0/1 = -/M_{0}$	onitor R	estart					
a. h7		h5 h		CIOCK I	aun b0	t	53: (54: (0/1 = -/1ni 0/1 = -/Da	tializatio ta Copy	on restart (for D	ual-CPU	J system	only)	
07		03 L	4 03		00	ե 1 հ	5: (7: (0/1 = -/M	B contro	l (active s	vstei	n indica	tion afte	r restart`)
										(uouro :			uron uroo		,
2 M b7	late-C	CPU R b5 b	estart In 04 b3	nformat	ion b0	נו נו נו נו נו	50: (53: (54: (55: (57: (0/1 = -/Mc 0/1 = -/Ini 0/1 = -/Da 0/1 = -/Ml 0/1 = ACT	onitor Ro tializatio ta Copy Bcontrol C/STBY	estart on Restart (active s	(for]	Dual-CP n indica	U syster tion afte	n only) r restart))
3 В b7	-leve	1 Infini	te Loop		o1 b0	ե Ե	50: (51: (0/1 = -/B - 1 0/1 = -/Tas	level Inf sk Timer	inite Loo r Timeou	op it				

④ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 6.2, for the repair procedure.

0-H	B1·	-Level Infinite L	oop (Temporary	()
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when, in the CPU program processing, the counter value to check the normality of the processing has become abnormal.

1:	XXXX	XXXX	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	XXXX	XXXX	XXXX	XXXX
	12	3	(4)			(4	Ð				(4)	
4:	XXXX	XXXX	XXXX	XXXX	5:	XXXX	XXXX	XXXX	XXXX	6:	XXXX	XXXX	XXXX	XXXX
		(4	Ð				(4				(4	
7:	XXXX	XXXX	XXXX	XXXX	8:	<u>xx</u> 00	0000	0000	0000	9:	0000	0000	0000	0000
		(4)			4								
elf-C	PU Rea	start Inf 94 b3		b0	1 1 1 1 1 1	00: 0/ 03: 0/ 04: 0/ 05: 0/ 07: 0/	(1 = -/Ma) (1 = -/Ini) (1 = -/Da) (1 = -/Mi) (1 = AC)	onitor Ra tializatio tta Copy B contro [/STBY	estart on restart (l (active s	for D syster	Dual-CPI m indica	U systen tion afte	n only) er restart)
ate-C	CPU Re t moun	estart In ted)	formati	on (FF	t t	00: 0/ 03: 0/	$1 = -/M_{1}$ $1 = -/I_{1}$	onitor R tializatio	estart on			T	1 \	
	b5 t	64 b3		b0	t P	04: 0/	1 = -Da 1 = -M	ita Copy B contro	restart (for L	Dual-CP	∪ system	n only)	
					ł	o7: 0/	1 = AC	C/STBY	(active s	syster	m indica	tion afte	r restart)
					1		(1 / D							
	1: 4: 7: elf-C	1: <u>xxxx</u> 1: <u>xxxx</u> 4: <u>xxxx</u> 7: <u>xxxx</u> elf-CPU Rest b5 b b5 b b [ate-CPU Rest b [ate-CPU Rest b b5 b b [ate-CPU Rest b [x not moun] b b b	1: <u>xxxx</u> <u>xxxx</u> 1) ② ③ 4: <u>xxxx</u> <u>xxxx</u> 7: <u>xxxx</u> <u>xxxx</u> 6 1 1 1: <u>xxxx</u> <u>xxxx</u> 1:	1: $xxxx$ $xxxx$ $xxxx$ (1) (2) (3) 4: $xxxx$ $xxxx$ $xxxx$ (4) 7: $xxxx$ $xxxx$ $xxxx$ (4) 7: $xxxx$ $xxxx$ $xxxx$ (4) 2: off-CPU Restart Information (ate-CPU Restart Information (c) b5 b4 b3 (c) b5	1: $xxxx xxx xxx xxx xxx xxx 1 2 3 4 4: xxxx xxx xxx xxx xxx xxx 4 7: xxxx xxx xxx xxx xxx 4 7: xxxx xxx xxx xxx xxx 4 elf-CPU Restart Information b5 b4 b3 b0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 $	1: $XXXX XXX XXX XXX 2:$ (1) (2) (3) (4) 4: $XXXX XXX XXX XXX XXX 5:$ (4) 7: $XXXX XXX XXX XXX XXX 8:$ (4) 2If-CPU Restart Information b5 b4 b3 b0 (4) (4) (5) b4 b3 b0 (4) (5) b4 b3 b0 (5) b4 b3 b0 (6) (7) (7) (7) (7) (7) (7) (7) (7	1: \underline{XXXX} \underline{XXXX} \underline{XXXX} $2:$ \underline{XXXX} 4: \underline{XXXX} \underline{XXXX} \underline{XXXX} $5:$ \underline{XXXX} \underline{a} \underline{a} \underline{a} \underline{a} \underline{a} \underline{a} 7: \underline{XXXX} \underline{XXXX} \underline{XXXX} \underline{XXXX} $\underline{8:}$ $\underline{XX00}$ \underline{a} \underline{a} \underline{a} \underline{a} \underline{a} \underline{a} \underline{a} elf-CPU Restart Information $\underline{b0:}$ $0'_{b4:}$ $0'_{b5:}$ $0'_{b4:}$ $0'_{b5:}$ $0'_{b7:}$ $0'_{b$	1: \underline{XXXX} \underline	1: \underline{XXXX} \underline	1: \underline{XXXX} \underline	1: \underline{XXXX} \underline	1: $\underbrace{XXXX}_{0} \underbrace{XXXX}_{0} XXXX$	1: \underline{XXXX} \underline	1: \underline{XXXX}

④ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 6.2 and Section 6.3, for the repair procedure.

CHAPTER 3 Page 50 Issue 1

0-1		Mate CPL	J Failure	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a fault, such as the Clock down or C-level infinite loop error, has occurred.

1:	xx00 ①	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Mate-CPU Restart Information

ſ

b7		b3	b2	b1	b0	b1: b2:
						b3:

b0: 0/1 = -/CPU clock down b1: 0/1 = -/C-level infinite loop

0/1 = -/Memory error, Parity alarm

0/1 = -/Emergency Timer Overflow

Reference: See Chapter 5, Section 6.2 and Section 6.3, for the repair procedure.

Γ

0-J	Abnormal Interrupt									
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:						

This message displays when the system is interrupting abnormally in the processing.

1:	<u>xxxx</u> 1 2	xxxx 3 4	XXXX	<u>xxxx</u> 4	2:	XXXX	XXXX	xxxx	XXXX	3:	XXXX	XXXX	<u>xxxx</u> 4	XXXX
4:	XXXX	XXXX	xxxx	XXXX	5:	XXXX	XXXX	<u>xxxx</u> 4	XXXX	6:	XXXX	XXXX	<u>xxxx</u> 4	XXXX
7:	XXXX	XXXX	<u>XXXX</u>	XXXX	8:	<u>xx</u> 00 ④	0000	0000	0000	9:	0000	0000	0000	0000

(1) S	elf-CPU	JR	Restar	rt Info	ormatio	n	b0:	0/1 = -/Monitor Restart
h7	h	5	b/	h3		b 0	b3:	0/1 = -/Initialization
07	0	5	04	05	-	00	b4:	0/1 = -/Data Copy restart (for Dual-CPU system only)
							b5:	0/1 = -/MB control
							b7:	0/1 = ACT/STBY (active system indication after restart)
								· · · · · · · · · · · · · · · · · · ·

b0:

b3:

⁽²⁾ Mate-CPU Restart Information (FF
H: not mounted)	



- 0/1 = -/Monitor Restart 0/1 = -/Initialization 0/1 = -/Data Copy restart (for Dual-CPU system only)0/1 = -/MB control
- 0/1 = ACT/STBY (active system indication after restart)



0/1 = -/Abnormal Interruption (Hardware) 0/1 = -/Program Exception

④ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 6.2 and Section 6.3, for the repair procedure.

1-A	Both TSW Failure (Permanent)								
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when link information cannot be written into the switch memory of the TSW in both systems.

- 1:
 xxxx
 xxxx
 xxxx
 xxxx
 xxxx
 xxxx
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
- (1) TSW system in which a fault is b0: 0/1 = TSW No. 0/TSW No. 1 detected

b7				b0

2 S	tatus	at th	e tim	e of	fault	detec	tion	b0:
b7	b6						b0	b6:

0/1 = TSW No. 0 system/TSW No. 1 system Speech Path in ACT status 0/1 = No. 0 system/No. 1 system

③ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 5.3, for the repair procedure.

SYSTEM MESSAGES

1-B	TSW Failure (Permanent)									
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when link information cannot be written into the switch memory of the TSW card in one of the dual systems.

1:		XXXX	XXXX 3	XXXX	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① TSW system in which a fault is b0: 0/1 = TSW No. 0/TSW No. 1 detected

b7				b0

2) S	tatus	at th	e tim	e of t	fault	detec	tion	
b7	b6	_				_	b0	

0/1 = TSW No. 0/TSW No. 1 0/1 = Speech Path in ACT status No. 0 system/No. 1 system

③ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 5.4, for the repair procedure.

b0:

b6:

1-C		Both TSW W	rite Failure	
	Default Alarm: MN	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the link information cannot be written into the switch memory of the TSW in both systems.

- 1:
 XXXX
 XXXX
 XXXX
 XXXX
 XXXX
 XXXX
 XXXX
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
- (1) TSW system in which a fault is b_0 : 0/1 = TSW No. 0/TSW No. 1 detected

b7				b0

2						b0:	0/1 = TSW No. 0/TSW No. 1 0/1 = Speech Path in ACT status
b7	b6	_			b0	00.	No. 0 system/No. 1 system

③ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 5.2 and Section 6.2, for the repair procedure.

SYSTEM MESSAGES

1-D		TSW Write	e Failure	
	Default Alarm: MN	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the link information cannot be written into the switch memory of the TSW card in one of the dual systems.

1:	XXXX	xxxx	XXXX	xxxx	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	12		3											
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① TSW system in which a fault is b0: 0/1 = TSW No. 0/TSW No. 1 detected

b7				b0

2 S	tatus	at th	e tim	e of t	fault	detec	tion	b0:
b7	b6	_					b0	b6:

0/1 = TSW No. 0/TSW No. 1 0/1 = Speech Path ACT status TSW No. 0 system is ACT/TSW No. 1 system is ACT

③ Data Analyzed by NEC Engineers

Reference: See Chapter 5, Section 5.2, Section 5.4, and Section 6.2, for the repair procedure.

1-E		Both TSW CI	ock Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the system detects a clock failure, such as TSW internal clock down or Frame Head down, in both systems.

 1:
 xxxx
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① TSW card in which a fault is detected

b0: 0/1 = -/TSW No. 0 system b1: 0/1 = -/TSW No. 1 system

b7			b1	b0

2	Clock	status	of	No.	0	TSW	

b7

b6

0/1 = -/DTG output down	
0/1 = -/External 32 ch Clock (PLO) No. 0 System	down
0/1 = -/External 32 ch Clock (PLO) No. 1 System	down

③ Clock status of No. 1 TSW

Note: *Refer to the meaning of* 2*.*

b2

Reference: See Chapter 5, Section 5.3, for the repair procedure.

b0

b2: b6:

b7:

1-F		TSW Cloc	k Failure	
	Default Alarm: MJ	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the system detects a clock failure, such as TSW internal clock down or Frame Head down, in one of the dual systems.

 1:
 xxxx
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① TSW card in which a fault is detected

b0: 0/1 = -/TSW No. 0 b1: 0/1 = -/TSW No. 1 system

b7			b1	b0

b2

2	Clock	status	of	No.	0	TSW	

b7

b6

0/1 = -/DTG output down
0/1 = -/External 32 ch Clock (PLO) No. 0 System down
0/1 = -/External 32 ch Clock (PLO) No. 1 System down

③ Clock status of No. 1 TSW

Note: *Refer to the meaning of* 2*.*

Reference: See Chapter 5, Section 5.4, for the repair procedure.

b0

b2: b6:

b7:

1-0		Both PLO	Failure	
	Default Alarm: MJ	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the system detects a fault, such as input clock all down or output clock down in the PLO cards, at both sides.

	1:	XXXX		<u>xx</u>	XX0	0 0	000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	1.	12			5	0 0	000	Ę۰	0000	0000	0000	0000	6٠	0000	0000	0000	0000
	4.	0000	, 00	000	000	0 0	000	5.	0000	0000	0000	0000	0.	0000	0000	0000	0000
	7:	0000	00	000	000	0 0	000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① C	Detect	ted PL	O nu	umbe	er			h	0· 0/	1 = No	0 PL 0/N	No 1 PI	0				
b7							b0	0	0. 0,	1 1101	0120/1						
								1									
② V 1 b7	alid 1 b6	Inform b5	ation b4	ı bit b3	for S b2	can b1	Data b0	b 1	0-b7: Bi	it positic 4) is fla	on corres gged "1'	ponding ".	to th	e detect	ed infori	mation in	n Scan D
3 V	/alid	Inform	natior	n bit	for S	can	Data	b	0-b7: Bi	it positio	on corres	ponding	g to th	ne detect	ed infor	mation i	n Scan D
b7	b6	b5 1	b4	b3	b2	b1	b0		((5)) is fla	gged "1'	•					

Reference: See Chapter 4, Section 2.3.2 and Section 2.3.4, for the circuit card replacement procedure.

SYSTEM MESSAGES

④ Scan Data 1: Current Status of PLO card

h7 h6 h5 h4 h3 h2 h1 l	h0	h1	h2	h3	h4	h5	h6	h7

b0: Clock status at time of detection 0/1 = STBY/ACT

b1: Circuit Card status at time of detection

0/1 = PLO synchronizing/PLO self running or drift abnormal

b2: 0/1 = -/Input clock down

b3, b4: Route of Input clock

b4	b3	DCS Input Route	Route Of Input Clock
0	0	0	0
0	1	1	1
1	0	-	2
1	1	-	3

b5: 0/1 = -/PLO input all down

b6: 0/1 = -/PLO output down

b7: 0/1 = -/Drifting

b1:

5	Scan	Data 2:	Current	Status	of PLO
	card				

b7	_	b4	_	b1	b0

b0: (0/1 = -/5 msec	Burst Clock down
-------	----------------	------------------

0/1 = -/Frame Synchronization from SYNC card is down

b4: 0/1 = -/Internal OSC clock down

1-P		PLO Fa	ailure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the system detects all the failures concerned with input clock down or output clock down in the PLO card at the ACT side. When this message is indicated, the PLO card changeover executes.

Note: *The No. 0 PLO card automatically changes over to No. 1. The changeover of No. 1 to No. 0 is not automatic.*

1:	XXXX	XXXX	<u>xx</u> 00	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	12	34	5											
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b0:

0/1 = No. 0 PLO/No. 1 PLO

① Self-CPU Restart Information



- 2 Valid Information bit for Scan Data 1
- b0-b7: Bit position corresponding to the detected information in Scan Data 1 (④) is flagged "1".
- b7 b6 b5 b4 b3 b2 b1 b0
- ③ Valid Information bit for Scan Data 2

b4 b3

b2 b1

b0

b7

b5

b6

b0-b7: Bit position corresponding to the detected information in Scan Data 2 (⑤) is flagged "1".

Reference: See Chapter 4, Section 2.3.2 and Section 2.3.4, for the circuit card replacement procedure.

SYSTEM MESSAGES

4	Scan	Data	1:	Status	of	PLO	card
---	------	------	----	--------	----	-----	------

b7	b6	b5	b4	b3	b2	b1	b0

b0: Clock status at time of detection

0/1 = STBY/ACT

b1: Circuit card at time of detection

0/1 = PLO synchronizing/PLO self running or drifting

b2: 0/1 = -/Input clock down

b3, b4: Route of Input clock

b4	b3	DCS Input Route	Route Of Input Clock
0	0	0	0
0	1	1	1
1	0	-	2
1	1	-	3

b5: 0/1 = -/PLO input all down

b6: 0/1 = -/PLO output down

b7: 0/1 = -/Drifting

b4:

5	Scan	Data:	Status	of	PLO	card
---	------	-------	--------	----	-----	------

b7		b4		b1	b0

b0: 0/1 = -/5 msec Burst Clock down

b1: 0/1 = -/Frame Synchronization from SYNC card is down

0/1 = -/Internal OSC clock down

1-S		Module Group	Down Failure	
	Default Alarm: MJ	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a fault of the speech path system has occurred in a specific Module Group. The specific Module Group is placed into make-busy state.

<u>XX</u>00 XXXX 1: 3 12 ① MG number of fault detection b0: 0/1 = Even-numbered MG/Odd-numbered MG b7 b0 ⁽²⁾ Kind of failure b0-b7: 00H/01H = -/ACT side TSW fault b7 b6 b5 b4 b3 b2 b1 b0 ③ Speech Path/Clock System b0: ACT side speech path 0/1 = No. 0 system/No. 1 system b7 b1 b0 ACT side clock b1:

0/1 = No. 0 system/No. 1 system

Reference: See Chapter 4, Section 2.3.2, for the circuit card replacement procedure.

1-T		TSW ACT Cha	ange Report	
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the changeover of the TSW system is executed.

1		0000	XXXX	XXXX	2:	0000	0000	0000	0000	3:	0000	0000	XXXX	XXXX
	12		34	56									78	91
4	: 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7	• • • • • • •	0000	0000	0000	0.	0000	0000	0000	0000	0.	0000	0000	0000	0000
/	0000	0000	0000	0000	8.	0000	0000	0000	0000	9:	0000	0000	0000	0000
1														

① ACT side Speech Path (TSW) after b0: 0/1 = No. 0 system/No. 1 system changeover

b7				b0

2 Reason for changeover

b7	b6	b5	b4	b3	b2	b1	b0	b7-b4	b3-b0	Card	Contents
								0	1	TSW	I/O Alarm
						l			2		32ch Clock down, FH down
									3		24ch Clock down, FH down
									6		TSW SW Memory write failure
									9		I/O Alarm release
									10		32ch Clock down recovered, FH down recovered
									11		24ch Clock down recovered, FH down recovered
									13		TSW MBR key OFF
									15		TSW ACT/STBY changeover by CMOD command
								6	1	MUX	MUX circuit card Ready failure
									2		MUX circuit card clock failure

③∼⑥ Status of ACT side TSW card

b7	b6	b5	b4	b3	b2	b1	b0

3 4	MG00 MG02	MG01 MG03
6	MG04 MG06	MG05 MG07
	b7-b4	b3-b0

b0-b3, b4-b7: The status of TSW card in each MG (00~07) 0000 = Normal 0001 = Abnormal (Impossible to make links)

 $\textcircled{O}{\sim}\textcircled{0}$ Status of ST-BY side TSW card

b7	b6	b5	b4	b3	b2	b1	b0

\bigcirc	MG00	MG01
8	MG02	MG03
9	MG04	MG05
10	MG06	MG07
	b7-b4	b3-b0

b0-b3, b4-b7: The status of TSW card in each MG (00~07) 0000 = Normal 0001 = Abnormal (Impossible to make links)

1-U	DLKC	Data Transfer	Failure (Perman	ent)
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when DLKC data transfer failure (temporary), shown in message [1-V], occurs more than 16 times an hour. At this time, the faulty DLKC card is down and its switching network automatically changes over.

 1:
 xxxx
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

01H: Firmware fault

04H: Data parity error

02H: Data transfer time out to DLKC 03H: No answer time out (at DLKC)

① System status of faulty DLKC card b0: 0/1 = No.0 system / No. 1 system

b7				b0

② Error Code

b7	b6	b5	b4	b3	b2	b1	b0

③ Details on Switching Network



b0: Status of Speech Path System (including DLKC) 0/1 = No. 0 system is ACT/No. 1 system is ACT
b1: Status of basic clock 0/1 = No. 0 system is ACT/No. 1 system is ACT

1-V	DLKC	Data Transfer I	Failure (Tempor	ary)
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when a data sending error or no answer error occurs at the time of data transfer from CPU to DLKC card.

	1:	xxxx 1 2 0000	3 0000	0000	0000	2: 5:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① S	ysten	n statu	s of fau	lty DLl	KC card	l t	0 : 0)/1 = No.	0 systen	n / No. 1	syst	em			
b7					b0										
2 E b7	rror (b6	Code b5 l	o4 b3	b2	b1 b0)1H: F)2H: I)3H: N)4H: I	Firmware Data trans No answe Data parit	fault fer time r time ou y error	out to I ut (at DI	DLKO LKC)				
③ D b7		s on S	witching	g Netwo	ork b1 b0	ե 1 ե	00: S 01: S 07: I	Status of Status of Status of Status of I Status of I J/1 = No. nformatio J/1 = - /S'	Speech F 0 systen basic clo 0 systen on on Re FBY DL	Path Sys n is ACT ock n is ACT eset of S' .KC card	tem ([/No. [/No. TBY 1 was	includin 1 syster 1 syster DLKC reset	g DLKO n is AC ⁷ n is AC ⁷ Note	2) Г Г	

Note: *This data displays when the STBY DLKC card is detected as faulty.*

1-W		PLO Re	estore	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a failure such as internal clock down occurred to PLO is restored.

b0:

1:	XXXX	XX00	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	12	3												
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Restoration of PLO fault

b7			_	b0

⁽²⁾ Current	Status	of PLO	card
• • • • • • • • • • • • • • • • • • • •			

b7 b6 b5 b4 b3 b2 b1 b0

_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				

b0:	0/1 = Clock is in STBY side/ACT side
b1:	0/1 = PLO synchronizing/PLO self running or drifting
b2:	0/1 = -/Input clock down
b3, b4	Route of input clock (see the table below)

0/1 = PLO No. 0 system/PLO No. 1 system

b4	b3	Connected With Primary Oscillator (M-OSC)	Connected With External Clock
0	0	No. 0 M-OSC	Route 0
0	1	No. 1 M-OSC	Route 1
1	0	_	Route 2
		_	Route 3

- b5: 0/1 = -/PLO input all down
- b6: 0/1 = -/PLO output down
- b7: 0/1 = -/Drifting

③ Current Status of PLO card



- b0: 0/1 = -5msec clock down
 - : 0/1 = -/Frame Synchronization from SYNC card is down
 - 0/1 = -/Internal OSC clock down

CHAPTER 3 Page 68 Issue 1

3-B	C-Level Infinite Loop (Permanent)							
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:				

This message displays when a C-level program abnormal state is detected as permanent. When the Port Microprocessor (PM) on an LC/TRK card detects the abnormal state, the PM places the card into make-busy status. If the failure occurs more than 15 times an hour, the system judges the failure as permanent and issues the this system message.

 1:
 xx 0
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

1 1 1	Faulty Locat	y Ciro ion	cuit (Card	Moui	nting		b0-b4 b5-b6	4: Group 5: Unit (0-3)
b7	b6	b5	b4	b3	b2	b1	b0	b7:	Module Group (0/1)

Γ

3-C	C-Level Infinite Loop (Temporary)								
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:					

This message displays when C-level program is detected as abnormal by the Port Microprocessor (PM) mounted on an LC/TRK card. If the failure occurs less than 15 times/hour, and a B-monitor/Initial restart executes as the result, the failure is judged as temporary and this message is created.

1:	XXOX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	(1) (2) 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Faulty Circuit Card Mounting Location								b0-b4 b5-b6	b0-b4: Group b5-b6: Unit (0-3)			
b7	b6	b5	b4	b3	b2	b1	b0	b7:	Module Group (0/1)			
② F	② PM Restart Type							b0:	0/1 = B-monitor/Initial Restart	Note		
b7	b7 b0											

Note: *B-monitor Restart: Ports whose link has already been established remain connected. Ports processing a call-origination may be released.*

Initial Restart: All ports on the circuit card are forcibly released to be placed in idle state.

3-D	Lock-Up Failure (Permanent)							
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:				

At the periodic interval, the CPU sends diagnosis data to the Port Microprocessor (PM) on LC/TRK cards in order to monitor the PM. If the CPU cannot receive the return data within a predetermined period of time, the system displays this data. When the failure is detected more than 15 times per hour, the failure is judged as permanent.

1: 1 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 0000 \$

① Faulty Circuit Card Location

(1) F	\mathcal{D} Faulty Circuit Card Location							b0-b4: Group		
b7	b6	b5	b4	b3	b2	b1	b0	b5-b6: Unit (0-3) b7: Module Group		
								0/1 = Even-numbered MG/Odd-numbered MG		

Reference: See Chapter 5, Section 6.2, for the repair procedure.

3-E		Lock-Up Failure	e (Temporary)	
~	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

At the periodic interval, the CPU sends diagnosis data to the Port Microprocessor (PM) on LC/TRK cards in order to monitor the PM. If the CPU cannot receive the return data within a predetermined period of time, the system displays this data. When the failure is detected less than 15 times per hour, the failure is judged as temporary.

 1:
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

0/1 = B-monitor/Initial Restart

 ① Faulty Circuit Card Location
 b0-b4: Group

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b7
 module Group
 0/1 = Even-numbered MG/Odd-numbered MG

② PM Restart Type b0:

 b7
 b0

3-F		-48V Over	Current	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when over current of the operating power (DC-48V) is supplied from the ATI/ELC circuit card to the Attendant Console/D^{term}. When this fault occurs, the related circuit card is placed into makebusy state and stops supplying power.

 1:
 xx00
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

1	Locati	on of	f faul	ty Pl	M			b0-b4: Group
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit b7: $0/1 =$ Even-numbered MG/Odd-numbered MG

Γ

3-G		Ground	Failure	
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when a wire of the line between the LC circuit card and the telephone set is shortcircuited with ground.

	1:	XXXX	х 0)	000	0000	00	00	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4:	① ② 0000	2) D 0(000	0000	00	00	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	000	0 0	000	0000	00	00	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
 ① Location of faulty circuit card b0-b2: Circuit No. (0-7) b7 b6 b5 b4 b3 b2 b1 b0 b7 b6 b5 b4 b3 b2 b1 b0 																	
2 L	ocati	on of	faul	ty ci	rcuit d	card		ł	50. b1: Ui	nit No. (0-3)						
b7	b6	b5	b4	b3	b2	b1	b0	ł	o2-b7: M	G No. (0-1)						

Note: This message displays when the specific LC card providing the above function is used.

3-Н		Digital Line	Warning	
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the DTI card detects an abnormal state of a digital line but this failure has no influence on the speech path. When the status worsens, the system issues [3-I] Digital Line Failure message.

 1:
 XXXX
 XX00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000

 4:
 0000
 0000
 0000
 5:
 0000
 0000
 0000
 6:
 0000
 0000
 0000
 0000

 7:
 0000
 0000
 0000
 8:
 0000
 0000
 0000
 9:
 0000
 0000
 0000

(1) Location of PM (LENS) with a fault								b0-b4 b5, b0	b0-b4: Group b5, b6: Unit				
b7	b6	b5	b4	b3	b2	b1	b0	b7:	0/1 = Even-numbered MG/Odd-numbered MG				

⁽²⁾ Kind of fault

b7	b6	b5	b4	b3	b2	b1	b0

01H = Frame alignment loss occurs three times a day 02H = Bit error rate is over 10^{-6} 03H = Slip occurs twice a day 04H = Multiframe alignment loss occurs three times a day 08H = Fault detection on the CCIS Bch

③ Time Slot No. of fault (This data is valid only when the kind of fault is 08H.)

b0-b4: Time slot No. in which the digital line failure occurred (1-16, 17-31)

b7	_	b4	b3	b2	b1	b0

3-1		Digital Lin	e Failure	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays after [3-H] Digital Line Warning lasts in the DTI card over the particular time. This failure may cause a speech path fault to the DTI card.

1:	XXXX	0000	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	XXXX	XXXX	XXXX	XXXX
	12			34		34	34	34	34		34	34	34	34
4:	xxxx 3 4	34	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Location of faulty PM b0-b4: Group b5, b6: Unit b7 b6 b5 b4 b3 b2 b1 b0 b7: 0/1 = Even-numbered MG/Odd-numbered MG ⁽²⁾ Kind of fault 01H = Frame alignment loss occurs 100 times a day 03H = Slip occurs 50 times a dayb7 b6 b5 b4 b3 b2 b1 b0 04H = Multiframe alignment loss occurs 110 times a day 06H = Frame alignment loss lasts for 2 to 3 sec. $07H = Bit error rate is over 10^{-4}$ 09H = Warning signal (AIS) from the opposite office has been received for 1 sec. continuously. 0BH = Multiframe alignment loss lasts for 2 to 3 sec. 0FH = Digital Line is not restored ③ Location of faulty circuit card (This b3-b7: Group No. data is valid when ② is 0FH) b7 b6 b5 b4 b3 b0 (4) Location of faulty circuit card (This b0, b1: Unit No. data is valid when ⁽²⁾ is 0FH) b2-b7: MG No. b7 b6 b5 b4 b3 b2 b1 b0

3-J		Digital Line	e Restore	
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:

This message displays when a digital line fault is restored.

1:	xx00 (1)	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Location of faulty line

b7	b6	b5	b4	b3	b2	b1	b0	b5, b b7:	6: Unit 0/1 =

b0-b4: Group No. b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/odd-numbered MG

4-C		Both TSW Re	ady Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a Ready Failure occurs in both systems as a result of the TSW card having a failure or the card is not mounted properly.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
nit o	nd MG	numb	r of fo	ult		0.00	1 7501				N7 1			

detection	umber	011	aun		b0: 0/1 =	= 1SW No. 0 system/ISW No. 1 system
b7			_	b0	Note:	When Ready Failure occurs in both systems, the [4-C] message is separately issued twice: "0" displays in one
						message, and "1" in the other message.

Reference: See Chapter 5, Section 5.3, for the repair procedure.

4-D		TSW Read	y Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a Ready Failure occurs in one of the dual systems because the TSW card fails or the card is not mounted properly.

- 1:
 xx00 ①
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <t
- (1) Unit and MG number of fault b0: 0/1 = TSW No. 0 system/TSW No. 1 system detection

b7				b0

Reference: See Chapter 5, Section 5.4, for the repair procedure.

4-Q		DLKC Rea	dy Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when I/O Ready Failure occurs on a DLKC card.

b0:

b7:

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

0/1 = ACT/STBY

0/1 = No. 0 system/No. 1 system

1 Details on faulty DLKC card

h7	
\mathbf{U}	

7 b0

CHAPTER 3 Page 80 Issue 1

4-S		MUX Read	y Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MUX (PH-PC36) card has a Ready Failure in one of the dual systems. When the card is not ready for service function because of the failure or because the card is not mounted properly, the system creates this message.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

 ① Unit and MG number for MUX card with ready fault b7 b6 b5 b4 b3 b2 b1 b0 	b0: b1: b2: b3: b4: b5: b6: b7:	0/1 = -/MUX ready fault in even-numbered MG, Unit 0 0/1 = -/MUX ready fault in even-numbered MG, Unit 1 0/1 = -/MUX ready fault in even-numbered MG, Unit 2 0/1 = -/MUX ready fault in odd-numbered MG, Unit 3 0/1 = -/MUX ready fault in odd-numbered MG, Unit 1 0/1 = -/MUX ready fault in odd-numbered MG, Unit 2 0/1 = -/MUX ready fault in odd-numbered MG, Unit 2 0/1 = -/MUX ready fault in odd-numbered MG, Unit 2
② MG and system number for faulty MUX card	b0:	MG number for faulty MUX card 0/1 = Even number/Odd number
b7 b2 b1 b0	b1: b2:	 0/1 = Ready failure in MUX No. 0 system/Ready failure in MUX No. 1 system ACT or STBY status of faulty MUX. 0/1 = ACT/STBY

Reference: See Chapter 5, Section 4.3 and Section 4.4, for the repair procedure.
Γ

4-T		Both MUX Re	ady Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MUX (PH-PC36) card has a Ready Failure in both of the dual systems. When the card is not ready for service function because of the failure or because the card is not mounted properly, the system creates this system message.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① U ca b7	Init a ard w b6	nd M vith t b5	IG nu he re b4	umbe ady f b3	r for Fault b2	MU2 b1	X b0	b0: b1: b2: b3: b4: b5: b6: b7:	0/1 = -/MUX ready fault in even-numbered MG, Unit 0 0/1 = -/MUX ready fault in even-numbered MG, Unit 1 0/1 = -/MUX ready fault in even-numbered MG, Unit 2 0/1 = -/MUX ready fault in even-numbered MG, Unit 3 0/1 = -/MUX ready fault in odd-numbered MG, Unit 0 0/1 = -/MUX ready fault in odd-numbered MG, Unit 1 0/1 = -/MUX ready fault in odd-numbered MG, Unit 2 0/1 = -/MUX ready fault in odd-numbered MG, Unit 3
2 n N	1G aı 1UX	nd sy card	stem	num	ber f	or fa	ulty	b0:	MG number for faulty MUX card 0/1 = Even number/Odd number
b7					b2	b1	b0	b1:	0/1 = Ready failure in MUX No. 0 system/Ready failure in MUX No. 1 system Note 1
								b2:	ACT or STBY status of the faulty MUX Note 2 0/1 = ACT/STBY

Note 1: Though this message indicates the Ready Failure in both systems, the information displayed here only relates to the ACT-side MUX status. (Two messages are not displayed separately.)

Note 2: *Fixed as "0 (=ACT)." See* **Note 1**.

Reference: See Chapter 5, Section 4.3 and Section 4.4, for the repair procedure.

NDA-24300

4-U		PCI Card	Failure	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a PCI card failure occurs.

1:	0x0x T T 1 2	0x0x 7 7 3 4	0x00 T 5	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b0:

b0:

b1:

b1

b0

① Fault detection on PCI card

b7		b3	b2	b1	b0	b1: b2:
						b3:

0/1 = -/Error detection on PCI slot 0 (LANI-A)

0/1 = -/Error detection on PCI slot 1

0/1 = -/Error detection on PCI slot 2 (Not used)

0/1 = -/Error detection on PCI slot 3 (LANI-B)

21	Error	status	s on]	PCI s	slot 0			b0:
b7						b1	b0	b1:

③ Error status on PCI slot 1

0/1 = -/Physical connection error Note 10/1 = -/Hardware Fault Note 2

0/1 = -/Physical connection error**Note 1**

0/1 = -/Hardware Fault Note 2

4 N	ot used	
-----	---------	--

b7

CHAPTER 3 Page 83 Issue 1



0/1 = -/Physical connection error Note 10/1 = -/Hardware Fault Note 2

Note 1: *Physical Connection Error*

- Ethernet cable is disconnected.
- Ethernet cable has short-circuited.
- Ethernet straight/cross cable selection error

Note 2: Hardware Fault

- Transmitter failure
- Controller lock-up

4-V		PCI Card Failu	re Recovered	
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the PCI card, which was detected as faulty, is recovered.

b0:

b0:

 1:
 0x0x
 0x0x
 0x0x
 0x00
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Detection of PCI restoration

b7		b3	b2	b1	b0	b1: b2:
						b3:

0/1 = -/Error detection on PCI slot 0 (LANI-A)

0/1 = -/Error detection on PCI slot 1

0/1 = -/Error detection on PCI slot 2 (Not used)

0/1 = -/Error detection on PCI slot 3 (LANI-B)

② Details on error restoration (PCI slot 0)

b0: 0/1 = -/Physical connection error restoration**Note**

b7				b0

③ Details on error restoration (PCI slot 1)

0/1 = -/Physical connection error restoration**Note**



④ Not used

(5) Details on error restoration (PCI b0: 0/1 = -/Physical connection error restoration Note slot 3)

b7				b0

Note: *Physical Connection Error*

- *Ethernet cable is disconnected.*
- Ethernet cable has short-circuited.
- Ethernet straight/cross cable selection error

6-A		System	Failure	
	Default Alarm:	Default Grade:	Grade Modified:	Lamp Modified:
	NON	3	(FIXED) NON	(FIXED) 3

This message displays when any of the following faults are detected:

- Power failure
- Fuse blowing
- In-Frame abnormal temperature

1:	xx00	XXXX Y	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Probable cause for failure



b0: Input power (-48V) down/abnormal detected
b1: PWR Supply abnormal detected
b2: PWR Supply Fuse Blown detected
b3: Abnormal temperature MJ (70°C (158°F))
b4: Abnormal temperature MN (60°C (140°F))

2	Frame	in	which	a	fault	is	detec	ted
		1.0			a 1	~		1.0

b7	b6	b5	b4	b3	b2	b1	b0

b0-b3: Frame No. (0 Only)
0/1 = CPU is mounted/Not mounted
b4, b5: Frame Group No.
b6, b7: Kind of frame
00 = IMG

③ Factor of failure

b7		b4	b3	b2	b1	b0	b1: b2:
							b3:

0/1 = -/OBP Alarm 0 side	;
0/1 = -/OBP Alarm 1 side	;
0/1 = -/OBP Alarm MISC	' side
0/1 = -/Power Alarm 0 side	le
0/1 = -/Power Alarm 1 side	le

Reference: See Chapter 5, Section 8, for the repair procedure.

b0:

6-B	RGU & Howler Failure									
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when a fault in either the ringer or howler tone occurs in the PWR card.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
1														

① Unit and MG number of fault detection

b7			b2	b1	b0

b0, b1: Unit No. (0-3)b2: 0/1 = Even-numbered MG/Odd-numbered MG

② К b7	ind o	of fau	ılt		b1	b0	b0: b1:	0/1 = -/RGU (Ringing Unit) Fault 0/1 = -/Howler Fault

6-C		Line Load Co	ontrol Start	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the CPU usage (occupancy) rate exceeds the value assigned to ASYD, SYS1, Index 56, and the call origination from the pre-selected group of stations is restricted (i.e., Line Load Control is set). This system message is always indicated as 0.

1:	0000	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

6-D		Line Load Co	ontrol Stop	
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the CPU usage (occupancy) rate becomes lower than the value assigned to ASYD, SYS1, Index 57, and Line Load Control is cancelled. This system message is always indicated as 0.

٦

1: 0000 0000 0000 2: 0000 0000 0000 0000	0000 0000
4: 0000 0000 0000 5: 0000 0000 0000 0000	0000 0000
7: 0000 0000 0000 8: 0000 0000 0000 0000	0000 0000

6-H		Bad Call No	otification	
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays to indicate the result of Bad Call Notification.

	1:	xxxx (1) (2)	<u>xxxx</u> 3 4	xxxx 56	xxxx 78	2:	<u>xxxx</u> 9	xxxx 10	XXXX (1)	<u>xxxx</u> (12)	3:	0000	0000	0000	0000
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① b7	b6	b5 b	4 b3	b2 l	o1 b0	b	00-b3: St "0 94-b7: Ty	ation nu " when ' pe of co	mber dig Type of onnection	git with the connection	he fa	ult. (Thi 2 (ACI	s data is) Trunk)	always i .)	ndicated a

0 = Station connection

1 = Trunk connection

2 = ACD Trunk connection

When type of connection is Station connection

2 - 4 Station number (see table)

ſ

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
2	DC0	DC1
3	DC2	DC3
4	DC4	DC5

^⑤ The called station number

b0-b3: Number of digits for called station number



6 - 8 Called station number (See table)

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
6	DC0	DC1
\bigcirc	DC2	DC3
8	DC4	DC5

- (9) Time Slot Number of Link 1
- 1 Not used
- (1) Time Slot Number of Link 2
- (12) Not used

When type of connection is Trunk connection

② - ④ Station number (See table)

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
2	DC0	DC1
3	DC2	DC3
4	DC4	DC5

^⑤ Remote Route No.

b7	b6	b5	b4	b3	b2	b1	b0	b6:
								b7:

b0-b5: Route No. (1-63)
b6: OP 0/1 = Data in OPRT is invalid/valid
b7: AC 0/1 = Internal trunk/External trunk

6 Remote Route No.

b7

b0-b3: OPRT Route No. (Over 64) b3 b2 b1 b0

⑦ Called Trunk No.

b0-b7: Trunk No.

b7	b6	b5	b4	b3	b2	b1	b0

8 Not used

(9) Time Slot Number of Link 1

0 Not used

(1) Time Slot Number of Link 2

(12) Not used

When type of connection is ACD Trunk connection

② ACD Trouble Kind

b7	b6	b5	b4	b3	b2	b1	b0

b0-b7: ACD trouble kind 01H=ACD trunk trouble key Note 1 14H=ACD reset start Note 2 15H=Insufficient ACD memory 16H=Insufficient ACD call record 17H=Excessive business station on ACD calls 18H=Excessive calls queued 21H=Unknown Pilot No. called Note 3 24H=Illegal execution of ACD timeout procedure Note 4 30H=ACD pointer error detection and recovery Note 5 33H=ACDP reset completion Note 6 34H=Call recovery failure on unknown Pilot No. Note 7 37H=ACD Traffic (incoming) Capacity Over 99H=Illegal ACD processing-trace stored Note 4

Note 1: When "(ACD Trouble Kind)" is 01 Hex: **3-**[®] Information on Calling Party

(a) Station

My Line No.

/	b4-b7	b0-b3
3	DC0	DC1
4	DC2	DC3
(5)	DC4	DC5
6		

(b) Trunk

Route No. + Trunk No.

Example: RT125,TK10

01 25 00 10

3 4 5 6

			-
	b4-b7	b0-b3	
3		DC0	
4	DC1	DC2	koule No.
(5)		DC0	Trunk No.
6	DC1	DC2	

- ⑦ ⑧ Not Used
- Information on Calling Party Refer to $3\sim 6$

1 2 Information on Held Party or 3rd Station/Trunk in 3-Party Connection Refer to 3~6

Note 2: When "(ACD Trouble Kind)" is 14 Hex:

- 3 Issue of ACDP (First digit of decimal place)
- 4 Issue of ACDP (Second digit of decimal place)

Note 3: When "(ACD Trouble Kind)" is 21 Hex:

- ③∼⑥ Information on Calling Party Refer to 3~6 of Note 1
- ⑦ ⑧ Not used
- Information on Unknown Pilot No. Refer to 3~6, (a) Station of Note 1

NDA-24300

Note 4: When "(ACD Trouble Kind)" is 24 or 99 Hex:

3~6 Not used
 7 8 Error Counter

Note 5: When "(ACD Trouble Kind)" is 30 Hex:

3~⁶ Pointer Address

- ⑦ Not used
- 8 Error Kind

Note 6: When "(ACD Trouble Kind)" is 33 Hex:

- ACDP Data Memory 00 = Used 01 = Not used
 ACDP System Capacity 02 = 50 Agent Positions 04 = 200 Agent Positions 12 = 900 Agent Positions 15 = 2,000 Agent Positions
- **Note:** If other data is output, the ACD system may not be working correctly. In this case, be sure to install the ACD application again by using the MSVIP command.

Note 7: *When "(ACD Trouble Kind)" is 34 Hex:*

③~⑥ Information on Unknown Pilot No. Refer to ③~⑥, (a) Station of Note 1

6-I		STA-Test Con	nection Data	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays to indicate the result of a designated connection test (Individual Trunk Access) from a station.

1:	<u>xxxx</u> 1 2	<u>xxxx</u> 3 4	<u>xxxx</u> 56	<u>xxxx</u> 7 8	2:	xxxx 9 10	00 <u>xx</u> 11	<u>xxxx</u> 12	<u>xxxx</u> 12	3:	<u>xxxx</u> 12	<u>xxxx</u> 12	<u>xxxx</u> 12	<u>xxxx</u> 12
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

- ① Test Item (b0-b3 is valid only for Outgoing trunk test)
- b7 b6 b5 b4 b3 b2 b1 b0

			b3:
			h4-h

- b0-b2: Kind of Signal
 - 2 = Second Dial Tone
 - 6 = Sender (Delay Dial Start)
 - 7 = Sender (Wink Start)
 - 0/1 = Data is invalid/valid
- b4-b7: Test item
 - 1 = Outgoing Trunk Test
 - 2 = ORT/IRT Test
 - 3 =Sender Test
 - 4 = Digital Conference
 - 5 = Tone Test
 - 6 = Ringing Signal test
 - 0 = Test NG

b7 b6 b5 b4 b3 b2 b1 b0

2

b0-b3: Number of digits of the testing station No. b4-b7: Error Numbers (see table below)

Error Numbers and Their Meanings

ERROR NO.	MEANING
0	
1	The testing station is restricted from activating the service.
2	Route Number Error of the designated trunk
3	Trunk Number Error of the designated trunk
4	Trunk busy
5	Sender busy
6	SMDR failure
7	Call origination restriction
8	Register busy
9	Trunk Number Error - when the trunk has been designated by SHF.
А	Trunk busy - when the trunk has been designated by SHF.
В	Inter-digit timer expiration
С	Register or sender is defective with respect to DP, DP/PB
D	Register of sender is faulty with respect to PB
Е	Tone fault
F	Test Processing Error

3-5 Station number of testing station (see table)

	b4-b7	b0-b3
3	DC0	DC1
4	DC2	DC3
5	DC4	DC5

6 Tenant No.



b0-b3: Tenant No. (1-15)

OP

0/1 = Data in OPTN (7) is invalid/valid

⑦ OPTN data

b7 b3 b2 b1 b0

b0-b3: Tenant No. (Over 15)

(8) J	Testec	l Roi	ite N	0.				b0-b5	5: Route No. (1-63) Note
b7	b6	b5	b4	b3	b2	b1	b0	b6:	OP 0/1 - Data in OPRT(9) is invalid/valid
								b7:	AC
								-	0/1 = Internal trunk/External trunk

Note: When Logical Routes are assigned, Logical Route Numbers are displayed here.

9	OPRT	data
---	------	------

b0-b7: Route No. (> 64) **Note**

Digital Conference test Tone Slot No. for Tone Test

0 = DT

4 = BT6 = SST, WT

2 = RBT

8 = TRG

10 = CWRBT

b7	b6	b5	b4	b3	b2	bl	b0

Note: When Logical Routes are assigned, Logical Route Numbers are displayed here.

① (This data is not for Ringing Signal Test)

b7	b6	b5	b4	b3	b2	b1	b0

(11) Digit of	Dialed	Number	(for	test)	
---------------	--------	--------	------	-------	--

b7		b4	b3	b2	b1	b0

b0-b4: Dialed number digit sent by the test Trunk/Sender or Dialed Number digit received by the test Register

b0-b7: Trunk No. for Outgoing trunk test, ORT/IRT Test, Sender Test and

1 = SPDT

5 = RBT

7 = SDT

9 = SDTT

14 = MSC

3 = CRBT, CWT

(12) Dialed Number (for test)

b7	b6	b5	b4	b3	b2	b1	b0

(a) Dialed Number sent by the test Trunk/Sender

b4-b7	b0-b3	b4-b7	b0-b3
dc0	dc1	dc12	dc13
dc2	dc3	dc14	dc15
dc4	dc5	dc16	dc17
dc6	dc7	dc18	dc19
dc8	dc9	dc20	dc21
dc10	dc11		

(b) Dial Number received by the test Register

b4-b7	b0-b3
dc0	dc1
dc2	dc3
dc4	dc5
dc6	dc7
dc8	dc9
dc10	dc11

6-J	Emergency Call								
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when a call terminates to the Emergency Telephone.

1:	XXXX	XXXX	XXXX	XXXX	2:	XXXX	XXXX	0000	0000	3:	0000	0000	0000	0000
	12	34	56	78		90	(1) (12)							
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① - ⑥ Called Station (Emergency Telephone) No. (ASCII Code)

b7	b6	b5	b4	b3	b2	b1	b0

⑦ - 12 Calling Station No. (ASCII Code)

b7	b6	b5	b4	b3	b2	b1	b0

- DC0 (1st digit)
 DC1 (2nd digit)
 DC2 (3rd digit)
 DC3 (4th digit)
 DC4 (5th digit)
 DC5 (6th digit)
- ⑦ DC0 (1st digit)
- B DC1 (2nd digit)DC2 (3rd digit)
- 0 DC2 (Sid digit) 0 DC3 (4th digit)
- $\begin{array}{c} \textcircled{1} \\ (1) \\ DC4 \\ (5th \ digit) \\ \end{array}$
- 1) DC4 (5th digit)(1) DC5 (6th digit)

6-L		Emergency C	Control Start	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the LCR-Attendant Manual Override is set at the Attendant Desk Console.

 1:
 xx 00
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000

 1 Route Selection Time Pattern No. assigned at Attendant Desk Console
 b0-b2: Pattern No. (1-7)

b7		_	b2	b1	b0

Note: Route Selection Time Pattern 0-7 corresponds to TDPTN No. 0-7 in the AOPR command.

6-M		Emergency C	control Stop	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the LCR-Attendant Manual Override is cancelled at the Attendant Desk Console.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	① 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
_										_				
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

(1) S b7	Suspe	nsion	of E	Emerg	gency	Con	trol b0	b0:	Fixed 0. 0 = Outgoing call restriction is released by Attendant Desk Console

Note: Route Selection Patterns 0-7 corresponds to TDPTN No. 0-7 in the AOPR command.

_

6-N		Abnormal Call	Duration Data	
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:

This message displays when the system detects abnormal duration in the line connection between the calling and called party. When the calling and called party establish a line connection and continue the hook-up for an extremely short or long period of time (predetermined by the ASYD command (SYS1 Index 45, 46)), this message is created.

1:		23	xxxx 3 3	xx00 3	2:	<u>xxxx</u> (4) (5)	xxxx 5 5	xxxx 5 5	xxxx 5 5	3:	xxxx 5 5	xxxx 5 5	xxxx 5 5	xx00 5
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Calling party information

b7		b3	b2	b1	b0	
						h7∙

b0-b3: Type of Calling party 0 = Station 1 = Attendant console 2 = Trunk b7: 0/1 = Short/Long Time

⁽²⁾ Tenant No. of Calling/Called party (Hex.)

③ Calling party Information

When calling party is Station

Calling station No. (See table)

b7	_	_	b3	b2	b1	b0

b4-b7	b0-b3
DC0	DC1
DC2	DC3
DC4	DC5

When calling party is ATTCON/DESKCON

Attendant/Desk console No. (See table.)

b7	b6	b5	b4	b3	b2	b1	b0

b4- b7	b0-b3
DC0	DC1

When calling party is Trunk

Route No. and Trunk No. (See table.)

	b0-b7
(a)	Route No. (Hex) Note
(b)	Route No. (Hex) Note
(c)	Trunk No. (Hex)
(d)	Trunk No. (Hex)



⁽⁵⁾ Called Party Information

Station to Station Call

- (a) Type of called party
 - 00 =Station
 - 01 = Attendant Console





b4-b7	b0-b3					
(8	(a)					
Tenar	nt No.					
Tenant No.						
DC0	DC1					
DC2	DC3					
DC4	DC5					

OG Call to outside (IC Call from outside)

b4-b7	b0-b3
Route N	o. (Hex)
Route N	o. (Hex)
Trunk N	o. (Hex)
Trunk N	o. (Hex)
DC0	DC1
DC2	DC3
DC4	DC5
DC6	DC7
DC8	DC9
DC10	DC11
DC12	DC13
DC14	DC15
DC16	DC17
DC18	DC19

b0-b7						
Route No. (Hex)						
Route No. (Hex)						
Trunk No. (Hex)						
Trunk No. (Hex)						

6-0	SMDR Output Buffer Overflow Alarm							
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:				

This message displays when the SMDR output buffer usage rate has exceeded the value assigned to ASYD, SYS1, Index 249.

1: 12 34

① Detail Information

b7

b0-b3: FS b4-b7: FE

b0

b6 b5 b4 b3 b2 b1

This system message varies depending on the data.

	FS	FE	MEANING
(a)	0	0	SMDR output buffer usage rate exceeds the value assigned by ASYD, SYS1, Index 249.
(a)	0	1	After SMDR output buffer usage rate exceeds the value assigned by ASYD, SYS1, Index 249, usage rate lowered less than the value assigned by Index 250.
(b)	1	0	-
(c)	2	0	Data output is impossible due to SMDR apparatus failure.

(a) FS = 0, FE = 0/1

2

b7	b7								

b0: 0/1 = Data assigned by the ASYD, SYS1, Index 249, 250 is valid/ invalid

③ Buffer Usage Rate Assigned by ASYD, SYS1, Index 249							У	b0-b3: Units b4-b7: Tens
b7	b6	b5	b4	b3	b2	b1	b0	
④ E A b7	Buffer SYD b6	: Usa), SY b5	ge R S1, I b4	ate A ndex b3	assign 250 b2	ned b b1	y b0	b0-b3: Units b4-b7: Tens
(b) H ② b7	FS =	1, FI	E = ()	b2	b1	b0	b0:Fault Grade by ALMG command $00 = NON CONT$ $01 = SUP$ $10 = MN$ $11 = MJ$
③(b7	Overf	low I	Rate				b0	b0: 0/1 = -/100% Overflow
④ (b7)verf b6	low H b5	Rate b4				b0	b4-b7: 1-9 = 10%-90% Overflow

(c) I	F S =	2, F	E = ()				
② SMDR Group No.								b0-b3: SMDR Group No. to which failure occurred
b7				b3	b2	b1	b0	
				-		•		
3 I	Port 1	No.						b0-b7: Port No. allocated for SMDR Group to which failure occurred (0-7)
b7	b6	b5	b4	b3	b2	b1	b0	
_								
(4) I	Not u	sed						
(d)]	FS =	3. F	$\mathbf{E} = 0$	0				
2		-,						b0-b3: SMDR Group No. to which failure occurred
b7				b3	b2	b1	b0	
	1	1	1			-		

6-P	SMDR Output Buffer Overflow Release								
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:					

This message displays when the SMDR output buffer usage rate has been lowered to less than the value assigned in the ASYD, SYS1, Index 250 after the rate exceeds the value assigned by Index 249.

 1:
 xx00
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Detail Information

b7	b6	b5	b4	b3	b2	b1	b0
----	----	----	----	----	----	----	----

b0-b7: 00H = After SMDR output buffer usage rate exceeds the value assigned by ASYD, SYS1, Index 249, the rate lowered less than the value assigned by Index 250.

7-A	S	ystem Initialize	With Data Load	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays after the office data is loaded and system initialization has executed.

	1:	XXX	x x	<u>x</u> 00	0000	00	000	2:	000	00	0000	0000	0000	3:	0000	0000	0000	0000
	4:	① 000	② 0 0	000	0000	00	000	5:	000	00	0000	0000	0000	6:	0000	0000	0000	0000
	7:	000	0 0	000	0000	00	000	8:	000	00	0000	0000	0000	9:	0000	0000	0000	0000
〕 b7			b4	b3	b2	b1	b0	1 1 1 1 1	50: 51: 52: 53: 54:	0/1 0/1 0/1 0/1 0/1	1 = IPL/ 1 = Load 1 = IPL 1 = Prog 1 = -/Pha	PWR O d Key O KEY/M gram loa ase1 Res	N FF/ON AT INII d is exec start No	TIAL cuted	/_			
2) L b7	.oad b6	Statu: b5	s b4	b3	b2	b1	b0	t t	50: 51:	Of 0/1 Ca	fice Dat 1 = Load 11 Forwa	ta Load a d OK/NG arding D	Status G Data Loa	d Sta	tus			
								L t	o2: o3:	0/1 Inc 0/1 Wi 0/1	1 = Load dividual 1 = Load ireless C 1 = Load	d OK/N(Speed (d OK/N(Call Forv d OK/N(G Calling I G warding G	Data I Data	Load Sta Load St	atus atus		
515				b11		b9	68	ե է	04: 05:	Na 0/1 Ne	ame Dis 1 = Load etwork I 1 = Load	play Dat d OK/N OM Load	ta Load G d Status	Statu	S			
								ե Ե Ե	06: 07: 08:	U/1 D/1 0/1 Us	a = Loadbcal DM $l = Loadl = DMser assig$	Load S d OK/N Load/N n Soft K	tatus G on Load Yey Data	Load	1 Status			
								t t	9: 011:	0/1 Nu 0/1 Ca 0/1	l = Load 1mber S l = Load 1l Block l = Load	1 OK/N(haring I 1 OK/N(2 Data L 1 OK/N(G Data Loa G Note oad Stat G	d Sta <mark>2</mark> us	tus			

- **Note 1:** *Phase1 Restart is executed when initializing the system without disrupting the following two-way con-nections that have already been established:*
 - Basic two-way connections (STN-STN, STN-TRK, TRK-TRK)
 - Fixed connections
 - Two-way connections established on a Fusion link

For more details, see Section Chapter 6, Section 12.2.3.

Note 2: Number Sharing data load also affects the data load of Dual Station Calling Over-FCCS.

7-B		System Initialize									
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when system initialization is activated.

	1:	xx00 1	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① b7		b	o4 b3	b2	b0	b b b	2: 0/ 3: 0/ 4: 0/	1 = IPL 1 = Prog 1 = -/Ph	KEY/M ram Loa ase1 Res	AT INIT ad/Non I start No t	TIAL Load t e				

Note: *Phase1 Restart is executed when initializing the system without disrupting the following two-way connections that have already been established:*

- Basic two-way connections (STN-STN, STN-TRK, TRK-TRK)
- Fixed connections
- Two-way connections established on a Fusion link

For more details, see Chapter 6, Section 12.2.3.

7-C	CPU MBR Key Turn ON										
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when the MBR switch on the GATE card is turned ON at the time of CPU changeover or speech path changeover.

1:	xxxx 1 2	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① s	elf-C	PU I	Resta	rt inf	orma	tion		b0:	0/1 =
b7		b5	b4	b3	_		b0	b3: b4:	0/1 = 0/1 =
								b5: b7:	0/1 = 0/1 =
								U/:	U/1 =

0/1 = -/Monitor Restart
0/1 = -/Initialization
0/1 = -/Data Copy Restart (for Dual-CPU system only)
0/1 = -/MB control
0/1 = ACT/STBY (active system indication after restart)

② Mate-CPU Restart information											
b7		b5	b4	b3			b0	b3:			
								b4: b5:			
								b7:			

- 0/1 = -/Monitor Restart
- 0/1 = -/Initialization
- 0/1 = -/Data Copy Restart (for Dual-CPU system only)
- 0/1 = -/MB control
- 0/1 = ACT/STBY (active system indication after restart)

7-D	CPU MBR Key Turn OFF										
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when the MBR switch on the GATE card is turned OFF at the time of CPU changeover or speech path changeover.

1:	1 2	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b0:

b0:

b3:

b4: b5:

b7:

① Self-C	CPU F	Resta	rt information		
b7	b5	b4	b3	b0	

b7	_	b5	b4	b3	_	b0	b3: b4:
							b5:
					-		07.

0/1 = -/Monitor Restart
0/1 = -/Initialization
0/1 = -/Data Copy Restart (for Dual-CPU system only)
0/1 = -/MB control
0/1 = ACT/STBY (active system indication after restart)

2 M	⁽²⁾ Mate-CPU Restart information											
b7	_	b5	b4	b3	_		b0					

- 0/1 = -/Monitor Restart 0/1 = -/Initialization 0/1 = -/Data Copy Restart (for Dual-CPU system only)
 - 0/1 = -/MB control
- 0/1 = ACT/STBY (active system indication after restart)

7-E		TSW MBR Ke	ey Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MBR switch on the TSW card is turned ON at CPU changeover or speech path changeover.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	(<u>)</u> 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b7	_			b0	b

① System status of TSW card

 b0: 0/1 = No. 0 system/No. 1 system
 b7: Kind of Circuit Card 0/1 = SW12/GT19

7-F		TSW MBR Ke	ey Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MBR switch on the TSW card is turned OFF at CPU changeover or speech path changeover.

 1:
 xx00 ①
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <t

\bigcirc S	ysten	1 stat	us of	TSV	V car	d		b
b7							b0	b

 b0: 0/1 = No. 0 system/No. 1 system
 b7: Kind of Circuit Card 0/1 = SW12/GT09 Γ

7-G		TSW PLO K	ey Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the PLO MBR switch is turned ON (UP).

1:	xx00 ①	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Information on PLO MBR b0: 0/1=System 0/System 1 operation

b7				b0

7-H		TSW PLO Ke	y Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the PLO MBR switch is turned OFF (DOWN).

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Information on PLO MBR b0: 0/1=System 0/System 1 operation

b7				b0

ſ
7-1		ALMC MB Ke	ey Turn ON	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the EMA card is turned ON while extracting or inserting a circuit card or at PM initialization. This message displays with the [7-J]: ALMC MB Key Turn OFF message.

 1:
 xx00
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① F	Frame	e No	. and	its	kind			b0-b3: Frame No. (0 only)
b7	b6	b5	b4	b3	b2	b1	b0	b4-b5: Frame Group No. (0 only) b6-b7: Kind of Frame
								00=IMG

7J		ALMC MB Ke	ey Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the EMA card is turned OFF while extracting or inserting a circuit card or at PM initialization.

 1:
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① F	rame	No	. and	its	kind			b0-b3: Frame No. (0 only)
b7	b6	b5	b4	b3	b2	b1	b0	b4, b5: Frame Group No. (0 only) b6, b7: Kind of Frame
								00=IMG

7-К		РМ МВ Кеу	r Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the line/trunk card is turned ON while extracting or inserting a circuit card or at PM initialization.

 1: $\underline{xx00}$ 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000

 4:
 0000
 0000
 0000
 5:
 0000
 0000
 0000
 6:
 0000
 0000
 0000
 0000

 7:
 0000
 0000
 0000
 8:
 0000
 0000
 0000
 9:
 0000
 0000
 0000

① L	${f D}$ Location of faulty Line/Trunk card							b0-b4: Circuit card No. (0-31)		
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.		
								0/1 = Even-numbered MG/Odd-numbered MG		

7-L		PM MB Key	Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the line/trunk card is turned OFF while extracting or inserting a circuit card or at PM initialization.

 1:
 xx00 ①
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <t

1 L	D Location of faulty Line/Trunk card							b0-b4: Circuit card No. (0-31)		
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.		
								0/1 = Even-numbered MG/Odd-numbered MG		

7-M		NCU MB Ke	y Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the PFT card is turned ON while extracting or inserting a circuit card, or at PM initialization.

 1:
 xxxx, ① ②
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000

① Faulty PFT card No.

b0-b2: Circuit card No. (0-7)

b7		b2	b1	b0		

2 L	ocati	on of	faul	ty PF	FT ca	rd		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. $(0-3)$ b7: $0/1 =$ Even-numbered MG/Odd-numbered MG

7-N		NCU MB Key	/ Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the PFT card is turned OFF while extracting or inserting a circuit card, or at PM initialization.

 1:
 xxxx, ① ②
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000

① Faulty PFT card No.

b0-b2: Circuit card No. (0-7)

b7			b2	b1	b0

2 L	ocati	on of	faul	ty PF	FT ca	rd		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. $(0-3)$ b7: $0/1 =$ Even-numbered MG/Odd-numbered MG

7-0		Cyclic Diagno	osis Normal	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

In a specific time cycle, the system allows a routine diagnosis in its hardware and software to determine if they are operating properly. This message indicates that the system has been checked by the routine diagnosis program and the result of the diagnosis is normal.

1:	<u>xxxx</u>	XXXX	xxxx	xxxx	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	1		Note											
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Performed Diagnosis Item

b7	b6	b5	b4	b3	b2	b1	b0	_

[00H] Routine Diagnosis Start
[10H] Program Memory Verification Normal End
[20H] Data Memory Verification Normal End
[30H] TSW ACT/STBY Changeover Normal End
[40H] CPU ACT/STBY Changeover Normal End
[50H] No Trunk Ineffective Hold
[70H] Call Forwarding Memory Clear Normal End
[A0H] Periodic Back-up Normal End
[C0H] Detection of Remaining Link Normal End

Note: *The data in this area will be diverse, according to the diagnosis specified in* ①. *For details on each item data, see the following pages.*

[00H] Routine Diagnosis Start

 1:
 00xx
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000

 1:
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0</t

① Performed Diagnosis Item

[00H] Routine Diagnosis Start

Pending Diagnosis Menu (SYS1, Index 89)

b7	b6	b5	b4	b3	b2	b1	b0	

- b0: 0/1=-/Program Memory Verification 0/1=-/Data Memory Verification b1: b2: 0/1=-/TSW ACT/STBY Changeover b3: 0/1=-/CPU ACT/STBY Changeover b4: 0/1=-/Trunk Ineffective Hold Check 0/1=-/Trunk Ineffective Hold Detection b5: 0/1=-/Call Forwarding Memory clear b6: b7: 0/1=-/IP ACT/STBY changeover
- ③ Pending Diagnosis Menu (SYS1, Index 90)

b7			b1	b0	

b0:Not usedb1:Periodic Back-upb2-b7:Not used

[10H] Program Memory Verification Normal End

 1:
 10xx xx00 0000 0000 2: 0000 0000 0000 3: 0000 <t

1 Routine Diagnosis

0

[10H] Program Memory Verification Normal End

2 Infb7	orma	tion	on	HD	b1	b0	b0: b1:	0/1 = -/HFC 0 is normal 0/1 = -/HFC 1 is normal

(3) Verificati	on of I	Drive	Num	ber		b0:	0/1 = -/Drive Number 0
1.7		1.2	L 0	1.1	1.0	b1:	0/1 = -/Drive Number 1
D7		03	02	DI	DU	b2:	0/1 = -/Drive Number 2
						b3:	0/1 = -/Drive Number 3

[20H] Data Memory Verification Normal End

1: 123 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 0000 \$

1 Routine Diagnosis

[20H] Data Memory Verification Normal End

b7 b1 b0 b1: $0/1 = -/\text{HFC 1 is normal}$	② Verification of HD	b0:	0/1 = -/HFC 0 is normal
	b7	b1 b0 ^{b1:}	0/1 = -/HFC 1 is normal

(3) V	erific	ation	of I	Data I	Mem	ory		b0:	0/1 = -/Data Memory
b7					b2	b1	b0	b1: b2:	0/1 = -/Local Data Memory 0/1 = -/Network Data Memory

[30H] TSW ACT/STBY Changeover Normal End

 1:
 30xx (1) (2)
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000

1 Routine Diagnosis

[30H] TSW ACT/STBY Changeover Normal End

② Active TSW system after changeover

b0: 0/1 = TSW No. 0 is ACT/ TSW No. 1 is ACT

b7				b0

[40H] CPU ACT/STBY Changeover Normal End

 1:
 40xx () ②
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000

① Routine Diagnosis

[40H] CPU ACT/STBY Changeover Normal End

2 A	Active	e CPI	J sys	tem				b0:	CPU		
b7						b1	b0	b1:	0/1 = #0 is ACT/#1 is ACT TSW		
									0/1 = #0 is ACT/#1 is ACT		

[50H] No Trunk Ineffective Hold

 1:
 50xx (1) (2)
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000

① Routine Diagnosis

[50H] Trunk Ineffective Hold

② MG and Unit of No. of Trunk Ineffective Hold

b7	b6	b5	b4	b3	b2	b1	b0	

- b0: Unit 0, Even-numbered MG 1 = No Trunk Ineffective Hold
 b1: Unit 1, Even-numbered MG 1 = No Trunk Ineffective Hold
 b2: Unit 2, Even-numbered MG 1 = No Trunk Ineffective Hold
 b3: Unit 3, Even-numbered MG
 - 1 =No Trunk Ineffective Hold
- b4: Unit 0, Odd-numbered MG
 - 1 = No Trunk Ineffective Hold
- b5: Unit 1, Odd-numbered MG 1 = No Trunk Ineffective Hold
- b6: Unit 6, Odd-numbered MG
- 1 = No Trunk Ineffective Holdb7: Unit 3, Odd-numbered MG
- b7: Unit 3, Odd-numbered MG 1 = No Trunk Ineffective Hold

[70H] Call Forwarding Memory Clear Normal End

 1:
 7000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000

 4:
 0000
 0000
 0000
 5:
 0000
 0000
 0000
 6:
 0000
 0000
 0000
 0000

 7:
 0000
 0000
 0000
 8:
 0000
 0000
 0000
 9:
 0000
 0000
 0000

1 Routine Diagnosis

[70H] Call Forwarding Memory Clear Normal End

[A0H] Periodic Back-up Normal

 1:
 A0XX
 XX00
 0000
 XX00
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Routine Diagnosis

[A0H] Periodic Back-up Normal

② Information on Periodic Backup Normal End

b7			b1	b0

0/1 = HFD0 Normal end/Abnormal e	end
0/1 = HFD1 Normal end/Abnormal e	end

3 E	Backu	p Da	ta to	No.	0 sys	tem		b0:	0/1 = -/Individual Speed Calling Data
b7	o7 b6 b5 b4 b3 b2 b1 b0								0/1 = -/Call Forwarding Data 0/1 = -/RCF
								b2: b3: b4: b5: b6:	0/1 = -/Name Display Data 0/1 = -/User Assign Soft Key Data 0/1 = -/Number Sharing Data Note 0/1 = -/Call Block Data
4 I	Backu	ıp Da	ita to	No.	1 sys	stem		b0:	0/1 = -/Individual Speed Calling Data
b7	b6	b5	b4	b3	b2	b1	b0	b1: b2:	0/1 = -/Call Forwarding Data 0/1 = -/RCF
								b3: b4:	0/1 = -/Name Display Data 0/1 = -/User Assign Soft Key Data
								b5:	0/1 = -/Number Sharing Data Note

b0:

b1:

Note: Number Sharing data load also affects the data load of Dual Station Calling Over-FCCS.

[C0H] Detection of Remaining Link Normal End

1:		XX00	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Performed Diagnosis Item

[C0H] Detection of Remaining Link Normal End

b7	b6	b5	b4	b3	b2	b1	b0

7-P	Cyclic D	iagnosis Inform	ation (Error Det	tected)
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

In a specific time cycle, the system allows a routine diagnosis in its hardware and software to determine if they are operating properly. This message indicates that the system has been checked by the routine diagnosis program and the result of the diagnosis is not normal.

1:	xxxx	XXXX	XXXX	XXXX	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	1		Note											
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Detected Error Item

Γ

b7	b6	b5	b4	b3	b2	b1	b0

[10H] Program Memory Verification Discrepancy	
[11H] Program Memory Verification Impossible (HFD Fault)	
[12H] Program Memory Verification Impossible (Fault at CPU side)	
[20H] Data Memory Verification Discrepancy	
[21H] Data Memory Verification Impossible (HFD Fault)	
[30H] TSW ACT/STBY Changeover Failure	
[31H] TSW ACT/STBY Changeover Failure (MUX Fault)	
[41H] CPU ACT/STBY Changeover Failure (Single CPU System)	
[42H] CPU ACT/STBY Changeover Failure (DM Verification NG)	
[43H] CPU ACT/STBY Changeover Failure (PCI Fault)	
[44H] CPU ACT/STBY Changeover Failure (Changeover NG or CPU	
RAM Copy NG)	
[50H] Trunk Ineffective Hold Detected	
[51H] Trunk Ineffective Hold Detected and Released	
[52H] Trunk Ineffective Hold Detected Impossible	
[70H] Call Forwarding Memory Clear NG	
[A0H] Periodic Backup Abnormal End	
[C0H] Detection of Remaining Link Abnormal End	
(for Release 4 or later)	

Note: *The data in this area will be diverse, according to the diagnosis specified in* ①. *For details on each item data, see the following pages.*

[10H] Program Memory Verification Discrepancy

 1:
 1000
 xxxx
 xxxx
 2:
 xxxx
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Error detection by Routine [10H] Diagnosis

[10H] Program Memory Verification Discrepancy

21	<i>Verific</i>	cation	of H	HFD	numt	ber		b0:	0/1 = -/HFD 0
b7						b1	b0	b1:	0/1 = -/HFD 1

3	Verific	cation	of I	Drive	Nun	nber		b0:	0/1 = -/Drive Number 0
b7			_	b3	b2	b1	b0	b1: b2:	0/1 = -/Drive Number 1 0/1 = -/Drive Number 2
								b3:	0/1 = -/Drive Number 3

④ Data analyzed by NEC Engineers

[11H] Program Memory Verification Impossible (HFD Fault)

 1:
 11xx xxxx xxxx 0000 2: 0000 0000 0000 3: 0000 <t

① Error detection by Routine [11H] Program Memory Verification Impossible (HFC Fault) Diagnosis

2 Verification Impossible	of HD	b0:	0/1 = -/HFC 0
b7	b1 b0	b1:	0/1 = -/HFC 1

3 E	Error	Туре						00H:	HD Processing NG
1.7	1.0	1.5	1. 4	1.2	1.0	1. 1	1.0	01H:	HD Not Connected
D/	b 6	05	b 4	63	b2	01	b0	02H:	HD Busy
								03H:	HD Fault (Fault processing/Not equipment, etc.)
								04H:	Transfer NG
								05H:	Response Timeout

④ Data analyzed by NEC Engineers

5 Error	Drive	e					b0:	0/1 = -/Drive Number 0
b7			b3	b2	b1	b0	b1: b2:	0/1 = -/Drive Number 1 0/1 = -/Drive Number 2
							b3:	0/1 = -/Drive Number 3

[12H] Program Memory Verification Impossible (Fault at CPU side)

1:	12XX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

- ① Error detection by Routine [12H] Program Memory Verification Impossible (Fault at CPU side) Diagnosis
- ② Cause for suspension of Program Memory Verification (Error Code)

01H: CPU-to-CPU communication failed 02H: Check sum file copy failed

b7			_	b1	b0

Γ

[20H] Data Memory Verification Discrepancy

1:	20XX	<u>xx</u> 00	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	0000	0000	0000	0000
	12	3				4								
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error detection by Routine Diagnosis

[20H] Data Memory Verification Discrepancy

② Ver	rific	ation	of H	IFC			b0:	0/1 = -/HFC 0 is normal	
b7					b1	b0	b1:	0/1 = -/HFC 1 is normal	

b0: b1: b2:

③ Verification of Data Memory													
b7					b2	b1	b0						

0/1 = -/Present Data Memory (DM)
0/1 = -/Local Data Memory (LDM)
0/1 = -/Network Data Memory (NDM)

④ Data analyzed by NEC Engineers

[21H] Data Memory Verification Impossible (HFC Fault)

		DM					LDM NDM							
1:	21XX	<u>xx</u> 00	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	0000	0000	0000	0000
	12	3	45	67		45	67	45	67					
4:	0000	0000	0000	0000	5 :	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error detection by Routine Diagnosis

[21H] Data Memory Verification Impossible (HFC Fault)

2	HFC	Impo	ssible	e Veri	ficati	on		b0:	0/1 = -/HFC 0 is abnormal
b7						b1	b0	b1:	0/1 = -/HFC 1 is abnormal

③ Verification of Data Memory												
b7					b2	b1	b0					

0/1 = -/Data Memory (DM)
0/1 = -/Local Data Memory (LDM)
0/1 = -/Network Data Memory (NDM)

(4)	Error	Туре		
1.7	1.0	1.5	1. 4	

b7	b6	b5	b4	b3	b2	b1	b0	(

00H: HD Processing NG
01H: HD Not Connected
02H: HD Busy
03H: HD Fault (Fault processing/Not equipment etc.)
04H: Transfer NG

05H: Response Timeout

Single Code	(5)	Single (Code
-------------	-----	----------	------

b7	b6	b5	b4	b3	b2	b1	b0

- 51H: Data Transfer starts 53H: File Transfer starts
- 55H: Data Load

b0: b1: b2:

⁽⁶⁾ Data analyzed by NEC Engineers



Note: When ④ (Error Type) is 00H, ⑤ Signal Code, ⑥ and ⑦ Error Drive are valid.

[30H] TSW ACT/STBY Changeover Failure

1:	30xx 12	xxxx 3 4	xxxx 56	xxxx 78	2:	xxxx 9 10	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Detected Error Item

[30H] TSW ACT/STBY Changeover Failure

⁽²⁾ Active TSW No.

b0: 0/1=TSW #0 is ACT/#1 is ACT

b7				b0

3-6 MUX card (ACT-side) linkage condition

b7 b6 b5 b4 b3 b2 b1 b0

As shown in the following table, each bit represents the Unit No. allocated for each MUX card in position. When "1" is set, the corresponding MUX card (status: ACT) has a functional failure or is not mounted in the proper location.

	b7	b6	b5	b4	b3	b2	b1	b0	
3)	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0	
Ì				~~~	<u> </u>			~	
		M	G1			M	G0		
4)	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0	
	_	(\sim		J		\sim		
		M	G3			M	G2		
5)	Unit 3	3 Unit 2 Unit 1 Unit 0			Unit 3	Unit 2	Unit 1	Unit 0	
		(
		M	G5		MG4				
6)	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0	
				~	ļ				
		M	G7			M	G6		
		b7 3 Unit 3 4 Unit 3 5 Unit 3 5 Unit 3	b7 b6 3 Unit 3 Unit 2 Ma 4 Unit 3 Unit 2 Ma 5 Unit 3 Unit 2 Ma 5 Unit 3 Unit 2 Ma 6 Ma 1 Ma	b7 b6 b5 3 Unit 3 Unit 2 Unit 1 MG1 4 Unit 3 Unit 2 Unit 1 MG3 5 Unit 3 Unit 2 Unit 1 MG5 5 Unit 3 Unit 2 Unit 1 MG5	b7 b6 b5 b4 3 Unit 3 Unit 2 Unit 1 Unit 0 MG1 Unit 3 Unit 2 Unit 1 Unit 0 MG3 Unit 3 Unit 2 Unit 1 Unit 0 MG5 Unit 3 Unit 2 Unit 1 Unit 0 MG5 MG7	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	b7 b6 b5 b4 b3 b2 b1 Unit 3 Unit 2 Unit 1 Unit 0 Unit 3 Unit 2 Unit 1 MG1 MG0 Unit 3 Unit 2 Unit 1 Unit 0 Unit 3 Unit 2 Unit 1 MG3 MG2 Unit 3 Unit 2 Unit 1 Unit 0 Unit 3 Unit 2 Unit 1 MG5 MG4 Unit 3 Unit 2 Unit 1 Unit 0 Unit 3 Unit 2 Unit 1 MG5 MG4	

0: -1: MUX connection error (functional fault/not mounted)

⑦-⑩ MUX card (STBY) linkage condition

b7 b6 b5 b4 b3 b2 b1 b0

As shown in the following table, each bit represents the Unit No. allocated for each MUX card in position. When "1" is set, the corresponding MUX card (status: STBY) has a functional failure or is not mounted in the proper location.





1: MUX connection error (functional fault/not mounted)

[31H] TSW ACT/STBY Changeover Failure (MUX Fault)

1:	31XX	XXXX	XXXX	XXXX	2:	XXXX	0000	0000	0000	3:	0000	0000	0000	0000
	(1)(2)	34	56			91								
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

Detected Error Item

[31H] TSW ACT/STBY Changeover Failure (MUX Fault)

② Active TSW No.

b0: 0/1=TSW #0 is ACT/#1 is ACT



(3-6) MUX card (ACT-side) linkage condition

b7 b6 b5 b4 b3 b2 b1 b0

As shown in the following table, each bit represents the Unit No. allocated for each MUX card in position. When "1" is set, the corresponding MUX card (status: ACT) has a functional failure or is not mounted in the proper location.

	b7	b6	b5	b4	b3	b2	b1	b0		
3	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0		
]				ļ		~			
		M	Gl			M	GO			
4	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0		
	ļ			~	ļ					
		M	G3		MG2					
(5)	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0		
			\sim		ļ		~			
		M	G5			M	G4			
6	Unit 3	Unit 2	Unit 1	Unit 0	Unit 3	Unit 2	Unit 1	Unit 0		
	ļ		\sim	~	1			~		
		M	G7			M	G6			

0: -1: MUX connection error (functional fault/not mounted)

⑦-⑩ MUX card (STBY) linkage condition

b7 b6 b5 b4 b3 b2 b1 b0

As shown in the following table, each bit represents the Unit No. allocated for each MUX card in position. When "1" is set, the corresponding MUX card (status: STBY) has a functional failure or is not mounted in the proper location.





1: MUX connection error (functional fault/not mounted)

[41H] CPU ACT/STBY Changeover Failure

12 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 00000 \ 0000 \ 0000 \ 0000 \ 0000$

① Error detection by Routine [41H] CPU ACT/STBY Changeover Failure Diagnosis

2	ACT s	syster	n afte	er cha	angeo	over		b0:	CPU
b7						b1	b0	b1:	0/1 = #0 is ACT/#1 is ACT TSW
									0/1 = #0 is ACT/#1 is ACT

[42H] CPU ACT/STBY Changeover Failure (DM Verification NG or PM Verification NG)

1: 12 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 00000 \ 0000 \ 0000 \ 0000 \ 0000$

Diagnosis

① Error detection by Routine [42H] CPU ACT/STBY Changeover Failure (DM Verification NG)

2 A	CT s	ysten	n afte	er cha	angeo	over		b0:	CPU
b7						b1	b0	b1:	0/1 = #0 is ACT/#1 is ACT TSW
									0/1 = #0 is ACT/#1 is ACT

[43H] CPU ACT/STBY Changeover Failure (PCI Fault)

12 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 00000 \ 0000 \ 0000 \ 0000 \ 0000$

(1) Error detection by Routine [43H] CPU ACT/STBY Changeover Failure (PCI Fault) Diagnosis

2 A	CT s	ysten	n afte	er cha	angeo	ver		b0:	CPU
b7						b1	b0	b1:	0/1 = #0 is ACT/#1 is ACT TSW
									0/1 = #0 is ACT/#1 is ACT

[44H] CPU ACT/STBY Changeover Failure (Changeover NG or CPU RAM Copy NG)

 1:
 44xx ①②
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <

① Error detection by Routine Diagnosis

[44H] CPU ACT/STBY Changeover Failure Changeover NG or CPU RAM Copy NG)

2 AC	CT s	syster	n aft	er ch	angeo	over		b0:	CPU
b7						b1	b0	b1:	0/1 = #0 is ACT/#1 is ACT TSW
									0/1 = #0 is ACT/#1 is ACT

[50H] Trunk Ineffective Hold Detected

1:	50XX	00 <u>xx</u>	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	xxxx	XXXX	XXXX	XXXX
	12		3)			(3)					-	
4:	XXXX	XXXX	XXXX	XXXX	5:	XXXX	<u>xx</u> 00	0000	0000	6:	0000	0000	0000	0000
		(3	3)			-	3							
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error detection by Routine Diagnosis

[50H] Trunk Ineffective Hold Detected

② I (1	LENS MG,	of T U)	Frunk	Ineff	fectiv	e Ho	ld	<u>b1</u> 0	$\frac{b0}{0} = \text{Unit } 0$
b7					b2	b1	b0	0 1	1 = Unit 1 0 = Unit 2
								1 b2:	1 = Unit 3 0/1 = Even No./Odd No. Module

③ LENS of Ineffective Hold Trunk (G, LV)

Gro	up No	•												
1:	500X	00XX	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	XXXX	XXXX	XXXX	XXXX
Grouj Numb	p ──► er	1	12	34		56	78	90	(1)(12)		1314	1516	(17)(18)	1920
4:	<u>XXXX</u> 2122	<u>XXXX</u> 2324	<u>XXXX</u> 2526	<u>XXXX</u> 2728	5:	<u>XXXX</u> 2930	<u>xx</u> 00 31	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	000	0000	0000	0000	9:	0000	0000	0000	0000





NDA-24300

[51H] Trunk Ineffective Hold Detected and Released

1:	50xx 12	00 <u>xx</u>		<u>xxxx</u> ,	2:	XXXX	xxxx	XXXX 3)	xxxx	3:	XXXX	XXXX	XXXX 3)	xxxx
4:	XXXX	XXXX	XXXX 3)	XXXX	5:	XXXX	<u>xx</u> 00	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error detection by Routine Diagnosis

[51H] Trunk Ineffective Hold Detected and Released

2 L D	.ENS Detect	of T ed ar	Trunk nd Re	Ineff lease	fectiv d (M	e Ho IG, U	old J)	<u>b1</u> 0	$\frac{b0}{0} = \text{Unit } 0$
b7					b2	b1	b0	0 1	1 = Unit 1 0 = Unit 2
								1 b2:	1 = Unit 3 0/1 = Even No./Odd No. Module

③ LENS of Ineffective Hold Trunk (G, LV)

Gro	up No	•												
1:	500X	00XX	XXXX	XXXX	2:	XXXX	XXXX	XXXX	XXXX	3:	XXXX	XXXX	XXXX	XXXX
Grou Numb	p ──► er	1	12	34		56	78	910	(1)(12)		1314	1516	17(18)	1920
4:	<u>XXXX</u> (21)(22)	<u>XXXX</u> (23(24)	<u>XXXX</u> 2526	<u>XXXX</u> (27)(28)	5:	<u>XXXX</u> 2930	<u>xx</u> 00 31	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	000	0000	0000	0000	9:	0000	0000	0000	0000



CHAPTER 3 Page 150 Issue 1 NDA-24300

[52H] Trunk Ineffective Hold Detected Impossible

 1:
 XX00 (1)
 XX00 (2)
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000

① Error detection by Routine Diagnosis

[52H] Trunk Ineffective Hold Detected Impossible

② Cause for suspended detect Trunk Ineffective Hold	ion	of	<u>b1</u> 0
1.7	1.1	10	1

b7			b1	b0	1

- b0 = 1 = CPU to detect is abnormal
- I = CPU to detect is abnorma
- 0 = Data transfer error1 = No Answer error

[70H] Call Forwarding Memory Clear NG

1: 1 2 $4: \ 0000 \ 0000 \ 0000 \ 0000 \ 5: \ 0000 \ 0000 \ 0000 \ 6: \ 0000 \$

① Error detection by Routine [70H] Call Forwarding Memory Clear NG Diagnosis

② Cause for which Transfe was stopped	r Mem	ory	<u>b1</u> 0]
b7	b1	b0	1	

<u>b0</u> 1 = CPU is abnormal 0 = Data Transfer error

[A0H] Periodic Backup Abnormal End

1:	A0XX (1) (2)	xx00 3	<u>xxxx</u> (4) (5)	<u>xx</u> 00 6	2:	xxxx 7 8	XXXX	<u>xxxx</u>	<u>xx</u> 00	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error detection by Routine Diagnosis

[A0H] Periodic Backup Abnormal End

- ② Information of Periodic Backup Abnormal End
- b0: 0/1 = HFD 0 Normal end/Abnormal endb1: 0/1 = HFD 1 Normal end/Abnormal end

b7			 b1	b0

③ Backup Data to No. 0 system								0/1 = -/Individual Speed Calling	g Data
b7 b6	b5	b4	b3	b2	b1	b0	b1: b2:	0/1 = -/Call Forwarding Data 0/1 = -/RCF	
							b3:	0/1 = -/Name Display Data 0/1 = -/Lser Assign Soft Kay D	ata
B							b4: b5:	0/1 = -/Oser Assign Soft Rey D 0/1 = -/Number Sharing Data	Note
							b6:	0/1 = -/Call Block Data	

④ Error Code of No. 0 system HD

b7	b6	b5	b4	b3	b2	b1	b0

0/1 = -/Name Displa	y Data						
1 = -/User Assign	Soft Key Data						
1/1 = -Number Sharing Data Note							
D/1 = -/Call Block D	ata						
	21H:						
	40H~47H:						
Danamatan	53H:						
r ai allietei 🧹	57H:						

HD Fault 59H~5BH: 80H~84H: A0H: A2H~A6H: BDH: C0H: Failed installation 01H: HD being used by another program

02H: HD not equipped


SYSTEM MESSAGES

⑤ E	rror S	Status	of N	o. 0 s	syster	n HD)	Error occurs;
b7	7		b3 b2 b1 b0				b0: $0/1 = -/At$ the time data transfer started b1: $0/1 = -/At$ the time data saved b2: $0/1 = -/At$ the time data transfer and d	
								b3: $0/1 = -/At$ the time file transfer started
© В b7	ackup b6	o data b5	to N b4	o. 1 s b3	syster b2	n b1	b0	Refer to No. ③
⑦ Ei	rror C	Code	of No	o. 1 sy	vstem	HD		Refer to No.4

b7	b6	b5	b4	b3	b2	b1	b0

8 Ei	rror S	tatus	of N	o. 1 s	ysten	n HD		Refer to No.5
b7				b3	b2	b1	b0	

(9) Data analyzed by NEC Engineers

0 Data analyzed by NEC Engineers

[C0H] Detection of Remaining Link Abnormal End

1:	<u>C000</u>	xx00 2	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Performed Diagnosis Item

b5 b4 b3

b6

b7

[C0H] Detection of Remaining Link Abnormal End

2 E	D (E	rror l	Data)				<u>b1</u>	<u>b0</u>
b7					b1	b0	0 1	1 = CPU is not normal 0 = Data transfer error
							1	1 = No Answer error

b0

b2 b1

7-U	PLO MB Key Turn ON									
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when the MB switch on the PLO card is turned on while extracting or inserting a circuit card.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Faulty PLO card No.

b0: 0/1 = PLO No. 0 system/PLO No. 1 system

b7				b0

7-V		PLO MB Key	/ Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the PLO card is turned off while extracting or inserting a circuit card.

1:		<u>xx</u> 00 3	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b0:

① Faulty PLO card No.



② Status of PLO card at the time of failure detection (Scan Data 1)

b7	b6	b5	b4	b3	b2	b1	b0
01	00	00	0.	05	04	01	00

b0:	0/1 = Clock STBY/ACT
b1:	0/1 = PLO Synchronizing/PLO self-running
b2:	0/1 = -/Input clock down

0/1 = PLO No. 0 system/PLO No. 1 system

b3, b4: Route of Input clock (see table)

b5:	0/1 = -/PLO input all down
-----	----------------------------

b4	b3	Connected With Primary Oscillator (M-OSC)	Connected With External Clock
0	0	NO. 0 M-OSC	Route 0
0	1	NO. 1 M-OSC	Route 1
1	0	-	Route 2
1	1	-	Route 3

or drifting

b6: 0/1 = -/PLO output down

b7: 0/1 = -/Drifting

③ Status of PLO card at the time of failure detection (Scan Data 2)



- b0: $0/1 = -/n \times 5$ msec clock down
- b1: 0/1 = -/Frame Synchronization down from SYNC card
 - 0/1 = -/Internal OSC clock down

NDA-24300

13-A		CCH Cloc	k Failure	
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a clock down failure occurs in the CCH/DCH circuit card. When this message is indicated, the related CCH/DCH card is placed into make-busy status.

1) L	ocati	on of	faul	ty CO	CH/D	СН о	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-B	CCH C-L	evel Infinite Loc	op Failure (Perm	nanent)
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when C-level infinite loop of the Port Microprocessor (PM) in the CCH/DCH circuit card has occurred.

1 L	ocati	on of	faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-C	CCH C-L	evel Infinite Loo	op Failure (Tem	porary)
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when C-level infinite loop of the Port Microprocessor (PM) in the CCH/DCH circuit card has occurred.

1 L	ocati	on of	faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-D	CC	CH Lock-Up Fail	ure (Permanent)
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when a Port Microprocessor (PM) of the CCH/DCH card did not send an answer to the CPU.

1 L	ocati	on of	faul	ty CO	CH/D	СН о	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-E	CCH Lock-Up Failure (Temporary)									
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when a Port Microprocessor (PM) of the CCH/DCH card did not send an answer to the CPU.

1 L	ocati	on of	faul	ty CO	CH/D	СН о	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-F	CCH B-L	evel Infinite Loc	op Failure (Perm	nanent)
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when B-level infinite loop of the Port Microprocessor (PM) in the CCH/DCH circuit card has occurred.

1 L	ocati	on of	faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-G	CCH B-L	evel Infinite Loc	op Failure (Tem	porary)
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when B-level infinite loop of the Port Microprocessor (PM) in the CCH/DCH circuit card has occurred.

1 L	ocati	on of	faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-H		CCS Link Failur	e (Permanent)	
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when a failure has occurred numerous times to a common channel signaling link and the link has been placed into make-busy state.

 1:
 xxxx xx00 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000

1 L	ocati	on of	faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

2 Data Analyzed by NEC Engineers

SYSTEM MESSAGES

③ Probable cause for failure

b7		b3	b2	b1	b0

b0-b3: See Table.

FLT ID	CCITT ERROR	FACTOR
00	А	S (F = 1) frame is received.
01	В	DM ($F = 1$) response is received.
02	С	UA ($F = 1$) response is received.
03	D	UA (F = 0) response is received.
04	Е	DM ($F = 0$) response is received.
05	F	SABME command is received.
06	G	N200 Timeout (Link is set)
07	Н	N200 Timeout (Link is disconnected)
08	Ι	N200 Timeout (Link failure is restored to normal)
09	J	N (R) frame error is received.
0A	К	FRMR frame is received (Link is re-set- up).
0B	L	Undefined frame is received.
0C	М	-
0D	Ν	Improper long frame is received.
0E	0	I frame with I field which exceeds N201 is received.
0F	-	-
10	-	Layer 1 down (for ILC)
40	-	FRMR frame is received. (Link is not re-setup)

13-1		CCS Link Failur	e (Temporary)	
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when a failure has occurred numerous times to a common channel signaling link and the link has been placed into make-busy state. When this fault lasts over three minutes, the system message changes to [13-H] CCS Link Failure (Permanent).

 1:
 xxxx
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① L	ocati	on of	faul	ty CO	CH/D	CH o	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

² Data Analyzed by NEC Engineers

SYSTEM MESSAGES

3 Probable cause for the failure

b7		b3	b2	b1	b0

b0-b3: See Table.

FLT ID	CCITT ERROR	FACTOR
00	А	S (F = 1) frame is received.
01	В	DM (F = 1) response is received.
02	С	UA ($F = 1$) response is received.
03	D	UA (F = 0) response is received.
04	Е	DM ($F = 0$) response is received.
05	F	SABME command is received.
06	G	N200 Timeout (Link is set)
07	Н	N200 Timeout (Link is disconnected)
08	Ι	N200 Timeout (Link failure is restored to normal)
09	J	N (R) frame error is received.
0A	К	FRMR frame is received (Link is re-set-up).
0B	L	Undefined frame is received.
0C	М	-
0D	Ν	Improper long frame is received.
0E	0	I frame with I field which exceeds N201 is received.
0F	-	-
10	-	Layer 1 down (for ILC)
40	-	FRMR frame is received. (Link is not re-setup)

13-J	Restoration From CCS Link Failure										
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when the faults pertaining to CCIS/ISDN Link are restored to normal.

1:	xxxx (1 2)	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 L	ocati	on of	f faul	lty C	CH/D	OCH	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3

b0-b4: Group No.
b5, b6: Unit No. (0-3)
b7: 0/1 = Even-numbered MG/Odd-numbered MG

2	CKT	No.	of	faulty	circuit	
---	-----	-----	----	--------	---------	--

b0-b7: CKT No. (0-3)

b7	b6	b5	b4	b3	b2	b1	b0

13-K	CCH Reset Interrupt Failure										
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when a fault occurred to the Port Microprocessor (PM) within the CCH/DCH circuit card and the restart processing is executed.

① L	ocati	on of	f faul	ty CO	CH/D	СН с	card	b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	 b5, b6: Unit No. (0-3) b7: 0/1 = Even-numbered MG/Odd-numbered MG

13-N		Digital Line Warning										
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:								

This message displays when a digital line failure occurs.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Accommodated location

ł	o7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.
									0/1 = Even-numbered MG/Odd-numbered MG

⁽²⁾ Kind of Fault

Γ

b7	b4	b3	b2	b1	b0

b0-b4: Kind of Fault (HEX)

01 = Frame alignment loss PCM down

 $02 = Bit error rate is over 10^{-6}$

$$03 =$$
Slip is detected

b0-b4: Group No.

05 = Dch down

06 = Multi-frame alignment loss 07 = -

$$07 = -10 = -10$$

- 11 = Frame alignment loss PCM down (frequently)
- $12 = Bit error rate is over 10^{-4}$
- 13 = Slip is detected (frequently)
- 14 =Opposite office alarm is detected
- 15 = -
- 16 = Multi-frame alignment loss (frequently)
- 17 = Frame alignment loss PCM down (continuously)
- 18 = Multi-frame alignment loss (continuously)

Γ

13-0	Digital Line Failure									
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:						

This message displays when a digital line failure occurs.

1:	xxxx 1 2	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Accommodated location

(1) A	ccon	nmod	ated	locat	ion			b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.
								0/1 = Even-numbered MG/Odd-numbered MG

2 Kind of Fault

b7		b4	b3	b2	b1	b0

b0-b4: Kind of Fault (HEX)

- 01 = Frame alignment loss PCM down
- $02 = Bit error rate is over 10^{-4}$
- 03 = Slip is detected
- 04 = Opposite office alarm (AIS) is detected
- 05 = -
- 06 = Multi-frame alignment loss
- 07 = Frame alignment loss PCM down (continuously)
- 08 = Multi-frame alignment loss (continuously)

13-P		Digital Line	e Restore	
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:

This message displays when a digital line failure is restored to normal.

ſ

$(\mathbf{I})(\mathbf{Z})$												
4: 0000 00	0000 0000	0000 !	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7: 0000 00	000 0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

 ① Accommodated location
 b0-b4: Group No.

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b7
 b7
 MG No.
 0/1 = Even-numbered MG/Odd-numbered MG

13-Q	DRU Battery Operation									
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:						

This message displays when the battery is operated in the DRU system.

1:	<u>xx</u> 00 (1)	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Accommodated location b0-b4: Group No.

b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: b7:	Unit No. (0-3) MG No.
									0/1 = Even-numbered MG/Odd-numbered MG

13-R		DRU Line Operation									
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:							

This message displays when the main power of the DRU system is restored to normal.

1:	xx00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

b0-b4: Group No.

1 Accommodated location

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0
 b5, b6: Unit No. (0-3)

 b7:
 0/1 = Even-nut

7: 0/1 = Even-numbered MG/Odd-numbered MG

13-Z		Power Failure										
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:								

This message displays when a PWR circuit card failure is detected.

	1:	XXXX		0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① N dd b7	IG N etecti	No. and	Unit N	b2	ault b1 b0	b b	00, b1: U 52: M 0/	nit No. (IG No. '1 = Ever	0-3) 1-numbe	ered MG	/Odd	-number	red MG		
② K b7	ind o	of Pow t	er 54 b3	b2	b1 b0	b b b b	01: 0/ 02: 0/ 03: 0/ 04: 0/	11 = -/-5 11 = -/+1 11 = -/+5 11 = -/-48	V Power 2V Pow V Powe 3V Powe	Failure er Failur r Failure er Failure	re e				
③ L b7	ocati	on of f	aulty ci	rcuit ca	ard b0	b	o0: 0/	'1 = Gro	up 24 (0	side) / (Grouț	o 25 (1 s	ide)		

Reference: See Chapter 4, Section 3.3.3, for the circuit card replacement procedure.

NDA-24300

15-A		VPS Failure (Temporary)	
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when a VPS failure is detected.

1:	XXXX TTT	<u>xx</u> 00	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Probable cause for failure

(1) P	robat	ole ca	use f	for fa	b0-b7: 0 = -			
b7	b6	b5	b4	b3	b2	b1	b0	1 = Sector error FF = Other than above

2 L	ENS	of V	PS v	with t	he fa	ilure		b0-b2: Level
b7	b6	b5	b4	b3	b2	b1	b0	b3-b7: Group

(3) L	ENS	b0, b1: Unit No.						
b7	b6	b5	b4	b3	b2	b1	b0	b2-b7: MG No.

15-B		VPS Failure (Permanent)	
	Default Alarm: MN	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when a VPS failure is detected.

1:	xxxx 1 2	<u>xx</u> 00 3	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Probable cause for failure

(1) P	robat	ole ca	use f	for fa	b0-b7: 0 = -			
b7	b6	b5	b4	b3	b2	b1	b0	1 = Sector error FF = Other than above

2 L	ENS	of V	PS w	vith t	he fa	ilure		b0-b2: Level
b7	b6	b5	b4	b3	b2	b1	b0	b3-b7: Group

3 L b7	ENS b6	of V b5	PS w b4	b3	he fa b2	ilure b1	b0	b0, b1: Unit No. b2-b7: MG No.

15-C		VPS Re	estore	
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when a VPS failure is restored to normal.

1:	XXXX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

(1) L	ENS	of V	PS v	vith t	he fa	ilure	b0	b0-b2: Level
b7	b6	b5	b4	b3	b2	b1		b3-b7: Group

2 L	ENS	of V	'PS v	vith t	he fa	ilure		b0, b1: Unit No.
b7	b6	b5	b4	b3	b2	b1	b0	02-07. MG NO.

16-A		Inside Trunk All Busy								
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when Intra-Office Trunks (ATI, RST, etc.) have all become busy.

 1:
 xx00 ①
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <t

① Intra-Office trunks that have become all busy

b0-b7: Intra-Office trunks that have become all busy (01-1F) (See table on the following page)

b7 b6 b5 b4 b3 b2 b1 b0

ROUTE NO.	DATA (HEX.)	TRUNK NAME	ROUTE NO.	DATA (HEX.)	TRUNK NAME
901	01	Attendant Console	917	11	MFC Sender
902	02	Originating Register Trunk	918	12	Not used
903	03	Incoming Register Trunk	919	13	MODEM
904	04	MF Receiver	920	14	MODEM
905	05	Sender Trunk DP/PB	921	15	MODEM
906	06	PB Receiver for Automated Attendant Service	922	16	MODEM
907	07	AMP	923	17	MODEM
908	08	Not used	924	18	MODEM
909	09	Three-Way Conference Trunk	925	19	MODEM
910	0A	Not used	926	1A	MODEM
911	0B	Not used	927	1B	Not used
912	0C	Originating Register Trunk for ATTCON/DESKCON	928	1C	Not used
913	0D	Three-Way Conference Trunk for ATTCON/DESKCON	929	1D	Data Signaling Trunk-Option
914	0E	Not used	930	1E	Rate Adaptation Conversion Trunk
915	0F	Night ATTCON/DESKCON	931	1F	Not used
916	10	MFC Register			

16-B		Virtual Tie Lin	e Set Report	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when virtual tie line setup has completed.

	1:	xxxx 12	<u>xx</u> 00) (3)	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4: 7:	0000	0000	0000	0000	5: 8:	0000	0000	0000	0000	6: 9:	0000	0000	0000	0000
1 C b7	ounte	er			b0	ł	50: 00 01)=- l=Re-set	up						
② V A	irtual .ccon	l Tie I nmoda	Line Ca ted Loc	ll Head	er	ł	50,b1: U 52: M	nit No. lodule G	roup No).					
b7				b2	b1 b0]									
③ V A b7	irtual .ccon b6	l Tie I nmoda b5	Line Ca ted Loc b4 b3	ll Head ation b2	er b1 b0	t t	о0-b2: L o3-b7: С	evel Froup No).						
				-											

16-C		Virtual Tie Line	Cancel Report	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when virtual tie line cancel has completed.

1:	xxxx 1 2	3 3	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
Count	er				ŀ	b0: 0/	1=-/Re-s	setup						
7				b0										
Virtua Accon	Virtual Tie Line Call Header						nit No. Iodule G	roup No						
7			b2	b1 b0										
Virtua Accon	l Tie Li	ine Cal ed Loca	l Heado	er	t t	00-b2: Le 03-b7: G	evel roup No							
7			b2	b1 b0										

16-E	Virtual Tie Line Set Time Out								
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:					

This message displays when virtual tie line setup has failed due to a fault in the network of the terminating office concerned.

 1:
 00xx
 xx8x
 xxxx
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Virtual Tie Line Call Header Accommodated Location

b0,b1: Unit No.b2: Module Group No.

b7			b2	b1	b0

② Virtual Tie Line Call Headerb0-b2: LevelAccommodated Locationb3-b7: Group No.

b7	b6	b5	b4	b3	b2	b1	b0

SYSTEM MESSAGES

③ Virtual Tie Line Call Header Accommodated Location

b7 b6 b5 b4 b3 b2 b1 b0

b3-b7: Call Source

DATA	CALL SOURCE
0	User
1	Private network to which the user is directly connected. (Self side)
2	National network to which the user is directly connected. (Self side)
3	Tie-Line Network
4	National network to which the opposite party is directly connected. (Opposite party's side)
5	Private network to which the opposite party is directly connected. (Opposite party's side)
7	International Network
А	Network from Interworking
Other	Spare

b4-b7: "8" is always indicated.

④ Fault Cause

b7 b6 b5 b4 b3 b2 b1 b0

b4-b6: Class 0=No Answer

b0-b3: Reason Kind

Other than 0=Refer to the following table

		CLASS	REASON KIND VALUE	DATA	REASON KIND
		000	0001	1	Dead Number
		000	0010	2	No route to the designated transit network
		000	0011	3	No route to the opposite Party
	Reason Kind	000	0110	6	Use of channel not allowed
Class	Value	000	0111	7	Call terminated to a setup channel
Х	Х	001	0000	16	Normal disconnection
]	001	0001	17	Called user busy
<u>8765</u>	<u>4321(bit)</u>	001	0010	18	No response from called user
		001	0011	19	Called party being rung/no answer
-000		001	0101	21	Communication denied
	XXXX	001	0110	22	Opposite party's terminal number changed
-001		001	1010	26	Disconnection and release of the user not selected
		001	1011	27	Opposite party's terminal out of order
Normal Event Class		001	1100	28	Invalid number format (Incomplete Number)
		001	1101	29	Facility denied
		001	1110	30	Answer to status inquiry
		001	1111	31	Other normal class

NDA-24300

SYSTEM MESSAGES

	CLASS	REASON KIND VALUE	DATA	REASON KIND
010 xxxx Classes not allowed use of resources	010 010 010 010 010 010 010	0010 0110 1001 1010 1011 1100 1111	34 38 41 42 43 44 47	No usable channel/line Network failure Temporary failure Switching system congested Access information discarded Use of requested line/channel not allowed Class not allowed use of other resources
$\begin{tabular}{c c c c c c } \hline Reason Kind \\ \hline Class & Value \\ X & X \\ \hline & \\ \hline \\ \hline$	011 011 011 011 011	0001 0010 1001 1010 1111	49 50 57 58 63	Use of QOS not allowed Requested facility not contracted Bearer capability not allowed Bearer capability not allowed at present Class not allowed to use other services or options
100 xxxx Classes not provided with services	100 100 100 100 100	0001 0010 0101 0110 1111	65 66 69 70 79	Unprovided bearer capability designated Unprovided channel kind designated Unprovided facility requested Restricted digital information bearer capability Class unprovided with other services or options
101 xxxx Invalid message class	101 101 101 101 101 101 101 101	0001 0010 0011 0100 0101 0110 1000 1011 1111	81 82 83 84 85 86 88 91 95	Invalid call number used Invalid channel number used Designated transit call ID number unused Transit call ID number being used No transit call Designated transit call disconnected and released Terminal attributes unmatch Invalid transit network selected Other invalid message class
110 xxxx Procedure error (ex: unrecognized message) class	110 110 110 110 110 110 110 110 110	0000 0001 0010 0011 0100 0101 0110 1111	96 97 98 99 100 101 102 111	Mandatory information elements inadequate Message kind undefined or unprovided Call status and message unmatching or message kind undefined Information element undefined Content of information element invalid Call status and message unmatching Recovery due to timer over Class of other procedure errors
111 xxxx Interworking class	111	111	127	Other interworking class
Others				Reserved

16-F	Sender Start Time Out									
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:						

This message indicates that an outgoing call (by connection acknowledge system) has not received an acknowledgment signal from the opposite office. As a result, the attempted outgoing call is routed to Reorder Tone (ROT) connection.

1:	12	xxxx 3 4	xx0x 56	xx0x 78	2:	<u>xxxx</u> 9		<u>xxxx</u> (1)	xxxx (12)	3:	xxxx	xxxx	XXXX 2)	XXXX
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

In Case of Station OG/ATT OG/ATT Tandem Connection

① Type of connection and station number digits

Г

b7 b6 b2 b1 b0

b0-b2: Digits of station number (origination) b6-b7: 0H=Station OG connection 4H=ATT OG connection CH=ATT Tandem connection

2-4 Calling station number (See table)

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
2	DC0	DC1
3	DC2	DC3
4	DC4	DC5

SYSTEM MESSAGES



6 OPTN data

b0-b3: OPTN data Note



Note: This data displays when the Tenant No. of the calling station is larger than 15, and bit7 of ⁽⁵⁾ displays as "1" (otherwise, "0" displays at any time). While the four-bit data of ⁽⁵⁾ is self-sufficient in verifying the Tenant No. "1-15," this OPTN data provides a supportive role to cover the larger Tenant No. ranging from 16 to 255. Use the following method to analyze the data:

Tenant No. of Calling Station (1-15)	=	0	0	0	0	Tenant No.
	C	PTN (data ((): fixe	d)	bit 0 - bit 3 of 5
Tenant No. of Calling Station (16-255)	=		OPT	V data		Tenant No.
	0	PTN o	lata (v	ariabl	e)	bit 0 - bit 3 of 5

⑦ OG route number (Hex.)								b7:	AC data
b7	b6	b5	b4	b3	b2	b1	b0	b6:	0/1=Internal trunk/External trunk OP data (0/1)
								b0 b5	When OPRT data of \textcircled{B} is valid, "1" displays,
								00-05	• bit $6=0 \longrightarrow$ Route No.<64 Refer to the OPTN
									• bit 6=1 \longrightarrow 63 <route <math="" data="" no.="" of="">\textcircled{8}</route>

NDA-24300

8 C	PRT	data					b0-b3: OPRT data	Note
b7			b3	b2	b1	b0		

Note: This data displays when the OG Route No. is larger than 63, and bit6 of ⑦ displays as "1" (otherwise, "0" displays at any time). While the six-bit data of ⑦ is self-sufficient in verifying the Route No. "1-63," this OPRT data provides a supportive role to cover the Route No., which is larger than 63. Use the following method to analyze the data:

OG Route No. (1-63)									=	0	0	0	0	OG Route No.
OG Route No. (64 or larger)									OPTN data (0:fixed)				bit0 - bit5 of ⑦	
								r)	=	= OPTN data				OG Route No.
									0	OPTN data (variable)				bit0 - bit5 of ⑦
9 Trunk No. of OG trunk								b0-b7:	Trunk No. of OG trunk					
b7	b6	b5	b4	b3	b2	b1	b0							
10 Trunk No. of sender								b0-b7:	Т	Trunk No. of sender				
b7	b6	b5	b4	b3	b2	b1	b0							
1) N	s dial	ed by	y cal	ler	b0-b4:	Ň	Number of digits dialed by caller							
b7			b4	b3	b2	b1	b0							
(2) Number dialed by caller (See table)

b7	b6	b5	b4	b3	b2	b1	b0

b4-b7	b0-b3
DC0	DC1
DC2	DC3
DC4	DC5
DC6	DC7
DC8	DC9
DC10	DC11
DC12	DC13
DC14	DC15
DC16	DC17
DC18	DC19
DC20	DC21

In Case of Tandem Connection

① Т b7	b6		nnect	ion			b0	<u>b7</u> 1	b6 = Tandem connection
② I b7	C rou b6	ite nu b5	umber b4	r (He b3	x.) b2	b1	b0	b7: b6:	AC data 0/1=Internal trunk/External trunk OP data (0/1) When OPRT data of ③ is valid, "1" displays.
				<u> </u>	<u> </u>			b0-b5:	IC route number • bit $6=0 \longrightarrow$ Route No.<64 • bit $6=1 \longrightarrow <63$ Route No. Refer to the OPTN data of ③

③ OPRT data	h0 h2. ODDT data Noto
b7 $b3$ $b2$ $b1$	b0-b3: OPRI data Note
Note: This data displays when the "1" displays at any time 63," this OPRT data provide following method to analyst.	he IC Route No. is larger than 63, and bit6 of \textcircled{O} displays as "1" (otherwise, b. While the six-bit data of \textcircled{O} is self-sufficient in verifying the Route No. "1- ides a supportive role to cover the Route No., which is larger than 63. Use the yze the data:
IC Route No. (1-63)	= 0 0 0 0 0 IC Route No.
	OPRT data (0:fixed) bit0 - bit5 of 2
IC Route No. (64 or la	rger) = OPRT data IC Route No.
	OPRT data (variable) bit0 - bit5 of 2
④ - ⑤ Trunk No. of IC trunk	b0-b7: Trunk No. of IC trunk
b7 b6 b5 b4 b3 b2 b1	b0
6 Not used	
$\widehat{\mathcal{O}}$ OG route number (Hex.)	b7: AC data



(8) OPRT data

b0-b3: OPRT data Note

b7		_	b3	b2	b1	b0

Note: This data displays when the OG Route No. is larger than 63, and bit6 of $\overline{\mathbb{O}}$ displays as "1" (otherwise, "0" is displays at any time). While the six bit data of $\overline{\mathbb{O}}$ is self-sufficient in verifying the Route No. "1-63," this OPRT data provides a supportive role to cover the Route No., which is larger than 63. Use the following method to analyze the data:

			OG	Route	e No.	(1-63)		=	0	0	0	0	OG Route No.
									0	PRT	data (O): fixed	l)	bit 0 - bit 5 of ⑦
			OG	Route	e No.	(64 o	r larger)	=		OPR	Γ data		OG Route No.
									0	PRT o	lata (v	ariable	e)	bit 0 - bit 5 of ⑦
9 T	runk	No.	of O	G tru	nk			b0-b7:]	Frunk	No. o	f OG t	runk	
b7	b6	b5	b4	b3	b2	b1	b0							
10 т	runk	No.	of se	nder				b0-b7:]	Frunk	No. o	f send	er	
b7	b6	b5	b4	b3	b2	b1	b0							
1) N	umbe	er of	digit	s dial	led b	y cal	ler	b0-b4:	1	Numb	er of c	ligits c	lialed b	y caller
b7			b4	b3	b2	b1	b0							

12 Number dialed by caller (See table)

b7	b6	b5	b4	b3	b2	b1	b0

b4-b7	b0-b3
DC0	DC1
DC2	DC3
DC4	DC5
DC6	DC7
DC8	DC9
DC10	DC11
DC12	DC13
DC14	DC15
DC16	DC17
DC18	DC19
DC20	DC21

16-K		I/O Port L	ine OFF	
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when the DR signal of the RS-232C, connected to the port designated by the system data, remains off for 30 consecutive seconds while the system is in service (immediately after startup in the case of system start-up).

1

(1) Faulty Port No.

(1) F	aulty	Port	No.					0/1 =	-/Link Do	own			
h7	h6	h5	h/	h3	h2	h 1	bΟ	b0:	Port 0		b4:	Port 4	\mathbf{i}
07	00	05	04	05	02	01	00	b1:	Port 1		b5:	Port 5	
								b2:	Port 2	IOCO	b6:	Port 6	1001
I								b3:	Port 3		b7:	Port 7	

16-L		I/O Port Lin	e Restore	
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when [16-K] I/O Port Line Down Failure is restored to normal.

1:	<u>xx</u> 00 1	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0

-								0/1 =	-/LIIIK DO	own			
h7	h6	h 5	b/	h3	h2	h1	b0	b0:	Port 0	\backslash	b4:	Port 4	
07	00	05	04	05	02	01	00	b1:	Port 1		b5:	Port 5	Junga
								b2:	Port 2	1000	b6:	Port 6	IOCI
								b3:	Port 3		b7:	Port 7	

16-M	Hard Clock Failure									
	Default Alarm: SUP	Default Grade: 3	Grade Modified:	Lamp Modified:						

This message displays when the timer circuit in the EMA card becomes faulty and stops functioning and 64-Hz clock alarm is output.

 1:
 0000 ①
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 00000
 0000
 0000
 <t

① Message Detail Data

This system message is always indicated as 0000.

16-N	Hard Clock Restore								
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when [16-M] 64 Hz Clock Down Detected is restored to normal.

 1:
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000

 4:
 0000
 0000
 0000
 5:
 0000
 0000
 0000
 6:
 0000
 0000
 0000
 0000

 7:
 0000
 0000
 0000
 8:
 0000
 0000
 0000
 9:
 0000
 0000
 0000

① Message Detail Data

This system message is always indicated as 0000.

16-T	IOC Failure (Temporary)								
	Default Alarm: SUP	Default Grade: 1	Grade Modified:	Lamp Modified:					

This message displays when the IOC card fails.

1:	XXXX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	(1) (2) 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① IOC circuit card No.

0/1 = No. 0/No. 1 b0:

b0:

b7				b0

⁽²⁾ Cause for fault

b7	_	b4	b3	b2	b1	b0	b1: b2:
							b3:
							h∕l∙

0/1 = -/COP Alarm 0/1 = -/CLK Alarm 0/1 = -/MEM bus CLK Alarm b3: 0/1 = -/Abnormal Interruption0/1 = -/Infinite Loop Detectedb4:

NDA-24300

16-U	IOC Failure (Permanent)								
	Default Alarm: SUP	Default Grade: 2	Grade Modified:	Lamp Modified:					

This message displays when the IOC card failure, observed in the message [16-T], is detected more than 8 times a day.

Γ

	1:	XXXX (1) (2)	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
1) IC)C c	ircuit c	ard No.			b	0: 0/	1 = No.	0/No. 1						
b7					b0										
2 C	ause	for fa	ılt			b	0: 0/	1 = -/CC	OP Alarn	n					
b7		t	64 b3	b2 l	b1 b0	b b	01: 0/02: 0/01	1 = -/CL $1 = -/MI$	LK Alarr EM bus	n CLK Ala	arm				
] b	03: 0/ 04: 0/	1 = -/Ab $1 = -/Inf$	normal	Interrup	tion cted				

Reference: See Chapter 4, Section 1.3.3, for the circuit card replacement procedure.

16-X	Station Exchanged Report									
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:						

This message displays when the user uses Follow Phone (SWAP) service.

1:	xxxx 12	xxxx 3 4	xxxx 56	xx00 ⑦	2:	×××× (8) (9)	xxxx 10 11	XXXX 1213	00XX (14)	3:	<u>xxxx</u> 14	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Error code

b0-b7: See table

b7	b6	b5	b4	b3	b2	b1	b0

ERROR CODE (HEX)	FAILURE
00	Normal End
01	MG unmatch
02	Called party is not the station
03	TEC of Calling or Called station is abnormal
04	TEC unmatch
05	Hunting group unmatch
06	Call Pick Up group unmatch
07	Calling or Called station is Night station
08	Call Pick Up Expand group unmatch
09	-
10	Calling or Called D ^{term} has Data Line
11	Calling or Called D ^{term} has OAI function key
12	Calling or Called station is Agent/Supervisor (ACD)
13-15	-
16	Called station is busy
17	MW has been set to Calling or Called station

NDA-24300

ERROR CODE (HEX)	FAILURE			
18	Call Back/OG queuing has been set to Calling or Called station			
19	Call Forwarding - All Calls has been set to Calling or Called station			
20	Call Forwarding - Busy Line has been set to Calling or Called station			
21	Call Forwarding - Don't Answer has been set to Calling or Called station			
22-31	-			
32	Under processing of Data Memory Back Up			
33	Collision of swap service			
	Under swapping of One Touch Memory			
	Memory overflow (Max. 4 stations)			
34	Data Memory read error			
35	Data Memory swap failure			
36	OAI Terminal Information swap failure (CM Data)			
37	OAI Terminal Information swap failure (LP Data)			
38	SST Time out			

2 Tenant No. of calling station

b7	b6	b5	b4	b3	b2	b1	b0

b0-b3: Tenant No. (1-15) b4-b7: Tenant No. (over 15)

③ Accommodated location of calling	b0-b2: Level
station after Follow Phone service	b3-b7: Group (0-22)

b7	b6	b5	b4	b3	b2	b1	b0

Accommodated location of calling station after Follow Phone service

b0, b1: Unit No. (0-3) b2-b7: MG No.



5-7 Station No. of calling station

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
5	DC0	DC1
6	DC2	DC3
1	DC4	DC5

(8) Tenant No. of called station

b0-b3: Tenant No. (1-15) b4-b7: Tenant No. (over 15)

b7	b6	b5	b4	b3	b2	b1	b0

Accommodated location of called b0-b2: b3-b7:

b0-b2: Level b3-b7: Group

b7	b6	b5	b4	b3	b2	b1	b0

① Accommodated location of called station

 b0, b1: Unit No. (0-3)

 b2-b7: MG No.

b7	b6	b5	b4	b3	b2	b1	b0

(1) - (13) Station No. of called station

b7	b6	b5	b4	b3	b2	b1	b0

	b4-b7	b0-b3
(11)	DC0	DC1
(12)	DC2	DC3
13	DC4	DC5

(14) Data Analyzed by NEC Engineers

17-A	CCH MBR Key Turn ON								
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when the MBR switch on the CCH/DCH card is turned ON.

1:	XXXX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	12													
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Location of CCH/DCH card b0-b4: Group No.

b7	b6	b5	b4	b3	b2	b1	b0	b5, b6 b7:	5: Unit No. (0-3) MG No.
									0/1 = Even-numbered MG/Odd-numbered MG

2 CKT No.

Γ

b0, b1:CKT No. (0-3)

b7			b1	b0

17-B	CCH MBR Key Turn OFF								
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when the MBR switch on the CCH/DCH card is turned OFF.

1:	XXXX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	12													
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
,.	0000	0000	0000	0000	0.	0000	0000	0000	0000	۶.	0000	0000	0000	0000

① Location of CCH/DCH card b0-b4: Group No.

b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.
								0/1 = Even-numbered MG/Odd-numbered MG

2 CKT No.

b0, b1:CKT No. (0-3)

b7			b1	b0	

17-C	CCH MB Key Turn ON								
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when the MB switch on the CCH/DCH card is turned ON while extracting or inserting a circuit card or at PM initialization, etc.

 1:
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

1 L	ocati	on of	f CCI	H/DC	СН са	ırd		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.
								0/1 = Even-numbered MG/Odd-numbered MG

17-D	CCH MB Key Turn OFF								
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when the MB switch on the CCH/DCH card is turned OFF while extracting or inserting a circuit card or at PM initialization, etc.

 1:
 xx00
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① I	Locati	ion o	f CC	H/DC	CH ca	ard		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: MG No.
								0/1 = Even-numbered MG/Odd-numbered MG

17-Н	I	Day/Night Chan	ge Information	
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:

This message displays when the NIGHT switch on the ATTCON/DESKCON is operated or when the DAY/ NIGHT change is executed by the external switch operation.

 1:
 xxxx
 xxxx
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Tenant No.

b0-b3: Tenant No. (1-15) b4-b7: Tenant No. (over 15)

b7	b6	b5	b4	b3	b2	b1	b0

20	Chang	ging 1	Metho	bc				b0-b7:
b7	b6	b5	b4	b3	b2	b1	b0	1=Night Key onATTCON/DESKCON 2=External Key

3 Day/Night Mode Specification

b7 b6 b5 b4 b3 b2 b1 b0

b0-b3: Mode after changingb4-b7: Mode before changing

Note: *This data is programmed as initial data.*

b0	b1	b2	b3	MEANING
b4	b5	b6	b7	
0	0	0	0	Day Mode
0	0	0	1	Night Mode 1
0	0	1	0	Night Mode 2 available only for Japan
0	0	1	1	Night Mode 3 (DIT-Night Connection Fixed) Note

④ External Switch Status





01=Not used 02=Day/Night Change 03=Not used

17-0		IOC MB Key	y Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the IOC card is turned ON while extracting or inserting a circuit card.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	(<u>)</u> 0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Circuit Card No.

b7				b0

17-P		IOC MB Key	Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MB switch on the IOC card is turned OFF.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Circuit Card No.

b7				b0

17-Q		IOC MBR Ke	ey Turn ON	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MBR switch on the IOC card is turned on at the time of CPU changeover or speech path changeover.

 1:
 xx00
 0000
 0000
 0000
 2:
 0000
 0000
 0000
 3:
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0000
 0

① Circuit Card No.

b7				b0

17-R		IOC MBR Ke	y Turn OFF	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MBR switch on the IOC card is turned off at the time of CPU changeover or speech path changeover.

1:	<u>xx</u> 00	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Circuit Card No.

b7				b0

23-P	DCH Back-Up Automatic Change Start/End									
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:						

This message displays when the Primary Dch fails, and the Dch Back-Up function is operated automatically.

1:	xxxx 12	3 4	xxxx 56	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Condition of Dch

b7	b6	b5	b4	b3	b2	b1	b0	1 = Back-up Star 2 = Back-up Enc
								3 = Back-up Fai

 ② Location of Dch (Primary)
 b0-b4: Group No.

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b5
 b4
 b3
 b2
 b1
 b0

 b7
 b6
 b7
 b7
 0/1 = Even-numbered MG/Odd-numbered MG

b0-b7:

3 L	ocati	on of	Dch	(Ba	ck-up)		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: $0/1 =$ Even-numbered MG/Odd-numbered MG



b7	b6	b5	b4	b3	b2	b1	b0

23-Q	DCH	Back-Up Manua	I Change Start/	End
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:

This message displays when the Primary Dch fails, and the Dch Back-Up function is operated manually.

1:	xxxx 1 2	3 4	xxxx 56	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Condition of Dch

(1) C	Condit	tion of	of Dc	b0-b7:				
b7	b6	b5	b4	b3	b2	b1	b0	1 = Back-up Start 2 = Back-up End
								3 = Back-up Failed

⁽²⁾ Location of Dch (Primary) b0-b4: Group No. b5, b6: Unit No. (0-3) b7 b6 b5 b4 b3 b2 b1 b0 b7: 0/1 = Even-numbered MG/Odd-numbered MG

3 L	ocati	on of	Dch	(Ba	ck-up))		b0-b4: Group No.
b7	b6	b5	b4	b3	b2	b1	b0	b5, b6: Unit No. (0-3) b7: $0/1 =$ Even-numbered MG/Odd-numbered MG

④ Detailed information on changing Dch

b7		 b3	b2	b1	b0

- b0, b1:
 - 00 = Change from Primary Dch to Dch for Back-up
 - 01 = Change from the Dch for Back-up to Primary Dch
 - 10 = Place Primary Dch to ACT status
 - 11 = Place Dch for Back-up to ACT status
- b2, b3: Way of changing
 - 00 = Changed by the MAT
 - 01 = Changed by the MB switch of the circuit card
 - 02 = Changed by placing Dch to Make-Busy
 - 03 = Unknown

⁽⁵⁾ Status of Primary/Back-up Dch

b7	b7		b4	b3	b2	b1	b0

- b0-b2: Status of Primary Dch
 - 0 =In service
 - 1 =Standby
 - 2 =Out of Service
 - 3 = Make Busy
 - 4 = Changing status from STBY to In Service
 - 5 = Manual out of service
- b3-b5: Status of Back-up Dch
 - 0 = In service
 - 1 = Standby
 - 2 =Out of Service
 - 3 = Make Busy
 - 4 = Changing status from STBY to In Service
 - 5 = Manual out of service

6 EVENT No.

b0-b7: EVENT No.

b7	b6	b5	b4	b3	b2	b1	b0

23-Y	MUX Clock Failure										
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when the MUX (PH-PC36) card has a clock failure in one of the dual systems.

1:	12	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1 Unit,	MG,	system number for MUX	
card	with	a clock failure	

b7		b4	b3	b2	b1	b0	b3:
							b4:

b2 b1

b0

b0-b1:	Unit number where a clock failure occurred
b2:	MG number where a clock failure occurred
b3:	0/1 = a clock failure in MUX No. 0 system/
	a clock failure in MUX No. 1 system
b4:	0/1 = Faulty MUX is in ACT/
	Faulty MUX is in STBY

② Scan Data	
b7	b3

Scan Data:Clock alarm information on the faulty MUX card b1: 0/1 = -/FH failure for 2M PCM Highway b2: 0/1 = -/CLK failure for 2M PCM Highway b3: 0/1 = -/4M CLK failure for PM

Reference: See Chapter 5, Section 4.3, Section 4.4, and Section 5.3, for the repair procedure.

23-Z	Both MUX Clock Failure										
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:							

This message displays when the MUX (PH-PC36) card has a clock failure in both of the dual systems.

1:			0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

(1) N	IUX	card	locat	ion				b0-b1	: Unit No.
b7					b2	b1	b0	b2:	MG No.

② Scan Data 1

b7		b3	b2	b1	b0	

Scan Data 1:Details on clock alarm information (ACT mode) b1: 0/1 = -/FH failure for 2M PCM Highway b2: 0/1 = -/CLK failure for 2M PCM Highway b3: 0/1 = -/4M CLK failure for PM

3	Scan	Data	2
---	------	------	---

b7		b3	b2	b1	b0	b b
						b

Scan Data 2:Details on clock alarm information (STBY mode)
b1: 0/1 = -/FH failure for 2M PCM Highway
b2: 0/1 = -/CLK failure for 2M PCM Highway
b3: 0/1 = -/4M CLK failure for PM

Reference: See Chapter 4, Section 3.3.2, for the circuit card replacement procedure.

26-N	MAT Log								
	Default Alarm: NON	Default Grade: 0	Grade Modified:	Lamp Modified:					

This message displays when the MAT is log-in or log-out.

	-														
	1:	xx00 1	xxxx ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2 2	, <u>xxxx</u> ② ②	2:	xxxx 	<u>xxxx</u> 3 3	xxxx 3 3	<u>xxxx</u> 3 3	3:	xxxx 3 3	33	xxxx 3 3	xxxx 3 3
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
① P b7															
2 C	2 Command Name							ommand	name						
b7	b6	b5 I	b4 b3	b2	b1 b0										

 	~ -	 	~ -	

③ User Name

b0-b7: User name entered by the MAT

b7	b6	b5	b4	b3	b2	b1	b0

26-R	Call Trace							
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:				

This massage is issued when a call, originated via a station/trunk, is judged as malicious, and then, the details on the call is traced with the called party pressing an access code or the "Call Trace" key.

[When a call is originated from a station]

1:	xxxx	XXXX	XXXX	xxxx	2:	xxxx	XXXX	XXXX	XXXX	3:	XXXX	xxxx	XXXX	XXXX
	1	2	→ ③		4			5			6	7	8	9
4:	<u>xxxx</u>	xxxx	XXXX	XXXX	5 :	XXXX	XX00	0000	0000	6:	0000	0000	0000	0000
	1	0		1										
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

• Information on Called Party (Informer)

① Fusion Point Code (FPC) (Hex.) Note										
b7	b6	b5	b4	b3	b2	b1	b0			

2 Tenant No. (Hex.) Note											
b7	b6	b5	b4	b3	b2	b1	b0				

3 Pł	nysica	al Sta	tion l	No. (l	Hex.)	No	te
b7	b6	b5	b4	b3	b2	b1	b0

④ User Group No. (UGN) (Hex.)						Note	
b7	b6	b5	b4	b3	b2	b1	b0

⑤ Te	5 Telephone No. (Hex.)				Not	e	
b7	b6	b5	b4	b3	b2	b1	b0

	b4 - b7	b0 - b3
	dc0	dc1
\cup	dc2	dc3

	b4 - b7	b0 - b3
0	dc0	dc1
(2)	dc2	dc3

	/	b4 - b7	b0 - b3
		dc0	dc1
(3)	dc2	dc3
		dc4	dc5

	b4 - b7	b0 - b3
	dc0	dc1
4)	dc2	dc3

	b4 - b7	b0 - b3	b4 - b7	b0 - b3
	dc0	dc1	dc8	dc9
6	dc2	dc3	dc10	dc11
	dc4	dc5	dc12	dc13
	dc6	dc7	dc14	dc15

• Information on Malicious call

© K	ina oi	Can	(IICA				
b7	b6	b5	b4	b3	b2	b1	b0
<u> </u>			~ .			_ `	
(7) Ft	ision	Point	Cod	e (FP	C) (H	Iex.)	Note
b7	b6	b5	b4	b3	b2	b1	b0
® Te	enant	No. (Hex.)) N o	ote		
b7	b6	b5	b4	b3	b2	b1	b0
9 Pł	nysica	al Stat	tion N	Jo. (I	Hex.)	No	te
9 Pł b7	nysica b6	al Stat b5	tion N b4	No. (H b3	Hex.) b2	No b1	te b0
9 Pł b7	b6	al Stat b5	tion N b4	No. (H b3	Hex.) b2	No b1	te b0
9 Ph b7	b6	al Stat b5	tion N b4	No. (H b3	Hex.) b2	No b1	te b0
 9 Pł b7 10 Us 	b6 b6 ser G	al Stat b5 roup	tion N b4 No. (Vo. (H b3 UGN	Hex.) b2) (He	No b1 x.)	te b0 Note
 9 Pł b7 0 Us b7 	b6 b6 ser G b6	al Stat b5 roup b5	tion N b4 No. (b4	No. (H b3 UGN b3	Hex.) b2) (He b2	No b1 ex.) b1	te b0 Note b0
 9 Pł b7 0 Us b7 	nysica b6 ser G b6	nl Stat b5 roup b5	tion N b4 No. (b4	No. (H b3 UGN b3	Hex.) b2) (He b2	No b1 x.) b1	te b0 Note b0
 9 Pł b7 10 U: b7 	b6 ser G b6	al Stat b5 roup b5	tion N b4 No. (b4	Vo. (H b3 UGN b3	Hex.) b2) (He b2	No b1 x.) b1	te b0 Note b0
 9 Pł b7 0 U: b7 1 Te 	b6 ser G b6	al Star b5 roup b5	tion N b4 No. (b4 No. (H	No. (H b3 UGN b3 Iex.)	Hex.) b2) (He b2	No b1 ex.) b1	te b0 Note b0
 9 Ph b7 10 U: b7 11 Te b7 	b6 ser G b6 elepho b6	al Star b5 roup 1 b5 one N b5	tion N b4 No. (b4 Jo. (H b4	No. (H b3 UGN b3 [ex.) b3	Hex.) b2) (He b2 Not b2	No b1 ex.) b1	te b0 Note b0

10H=Call from a station

	b4 - b7	b0 - b3
$\overline{\mathcal{O}}$	dc0	dc1
\mathcal{O}	dc2	dc3

	b4 - b7	b0 - b3
Ø	dc0	dc1
9	dc2	dc3

	b4 - b7	b0 - b3
	dc0	dc1
9	dc2	dc3
	dc4	dc5

	b4 - b7	b0 - b3
10	dc0	dc1
	dc2	dc3

	b4 - b7	b0 - b3	b4 - b7	b0 - b3
	dc0	dc1	dc8	dc9
(TI)	dc2	dc3	dc10	dc11
	dc4	dc5	dc12	dc13
	dc6	dc7	dc14	dc15

Note: *Each No./code is output in hexadecimal. Detailed meanings are as follows:*

Output Data (Hex.)		Actual Meaning			
1~9	\rightarrow	1~9			
А	\rightarrow	0			
В	\rightarrow	*			
С	\rightarrow	#			
0	\rightarrow	blank			

[When a call is originated from a trunk]

1.	VVVV	VVVV	VVVV	VVVV	· ·	VVVV	VVVV	VVVV	VVVV	· ·	VVVV	VVVV	VVVV	VVVV
1.										3.			AAAA	
	\bigcirc	2	3		4			9			6			
4:	XXXX	XXXX	XXXX	XXXX	5:	XXXX	0000	0000	0000	6:	0000	0000	0000	0000
			\tilde{O}											
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

• Information on Called Party (Informer)

① Fusion Point Code (FPC) (Hex.) Note											
b7	b6	b5	b4	b3	b2	b1	b0				
^② Tenant No. (Hex.) Note											
b7	b6	b5	b4	b3	b2	b1	b0				
^③ Physical Station No. (Hex.) Note											
b7	b6	b5	b4	b3	b2	b1	b0				
b7	b6	b5	b4	b3	b2	b1	b0				
b7 ④ Us	b6 ser G	b5 roup	b4 No. (b3 UGN	b2	b1 ex.)	b0 Note				
b7 ④ Us b7	b6 ser G b6	b5 roup b5	b4 No. (b4	b3 UGN b3	b2) (He b2	b1 ex.) b1	b0 Note b0				
b7 ④ Us b7	b6 ser G b6	b5 roup b5	b4 No. (b4	b3 UGN b3	b2) (He b2	b1 ex.) b1	b0 Note b0				
b7 ④ Us b7 ⑤ Te	b6 ser G b6 elepho	b5 roup b5 one N	b4 No. (b4	b3 UGN b3 [ex.)	b2) (He b2 Not	b1 ex.) b1	b0 Note b0				

b7	b6	b5	b4	b3	b2	b1	b0

	b4 - b7	b0 - b3
	dc0	dc1
\cup	dc2	dc3

	b4 - b7	b0 - b3
0	dc0	dc1
Ľ	dc2	dc3

	b4 - b7	b0 - b3
	dc0	dc1
3	dc2	dc3
	dc4	dc5

	b4 - b7	b0 - b3
	dc0	dc1
æ	dc2	dc3

	b4 - b7	b0 - b3
	dc0	dc1
	dc2	dc3
	dc4	dc5
ß	dc6	dc7
0	dc8	dc9
	dc10	dc11
	dc12	dc13
	dc14	dc15

NDA-24300

b0 - b3 dc1 dc3 dc5 dc7 dc9 dc11 dc13 dc15 dc17 dc19 dc21 dc23 dc25 dc27 dc29 dc31

• Information on Malicious Call

6 Ki	ind of	Call	(Hex	x.) 🚺	lote						20H=Call f	rom a tru	unk		
b7	b6	b5	b4	b3	b2	b1	b0								
															b4 - b7
⑦ Ca	alling	No.	of Tri	unk (Call ((Calle	r ID) (Hey	x.)		Note. Note	1			dc0
L7		1.5	1. 4	1.2	L0	L 1	10	(,,	-			dc2 dc4
D7	00	05	b4	03	D2	bl	60								dc6
															dc8
															dc10
															dc12
Ν	lote:	Eac	h No.	/Cod	e is o	output	t in he	xad	lecin	nal.				\bigcirc	dc14
		Det	ailed	mear	ings	are c	is folla	ows.	:						dc16
		O	utout	Data	(He	x.)			Ad	ctual	Meaning				dc18
				0	. (110	,				1	0				dc22
			1~	.9			\rightarrow	•		1~	9				dc24
			A	4			\rightarrow			0					dc26
			I	3			\rightarrow			*					dc28
			(7						4					dc30
			C	~			\rightarrow	•		Ŧ					
			0)			\rightarrow			bla	ank				

Note 1: *If the number of the trunk call (Caller-ID) cannot be identified, the data here is output as "0".*

26-V	LAN Interface Error Report						
	Default Alarm: SUP	Default Grade:	Grade Modified:	Lamp Modified:			

This message is issued when the connection error related to external LAN Interface equipment occurs in the system.

	TCP/IP Part				Application Part									
1:	xxxx 12	xxxx 3 4	xxxx 5 6	78	2:	xxxx 9 10	XXXX (1) (2)	XXXX (13) (14)	XXXX (15 (16)	3:	XXXX (1) (18)	XXXX (19 20)	2) 2)	XXXX 3 24
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

①~④ IP Address for external equipment in which error has been detected. (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑤, ⑥ Port No. (Client Port No.) (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑦ Socket No. (Used Socket No.) (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑧ Error Code (TCP/IP Error Code) (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

See Table 3-2.

Output Data (Hex.)	Definition	Output Data (Hex.)	Definition
BSD SOCKET ERROR		58	Address family not supported
10	User parameter error	PROTOCOL FAM	ILY
11	Host not reachable	59	Address already in use
12	Timeout	60	Can't assign requested address
14	Protocol error	61	Network is down
15	No buffer space	*//62	Network is unreachable
16	Connection block invalid	63	Network dropped connection
17	Invalid pointer argument	RESET	
18	Operation would block	65	Connection reset by peer
19	Message too long	67	Socket is already connected
20	Protocol not available	68	Socket is not connected
50	Destination address required	69	Can't send after socket shutdown
52	Protocol wrong type for socket	72	Connection refused
54	Protocol not supported	73	Host is down
55	Socket type not supported	76	Operation already in progress
56	Operation not supported on socket	77	Operation now in progress
57	Protocol family not supported		

Table 3-2 Error Code
SYSTEM MESSAGES

9 Application Type

b7	b6	b5	b4	b3	b2	b1	b0

[When (9=03 (SMDR) / 04 (MCI)]

⁽¹⁾ Device Number of Error detected client PC

b7	b6	b5	b4	b3	b2	b1	b0	

1 Kind of Error



12 Details on Detected Error

b7	b6	b5	b4	b3	b2	b1	b0

⁽¹³⁾~⁽²⁴⁾ Not used

b0-b7 : (Hex) 01=SUPER SERVER 02=MAT 03=SMDR 04=MCI 05=OAI 06=PMS 07=MIS

b0-b7: (Hex) Device Number of error detected Client PC. If the Machine Number is not determined, "FF" is output.

b0-b7: (Hex)

01=SEND Execution Error 02=RECEIVE Execution Error 03=SEND Execution Count Over 04=RECEIVE Execution Count Over 05=System Data is not assigned 06=Time Over 07=Parity Error 08=Connection Error 09=Connection Port Capacity Over 0A=Detection of B-level Infinite Loop 0B~FF=Not Used

-When 01/02 is output at ⁽¹⁾
b0-b7: Cause of error (Hex)
-When 05 is output at ⁽¹⁾
b0-b7: 01=Data (Data Output via LAN) not assigned
-When 07 is output at ⁽¹⁾
b0-b7: 00H=No Parity is set

01H=Odd Parity is set

02H=Even Parity is set

-When 08 is output at 1

b0-b7: Cause of error (Hex)

[When 9=05 (OAI) / 07 (MIS)]

10 Faulty Logical Port No. (Hex)

b7	b6	b5	b4	b3	b2	b1	b0
	1	1			1		1

① Error Kind (ERRK)



b0-b7 : Error Kind (Hex) Refer to Table 3-3:

Table 3-3 Error Kind (ERRK)

Output Data	Error Situation	Required Check		
01H	SEND Execution Error TCP/IP connection is down because the text is not transmit-	[1] Check the TCP/IP Transmission capacity on the UAP side is proper or not.		
	ted continuously.	[2] Check the operation status on the UAP side is normal.		
02H	RECEIVE Execution Error	[1] Check the software operation on the MIS or Host side.		
	Incorrect text format is received.	[2] Check the LAN cable connection status.		
03H	TCP/IP Connection Error	Re-start the MIS or HOST computer.		
	TCP/IP connection is released due to the TCP port discon- nection order from the MIS or Host.			
04H	Connection Error (B-level Infinite Loop, etc.)	Re-check the operation status of MIS or Host		
	TCP port is released due to the detection of abnormal state in the MIS or HOST operation.			
05H	TCP/IP Port Capacity Over	The number of allowed ports for applica- tion use via TCP/IP must be 16 or less. Ad-		
	TCP/IP connection cannot be established due to the connection port capacity over.	just the used application number not to exceed "16" in total.		

¹²∼² Mot used

26-W		LAN Interface R	elease Report	
	Default Alarm: NON	Default Grade:	Grade Modified:	Lamp Modified:

This message displays when the LAN Interface Connection Failure, detected in Message [26-V], recovers. The message displays when the LAN Interface Connection Failure is restored. The first data is normally sent/received by the recovered application equipment.

	TCP/IP Part						Application Part							
1:		xxxx 3 4	xxxx 5 6	XXXX 7 (8)	2:	xxxx 9 10	XXXX (1) (2)	XXXX (13) (14)	XXXX (15) (16)	3:	XXXX 17 18	XXXX 19 20	xxxx (1) (2)	XXXX (3) (4)
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

1-4 IP Address for external equipment in which error has been detected. (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑤, ⑥ Port No. (Client Port No.) (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑦ Socket No. (Used Socket No.) (Hex.)

b7	b6	b5	b4	b3	b2	b1	b0

⑧ Error Code (TCP/IP Error Code) (Hex.)

b6	b5	b4	b3	b2	b1	b0

b7

See Table 3-2.

9 Application Type

b7	b6	b5	b4	b3	b2	b1	b0

b0-b7: (Hex) 01=SUPER SERVER 02=MAT 03=SMDR 04=MCI 05=OAI 06=PMS 07=MIS

[When @=03 (SMDR) / 04 (MCI)]

⁽¹⁾ Device Number of recovered client PC

b7	b6	b5	b4	b3	b2	b1	b0

1 Recovery Information

b7	b6	b5	b4	b3	b2	b1	b0

b0-b7: (Hex) Device Number of recovered Client PC for external LAN Interface.

b0-b7: (Hex)

01=Recovered 02~FF=Not defined

33-A		MUX Clock	Restore	
	Default Alarm: NON	Default Grade: 3	Grade Modified:	Lamp Modified:

This message displays when the MUX (PH-PC36) card, whose clock function was detected as faulty, is recovered.

1:		0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000

① Unit, MG number for MUX card, which recovered from a clock failure

b0-b1: Unit number for the recovered MUX card

- b2: MG number for the recovered MUX card
- b3: 0/1 = fault recovery in the MUX No. 0 system / fault recovery in MUX No. 1 system

b7	b4	b3	b2	b1	b0	b4:

0/1 = faulty MUX is in ACT/ Faulty MUX is in STBY

2	RLS	Data
---	-----	------

b7		_	b3	b2	b1	b0	1 1
							ł

RLS	Data:Clock alarm information on the recovered MUX card
b1:	0/1 = -/FH failure for 2M PCM Highway
b2:	0/1 = -/CLK failure for 2M PCM Highway
b3:	0/1 = -/4M CLK failure for PM

33-B		SDT Alarm	Warning	
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when an abnormal state is detected temporarily on the SDT (PA-SDTA/B) card.

	1:	X0XX	<u> </u>	<u>xx</u>	xxxx	<u></u> 00	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
		12)		3											
	4:	0000	00	000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	00	000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
1) N	1G (Modul	e Gr	oup)			b7: 0/	1 = Eve	n-numbe	er MG/C)dd-n	umber N	//G		
h7				_		b()							-		
07					1 1		, 									
<u>(2)</u> г)etail	s on a	larm					1412	1010							
υL	<i>i</i> ctan	5 011 0	14111	L				$\frac{04, 03}{00}$	0.0.0					<		
b7			b4	b3	b2	b1 b()	00	001	Hardw	are Fail	ure		SE	OT Card	
								0 0	010	Optica	ıl Line F	ailur	e	Tr	ouble	
							_	00	011	Onboa	rd Powe	er Ala	arm			
								01	000	PCM I				\mathbf{i}		
								01	010	Frame	Alignm	ent L	LOSS			
								01	011	Receiv	ving Sec	tion I	Failure	52	M Inter	face
								01	$1 \ 0 \ 0$	Mistal	ke Rate I	Degra	adation	AI	arm	
								01	101	Sendir	ng Sectio	on Fa	ilure			
								01	110	Mistal	ce Detec	tion		/		
								10	000			D ''		\mathbf{i}		
								10	001	Receiv	ng Path	i Fail	ure		7 11 D-4	Ь
								10	010	Pointe Sondi-	r Fallure	; Foilus	•••		-11 Pat	.11
								10	100	Receiv	ig raul I Zing Path	Frrd Frrd	lu nr		ouble	
								10	101	Sendir	ng Path I	Error	<i>J</i> 1			Note
								1.7. 0		C.						
								b/: S.	DT Card	Status	No 1 9	to				
								0/	$1 = 1 \times 0.0$	o system	110.1 2	ysten	1			

Note: Alarm-detected HW is specified in \Im (next page).

SYSTEM MESSAGES





The data here specifies the HW, on which any of the VC-11 Path Trouble was detected in data O (see **Note**). Refer to the table below:

b7	b6	b5	b4	b3	b2	b1	b0
-	-	-	-	28	27	26	25
24	23	22	21	20	19	18	17
16	15	14	13	12	11	10	9
8	7	6	5	4	3	2	1

0/1=-/VC-11 Path Trouble

Note: This data displays only when b4 is "1" and b3 is "0" in data @.

Repair Procedure

Basically, fault repair work is not required by the display of this message. However, if the message is created frequently, it is recommended that the repair work be performed as shown in the message [33-C] SDT Alarm Trouble.

33-C	SDT Alarm Trouble								
	Default Alarm: MN	Default Grade: 3	Grade Modified:	Lamp Modified:					

This message displays when a grave failure occurs on the SDT (PA-SDTA/B) card. If this is issued, remember the ACT/STBY change of the SDT card may be followed, as a result of fault detection in the optical fiber line (see [33-E] message).

Γ

	1:	XXXX	0000	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
		$\bigcirc 2$													
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	_					~									
	·/:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
DN	1 G (1	Module	e Group)		b	o7: 0/	1 = Ever	n-numbe	er MG/O	dd-n	umber N	/IG		
h7					b0										
07		1				-									
		1 1		1 1											
D (Detail	s on al	arm			h	4. b3	b2-b0							
_						2	00	000							
_		1	. 1 1.7	L7	L1										
57		ť	04 03	02	01 00		00	001	Hardw	are Fail	ure			SDT Ca	rd
57			04 03	02		٦	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \end{array}$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \end{array}$	Hardw Optica	are Fail 1 Line F	ure ailure	e		SDT Ca	ırd
57			04 03	02			0 0 0 0 0 0	0 0 1 0 1 0 0 1 1	Hardw Optica Onboa	are Fail l Line F rd Powe	ure ailure er Ala	e irm		SDT Ca Trouble	ırd
57		t	04 03	02]	0 0 0 0 0 0 0 0	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ \end{array}$	Hardw Optica Onboa Abnor	are Fail l Line F rd Powe mal MB	ure ailure er Ala Key	e irm Operatio	on /	SDT Ca Trouble	ırd
57			04 03	02]	0 0 0 0 0 0 0 0 0 1	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \end{array}$	Hardw Optica Onboa Abnor	are Fail l Line F rd Powe mal MB	ure ailure r Ala Key	e irm Operatio	on /	SDT Ca Trouble	urd
57			54 63	02		כ	0 0 0 0 0 0 0 0 0 1 0 1	$\begin{array}{c} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 0 & 1 & 1 \\ 1 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{array}$	Hardw Optica Onboa Abnor PCM I	rare Fail I Line F rd Powe mal MB Loss	ure ailure r Ala Key	e irm Operatio	on /	SDT Ca Trouble	ırd
57			04 03			כ	0 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ \end{array}$	Hardw Optica Onboa Abnor PCM I Frame	are Fail I Line F rd Powe mal MB Loss Alignm	ure ailure r Ala Key ent L	e urm Operatio	on	SDT Ca Trouble 52M Int	erface
57			04 03	02		כ	0 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ \end{array}$	Hardw Optica Onboa Abnor PCM I Frame Receiv	are Fail I Line F rd Powe mal MB Loss Alignm	ure ailure r Ala Key ent L tion H	e rm Operatio .oss Failure	on	SDT Ca Trouble 52M Int Alarm	urd erface
57			04 03			כ	0 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 1 \ 0 \ 1 \\ 1 \ 0 \ 0 \\ 1 \ 0 \ 1 \\ \end{array}$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sandin	are Faih I Line F rd Powe mal MB Loss Alignm ring Sect are Rate I	ure ailure er Ala Key ent L tion H Degra	operation Operation	on	SDT Ca Trouble 52M Int Alarm	urd terface
57			04 03	02		כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 0 \ 0 \\ 0 \ 0 \\ 0 \ 0 \\ 0 \ 0 \\ 1 \\ 1 \ 0 \\ 0 \\ 1 \ 0 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak	are Faih I Line F rd Powe mal MB Loss Alignm ring Sector a Data	ure ailure er Ala Key ent L tion H Degra on Fa	operation Operation oss Failure Idation ilure	on	SDT Ca Trouble 52M Int Alarm	rd erface
			04 03	02		כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \\ 0 \ 0 \\ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak	are Fail I Line F rd Powe mal MB Loss Alignm ring Sector ag Section ag Section	ure ailure or Ala Key ent L tion H Degra on Fa tion	operation Operation oss Failure Idation ilure	on	SDT Ca Trouble 52M Int Alarm	rd erface
57			04 03	02		כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 0 \ 1 \\ 1 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 1 \\ 1$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak	are Failu I Line F rd Powe mal MB Loss Alignm ring Sector ag Sector ag Sector ag Sector ag Sector	ure ailure er Ala Key ent L tion H Degra on Fa tion	operation operation coss Failure dation ilure	on	SDT Ca Trouble 52M Int Alarm	rd
67			04 03	02		כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 0 \ 1 \\ 1 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak Receiv	are Failur I Line F rd Powe mal MB Loss Alignm ring Sector are Rate I ng Sector are Detec	ure ailure er Ala Key ent L tion H Degra on Fa tion	e operatio oss Failure idation ilure ure	on	SDT Ca Trouble 52M Int Alarm	rd erface
57			94 03			כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 0 \ 1 \\ 1 \ 0 \ 0 \\ 1 \ 0 \ 1 \\ 1 \ 1 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 0 \ 1 \ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak Receiv Pointe: Sendir	are Failu I Line F rd Powe mal MB Loss Alignm ring Sector the Detec ring Path r Failure	ure ailure er Ala Key ent L tion H Degra on Fa tion	e operatio coss Failure idation ilure ure	on	SDT Ca Trouble 52M Int Alarm VC-11 I	rd eerface Path
67			94 03			כ	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 1 \ 0 \\ 0 \ 0 \\ 0 \ 1 \\ 1 \ 1 \\ 0 \\ 0 \ 0 \\ 0 \ 1 \\ 1 \\ 1 \ 0 \\ 0 \ 0 \\ 0 \ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \\$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak Receiv Pointe Sendin Baceiv	are Failure I Line F rd Powe mal MB Loss Alignm ring Sector a Rate I ag Sector a Detec ring Path r Failure ag Path H	ure ailure or Ala Key ent L tion H Degra on Fa tion Failur Failur	e operatio oss Failure idation ilure ure	on	SDT Ca Trouble 52M Int Alarm VC-11 I Trouble	erface Path
Б7 			94 03			ן	$\begin{array}{c} 0 \ 0 \\ 0 \ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0$	$\begin{array}{c} 0 \ 0 \ 1 \\ 0 \ 1 \ 0 \\ 0 \ 1 \ 1 \\ 1 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \ 0 \\ 0 \ 0 \$	Hardw Optica Onboa Abnor PCM I Frame Receiv Mistak Sendin Mistak Receiv Sendin Receiv Sendin	are Failu I Line F rd Powe mal MB Loss Alignm ring Sector a Rate I ag Sector a Detec ring Path r Failure ag Path I	ure ailure for Ala Key ent L tion H Degra on Fa tion 1 Failur Failur 1 Error	e operatio oss Failure idation ilure ure e or	on	SDT Ca Trouble 52M Int Alarm VC-11 I Trouble	erface Path

0/1=No. 0 System/No.1 System

Note: Fault repair procedure on each alarm is shown on the next page.

SYSTEM MESSAGES

Repair Procedure

Depending on the fault status shown in data ⁽²⁾, perform necessary repair work:

(1) Hardware Failure/Onboard Power Alarm

SDT (PA-SDTA/B) card is faulty. Replace the card with a spare by referring to Chapter 4, Section 3.3.3, SDT Card Replacement Procedure.

(2) Optical Line Failure

Diagnosis: In addition to this alarm, is the "PCM Loss" alarm also indicated?

YES \rightarrow Optical line side is faulty.

Verify that the SDT card in the distant node is not placed into make-busy state. Also, perform the light level check of the optical fiber cables.

NO \rightarrow SDT card is faulty.

Replace the SDT card with a spare by referring to Chapter 4, Section 3.3.3, SDT Card Replacement Procedure.

(3) Abnormal MB Key Operation

This alarm is indicated when the MB key on the PA-SDTA card is turned ON, even though the MBR key has been on the OFF side. Place the MBR key UP (=ON) and then turn ON the MB key.

(4) PCM Loss

Abnormal state is detected on the optical line side. Verify that the SDT card in the distant node is not placed into make-busy state. Also, perform the light level check of the optical fiber cables.

- (5) 52M Interface Alarm
 - Frame Alignment Loss
 - Receiving Section Failure
 - Mistake Rate Degradation
 - Sending Section Failure
 - Mistake Detection

Clock synchronization with the distant node might be lost, or a trouble might occur on the optical line side. Check the PLO cards first in both self-node and distant node. When no fault is found, proceed with the light level check of the optical fiber cables.

(6) Receiving Path Failure/Receiving Path Error

Abnormal state is detected in the process of multiplexing the "Receive" signals. To restore this, perform the following:

STEP 1 Initialization of SDT card (distant node)

Initialize the SDT card in the distant node, and observe the situation. If the fault is not restored, proceed with STEP 2.

STEP 2 Initialization of SDT card (self-node)

Initialize the SDT card in the self-node, and observe the situation. If the fault is not restored, proceed with STEP 3.

STEP 3 Replacement of SDT card

It cannot be confirmed which node side (self-node or distant node) is faulty. By referring to Chapter 4, Section 3.3.3, SDT Card Replacement Procedure, first replace the SDT card only in one of the nodes. When the fault does not recover, then also replace the SDT card in other side of the nodes.

(7) Pointer Failure/Sending Path Failure/Sending Path Error

Abnormal state is detected in the process of multiplexing the "Send" signals. To restore this, perform the following:

STEP 1 Initialization of SDT card

Initialize the SDT card in the self-node, and observe the situation. If the fault is not restored, proceed with STEP 2.

STEP 2 Replacement of SDT card

By referring to Chapter 4, Section 3.3.3, SDT Card Replacement Procedure, replace the SDT card in the self-node with a spare.

_

33-D	SDT Alarm Restore								
	Default Alarm: NON	Default Grade: 1	Grade Modified:	Lamp Modified:					

This message displays when the SDT (PA-SDTA/B) card or optical fiber line, which was once detected as faulty, recovers.

	1:	X0XX	000	0 0 0 0	0 000) 2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
		12)												
	4:	0000	000	0 0 0 0	0 000) 5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	000	0 0 0 0	0 000) 8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
1 N	1G (1	Modul	e Grou	up)			b7: 0/	1 = Eve	n-numbe	er MG/O)dd-n	umber N	/IG		
b7				-	b	0									
<u>(</u> 2) г	etail	s on th	ne fau	1+			14 12	1210							
	cian	5 011 u				_	$\frac{04,03}{00}$	000		_					
b7			b4 b	3 b2	b1 b	0	0 0	001	Hardw	are Fail	ure			SDT C	ard
							00	010	Optica	ll Line F	ailur	e		Trouble	uu
		l l					00		Abnor	ird Powe	r Ala	irm Operativ	on		
							00	000			Ксу	Operation			
							01	001	PCM I	Loss					
							01	010	Frame	Alignm	ent L	LOSS		52M In	terface
							01	011	Receiv	ving Sec	tion I	Failure		Alarm	lerrace
							01	100	Mistal	ke Rate I	Degra	dation			
							01	101	Sendir	ng Sectio	on Fa	ilure	J		
							01	110	Mistal	ce Detec	tion				
							10	000	Dagain	ring Datk	. Eoil	11#0			
							10	010	Pointe	r Failure	1 1 all	ule		VC-11	Path
							10	011	Sendir	ig Path F	Failm	·e		Trouble	
							10	100	Receiv	ving Path	n Erro	or		1104010	
							10	101	Sendir	ng Path I	Error				
							b7: S	DT Card	Status						

0/1=No. 0 System/No.1 System

33-E		SDT Interface C	Change Notify	
	Default Alarm: NON	Default Grade: 2	Grade Modified:	Lamp Modified:

This message displays when the ACT/STBY of the SDT (PA-SDTA) card is changed over as a result of fault detection in the optical fiber line. When the ACT/STBY change cannot be performed, this message also indicates the cause for the changeover execution failure.

	1:	X0XX T	<u> </u>	0000	0000	2:	0000	0000	0000	0000	3:	0000	0000	0000	0000
	4:	0000	0000	0000	0000	5:	0000	0000	0000	0000	6:	0000	0000	0000	0000
	7:	0000	0000	0000	0000	8:	0000	0000	0000	0000	9:	0000	0000	0000	0000
1	MG (I	Modul	e Grouj	p)		ť	o7: 0/	1 = Evei	n-numbe	er MG/O	dd-n	umber N	4G		
b7					b0										
2 I b7	Detail b6	ed info	ormatio b4 b3	n b2	b1 b0	t t	00: A 0/ 01: O 0/ 02, b3:	ctive SD (1=No.0 perating (1=In ser Result	T after (System/ Status o vice/Ou of Chan	Changeo No.1 Sy of SDT t of serv geover	over stem ice				
						<u>t</u> (<u>57-64</u> 2001 2010	0/1=Su Cause f SDT ha MB ke	ccess/Fa for Chan ad a seri y on SD	uilure ageover ous failu T card v	ire vas tu	urned Of	Ň		
3 (Cause	for ch	angeov	ver exec	ution fa	ilure	e								
b7	b6	b5	b4 b3	b2	b1 b0	()H: ((Changeo	ver Succ	cess)					
r			-								1				

Repair Procedure

Г

Once this message displays, be sure to check other messages, such as [33-C] SDT Alarm Trouble, and review the cause for the changeover. If any fault is implicated, repair the whole fault(s) according to the situation.

This page is for your notes.

CHAPTER 4 Unit/Circuit Card Replacement Procedure

1. LPM Accommodating Unit/Circuit Card Replacement Procedure

This section explains how to replace unit/circuit cards mounted in the LPM.

1.1 Precaution

- Use this procedure to replace a faulty unit/circuit card with a spare or to check a spare card.
- There are functional switches (having set the default switch) on some of the circuit cards to be replaced. As for switch setting on the circuit cards, confirm the circuit card mounting face layout for the LPM. When a circuit card with a default switch setting is replaced with a spare card, always make the switch setting on the new circuit card the same as on the replaced card. Otherwise, electronic components on the circuit card may be destroyed, or the circuit card itself may fail to function normally.
- When handling a circuit card, always use the field service kit for countermeasures against static electricity. Touching a circuit card without using the field service kit may destroy the card due to static electricity on the human body.

1.2 Circuit Card Mounting Face Layout

Figure 4-1 shows the face layout of circuit cards mounted in the LPM. The circuit cards marked with * are optional.



Figure 4-1 Circuit Card Mounting Face Layout of LPM

1.3 Operating Procedures

The following paragraphs provide operating procedures to replace unit/circuit cards of the LPM. Perform the operations that correspond to each Reference Item specified in Table 4-1.

UNIT/CIRCUIT CARD	REFERENCE ITEM	REMARKS
CPR	Section 1.3.1, CPR Replacement Procedure	CPU, ISAGT, LANI
EMA Card	Section 1.3.2, EMA Card Replacement Procedure	
IOC Card	Section 1.3.3, IOC Card Replacement Procedure	
PWR Unit	Section 1.3.4, Power Supply Unit Replacement Procedure	
MISC Card	Section 1.3.5, MISC Card Replacement Procedure	

Table 4-1 LPM Unit/Circuit Cards and Reference Items

WARNING

Improper key operations may result in a system down. Operate the key using extreme care. During replacement of a circuit card, the system issues system messages and activates the related alarm. Reset the indicated alarm after completing the replacement procedure.

If the indicated alarm is cleared via the RALM command, the system also clears the contents of the system message. *Before* using the RALM command, print the messages using the DFTD command.

Use the ALM RST button only to reset the alarm lamps.

1.3.1 CPR Replacement Procedure

This section explains how to replace the Control Processor Rack (CPR). Before starting the procedures, make a backup copy of the main data, such as office data, Call Forwarding (CF) data and Speed Calling (SPD) data, on to the hard disk of the HFC. Figure 4-2 shows the front view of the CPR. Operate the related keys and con-



nectors to replace the CPU with a new one. Using a Phillips screwdriver, remove the four screws and extract the CPR with care, as shown in Figure 4-3.



Figure 4-2 CPR Face Layout



Figure 4-3 How to Replace the CPU

[Circuit Card Accommodation into the New CPR]

The steps below show the procedure to install the new CPR into the LPM.

STEP 1 Using the Phillips Screwdriver, remove the 4 + 8 screws. Then, detach the front panel and top cover from the new CPR. (Refer to Figure 4-4)





Figure 4-4 Removal of Front Panel and Top Cover from CPR

STEP 2 Insert the ISAGT (PZ-GT13) and LANI (PZ-PC19) cards into the following slots of the new CPR (refer to Figure 4-5):

ISAGT (PZ-GT13) \rightarrow	Slot #6 (ISA)	ATTENTION
LANI (PZ-PC19) \rightarrow	Slot #0 (PCI)(For Fusion Link)	Static Sensitive Handling Precautions Required
LANI (PZ-PC19) \rightarrow BASE T and PCI buses)	Slot #1 (PCI)(When connecting MAT via 10-	
LANI (PZ-PC19) \rightarrow Note	Slot #3 (PCI)(When LANI for Fusion Link is in du	al configuration)



Figure 4-5 Insertion of ISAGT and LANI Cards

STEP 3 Reattach the top cover and front panel by fastening the removed screws. (Refer to Figure 4-6)





Figure 4-6 Reattachment of CPR Top Cover and Front Panel

STEP 4 After turning "ON" the MBR key on the DSP of the new CPR, insert the new CPR into the LPM. Then, fasten the retained four screws. (Refer to Figure 4-7)





Figure 4-7 Accommodation of New CPR into LPM

STEP 5 Insert the new HFD into the CPR. Then, fasten the two screws. (Refer to Figure 4-8)





Figure 4-8 Insertion of New HFD into CPR

Replacement Procedure





FRONT VIEW



ENTION

Static Sensitive

Handling Precautions Required





• Refer to Figure 4-3 to replace the CPU.



• Refer to Circuit Card Installation Into New CPR procedure in this section.











• EMA SUP lamp on the EMA card goes OFF.



↓ Initial Program Load (IPL) starts automatically.

• IMG0 lamp on the DSP flashes green.



Circuit Card Installation Into New CPR

This procedure shows how to install the new CPR into the LPM.

(1) Detach the front panel of the new CPR by using the Phillips screwdriver to remove the four screws, as shown in Figure 4-9. Then, lift the top cover by removing the eight screws.



As shown in the figure below, detach the front panel of the new CPR by removing the 4 screws. Then, also lift away the top cover by removing the 8 screws. **Top Cover** Front Panel CPR

Figure 4-9 Removal of Front Panel and Top Cover From CPR

Sensitive

(2) Insert the ISAGT (PZ-GT13) and LANI (PZ-PC19) cards into the following slots of the new CPR (refer to Figure 4-10):

ISAGT (PZ-GT13) →Slot #6 (ISA) LANI (PZ-PC19) →Slot #0 (PCI) (For Netfusing Link) LANI (PZ-PC19) →Slot #1 (PCI) (When connecting MAT via 10-BASE T and PCI buses) LANI (PZ-PC19) →Slot #3 (PCI) (When LANI for Netfusing Link is in dual configuration)

Note: The location of the second LANI (PCI Slot 3) is optional.



Figure 4-10 Insertion of ISAGT and LANI Cards

(3) Reattach the top cover by fastening the removed eight screws. Then, reattach the front panel by fastening the removed four screws. Refer to Figure 4-11.





Figure 4-11 Reattachment of CPR Top Cover and Front Panel

(4) After turning ON the MBR key on the DSP of the new CPR, insert the new CPR into the LPM as shown in Figure 4-12. Then, fasten the retained four screws.





Figure 4-12 Location of New CPR Into LPM

(5) Lastly, insert the new HFD into the CPR. Then, fasten the two screws as shown in Figure 4-13.





Figure 4-13 Insertion of New HFD Into CPR

1.3.2 EMA Card Replacement Procedure

The EMA (PH-PC40) card is mounted in Slot No. 04 of the LPM. The main functions of the card are as follows:



- Designation of ACT/STBY status of the CPU and forced changeover of the system
- Shutoff of the system's power supply and detection of rising temperature within the system
- Music source for Music-On-Hold (for 1-IMG system only)
- Control of the NCU (PA-M53) card

CHAPTER 4 Page 258 Issue 1

WARNING Before replacing the EMA card, check the CPU #0's ACT mode. Attempting to replace the card when the CPU is active will result in the system being initialized.

Replacement Procedure







• OPE/MB lamp on the EMA card is steady-green.

↓

• PFT service is cancelled: resumption of normal operation.

1.3.3 IOC Card Replacement Procedure

The IOC (PH-IO24) card is mounted in Slot No. 02 and/or 03 of the LPM. The card's main function is to provide a serial interface between the system and its external equipment, such as the Maintenance Administration Terminal (MAT), Station Message Detail Recording System (SMDR), Message Center Interface (MCI), Property Management System (PMS), etc.



ATTENTION The equipment connected to the I/O ports of each card (MAT, SMDR, etc.) cannot be used while replacing the IOC card.

Replacement Procedure

Turn ON the MBR key on the IOC (PH-IO24) card to be replaced.
Turn ON the MB key on the card.
Extract the card from the LPR.
Set the keys on the new card, referring to the card to be replaced.
A

• OPE lamp on the IOC card first flashes and then becomes red.

- All I/O ports are closed and the equipment, such as MAT and SMDR, loses connections.
 - Note: The text data (such as billing information), registered before this step, will be safely transmitted later. However, the data, recorded after this step, will not be sent out, and instead is stored in the buffer.
- OPE lamp on the IOC card goes




- OPE lamp on the IOC card is red.
- Release of I/O ports: new IOC card is initialized, and I/O port channels reopens.

•

• OPE lamp is green.

1.3.4 Power Supply Unit Replacement Procedure



CHAPTER 4 Page 263 Issue 1





1.3.5 MISC Card Replacement Procedure





• Keep MB switch UP.

2. TSWM ACCOMMODATING CIRCUIT CARD REPLACEMENT PROCEDURE

This section explains the procedure for replacing circuit cards accommodated in the TSWM.

2.1 Precaution

- This procedure is applied when replacing a faulty circuit card with a spare. It is also able to be applied when checking a spare card.
- There are the functional switches (having set the default switch) on some of the circuit cards to be replaced. As for switch setting on the circuit cards, confirm the circuit card mounting face layout for the PIM. When a circuit card that has default switch settings has been replaced with a spare card, be sure to make switch settings on the new circuit card the same as on the replaced card. Otherwise, electronic components on the circuit card may be destroyed, or the circuit card itself may fail to function normally.
- When handling a circuit card, be sure to use the field service kit for countermeasures against static electricity. If you touch a circuit card without using the field service kit, electronic components like an IC on the card may be destroyed by the static electricity on the human body.

2.2 Circuit Card Mounting Face Layout

The face layout of the circuit cards housed in the TSWM is shown in Figure 4-4 Circuit Card Mounting Face Layout of TSWM. Note that the circuit cards marked with * are optional.



Figure 4-14 Circuit Card Mounting Face Layout of TSWM

WARNING Improper key operations may result in a system down. Operate the key, using extreme care.

By replacing a circuit card, the system will issue system messages and activate the related alarm. Be sure to reset the indicated alarm after the replacement procedure is complete.

If the indicated alarm is cleared via the RALM command, the system also clears the contents of the system message. Be sure to print out the messages (using the DFTD command) BEFORE using the RALM command.

The ALM RST button is used to reset the alarm lamps only.

CHAPTER 4 Page 266 Issue 1

2.3 Operating Procedures

The following paragraphs explain the operating procedures to replace circuit cards located in the PIM. Perform the operations corresponding to each Reference Item specified in Table 4-2.

CIRCUIT CARD FUNCTION NAME	REFERENCE ITEM	REMARKS
GT	Section 2.3.1, GT Card Replacement Procedure	
TSW	Section 2.3.2, TSW Card Replacement Procedure	
DLKC	Section 2.3.3, DLKC Card Replacement Procedure	
PLO	Section 2.3.4, PLO Card Replacement Procedure	
PWR SW	Section 2.3.5, PWR SW Card Replacement Procedure	
MISC	Section 2.3.6, MISC Card Replacement Procedure	

Table 4-2 TSWM Circuit Cards and Reference Items

2.3.1 GT Card Replacement Procedure

The GT (PH-GT09) card is located in Slot No. 10 or 11 within the TSWM. The card's main function is to provide both MISC and I/O Local bus interface between the microprocessor of CPU and other lower echelons, such as DLKC, TSW and MUX cards. Follow the procedures below to replace a GT card with a spare.

Note: To replace the GT card, the ACT/STBY status of GT must be changed over first. This must be done by operating the MBR key (or by using the CMOD command) on the DSP of active CPR. Figure 4-15 shows a system block diagram centering upon the CPU and its controlling GT. If the ACT/STBY of GT is to be changed over, the system of CPU must be manually changed over. For more details on the GT changeover, refer to Section 12.1.2, How to Control CPU Block, in Chapter 6.



connection on the backboard side.

Figure 4-15 System Block Diagram (Connections Between GT and CPU)

GT Card Replacement Procedure

WARNING

Use extreme care when operating the keys on the DSP of CPR and PH-GT09 card.





• System changeover of GT from ACT to STBY mode



Check the following lamp indications on the GT card to be replaced and on the DSP of CPR that controls the GT:

- OPE/MB (GT card) = OFF
- CPU OPE (CPU DSP) = OFF
- IMG0 (CPU DSP) = Flash (green)
- IMG1-3 (CPU DSP) = OFF

Check the following lamp indications on the mate GT_card and the DSP of the mate CPR:

- OPE/MB (GT card) = Steady-green
- CPU OPE (CPU DSP) = Steadygreen
- IMG0-3 (CPU DSP) = Flash (green)

EMA SUP lamp on the EMA card is steady-green.





• OPE/MB lamp on the GT card remains OFF.

- OPE/MB lamp on the new card is OFF.
- OPE/MB lamp on the new card remains OFF.



Note: The system changeover of GT can be executed also by using the CMOD command. For details, refer to Chapter 8, Maintenance Commands.

2.3.2 TSW Card Replacement Procedure

The TSW (PH-SW12) card is located in the Slot Nos. ranging from 12 to 19 within the TSWM. Equipped with the Time Division Switch (TSW) and Speech Path Controlling Interface (INT), the card's main function is to provide a maximum of 8192×2048 Time Slot (TS) switching for a designated single IMG. Because a single TSW card only enables the TS switching associated with a single, individual IMG alone, note that the fully expanded 4-IMG system requires a total of 4 TSW cards when it adopts a single configuration, or as many as 8 in the case of dual configuration. If your system adopts the latter's dual configuration, the card's replacement procedures are as follows:

Note: To replace a TSW card in dual configuration, the system of the card must be changed over from ACT to STBY mode. The changeover can be done by flipping the MBR key on the active GT (PH-GT09) card or by using the CMOD command. For more details, refer to Section 12, System Control Procedures, in Chapter 6.

Figure 4-16 provides the system block diagram centering upon the TSW cards. If the system of TSW/ INT is changed over, the ACT/STBY of DLKC and MUX in the same switching block are also totally changed over. The changeover can be performed by flipping the MBR key on the active GT (PH-GT09) card, or by using the CMOD command.



Figure 4-16 System Block Diagram (TSW and Other Speech Path Echelons)

TSW Card Replacement Procedure

WARNING Use extreme care when operating the keys on the circuit card.



Figure 4-17 LEDs and Switches for TSW Changeover





• TSW ACT lamp on the TSW card is red.

• TSW ACT lamp on the new card is red.





- TSW ACT lamp on the new card goes OFF.
- TSW ACT lamp on the new card remains OFF.



System Changeover

- Replaced TSW: STBY to ACT
- Mate TSW: ACT to STBY

Check the following lamp indications on the Speech Path block to which the new TSW card belongs and ensure that they are all steady-green:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

Check the following lamp indications on the mate Speech Path block and ensure that they are all OFF:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

Note: The system changeover of TSW card can be executed also by using the CMOD command. For details, refer to Chapter 8, Maintenance Commands.

2.3.3 DLKC Card Replacement Procedure

The DLKC (PH-PC20) card is located in Slot No. 08 or 09 within the TSWM. The card's main function is to provide all the Attendant/Desk Consoles with information such as termination/answer/release (abandoned) of ATT calls or idle/busy status of a station via the link of the TSW system. Use the following procedures to replace the DLCK card with a spare.

Note: The system changeover of DLKC must be executed by the MBR key operation on the active GT (PH-GT09) card or by using the CMOD command. Before starting this work, confirm the system block diagram shown in Figure 4-16, or Section 12, System Control Procedures, in Chapter 6.



WARNING Use extreme care when operating the keys on the circuit card.





System Changeover

Check the following lamp indications on the circuit cards to be affected and ensure that they are all OFF:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card) Note
- MUX ACT (MUX cards)

Note: If the DLKC card to be replaced represents system status #0, all circuit cards with #0 status are totally affected. Check the cited cards' lamp indications. See Figure 4-16 and Figure 4-17.

Check the following lamp indications on the mate Speech Path Block and ensure that they are all steady-green:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

OPE/MB lamp on the DLKC card is red.





2.3.4 PLO Card Replacement Procedure

The PLO (PH-CK16/17/16-A/17-A) card is located in Slot No. 21 or 23 within the TSWM. Used together with a different direct digital interface circuit card, the card's main function is to set up the clock synchronization on the network. In addition, the MUSIC ROM supplies the hold tone to each station line via the TSW circuit card. Use the procedures below to replace the PLO card with a spare.

Note: The ACT/STBY of PLO can be changed over via a single MB key operation on the circuit card. Though its circuit is controlled by the GT (PH-GT09) card via TSW I/O bus, the switching system of PLO is not affected by the speech path system changeover, differing from other echelons such as TSW, MUX, DLKC. Refer to Section 12, System Control Procedures, in Chapter 6.

Replacement Procedure





• PLO system is changed over from ACT to STBY mode.

♦

• OPE lamp on the PLO card goes OFF.

Check the mate PLO card's following lamp indication:

• OPE = Steady-green



Note: After all steps are completed, check the ACT mode of TSW cards, which are in the same switching block with the replaced PLO. Because the PLO-located MUSIC ROM supplies hold tones only to the TSW cards belonging to the same switching block, verify all the TSW cards are also in the ACT-mode status. Refer to Section 12, System Control Procedures, in Chapter 6.

2.3.5 PWR SW Card Replacement Procedure

The PWR SW (PH-PW14) card is located in Slot No. 00 or 01 within the TSWM. The card's main function is to supply DC -48V operating power to the same TSWM circuit cards and also DC +5, -5V, and +12V output power to the MISC slots. Use the following procedures to replace the card with a new one.

Replacement Procedure





- P-ON lamp on the PWR SW card goes OFF.
- ALM lamp on the PWR SW card is red.

- P-ON lamp on the new card is OFF.
- ALM lamp on the PWR SW card is red.
- P-ON lamp on the new card is steady-green.
- ALM lamp on the PWR SW goes OFF.

2.3.6 MISC Card Replacement Procedure





• Keep MB switch UP.

3. PIM Accommodating Circuit Card Replacement Procedure

This section covers the procedures for replacing circuit cards mounted in the PIM (IMG0/1/2/3).

3.1 Precaution

- Use this procedure to replace a faulty circuit card with a spare or to check a spare card.
- There are functional switches (having set the default switch) on some of the circuit cards to be replaced. As for switch setting on the circuit cards, confirm the circuit card mounting face layout for the PIM. When a circuit card with a default switch setting is replaced with a spare card, always make the switch setting on the new circuit card the same as on the replaced card. Otherwise, electronic components on the circuit card may be destroyed, or the circuit card itself may fail to function normally.
- When handling a circuit card, always use the field service kit as countermeasures against static electricity. Touching a circuit card without using the field service kit may destroy the card due to static electricity on the human body.

3.2 Circuit Card Mounting Face Layout

Figure 4-18 shows the face layout of the circuit cards mounted in the PIM.



Figure 4-18 Circuit Card Mounting Face Layout of PIM

WARNING

Improper key operations may result in a system down. Operate the keys with extreme care.

During replacement of a circuit card, the system issues system messages and activates the related alarm. Reset the indicated alarm after completing the replacement procedure.

If the indicated alarm is cleared via the RALM command, the system also clears the whole contents of the system message. *Before* using the RALM command, print the messages using the DFTD command.

Use the ALM RST button only to reset the alarm lamps.

3.3 Operating Procedures

The following sections provide operating procedures to replace circuit cards mounted in the PIM. Perform the operations corresponding to each Reference Item specified in Table 4-3. Note that the procedures assume that the system adopts the dual configuration.

CIRCUIT CARD FUNCTION NAME	REFERENCE ITEM	REMARKS
LC/TRK	Section 3.3.1, LC/TRK Circuit Card Replacement Procedure	
MUX	Section 3.3.2, MUX Card Replacement Procedure	
SDT	Section 3.3.3, SDT Card Replacement Procedure	
PWR	Section 3.3.4, PWR Card Replacement Procedure	

Table 4-3 PIM Circuit Cards and Reference Items

3.3.1 LC/TRK Circuit Card Replacement Procedure





• Keep MB switch set at UP.

3.3.2 MUX Card Replacement Procedure

The MUX (PH-PC36) card is mounted in Slot No. 13 and/or 14 of each Port Interface Module (PIM). The card's main function is to provide an interface between the CPR and Port Microprocessor (PM) of the line/trunk circuit, and also to provide an interface for multiplexing/de-multiplexing of voice Pulse Code Modulation (PCM) information and digital data information. Use the procedures below to replace the MUX card with a spare:

Note: Execute the system changeover of MUX by using the MBR key operation on the active GT (PH-GT09) card or by using the CMOD command. Before starting this task, be sure to confirm the system block diagram shown in Figure 4-16, or Section 12, System Control Procedures, in Chapter 6.

MUX Card Replacement Procedure

WARNING Apply extreme care when operating the keys on the circuit cards.





System Changeover

Check the following lamp indications on the circuit cards to be affected and ensure that they are all OFF:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card) Note
- MUX ACT (MUX cards)

Note: If the MUX card to be replaced represents system status #0, all circuit cards with #0 status are totally affected. Check the cited cards' lamp indications. Refer to Figure 4-16 and Figure 4-17.

Check the following lamp indications on the mate Speech Path Block and ensure that they are all steady-green:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

MUX/ACT lamp on the DLKC card is red.





• MUX ACT lamp on the new card is red.





MBR (on the active GT card)



System Changeover Replaced MUX: STBY to ACT Mate MUX: ACT to STBY

Check all the following lamp indications on the Speech Path block to which the new MUX card belongs and ensure that they are all steadygreen:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

Check the following lamp indications on the mate Speech Path block and ensure that they are all steady-green:

- TSW ACT (TSW cards)
- OPE/MB (DLKC card)
- MUX ACT (MUX cards)

Refer to Figure 4-16 and Figure 4-17.



SDT Card Replacement Procedure 3.3.3

The SDT (PA-SDTA/PA-SDTB) card, mounted in a universal slot of a PIM, is used to provide a 52M interface for the optical fiber lines. Use the following procedure to replace the SDT card with a spare.



WARNING While this card is being replaced, the connected optical fiber line cannot be used.

Procedure to Replace Optical Fiber Cable





• ACT lamp on PA-SDTA card goes OFF. (When card is provided in a dual configuration, the card becomes STBY.)

The following occurs in call processing:

When card is provided in dual configuration

All calls (including already established calls plus newly attempted calls) can normally be handled by the mate card.

When card is in single configuration, or mate card is faulty in dual configuration

Though any call attempt is rejected, already established calls are not affected. When any connection link exists, the link is still maintained.

• OPE lamp on the PA-SDTA card is red.

The following occurs in call processing:

When card is in single configuration, or mate card is faulty in dual configuration

Already established calls (while in speech) lose voice/tone. Any connection link is severed after a few seconds.





• OPE lamp on the PA-SDTA card is steady-green.

Procedure to Replace PA-SDTA/PA-SDTB card





- ACT lamp on the PA-SDTA card goes OFF.
- Though any call attempt is rejected, already established calls are safely maintained. When any connection link exists, the link is maintained.
 - **Note:** When the card is in a dual configuration, perform this for both system sides, in the order of STBY \rightarrow ACT.

- OPE lamp on the PA-SDTA card is red.
- When already established calls exist, the connections lose voice/tone. When any connection link exists, the link is severed after a few seconds.
 - **Note:** When the card is in a dual configuration, perform this for both system sides (both ACT and STBY sides).





- OPE lamp on the PA-SDTB card is red.
- When any connection link exists, the nailed-down connection between the FCH (PA-FCHA) and SDT (PA-SDTB) cards is cut off. Already established calls, while in speech, are all disconnected.

• Confirm that the MB key on the new card is set UP (=ON). If the new card is PA-SDTA, also confirm that Switch 4 of the P-SW key is ON.



3.3.4 PWR Card Replacement Procedure

The PWR (PA-PW55-A/PA-PW55-B) and DPWR (PA-PW54-A/PA-PW54-B) cards are mounted respectively in Slot No. 1 and Slot No. 3 of each PIM. The card's main function is to provide operating power to the circuit cards accommodated in the PIM. The procedures to replace the PWR/DPWR card are as follows:



Replacement Procedure



• OPE lamp on the card goes OFF.





• OPE lamp on the new card is OFF.

• OPE lamp on the new card is green.

4. Fan Unit Replacement

This section explains how to replace the Fan Unit (FANU), which is fastened on the TOPU or inside the dedicated fan box within the system. Because the fan is a vital device to protect the system from heated air, it is recommended that the fan (a total of three per unit) be replaced at least every two years to guarantee its high performance.

The mounting location of FANU differs, depending on the module configuration of each cabinet. When the system consists of a total of three modules or less, the FANU is mounted on the TOPU of the cabinet. Otherwise, the FANU is housed in the dedicated fan box in the center of the cabinet. Refer to Figure 4-19.



Figure 4-19 FANU Locations

Replacement Procedure: FANU on TOPU

When the FANU is mounted on the TOPU, perform the following replacement procedure:

- STEP 1 Using a Phillips screwdriver, remove the four screws. Lift away the top cover.
- STEP 2 Turn OFF the PWR SW on the PZ-M369. (Refer to Figure 4-20.)
- STEP 3 Remove the fan fuse (5A) on the PZ-M369.
- STEP 4 Remove the fan cables from the fan connector and the connector(s) corresponding to the fan to be replaced (for example, when replacing FAN #0, disconnect the FC0 connector together with the fan connector).



Figure 4-20 Preparation for FANU Replacement (Fans on TOPU)

STEP 5 Remove the four screws fastening the fan to be replaced. Refer to Figure 4-21.

Note: The removed screws are used in STEP 7 again. Do not dispose of them when unscrewing the fan here.

- STEP 6 Remove the unscrewed fan from the FANU.
- STEP 7 Fasten the new fan with the removed screws.
- STEP 8 Connect the new fan cables to the fan connector and the connector(s) disconnected in STEP 4.
- STEP 9 Fix the fan fuse (5A) onto the PZ-M369.
STEP 10 Set the PWR SW on the PZ-M369 to the AUTO position.

Note: *The switch setting of the PWR SW can be ON, depending on the location conditions of the system.*

STEP 11 Attach the top cover again to the original location.



Figure 4-21 How to Replace FANU (Fans on TOPU)

Replacement Procedure: FANU in Fan Box

When the FANU is mounted in the fan box, perform the following replacement:

- STEP 1 Remove the front cover of the fan box. Then, extract the FANU.
- STEP 2 Turn OFF the PWR SW on the PZ-M369. (Refer to Figure 4-22.)
- STEP 3 Remove the fan fuse (5A) on the PZ-M369.
- STEP 4 Remove the fan cables from the fan connector and the connector(s) corresponding to the fan to be replaced (for example, when replacing FAN #1, disconnect the FC0 connector together with the fan connector).



Figure 4-22 Preparation for FANU Replacement (Fans in Fan Box)

UNIT/CIRCUIT CARD REPLACEMENT PROCEDURE

STEP 5 Take off the four screws fastening the fan to be replaced. (Refer to Figure 4-23.)

Note: The removed screws are used in STEP 7 again. Do not dispose of them when unscrewing the FAN here.

- STEP 6 Remove the unscrewed fan from the FANU.
- STEP 7 Fasten the new fan with the removed screws.
- STEP 8 Connect the new fan cables to the fan connector and the connector(s) disconnected in STEP 4.
- STEP 9 Fix the fan fuse (5A) again onto the PZ-M369.
- STEP 10 Insert the FANU into the fan box and fasten it with the two screws.
- STEP 11 Set the PWR SW on the PZ-M369 to the AUTO position.
- **Note:** *The switch setting of the PWR SW can be ON, depending on the location conditions of the system.*

STEP 12 Attach the front cover to the original location.



Figure 4-23 How to Replace FANU (Fans in Fan Box)

5. CPR Cooling Fan Replacement

This section explains how to replace a cooling fan in the back side of the CPR. This procedure is necessary when a fault is detected in the cooling fan. Because the fan is a vital device to protect the CPR from heated air, it is also recommended that the fan be replaced at least every two years, even if a fault is not detected.

STEP 1 Set the CPU, whose rack houses the fan to be replaced, in STBY mode via the MBR key on the DSP (Refer to Figure 4-24.) **Note**

Note: For the ACT/STBY changeover of the CPU, see Chapter 6.

- STEP 2 Disconnect the power alarm cable from the PALM connector on PZ-PW92.
- STEP 3 Turn OFF the PWR SW on the PZ-PW92 (Refer to Figure 4-24 Face Layout of CPR.)



Figure 4-24 CPR Face Layout

- STEP 4 Disconnect the power and bus and ether cables from the relevant connectors.
 - Power cables from OUTPWR, INPWR connectors on PZ-PW92
 - Bus cables from the front connectors on PZ-GT13 and PZ-GT16
 - Ether (UTP CTG5 ST CA-n) cables from the front connectors on the PZ-PC19.
- STEP 5 Remove the front bracket, and then take off the four screws fastened onto the CPU. (Refer to Figure 4-25.)
- STEP 6 Extract the CPR from the LPM. (Refer to Figure 4-25.)



Figure 4-25 Extraction of CPR from LPM

- STEP 7 Disconnect the fan cable from the connector in the backbone of CPR.
- **Note:** *The cooling fan is located in the backbone of CPR and the cable connector lies in its right side. Refer to Figure 4-26.*



Figure 4-26 Rear View of CPR

- STEP 8 Loosen the two screws fastening the box that contains the fan inside. Slightly lift the box and remove it from the CPR. Refer to Figure 4-26 and Figure 4-27.
- STEP 9 Take off the four screws and remove the cooling fan from the CPR. Refer to Figure 4-27.
- STEP 10 Fasten the new cooling fan and CPR with screws. Then, connect the fan cable again to the connector. Refer to Figure 4-26 and Figure 4-27.

CHAPTER 4 Page 302 Issue 1

- STEP 11 Insert the CPR back into the LPM.
- STEP 12 Fasten the CPR and LPM with the four screws.
- STEP 13 Connect the disconnected power, bus, and ether cables to the relevant connectors.
- STEP 14 Turn ON the SW key on the PZ-PW92.
- STEP 15 Connect the disconnected power alarm cable to the PALM connector on the PZ-PW92.
- STEP 16 Analyze the indicated system message. The message displayed when the PWR SW on the PZ-PW92 was turned OFF.
- STEP 17 Clear the indicated ALM and confirm that the ALM lamp is not lit again, indicating that the cooling fan is replaced securely.



Figure 4-27 How to Remove the Cooling FAN

6. Fuse Replacement

The system uses the fuses shown in Figure 4-28 as a protection against an overload resulting from a short circuit.



Figure 4-28 Fuses Used by System

When excessive current is applied to a PWR circuit card, the related fuse is blown. The blown fuse after a fault can be confirmed as shown in Figure 4-29.



Figure 4-29 Blown Fault Example

The purpose of fuses is to let them blow before the components are damaged. If any fuse gets blown, replace it immediately with a new one using the following procedure:

- (1) Confirm the blown fuse via the system message [6-A] or MJ lamp on the top of IMG0.
- (2) Replace the fuse with a new one, referring to Figure 4-30 and Figure 4-31.
- (3) Determine the cause of the blown fault, referring to Figure 4-32 (case of RGU fuse) or Figure 4-33 (DC-48V fuse.)



Figure 4-30 shows the location of fuses within the system. In Chapter 4-30, the fuses are indicated by 🗍 or 💽.

Figure 4-30 Fuse Locations Within System

UNIT/CIRCUIT CARD REPLACEMENT PROCEDURE

In the TSWM, the fuse shown in Figure 4-31 is used for the PWR SW (PH-PW14) card, which is housed in Slot No. 00 and/or 01.



Figure 4-31 Fuse Location Within TSWM



Perform the procedure in Figure 4-32 to confirm the cause of the RGU fuse blown fault.

Figure 4-32 RGU Fuse Blown Fault Flowchart

UNIT/CIRCUIT CARD REPLACEMENT PROCEDURE





Figure 4-33 DC -48V Fuse Blown Fault Flowchart

CHAPTER 5 FAULT REPAIR PROCEDURES

This chapter provides information on how to repair the fault(s) within the system. If any of the components or equipment listed in Table 5-1 has a failure, move on to the repair procedure explained for each faulty condition.

FAULTY ITEM	FAULTY SITUATION		REFERENCE SECTION
Line Fault	DP/PB Telephone	Dial tone is not heard.	Section 1.3, Line Fault - When Dial Tone (DT) Cannot Be Heard
		Dialing results in a wrong connection.	Section 1.4, Line Fault - When Dialing Results in Wrong Connection
		Bell does not ring.	Section 1.5, Line Fault - When Bell Does Not Ring
		Answer/speech cannot be made.	Section 1.6, When Call Cannot Be Answered and Speech Cannot Be Made
	D ^{term}	 D^{term} cannot be operated. Operations are abnormal. 	Section 1.7, D ^{term} Fault
Trunk Fault	 No connections can be set up. PB/DP signals are erroneously received or set out from ORT/SND. No three-way calling can be made on CFT, or noise gets in a established connection. A connection results in no speech. 		Section 2.3, Trunk (ORT, SND, CFT) Fault and Section 2.4, Trunk (COT, TLT, DTI) Fault
ATTCON/DESKCON	No speech can be madeNo control operations c	e. an be made.	Section 3.3, ATTCON/DESKCON Fault
Unit Fault	Faults related to speech.		Section 4.2, Unit Fault - Fault Related to Speech
	Dial tone is not heard. The ACT MUX card side has become faulty and system changeover has been executed.		Section 4.3, Unit Fault - When Dial Tone (DT) Cannot Be Heard
			Section 4.4, Unit Fault - ACT-Side MUX Card Is Faulty and System Has Changed Over

 Table 5-1
 Fault Repair Procedure Quick Reference

FAULTY ITEM	FAULTY SITUATION	REFERENCE SECTION
Speech System Fault	Faults related to speech.	Section 5.2, Speech Path System Fault - Fault Related to Speech
	Dial tone is not heard.	Section 5.3, Speech Path System Fault - When Dial Tone (DT) Cannot Be Heard
	STBY side is faulty.	Section 5.4, Speech Path System Fault - STBY Side Has Become Faulty
Control System Fault	Fault occurs occasionally at the ACT side.	Section 6.2, Control System Fault - Fault Occurs Intermittently
	STBY side is faulty.	Section 6.3, Control System Fault - STBY Side Is Faulty
Alarm Indication Fault	No fault indication is made on the Alarm Indicator Panel.	Section 7.2, Fault of Alarm Indicating Panel
	Fault is not detected.	Section 7.3, Fault That Cannot Be Detected
Power Supply Fault	Fuse for RGU/-48V has blown.	Section 8.2, Fuse Blown Fault
	The circuit breaker of PWR supply is off.	Section 8.3, Circuit Breaker OFF Fault in PWR Supply
	Alarm lamp on the PWR supply is lit.	Section 8.4, Fault of Alarm Lamps on PWR Supply
Fan Unit Fault	 Fan are not activated even if the temperature has risen higher than a predetermined degree. Fans are not activated even if the FAN START switch 	Section 9.2, Fan Unit Fault
	is set to AUTO position.	
Tone Fault	Tone is distorted.	Section 10.2, Tone Fault
System Down Fault	Cause for the fault cannot be identified.	Section 11.1, When Cause for Fault Cannot Be Identified
	The faulty circuit card can be detected.	Section 11.2, When Faulty Circuit Cards Can Be Assumed From System Message
 CCIS Line Fault A Specific CCH/CCT card is faulty. When the signal transmission line is a digital line, transmission/receiving of control signals cannot be performed. When the signal transmission line is an analog line, 		Section 12.3, Specific CCH/CCT Card Is Faulty and Section 12.4, Fault of CCH, DTI and Related Flat Cable
	transmission/receiving of control signals cannot be performed.	

Table 5-1	Fault Repair Procedure Quick Reference	(Continued)
-----------	--	-------------

FAULTY ITEM	FAULTY SITUATION	REFERENCE SECTION
ISDN Line Fault	 A specific DCH/PRT card is faulty. When the signal transmission line is a digital line, transmission/receiving of control signals cannot be performed. 	Section 13.3, Specific DCH/PRT Card Is Faulty and Section 13.4, Fault of DCH, DTI, and Related Flat Cable
Hard Time Clock Fault	EMA card is faulty.	Section 14, Hard Time Clock Fault

Table 5-1 Fault Repair Procedure Quick Reference (Continued)

1. LINE FAULT

This section explains the fault repair procedure in a case where only one specific station line is in any of the faulty conditions listed in Table 5-2.

FAULTY SITUATION	REFERENCE SECTION
When Dial Tone cannot be heard	Section 1.3, Line Fault - When Dial Tone (DT) Cannot Be Heard
When dialing results in a wrong connection	Section 1.4, Line Fault - When Dialing Results in Wrong Connection
When the bell does not ring	Section 1.5, Line Fault - When Bell Does Not Ring
When call cannot be answered and speech cannot be made	Section 1.6, When Call Cannot Be Answered and Speech Cannot Be Made
D ^{term} Fault	Section 1.7, D ^{term} Fault

Table 5-2 Line Fault Situation

FAULT REPAIR PROCEDURES

1.1 Check Point

When repairing a line fault, consider the following items:

- (1) Check alarm lamps on line circuit cards.
- (2) When an outgoing call cannot be originated to a specific line/trunk or when an incoming call cannot be terminated from a specific line/trunk, check Tenant Restriction Data (assigned via ATNR command) and Route Restriction Data (assigned via ARSC command).

1.2 Line Control

Each line in a specific Line circuit (LC/ELC) card is controlled by the PM in that line circuit card. The line circuit cards are controlled from the CPU via the MUX. Figure 5-1 shows the control route of line circuit cards.



Figure 5-1 Controlling LC/ELC Circuit Cards and Speech Path

1.3 Line Fault - When Dial Tone (DT) Cannot Be Heard



-	When OPE lamp on the LC circuit card - does not illuminate		Confirm MB switch of the LC circuit card is in ON position (UP).
		_	Use ASDT command to confirm that station data in the LC circuit card is assigned.
			Replace the LC circuit card with a spare.
-	When BL lamp for each line is flashing or - illuminating on the LC circuit card	\top	Confirm MB switch of the LC circuit card is in ON position (UP side).
			Use MBST command to confirm LC circuit card has not been placed into make-busy state.
			Use ASDT command to check the station data assignment.
A			Replace the LC circuit card with a spare.

Note: If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.





1.4 Line Fault - When Dialing Results in Wrong Connection



START		
\vdash	When a call addressed to a specific station ————————————————————————————————————	Check to see if Call Forwarding-All Calls data has been deleted.
$\left \right $	Check the faulty line on the MDF.	On the MDF, isolate the faulty line to the in- house wiring side and to the system side.
		Connect the test telephone to the system side.
		Repeat station-to-station connections and check to see if the connection is established normally.
	When the dialed station is called —	The station telephone set is faulty. Replace the station telephone set with a spare.
END	When a wrong connection	Replace the LC circuit card with a spare.

Note: If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.

FAULT REPAIR PROCEDURES

1.5 Line Fault - When Bell Does Not Ring



	Call the faulty station line by Station-to- Station calling and check to see if the bell of the telephone rings.		Replace the telephone set and check to see if its bell rings.
	Check the faulty line on the MDF.	F	Isolate the faulty line to the in-house wiring side and to the system side. Connect the test telephone to the system side. Call the faulty line by station-to-station calling and check to see if the bell rings.
	— When the bell does not ring		Replace the LC circuit card with a spare.
END	When the bell rings		The in-house wiring side is faulty. Confirm that the A wire is not short-circuiting with ground.

Note: If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.

1.6 When Call Cannot Be Answered and Speech Cannot Be Made





Note: If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.

FAULT REPAIR PROCEDURES

1.7 D^{term} Fault

- **Note 1:** If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.
- **Note 2:** If any of the in-house cable wirings short-circuit, the POW ALM lamp on the ELC circuit card lights. Remove the cause of the short-circuit and initialize the ELC circuit card.



	When OPE lamp on the ELC circuit card does not illuminate	\top	Confirm that MB switch of the ELC circuit card is in ON position (UP).
			Confirm that station data (ASDT command) in the ELC circuit card is assigned.
			Replace ELC circuit card with a spare.
	When BL lamp for each line is flashing or illuminating on the ELC circuit card	Т	Confirm that MB switch of the ELC circuit card is in ON position (UP).
			Use MBST command to confirm that ELC circuit card has not been placed into make- busy state.
			Check the station data (ASDT command) assignment.
			Replace the ELC circuit card with a spare.
4			



A			
_	Check the faulty line on the MDF.		Isolate the faulty line to the in-house wiring side and to the system side. Connect the test D ^{term} to the system side. Confirm speech by Station-to-Station calling.
	— When no speech can be made.	Τ	Check LT cables. Replace ELC circuit card with a spare.
END	When speech can be made.		Check to see if the modular plug is firmly connected with the D ^{term} . Check the wiring inside the rosette. Check the in-house wiring for any abnormality. Replace the D ^{term} with a spare.

2. TRUNK FAULT

This paragraph explains the fault repair procedure when a fault, shown in Table 5-3, has occurred to a specific trunk.

TRUNK	FAULTY SITUATION	REFERENCE SECTION
ORT	No connection can be set up. PB/DP signals are erroneously received or cannot be received.	Section 2.3, Trunk (ORT, SND, CFT) Fault
SND	No connections can be set up. PB/DP signals are erroneously sent out or cannot be sent out.	
CFT	No connections can be set up. No three-way calling can be made. Noise gets in an established connection.	
COT TLT DTI	No connections can be set up. A connection results in no speech. Noise gets in an established connection.	Section 2.4, Trunk (COT, TLT, DTI) Fault

Table 5-3 Trunk Fault Situation

2.1 Check Point

When repairing a trunk fault, consider the following items:

- (1) Check alarm lamps on trunk circuit cards.
- (2) When an outgoing call cannot be originated to a specific trunk or when an incoming call cannot be terminated from a specific trunk, check Tenant Restriction Data (assigned via ATNR command) and Route Restriction Data (assigned via ARSC command).
- (3) Three-Way Conference Trunk (CFT) is on the MUX (PH-PC36) circuit cards. If a three-way conference call cannot be established, check the MUX cards.
- (4) If the present timing for supervising the trunk/sender status is considered to be responsible for the fault, change the timing. The specifications for timings that can be changed with respect to trunks and senders are shown in Table 5-4 and Table 5-5.

	ITEMS FOR STATUS SUPERVISION	CONDITIONS FOR SUPERVISION	TIMING SPECIFICATIONS
1	Detection of Call Termination	 Ring Down System Detection by ringing signal (20Hz) from the opposite office. Loop System Detection by loop from the opposite office. E&M System Detection by incoming signal (ground or – 48V) on E (RG2) lead. 	Ringing signal of more than 4 cycles is detected within 800 ms. Detection within 16 ms after call termination.
2	Acknowledge Signal Sending	Wink SignalDelay Start	160 ms (standard) Timing can be assigned using ARTD command.
3	Detection of Release at the time of Incoming Connection	 E&M System Loop System	288 ms (standard) 160 ms (standard) Timing can be assigned using ARTD command.
4	Timing for Restricting Call Origination after Release	After release of the user's trunk or the trunk at the opposite office has been detected, a new call origination is restricted.	3070 ms (standard) Timing can be assigned using ARTD command.
5	Seizure of Opposite Office	 Loop System Closure of DC loop. E&M System Supply of outgoing call signal (ground or – 48V) onto M (DL) lead. 	
6	Detection of Acknowledge Signal	Wink SignalDelay Start	Timing is assigned using ARTD command.
7	Trunk Hold Time	Even if answer signal has not reached from the opposite office, the call is regarded as answered.	 If DP Signal is 10 sec. (standard) after dial pulses are sent out Timing can be assigned using ARTD command. If PB Signal is 30 sec. (standard) after seizure of the trunk Timing can be assigned using ASYD SYS 1 Index 156 (only when 2nd Dial Tone System).
8	Detection of Release at the time of Outgoing Connection	 Loop System Detection of polarity reversal across tip and ring. E&M System Detection of Release Signal (ground or – 48V) on E lead. 	608 ms (standard) Timing can be assigned using ARTD command.

Table 5-4	Timings	for Trunks
-----------	---------	------------

	ITEMS FOR STATUS SUPERVISION	CONDITIONS FOR SUPERVISION	TIMING SPECIFICATIONS
1	Sender Acknowledge Wait Timer	Timing limit for waiting to receive connection acknowledgement signal from the opposite office after seizing the opposite office.	4 sec. (standard) Timing can be assigned using ASYD SYS 1 Index 130 command.
2	Sender Prepause Timer	Time from sender seizure till sending of the 1st digit where connection acknowledgment is made by interface with the opposite office.	DP: 3 sec. (standard) PB: 2.5 sec. (standard) Timing can be assigned using ASYD SYS 1 Index 131 command.
3	Sender Inter-digit Timer	Inter-digit timing for the numbers to be sent out by the sender.	 For DP 10 pps: 860 ms (standard) 20 pps: 460 ms (standard) Timing can be assigned using ASYD SYS 1 Index. 132 com- mand. For PB 60 ms/120 ms (to be selected by ONSG of ARTD command.) Timing can be changed using ASYD SYS 1 Index 133 com- mand.

Table 5-5 Timings for Senders

2.2 Trunk Control

Trunk circuit cards are controlled from the CPU via the MUX. Each trunk line in a specific trunk circuit card is controlled by the Port Microprocessor (PM) in a trunk circuit card. Figure 5-2 shows the control route of the trunk circuit card.



Figure 5-2 Controlling Trunk Circuit Cards and Speech Path

FAULT REPAIR PROCEDURES

2.3 Trunk (ORT, SND, CFT) Fault

Note: If a circuit card is replaced because only one line is faulty, no other lines in that circuit card can be used until the replacement is complete.



<u>START</u>

<u> </u>	When only one line is faulty	 Place the faulty line into make-busy state.
		For ORT/SND, set MB switch of each circuit to ON position. For CFT, place it into make-busy state using command MBTK.
_	Replace the circuit card with spare.	Set MB switch UP and extract the circuit card from its mounting slot.
		Set MB switch of the new circuit card UP and insert the circuit card into its mounting slot.
		Set MB switch DOWN.
		If the line is under make-busy state, cancel it.
<u>ID</u>		

2.4 Trunk (COT, TLT, DTI) Fault

- **Note 1:** If a circuit card is replaced because only one line is faulty, any other lines in that circuit card cannot be used until the replacement is complete.
- **Note 2:** If the polarities of the external line is reversed, it is detected in the form of Trunk Ineffective Hold.



	When OPE lamp on the trunk circuit card - does not illuminate	Τ	Confirm that MB switch of the trunk circuit card is in ON position (UP side).
			Confirm that trunk data (ATRK command) in the trunk circuit card is assigned.
			Replace trunk circuit card with a spare.
	When BL lamp is flashing or illuminating - on the trunk circuit card		Confirm that MB switch of trunk circuit card is in ON position (UP side).
			Use MBTK command to confirm that trunk circuit card has not been placed into make-busy state.
		-	Check trunk data (ATRK command) assignment.
A			Replace trunk circuit card with a spare.





Note: When performing loop-back connection tests on the trunks at the user's office, provide cross connection as follows:



(1) For a COT



- Set up a loop-back connection between the COT (C.O. Trunk) to be tested and station line.
- The trunk route must be assigned for Loop Start.

(2) For a TLT (for DID)



- Set up a loop-back connection between the Tie Line Trunk (TLT) to be tested and another TLT.
- If the TLT is a Direct Inward Dialing (DID) Trunk, connect the related leads as shown below:

 $\mathsf{TLT}\left(\begin{array}{c}\mathsf{T}\\\mathsf{R}\end{array}\stackrel{\mathsf{T}}{\longleftrightarrow} \begin{array}{c}\mathsf{T}\\\mathsf{R}\end{array}\right)\mathsf{TLT}$

• If the TLT is a 4-wire E & M System, connect the related leads as shown below:



• If the TLT is a 2W E & M System, connect the related leads as shown below:



(3) For a DTI



• Set up a loop-back connection between the DTI Trunk to be tested and another DTI Trunk as shown below:



- If the office is the PLO-source office, perform the tests by disconnecting the PLO and M-OSC. The mode of the PLO becomes Self Operation Mode.
- When the loop-back test is performed at the time of PCM LOSS, FRM LOSS, or MERM LOSS alarm lamp (red) illuminates. If the alarm lamp goes out, the DTI circuit card side is normal.
- When only one DTI circuit card is to be checked, make the following connections and confirm that no alarm lamps illuminates.



3. ATTCON/DESKCON FAULT

This section explains the fault repair procedure when a specific Attendant Console (ATTCON) is in any of the following faulty conditions.

- No speech can be made.
- No operations can be made.

3.1 Check Point

When repairing an ATTCON/DESKCON fault, consider the following items:

- (1) Check the cable connections on the backplane.
- (2) When replacing the ATI circuit card for master ATTCON/DESKCON, the system is placed under Night Mode during replacement procedure.
- (3) When replacing the master ATTCON/DESKCON, the system is placed under Night Mode during replacement procedure.

3.2 ATTCON/DESKCON Control

Each ATTCON/DESKCON is controlled from an ATI (PA-CS33) circuit card. The ATI circuit card is controlled from the CPU card via the INT on the TSW card. Figure 5-3 shows the control route of the ATI circuit card.

The ATI (PA-CS33) circuit card is used as an interface card between the PBX and ATTCON/DESKCON. The card is mounted in Slots 12 or 23.



Figure 5-3 ATT Connector Cabling and Connector Leads Accommodation

3.3 ATTCON/DESKCON Fault

Note 1: *No speech can be made.*

Note 2: While replacement of the ATI circuit card for the master ATTCON/DESKCON is in progress, the system is placed under Night Mode.



	- On the ATTCON/DESKCON, LCHK - (Lamp Check) key has been pressed but no lamps have illuminated.		Check the ATT connector cable between the ATTCON/DESKCON and the PBX.
	When the OPE lamp of the ATI (PACS33) circuit card does not illuminate		Confirm that MB switch of the ATI circuit card is in ON position (UP side).
		-	Confirm that trunk data (ATRK command) in the ATI circuit card are assigned.
			Replace the ATI circuit card with a spare.
	- When the BL lamp of the ATI circuit card is flashing or illuminating		Confirm that MB switch of the ATI circuit card is in ON position (UP side).
			Use MBTK command to confirm ATI circuit card is placed into make-busy state.
			Check assignment of ATI data (ATRK command.)
			Replace the ATI circuit card with a spare.
	- When keys cannot be operated		Replace the operator's headset.
END			Replace the ATI circuit card with a spare.

Note: *No operations can be made.*



	Replace the ATTCON/DESKCON with a		Set the MB switch of ATI PA-CS33 circuit card UP.
		_	If the circuit card is equipped with a fuse, remove the fuse.
			Disconnect the CHAMP connector of the ATTCON/DESKCON and replace the ATTCON/DESKCON.
		_	If the circuit card is equipped with a fuse, insert the fuse into its position.
			Set the MB switch of the ATI circuit card DOWN.
END		L	Confirm the PA lamp illuminates on the ATTCON/DESKCON.

4. UNIT FAULT

This section explains the fault repair procedure in a case where any of the faults shown in Table 5-6 has occurred to all the line/trunk circuit cards mounted in a specific unit. Figure 5-4 shows the range of units.

FAULT SITUATION	REFERENCE SECTION
Noise, one-way speech, no tone. Even if dialing has been made, dial tone does not stop.	Section 4.2, Unit Fault - Fault Related to Speech
Dial Tone cannot be heard.	Section 4.3, Unit Fault - When Dial Tone (DT) Cannot Be Heard
MUX card has become faulty and, as a result the CPU has changed over.	Section 4.4, Unit Fault - ACT-Side MUX Card Is Faulty and System Has Changed Over

Table 5-6 Unit Fault Situation



Figure 5-4 Range of Units
FAULT REPAIR PROCEDURES

4.1 Check Point

When repairing a unit fault, consider the following items:

- (1) Speech paths and control paths in the unit are connected to line/trunks via the MUX circuit cards. Be sure to check the alarm lamps on the MUX circuit cards, and check to see if the front cable between each MUX circuit card and TSW circuit card is connected correctly. Figure 5-5 and Figure 5-6 show the block diagram within the unit.
- (2) The MUX circuit cards are operating in the ACT/STBY modes under control of the CPU circuit. When the ACT-side CPU has detected a fault in the ACT-side MUX circuit card, CPU changeover is executed and the ACT/STBY mode of the Speech Path System is also changed over. When both of the MUX circuit cards have become faulty, all the lines/trunks in that unit are placed into make-busy state. (If a PFT circuit card is located in that specific unit, the PFT is activated.) Figure 5-7 shows the location of the MUX cards.
- (3) When both units in a specific PIM are faulty, it is possible that the PWR circuit card mounted in that specific PIM is faulty. In such a case, refer to Section 8, Power Supply Fault.



Figure 5-5 Unit Control Block Diagram (Dual Configuration)



Figure 5-6 Unit Control Block Diagram (Single Configuration)





4.2 Unit Fault - Fault Related to Speech

Faulty Situation:

- Noise, one-way speech, no tone, etc. occurs only within a unit.
- Even if dialing has started, dial tone does not stop.

(1) For Dual Configuration

START

Check by replacing the MUX (PH-PC36) circuit card.

> After replacement of the MUX circuit card, make a station-tostation call in the faulty unit and see if speech is normal.

Check by replacing the TSW circuit card. -

After replacement of the TSW circuit card, make a station-tostation call in the faulty unit and see if speech is normal.

Replace the MUX circuit card referring to Section 3.3.2, MUX Card Replacement Procedure, in Chapter 4.

- Place the MUX circuit card into ACT mode by flipping the MBR key on the active GT (PH-GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
- Replace the TSW circuit card by referring to Section 2.3.2, TSW Card Replacement Procedure, in Chapter 4.
- Place the TSW circuit card into ACT mode by flipping the MBR key on the active GT (PH-GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.







- Set the MB switch of the line/trunk circuit card UP and extract it from its mounting slot.
- Make a station-to-station call and see if a fault occurs.



(2) For Single Configuration

	Check by replacing the MUX (PH-PC36)	Replace the MUX circuit card by referring to Section 3.3.2, MUX Card Replacement Procedure, in Chapter 4.
	After replacement of the MUX circuit card, make a station-to-station call in the faulty unit and see if speech is normal.	Press the RESET button on the EMA card (*D).
	Check by replacing the TSW circuit card.	Replace the TSW circuit card referring to Section 2.3.2, TSW Card Replacement Procedure, in Chapter 4.
A	After replacement of the TSW circuit card, make a station-to-station call in the faulty unit and see if speech is normal.	Press the RESET button on the EMA card (*D).





4.3 Unit Fault - When DialTone (DT) Cannot Be Heard

Faulty Situation:

- Dial Tone (DT) cannot be heard except within a unit.
- [4-T] Both MUX Failure / [4-S] MUX Ready Failure
- [23-Y] MUX Clock Failure



- **Note:** For dual system configuration, if a system message indicates that both systems are faulty, first repair the fault in the indicated system and then proceed to repair the PIM in the other system.
- (1) For Dual Configuration

	Check to see if the MUX (PH-PC36) circuit — card is making poor contact.		Set the MUX circuit card into STBY mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
		-	Set the MB switch of the MUX circuit card UP.
			Extract the MUX circuit card from its mounting slot and clean the contact portion. If cleaning cannot be done, repeat insertion and extraction of the circuit card two or three times.
			Set the MB switch of the MUX circuit card UP and insert the circuit card into its mounting slot.
			Set the MB switch of the MUX circuit card DOWN.
			Check to see if a station-to-station connection can be set up within the faulty unit.
	Check by replacing the MUX circuit card — with a spare.		Place the MUX circuit card into STBY mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
\checkmark	Ĺ	B	Replace the MUX circuit card. Refer to Section 3.3.2, MUX Card Replacement Procedure, in Chapter 4.







(2) For Single Configuration

	Check to see if the MUX (PH-PC36) – circuit card is making poor contact.	Τ	Set the MB switch of the MUX circuit card UP.
			Extract the MUX circuit card from its mounting slot and clean the contact portion. If cleaning cannot be done, repeat insertion and extraction of the circuit card two or three times.
			Set the MB switch of the MUX circuit card UP and insert the circuit card into its mounting slot.
		$\left \right $	Set the MB switch of the MUX circuit card DOWN.
		L	Check to see if a station-to-station connection can be set up within the faulty unit.
	Check by replacing the MUX circuit card – with a spare.		Replace the MUX circuit card referring to Sec- tion 3.3.2, MUX Card Replacement Procedure, in Chapter 4.
A			Place the MUX circuit card into ACT mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
			Check to see if a station-to-station connection can be set up to identify a circuit card responsi- ble for the fault.



Extract all the line/trunk circuit cards from - their mounting slots in the unit. Insert the cards back into their slots one after another and see if the dial tone is heard each time.	Extract all the line/trunk circuit cards from their slots. Note: Set the MB switch of the line/trunk circuit card UP and extract.
	Confirm the MUX ACT lamp on the MUX circuit card illuminates.
	Set the MB switch of an extracted Line/Trunk circuit card UP and insert the circuit cards into their mounting slots one by one.
	Confirm the OPE lamp of the inserted circuit card illuminates by setting the MB switch DOWN.
	Make a station-to-station call and see if dial tone can be heard.
If DT is heard, check the next circuit card.	Note: Perform this check on the reset of the circuit cards by inserting them into their slots individually.
If DT is not heard, replace the circuit card with a spare.	

4.4 Unit Fault - ACT-Side MUX Card Is Faulty and System Has Changed Over

Faulty Situation:

- The ACT side has become faulty and the system changeover has executed in the dual configuration system.
- [4-S] MUX Ready Failure / [4-T] Both MUX Failure
- [23-Y] MUX Clock Failure

_	- Check to see if the MUX (PH-PC36) - circuit card of the STBY side is making	Set the MB switch of the MUX circuit card UP.
		Extract the MUX circuit card from its mounting slot and clean the contact portion.
		If cleaning cannot be done, repeat insertion and extraction of the circuit card two or three times.
		Set the MB switch of the MUX circuit card UP and insert the circuit card into its mounting slot.
		Set the MB switch of the MUX circuit card DOWN.
	If the connection is set up, set the faulty system into STBY side.	Set the faulty system to ACT side by flipping the MBR key on the active GT (PH-GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
A		Check to see if a station-to-station connection can be set up within the faulty unit.







А

FAULT REPAIR PROCEDURES

5. SPEECH PATH (TSW) SYSTEM FAULT

This section explains the fault repair procedure when any of the faults shown in Table 5-7 has occurred in the whole system.

FAULTY SITUATION	REFERENCE SECTION
Noise, one-way speech, no toneEven if dialing has been made, dial tone does not stop.	Section 5.2, Speech Path System Fault - Fault Related to Speech
Dial tone cannot be heard.	Section 5.3, Speech Path System Fault - When Dial Tone (DT) Cannot Be Heard
A fault occurring in the STBY side TSW is indicated by a system message or an alarm lamp.	Section 5.4, Speech Path System Fault - STBY Side Has Become Faulty

Table 5-7 Speech Path (TSW) System Fault Situation

5.1 Check Point

When repairing a speech path fault, consider that when any of the faults shown in Table 5-7 have occurred in the system, it is possible that the TSW circuit card is at fault. Always check the alarm lamps on the TSW circuit card.



Figure 5-8 Speech Path Block Diagram



Figure 5-8 Speech Path Block Diagram (Continued)

5.2 Speech Path System Fault - Fault Related to Speech

Faulty Situation:

- Fault related to speech such as noise, one-way speech, no-speed, etc. occurs.
- Even if dialing started, Dial Tone (DT) does not stop.
- [1-C] Both TSW Write Failure
- [1-D] TSW Write Failure
- (1) For Dual Configuration

	Check to see if fault occurs by extracting TSW circuit cards one by one.		Replace the TSW circuit card referring to Section 2.3.2, TSW Card Replacement Procedure, in Chapter 4.
			Place the TSW circuit card into ACT mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
			Check to see if a station-to-station connection can be set up and identify a TSW circuit card responsible for the fault.
			Perform the above check by extracting the TSW circuit cards individually.
	Check to see if fault occurs by extracting MUX circuit cards one by one.		Replace the MUX circuit card referring to Section 3.3.2, MUX Card Replacement Procedure, in Chapter 4.
A		B	Place the MUX circuit card into ACT mode by flipping the MBR key on the active GT (PH-GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.









(2) For Single Configuration

START

	Check to see if the fault occurs by — extracting TSW circuit cards one by one.		Replace the TSW circuit card referring to Section 2.3.2, TSW Card Replacement Procedure, in Chapter 4.
			Check to see if a station-to-station connection can be set up and identify a TSW circuit card responsible for the fault.
			Perform the above check by extracting the TSW circuit cards individually.
	Check to see if the fault occurs by — extracting MUX circuit cards one by one.		Replace the MUX circuit card referring to Section 3.3.2, MUX Card Replacement Procedure, in Chapter 4.
		-	Initialize the system by pressing the START button on the TOPU.
A			Check to see if a station-to-station connection can be set up and identify a TSW circuit card responsible for the fault.
~			Perform the above check by extracting the TSW circuit cards individually.



When the PLO (PH-CK16/17) circuit card -Set MB switch of the PLO circuit card to UP is mounted for digital interface, replace side. the PLO circuit card with a spare and check it. Confirm ACT lamp on the PLO circuit card goes out. Extract PLO circuit card from its mounting slot. Set MB switch UP and insert the new PLO circuit card into its mounting slot. Set MB switch DOWN. Confirm the ACT lamp on the new PLO circuit card illuminates. Confirm that speech can be carried out normally by a station-to-station call.



А

5.3 Speech Path System Fault - When Dial Tone (DT) Cannot Be Heard

Faulty Situation:

- Dial Tone (DT) cannot be heard.
- [1-A] Both TSW Failure (Permanent)
- [1-E] Both TSW Clock Failure
- [4-C] Both TSW Ready Failure
- [23-Y] MUX Clock Failure



Note: For dual system configuration, if a system message indicates that both systems are faulty, first repair the fault in the indicated system and then proceed to repair the PIM in the other system.

	Check to see if the TSW circuit card is – making poor contact.	Set TSW circuit card into STBY mode by flip- ping the MBR key on the active GT (PH-GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6. Set TSW MBR switch on the TSW card UP. Set MB switch of the TSW circuit card UP. Extract the TSW circuit card from its mounting slot and clean the contact portion. If cleaning cannot be done, repeat insertion and extraction of the circuit card two or three times. Set TSW MBR and MB switches on the TSW circuit card UP and insert the circuit card into its mounting slot. Set MB switch of the TSW circuit card DOWN. Set TSW MBR switch DOWN. Check if a station-to-station connection can be set up.
END	Check front cables.	Check the front cables. (See Figure 5-8). Initialize the system by pressing the START button on the TOPU and see if a station-to-sta- tion connection can be set up.

5.4 Speech Path System Fault - STBY Side Has Become Faulty

Faulty Situation:

- A fault occurred in the STBY side of the dual configuration system.
- [1-B] TSW Failure (Permanent)
- [1-D] TSW Write Failure
- [1-F] TSW Clock Failure
- [4-D] TSW Ready Failure

	Check to see if the TSW circuit card is mak- ing poor contact.	Set the TSW MBR switch of the TSW circuit card UP.
		 Set the MB switch of the TSW circuit card UP and extract the circuit card from its mounting slot.
		Extract the TSW circuit card from its mounting slot and clean the contact portion. If cleaning cannot be done, repeat insertion and extraction of the circuit card two or three times.
		Set the TSW MBR and MB switches of the TSW circuit card UP and insert the circuit card into its mounting slot.
		Set the MB switch of the TSW circuit card DOWN.
		 Set the TSW MBR switch DOWN.
		Check if a station-to-station connection can be set up.
	Check PCM cables. —	Check the PCM cables. See Figure 5-8.
 		Initialize the system by pressing the START button on the TOPU and see if a station-to-sta- tion connection can be set up.



Faulty Situation:

- Fault related to speech such as noise, one-way speech, no-speed, etc. occurs. ٠
- ٠ Even if dialing started, Dial Tone (DT) does not stop.
- [1-C] Both TSW Write Failure ٠
- [1-D] TSW Write Failure •



A			
Ť	Check to see if fault occurs by extracting – TSW circuit cards one by one.	Τ	Replace the TSW circuit card referring to Sec- tion 2.3.2, TSW Card Replacement Procedure in Chapter 4.
			Set the TSW circuit card into ACT mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
			Initialize the system by pressing the START button on the TOPU.
			Check to see if a station-to-station connection can be set up to identify a TSW circuit card re- sponsible for the fault.
			Perform the above check by extracting the TSW circuit cards individually.
	Check to see if the fault occurs by - extracting MUX circuit cards one by one.		Replace the MUX circuit card referring to Sec- tion 3.3.2, MUX Card Replacement Procedure, in Chapter 4.
			Set the MUX circuit card into ACT mode by flipping the MBR key on the active GT (PH- GT09) card. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
			Check to see if a station-to-station connection can be set up and identify a TSW circuit card re- sponsible for the fault.
END			Perform the above check by extracting the MUX circuit cards individually.

<u>END</u>

FAULT REPAIR PROCEDURES

6. CONTROL SYSTEM FAULT

This section explains the fault repair procedure for the control system listed in Table 5-8.

Table 5-8 Control System Fault Situation

FAULTY SITUATION	REFERENCE SECTION
Fault occurs occasionally at the STBY side.	Section 6.2, Control System Fault - Fault Occurs Intermittently
STBY side is faulty.	Section 6.3, Control System Fault - STBY Side Is Faulty

6.1 Check Point

When repairing the control system, check the status of the following lamps:

- CPR
- GT
- TSW
- MUX
- EMA circuit cards

Figure 5-9 shows a block diagram of the CPU controlling block, where CPU #0 is active.



Note 2: If the ACT/STBY of CPU is once changed over, the system of GT (in TSWM) also changes over.
Note 3: Though an external cable is physically connected between ISAGT0 and GT1, the actual control signal is sent/received only between ISAGT0 and GT0. This is because GT0 and GT1 are having a multiple connection on the backboard side. (Refer to Chapter 6, Section 12.)

Figure 5-9 CPU Controlling Block Diagram



Note 2: If the ACT/STBY of CPU is once changed over, the system of GT (in TSWM) also changes over. **Note 3:** Though an external cable is physically connected between ISAGT0 and GT1, the actual control signal is

sent/received only between ISAGT0 and GT0. This is because GT0 and GT1 are having a multiple connection on the backboard side. (Refer to Chapter 6, Section 12.)



CHAPTER 5 Page 358 Issue 1

6.2 Control System Fault - Fault Occurs Intermittently

Faulty Situation:

- Fault occurs intermittently at ACT side in the dual configuration system.
- Fault occurs intermittently in the single configuration system.
- [0-C] ~ [0-K] CPU Failure
- [1-C] Both TSW Write Failure
- [1-D] TSW Write Failure
- [3-D], [3-E] Lock-Up Failure (Permanent/Temporary)
- (1) For Dual Configuration

START

	CPU, GT, TSW, MUX, EMA) with a spare, nd check.	 Replace the circuit cards (CPO, G1, 15 w, MOX, EMA) individually referring to the following sections in Chapter 4: Section 1.3.1, CPR Replacement Procedure Section 1.3.2, EMA Card Replacement Procedure Section 2.3.1, GT Card Replacement Procedure Section 2.3.2, TSW Card Replacement Procedure Section 3.3.2, MUX Card Replacement Procedure
		 Place the circuit card (CPU, GT, TSW, MUX) into ACT mode individually by executing CPU or Speech Path System changeover. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6. Check to see if a station-to-station connection can be set up and identify a circuit card responsible for the fault.
A		After all the steps are complete, place the whole circuit card (CPU, GT, TSW, MUX examined above) to the ACT mode. Refer to Section 12.1.6, Manual System Changeover of Speech Path System, in Chapter 6.
	When a fault is not indicated, set the faulty system to STBY mode. Refer to Section 12, System Control Pro- cedures, in Chapter 6.	Check to see if a fault is indicated.





(2) For Single Configuration

A		
	Replace the related circuit card (CPU, GT,	 Replace the circuit card (CPU, GT, TSW, MUX, EMA) individually by referring to the following sections in Chapter 4:
		 Section 1.3.1, CPR Replacement Procedure Section 1.3.2, EMA Card Replacement Procedure Section 2.3.1 GT Card Replacement
		 Section 2.3.1, GT Card Replacement Procedure Section 2.3.2, TSW Card Replacement Procedure Section 3.3.2, MUX Card Replacement
		 Procedure Initialize the system by pressing the START button on the TOPU and check to see if a station-to-station connection can be set up and identify a circuit card responsible for the fault.
 <u>END</u>		

6.3 Control System Fault - STBY Side Is Faulty

Faulty Situation:

- Fault has occurred in the STBY side of dual configuration system.
- [0-I] STBY CPU Failure
- The ACT side has become faulty, and system changeover has executed.
- [0-C], [0-H], [0-J] Processor Failure (ACT side)

START







Figure 5-10 Alarm Bus Cable Connections Diagram



Figure 5-10 Alarm Bus Cable Connections Diagram (Continued)

FAULT REPAIR PROCEDURES

7. ALARM INDICATION FAULT

This section explains the fault repair procedure where any of the faults shown in Table 5-9 occur.

FAULTY SITUATION	REFERENCE SECTION
A fault is indicated on the TOPU, but it is not indicated on the Alarm Indicating Panel (External Alarm Indicating Panel).	Section 7.2, Fault of Alarm Indicating Panel
 A system message is indicated, but no alarm indication is made on the TOPU. An alarm lamp on the circuit card is lighting, but no alarm indication is made on the MAT or on the TOPU. 	Section 7.3, Fault That Cannot Be Detected

Table 5-9 Alarm Indication Fault Situation

7.1 Check Point

When repairing an alarm indication fault, check the alarm cable route shown in Figure 5-11 and Figure 5-12.

7.2 Fault of Alarm Indicating Panel

START

· Confirm lamps and power supply circuit of the Alarm Indicating Panel.



Confirm cross connections on the MDF.

Confirm that the connector of 16 PH EXALM CA is firmly plugged in the EXALM connector on the backplane of LPR.

END



Figure 5-11 Cable Routing for Alarm Indications





7.3 Fault That Cannot Be Detected



START

— Check the DSP flat cable (See Figure 5-10.).
WARNING If the EMA card is removed from the system while the system is in operation under the control of the CPU #1, the system will reset and stop all call processing. See Section 1.3.2, EMA Card Replacement Procedure, in Chapter 4 for detailed instructions
— Replace the EMA circuit card with a spare.
Set the MB switch of the EMA circuit card, and extract the circuit card from its mounting slot.
— Make necessary switch settings on the new circuit card.
— Set MB switch UP side and insert the circuit card into its mounting slot.
Set the MB switch DOWN.
Check to see if a fault is detected.
END

8. POWER SUPPLY FAULT

This section explains the fault repair procedure when any of the faults shown in Table 5-10 occur.

FAULTY SITUATION	REFERENCE SECTION
Fuse Blown Fault	Section 8.2, Fuse Blown Fault
Circuit Breaker OFF, Fault in PWR Supply	Section 8.3, Circuit Breaker OFF Fault in PWR Supply
Fault of Alarm Lamps on PWR Supply	Section 8.4, Fault of Alarm Lamps on PWR Supply

Table 5-10 PWR Supply Fault Situation

8.1 Check Point

When repairing a power supply fault, consider the following items:

- (1) Before checking the system, check the rectifier, battery, and power cables.
- (2) The PWR circuit card is equipped with the circuits to supply ringing signal and howler tone. When a fault occurs that causes the bell of the telephone not to ring, or howler tone cannot be heard, etc., check the alarm lamp on the PWR circuit card.
- (3) Figure 5-13 through Figure 5-15 show the block diagrams for the power supply to each module.



Figure 5-13 Block Diagram of Power Supply System (IMG0)



Figure 5-14 Block Diagram of Power Supply System (IMG1)



Figure 5-15 Block Diagram of Power Supply System (IMG2/3)

- PWR0 PWR1 DC-DC DC-DC CONV CONV +5V, +12V, -5V RGU RGU RGU ď CR (for LC) HOW HOW REL REL 11 HOW (for LC) -48V -48V ഹ \cap NFB NFB -48V (for LC, TRK) +80V +80V $\overline{\mathbf{O}}$ \sim rel rel +80V +80V Note +80V -48V -48V **Note:** +80V is for message waiting lamp.
- (4) Figure 5-16 shows the power supply system for PIM.



(5) Figure 5-17 shows the power supply system for LPM.



Figure 5-17 Power Supply to LPM
(6) Figure 5-18 shows the power supply system for TSWM.



Figure 5-18 Power Supply to TSWM

8.2 Fuse Blown Fault

<u>ST</u>	<u>ART</u>			
		Check the backplane of the PIM.		Make a visual check on the backplane for pin contacting, melting or burn, etc.
		Extract all the circuit cards from the PIM,		Set the MB switch of the PWR supply UP.
		and insert them back into their slots individually to see if the fuse blows.		Set the circuit breaker of the PWR supply DOWN.
				Extract all the circuit cards from their mounting slots, except PWR supply.
				Replace the fuse with spare.
				Set the circuit breaker of the PWR supply UP side.
			\vdash	Set the MB switch of the PWR supply DOWN.
				Insert the circuit cards into their mounting slots individually, with their MB switch to UP side.
				Check to see if the fuse blows when the MB switch has been set to DOWN.

END

FAULT REPAIR PROCEDURES

8.3 Circuit Breaker OFF Fault in PWR Supply



	Check the backplane of the PIM.		Make a visual check on the backplane for pin contacting, melting or burning, etc.
	Extract all the circuit cards from the PIM, —— and make a visual check of the circuit	Г	Set MB switch of the PWR supply UP. Set the circuit breaker of the PWR supply DOWN.
	cards.		
			Extract all circuit cards out of their mounting slots.
			Make a visual check of the extracted circuit cards. Check ICs, resistors, and capacitors to see if any are burned.

<u>END</u>

8.4 Fault of Alarm Lamps on PWR Supply



Note: Insert each PWR supply with its MB switch to UP side, and then set it back to DOWN side.

FAULT REPAIR PROCEDURES

9. FAN UNIT FAULT

This section explains the fault repair procedure where a fan in the Fan Unit (FANU) does not operate.

9.1 Check Point

- (1) When repairing a FANU fault, exercise care about the following conditions. The fans (a total of 3) are activated by operating the PWR SW key located on the PZ-M369. The conditions for starting the fan are as follows:
 - With PWR SW key for the fan set to ON position: Always operating
 - With PWR SW key for the fan set to AUTO position:

Starts operating if the in-frame temperature is higher than 40° C (104° F); stops operating at temperatures lower than 32° C (90° F). See Figure 5-19.

(2) When replacing the FANU with a spare, refer to Section 4., Fan Unit Replacement, in Chapter 4.



Figure 5-19 Circuit Diagram of Fan Unit and Thermal Unit

NDA-24300

9.2 Fan Unit Fault



FAULT REPAIR PROCEDURES

10. TONE FAULT

This section explains the fault repair procedure when any of the various tones cannot be heard in the whole system.

10.1 Check Point

When repairing a tone fault, consider that the tone generator circuit is equipped in the TSW circuit card and supplies tone.

Figure 5-20 shows an example of the related trunking for dial tone connection.



Figure 5-20 DialTone Connection

10.2 Tone Fault



<u>START</u>

Rep and	_ Replace the TSW circuit card with a spare and check.					
— Whe	en only Hold Tone is faulty					
	If External Hold Tone source is in – use	Check the external equipment which sends out hold tone.				
		Check cross connections on the MDF. Figure 5- 21 shows a block diagram of external hold tone supply (optional).				
	Replace the EMA/PLO circuit – card with a spare. Note: When system is 1-IMG configuration, replace EMA card. Otherwise, replace PLO card.	Set the MB switch of the EMA/PLO circuit card to UP side and extract the circuit card from its mounting slot.				
W/	ARNING If the EMA card is removed from the system while the system is in operation under	— Make necessary switch settings on the new circuit card, referring to the card extracted.				
	the control of the CPU #1, the system will reset and stop all call processing. Refer to	— Set the MB switch of the new circuit card UP and insert the circuit card into its mounting slot.				
	Section 1.3.2, EMA Card Replacement Procedure, in Chapter 4, for detailed	— Set the MB switch DOWN.				
 ND	instructions.	└── Initialize the system and confirm the tone.				



Figure 5-21 External Hold Tone Supply Block Diagram

11. SYSTEM DOWN FAULT

This section explains the fault repair procedure when both the CPU and TSW systems are faulty. Figure 5-22 shows the sequence of repair for system down fault.



Figure 5-22 System Down Fault Repair Sequence

FAULT REPAIR PROCEDURES

11.1 When Cause for Fault Cannot Be Identified

START

\vdash	Check power supply circuits.	Check voltage (DC: $-48V$, $\pm 5V$) at LOAD side of the rectifier.
		Confirm that NFB (circuit breaker) on all PWR supplies is at ON position (UP side).
		Check to see if there is any PWR supply to which the alarm lamp illuminates.
-	System Initialization by loading office data and program data from the hard disk (Refer to Chapter 6.)	
	Service connections such as station-to-station connection cannot be set up.	See "Check by Minimizing the System Configuration" on the next page.
A	Service connections such as station-to-station connection can be set up.	——— Data in the memory is temporarily destroyed. Observe the situation for a while.

(1) Check by minimizing the system configuration

Mount only the basic circuit cards in CPU – No. 0 system and initialize.	Remove all circuit cards from CPU No. 0 system except the basic circuit cards.
	Circuit cards to be mounted are as follows: CPU, EMA, TSW, MUX (EMA: PH-PC40, TSW: PH-SW12, MUX: PH-PC36)
	— On the CPU Display Panel (DSP), set its SENSE switch to "1."
	Press Reset (RST) button on the DSP.
	CPU OPE lamp should be illuminated on the DSP.
—— Initialization cannot be made.	Check by replacing the basic circuit cards indi- vidually.
	— Set MB switch of the circuit card UP and extract the circuit card from its mounting slot.
	— Make necessary switch settings on the new circuit card.
	- Set MB switch of the new circuit card UP and insert the circuit card into its mounting slot.
	Set MB switch DOWN.
	— On the DSP (CPU), set SENSE switch to "1."
	— Press RST button on the DSP.
	— CPU OPE lamp should illuminate on the DSP.
END	If CPU OPE lamp of the DSP does not illuminate, replace next circuit card and check it. (Repeat the above steps for all basic circuit cards.)

11.2 When Faulty Circuit Cards Can Be Assumed From System Message

Faulty Situation:

When the system is down with message $[0-C] \sim [0-J]$ indicated, faulty circuit cards can be assumed from the message detail data. Replace circuit cards with spares.



	Replace faulty circuit card with a spare	Τ	Set MB switch UP and extract the circuit card from its mounting slot.
		\vdash	Make necessary switch settings on the new circuit card.
		-	Set the MB switch UP and insert the circuit card into its mounting slot.
			Set the MB switch DOWN.
		L	Initialize the system by loading the office data and program data from the hard disk.
-	Confirm that service connections such as station-to-station connection can be set up.		
END			

12. COMMON CHANNEL INTEROFFICE SIGNALING (CCIS) LINE FAULT

This section explains the fault repair procedure when any of the faults shown in Table 5-11 occur to a specific CCIS line.

FAULTY SITUATION	REFERENCE SECTION
A specific CCH/CCT card is faulty.	Section 12.3, Specific CCH/CCT Card Is Faulty
When the signal transmission line is a digital line, transmitting/ receiving of control signals cannot be performed.	Section 12.4, Fault of CCH, DTI and Related Flat Cable

Table 5-11 CCIS Line Fault Situation

12.1 Check Point

When repairing a CCIS Line fault, consider the following items:

- (1) Check alarm lamps on the CCH or CCT circuit card.
- (2) Refer to Figure 5-23, and check the cable connection.

12.2 CCIS Line Control

The CCH/CCT circuit card controls the signal link (digital) of the interoffice common channel signaling system and transmitting/receiving call processing information. The signal link controls permit normal transmission and reception of call processing information.

A break in signal links is detected, then restored to establish signal links. The call processing information is converted into No. 7 signal format for channel 1 (any channel) of the DTI before being transmitted to a distant office. Figure 5-23 shows the CCIS line control route.



Figure 5-23 Controlling CCIS Line

NDA-24300

FAULT REPAIR PROCEDURES

12.3 Specific CCH/CCT Card Is Faulty



— Check by replacing CCH/CCT card with –	T	On CCH/CCT card, set the MBR switch UP.
a spare.	╞	On CCH/CCT card, set MBR switch UP and extract the card from its mounting slot.
		Make switch settings on a new CCH/CCT card.
		On new CCH/CCT card, set MBR and MB switches UP and insert the card into its mounting slot.
		On new CCH/CCT card, set MB switch DOWN.
		On new CCH/CCT card, set MBR switch DOWN.
		Check whether the fault is still indicated.

<u>END</u>

12.4 Fault of CCH, DTI and Related Flat Cable

<u>START</u>			
	Check connectors and flat cables between DTI and CCH.	Τ	On DTI cards, set MB switch UP. On CCH card, set MBR switch UP.
	— Check the connector.		Check whether the connector is correctly con- nected or not. If the connection is found im- proper, plug and unplug the connector a few times.
		-	On DTI cards, set MB switch DOWN. On CCH card, set MBR switch DOWN.
			Check whether the fault is still indicated.
	Check the flat cable.	\square	On DTI cards, set MB switch UP. On CCH card, set MBR switch UP.
			Test the continuity of the flat cable. If found to be abnormal, replace the flat cable with a spare.
			On DTI cards, set MB switch DOWN. On CCH card, set MBR switch DOWN.
			Check whether the fault is still indicated.
	Check by replacing the DTI card with spare.	Τ	On DTI card, set MB switch UP and extract the card from the mounting slot.
		-	On a new DTI card, make the switch setting.
			On new DTI card, set MB switch UP and insert the card into the mounting slot.
		\vdash	On new DTI card, set MB switch DOWN.
END			Check whether the fault is still indicated.

FAULT REPAIR PROCEDURES

13. INTEGRATED SERVICE DIGITAL NETWORK (ISDN) LINE FAULT

This section explains the fault repair procedure when any of the faults shown in Table 5-12 occur to a specific ISDN.

FAULTY SITUATION	REFERENCE SECTION
A specific CCH/CCT card is faulty.	Section 13.3, Specific DCH/PRT Card Is Faulty
When the signal transmission line is a digital line, transmitting/ receiving of control signals cannot be performed.	Section 13.4, Fault of DCH, DTI, and Related Flat Cable

Table 5-12 ISDN Line Fault Situation

13.1 Check Point

When repairing an ISDN Line fault, consider the following items:

- (1) Check alarm lamps on the DCH or PRT circuit card.
- (2) Refer to Figure 5-24, and check the cable connection.

13.2 ISDN Line Control

The DCH/PRT circuit card controls the signal link (digital) of the ISDN line and transmits/receives call processing information.

The signal link controls permit normal transmission and reception of call processing information. Figure 5-24 shows the ISDN line control route.



Figure 5-24 Controlling ISDN Line

NDA-24300

13.3 Specific DCH/PRT Card Is Faulty

START		
	Check by replacing the DCH/PRT card with —	On DCH/PRT card, set MBR switch UP.
	a spare.	— On DCH/PRT card, set MB switch UP and extract the card from its mounting slot.
		— Make switch setting on a new DCH/PRT card.
		— On new DCH/PRT card, set MBR and MB switches UP and insert the card into its mounting slot.
		— On new DCH/PRT card, set MB switch DOWN.
		— On new DCH/PRT card, set MBR switch DOWN.
END		Check whether the fault is still indicated.

13.4 Fault of DCH, DTI, and Related Flat Cable

ST.	ART							
		Check between	the connectors DTI and DCH.	and fla	at c	ables		
		-	Check the conne	ector.		-		On DTI cards, set MB switch UP. On DCH card, set MBR switch UP.
								Check whether the connector is correctly connected. If the connection is found improper, plug and unplug the connector a few times.
							-	On DTI cards, set MB switch DOWN. On DCH card, set MBR switch DOWN.
								Check whether the fault is still indicated.
			Check the flat c	able.		-		On DTI cards, set MB switch UP. On DCH card, set MBR switch UP.
							\vdash	Test the continuity of the flat cable. If abnormal, replace the flat cable with spare.
							\vdash	On DTI cards, set MB switch DOWN. On DCH card, set MBR switch DOWN.
								Check whether the fault is still indicated.
		Check l spare.	by replacing the	DTI cai	d w	ith a-	Τ	On DTI card, set MB switch UP and extract the card from the mounting slot.
							-	On a new DTI card, make switch setting.
								On new DTI card, set MB switch UP and insert the card into the mounting slot.
							-	On new DTI card, set MB switch DOWN.
								Check whether the fault is still indicated.

<u>END</u>

14. HARD TIME CLOCK FAULT

This section explains the procedure for repairing a hard time clock failure which occurs within the EMA card.

<u>START</u>		
END	Replace the EMA card. WARNING If the EMA card is removed from the system while the system is in operation under the control of the CPU #1, the system will reset and stop all call processing. See Section 1.3.2, EMA Card Replacement Procedure, in Chapter 4, for detailed instructions	 Replace the EMA card referring to Section 1.3.2, EMA Card Replacement Procedure, in Chapter 4.

This page is for your notes.

CHAPTER 6 SYSTEM OPERATIONS

To maintain the system in a normal state, maintenance technicians need to monitor the servicing status of the system. Figure 6-1 shows the flow of the system status monitor.

When trouble occurs in any part of the system or to any phase of system operations, maintenance technicians are alerted by an alarm indication or by a report from a station user or an operator. When the system becomes overloaded, maintenance technicians can execute Line Load Control.



Figure 6-1 System Status Monitor

1. ALARM INDICATIONS

When trouble occurs in the system, the system activates an appropriate remedial action (system changeover, make-busy shift of the circuit card, restart processing, etc.) by executing the automatic diagnostic function. Results of the action taken and the faulty situation are displayed.

1.1 Kinds of Alarm Indications

Figure 6-2 shows the kinds of alarm indications.



Figure 6-2 Alarm Indications

NDA-24300

SYSTEM OPERATIONS

1.2 How to Stop Alarm Indications

To stop the alarm indication, press ALM RST key on the TOPU or use the RALM command.

Note: If the RALM command is executed, the system messages that show the reason for the failure will be cleared. Always print the indicated system message before using this command.

1.3 Alarm Indications on TOPU

The system has alarm lamps on the TOPU as shown in Figure 6-3. Table 6-1 lists the meaning of each lamp.



Figure 6-3 Alarm Indications on TOPU

		-					
LAMP	COLOR	FUNCTION	CONTENTS				
PWR ON	Green	Power ON Indication	Lights when the power is turned ON to the LPR (EMA card mounted)				
ALM MJ	Red	Alarm urgency level	The kind of lamp indications are programmable by variable alarm				
ALM MN	Red	indicating lamps for each IMG	indication. Refer to Section 1.4, Variable Alarm Indication.				
ALM SUP	Yellow						
SMJ	Red	Alarm urgency level	Lights when any abnormal state is detected within the system				
SMN	IN Red IMG0		(System Alarm MJ/MN)				

Table 6-1	Description	of	Alarm	Indications	
	Description	OI	Alarm	indications	

1.4 Variable Alarm Indication

This feature allows PBX users to make a flexible change of system message output grades which range 0 to 3 and alarm lamp grades which consist of MJ, MN, SUP and NONE. Thus, the PBX users can give a proper alarm grade to each system message according to their requirements. When assigning no data, the default alarm grades are automatically adopted.

COMMAND	COMMAND FULL NAME					
ALMG	Assignment of Alarm Grade Data					

2. COLLECTION OF SYSTEM MESSAGES

System messages are collected in the following ways:

- Automatic printout to the system message dedicated printer
- Automatic printout to the MAT printer
- Printout by DFTD command

2.1 Automatic Printout to System Message Dedicated Printer

Figure 6-4 shows the operating procedure.



Figure 6-4 Automatic Printout to System Message Dedicated Printer Operating Procedure

COMMAND	COMMAND FULL NAME				
MBSM	Make Busy of System Message Printout				

SYSTEM OPERATIONS

2.2 Display on MAT

Set Scanning to Scanning ON (default) on the Scanning PBX form to collect system messages. If any message is collected, the information is displayed in the text box on the DFTD command form.

3. INDICATION OF LOCKOUT STATIONS

When a station is in lockout status (permanent signaling state, shorting across speech wires, etc.), it can quickly be discovered, preventing the situation from developing into serious trouble.

3.1 Indicating Method

By entering the following commands from the MAT, information pertaining to the lockout station concerned will display.

COMMAND	COMMAND FULL NAME
DLSL	Display of Lockout Station - LENS
DLSS	Display of Lockout Station - Number

3.2 Recovery Procedure





NDA-24300



Figure 6-5 Recovery Procedure From Lockout Station (Continued)

COMMAND	COMMAND FULL NAME
RLST	Release Station/Trunk

SYSTEM OPERATIONS

4. LINE LOAD CONTROL

In the PBX, Line Load Control can be activated automatically or manually as a countermeasure against abnormal traffic congestion.

In the case of automatic control, the system automatically monitors an overloaded situation and restricts outgoing calls from stations and incoming calls from trunks.

In the case of manual control, the operator at an Attendant/Desk Console or the MAT restricts outgoing calls from stations and incoming calls from trunks.

This section covers the following methods to activate Line Load Control:

- Control by dialing an access code from theATTCON/DESKCON
- Control by entering command data from the MAT
- System automatic monitoring

Operating Procedure

(1) Operations on the Attendant Console

By the operations on the ATTCON, restriction is effected on an outgoing call from a station having SFC in which the SFI = 16 (Line Load Control) of ASFC command is set as RES=0 (incoming calls to that station are allowed). For restricting incoming calls from a trunk, system data ASYD, SYS1, INDEX59, b0=1 should be assigned.

• Setting



Figure 6-6 Line Load Control Operations on ATTCON—Setting

• Cancelling



Figure 6-7 Line Load Control Operations on ATTCON—Cancelling



Figure 6-8 Locations of Lamps (ATTCON)

SYSTEM OPERATIONS

(2) Key Operations on the Desk Console (DESKCON)

By the operations on the Desk Console, restriction is applied on an outgoing call from a station having SFC in which the SFI = 16 (Line Load Control) of ASFC command is set as RES=0 (incoming calls to that station are allowed). For restricting incoming calls from a trunk, system data ASYD, SYS1, INDEX59, b0=1 should be assigned.

• Setting



Figure 6-9 Line Load Control Key Operations on DESKCON—Setting

• Cancelling



Figure 6-10 Line Load Control Key Operations on DESKCON—Cancelling





(3) Operations on the MAT

By entering ALLC command from the MAT, Line Load Control executes. The station to be controlled and the contents of the Line Load Control executed on the MAT are the same as those in Step (1), Operations on the Attendant Console.

COMMAND	COMMAND FULL NAME
ALLC	Assignment of Line Load Control

(4) Automatic Setting

If the usage rate of the CPU exceeds the system data usage rate, Line Load Control is automatically set. In this case, system message [6-C] displays. The station to be controlled and the contents of the Automatic Line Load Control are the same as those in Step (1), Operations on the Attendant Console.

If the usage rate of the CPU drops below the system data usage rate, the Line Load Control is automatically cancelled. In this case, system message [6-D] displays. While the Line Load Control is set, the lamps on the control panel of the Desk/Attendant Console remain lit.

SYSTEM OPERATIONS

5. IOC LINE MONITOR

(1) Functional Outline

This function monitors the IOC port status. As a result of the monitoring by this function, the following is executed:

- When the connection with a port has been disconnected, it is reported by a message.
- When the connection with a port is set up, it is reported by a message.
- The port status is stored in the memory and updated continuously.

(2) Message Judgment Criteria

Table 6-2 describes the message judgement criteria.

MESSAGE	CONTENT
Port Normal	System data is assigned, and DR signal is ON.
Port Abnormal	System data is assigned, and DR signal is OFF.
Output of Port Disconnected	This message is output when Port Abnormal status has lasted for 30 seconds. This message is immediately output if port abnormal occurs after the IOC card is initialized.
Output of Port Status Restored	This message is output when DR signal is ON for the port about which Output of Port Disconnected message is output.

Table 6-2 Message Judgment Criteria

6. LINE MANAGEMENT

The following explanations apply to line management:

- Make-Busy/Make-Busy Cancel of Station and Data Terminal
- Class Change and Number Change of Station and Data Terminal
- Make-Busy/Make-Busy Cancel of C.O. Line/Tie Line

6.1 Make-Busy/Make-Busy Cancel of Station and Data Terminal

Stations and data terminals can be put into make-busy state by the following operations:

- (1) On each station basis using the MBST command.
 Assign the station number in the STN parameter and choose "1" for the MB box of the MBST command.
 For the make-busy cancellation, choose "0" for the MB box.
- (2) On each circuit basis using the MBLE command.Assign LENS number in the LENS parameter and choose "1" for the MB box of the MBLE command.For the make-busy cancellation, choose "0" for the MB box.
- (3) On each circuit card basis using the MBPM command or operating the MB (toggle) key on the card.
 - Assign the required LENS number in the MG, UNIT and Group parameters and choose "3" for the MB box of the MBPM command.
 - For the make-busy cancellation, choose "2" for the MB box.

or

- Set to UP the MB key on the circuit card (= ON).
- For make-busy cancellation, return the MB key down (= OFF).

6.2 Class Change and Number Change of Station and Data Terminal

Figure 6-12 shows the procedure for class change and number change of station and data terminal.



Figure 6-12 Class Change and Number Change of Station and Data Terminal Procedure

6.3 Make-Busy/Make-Busy Cancel of C.O. Line/Tie Line

Figure 6-13 shows the procedure to make-busy/make-busy cancel of C.O. line/tie line.



Figure 6-13 Make-Busy/Make-Busy Cancel of C.O. Line/Tie Line Procedure

COMMAND	COMMAND FULL NAME					
AGCL	Assignment of Guest Station Class					
AGSN	Assignment of Alternated Guest Station Number					
ASCL	Assignment of Station Class Data					
ASTN	Assignment of Station Number					
MBLE	Make Busy of LENS					
MBPM	Make Busy of Port Microprocessor					
MBRT	Make Busy of Route					
MBST	Make Busy of Station					
MBTK	Make Busy of Trunk					
DLEN	Display of LENS Data					

6.4 Line Management Commands

7. STATION MESSAGE DETAIL RECORDING SYSTEM (SMDR)

Billing information can be managed by connecting the PBX system and an external computer (SMDR equipment).

Note: The SMDR equipment and its software must be provided by the user.

The PBX system provides the SMDR equipment with the following information:

- Calling Party Information
- Called Party Number
- Call Start Time
- Call End Time
- Call Data
- Authorization Code/Account Code

Upon receiving the above information from the PBX system, the SMDR equipment performs editing and management of the information and outputs the resulting information. This section explains the information provided to the SMDR equipment and also explains the method of controlling the interface port (IOC card) between the SMDR equipment and the PBX system.

NDA-24300

7.1 Transmission Data to SMDR Equipment

(1) Transmission Format

As seen in the figure below, the basic information to be transmitted (Transmission Message) is a block which begins with Start of Text (STX) and ends with End of Text (ETX). When the call ends, the whole contents of this information is transmitted to the SMDR equipment.



(2) Transmission Message

One transmission message consists of 128 bytes of data. Each byte represents by ASCII codes the data to be transmitted (Refer to Table 6-3). The contents of the data to be transmitted vary with the kind of call, but the first byte is always transmitted by ASCII code K (4B hex.). The second byte to be transmitted is the data which specifies the kind of call.

Note: In case the Fusion service is involved, the message can consist of more than 128 byte data.

Figure 6-14 shows the transmission message of an outgoing call. Figure 6-15 shows the transmission message of an incoming call. Also, Figure 6-16 shows the transmission message of a station-to-station call.

	ASCII CODE									
CHARAC- TER	HEX.	BINARY DIGIT								REMARKS
		b7	b6	b5	b4	b3	b2	b1	b0	
0	30	0	0	1	1	0	0	0	0	
1	31	0	0	1	1	0	0	0	1	
2	32	0	0	1	1	0	0	1	0	
3	33	0	0	1	1	0	0	1	1	
4	34	0	0	1	1	0	1	0	0	
5	35	0	0	1	1	0	1	0	1	
6	36	0	0	1	1	0	1	1	0	
7	37	0	0	1	1	0	1	1	1	
8	38	0	0	1	1	1	0	0	0	
9	39	0	0	1	1	1	0	0	1	
SPACE	20	0	0	1	0	0	0	0	0	Special Characters Code
STX	02	0	0	0	0	0	0	1	0	
ETX	03	0	0	0	0	0	0	1	1	
SA	30	0	0	1	1	0	0	0	0	
UA	21	0	0	1	0	1	0	1	1	
*	2A	0	0	1	0	1	0	1	0	
#	23	0	0	1	0	0	0	1	1	

Table 6-3 ASCII Code


Figure 6-14 Message Format for Outgoing Call



Figure 6-15 Message Format for Incoming Call



Figure 6-16 Message Format for Station-to-Station Call

7.2 Details on Transmission Data

7.2.1 Calling Party Information/Called Party Information

• The 9th byte indicates the type of the calling (or called) party. The 10th through 17th bytes are data pertaining to this calling (or called) party.

ORIG (Originating Source Identification):

- 0 =Calling (or called) Party is a station
- 1 = Calling (or called) Party is an Attendant
- 2 = Calling (or called) Party is an outside (inside) party
- The contents of 12th through 17th bytes vary with the type of the calling (or called) party.
- (1) For a station (ORIG = 0): Data showing Station Number

BYTE	DATA	_	EXAMPLE
12	1st DIGIT		4
13	2nd DIGIT		0
14	3rd DIGIT		0
15	4th DIGIT		1
16	5th DIGIT		SPACE
17	6th DIGIT		SPACE

(2) For an Attendant (ORIG = 1): Data showing Attendant Number



(3) For a trunk (ORIG = 2): Data showing Route Number and Trunk Number



7.2.2 Call Start/Call End Time Information



• The data which indicates Call Start Time is as follows:

• The data which indicates Call End Time is as follows:



7.2.3 Called Number



• The data which indicates the Called Number is as follows:

7.2.4 Account Code/Authorization Code



• The data which indicates the Account Code is as follows:

• The data which indicates the Authorization Code is as follows:



7.2.5 Route Advance Information



When a call has been originated by route advancing, the following data is transmitted.

7.2.6 Condition B Information

The 51st through 53rd bytes are Condition B Information. The Condition B Information indicates the following data:



7.2.7 Call Metering Information

The value of call metering from the Central Office is transmitted via the data from the 92nd byte to 95th byte.



7.2.8 Office Code of Calling (Called) Party and Billing Process Office

The 96th byte through 99th byte indicates the Office Code of Calling (Called) Party terminated via CCIS line.

The 100th byte through 103rd byte indicates the Office Code of the office processing centralized billing for CCIS network.





7.2.9 Text Format of Centralized Billing - Fusion

Below is the text format for billing information (Fusion) to be transmitted to the SMDR equipment. On the following pages, Figure 6-17 through Figure 6-19, provide detailed information.



KIND OF DATA	CONTENTS	KK (OUTGOING)	KL (INCOMING)	KM (STATION)
00	Not Used			
01	Outgoing Trunk/Incoming Trunk Information	Provided	Provided	-
02	Calling Party Information (Station Number)	Provided	-	Provided
03	Calling Party Information (Telephone Number)	Conditionally Provided	-	Conditionally Provided
04	Called Party Information (Station Number)	-	Provided	Provided
05	Called Party Information (Telephone Number)	-	Conditionally Provided	Conditionally Provided
06	Call Start/Call End Time	Provided	Provided	Provided
07	Account Code	Conditionally Provided	Conditionally Provided	Conditionally Provided
08	Condition B Information	Provided	Provided	Provided
09	Alternate Routing Information/Incoming Route Number	Provided	Provided	-
10	Dial Code	Provided	Conditionally Provided	-
11	Office Code Information (For CCIS)	Conditionally Provided	Conditionally Provided	-
12	Authorization Code	Conditionally Provided	Conditionally Provided	-
13	Condition C Information + Billing Info/Call Metalling Info	Provided	Conditionally Provided	-

Table 6-4 Centralized Billing—Fusion Kinds of Data

KIND OF DATA	CONTENTS	KK (OUTGOING)	KL (INCOMING)	KM (STATION)
14	Condition D Information + Bill Notification Attendant Console Number	Conditionally Provided	-	-
15	Department Code	Conditionally Provided	-	-
16	Automatic Number Indication	Conditionally Provided	Conditionally Provided	-
17	Converted Number	Conditionally Provided	-	-
18-99	Not Used	-	-	-

Table 6-4 Centralized Billing—Fusion Kinds of Data (Continued)

Note: Conditionally Provided: Information is provided when data is effective. Provided: Information is provided on every call with no exception. -: Not available.



Figure 6-17 Message Format for Outgoing Call - Fusion



Figure 6-18 Message Format for Incoming Call - Fusion



Figure 6-19 Message Format for Station-to-Station Call - Fusion

Reference









Data = 09: Alternate Routing Information (KK) / Incoming Route Number (KL)

| 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Log
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Log
RT No. 2 1 I I I I I I I 18 FPC1 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually
FPC2:
FPC first selected
Physical route first selected
Physical route first selected
Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually
FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC first selected
Physical Route No. 2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical Route No. 2:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually u
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected | 1 1 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 FT No. 2 RT No. 2 19 FPC1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually us
FPC2:
Cogical Route No. 2:
Logical route first selected
 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC first selected
Physical Route No. 2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC first selected
Physical Route No. 2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logic
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logic
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually u
FPC2: FPC first selected
Physical Route No. 2: FPC1: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 1 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 18 FPC1 Physical Logical FPC2 Physical Logical 18 Gigits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 19 FPC1: FPC actually used FPC3 Physical Route No. 1: Physical route actually used 10 FPC2: FPC first selected FPC2: FPC first selected 10 Physical Route No. 2: Physical route first selected Physical route first selected 10 FPC2: FPC first selected Physical route first selected 10 First Route No. 2: Logical route first selected 10 First Route No. 2: Logical route first selected
 | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 18 FPC1 Physical Logical FPC2 Physical Logical 18 Gigits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used 10 FPC2: FPC first selected Physical Route No. 1: Logical route actually used 10 FPC2: FPC first selected Physical Route No. 2: Physical route first selected 10 Physical Route No. 2: Logical route first selected Physical route first selected | 1 1 | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 1 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC first selected
Physical Route No. 2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected
 | 1 | 1 I | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected

 | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected

 | 1 1 | 1 1 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Logical Route No. 2: Cogical route first selected
Physical Route No. 2: Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Logical Route No. 2: Cogical route first selected
Physical Route No. 2: Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Logical Route No. 2: Cogical route first selected
Physical Route No. 2: Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 1 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 1 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Logical Route No. 2: Cogical route first selected
Physical Route No. 2: Physical route first selected
 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
FPC first selected
Physical Route No. 2: Physical Route No. 2: Cogical route first selected
Logical Route No. 2: Physical route first selected
 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually use
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Physical Route No. 2: Logical route first selected
Physical Route No. 2: Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logica
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC first selected
Physical route first selected
Physical Route No. 2: Physical Route No. 2: Cogical route first selected
Physical Route No. 2: Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC1
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually us
FPC2:
FPC first selected Physical Route No. 2:
Logical Route No. 2: Physical route first selected
 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 1 1 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 1 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical route actually used FPC2: FPC first selected FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC3 Physical route actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical route first selected Physical Route No. 2: Logical route first selected Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT
No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 1 | 1 | 1 | 1 | 1 1
 1 | 1 | 18 FPC1 Physical Logical FPC2 Physical Logica 18 Gaigits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC1 FPC actually used 19 FPC1: FPC actually used Physical route actually used 10 FPC2: FPC first selected 10 Physical Route No. 1: Logical route actually used 10 FPC2: FPC first selected 10 Physical Route No. 2: Physical route first selected 10 Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logica 18 Gaigits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC1 FPC actually used 19 FPC1: FPC actually used Physical route actually used 10 FPC2: FPC first selected 10 Physical Route No. 1: Logical route actually used 10 FPC2: FPC first selected 10 Physical Route No. 2: Physical route first selected 10 Physical Route No. 2: Logical route first selected | 1 1 | 18 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC3 Physical route actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical route first selected Physical Route No. 2: Logical route first selected Physical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC3 Physical route actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical route first selected Physical Route No. 2: Logical route first selected Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 Gaigits) FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
Logical route actually us
FPC2: Physical route actually us
Cogical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Logical route first selected
 | 18 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC3 Physical route actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical route first selected Physical Route No. 2: Logical route first selected Physical route first selected | 1 FPC1 Physical Logical FPC2 Physical Logical 18 FPC1 RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC actually used FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical route actually used FPC2: FPC first selected FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
Physical Route No. 1: Physical route actually used
Physical route actually used
Physical Route No. 1: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first select | 1 FPC1 Physical Logical FPC2 Physical Logic 18 FPC1 Physical RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 18 FPC1 FPC1 RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 18 FPC1: FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first sele Logical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logic 18 (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 18 FPC1 FPC2 FPC2 Physical RT No. RT No. 19 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical route actually Logical Route No. 1: FPC2: FPC first selected Physical route first selected Physical Route No. 2: Logical route first selected Physical route first selected Physical Route No. 2: Logical route first selected Logical Route No. 2: Logical route first selected |

--
--
--
--
--|---|--|--|--|---
--|---|--|--
---|---|---|--|---|---|---
--|---|---|---
--
--
--
--
--
--|---|---|--|--
--|--
--
--
--
---|---
---|---|---|---|---|---|---|---|---|--
---	---	---	---	---	--	--	---
---	---	---	---	--	--	--	---
18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Log RT No. 2 1 I I I I I I I I 18 FPC1 I FPC1 FPC2 (3 digits) Physical RT No. 2 RT No. 2 RT No. 2 RT No. 2 I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I <td< th=""><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 FPC1: FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually Logical Route No. 1: FPC2: FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) FPC2 RT No. 1 FPC2 Physical RT No. 1 FPC2 Physical RT No. 2 FPC3 Physical RT No. 2 19 FPC1: Physical Route No. 1: Logical Route No. 1: Physical route actually us FPC2: Physical Route No. 2: Logical Route No. 2: FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 Physical Route No. 1: Logical Route No. 1: FPC2: Physical Route No. 2: Logical Route No. 2: Logical Route No. 2: FPC actually used Physical route actually used Physical route actually used Physical route first selected Physical route No. 2: Logical route No. 2:</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 FPC1: FPC2 Physical Route No. 1: FPC2 Physical route actually Logical Route No. 1: FPC actually used Physical route actually Logical route actually FPC2: FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1 (3 digits) FPC1 RT No. 1 FPC2 RT No. 2 Physical RT No. 2 Logical RT No. 2 19 FPC1: Logical Route No. 1: FPC2: Physical Route No. 1: Logical route actually us FPC2: Physical Route No. 2: Logical Route No. 2: Logical route first select</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) FPC2 RT No. 1 FPC2 RT No. 1 Physical RT No. 2 Logical RT No. 2 19 I I I I I I 18 FPC1: Logical Route No. 1: FPC2: Physical Route No. 1: Logical route actually us FPC2: Logical Route No. 2: Logical route first selected FPC first selected Physical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC2 FPC2 Image: Constraint of the second sec</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually us FPC2: FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually us FPC2: FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first select</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 FPC2 RT No. 2 Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) FPC1 FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually us FPC2: FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 FPC1: FPC2 FPC3 Physical RT No. 1 Logical RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually used FPC2: FPC first selected FPC first selected Physical Route No. 2: FPC2: FPC first selected Physical Route No. 2: FPC first selected Logical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logic RT No. 2 18 FPC1 Physical Physical Route No. 1 FPC2 Physical Route No. 1 Physical Physical route actually Logical Route No. 1 FPC actually used Physical route actually Logical route No. 1 FPC2: Physical Route No. 2 FPC first selected Physical Route No. 2 FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 RT No. 1 RT No. 1 Second RT No. 2 RT No. 2 18 FPC1 Logical Route No. 1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually used Physical Route No. 1: 18 FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 19 FPC1: Logical Route No. 1: Logical Route No. 1: FPC2: FPC first selected FPC actually used 10 FPC2: FPC first selected FPC first selected 10 Physical Route No. 2: Logical Route No. 2: Physical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1 (3 digits) FPC1 FPC1: FPC actually used Physical Route No. 1: FPC actually used Physical route actually used Physical Route No. 1: 10 FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first select</th><th>18 FPC1 (3 digits) Physical RT No. 1 Logical RT No. 1 FPC2 (3 digits) Physical RT No. 2 Logical RT No. 2 18 FPC1 (3 digits) Physical RT No. 1 FPC2 RT No. 2 Physical RT No. 2 Logical RT No. 2 18 FPC1 Physical Route No. 1 FPC actually used Physical Route No. 1: Logical Route No. 1: Physical route actually us FPC2: Physical Route No. 2: Logical Route No. 2: Logical route first selected</th><th>18 FPC1 (3 digits) Physical RT No. 1							
Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually us
FPC2:
FPC first selected FPC first selected
Physical route first selected 10 FPC2:
Logical Route No. 2:
Logical route first selected FPC first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
Physical Route No. 1: 10 FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logica
RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logica
RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1
RT No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1
RT No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
FPC2:
FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
FPC2:
FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3
digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2:
Physical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 FPC2
Physical
RT No. 2 FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually us
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually us
FPC2:
FPC first selected 10 FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Logical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits)
 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Cogical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Cogical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually us
FPC2:
FPC first selected 10 FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1
 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Logical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected</th><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
Physical Route No. 1:
Logical route actually used
Physical route actually used
Physical route actually used
Physical route not actually used
Physical Route No. 2:
Logical route first selected</th><th>18 FPC1 Physical Logical FPC2 Physical Logic 18 (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 18 FPC1 Physical Logical FPC2 Physical Logical 18 Gaigits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 19 I I I I I I I I 10 I I I I I I I I 10 I I I I I I I I 11 I I I I I I I I 11 I I I I I I I I 11 I I I I I I I I 12 I I I I I I I I 12 I I <t< th=""><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected</th></t<></th></td<>

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually
Logical Route No. 1: FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 FPC2
Physical
RT No. 2 FPC3
Physical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually us
FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
Physical route actually used
Physical route first selected
Physical route No. 2:
Logical route No. 2: | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC2
Physical Route No. 1: FPC2
Physical route actually
Logical Route No. 1: FPC actually used
Physical route actually
Logical route actually
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1
(3 digits) FPC1
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually us
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first select | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually us
FPC2:
Logical Route No. 2:
Logical route first selected FPC first selected
Physical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC2 FPC2 Image: Constraint of the second sec | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC1: FPC actually used
Physical Route No. 1: FPC actually
used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first select | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC2
FPC3 Physical
RT No. 1 Logical
RT No. 2 RT No. 2 FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC first selected
FPC first selected
Physical Route No. 2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logic
RT No. 2 18 FPC1
Physical
Physical Route No. 1 FPC2
Physical Route No. 1 Physical
Physical route actually
Logical Route No. 1 FPC actually used
Physical route actually
Logical route No. 1 FPC2:
Physical Route No. 2 FPC first selected
Physical Route No. 2 FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 RT No. 1 Second
RT No. 2 RT No. 2 18 FPC1
Logical Route No. 1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
Physical Route No. 1: 18 FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 19 FPC1:
Logical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used 10 FPC2:
FPC first selected FPC first selected 10 Physical Route No. 2:
Logical Route No. 2: Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
Physical Route No. 1: 10 FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first select
 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical Route No. 1:
Physical route actually us
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually us
FPC2:
FPC first selected FPC first selected
Physical route first selected 10 FPC2:
Logical Route No. 2:
Logical route first selected FPC first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 RT No. 2 RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
Physical Route No. 1: 10 FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually us
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected
| 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logica
RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logica
RT No. 2 18 FPC1
(3 digits) FPC1
FPC1: FPC actually used
Physical Route No. 1: FPC actually used
Physical route actually used
FPC2: FPC2: FPC first selected
Physical Route No. 2: FPC first selected
Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1
RT No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1
RT No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first
selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
FPC2:
FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 I I I I I I 18 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
FPC2:
FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually use
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2: FPC first selected
Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
Physical route actually used
FPC2:
FPC first selected
Physical Route No. 2:
Logical Route No. 2:
Physical route first selected

 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
Physical
RT No. 1 FPC2
Physical
RT No. 2 FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually us
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually us
FPC2:
FPC first selected 10 FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route
No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Logical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT
No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Cogical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Cogical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) FPC2
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 19 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually us
FPC2:
FPC first selected 10 FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1 Physical Logical FPC2 Physical Logical 18 (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 Physical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 18 FPC1 FPC1 FPC1 FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 18 FPC1
Physical Route No. 1 FPC actually used
Physical Route No. 1:
Logical route actually used
Physical Route No. 1:
FPC2:
FPC first selected
Physical Route No. 2:
Logical route first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
FPC1:
Logical Route No. 1:
Logical Route No. 1:
FPC2:
FPC first selected FPC actually used
Physical route actually used
Physical Route No. 1:
Logical route actually used
FPC2:
FPC first selected | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
Physical Route No. 1:
Logical route actually used
Physical route actually used
Physical route actually used
Physical route not actually used
Physical Route No. 2:
Logical route first selected
 | 18 FPC1 Physical Logical FPC2 Physical Logic 18 (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 18 FPC1 Physical Logical FPC2 Physical Logical 18 Gaigits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 19 I I I I I I I I 10 I I I I I I I I 10 I I I I I I I I 11 I I I I I I I I 11 I I I I I I I I 11 I I I I I I I I 12 I I I I I I I I 12 I I <t< th=""><th>18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected</th></t<> | 18 FPC1
(3 digits) Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 18 FPC1
(3 digits) Physical
RT No. 1 FPC2
RT No. 2 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 1:
Logical route actually
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical route first selected |
| FPC1 Physical Logical FPC2 Physical Log (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logic (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually u FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical
(3 digits) Logical
RT No. 1 FPC2
RT No. 1 Physical
(3 digits) Logical
RT No. 2 End
RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually
Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logic (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Logical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logica (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1
(3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1:
FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1 FPC actually used Physical Route No. 1: Physical route actually used Control Contro | FPC1 Physical Logical FPC2 Physical Logic (3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1 FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical (3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected |
| FPC1 Physical Logical FPC2 Physical Log 3 digits) RT No. 1 RT No. 1 RT No. 1 FPC2 RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logic 3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually
Logical Route No. 1: FPC actually used FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical Route No. 2: Cogical route first selected | FPC1 Physical Logical FPC2 Physical Logic 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: FPC first selected Physical Route No. 2: FPC first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logic 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first sele Logical Route No. 2: Logical route first sele Logical Route No. 2: Logical route first sele | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1
(3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC
actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logica 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Copical Route No. 1: Copical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logica 3 digits) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Copical Route No. 1: Copical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | FPC1 Physical Logical FPC2 Physical Logical 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Control Route No. 1: Control Route No. 1: Control Route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logic 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first sele Logical Route No. 2: Logical route first selected | FPC1 Physical Logical FPC2 Physical Logic 3 digits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected |
| PC1 Physical Logical FPC2 Physical Log ligits) RT No. 1 RT No. 1 FPC2 RT No. 2 RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical route actually Physical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | PC1 Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logic
RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually
Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical
Igits) Logical
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually
Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | PC1 Physical Logical FPC2 Physical Logical Iigits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logic ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical Iigits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected

 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected

 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | PC1 Physical Logical FPC2 Physical Logica ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3
digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC
actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logica ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logica ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | PC1 Physical Logical FPC2 Physical Logical ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logic ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | PC1 Physical Logical FPC2 Physical Logic ligits) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical route actually Logical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected |
| Physical Logical FPC2 Physical Log its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected

 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Image: State of the second state of | Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical rote its selected Physical Route No. 1: FPC1: FPC actually used Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: FPC first selected Physical route first selected Physical Route No. 2: | 1 Physical Logical FPC2 Physical Logic its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Image: Physical Physical Logical its) Physical Logical RT No. 1 FPC2 Physical Logical RT No. 2 Physical Logical RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Route Route No. 1: Physical route actually used RT No. 2 FPC2: FPC first selected Physical Route No. 2: FPC first selected Route Ro | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical route Image: Physical Physical Route No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected

 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected

 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | 1 Physical Logical FPC2 Physical Logica its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2:
 | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: | Image: Physical Physical Logical its) Physical Logical FPC2 Physical Logical Logical RT No. 1 Its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2:
 | 1 Physical Logical FPC2 Physical Logica its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logica its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | 1 Physical Logical FPC2 Physical Logic its) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually u Logical Route No. 1: Logical route actually u FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | 1 Physical Logical FPC2 Physical Logical its) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected |
| Physical Logical FPC2 Physical Log RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC1: FPC actually used Physical Route No. 1: Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
s) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 5 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Physical Route No. 2: Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Route Physical Route No. 2: Physical Route Phy | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 Physical RT No. 2 RT No. 4 RT No. 4 RT No. 4 RT No. 4 RT No. 5 RT No. | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 5 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used Physical Route No. 2: Physical route first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Physical Route No. 2: Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Route Physical Route No. 2: Physical Route Phy | Physical Logical FPC2 Physical Logical s) RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic s) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually u Logical Route No. 1: Logical route actually u FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical S) RT No. 1 RT No. 1 FPC2 Physical Logical FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical s) RT No. 1 RT No. 1 FPC2 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
s) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Physical Route No. 2: Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Route Physical Route No. 2: Physical Route Physi | Physical Logical FPC2 Physical Logical RT No. 1
RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Rou | Physical Logical FPC2 Physical Logical
s) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC1: FPC1: FPC actually used Physical Route No. 1: Physical route actually us Logical Route No. 1: Logical route actually us FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Logical route first selected Physical Route No. 2: Physical Route No. 2: Physical Route No. 2: Physical Route Physical Route No. 2: Physical Route Physical Route Physical Route No. 2: Physical Route Physi | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually us
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually use
Logical Route No. 1: Logical route actually use
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually use
Logical Route No. 1: Logical route actually use
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually use FPC2: FPC first selected Physical Route No. 2: Physical route Physical Route | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually use FPC2: FPC first selected Physical Route No. 2: Physical route Physical Route | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually use FPC2: FPC first selected Physical Route No. 2: Physical route Physical Route | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 Physical Route No. 1: Physical route actually used Physical Route No. 1: Physical route actually use FPC2: FPC first selected Physical Route No. 2: Physical route No. 2: Physical Route No. 2: Physical Route Physical Rout

 | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually use
Logical Route No. 1: Logical route actually use
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually
used
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually used
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually used
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually used
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually us
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first
selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Discrete actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Cogical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Cogical route first selected | Physical Logical FPC2
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical
S) RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
FPC1: FPC actually used
Physical Route No. 1: Physical route actually used
Physical Route No. 1: Logical route actually used
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected
Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic
RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No
FPC1: FPC actually used
Physical Route No. 1: Physical route actually u
Logical Route No. 1: Logical route actually u
FPC2: FPC first selected
Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical No. 1 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected |
| Physical
RT No. 1 Logical
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Log
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually
FPC first selected
Physical route first selected

 | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical
RT No. 1 Logical
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2:
Logical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually used
Physical route actually used
Physical route first selected
Physical Route No. 2:
Logical route No. 2: | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 RT No. 1 RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first sele Logical Route No. 2: Logical route first sele Logical Route No. 2: Logical route first sele | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 RT No. 1 Gaigits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected

 | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical
RT No. 1 Logical
RT No. 1 FPC2
RT No. 1 Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
FPC2:
Physical Route No. 2: FPC actually used
Physical route actually us
FPC2:
Physical Route No. 2:
Logical Route No. 2: FPC actually used
Physical route actually us
FPC2:
Physical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2
 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used
Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Cogical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 G3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first sele Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Physical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected |
| Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Log
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2: FPC actually used
Physical route actually
FPC first selected
Physical route first selected

 | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical
RT No. 1 Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logical
RT No. 2 FPC1:
Physical Route No. 1:
Logical Route No. 1:
FPC2:
Physical Route No. 2: FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first selected
Physical Route No. 2:
Logical Route No. 2: | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Logical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Physical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected

 | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2
 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used
Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Cogical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logica RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected
 | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logic RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC1: FPC actually used Physical Route No. 1: Physical route actually used Logical Route No. 1: Logical route actually used FPC2: FPC first selected Physical Route No. 2: Physical route first selected Physical Route No. 2: Logical route first selected | Physical Logical FPC2 Physical Logical RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC1: FPC actually used Physical Route No. 1: Physical route actually Logical Route No. 1: Logical route actually FPC2: FPC first selected Physical Route No. 2: Physical route first selected |
| hysical
No. 1Logical
RT No. 1FPC2
(3 digits)Physical
RT No. 2Log
RT No. 2PC1:
hysical Route No. 1:
pogical Route No. 1:
PC2:
hysical Route No. 2:FPC actually used
Physical route actually
FPC first selected
Physical route first selected
Physical route first selected

 | hysical
No. 1Logical
RT No. 1FPC2
(3 digits)Physical
RT No. 2Logic
RT No. 2PC1:
hysical Route No. 1:
pical Route No. 1:
PC2:
hysical Route No. 2:FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selec
Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical
No. 1Logical
RT No. 1FPC2
(3 digits)Physical
RT No. 2Logical
RT No. 2PC1:
nysical Route No. 1:
Dec2:
nysical Route No. 2:FPC actually used
Physical route actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first selected
Physical route first selected
Physical route first selected
Physical route first selected | hysical
No. 1Logical
RT No. 1FPC2
(3 digits)Physical
RT No. 2Logic
RT No. 2PC1:
hysical Route No. 1:
pical Route No. 1:
PC2:
hysical Route No. 2:FPC actually used
Physical route actually
Logical route actually
PC2:
PC2:
PC2:
hysical Route No. 2:FPC actually used
PC2:
Physical route actually
Logical route first selected
Physical route first selected
Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected
 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Cogical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Cogical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected pical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pgical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected

 | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected

 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used pical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 PC1: FPC actually used nysical Route No. 1: Physical route actually used pogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 PC1: FPC actually used nysical Route No. 1: Physical route actually used rogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used rogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected

 | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used rigical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2
RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | Imposical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | Imposical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | Imposical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used
nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | Imposical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used rogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used rogical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected
 | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected | nysical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used rigical Route No. 1: Physical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected | nysical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. PC1: FPC actually used nysical Route No. 1: Physical route actually used ngical Route No. 1: Logical route actually used PC2: FPC first selected nysical Route No. 2: Physical route first selected nysical Route No. 2: Logical route first selected |
| sical Logical RT No. 1 Cl:
Sical Route No. 1:
Cl:
Sical Route No. 1:
Cl:
Sical Route No. 1:
Cl:
Sical Route No. 1:
Cl:
Sical Route No. 2:
Sical Route No. 2:

 | sical Logical FPC2 Physical Logic
No. 1 RT No. 1 (3 digits) RT No. 2 RT No
C1: FPC actually used
sical Route No. 1: Physical route actually
ical Route No. 1: Logical route actually u
C2: FPC first selected
sical Route No. 2: Physical route first selected
sical Route No. 2: Logical route first selected
 | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected Sical Route No. 2: Contact and the selected | sical Logical FPC2 Physical Logic
No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
C1: FPC actually used
sical Route No. 1: Physical route actually used
Sical Route No. 1: Logical route actually used
FPC first selected
sical Route No. 2: Physical route first selected
sical Route No. 2: Construction first selected | sical Logical FPC2 Physical Logic
No. 1 RT No. 1 (3 digits) RT No. 2 RT No
C1: FPC actually used
sical Route No. 1: Physical route actually
ical Route No. 1: Logical route actually used
Sical Route No. 2: FPC first selected
sical Route No. 2: Physical route first selected
sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Cogical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c5: FPC first selected c3: C1: c4: C1: c5: C1: c5: FPC first selected c5: C1: | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected Sical Route No. 2: Contact and the selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT N | sical
Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT N | sical Logical FPC2 Physical Logical
No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
C1: FPC actually used
sical Route No. 1: Physical route actually used
c2: FPC first selected
sical Route No. 2: Physical route first selected
sical Route No. 2: Cogical route first selected | sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected Sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Cogical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: Sical route first selected c3: Contact actually used c3: Contact actually used c4: Contact actually used c5: Contact actually used c5: Contact actually used c5: Contact actually used c5: Contact actually used c6: Contact actually used c7: Contact actually used c6: Contact actually used c7: Contact actually used | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c5: FPC first selected c3: C1: c4: C1: c5: C1: c5: FPC first selected c5: C1: c5: C1: c5: C1: c5: C2: c5: C1: c5: C1: c5: C2: c5: C1: c5: C1: c5: C1: c5: C1: c5: C1: c5: C1: | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route
actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c5: FPC first selected c3: C1: c4: C1: c5: C1: c5: FPC first selected c5: C1: | sical Logical FPC2 Physical Logical
No. 1 RT No. 1 (3 digits) RT No. 2 RT No.
C1: FPC actually used
sical Route No. 1: Physical route actually used
c2: FPC first selected
sical Route No. 2: Physical route first selected
sical Route No. 2: Cogical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c5: FPC first selected c3: C1: c4: C1: c5: C1: c5: FPC first selected c5: C1: c5: C1: c5: C1: c5: C2: c5: C1: c5: C1: c5: C2: c5: C1: c5: C1: c5: C1: c5: C1: c5: C1: c5: C1: | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c6: C2: c6: C2: c7: C1: c6: C2: c7: C1: c6: C2: c7: C1: c7: C1: <td< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c6: C2: c6: C2: c7: C1: c6: C2: c7: C1: c6: C2: c7: C1: <td< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6: C1: c6: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C2: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6:
 C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first
selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td></t<></td></t<></td></td<></td></td<> | sical
Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c6: C2: c6: C2: c7: C1: c6: C2: c7: C1: c6: C2: c7: C1: c7: C1: <td< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6: C1: c6: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C2: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6: C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C1: c7: C1: c7:</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2:
Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical
Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td></t<></td></t<></td></td<> | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6: C1: c6: C1: c7: | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C2: c7: C1: c6: C1: c7: C1: c6: C2: c7: C1: c6: C1: c7: | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected Sical Route No. 2: Physical route first selected C2: FPC first selected Sical Route No. 2: Contact on the first selected
 | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C1: c5: C1: c5: C1: c6: C1: c7: C1: c6: C1: c7: C1: c6: C1: c7: | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route
first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td></t<></td></t<> | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC
actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical Route No. 1: c2: C1: c3: C1: c3: C1: c4: C1: c5: FPC first selected c4: C1: c5: C2: c5: FPC first selected c5: C1: c5: C1: c5: C2: c5: C2: c5: C1: c5: C2: c5: C2: <t< td=""><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually
used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected</td><td>sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td><td>sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected</td></t<> | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: Sical route No. 1: c2: Contact actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected
 | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c1: Physical route actually used sical Route No. 1: Logical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected
 | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected
 | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected c1: FPC actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logica No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No.
2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used C2: FPC first selected sical Route No. 2: Physical route first selected | sical Logical FPC2 Physical Logic No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected | sical Logical FPC2 Physical Logical No. 1 RT No. 1 (3 digits) RT No. 2 RT No. C1: FPC actually used sical Route No. 1: Physical route actually used c2: FPC first selected sical Route No. 2: Physical route first selected sical Route No. 2: Logical route first selected |
| cal Logical FPC2 Physical Log 0. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 2 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I 1 I I I I I <t< td=""><td>cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. : FPC actually used cal Route No. 1: Physical route actually used al Route No. 1: Logical route actually used : FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the /td><th>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 r FPC actually used r FPC actually used r Physical route actually used r FPC first selected r FPC first selected r FPC first selected r FPSical route first selected</th><th>cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</th><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 2: Physical route first selected I cal Route No. 2: Physical route first selected I cal Route No. 2: Logical route first selected I cal Route No. 2: Logical route first selected I</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the second of</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the /td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. : FPC actually used cal Route No. 1: Physical route actually used al Route No. 1: Logical route actually used : FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica
D. 1 RT No. 1 (3 digits) RT No. 2 RT No
: FPC actually used
cal Route No. 1: Physical route actually used
al Route No. 1: Logical route actually used
: FPC first selected
cal Route No. 2: Physical route first selected
cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 2: Physical route first selected I cal Route No. 2: Physical route first selected I cal Route No. 2: Logical route first selected I cal Route No. 2: Logical route first selected I</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical
route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the /td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Image: Comparison of the structure of the</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC actually used Logical route actually used cal Route No. 1: Physical route actually used FPC first selected cal Route No. 2: FPC first selected Physical route first selected cal Route No. 2: Logical route first selected Cogical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Route No. 1: Physical route actually used Inclusion inclusis</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the second sec</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No.
 cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>Logical FPC2 Physical Logical A RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC actually
used Image: Comparison of the second sec</td><td>Logical FPC2 Physical Logical A RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC actually used Image: Comparison of the second sec</td><td>Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str</td><td>Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str</td><td>Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str</td><td>Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC actually used Logical route actually used cal Route No. 1: Physical route actually used Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected cal Route No. 2: Logical route first selected</td><td>cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logic cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used Physical route actually used cal Route No. 1: Physical route actually used FPC first selected cal Route No. 2: FPC first selected Physical route first sele
 cal Route No. 2: Physical route first selected Physical route first selected</td><td>cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1: FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected</td></t<> | cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. : FPC actually used cal Route No. 1: Physical route actually used al Route No. 1: Logical route actually used : FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 r FPC actually used r FPC actually used r Physical route actually used r FPC first selected r FPC first selected r FPC first selected r FPSical route first selected | cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 2: Physical route first selected I cal Route No. 2: Physical route first selected I cal Route No. 2: Logical route first selected I cal Route No. 2: Logical route first selected I | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the second of | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected
 | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. : FPC actually used cal Route No. 1: Physical route actually used al Route No. 1: Logical route actually used : FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica
D. 1 RT No. 1 (3 digits) RT No. 2 RT No
: FPC actually used
cal Route No. 1: Physical route actually used
al Route No. 1: Logical route actually used
: FPC first selected
cal Route No. 2: Physical route first selected
cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 1: Logical route actually used I cal Route No. 2: Physical route first selected I cal Route No. 2: Physical route first selected I cal Route No. 2: Logical route first selected I cal Route No. 2: Logical route first selected I | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected
 | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected

 | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected

 | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L L cal Route No. 1: Physical route actually used L L cal Route No. 1: Logical route actually used Logical route actually used cal Route No. 1: Logical route actually used Logical route first selected cal Route No. 2: Physical route first selected Logical route first selected cal Route No. 2: Logical route first selected Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Image: Comparison of the structure of the | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected
 | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected

 | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC actually used Logical route actually used cal Route No. 1: Physical route actually used FPC first selected cal Route No. 2: FPC first selected Physical route first selected cal Route No. 2: Logical route first selected Cogical route first selected
 | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal Route No. 1: Physical route actually used Inclusion inclusis | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L Image: Comparison of the second sec | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2:
 Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits)
 RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | Logical FPC2 Physical Logical A RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC actually used Image: Comparison of the second sec | Logical FPC2 Physical Logical A RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC actually used Image: Comparison of the second sec | Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str | Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str | Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str | Logical FPC2 Physical Logical Logical FPC2 Physical Logical N. 1 RT No. 1 (3 digits) RT No. 2 RT No. Image: Strain Str | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logica b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logica cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L L cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L I I I I cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used I cal Route No. 1: Physical route actually used Indicate actually used cal Route No. 1: Logical route actually used Indicate actually used cal Route No. 2: FPC first selected Indicate actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal L L L Logical cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route
first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC actually used Logical route actually used cal Route No. 1: Physical route actually used Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: Logical route actually used cal Route No. 2: Physical route first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected cal Route No. 2: Logical route first selected | cal Logical FPC2 Physical Logic b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logic cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1 FPC actually used Physical route actually used cal Route No. 1: Physical route actually used FPC first selected cal Route No. 2: FPC first selected Physical route first sele cal Route No. 2: Physical route first selected Physical route first selected | cal Logical FPC2 Physical Logical b. 1 RT No. 1 (3 digits) RT No. 2 RT No. cal Logical FPC2 Physical Logical cal RT No. 1 (3 digits) RT No. 2 RT No. cal Route No. 1: FPC actually used cal Route No. 1: Physical route actually used cal Route No. 1: Logical route actually used cal Route No. 1: FPC first selected cal Route No. 2: Physical route first selected cal Route No. 2: Logical route first selected |
| I Logical FPC2 Physical Log 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 I RT No. 1 (3 digits) FPC actually used I Route No. 1: Physical route actually Route No. 1: Logical route actually FPC first selected Physical route first selected I Route No. 2: Logical route first selected

 | I Logical FPC2 Physical Logic 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logic 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Physical route actually used I Route No. 2: Physical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Physical route first selected I Route No. 2: Physical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually us 1 Route No. 1: Logical route actually us FPC first selected FPC first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 1 RT No. 1 (3 digits) RT No. 2 RT No. 2 1 RT No. 1 (3 digits) FPC actually used 1 Route No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually us 1 Route No. 1: Logical route actually us FPC first selected FPC first selected 1 Route No. 2: Physical route first select 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 ROute No. 1: FPC actually used 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logic 1 RT No. 1 (3 digits) RT No. 2 RT No 1 RT No. 1 (3 digits) RT No. 2 RT No 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Physical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 ROute No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 ROute No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually us 1 Route No. 1: Logical route actually us FPC first selected FPC first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually us 1 Route No. 1: Logical route actually us FPC first selected FPC first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually us 1 Route No. 1: Logical route actually us FPC first selected FPC first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected

 | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected

 | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually use Route No. 1: Logical route actually use I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually use Route No. 1: Logical route actually use I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used FPC first selected I I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used FPC first selected I I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used FPC first selected I I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used I Route No. 1: Physical route actually used Route No. 1: Logical route actually used FPC first selected I Route No. 2: I Route No. 2: Physical route first selected
 | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually used I Route No. 1: Logical route actually use FPC first selected I I Route No. 2: Physical route first selecte I Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected

 | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Physical route actually used I Route No. 2: Physical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually us I Route No. 1: Logical route actually us FPC first selected I I Route No. 2: Physical route first select Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No.
 I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Image: stress of the stres of the stress of the stre | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Image: stress of the stres of the stress of the stre | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected
 | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logica 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I ROute No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected I Route No. 2: Physical route first select Route No. 2: Logical route first select | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 1: Logical route first selected I Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 (3 digits) RT No. 2 RT No. I RT No. 1 Sector FPC actually used I Route No. 1: Physical route actually used I Route No. 1: Logical route actually used I Route No. 2: Physical route first selected I Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route first selected 1 Route No. 2: Physical route first selected 1 Route No. 2: Logical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 ROute No. 1: Physical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected
 | I Logical FPC2 Physical Logic 1 RT No. 1 (3 digits) RT No. 2 RT No 1 RT No. 1 (3 digits) RT No. 2 RT No 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected | I Logical FPC2 Physical Logical 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 (3 digits) RT No. 2 RT No. 1 RT No. 1 Secondary FPC actually used 1 Route No. 1: Physical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 1: Logical route actually used 1 Route No. 2: Physical route first selected 1 Route No. 2: Physical route first selected |
| Logical FPC2 Physical Log RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 FPC actually used Route No. 1: Physical route actually Route No. 1: Logical route actually Route No. 1: Physical route first selected Route No. 2: Physical route first selected

 | Logical FPC2 Physical Logic RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually us Route No. 1: Logical route actually us FPC first selected FPC first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logic RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logic RT No. 1 (3 digits) RT No. 2 RT No FPC actually used FPC actually used Route No. 1: Physical route actually u Route No. 1: Logical route actually u FPC first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1 Physical Logical Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route first selected Route No. 2: Physical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually use Route No. 1: Logical route actually use Route No. 2: Physical route first selected Route No. 2: Logical route first selected

 | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually use Route No. 1: Logical route actually use Route No. 2: Physical route first selected Route No. 2: Logical route first selected

 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected

 | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually use Route No. 1: Logical route actually use Route No. 1: Logical route actually use Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC
actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Physical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Physical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route
actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually use Route No. 1: Logical route actually use Route No. 2: Physical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually use Route No. 1: Logical route actually use Route No. 2: Physical route first selected | Logical FPC2 Physical Logica RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected
 | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected | Logical FPC2 Physical Logic RT No. 1 (3 digits) RT No. 2 RT No FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Physical route first selected Route No. 2: Physical route first selected | Logical FPC2 Physical Logic RT No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used Route No. 1: Physical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 1: Logical route actually used Route No. 2: Physical route first selected Route No. 2: Logical route first selected Route No. 2: Logical route first selected |
| Logical FPC2
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually
ute No. 1: Logical route actually
FPC first selected
oute No. 2: Physical route first selected

 | Logical FPC2 Physical Logic
RT No. 1 (3 digits) RT No. 2 RT No
oute No. 1: Physical route actually
ute No. 1: Logical route actually
prec first selected
oute No. 2: Physical route first selected | Logical FPC2
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical
RT No. 1 FPC2
(3 digits) Physical
RT No. 2 Logic
RT No. 2 FPC actually used
oute No. 1: FPC actually used
Physical route actually
Logical route actually used
Physical route actually
FPC first selected
oute No. 2: oute No. 2: Physical route first selected
Physical route first selected | Logical FPC2 Physical Logic
RT No. 1 (3 digits) RT No. 2 RT No
oute No. 1: Physical route actually
ute No. 1: Logical route actually
prec first selected
oute No. 2: Physical route first selected
oute No. 2: Logical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logic
RT No. 1 (3 digits) RT No. 2 RT No
FPC actually used
oute No. 1: Physical route actually u
tute No. 1: Logical route actually u
FPC first selected
oute No. 2: Physical route first selec | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No
FPC actually used
oute No. 1: Physical route actually used
oute No. 1: Logical route actually used
oute No. 2: Physical route first selected
oute No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2
RT No. 1 (3 digits) Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select

 | Logical FPC2
RT No. 1 (3 digits) Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select

 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
tue No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first selected
oute No. 2: Logical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
tue No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first selected
oute No. 2: Logical route first selected | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC actually used oute No. 1: Physical route actually used FPC first selected oute No. 2: Physical route first select ute No. 2: Logical route first selected oute No. 2: Constant of the select of the selec | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC actually used oute No. 1: Physical route actually used FPC first selected oute No. 2: Physical route first select ute No. 2: Logical route first selected oute No. 2: Constant of the select of the selec | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC actually used oute No. 1: Physical route actually used FPC first selected oute No. 2: Physical route first select ute No. 2: Logical route first selected oute No. 2: Constant of the select of the selec | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC actually used oute No. 1: Physical route actually use FPC first selected oute No. 2: Physical route first select ute No. 2: Logical route first selected oute No. 2: Cogical route first selected oute No. | Logical FPC2 Physical Logical RT No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 4 FPC actually used oute No. 1: Physical route actually used FPC first selected oute No. 2: Physical route first select ute No. 2: Logical route first selected oute No. 2: Cogical route first selected first selected oute No. 2: Cogical route first selected oute No. 2: Cogical route first selected first selected oute No. 2: Cogical route first selected first select

 | Logical FPC2 Physical Logical
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
represent the selected
oute No. 2: Physical route first selected
oute No. 2: Logical route first selected
 | Logical FPC2
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected
 | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually u
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No.
2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first selected | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually us
tute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually us
FPC first selected
oute No. 2: Physical route first select | Logical FPC2 Physical Logica
RT No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
oute No. 1: Physical route actually used
ute No. 1: Logical route actually used
FPC first selected
oute No. 2: Physical route first select
ute No. 2: Logical route first select | Logical FPC2 Physical Logic
RT No. 1 (3 digits) RT No. 2 RT No
FPC actually used
oute No. 1: Physical route actually u
FPC first selected
oute No. 2: Physical route first selec
ute No. 2: Logical route first selec | Logical FPC2 Physical Logic
RT No. 1 (3 digits) RT No. 2 RT No
FPC actually used
oute No. 1: Physical route actually
ute No. 1: Logical route actually
FPC first selected
oute No. 2: Physical route first selected |
| Logical FPC2 Physical Log
T No. 1 (3 digits) RT No. 2 RT No. 2 RT No. 1
FPC actually used
the No. 1: Physical route actually
FPC first selected
the No. 2: Physical route first selected
the No. 2: Cogical route first selected
the No. 2: Cogical route first selected

 | Logical FPC2 Physical Logic T No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used te No. 1: Physical route actually u FPC first selected FPC first selected te No. 2: Physical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Cogical route first selected | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually u
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
the No. 1: Physical route actually u
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Cogical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first select
the No. 2: Logical route first select | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
the No. 1: Physical route actually u
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
te No. 1: Physical route actually used
te No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first select
te No. 2: Logical route first select | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Cogical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually us
FPC first selected
the No. 2: Physical route first selected
the No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected

 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected

 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logical
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logical
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logical
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
the No. 1: Physical route actually use
FPC first selected
the No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logical
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected
 | Logical FPC2 Physical Logical
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected

 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually
used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first
selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually use
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
to No. 2: Logical route first selected
 | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually us
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first selected
te No. 2: Logical route first selected | Logical FPC2 Physical Logica
T No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
te No. 1: Physical route actually used
te No. 1: Logical route actually used
FPC first selected
te No. 2: Physical route first select
e No. 2: Logical route first select | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
te No. 1: Physical route actually u
FPC first selected
te No. 2: Physical route first selec
e No. 2: Logical route first selec | Logical FPC2 Physical Logic
T No. 1 (3 digits) RT No. 2 RT No
FPC actually used
te No. 1: Physical route actually used
to No. 1: Logical route actually used
te No. 2: Physical route first selected
te No. 2: Cogical route first selected |
| ogical FPC2 Physical Log No. 1 (3 digits) RT No. 2 RT No. 2 FPC actually used FPC actually used No. 1: Physical route actually No. 1: Logical route actually FPC first selected No. 2: Physical route first selected

 | Pgical FPC2 Physical Logic
No. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | pgical FPC2 Physical Logic
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | FPC actually used
FPC actually used
FPC actually used
FPC actually used
FPC actually used
FPC actually used
FPC first selected
FPC first selected | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually us
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected
 | ogical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | ingical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used e No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected e No. 2: Physical route first selected | ogical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Pigical FPC2 Physical Logic
No. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | rgical FPC2 Physical Logic No. 1 (3 digits) RT No. 2 RT No FPC actually used FPC actually used Image: Comparison of the second | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually us
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select
 | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | ingical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected
 | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select

 | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select

 | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select
 | rgical FPC2 Physical Logical
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logical
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logical
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select | rgical FPC2 Physical Logical
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first selected | rgical FPC2 Physical Logical
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select

 | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select

 | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us No. 1: Logical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected
 | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical No. 2 Logical No. 2 FPC actually used FPC actually used FNo. 1: Physical route actually used No. 1:
Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical No. 2 Logical No. 2 FPC actually used FPC actually used FNo. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical Logical RT No. 2 RT No. 2 FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical Logical RT No. 2 RT No. 2 FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical Logical RT No. 2 RT No. 2 FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | Image: Special No. 1 FPC2 Physical Logical RT No. 2 RT No. 2 FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected
 | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually us FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logical No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Logical route actually used No. 1: Logical route actually used FPC first selected No. 2: Physical route first selected | rgical FPC2 Physical Logica
No. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Cogical route actually used
FPC first selected
No. 2: Physical route first select
No. 2: Logical route first select
 | rgical FPC2 Physical Logic No. 1 (3 digits) RT No. 2 RT No. FPC actually used FPC actually used No. 1: Physical route actually used No. 1: Physical route actually used No. 1: Physical route first selected No. 1: Logical route actually used No. 1: Physical route first selected No. 2: Physical route first selected | FPC 2 Physical Logic
No. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually
No. 1: Logical route actually
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected |
| ical FPC2 Physical Log
Io. 1 (3 digits) RT No. 2 RT No. 2
FPC actually used
No. 1: Physical route actually
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected

 | ical FPC2 Physical Logic
Io. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first sele
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logic
Io. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually u
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | ical FPC2 Physical Logic
Io. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first selected
No. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
o. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
Io. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logic
lo. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first sele
o. 2: Logical route first selec | ical FPC2 Physical Logic:
lo. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
No. 2: Physical route first selected
o. 2: Logical route first selected
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
o. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
o. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected

 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected

 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logical
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logical
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logical
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logical
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected
 | ical FPC2 Physical Logical
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually use
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected

 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1:
Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2:
Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually u
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
route actually used
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
route actually used
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first selected | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
o. 1: Logical route actually us
FPC first selected
No. 2: Physical route first selecto
o. 2: Logical route first selecto
 | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first selector
o. 2: Logical route first selector | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually us
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logica
lo. 1 (3 digits) RT No. 2 RT No.
FPC actually used
No. 1: Physical route actually used
No. 1: Logical route actually used
FPC first selected
No. 2: Physical route first select
o. 2: Logical route first select | ical FPC2 Physical Logic
lo. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first sele
o. 2: Logical route first selec | ical FPC2 Physical Logic
lo. 1 (3 digits) RT No. 2 RT No
FPC actually used
No. 1: Physical route actually u
FPC first selected
No. 2: Physical route first selected
o. 2: Logical route first selected |
| al FPC2 Physical Log
A 1 (3 digits) RT No. 2 RT N
FPC actually used
5. 1: Physical route actually
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected

 | al FPC2 Physical Logic
RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually
1: Logical route actually u
FPC first selected
5. 2: Physical route first selec | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2
(3 digits) Physical Logic
RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually u
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logic
A 1 (3 digits) RT No. 2 RT No
FPC actually used
5. 1: Physical route actually
1: Logical route actually u
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected
 | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
D. 1: Physical route actually us
FPC first selected
D. 2: Physical route first selected
D. 2: Logical route first selected | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
b. 1: Physical route actually us
FPC first selected
b. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually used
. 1: Logical route actually used
. 2: Physical route first selected
. 2: Logical route first selected | al FPC2 Physical Logic
A 1 (3 digits) RT No. 2 RT No
FPC actually used
5. 1: Physical route actually u
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logic
A 1 (3 digits) RT No. 2 RT No
FPC actually used
5. 1: Physical route actually used
5. 1: Logical route actually used
FPC first selected
5. 2: Physical route first select
 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No
FPC actually used
5. 1: Physical route actually used
A 1: Logical route actually used
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select
 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first selected
5. 2: Logical route first selected | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
D. 1: Physical route actually us
FPC first selected
D. 2: Physical route first selected
D. 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually used
5. 1: Logical route actually used
FPC first selected
5. 2: Physical route first select

 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually used
5. 1: Logical route actually used
FPC first selected
5. 2: Physical route first select

 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually used
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually used
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logical
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually use
FPC first selected
. 2: Physical route first select | al FPC2 Physical Logical
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually use
FPC first selected
. 2: Physical route first select | al FPC2 Physical Logical
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually use
FPC first selected
. 2: Physical route first select | al FPC2 Physical Logical
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually use
FPC first selected
. 2: Physical route first selecte
 | al FPC2 Physical Logical
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually use
FPC first selected
. 2: Physical route first select
 | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
D. 1: Physical route actually used
The first selected
D. 2: Physical route first selected
D. 2: Logical route first selected

 | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
D. 1: Physical route actually used
The first selected
D. 2: Physical route first selected
D. 2: Logical route first selected | al FPC2 Physical Logica
A. 1 (3 digits) RT No. 2 RT No.
FPC actually used
D. 1: Physical route actually us
FPC first selected
D. 2: Physical route first selected
D. 2: Logical route first selected
 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first
selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical
route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually us
FPC first selected
. 2: Physical route first select | al FPC2 Physical Logica
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually us
FPC first selected
. 2: Physical route first select | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected
 | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
D 1: Physical route actually us
FPC first selected
D 2: Physical route first selected
D 2: Logical route first selected | al FPC2 Physical Logica
A 1 (3 digits) RT No. 2 RT No.
FPC actually used
5. 1: Physical route actually us
FPC first selected
5. 2: Physical route first select | al FPC2 Physical Logica
. 1 (3 digits) RT No. 2 RT No.
FPC actually used
. 1: Physical route actually used
. 1: Logical route actually used
. 1: Logical route actually used
. 2: Physical route first selected
. 2: Logical route first selected | al FPC2 Physical Logic
. 1 (3 digits) RT No. 2 RT No
FPC actually used
. 1: Physical route actually u
FPC first selected
. 2: Physical route first selec | al FPC2 Physical Logic
. 1 (3 digits) RT No. 2 RT No
FPC actually used
. 1: Physical route actually used
. 1: Discrete control of the selected
. 2: Physical route first selected
. 2: Logical route first selected |
| FPC2 Physical Log
(3 digits) RT No. 2 RT N
FPC actually used
FPC actually used
Physical route actually
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected
Physical route first selected

 | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
FPC first selected
Physical route actually u
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected | FPC2
(3 digits)
FPC actually used
FPC actually used
Physical route actually
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logic
1 (3 digits) RT No. 2 RT No
FPC actually used
1: Physical route actually
1: Logical route actually
1: Logical route actually
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
Constrained first selected
Physical route first selected
Constrained first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
 | FPC2 Physical Logica
1 (3 digits) RT No. 2 RT No.
FPC actually used
1: Physical route actually us
FPC first selected
2: Physical route first select
2: Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually used
1: Logical route actually used
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
1: Physical route actually u
FPC first selected
2: Physical route first selec
2: Logical route first selected | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
1: Physical route actually used
1: Logical route actually used
2: Physical route first selected
2: Logical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No
FPC actually used
1: Physical route actually used
1: Logical route actually used
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
Constrained first selected
Physical route first selected
Constrained first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually us
FPC first selected
2: Physical route first select
2: Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
C Physical route first selected

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
C Physical route first selected

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually use
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually use
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually use
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
1: Physical route actually use
FPC first selected
2: Physical route first selected
2: Logical route first selected
 | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
C Physical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
C Physical route first selected

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
C Physical route first select
C Physical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route
first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
C Physical route first select
C Physical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
C Physical route first select
C Physical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
2: Physical route first selected
2: Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
C Physical route first selected
C Physical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
Constrained
FPC first selected
Physical route first select
Constrained
Constrained
FPC first selected
Constrained
FPC first selected
Constrained
FPC first selected
Constrained
FPC first selected
Constrained
FPC first selected
FPC firs | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
FPC actually used
Physical route actually u
FPC first selected
2: Physical route first selec
2: Logical route first selected | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
FPC actually used
Physical route actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first selected
C Physical route first selected
Physical route first selected
Physical route first selected |
| FPC2 Physical Log
(3 digits) RT No. 2 RT N
FPC actually used
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Logical route first selected

 | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2
(3 digits)
FPC actually used
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Control of the selected
Control of th | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Dysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
EPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC
actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually
used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selec
Logical route first selec |
| FPC2
(3 digits) RT No. 2 RT N
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected

 | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
FPC first selected
Physical route first selected
Physical route first selected | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Dhysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first sele | FPC2 Physical Logic:
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected
 | FPC2 Physical Logical
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Chysical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first
selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
FPC first selected
Physical route first selected
Chysical route
first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected
 | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
(3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logic
(3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Dhysical route first selected |
| FPC2 Physical Log
3 digits) RT No. 2 RT N
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Chysical route first selected

 | FPC2 Physical Logic
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Dhysical route first selected | FPC2 Physical Logic
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selec
Logical route first selec | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logic:
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually used
EPC first selected
Physical route first selected
Physical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected
 | FPC2 Physical Logical
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually
us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first
selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
3 digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
Cogical route actually used
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logic
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logic
3 digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selec
Logical route first selec |
| FPC2 Physical Log
digits) RT No. 2 RT N
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Physical route first selected

 | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
digits) RT No. 2 RT No.
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selec
Logical route first selec | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first sele | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually used
Cogical route actually used
FPC first selected
Physical route first selected
Cogical route first selected
 | FPC2 Physical Logica
digits) RT No. 2 RT No
FPC actually used
Physical route actually used
Cogical route actually used
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select
 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected
 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first
selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first
selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
Logical route actually us
FPC first selected
Physical route first selected
Logical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Chysical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first selected
Cogical route first selected
 | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first sele | FPC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selec
Logical route first selec |
| PC2 Physical Log
digits) RT No. 2 RT N
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Chysical route first selected

 | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first selected | PC2 Physical Logic
digits) RT No. 2 RT No.
FPC actually used
Physical route actually
Logical route actually used
Physical route first selected
Physical route first selected
Dhysical route first selected | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selec
Logical route first selec | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually u
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually used
EFPC first selected
Physical route first selected
Physical route first selected
 | PC2 Physical Logica
digits) RT No. 2 RT No
FPC actually used
Physical route actually used
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select

 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected | PC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected | PC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected | PC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selecte
 | PC2 Physical Logical
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected
 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first
selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route
first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually u
EPC first selected
Physical route first selected
Physical route first selected | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | PC2 Physical Logica
digits) RT No. 2 RT No.
FPC actually used
Physical route actually used
EPC first selected
Physical route first selected
Physical route first select | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first selec | PC2 Physical Logic
digits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selec
Logical route first selec |
| C2 Physical Log
gits) RT No. 2 RT N
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected

 | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selected
Logical route first selected | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first selec
Logical route first selec | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first sele | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select

 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first select
Logical route first select

 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logical
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logical
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logical
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logical
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logical
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical
route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select
 | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logica
gits) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually u
FPC first selected
Physical route first sele
Logical route first sele | C2 Physical Logic
gits) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually
FPC first selected
Physical route first selected
Logical route first selected |
| 2 Physical Log
ts) RT No. 2 RT N
FPC actually used
Physical route actually
cogical route actually
FPC first selected
Physical route first selected
Physical route first selected

 | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually
Logical route actually u
FPC first selected
Physical route first sele
Logical route first selec | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
cogical route first select | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually u
cogical route actually u
FPC first selected
Physical route first selected
Physical route first selected | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually u
cogical route actually u
FPC first selected
Physical route first selec
Logical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select
 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually u
cogical route actually u
FPC first selected
Physical route first sele
Logical route first selec | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually used
cogical route actually used
FPC first selected
Physical route first select
Logical route first select
 | 2 Physical Logica
ts) RT No. 2 RT No
FPC actually used
Physical route actually used
cogical route actually used
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select
 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select

 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select

 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logical
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logical
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logical
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logical
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selecte
 | 2 Physical Logical
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first selected
 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually use
FPC first selected
Physical route first select
Logical route first select

 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
cogical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first selected
Chysical route first selected
 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
special route actually us
FPC first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
spec first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually used
cogical route actually used
FPC first selected
Physical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC
first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually u
cogical route actually us
FPC first selected
Physical route first select
cogical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually u
cogical route actually us
FPC first selected
Physical route first select
cogical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually u
cogical route actually us
FPC first selected
Physical route first select
cogical route
first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually u
cogical route actually us
FPC first selected
Physical route first select
cogical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually used
FPC first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
special route actually us
FPC first selected
Physical route first selected
Physical route first selected | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select
 | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually us
cogical route actually us
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually used
cogical route actually used
FPC first selected
Physical route first select | 2 Physical Logica
ts) RT No. 2 RT No.
FPC actually used
Physical route actually used
Cogical route actually used
FPC first selected
Physical route first select
Logical route first select | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually u
cogical route actually u
FPC first selected
Physical route first sele
Logical route first selec | 2 Physical Logic
ts) RT No. 2 RT No
FPC actually used
Physical route actually u
cogical route actually u
FPC first selected
Physical route first selec
Logical route first selec |
| Physical Log
RT No. 2 RT N
PC actually used
hysical route actually
PC first selected
hysical route first selected
hysical route first selected

 | Physical Logic
RT No. 2 RT No
PC actually used
hysical route actually u
PC first selected
hysical route first sele
ogical route first selec | s) Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logic
RT No. 2 RT No.
PC actually used
hysical route actually u
PC first selected
hysical route first selected
hysical route first selected | Physical Logic
s) RT No. 2 RT No
PC actually used
hysical route actually u
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | s) Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector
 | s) Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first select
ogical route first select | Physical Logic
s) RT No. 2 RT No
PC actually used
hysical route actually u
PC first selected
hysical route first sele
ogical route first sele | Physical Logic:
S) RT No. 2 RT No
PC actually used
hysical route actually used
pogical route actually used
PC first selected
hysical route first selected
hysical route first selected
 | Physical Logic:
S) RT No. 2 RT No
PC actually used
hysical route actually used
cogical route actually used
PC first selected
hysical route first select
ogical route first select | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | s) Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first select
 | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pojical route actually use
PC first selected
hysical route first selected
pojical route first selected

 | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pojical route actually use
PC first selected
hysical route first selected
pojical route first selected

 | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
PC first selected
hysical route first selected
pogical route first selected | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
PC first selected
hysical route first selected
pogical route first selected | s) Physical Logical
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pogical route actually use
PC first selected
hysical route first selected
pogical route first selected | s) Physical Logical
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pogical route actually use
PC first selected
hysical route first selected
pogical route first selected | s) Physical Logical
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pogical route actually use
PC first selected
hysical route first selected
pogical route first selected | Physical Logical
s) RT No. 2 RT No.
PC actually used
hysical route actually use
PC first selected
hysical route first selected
pogical route first selected
 | s) Physical Logical
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pojical route actually use
PC first selected
hysical route first selected
pojical route first selected
 | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pojical route actually use
PC first selected
hysical route first selected
pojical route first selected

 | s) Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually used
pojical route actually use
PC first selected
hysical route first selected
pojical route first selected | s) Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually u
PC first selected
hysical route first selected
bysical route first selected
 | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
bysical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first select | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route
first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
hysical route first selected | Physical Logica
Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
hysical route first selected | Physical Logica
Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
hysical route first selected
 | Physical Logica
Physical Logica
RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selected
hysical route first selected | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pc first selected
hysical route first selecto
ogical route first selecto | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually use
pc first selected
hysical route first selecto
ogical route first selecto | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first selected
 | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selector
pogical route first selector | Physical Logica
S) RT No. 2 RT No.
PC actually used
hysical route actually us
PC first selected
hysical route first selectogical route first select | Physical Logica
s) RT No. 2 RT No.
PC actually used
hysical route actually used
cogical route actually used
PC first selected
hysical route first select | Physical Logic
s) RT No. 2 RT No
PC actually used
hysical route actually u
PC first selected
hysical route first sele
ogical route first selec | Physical Logic
s) RT No. 2 RT No
PC actually used
hysical route actually u
PC first selected
hysical route first selected
bysical route first selected |
| Physical Log
RT No. 2 RT N
C actually used
ysical route actually
gical route actually
C first selected
ysical route first selected
ysical route first selected

 | Physical Logic
RT No. 2 RT No
C actually used
ysical route actually used
ysical route actually u
C first selected
ysical route first selec
gical route first selec | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logic
RT No. 2 RT No
C actually used
ysical route actually u
c first selected
ysical route first selected
ysical route first selected | Physical Logic
RT No. 2 RT No
c actually used
ysical route actually u
c first selected
ysical route first selected
ysical route first selected | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
ysical route first select
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
first selected
ysical route first select
gical route first select | Physical Logic
RT No. 2 RT No
C actually used
ysical route actually u
gical route actually u
C first selected
ysical route first sele
gical route first selec | Physical Logic:
RT No. 2 RT No
C actually used
ysical route actually used
gical route actually used
gical route first selected
ysical route first selected
ysical route first selected
 | Physical Logica
RT No. 2 RT No
C actually used
ysical route actually used
gical route actually used
first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
first selected
ysical route first select
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
ysical route first selected
ysical route first selected

 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
ysical route first selected
ysical route first selected

 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually use
c first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually use
c first selected
ysical route first select
gical route first select | Physical Logical
RT No. 2 RT No.
C actually used
ysical route actually use
C first selected
ysical route first select
gical route first selected | Physical Logical
RT No. 2 RT No.
C actually used
ysical route actually use
C first selected
ysical route first select
gical route first selected | Physical Logical
RT No. 2 RT No.
C actually used
ysical route actually use
C first selected
ysical route first select
gical route first selected | Physical Logical
RT No. 2 RT No.
C actually used
ysical route actually use
C first selected
ysical route first select
gical route first selecte
 | Physical Logical
RT No. 2 RT No.
C actually used
ysical route actually use
C first selected
ysical route first select
gical route first selected
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
gical route actually used
c first selected
ysical route first select
gical route first selected

 | Physical Logica
RT No. 2 RT No.
C actually used
vsical route actually used
c first selected
vsical route first selected
vsical route first selected | Physical Logica
RT No. 2 RT No.
C actually used
vsical route actually u
gical route actually u
G first selected
vsical route first selected
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
route actually used
first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
c first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first
select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
vsical route actually used
c first selected
vsical route first selected
vsical route first selected | Physical Logica
RT No. 2 RT No.
C actually used
vsical route actually used
c first selected
vsical route first selected
vsical route first selected | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually u
gical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
c first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
c first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
C first selected
ysical route first select
gical route first select
 | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually us
c first selected
ysical route first select
ysical route first select | Physical Logica
RT No. 2 RT No.
C actually used
ysical route actually used
route actually used
first selected
ysical route first select
gical route first select | Physical Logica
RT No. 2 RT No.
C actually used
vsical route actually used
vsical route actually used
c first selected
vsical route first select
vsical route first select | Physical Logic
RT No. 2 RT No
C actually used
ysical route actually u
gical route actually u
C first selected
ysical route first selec
gical route first selec | Physical Logic
RT No. 2 RT No
C actually used
ysical route actually used
ysical route actually u
C first selected
ysical route first selected
ysical route first selected |
| Physical Log
RT No. 2 RT N
actually used
ical route actually
first selected
ical route first selected
ical route first selected

 | Physical Logic
RT No. 2 RT No
actually used
ical route actually used
ical route actually u
first selected
ical route first selecal route first selec | Physical Logica
RT No. 2 RT No. | Physical Logic
RT No. 2 RT No
actually used
ical route actually used
ical route actually u
first selected
ical route first selected
cal route first selected | Physical Logic
RT No. 2 RT No
actually used
ical route actually used
ical route actually u
first selected
ical route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select
 | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logic
RT No. 2 RT No
actually used
ical route actually u
first selected
ical route first selecal
cal route first selec | Physical Logic:
RT No. 2 RT No
actually used
ical route actually used
ical route actually used
ical route first selected
ical route first selected
ical route first selected
 | Physical Logic:
RT No. 2 RT No
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select
 | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logical
RT No. 2 RT No.
actually used
ical route actually used
first selected
ical route first selected
cal route first selected | Physical Logical
RT No. 2 RT No.
actually used
ical route actually used
first selected
ical route first selected
cal route first selected | Physical Logical
RT No. 2 RT No.
actually used
ical route actually used
first selected
ical route first selected
cal route first selected | Physical Logical
RT No. 2 RT No.
actually used
ical route actually used
first selected
ical route first selected
cal route first selected
 | Physical Logical
RT No. 2 RT No.
actually used
ical route actually used
first selected
ical route first selected
cal route first selected
 | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select | Physical Logica
RT No. 2 RT No.
actually used
ical route actually us
first selected
ical route first select
cal route first select
 | Physical Logic
RT No. 2 RT No
actually used
ical route actually u
first selected
ical route first selected
cal route first selected | Physical Logic
RT No. 2 RT No
actually used
ical route actually u
first selected
ical route first selected
ical route first selected |
| Physical Log
RT No. 2 RT M
actually used
cal route actually
al route actually
irst selected
cal route first sele
al route first sele

 | Physical Logic
RT No. 2 RT No
actually used
cal route actually u
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
cal route actually us
irst selected
cal route first selected
cal route first selected | Physical Logic
RT No. 2 RT No
actually used
cal route actually used
al route actually u
irst selected
cal route first selected
cal route first selected | Physical Logic
RT No. 2 RT No
actually used
cal route actually u
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select
 | Physical Logica
RT No. 2 RT No.
actually used
cal route actually us
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
al route actually used
irst selected
cal route first select
al route first select | Physical Logic
RT No. 2 RT No
actually used
al route actually u
irst selected
cal route first selected
al route first selected | Physical Logic:
RT No. 2 RT No
actually used
cal route actually used
al route actually used
irst selected
cal route first select
al route first select
 | Physical Logica
RT No. 2 RT No
actually used
cal route actually used
al route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually us
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually used
irst selected
cal route first select
al route first select
 | Physical Logica
RT No. 2 RT No.
actually used
cal route actually us
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
cal route actually us
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logical
RT No. 2 RT No. | Physical Logical
RT No. 2 RT No. | Physical Logical
RT No. 2 RT No. | Physical Logical
RT No. 2 RT No.
 | Physical Logical
RT No. 2 RT No.
 | Physical Logica
RT No. 2 RT No.

 | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
 | Physical Logica
RT No. 2 RT No.
actually used
al route actually us
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al
route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected
 | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No. | Physical Logica
RT No. 2 RT No.
actually used
al route actually us
irst selected
cal route first selected
cal route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected
 | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first selected
al route first selected | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
irst selected
cal route first select
al route first select | Physical Logica
RT No. 2 RT No.
actually used
al route actually used
al route actually used
al route first select
al route first select
al route first select | Physical Logic
RT No. 2 RT No
actually used
al route actually u
irst selected
cal route first selected
al route first selected | Physical Logic
RT No. 2 RT No
actually used
al route actually u
irst selected
cal route first selected
al route first selected |
| hysical Log
F No. 2 RT M
tually used
I route actually
route actually
st selected
I route first selected
I route first selected

 | hysical Logic
F No. 2 RT No
tually used
I route actually used
selected
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually us
st selected
I route first select
route first select | hysical Logic
F No. 2 RT No
L I I
tually used
I route actually used
selected
I route first selected
I route first selected | hysical Logic
F No. 2 RT No
tually used
I route actually used
selected
I route first selected
I route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first select
 | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first selected | hysical Logica
F No. 2 RT No.
Lually used
I route actually used
I route actually used
I route first select
route first select | hysical Logica
F No. 2 RT No.
Lually used
I route actually used
I route actually used
I route first select
route first select | hysical Logica
F No. 2 RT No.
tually used
I route actually used
route actually used
I route first select
route first select | hysical Logic
T No. 2 RT No
tually used
I route actually used
route actually used
I route first selected
I route first selec | hysical Logic
T No. 2 RT No
tually used
I route actually used
route actually used
I route first select
route first select
 | hysical Logica
T No. 2 RT No
tually used
I route actually used
route actually used
I route first select
route first select | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select | hysical Logica
F No. 2 RT No.
Lually used
I route actually used
I route actually used
I route first select
route first select | hysical Logica
F No. 2 RT No.
L L Logica
RT No.
L L Logica
RT No.
L L Logica
RT No.
L Logica
RT No.
L Logica
RT No.
L Logica
RT No.
L Logica
L Logica
L Logica
L Logica
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first select | hysical Logica
F No. 2 RT No.
Lually used
I route actually used
route actually used
I route first select
route first select | hysical Logica
F No. 2 RT No.
L L Logica
RT No.
L L Logica
RT No.
L L Logica
RT No.
L Logica
RT No.
L Logica
RT No.
L Logica
RT No.
L Logica
L Logica
L Logica
L Logica
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L Logica
RT No.
L Logica
L | hysical Logica
F No. 2 RT No.
L L Logica
RT No.
L L L
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first select | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select

 | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select

 | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected | hysical Logical
F No. 2 RT No.
L L L L
tually used
I route actually used
st selected
I route first select
route first selected
 | hysical Logical
F No. 2 RT No.
L L L L
tually used
I route actually used
st selected
I route first select
route first selected | hysical Logical
F No. 2 RT No.
L L L L
tually used
I route actually used
st selected
I route first select
route first selected | hysical Logical
F No. 2 RT No.
L L L
tually used
I route actually used
st selected
I route first select
route first selected | hysical Logical
T No. 2 RT No.
tually used
I route actually used
st selected
I route first select
route first selected

 | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected

 | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected
 | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selector
route first selector | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first selected
 | hysical Logica
F No. 2 RT No.
L I L I
tually used
I route actually used
I route actually used
I route actually used
I route first select
route first selected | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
F No. 2 RT No.
L L L L
tually used
I route actually used
I route actually used
I route actually used
I route first selected
I route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected
 | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
selected
route first select
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selector
route first selector | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selector
route first selector | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selected
route first selected | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first selector
route first selector | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select | hysical Logica
r No. 2 RT No.
tually used
route actually used
route actually used
route first select
route first select | hysical Logic
T No. 2 RT No
tually used
I route actually u
st selected
I route first selec
route first selec
 | hysical Logic
T No. 2 RT No
tually used
I route actually
route actually used
I route first selected
I route first selected
I route first selected |
| vsical Log
No. 2 RT M
ally used
route actually
selected
route first selected
route first selected

 | vsical Logic
No. 2 RT No
ally used
route actually u
selected
route first selec
oute first selec | vsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first selected
bute first selected | vsical Logic
No. 2 RT No
ally used
route actually u
selected
route first selected
route first selected | vsical Logic
No. 2 RT No
ally used
route actually u
selected
route first selected
route first selected | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first selecto
oute first selecto
 | vsical Logica
No. 2 RT No. | vsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select | vsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select
oute first select | vsical Logic
No. 2 RT No
ally used
route actually u
selected
route first selec | Ally used
route actually used
route actually used
route first selected
route first selected
 | Ally used
route actually used
route actually used
route first select
route first select | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first selecto
oute first selecto | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first selecto
oute first selecto | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first select
 | rsical Logica
No. 2 RT No.
ally used
route actually us
selected
route first selecto
oute first selecto | vsical Logica
No. 2 RT No. | vsical Logica
No. 2 RT No.
ally used
route actually use
selected
route first selected
pute first selected

 | vsical Logica
No. 2 RT No.
ally used
route actually use
selected
route first selected
pute first selected

 | vsical Logica
No. 2 RT No.
ally used
route actually use
selected
route first selected
pute first selected | vsical Logica
No. 2 RT No.
ally used
route actually use
selected
route first selected
pute first selected | rsical Logical
No. 2 RT No.
ally used
route actually use
selected
route first selected
bute first selected | rsical Logical
No. 2 RT No.
ally used
route actually use
selected
route first selected
bute first selected | rsical Logical
No. 2 RT No.
ally used
route actually use
selected
route first selected
bute first selected | rsical Logical
No. 2 RT No.
ally used
route actually use
selected
route first selecte
pute first selecte
 | rsical Logical
No. 2 RT No.
ally used
route actually use
selected
route first selected
bute first selected
 | rsical Logica
No. 2 RT No.
ally used
route actually use
selected
route first selected
pute first selected

 | rsical Logica
No. 2 RT No.
ally used
route actually used
route actually use
selected
route first selected
route first selected | Ally used
route actually us
selected
route first selected
 | Ally used
oute actually us
selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No.
 | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected
 | rsical Logica
No. 2 RT No.
ally used
oute actually us
selected
route first selected
oute first selected | Ally used
route actually uso
selected
route first selected | Ally used
route actually uso
selected
route first selected | Ally used
oute actually us
selected
oute first selected | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No.
 | rsical Logica
No. 2 RT No. | rsical Logica
No. 2 RT No. | Ally used
route actually used
route actually used
route first select
pute first select | Ally used
route actually used
route actually used
route first selected | Ally used
route actually used
route actually used
route first selected |
| ical Log
o. 2 RT M
I used
ute actually
elected
ute first sele
te first sele

 | ical Logic
o. 2 RT No
ute actually used
ute actually used
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logic
o. 2 RT No
I used
ute actually u
elected
ute first selec
te first selec | ical Logic
o. 2 RT No
ute actually used
ute actually used
ute first selected
te first selected | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually use
elected
ute first select
te first select | ical Logic
o. 2 RT No
ute actually u
elected
ute first selected
te first selected | ical Logic
o. 2 RT No
ute actually used
ute actually use
elected
ute first select
te first select
 | ical Logica
o. 2 RT No
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select

 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select

 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logical
o. 2 RT No.
I I I
ly used
ute actually use
elected
ute first select
te first selecte | ical Logical
o. 2 RT No.
I I I
ly used
ute actually use
elected
ute first select
te first selecte | ical Logical
o. 2 RT No.
I I I
ly used
ute actually use
elected
ute first select
te first selecte | ical Logical
o. 2 RT No.
I used
ute actually use
elected
ute first select
te first select
 | ical Logical
o. 2 RT No.
I I I
ly used
ute actually use
elected
ute first select
te first selecte
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select

 | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually us
elected
ute first select
te first select
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first selected
te first selected | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select
 | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I I I
ly used
ute actually us
elected
ute first select
te first select | ical Logica
o. 2 RT No.
I used
ute actually used
te actually use
elected
ute first select
te first select | ical Logic
o. 2 RT No
ute actually u
elected
ute first selec
te first selec | ical Logic
o. 2 RT No
ute actually te actually used
ute first selected
te first selected |
| al Log
2 RT M
r used
te actually
ected
te first sele

 | al Logic
2 RT No
y used
te actually u
ected
te first selec
e first selec | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logic
. 2 RT No
used
te actually u
ected
te first selec
e first selec | al Logic
2 RT No
used
te actually u
ected
te first selec
first selec | r used
te actually us
ected
te first select | al Logica
2 RT No.
2 used
te actually us
ected
te first selected
first selected
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first select
a first select | al Logica
2 RT No.
2 used
te actually us
ected
te first select
2 first select | al Logica
2 RT No.
2 used
te actually used
actually use
ected
te first select
a first select | al Logic
2 RT No
y used
te actually u
ected
te first selec
e first selec | r used
te actually used
e actually used
te first select
first select
 | al Logic:
2 RT No
r used
te actually us
ected
te first select
first select | r used
te actually us
ected
te first select | al Logica
2 RT No.
2 used
te actually us
ected
te first select
2 first select | al Logica
2 RT No.
2 used
te actually us
ected
te first selected
first selected | al Logica
2 RT No.
2 used
te actually us
ected
te first selected
first selected | al Logica
2 RT No.
2 used
te actually us
ected
te first select
2 first select
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selected
first selected | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 RT No.
4 used
te actually us
ected
te first selecte
first selecte

 | al Logica
2 RT No.
2 RT No.
4 used
te actually us
ected
te first selecte
first selecte

 | al Logica
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte | al Logica
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte | al Logical
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte | al Logical
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte | al Logical
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte | al Logical
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte
 | al Logical
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte
 | al Logica
2 RT No.
7 used
te actually use
ected
te first selecte
first selecte

 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
actually us
ected
te first select
a first select | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte
 | al Logica
2 RT No.
2 used
te actually us
ected
te first selecte
first selecte | al Logica
2 RT No.
2 used
te actually us
actually us
ected
te first select
a first select | r used
te actually used
actually used
te first select
first select | r used
te actually u
ected
te first selec | r used
te actually used
te first selected
te first selected |
| Log
RT M
used
actually
cted
first sele

 | Logic
RT No
used
actually u
cted
first selec | Logica
RT No.
Lused
actually us
cted
first select | Logic
RT No
used
actually u
cted
first selection | Logic
RT No
used
actually u
cted
first selec | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select
 | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logic
RT No
used
actually u
cted
first selec | Logic:
2 RT No
used
actually us
cted
first select
 | Logica
RT No
used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select
 | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Used
actually us
actually us
cted
first select

 | Logica
RT No.
Used
actually us
actually us
cted
first select

 | Logica
RT No.
Used
actually used
actually used
first selected | Logica
RT No.
Used
actually used
actually used
first selected | Logical
RT No.
Used
actually use
cted
first selecte

 | Logica
RT No.
Used
actually used
actually used
first select
 | Logica
RT No.
Used
actually us
actually us
cted
first select
 | Logica
RT No.
Used
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select
 | Logica
RT No.
used
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select
 | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
used
actually us
cted
first select | Logica
RT No.
used
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select
 | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
used
actually us
cted
first select | Logica
RT No.
Lused
actually us
cted
first select | Logica
RT No.
Used
actually us
cted
first select | Logic
RT No
used
actually u
cted
first selec | Logic
RT No
used
actually u
cted
first selection |
| ed
ed
ctually
ed
rst se
st sele

 | Logic
RT Nc
ed
actually
tually u
ed
rst sele
st selec | Logica
RT No.
ed
actually us
ed
irst selected | Logic
RT No
ed
actually
tually u
ed
irst selec | Logic
RT Nc
ed
actually
tually u
ed
irst selec | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select
 | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
ictually us
ed
rst select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logic
RT No
ed
actually u
ed
rst sele
st selec | Logic;
RT No
ed
actually us
ed
rst select
st select
 | Logica
RT No
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select
 | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
rst select
st select | Logica
RT No.
ed
actually us
ed
irst selected

 | Logica
RT No.
ed
actually us
ed
irst selected

 | Logica
RT No.
ed
actually us
etually us
ed
irst selecte | Logica
RT No.
ed
actually us
etually us
ed
irst selecte | Logical
RT No.
ed
actually use
ed
irst selecte | Logical
RT No.
ed
actually use
ed
irst selecte | Logical
RT No.
ed
actually use
ed
irst selecte | Logical
RT No.
ed
actually use
ed
irst selecte
 | Logical
RT No.
ed
actually use
ed
irst selecte
 | Logica
RT No.
ed
actually us
etually us
ed
irst selectes
st selecte

 | Logica
RT No.
ed
actually us
ed
irst selectes
st selectes | Logica
RT No.
ed
ictually us
ed
irst selectest selected
 | Logica
RT No.
ed
ictually us
ed
irst selectest selected | Logica
RT No.
ed
ctually us
ed
rst select
st selecte | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
cctually us
ed
rst select
st select | Logica
RT No.
ed
cctually us
ed
rst select
st select
 | Logica
RT No.
ed
ctually us
ed
rst select
st selecte | Logica
RT No.
ed
ictually us
ed
irst selectest selecte | Logica
RT No.
ed
ictually us
ed
irst selectest selecte | Logica
RT No.
ed
ictually us
ed
irst selectest selected | Logica
RT No.
ed
ctually us
ed
rst select | Logica
RT No.
ed
ctually us
ed
rst select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
rst select
 | Logica
RT No.
ed
ctually us
ed
rst select
st select | Logica
RT No.
ed
ctually us
ed
irst select
st select | Logic
RT No
ed
ictually u
ed
irst sele
st selec | ed
ed
ictually u
ed
irst selection |
| Log
RT N
d
ually
t se

 | Logic
RT No
ually
ally u
t sele
selec | Logica
RT No. | Logic
RT No
d
ually u
ally u
t sele
selec | Logic
RT No
d
ually u
ally u
t sele
selec | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logic
RT No
ually
ally u
t sele
selec | Logic:
RT No
ually u
ually u
t select
 | Logica
RT No
dually us
ally us
t select | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No.

 | Logica
RT No.

 | Logica
RT No. | Logica
RT No. | Logical
RT No. | Logical
RT No. | Logical
RT No. | Logical
RT No.
 | Logical
RT No.
 | Logica
RT No.

 | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logica
RT No.
 | Logica
RT No. | Logica
RT No. | Logica
RT No. | Logic
RT No
d
ually u
ally u
t sele
selec | Logic
RT No
ually
ally u
t selec
selec |
| og
- N
all <u>i</u>
ly
se

 | ogic
Nc | ogica
⁻ No.
I I
ally u
ly us
selecte | ogic
No
ally
ly u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogic
No | I
Ogic:
No
I
ally u
selection
 | ogica
No
ally u
select | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally us
selecte

 | ogica
⁻ No.
<u>I I</u>
ally us
selecte

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
⁻ No.
<u>I</u> <u>I</u>
ally us
selecte | ogica
⁻ No.
<u>I</u> I
ally u
ly us
selecte | ogica
⁻ No.
<u>I</u>
<u>I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No.
 | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
<u>I</u> <u>I</u>
ally us
selecte | ogica
⁻ No.
<u>I</u> <u>I</u>
ally us
selecte | ogica
⁻ No.
<u>I</u> <u>I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte
 | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogic
No | ally u |
|

 | gic
No
ly
y u
ele | gica
No. | gic
No
ly
y
ele | gic
No | gica
No. | gica
No.

ly us
electe
 | gica
No.

ly us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No. | gica
No.

ly us
electe | gica
No.
 | gica
No. | gica
No.
ly u
electe | gica
No.

 | gica
No.

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gic
No | gia
Na
Iy
y u
ele |
| Ji
V
V

 | | ca
o.

us
ec | | | | ca
o.

us
ecto
 | ca
o.

us
ec | | | | |
 | | | | us
ca | ca
o.

us
ecto |
 | us
ca | u
ca
o.
u
us |

 |

 | ca
o.

use
ecte | ca
o.

use
ecte | cal
o.

use
ect | cal
o.

use
ect | cal
o.

use
ect | cal
o.
 | cal
o.

use
ect
 | ca
o.
use
ecte

 | ca
o.
us
eci | ca
o.
us
ecce
 | ca
o.
us
ecce | u
ca
o. | u
ca
o. | u
ca
o. | u
ca
o. | u
ca
o. | u
ca
o. | us
ca | | | us
ca | us
ca
 | us
ca | us
ca | us
ca
ca
ca
ca
ca
ca | us
ca
ca
ca
ca
ca
ca | u
u
us | u
u
us | u
u
us
 | u
u
us | ca
o.

uso
eci | ca
o.

uso
eci | ca
o.
us
ecce | | | us
ca | us
ca | us
ca
 | | | | | |
|

 | | | | | |
 | | | | | |
 | | | | | |
 | | |

 |

 | | | | | |
 |
 |

 | |
 | | | | | | | | | | | |
 | | | | | | |
 | | | | | | | | |
 | | | | | |
| al
us
se

 | al
. 2
 | | al
2
us
se | al

 | |
 | se | | | al
us
se | al
us
se | al
us
se
 | al
us
se | | | | |
 | | se | l
2
se
te

 | l
2
se
te

 | | | | | |
 |
 |

 | | l
2
s
e
 | l
2
se | s
e | s
e | s
e | s
e | s
e | s
e | sete | | | se | sete
 | sete | se | se
te | se
te | se
te | se
te | se
te
 | se
te | | | l
2
se | | | se
te | se
te | ll :
se
 | | | | | |
|

 | 2 | 2
sed
ed
d | 2
e
d | 2
e
d | 2
e
d | 2
se
 | 2
sed
ed
d | 2
sed
ed
d | 2
sed
ed
d | 2
se | 2
e
d | 2
e
d
 | 2
e
d | 2
e
d | 2
e
d | 2
e
d | 2
e
d | 2
e
d
 | 2
e
d | 2
e
d | 2
e
d

 | 2
e
d

 | 2
e
d | 2
e
d | 2
e
d | 2
e
d | 2
e
d | 2
e
d
 | 2
e
d
 | 2

 | 2 |
 | | | | | | | | | | | |
 | | | | | | |
 | | | | | | | | |
 | | | | | al |
|

 | | u
s | | | L
L
L
L
L
L
L
L
L |
 | us | UUS | u
u
u
s | i and | | | | L
L
L
L
L
L
L
L
L
 | u
u
u
u
s | | | L
L
L
L
L
L
L
L
L |
 | us | u:
so
te

 | u:
so
te

 | u:
se | u:
se
 | i
al
o.
L | i
al
o.
L | i
al
o.
L | i
al
o.
L
us
se | i
al
o.
L

 | u:
se

 | u:
so
te | | | us | us
 | us | us | us | us | us | u
u
u
u
s | | us | us | us | us
 | us | us | us | us | us | us
 | u:
so
te | u:
so
te | | | | us | us | us | | u
u
u
u
s |
 | | |
|

 | | | | | |
 | u
u
us | | | | |
 | | | | | |
 | | u
u
us |

 |

 | | | L
cal
o. | L
cal
o. | L
cal
o. | L
cal
o.
 | L
cal
o.
 |

 | |
 | | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
us | | | u
u
us | u
u
us
 | u
u
us | u
u
us | u
u
us | u
u
us | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
 | u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u
u | | | | | | u
u
us | u
u
us | u
u
us
 | | | | | |
|

 | | ca
o.

us
ec | | | |
 | ca
o.

us
ecte | | | | |
 | ca
o
u
u | | | | |
 | | ca
o.

us
ecte | ca
o.

uso
cte

 | ca
o.

uso
cte

 | ca
o. | ca
o. | cal
o. | cal
o. | cal
o. | cal
o.
 | cal
o.
 | ca
o.

 | ca
o.

uso
cte | ca
o.
u
us
ecte
 | ca
o.
u
us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | | | ca
o.

us
ecte | ca
o.

us
ecte
 | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte
 | ca
o.

us
ecte | ca
o.

uso
cte | ca
o.

uso
cte | ca
o.
u
us
ecte | | | ca
o.

us
ecte | ca
o.

us
ecte | ca
o.

us
ecte
 | | | | | |
|

 | ic
lo
u
le | ica
lo.
/ u
us
lec | | | ica
lo.

us
lec | ica
lo.
/ u
us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | |
 | ica
lo
/ u | ica
lo.

us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.

us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u:
/ u:
/ u:
/ u:

 | ica
lo.
/ u:
/ u:
/ u:
/ u:

 | ica
lo.
/ u:
/ u:
/ u:
/ u: | ica
lo.
/ u:
/ u:
/ u:
/ u: | ical
lo.
/ use
lect | ical
lo.
/ use
use | ical
lo.
/ use
use | ical
lo.
/ use
use
 | ical
lo.
/ use
use
 | ica
lo.
/ u:
/ u:
/ u:
/ u:

 | ica
lo.
/ u:
/ u:
/ u:
/ u: | ica
lo.
/ u
us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u:
/ u:
/ u:
/ u: | ica
lo.
/ u:
/ u:
/ u:
/ u: | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec
 | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ica
lo.
/ u
us
lec | ic
lo
/ | |
|

 | y
v
u | jica
No.
y u
us | y
v
u | y
v
u | y u
y u
us | y u
y u
us
 | jica
No.
y u
us | jica
No.
y u
us | y u
y u
us | jica
No.
y u
us | y
v
u | y u
le
 | y u
v u
elec | y u
y u
us | y u
y u
us | y u
y u
us | y u
y u
us | y u
y u
us
 | y u
y u
us | jica
No.
y u
us | jica
No.

usi
usi
ecte

 | jica
No.

usi
usi
ecte

 | jica
No.
L
use
ecte | jica
No.
L
use
ecte | jical
No.
L
use
ecte | jical
No.
L
use
ecte | jical
No.
L
use
ecte | jical
No.
y us
use
 | jical
No.
L
use
ecte
 | jica
No.
L
use
ecte

 | jica
No.

usi
usi
ecte | jica
No.
y u
us
 | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | y u
y u
us | y u
y u
us | jica
No.
y u
us | jica
No.
y u
us
 | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us
 | jica
No.
y u
us | jica
No.

usi
usi
ecte | jica
No.

y u:
usi
usi | jica
No.
y u
us | y u
y u
us | y u
y u
us | jica
No.
y u
us | jica
No.
y u
us | jica
No.
y u
us
 | y u
y u
us | y u
y u
us | jica
No.
y u
us | y
v
u | |
|

 | gic
No
ly
/ u
elec | gica
No. | gic
No
ly
v u
elec | gic
No
ly
/ u
elec | gica
No. | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No
ly u
ele | gica
No
ly u
v u
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No.
Iy u
v us
electe | gica
No.

 | gica
No.

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No. | gica
No.
 | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No
ly u
ele | gia
Na
Iy
/ L
elec |
|

 | lly
ele | gica
No.
Ily u
y us
electe | igic
No
Ily
y u
ele | igic
No
Ily
y u
ele | Ily uselect | I
Ily u
election
 | liy u
y us
electe | igica
No.
Ily u
y us
election | Ily u
election | igica
No.
Ily u
elec | lly
No | Ily u
election
 | igica
No
Ily u
elec | Ily uselect | Ily u
election | I
Ily u
election | I
Ily u
election | Ily uselect
 | I
Ily u
election | liy u
y us
electe | gica
No.
Ily us
g us
elect

 | gica
No.
Ily us
g us
elect

 | igica
No.
Ily us
y use
electe | igica
No.
Ily us
y use
electe | igical
No. | igical
No. | igical
No. | gical
No.
 | igical
No.
 | igica
No.
Ily us
y use
electe

 | gica
No.
Ily us
g us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | liy u
y us
electe | Ily u
election | I
Ily u
election | liy u
y us
electe
 | liy u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily us
g us
elect | gica
No.
Ily us
g us
elect | gica
No.
Ily u
y us
electe | I
Ily u
election | I
Ily u
election | liy u
y us
electe | liy u
y us
electe | gica
No. | I
Ily u
election | Ily u
election | Ily uselect
 | lly
No | lly
y u
elec |
|

 | ogic
Nc
I
ly u
sele | ogica
No. | ogic
No
IIII
Iy u
sele | ally usele | i i
ogica
No.
I I
ally u
ly us
selec | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ally us | ally
sele
elec | ı
Sogic:
No
Ily u
selec
 | ally us | i i
ogica
No.
I I
ally u
ly us
selec | ogica
No. | ogica
No. | ogica
No. | ally us
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ally us | i
Sogic
No
I
Iy u
sele
selec | ally
selected |
| og
I
ally
ly
se

 | ogic
Nc
I
ly u
sele
elec | ogica
No. | ogic
No
I
Iy u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogic
No
I
ly u
sele
elec | i
No
ally u
ly us
select
 | ally us | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ı
ogic
No
Ily u
sele
elec | ally u |
| og
I
ally
Iy
se

 | ogic
Nc
I
ly u
sele
elec | ogica
⁻ No.
I I
ally u
ly us
selecte | ogic
No
ally
Iy u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogic
No
I
ly u
sele
elec | I
No
I
I
Iy us
select
 | ogica
No | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | I
ogic
No
I
ly u
sele
elec | ogic
No
ally
ly u
sele
 |
| og
I
ally
Iy
se

 | ogic
Nc
I
ly u
sele
elec | ogica
⁻ No.
I I
ally u
ly us
selecte | ogic
No
ally
Iy u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogic
No
I
ly u
sele
elec | I
No
I
I
Iy us
select
 | ogica
No | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | I
ogic
No
I
ly u
sele
elec | ogic
No
ally
ly u
sele
 |
| ally
selected

 | ogic
F Nc
ally
Ily u
sele
elec | ogica
Γ No.
ally u
Ily us
selecte | ogic
F No
ally
Ily u
sele
elec | cogic
Γ Νc
ally
Ily u
sele
elec | ogica
Γ Νο.
Δ ΙΙν τ
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select
 | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
Δ Ily us
select | .ogica
Γ No.
ally u
Ily us
select | ogica
Γ Νο.
ally us
select | ogic
Γ No
I
Ily u
sele
elec | ally us
 | ally us | ogica
Γ Νο.
Δ ΙΙν τ
Ily us
select | ogica
Γ No.
Δ Δ Δ
ally u
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | .ogica
Γ No.
ally u
lly us
select
 | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | ogica
Γ No.
Ι Ι
ally us
select
electe

 | ogica
Γ No.
Ι Ι
ally us
select
electe

 | ogica
Γ No.
Ι Ι
ally us
select
electe | ogica
Γ No.
Ι Ι
ally us
select
electe | ogical
Γ No.
Ι Ι
ally us
select
electe | ogical
Γ No.
Ι Ι
ally us
select
electe | ogical
Γ No.
Ι Ι
ally us
select
electe | ogical
Γ No.
Ι Ι
ally us
select
electe
 | ogical
Γ No.
Ι Ι
ally us
select
electe
 | ogica
Γ No.
Ι Ι
ally us
select
electe

 | ogica
Γ No.
Ι Ι
ally us
select
electe | ogica
Γ No.
I I
ally u
Ily us
selecte
 | ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
selecte | .ogica
Γ No.
I I
ally u
Ily us
select | ogica
Γ No.
Δ Δ Δ
ally u
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select
 | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
selecte | ogica
Γ No.
Ι Ι
ally us
select
electe | ogica
Γ No.
Ι Ι
ally us
select
electe | ogica
Γ No.
I I
ally u
Ily us
selecte
 | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | .ogica
Γ No.
I I
ally u
Ily us
select | ogica
Γ Νο.
Δ ΙΙν μ
Ily us
select | ogica
Γ No.
Δ Δ Δ
ally u
Ily us
select | ogica
Γ Νο.
ally us
select | ogic
Γ No
I
Ily u
sele
elec | οgic
ΓΝα
ally
Ily τ
sele
 |
| ally
se

 | ogic
Nc | ogica
No.
ally u
lly us
selected | ogic
No
ally
lly
sele
elec | ogic
No
ally
lly u
sele | ogica
Γ No.
Δ IIy us
select | ogica
No.
 | ogica
No. | ogica
No. | ogica
No.
ally u
lly us
select | ogica
No. | ogic
No | ogic:
ΓNo
I
ally u
Ily u
selee
 | ally us | ogica
Γ No.
Δ IIy us
select | ogica
No. | ogica
No. | ogica
No. | ogica
Γ No.
Δ IIy us
select
elect
 | ogica
No. | ogica
No. | ogica
No.
III I
ally us
selected

 | ogica
No.
III I
ally us
selected

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No.
III I
ally us
selected | ogica
No.
III us
selected
 | ogica
No.
III us
selected | ogica
No.
III u
Ily us
selected | ogica
No.
III u
Ily us
selected | ogica
No.
III u
Ily us
selected | ogica
No.
III u
Ily us
selected | ogica
No.
III u
Ily us
selected | ogica
No.
III u
Ily us
selected | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
III u
Ily us
selected | ogica
r No.
u u
ally u
lly us
selecte | ogica
r No.
u u
ally u
lly us
selecte
 | ogica
r No.
u u
ally u
lly us
selecte | ogica
No.
III I
ally us
selected | ogica
No.
III I
ally us
selected | ogica
No.
III us
selected | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogic
No | οgic
ΓΝα
ally
Ily τ
sele |
| og
⊺ N
⊥
Ily
se

 | ogic
Nc | ogica
No.
III
ally u
lly us
selected | ogic
No
ally
uly
sele | ogic
Nc | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ogic:
No
 | ogica
No
ally us
select | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.
I I
ally u
lly us
selec
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ι
οgic
ΓΝα
ally
ι
sele
elec |
| og
⊺ N
⊥
Ily
se

 | ogic
Nc | ogica
No.
III
ally u
lly us
selected | ogic
No
ally
uly
sele | ogic
Nc | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ogic:
No
 | ogica
No
ally us
select | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.
I I
ally u
lly us
selec
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ι
οgic
ΓΝα
ally
ι
sele
elec |
| og
⊺ N
⊥
Ily
se

 | ogic
Nc | ogica
⁻ No.
⊥ ⊥
ally u
lly us
selecte | ogic
No
ally
uly
sele | ogic
Nc | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ogic:
No
 | ogica
No
ally us
select | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.
I I
ally u
lly us
selec
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte
 | ogica
⊺ No.
⊥ ⊥
ally u
lly us
selecte | ogica
No. | ogica
No. | ogic
No | ι
οgic
ΓΝα
ally
ι
sele
elec |
|

 | ogic
Nc | ogica
⁻ No.
L L
ally u
ly us
selecte | ogic
No
ally
u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogic
No | ogic:
No
 | ogica
No | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
<u>I</u> II us
Ily us
selecte

 | ogica
⁻ No.
<u>I</u> II us
Ily us
selecte

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
⁻ No.
<u>I</u> II us
Ily us
selecte | ogica
⁻ No.
<u>I</u> I
ally u
ly us
selecte | ogica
⁻ No.
<u>I</u> I
ally u
ly
us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte
 | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte |
ogica
⁻ No.
<u>I</u> II us
Ily us
selecte | ogica
⁻ No.
<u>I</u> II us
Ily us
selecte | ogica
⁻ No.
<u>I</u> I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
⁻ No.
I I
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No.
 | ogic
No | ally u |
| og
I
ally
Iy
se

 | ogic
Nc
I
ly u
sele
elec | ogica
⁻ No.
I I
ally u
ly us
selecte | ogic
No
ally
Iy u
sele | ogic
Nc | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogic
No
I
ly u
sele
elec | I
No
I
I
Iy us
select
 | ogica
No | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte | ogica
No. | ogica
No. | ogica
⁻ No.
<u>I I</u>
ally u
ly us
selecte
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | I
ogic
No
I
ly u
sele
elec | ogic
No
ally
ly u
sele
 |
|

 | ogic
Nc
I
ly u
sele | ogica
No. | ogic
No
IIII
Iy u
sele | ally usele | i i
ogica
No.
I I
ally u
ly us
selec | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ally us | ally
sele
elec | ı
Sogic:
No
Ily u
selec
 | ally us | i i
ogica
No.
I I
ally u
ly us
selec | ogica
No. | ogica
No. | ogica
No. | ally us
 | ogica
No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ally us | i
Sogic
No
I
Iy u
sele
selec | ally
selected |
|

 | ogic
No
Illy
y u
sele | ogica
No. | lly
y u
sele | lly
No
lly
y u
sele | I I I I I I I I I I I I I I I I I I I | No.
 | ogica
No. | ogica
No. | No. | No. | ogic
No | lilly u
 | No
No
Illy u
select | I I I I I I I I I I I I I I I I I I I | No. | No. | No. | No.
 | No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
Illy us
y use
selecte
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | No. | No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | No. | No. | ogica
No. | ogica
No. | ogica
No.
 | No. | No. | No. | ogic
No | nilly
No |
|

 | ogic
No
Illy
y u
sele | ogica
No. | lly
y u
sele | lly
No
lly
y u
sele | I I I I I I I I I I I I I I I I I I I | No.
 | ogica
No. | ogica
No. | No. | No. | ogic
No | lilly u
 | No
No
Illy u
select | I I I I I I I I I I I I I I I I I I I | No. | No. | No. | No.
 | No. | ogica
No. | ogica
No.

 | ogica
No.

 | ogica
No. | ogica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
Illy us
y use
selecte
 | ogical
No.
 | ogica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | No. | No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | No. | No. | ogica
No. | ogica
No. | ogica
No.
 | No. | No. | No. | ogic
No | nilly
No |
|

 | ogic
No
Illy
y u
sele | ogica
No. | lly
y u
sele | lly
sele | I
No.
Illy u
select | I
No.
I
Illy u
selecte
 | n
Jogica
No.
Illy u
y us
selecte | no.
No. | no.
No. | No. | ogic
No | illy uselect
 | No
No
Illy u
select | I
No.
Illy u
select | I
No.
Illy u
selected | I
No.
I
Illy u
selecte | I
No.
I
Illy u
selecte | llly u
select
 | I
No.
I
Illy u
selecte | n
Jogica
No.
Illy u
y us
selecte | ogica
No.

 | ogica
No.

 | ygica
No. | ygica
No. | ogical
No. | ogical
No. | ogical
No. | ogical
No.
 | ogical
No.
 | ygica
No.

 | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | ogica
No. | n
Jogica
No.
Illy u
y us
selecte | I
No.
Illy u
selected | I
No.
Illy u
selected | n
Jogica
No.
Illy u
y us
selecte
 | n
Jogica
No.
Illy u
y us
selecte | ogica
No. | ogica
No. | ogica
No. | ogica
No.
 | ogica
No. | ogica
No. | ogica
No. | I
No.
Illy u
selected | I
No.
Illy u
selected | n
Jogica
No.
Illy u
y us
selecte | n
Jogica
No.
Illy u
y us
selecte | n
Jogica
No.
Illy u
y us
selecte | I
No.
Illy u
selected | I
No.
Illy u
selected | No.
 | ogic
No | lly
y u
sele |
|

 | lly
Nc | lly u
y us
electe | illy
July
July
July
July
July
July
July
J | lly
y u
elec | Ily uselect | I
No.
Ily u
y us
electe
 | I
No.
Ily u
y us
electe | lly u
velection | Ily u
velection | igica
No. | lly
No | ingica
No
 | ogica
No
Illy u
selec | Ily uselect | Ily u
velection | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | Ily uselect
 | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | ingica
No.
Ily us
y use
selecte

 | ingica
No.
Ily us
y use
selecte

 | ingica
No.
Ily use
selecte | ingica
No.
Ily use
selecte | ingical
No. | ingical
No. | ingical
No. | gical
No.
 | ingical
No.
 | ingica
No.
Ily use
selecte

 | ingica
No.
Ily us
y use
selecte | Ily u
y us
electe
 | Ily u
y us
electe | lly u
y us
electe | I
No.
Ily u
y us
electe | Ily u
velection | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe
 | Ily u
y us
electe | Ily u
y us
electe | Ily u
y us
electe | Ily u
y us
electe | ingica
No.
Ily us
y use
selecte | ingica
No.
Ily us
y use
selecte
 | Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | I
No.
Ily u
y us
electe | Ily u
velection | lly uselect | lly
No
 | Ily
y u |
|

 | lly
ele | gica
No.
Ily u
y us
electe | igic
No
Ily
y u
ele | igic
No
Ily
y u
ele | Ily uselect | I
Ily u
election
 | gica
No. | igica
No.
Ily u
y us
election | Ily u
election | igica
No.
Ily u
elec | lly
No | Ily u
election
 | igica
No
Ily u
elec | Ily uselect | Ily u
election | I
Ily u
election | I
Ily u
election | Ily uselect
 | I
Ily u
election | gica
No. | gica
No.
Ily us
g us
elect

 | gica
No.
Ily us
g us
elect

 | igica
No.
Ily us
y use
electe | igica
No.
Ily us
y use
electe | igical
No. | igical
No. | igical
No. | gical
No.
 | igical
No.
 | igica
No.
Ily us
y use
electe

 | gica
No.
Ily us
g us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No. | Ily u
election | I
Ily u
election | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily us
g us
elect | gica
No.
Ily us
g us
elect | gica
No.
Ily u
y us
electe | I
Ily u
election | I
Ily u
election | gica
No. | gica
No. | gica
No.
 | I
Ily u
election | Ily u
election | Ily uselect | lly
No | lly
y u
elec |
|

 | gic
Nc
Ily
/ u
ele | gica
No. | gic
No
Ily
/ U
ele | gic
No
Ily
/ u
ele | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
Ily u
elec | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No.

 | gica
No.

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
/ us
electe | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gic
No
 | gia
Na
Ily
/ L
ele |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly us
r usr
electe | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly us
r usr
electe | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly us
r usr
electe | gica
No.
ly us
r usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
r usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
elect
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
elect
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
ly
/ u
ele | gica
No.
ly u
/ us
electe | gic
No
ly
/ u
ele | gic
No
Iy
/ u
ele | gica
No. | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gica
No. | gic
No | gic:
No
 | gica
No
ly u
elec | gica
No. | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
elect
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly u:
/ usr
electe

 | gica
No.
ly us
v use
elect | gica
No.
ly us
v use
elect | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.
ly us
v use
elect

 | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
ly u
/ us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe
 | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
Iy u
/ us
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u:
/ usr
electe | gica
No.
ly u
/ us
electe
 | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No.
Iy u
v us
electe | gica
No. | gica
No. | gic
No | gia
Na
Iy
/ L
ele
 |
|

 | gic
Nc
Ily
/ u
ele | gica
No. | gic
No
Ily
/ U
ele | gic
No
Ily
/ u
ele | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gic
No | gica
No
 | gica
No
Ily u
elec | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No.

 | gica
No.

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
/ us
electe | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No.
 | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No.
Ily u
/ us
electe | gica
No. | gica
No.
 | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gica
No. | gic
No
 | gia
Na
Ily
/ L
ele |
|

 | gic
Nc
Ily
y u
ele
lec | gica
No.
Ily u
y us
electe | lly
elec | lly
ele | gica
No.
Ily u
elect | gica
No.
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
elect | gica
No. | gica
No.
Ily u
g us
elect | gic
No | gic:
No
 | gica
No
Ily u
g us
elec | gica
No.
Ily u
elect | gica
No.
Ily u
y us
election | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily us
y us
elect

 | gica
No.
Ily us
y us
elect

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
election | gica
No. | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily us
y us
elect | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe | gica
No. | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No. | gica
No.
Ily u
y us
election | gica
No.
 | lly
No | lly
y u
elec |
|

 | gic
Nc
Ily
y u
ele
lec | gica
No.
Ily u
y us
electe | lly
elec | lly
ele | gica
No.
Ily u
elect | gica
No.
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
elect | gica
No. | gica
No.
Ily u
g us
elect | gic
No | gic:
No
 | gica
No
Ily u
g us
elec | gica
No.
Ily u
elect | gica
No.
Ily u
y us
election | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily us
y us
elect

 | gica
No.
Ily us
y us
elect

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
election | gica
No. | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily us
y us
elect | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe | gica
No. | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No. | gica
No.
Ily u
y us
election | gica
No.
 | lly
No | lly
y u
elec |
|

 | gic
Nc
Ily
y u
ele
lec | gica
No.
Ily u
y us
electe | lly
elec | lly
ele | gica
No.
Ily u
elect | gica
No.
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
elect | gica
No. | gica
No.
Ily u
elect | gic
No | gic:
No
 | gica
No
Ily u
g us
elec | gica
No.
Ily u
elect | gica
No.
Ily u
y us
election | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily us
y us
elect

 | gica
No.
Ily us
y us
elect

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
election | gica
No. | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily us
y us
elect | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe | gica
No. | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No. | gica
No.
Ily u
y us
election | gica
No.
 | lly
No | lly
y u
elec |
|

 | gic
Nc
Ily
y u
ele
lec | gica
No.
Ily u
y us
electe | lly
elec | lly
ele | gica
No.
Ily u
elect | gica
No.
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
elect | gica
No. | gica
No.
Ily u
elect | gic
No | gic:
No
 | gica
No
Ily u
g us
elec | gica
No.
Ily u
elect | gica
No.
Ily u
y us
election | gica
No. | gica
No. | gica
No.
 | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily us
y us
elect

 | gica
No.
Ily us
y us
elect

 | gica
No. | gica
No. | gical
No. | gical
No. | gical
No. | gical
No.
 | gical
No.
 | gica
No.

 | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
election | gica
No. | gica
No.
Ily u
y us
electe
 | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe
 | gica
No.
Ily us
y us
elect | gica
No.
Ily us
y us
elect | gica
No.
Ily u
y us
electe | gica
No. | gica
No. | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No.
Ily u
y us
electe | gica
No. | gica
No.
Ily u
y us
election | gica
No.
 | lly
No | lly
y u
elec |

Data = 13: Condition C Information + Billing Info / Call Metering Info.



Data = 14: Condition D Information + Bill Notification ATT CON Number







7.2.10 Text Format of SMDR - TCP/IP Interface

When using SMDR - TCP/IP interface, billing information is output to the billing output devices connected by an external LAN in the form of socket interface as shown in Figure 6-20.



Figure 6-20 SMDR—TCP/IP Interface Billing Output Devices

Details on the text format for SMDR - TCP/IP Interface are explained below.

(1) Identifier 1: Data Request Text

A text to be sent by the client when it requests the server to send billing data.

Parity	Device No.	Device No. Parity
--------	---------------	----------------------

Text sending direction: Client \rightarrow Server

(2) Identifier 2: Sending Data Text

A text for sending billing data in response to "(1) Data Request Text" from the client.



Text sending direction: Client - Server

The number of billing data records is 64 or less.

(3) Identifier 3: Server Response Text

A text to be sent to the client when there is no billing data to send in response to "(1) Data Request Text" or as a response to a "(5) Status Monitoring Text."

S Y identifier (3) N	Device Response No. No.	Parity
----------------------------------	----------------------------	--------

Text sending direction: Client - Server

(4) Identifier 4: Client Response Text

A response text to be sent to the server by the client which has received the data by a "(2) Sending Data Text."

ACK/ NAK Parit	Se- quence No.	Device No.	Data length (00002)	Text identifier (4)	S Y N
-------------------	----------------------	---------------	------------------------	---------------------------	-------------

Text sending direction: Client \rightarrow Server

(5) Identifier 5: Status Monitoring Text

A text for use in monitoring the server status from the client's viewpoint or the client from the server's viewpoint. At the same time, the text is used to notify the server of the client status.



Text sending direction: Client \rightarrow Server

(6) Identifier 6: Connection Disconnect Text

A text to be sent from the client to the server to disconnect the connection. In response to this text, the server promptly performs processing to disconnect the connection.

|--|

Text sending direction: Client \rightarrow Server

8. TRAFFIC MANAGEMENT

To obtain the value of common equipment usage, the system provides traffic measurement feature. It can improve the system efficiency.

8.1 Kind of Traffic Measurement

Table 6-5 shows the kinds of traffic measurements.

TYPE	KIND OF MEASUREMENT	DESCRIPTION
1*	Terminal Traffic Measurement	Measurement of traffic on a per LENS basis, and measurement of the total traffic on a PIM basis.
2*	Route Traffic Measurement	Measurement of traffic on a per route basis.
3*	Station Peg Count	Measurement of the number of outgoing connections, intra-office calls, outgoing C.O. line calls, Tie Line calls, etc. originated by each station.

Table 6-5 Traffic Measurement Types

TYPE	KIND OF MEASUREMENT	DESCRIPTION
4*	ATTCON Peg Count	Measurement of the number of each type of call handled at theATTCON/ DESKCON.
5*	Route Peg Count	Measurement of the number of various types of call connections on a per route basis.
6	Service Peg Count	Measurement of the number of times the following services are operated: Call Hold Call Back Executive Right of Way Call Waiting Call Pickup - Group Call Pickup - Direct Call Forwarding - All Calls Call Forwarding - Busy Line Call Forwarding - Busy Line Call Forwarding - Don't Answer Speed Calling - System Speed Calling - System Speed Calling - Station Off-Hook Outgoing Trunk Queuing Outgoing Trunk Queuing Consultation Hold - All Call Call Transfer - All Calls Three-Way Calling
8	UCD Route Peg Count	Measurement of the number of incoming calls, answered calls, and abandoned calls handled at UCD Groups on a per route basis.
9	UCD Group Peg Count	Measurement of the number of incoming calls, answered calls and abandoned calls on a UCD Group basis.
10	UCD Station Peg Count	Measurement of the number of incoming calls, answered calls and abandoned calls for each station on a UCD Group basis.
15	ATT Answer Peg Count	Measurement of the number of answered calls handled by each attendant.
18	Connection Route Peg Count	Measurement of the number of various type of call connection on a connection route basis.
19	Connection Route Traffic	Measurement of traffic on a connection route basis.

Table 6-5 Traffic Measurement Types (Continued)

Note: Asterisk (*) identifies the traffic measurements that can be saved on the HD of the MAT.

8.2 Operating Procedure

1. Proce	edure for Set-up and Start
The	procedure to set up and start the traffic measurement is as follows:
<u>STEP 1</u>	By using the ASYD/ASYDN command, assign the necessary system data as follows:
ASYD	 When performing traffic measurement <i>on a node basis</i>: SYS1, INDEX8 (Number of Tenants) SYS1, INDEX9 (Number of Attendant Consoles) SYS1, INDEX47, bit 0 (Unit of Traffic Measurement): 0/1 = CCS/Erlang SYS1, INDEX47, bit 7 (Traffic Measurement Service): 0/1 = Out/In Service Assign "1."
ASYDN	 When performing traffic measurement <i>on a network basis (via TCP/IP)</i>: SYS1, INDEX8 (Number of Tenants) SYS1, INDEX9 (Number of Attendant Consoles) SYS1, INDEX47, bit 0 (Unit of Traffic Measurement): 0/1 = CCS/Erlang SYS1, INDEX47, bit 7 (Traffic Measurement Service): 0/1 = Out/In Service Assign "1."
<u>STEP 2</u>	By using the ATRF/ATRFN command, assign the traffic measurement programs as follows:
ATRF	When performing traffic measurement <i>on a node basis</i> : Assign traffic measurement "TYPE" (Note), "PORT" number to be used, and the output "INTERVAL" and "Time (HOUR/MINUTE)," etc. For more details, see the ATRF command in CHAPTER 8.
ATRFN	When performing traffic measurement <i>on a network basis (via TCP/IP)</i> : Assign traffic measurement "TYPE" (Note), "PORT" number to be used, and the output "INTER- VAL" and "Time (HOUR/MINUTE)," etc. For more details, see the ATRF command in CHAP- TER 8.
Note:	You can select one measurement "TYPE" at a time. If you need two or more measurement "TYPE," repeat the same steps, following the entry of this command.
STEP 3:	Terminate all the MAT commands.
	An image of IPX "MAT Menu" is shown in Figure 6-21. Terminate all MAT commands, and make sure no commands are currently running via the "Processes" button.
STEP 4:	Set the programmed Traffic Measurement in routine operation.
	Click the "Scan New Alarms/Traffic" and "Collect New Alarms" buttons on the IPX "MAT Menu" (confirm the clicked buttons remain in the pressed state). Then, the Traffic Measurement is activated as programmed.
END	



Figure 6-21 IPX "MAT Menu" Display Image (Example)

(2) Data Output - Details on DTFD/DTFDN Command

To obtain the collected Traffic data, you can use the "DTFxxx" or "DTFxxxN" command as shown below. The commands can be activated by your direct log-in operation onto the MAT, but in normal cases, the commands are to be activated automatically at predetermined intervals assigned by the ATRF/ATRFN command.

Also, each command below corresponds to the Traffic Measurement "TYPE" assigned by the ATRF/ATR-FN command.

When performing traffic measurement *on a node basis*:

	Measurement "TYPE" (by ATRF Command)	Command Name	Full Command Name
1	Terminal Traffic	DTF101	Display of Terminal Traffic Data
2	Route Traffic	DTF102	Display of Route Traffic Data
3	Station Peg Count	DTF103	Display of Station Peg Count Data
4	ATTCON Peg Count	DTF104	Display of Attendant Peg Count Data
5	Route Peg Count	DTF105	Display of Route Peg Count Data
6	Service Peg Count	DTF201	Display of Service Peg Count Data
8	UCD Route Peg Count	DTF301	Display of UCD Route Peg Count Data
9	UCD Group Peg Count	DTF302	Display of UCD Group Peg Count Data
10	UCD Station Peg Count	DTF303	Display of UCD Station Peg Count Data
15	ATT Answer Peg Count	DTF501	Display of Attendant Answering Peg Count Data
18	Connection Route Peg Count	DTF601	Display of Connection Route Peg Count Data
19	Connection Route Traffic	DTF602	Display of Connection Route Traffic Data

When performing traffic measurement *on a network basis (via TCP/IP)*:

Measurement "TYPE" (by ATRFN Command)		Command Name	Full Command Name
1	Terminal Traffic	DTF101N	Display of Terminal Traffic Data for Fusion Network
2	Route Traffic	DTF102N	Display of Route Traffic Data for Fusion Network
3	Station Peg Count	DTF103N	Display of Station Peg Count Data for Fusion Network
4	ATTCON Peg Count	DTF104N	Display of Attendant Peg Count Data for Fusion Network
5	Route Peg Count	DTF105N	Display of Route Peg Count Data for Fusion Network
6	Service Peg Count	DTF201N	Display of Service Peg Count Data for Fusion Network
8	UCD Route Peg Count	DTF301N	Display of UCD Route Peg Count Data for Fusion Network
9	UCD Group Peg Count	DTF302N	Display of UCD Group Peg Count Data for Fusion Network
10	UCD Station Peg Count	DTF303N	Display of UCD Station Peg Count Data for Fusion Network
15	ATT Answer Peg Count	DTF501N	Display of Attendant Answering Peg Count Data for Fusion Network
18	Connection Route Peg Count	DTF601N	Display of Connection Route Peg Count Data for Fusion Network
19	Connection Route Traffic	DTF602N	Display of Connection Route Traffic Data for Fusion Network

Note: For information on the command display images, see Figure 6-22, Figure 6-23, and Figure 6-24.



Figure 6-23 shows a sample image of the "Listup Report" window for the DTFD/DTFDN command. This window appears by taking the following operations, and is used to obtain a sequence of Traffic data, so far collected and stored in the database. The window is also used to save the Traffic data text (now displayed in the window) onto your desired PC directory.

- To activate this window:
- 1. Designate a specific "Traffic Data" TYPE out of the DTFD/DTFDN command check boxes. (see Figure 6-22).
- 2. Press the "View Database" button on the left-bottom part of the DTFD/DTFDN command (see Figure 6-22).



Figure 6-23 "Listup Report" Window when "View Database" is Selected (Example)

The dialog box, as shown below, appears, if the "SaveText File" bu (see Figure 6-23 above). If the file is to be saved:	atton is selected on the "Listup Report" window
1. Select " <i>Character-separated values</i> " on the "Format" list box.	Format: Destination: Character.separated values
2. Select "Disk file" on the "Destination" list box.	
3. Click OK .	OK Cancel
After these steps, a new dialog, asking the saved file name and d filling out these necessary items.	lirectory, also appears. Then, complete the data saving by

Figure 6-24 "Export" Dialog for Traffic Report Text File Saving

- (3) Service Conditions (when performing Traffic Measurement via TCP/IP)
 - (a) The NDM (network-level) data for the traffic measurement order is replaced/updated, at each time the system is initialized or data change is requested from theATRFN command.
 - (b) When the network-level data is once assigned via the ATRFN command, the node-level data for ATRF command cannot be changed or modified.
 - (c) When the network-level data is once assigned via the ATRFN command, the already assigned data by the ATRF command is not cleared, but becomes ineffective.
 - (d) When a data transfer error occurs, the following are performed in order:
 - → Traffic measurement is suspended momentarily and system message is displayed (notification of fault)
 - → Traffic measurement, concerning all the remaining data except for the fault-involved one, is resumed
 - \rightarrow Retry is made repeatedly for the transfer of fault-involved data, until the fault has been eradicated
 - \rightarrow If the fault hasn't been eradicated still until the time of next measurement routine, the data is finally discarded, and next traffic measurement routine starts
 - (e) When the same Individual ATT Numbers exist on the network, the traffic measurement concerning the ATTCON/DESKCON cannot be performed correctly.

9. OFFICE DATA MANAGEMENT

This section explains how to manage various kinds of data such as Call Forwarding Data, Individual Speed Calling Data, and Office Data, etc.

9.1 Office Data Stored Locations

The office data is stored in the memory (MEM) and on the Hard Disk (HD). While the system is in service, it operates by the office data stored in the memory. Should the contents of the office data be destroyed due to trouble, the system restarts its operations by loading the office data from the hard disk into the memory. The office data of the system in operation is being backed up by the hard disk.

9.2 Office Data Preservation

Since the PBX keeps operating by the assigned office data, be sure to preserve the latest office data. If the office data is not preserved, all office data must be reassigned if the contents of the data memory have been destroyed, because of trouble occurrence, etc. The system will remain in a system down state until reassignment of the office data is complete.

Practice to verify and confirm the valid office data by routine maintenance is considered an effective means to prevent loss of the office data and occurrence of trouble due to the office data. For this reason, be sure to keep the following items near the system at all times so that they may be available when needed.

(1) Office Data Programming Sheets

As the most up-to-date data must be recorded in the sheets, be sure to make entries by pencil.

(2) Floppy Disks for Data Saving

To back up the office data stored on the HD, use floppy disks. The necessary number of Floppy Disks (FD) is determined by the following factors:

- Mounting capacity of office data depends upon the system data (SYS1, Index30).
- Each floppy disk can save 1MB of data. After a large-scale office data change, in particular which includes system data, unpredictable failures might occur. To deal with such failures, prepare an FD for saving the office data before the changing. In addition, prepare an FD for saving the latest office data.

9.3 Office Data Management Procedure

The procedure generally taken when changing the office data is shown below.



Figure 6-25 Office Data Change Procedure



Figure 6-26 Office Data Change Procedure

Figure 6-27 shows the function of three backup commands: HDD to FDD, HDD to MAT, and MEM to HDD.



Figure 6-27 Backup Commands

9.4 Call Forwarding Data/Individual Speed Calling Data Management

Call Forwarding Data and Individual Speed Calling Data are changed at any time because these services are set/cancelled from the station involved. In the PBX, these data are backed up by FD.

Call Forwarding Data: HDD_MAT command

Individual Speed Calling Data: HDD_MAT command

9.5 One-Touch Speed Call Memory Data Management

One-Touch Speed Call Memory data of D^{term} is destroyed when DLC/ELC circuit card has been replaced with a spare or its mounting slot has been changed. The data can be backed up onto FD before replacement or mounting slot change of DLC/ELC card.

Backup:

BOSD command

9.6 Data Management Commands

COMMAND	COMMAND FULL NAME
BOSD	One-Touch Speed Call Memory Data Backup
HDD_FDD	Data Control Between HDD and FDD
HDD_MAT	Data Control Between HDD and MAT
MEM_HDD	Data Control Between Memory and HDD

10. TEST OPERATIONS OF VARIOUS KINDS

This section explains the methods of test operations (shown in Figure 6-28) to be performed in case a fault recovery occurs.



Figure 6-28 Test Operation Method Examples

10.1 Designated Connection Test (Station)

(1) General

The purpose of this test is to confirm the operations related to a trunk or tone that is designated from the test station. Refer to Table 6-6. The test result displays on the MAT screen as system message [6-I].

ITEM	TEST ITEM	CONTENT OF CONFIRMATION	REMARKS
1	Register (ORT/IRT)	Whether the dialed numbers (1, 2, 3, 4, 5, 6, 7, 8, 9, 0, *, #) can be received correctly is to be confirmed.	
2	Sender	Whether the numbers $(1, 2, 3, 4, 5, 6, 7, 8, 9, 0, *, #)$ can all be sent out is to be confirmed.	
3	3-Party Conference Trunk	By connecting the test tone to each port of a 3-Party Conference Trunk, whether the test tone can be heard is to be confirmed.	
4	Tone	Various kinds of tone are to be confirmed.	
5	Interrupted Ringing (IR)	Interrupt ringing (IR) is to be confirmed.	
6	Trunk	Connections of trunks are to be confirmed.	

Table 6-6 Designated Connection Test (Station) Operations

(2) Precaution

Designated connection to a trunk—A designated connection to trunk is limited only to an individual line of either 2nd DT system or sender system.

- (3) Designated Connection Test Procedure
 - (a) Register Test Procedure



Figure 6-29 Register Test Procedure/Connection Diagram

(b) Sender Test Procedure



Figure 6-30 Sender Test Procedure/Connection Diagram
(c) 3-Party Conference Trunk Test Procedure



Figure 6-31 3-Party Conference Test Procedure



Figure 6-32 3-Party Conference Test Connection Diagram

(d) Tone Test Procedure



Figure 6-33 Tone Test Procedure/Connection Diagram

TONE NO.	KIND OF TONE	REMARKS
00	Dial Tone (DT)	
01	Special Dial Tone (SPDT)	
02	Ring Back Tone (RBT)	
03	Continuous Ring Back Tone (CRBT)	
04	Busy Tone (BT)	
05	Reorder Tone (ROT)	
06	Service Set Tone (SST)	
07	Second Dial Tone (SDT)	
08	No Tone	
09	Sender Transmitting Tone (SDTT)	
10	Call Waiting Ring Back Tone (CWRBT)	
11	No Tone	
12	No Tone	
13	Test Tone (TSTT)	
14	Music On Hold (MSC)	
15	No Tone	

(e) Interrupt Ringing (IR) Test Procedure



Figure 6-34 Interrupt Ringing (IR) Test Procedure/Connection Diagram

(f) Trunk Test Procedure



Figure 6-35 Trunk Test Procedure



Figure 6-36 Trunk Test Connection Diagram

10.2 Designated Connection Test (DESKCON/ATTCON)

(1) General

The purpose of this test is to confirm the operations related to a trunk which has been designated from the Desk/Attendant Console (DESKCON/ATTCON).

- (2) Test Procedure
 - (a) Trunk seizure with TKSL key



(b) Trunk seizure by access code dialing



10.3 Bad Call Notification

(1) General

When a station user has trouble because of hearing noise during a call, or has other difficulty having a normal call, the line involved is recorded as a bad call notification.

The record displays on the MAT screen as system message [6-H], which indicates the recording source (Station Number), Called Station Number or Trunk Number, etc.

(2) Operating Procedure



11. ROUTINE DIAGNOSIS

For confirming its own servicing status, the system automatically executes self diagnosis every day, and displays the result of the diagnosis on a system message. By this function, possible causes for trouble can be discovered in an early stage and possible trouble can be prevented from remaining undetected.

11.1 Related System Data

- ASYD, SYS1, INDEX86,
 - b0 When routine diagnosis starts, and the result of the routine diagnosis is normal, the result displays as system message [7-O].

0/1: Not displayed/To display

b1 – When the result of the routine diagnosis is abnormal, it displays as system message [7-P].
 0/1: Not displayed/To display

b3, b2 - Processing at the time when Trunk Ineffective Hold is detected. Note

Bit Except the trunks being held on two-way calls (station-to-station call, station-to-trunk, trunk-		Except the trunks being held on two-way calls (station-to-station call, station-to-trunk, trunk-	All trunks being held at present are forcibly	LENS of the trunk detected display as system message
b3	b2	to-trunk call), the trunks being held at present are forcibly released	released	[7-P]
0	0	Х	_	Х
0	1	—	—	Х
1	0	—	Х	Х

- **Note:** Trunk Ineffective Hold is a continuous state other than idle state within a predetermined duration while routine diagnosis is in progress. Whether it is to be detected/not detected is assigned by ASYD, SYS1, INDEX89.
 - SYS1, INDEX87, 88 Routine Diagnosis Start Time

Start time should be such a time at which the traffic of the office is the lowest.

INDEX 87	0	2	(Hour)	2:00 a.m. is the start time.
INDEX 88	0	0	(Minute)	

To stop the routine diagnosis, set FF respectively to INDEX87, 88.

- SYS1, INDEX89, 90 Routine Diagnosis Items: The item corresponding to each bit is to execute once a day.
- Single System Configuration

٠

INDEX89	b0 — Main Memory Check (MM Program Memory) 0/1 = No/Yes
	b1 — DM Check (DM = Data Memory) 0/1 = No/Yes
	b4 — Trunk Ineffective Hold Check 0/1= No/Yes
	b5 — Trunk Ineffective Hold Detection 0/1 = No/Yes
INDEX90	b1 — Backup of Call Forwarding, Individual Speed Data, Name Display Data, User Assign Soft Key Data and Number Sharing Data to HDD (see Index 304) 0/1 = No/Yes
	b3 — Residual Link Detection 0/1 = No/Yes
INDEX304	b0 — Individual Speed Calling Data Saving 0/1 = Out/In Service (This data is valid when SYS1, INDEX90, b1=1)
	 b1 — Call Forwarding Data Saving 0/1 = Out/In Service (This data is valid when SYS1, INDEX90, b1=1)
	b3 — Name Display Data Saving 0/1 = Out/In Service (This data is valid when SYS1, INDEX90, b1=1)
	b4 — User Assign Soft Key Data Saving 0/1 = Out/In Service (This data is valid when SYS1, INDEX90, b1=1)
	b5 — Number Sharing Data Saving 0/1 = Out/In Service (This data is valid when SYS1, INDEX90, b1=1)
Dual System	Configuration
INDEX89	b0 — Main Memory Check (MM Program Memory) 0/1 = No/Yes
	b1 — DM Check (DM = Data Memory) 0/1 = No/Yes
	b2 — TSW ACT/STBY Changeover for Dual Systems 0/1 = No/Yes
	b3 — CPU ACT/STBY Changeover for Dual Systems 0/1 = No/Yes
	b4 — Trunk Ineffective Hold Check 0/1 = No/Yes
	b5 — Trunk Ineffective Hold Detection 0/1 = No/Yes

b6 — Call Forwarding Data Clear (See Index 232) 0/1 = No/YesINDEX90 b1 — Backup Call Forwarding, Individual Speed Data and Name Display Data to HDD (see Index 304) 0/1 = No/Yesb3 — Residual Link Detection 0/1 = No/YesINDEX304 b0 — Individual Speed Calling Data Saving 0/1 =Out/In Service (This data is valid when SYS1, INDEX90, b1=1) b1 — Call Forwarding Data Saving 0/1 =Out/In Service (This data is valid when SYS1, INDEX90, b1=1) b3 — Name Display Data Saving 0/1 =Out/In Service (This data is valid when SYS1, INDEX90, b1=1) b4 — User Assign Soft Key Data Saving 0/1 =Out/In Service (This data is valid when SYS1, INDEX90, b1=1) b5 — Number Sharing Data Saving 0/1 =Out/In Service (This data is valid when SYS1, INDEX90, b1=1)

11.2 Routine Diagnosis Result

The result of routine diagnosis displays as a system message.

Normally ended: [7-O]

|--|

In case an abnormality is detected, initiate necessary processing explained in Chapter 5.

12. SYSTEM CONTROL PROCEDURES

Although the system is remarkably maintenance free, maintenance technicians occasionally may confront a situation in which they have to manually control the system. This chapter describes system control procedures focusing on the following four items.

- Changeover/Make-busy/Make-busy Cancel of Equipment
- Initialization
- How to Turn On/Off the Whole System
- System Start-up
- **Note:** Changeover of equipment is available for common control equipment, which is provided in a dual configuration.

12.1 Changeover/Make-Busy/Make-Busy Cancel of Equipment

12.1.1 General

This section explains system operations which are necessary for Changeover/Make-Busy/Make-Busy Cancel of equipment dividing them into the following two blocks.

- CPU Block
- Switching Block (TSW, PLO)

Prior to performing these operations, see Figure 6-37 through Figure 6-47 to obtain general understanding on the system configuration.

Figure 6-37 shows a general block diagram of a dual-configuration system. Referring to the diagram, confirm the routes to be affected by any of the following operations:

- CPU Changeover: The ACT/STBY of CPU can be changed over by using the CMOD command or operating the MBR key on the CPU front panel. If the system of CPU is changed over, the ACT/STBY of GT (in TSWM), as well as of the belonging ISAGT and LANI, are also changed over.
- **Note:** The changeover of CPU can be performed by operating the CPU SEL key on the EMA (PH-PC40) card. However, this method is not normally used except in cases of unavoidable circumstances. Refer to Section 12.1.2, How to Control CPU Block.
 - Speech Path Changeover:The ACT/STBY of Speech Path System can be changed over by using the
CMOD command or operating the MBR key on the active GT circuit card.
If the system of Speech Path is once changeover, all the TSW, DLKC, and
MUX in the same switching block are also totally changed over.

PLO Changeover:

Though PLO is included in the switching block together with the TDSW, MUX, and DLKC, its ACT/STBY changeover should be performed independently by operating the MB key on the card. The changeover of PLO does not affect any other systems.



Figure 6-37 Switching Network General Block Diagram

To perform the ACT/STBY system changeover, check the lamp indicators shown in Figure 6-38, and then operate the related key.

- **Note 1:** *LED indications cited in Figure 6-38 are only an example. The indicating pattern (ON/Flash/OFF) can differ, depending on each system setting.*
- **Note 2:** STATUS 7-seg. LED provides information on ACT/STBY status of the belonging CPU. For details on the LED's checking method, refer Figure 6-41.



Figure 6-38 How to Check LEDs and SW Keys for System Changeover (IMG0)

To perform ACT/STBY system changeover, check the lamp indicators shown in Figure 6-39, and then operate the related key.

Note: *LED indications cited in Figure 6-39 are only an example. The indicating patterns (ON/Flash/OFF) can differ, depending on each system setting.*



Figure 6-39 How to Check LEDs and SW Keys for System Changeover (IMG1)

CHAPTER 6 Page 458 Issue 1

To perform the ACT/STBY system changeover, check the lamp indicators shown in Figure 6-40, and then operate the related key.





Figure 6-40 How to Check LEDs and SW Keys for System Changeover (IMG2/3)

• How to check the STATUS 7-segment LEDs

The ACT/STBY status of CPU can be confirmed by viewing the STATUS 7-segment LEDs. Visually check the LED indications and confirm which CPU is active in your system.

When the STATUS LEDs display any of the two-digit numbers (00 - 99), the belonging CPU is active. If the LEDs display the three letters (S, B and Y) in rotation, the CPU system is in STBY mode. Note that the numbers (00 - 99), displayed on the active CPU front panel (DSP), conform to the percentage points showing CPU occupancy rate.



Figure 6-41 How to Check STATUS LEDs

Note: Except for the indication of the STATUS 7-segment LEDs, the ACT/STBY of the CPU also can be confirmed via the lamps on the DSP. If the CPU OPE lamp light steady-green and IMG0-3 are flashing, the CPU is active. If CPU OPE appears OFF and IMG0 is flashing, the CPU is in STBY mode.

12.1.2 How to Control CPU Block

The CPU, when it is provided in a dual configuration, can be switched over by one of the operations shown in Table 6-8. If the system of CPU is changed over, the ACT/STBY of GT (in TSWM) also changes over.



TYPE	OPERATIONS	REMARKS	
Changeover by	Use the CMOD command.	CPU OPE lamp	
Note 1	See Chapter 8.	on the DSP of the	
Changeover by key operation Note 1	Turn ON the MBR key on the active DSP of the active CPU. After a few seconds, return the MBR key to the previous position. See Section 12.1.3, Manual System Changeover of CPU.	by this operation. OPE/MB lamp of	
Forced Changeover Note 2	ACT/STBY mode of CPU can be controlled by CPU SEL key operation on the EMA (PH-PC40) card. UP: No. 0 system (ACT) DOWN: No. 1 system (ACT) Normally, this key must be placed in the center position when the CPU is provided in a dual configuration. See Section 12.1.4, Forced Changeover of CPU.	GT (PH-GT09) card, which is in the controlling route, lights green.	

Table 6-8 Changeover of CPU Block

- **Note 1:** *While changeover of the CPU is in progress, any call attempt is rejected. Already established calls, however, will not be affected.*
- **Note 2:** When the forced changeover is executed, the entire system is initialized. For this reason, do not use this operation except in unavoidable circumstances.

Figure 6-42 shows a system block diagram centering upon the CPU and its controlling GT. Though the two sides have a complicated cable connection, the controlling route of CPU 0 directly goes to GT 0, and that of CPU 1 to GT 1. Therefore, if the system of CPU is changed over, the ACT/STBY of GT also changes over.

Because the ACT/STBY changeover of CPU also affects the GT status, the MBR key on the GT card is not used for GT system changeover. The key is used to switch over the Speech Path System, involving the TSW, DLKC, and MUX circuit cards. Refer to Section 12.1.6, Manual System Changeover of Speech Path System.



external cable is physically connected between ISAGT #0 and GT#1, the actual control signal is sent/received only between ISAGT 0 and GT 0. This is because GT 0 and GT 1 have a multiple connection on the backboard side.

Figure 6-42 System Block Diagram (Switching Network Between CPU and GT)

12.1.3 Manual System Changeover of CPU

To change over the CPU system, the CMOD command is normally used. However, if the command cannot be used for some reason, use the key operations listed below:

Note: For system changeover via the command, see Chapter 8.

STEP 1 Determine which CPU is active.

(1) Check the lamp indications. Refer to Figure 6-43 and Table 6-8.

DSP (Front View)		
MBR CPUOPE WDT IMGO	MBR CPUOPE WDT IMGO MBR CPUOPE WDT IMGO MG1 IMG2 IMG3 MG1 IMG3 MG3 MG1 IMG3 MG3	
Active	ST-BY	
☆: Lamp is ON	☆ : Lamp is Flashing ● : Lamp is OFF	

Figure 6-43 CPU in ACT/STBY Mode

The CPU changeover also affects the ACT/STBY of GT in the TSWM. Refer to Figure 6-44 for more information, also check the lamp indications on the GT (PH-GT09) card.



Figure 6-44 GT in ACT/STBY Mode

WARNING Improper key operations may result in a system down. Operate the related keys, applying extreme care.

- (2) Check the mate CPU's STBY mode. Also check the mate GT's STBY mode. Refer to Figure 6-43 and Figure 6-44.
- **WARNING** The system changeover of CPU can be done only when the mate CPU is in STBY mode. Do not attempt the changeover if the mate CPU is closed.

STEP 2 Flip the MBR key on the DSP of the active CPU. Refer to Figure 6-45.



Figure 6-45 CPU Changeover via MBR Key

- **Note:** If the MBR key remains in the UP position, the CPU stays in its make-busy status. Be sure to return the key to the DOWN position except in the case of a special purpose.
 - STEP 3 Confirm the changed lamp indications.

To confirm the CPU changeover, check the lamps in Figure 6-46 on both DSPs. LED indications must change as shown when the CPU system has been correctly changed over.

CPU Formerly Act	tive	After (Changeover
Г — — — — — – СРU ОРЕ	: Steady-ON (green)	>	– – – – – – – OFF – –
IMG0	: Flash (green)	→	Flash (green)
IMG1-3	: Flash (green)	→	OFF
MB/OPE (GT Card)	: Steady-ON (green)	►	OFF
L			J
CPU Formerly in STBY	′ Mode	After (Changeover
		>	– – – – – – – Steady-ON (green)
IMG0	: Flash (green)	→	Steady-ON (green)
IMG1-3	: OFF	►	Flash (green)
MB/OPE (GT Card)	: OFF	—	Steady-ON (green)
1		-	1

Figure 6-46 LED Indications Before and After CPU Changeover

STEP 4 Analyze the displayed system messages.

After STEPs 1 through 3 are performed, the system messages [7-C] and [7-D] automatically display. Confirm that no errors occurred during the CPU changeover process.

Note: When the CPU mode change executes, the MAT (TCP/IP) is once disconnected. Then, log in to the system again.

12.1.4 Forced Changeover of CPU

Figure 6-47 shows how to perform the forced changeover of CPU by key operation on the EMA (PH-PC40) card. Because the key operation will cause the entire system to initialize, do not rely on this method except as a last resort.





Figure 6-47 Forced CPU Changeover

12.1.5 How to Control Switching Block

The Switching Block denoted here includes the following system equipment:

- TSW (PH-SW12)
- MUX (PH-PC36)
- DLKC (PH-PC20)
- PLO (PH-CK16/17/16-A/17-A)

Perform the required system changeover by using the CMOD command or by operating the relevant key on the GT/PLO card. Refer to Table 6-9.

Туре	Operations	Remarks
Speech Path Changeover by the CMOD command	Use CMOD command.	All OPE or ACT lamps on the Speech Path System, which were formerly active, go OFF.
Note	See Chapter 8.	All OPE or ACT lamps on the Speech Path System, which were formerly STBY, light steady- green.
Speech Path System Changeover by Key Operation on the active GT card	On active GT card, turn MBR key UP. Return MBR key to original position (DOWN) after OPE/MB lamp goes OFF on GT card.	All OPE or ACT lamps on the Speech Path System, which were formerly active, go OFF.
Note	See Section 12.1.6, Manual System Changeover of Speech Path System.	All OPE or ACT lamps on the other side Speech Path System, light steady-green.
PLO Changeover by Key Operation	On active PLO card, turn MBR key UP.	ACT lamp on the PLO card, which was formerly active goes OFF
	Return MB key to original position (DOWN) after ACT lamp goes OFF on PLO card.	ACT lamp on the PLO card, which was formerly STBY, goes steady-
Note	of PLO.	green.

Table 6-9 Changeover of Switching Block

Note: These operations cause a momentary interruption in speech paths. Since the interruption is momentary, it can be ignored as far as ordinary telephone calls are concerned. However, care should be take when data communications are involved, as the interruption might cause bit errors.



12.1.6 Manual System Changeover of Speech Path System

To changeover the ACT/STBY of Speech Path System, the CMOD command is normally used. However, if for some reason the command cannot be used, use the key operations listed below.

- Note 1: As explained in this section, the ACT/STBY of the Speech Path System can be changed over via the MBR key on the GT (PH-GT09) card. Because each GT (GT0 and GT1) can control both the Speech Path System #0 an #1, perform the key operation on the active GT card, not on the card in STBY mode. Refer to Figure 6-48.
- Note 2: Figure 6-48 shows a system block diagram centering upon the GT and its controlling Speech Path System. By changing over the ACT/STBY of Speech Path System, all the related systems, such as TDSW/ INT, DLKC, and MUX, are totally switched over. The changeover can be executed by a key operation on the active GT card. If the MBR key is flipped on the active GT card, all the Speech Path-related systems (TSW/INT, DLKC, and MUX) in the same switching block are totally changed over. However, the ACT/STBY of GT and PLO is not affected.



Figure 6-48 System Block Diagram (Switching Network for Speech Path System)

- STEP 1 Make sure the active Speech Path System.
 - (1) Check all the lamp indications in Figure 6-49, which are in the same switching block.



Figure 6-49 TSW/DLKC/MUX in ACT Mode

- **Note:** Because this 4-IMG uses multiple TSW and MUX cards, be sure to check all the circuit cards concerned, which are in the same Switching Block. For example, if your system adopts the fully expanded system, you must check a total of 4 TSW cards and a total of 16 MUX cards in this step.
 - (2) Make sure the STBY mode of mate Speech Path System. Check all the lamp indications in Figure 6-50, which are in the same Switching Block.
- **WARNING** The ACT/STBY of Speech Path System can be changed over only when the mate system is in STBY mode. Do not attempt the changeover if the mate Speech Path System is closed.



Figure 6-50 TSW/DLKC/MUX in STBY Mode

- **Note:** Because this 4-IMG uses multiple TSW and MUX cards, be sure to check all the circuit cards concerned, which are in the same Switching Block. For example, if your system adopts the fully expanded system, you must check a total of 4 TSW cards and a total of 16 MUX cards in this step.
- WARNING Improper key operations may result in a system down. Operate the related keys, using extreme care.





Figure 6-51 Speech Path System Changeover via Active GT MBR Key

- **Note:** If the MBR and MB keys are turned ON (UP), the GT card is forcibly placed in a make-busy status. Therefore, do not operate the MB key by mistake. Also, after the MBR key is flipped, be sure to return the key to the original position (DOWN).
 - STEP 3 Confirm the changed lamp indications.
 - (1) To confirm the imposed Speech Path System changeover, check all the lamps on the cards shown in Figure 6-52, which are in the relevant switching blocks.



Figure 6-52 LED Indications Before and After Speech Path System Changeover

CHAPTER 6 Page 470 Issue 1

(2) If the system uses PH-CK16 or PH-CK17 as the PLO, make sure the active PLO and the newly activated TSW systems are in the same Switching Block. Refer to Figure 6-53.

Because this card's MUSIC ROM supplies hold tones only to the TSW cards that are in the same Switching Block, be sure to check the active PLO and the newly activated TSW systems are all in the same Switching Block. If not, perform the PLO changeover, referring to Section 12.1.7, Manual System Changeover of PLO.

Note: If the system has PH-CK16-A/PH-CK17-A card, this step is not required.



Figure 6-53 Check of Active PLO

STEP 4 Analyze the displayed system messages.

After STEPs 1 through 3 are performed, the system messages [7-E], [7-F], and [1-T] will automatically display. Confirm that no errors occurred during the Speech Path System changeover process.

12.1.7 Manual System Changeover of PLO

To change over the system of Phase Lock Oscillator (PLO), use the key operations listed below.

- **Note:** Though the PLO belongs to the Switching Block as explained in Section 12.1.5, its ACT/STBY Switching Network is separate from that of the Speech Path System. Therefore, the changeover of the PLO must be independently performed.
- WARNING Improper key operations may result in a system down. Operate the related keys, using extreme care.
 - STEP 1 Make sure the PLO system is active.
 - (1) When the PLO system is active, ACT or OPE lamp on the PLO card lights green. If the LED is OFF, the system is STBY mode.
 - (2) Check the mate PLO's STBY mode. Refer to Figure 6-54.
- **WARNING** The changeover of PLO system can be done only when the mate PLO is in STBY mode. Do not attempt the changeover if the mate PLO is closed.



Figure 6-54 PLO in ACT/STBY Mode





Figure 6-55 PLO Changeover via MB Key

- **Note:** If the MB key remains in the UP position, the PLO system also stays in its make-busy status. Be sure to return the key DOWN except in the case of a special purpose.
 - STEP 3 Confirm the changed lamp indications.
 - (1) To confirm the imposed PLO changeover, check the following lamps on both PLO cards. The LED indications must change as shown in Figure 6-56when the PLO system has been correctly changed over.



Figure 6-56 LED Indications Before and After PLO Changeover

(2) If your system uses PH-CK16/PH-CK17, make sure the active TSW cards and the newly activated PLO are in the same switching block.

Because this card's MUSIC ROM does not supply hold tones to the TSW cards which are in different Switching Blocks, make sure the newly activated PLO and currently active TSW cards are both in the same Switching Block. If not, perform the Speech Path System changeover, referring to Section 12.1.6.

Note: If the system uses PH-CK16-A/PH-CK17-A, this step is not required.

STEP 4 Analyze the displayed system messages.

After STEPs 1 through 3 are performed, the system messages [7-U] and [7-V] will automatically display. Make sure that no errors occurred during the PLO changeover process.

12.2 Initialization

12.2.1 General

This section explains the initialization types:

System Initialization

- System Initialization by Turning ON the Power Supply, Section 12.2.2
- System Initialization by Key Operations on the TOPU, Section 12.2.3 Procedure #1 through Procedure #5
- System Initialization by the keys on the CPU Front Panel, Section 12.2.4
- System Initialization by the SINZ Command, Section 12.2.5

Peripheral Equipment Initialization (Line/Trunk Initialization), Section 12.2.6

12.2.2 System Initialization by Turning ON Power Supply

This initialization executes when the power supply to the system has stopped. Follow the procedure in Table 6-10.



ACTION	REMARKS
Confirm all switches are turned OFF on PWR cards.	Refer to Section 12.3.
Power supply to the PBX is restored. Confirm input source power to the PBX is normal.	Check INPUT voltage is nor-
Turn ON power supply at PWR cards.	Refer to Section 12.3.
Execution of Initialization	
Confirm the following lamp indications: [CPU DSP#0] CPU OPE: steady-green IMG0-3: flash (green) [CPU DSP#1] IMG0: flash (green)	When initialization completes, ACT0 lamp lights green and ACT1 lamp goes OFF on EMA (PH-PC40) card.
Clear alarm by pressing ALM RST key on TOPU.	
Use ATIM command to adjust date and time.	

Table 6-10 System Initialization by Turning On Power Supply Procedure

12.2.3 System Initialization by Key Operations on TOPU

Table 6-11 shows the system initialization procedure. Figure 6-57 shows the initial program load conceptional diagram.

	ТҮРЕ	DESCRIPTION
Procedure #1 (Table 6-12)	System Initialization without Loading	Whole system is initialized. All communications are forcibly released. System restarts with current Main Memory Files and Office Data Files that exist on DRAM.
Procedure #2 (Table 6-13)	System Initialization with Office Data Loading	Whole system is initialized. All communications are forcibly released. System transfers Office Data Files from HDD to DRAM. System restarts with the transferred Office Data Files and the current Main Memory Files.
Procedure #3 (Table 6-14)	System Initialization with Program Loading	Whole system is initialized. All communications are forcibly released. System transfers Main Memory Files from HDD to DRAM. System restarts with the transferred Main Memory Files and the current Office Data Files.
Procedure #4 (Table 6-15)	System Initialization with Office Data and Program Loading	Whole system is initialized. All communications are forcibly released. System transfers both Main Memory Files and Office Data Files from HDD to DRAM. System restarts with the transferred Main Memory Files and the transferred Office Data Files.
Procedure #5 (Table 6-16)	System Initialization by Phase 1 Restart	System is initialized. All communications, except for the following two-way connections that have already been established, are forcibly released:
		 Basic two-way connections (STN-STN, STN-TRK, TRK-TRK)
		• Fixed connections
		• Two-way connections established on a Fusion Link
		Note 1: STN-ATT connection is not included in the two-way connection list cited above. These kind of calls are forcibly released once the initialization exe- cutes.
		Note 2: When a calling party hears the Ring Back Tone, the ORT is additionally provided, and the call is placed into the Dial Tone (DT) connection.

Table 6-11	Svstem	Initialization	Procedure Tv	pes
	0,0:0			200



Figure 6-57 Conceptional Diagram of Initial Program Load
SYSTEM OPERATIONS

To initialize the system, check the lamp indications in Figure 6-58, and operate the keys on PZ-DK222 (TOPU).



Figure 6-58 Related Keys and LEDs for System Initialization

NDA-24300

ACTION	7SEG LED/OPE LAMP/KEY SETTINGS
START	CPU OPE lamp on the DSP of active CPU lights steadily green. IMG0-3 lamps flash.
Turn ON the EFFECT key on the TOPU. (See Figure 6-58)	IMG0 lamp on the DSP of mate CPU flashes green.
 Set the keys on the TOPU as follows. PROGRAM KEY → NON LOAD SYSTEM DATA KEY → NON LOAD 	SYSTEM DATA PROGRM NON LOAD LOAD
Press INITIAL START button on the TOPU.	CPU OPE and IMGX lamps on both DSP go OFF.
• HD Initial	STATUS LED (right) on the CPU is ON.
System Initialization	STATUS LED (right) on the DSP of CPU is ON.
• System starts up again.	CPU OPE lamp on the DSP of active CPU lights steadily green. IMG0-3 lamps flash.
	IMG0 lamp on the DSP of mate CPU flashes green.
END	STATUS LED (right) on the DSP of active CPU is ON. (ON LINE)

Table 6-12 System Initialization Without Loading [Procedure #1]

ACTION		7SEG LED/OPE LAMP/KEY SETTINGS
STA Confirm system is	ART operating normally.	CPU OPE lamp on the DSP of active CPU lights steadily green. IMG0-3 lamps flash.
Turn ON the EFFECT key on	the TOPU. (See Figure 6-58)	IMG0 lamp on the DSP of mate CPU flashes green.
 ♦ Set the keys on the TOPU as follows. • PROGRAM KEY → NON LOAD • SYSTEM DATA KEY → LOAD 		SYSTEM DATA PROGRM NON LOAD LOAD NON LOAD NON LOAD
Press INITIAL STAR	F button on the TOPU.	CPU OPE and IMGX lamps on both DSP go OFF.
	• HD Initialization	STATUS LED (right) on the DSP of CPU is ON.
	Office Data Load	STATUS LED (right) on the DSP of CPU is ON.
	• System Initialization	STATUS LED (right) on the DSP of active CPU is ON.
	• System starts up again.	CPU OPE lamp on the DSP of active CPU lights steadily green. IMG0-3 lamps flash.
		IMG0 lamp on the DSP of mate CPU flashes green.
E	ND	STATUS LED (right) on the DSP of active CPU is ON. (ON LINE)

Table 6-13 System Initialization With Office Data Loading From HD [Procedure #2]



Table 6-14 System Initialization with Program Loading From HD [Procedure #3]



Table 6-15 System Initialization With Office Data And Program Loading From HD [Procedure #4]

ACTION	7SEG LED/OPE LAMP/KEY SETTINGS
Confirm system is operating normally.	CPU OPE lamp on the DSP of active CPU light steadily green. (IMG0-3 lamps flash.)
 ✓ Set the SENSE switch on the DSP of CPR to "3". ✓ Turn ON the EFFECT key on the TOPU. (See Figure 6-58) Set the keys on the TOPU as follows. • PROGRAM KEY → NON LOAD 	IMG0 lamp on the DSP of mate CPU flashes green.
• SYSTEM DATA KEY → NON LOAD Press INITIAL START button on the TOPU.	PZ-DK222 CPU OPE and IMGX lamps on both DSP go OFF.
HD Initialization System Initialization	STATUS LED (right) on the CPU is ON.
• System starts up again.	the DSP of CPU is ON. CPU OPE lamp on the DSP of active CPU lights steady green. (IMG0-3 lamps flash.)
	IMG0 lamp on the DSP of mate CPU flashes green.
END	the DSP of active CPU is ON. (ON LINE)

Table 6-16 System Initialization by Phase 1 Restart [Procedure #5]

SYSTEM OPERATIONS

12.2.4 System Initialization by Keys on CPU Front Panel

This initialization executes when the INITIAL key on the TOPU cannot be used. The CPU's active status must be confirmed before executing this type of initialization. Perform the procedure in Table 6-17.



Table 6-17 System Initialization by Keys on CPU Front Panel Procedure



NDA-24300

12.2.5 System Initialization by SINZ Command

The entire system can be initialized by execution of the SINZ command from the MAT, which is useful for maintenance technicians who have to control the system from a distant location. Perform the procedure in Table 6-18.



Table 6-18 System Initialization by SINZ Command Procedure

12.2.6 Peripheral Equipment Initialization (Line/Trunk Initialization)

Line/trunk initialization can be divided into two types: initialization on an individual channel basis and initialization on a circuit card basis. Follow the procedure in Table 6-19.





Table 6-19 Line/Trunk Initialization Procedure

12.3 How to Turn ON/OFF Whole System

A switching system, once put into service, is seldom stopped. However, there may be a case when a switching system must be stopped due to module expansion work, etc. In preparation for such a case, this section explains the procedure for stopping the system and turning ON the power supply.





Figure 6-59 How to Turn ON the Whole System

NDA-24300

SYSTEM OPERATIONS

12.3.2 How to Turn OFF Whole System

Confirm that the memory data has been backed up on the HD before turning OFF the system power. When turning OFF the power supply, follow the procedure shown below.

Turn OFF the power supply in the uppermost PIM of the IMG stack whose number is larger. Then move down to the bottommost PIM and repeat the procedure for the smaller IMGs.

IMCO	IMC1	IMCO	IMC2
		INIGZ	INGS
			PIM3
PłM2	₽ĮM2	PIM2	PIM2
PIM↑ 、	PIM1	PIM	PIM1
PIM0 \	PIM0 \	PIM0 \	PIM0
LPM	TSWM `		



- (1) Turn OFF -48V SW on DPWR (first) and PWR (next) cards in PIM3 of IMG3.
- (2) Repeat (1) for PIM2, PIM1, PIM0 (IMG3) in this order.
- (3) Turn OFF -48V SW on DPWR (first) and PWR (next) cards in PIM3 of IMG2.
- (4) Repeat (3) for PIM2, PIM1, PIM0 (IMG2) in this order.
- (5) Turn OFF -48V SW on DPWR (first) and PWR (next) cards in PIM3 of IMG1.
- (6) Repeat (5) for PIM2, PIM1, PIM0 (IMG1) in this order.
- (7) Turn OFF SW on PH-PW14 (both PWR SW #1 and #0) in TSWM.
- (8) Turn OFF -48V SW on DPWR (first) and PWR (next) cards in PIM3 of IMG0.
- (9) Repeat (8) for PIM2, PIM1, PIM0 (IMG0) in this order.
- (10) Turn OFF SW on PZ-PW92 of CPU #1.
- (11) Turn OFF SW on PZ-PW92 of CPU #0.

Figure 6-60 How To Turn OFF the Whole System

12.4 System Start-Up

The system start-up procedures consist of the following types:

Procedure #1 (see Table 6-20)	Executed when the Basic Software and Application Software have already been installed in the HD. Office Data has not been installed.
Procedure #2 (see Table 6-21)	Executed when the Basic Software, Application Software and Office Data have been already installed in the HD.

Note: For the start-up procedure in case any Basic Software, Application Software and Office Data have not been installed in the HD, refer to the Installation Manual (4-IMG Type).



Table 6-20 Start-Up When Basic & Application Software Is Installed [Procedure #1]

Table 6-20 Start-Up When Basic & Application Software Is Installed [Procedure #1] (Continued)





Table 6-21 Start-Up When Basic, Application Software, and Office Data Installed [Procedure #2]

ACTION	7SEG LED/OPE LAMP/KEY SETTINGS
• System starts up again.	CPU OPE lamp on the DSP of active CPU lights steady-green. IMG0-3 light steady-green. IMG0 lamp on the DSP of mate CPU flashes green. STATUS LED (right) on the DSP of CPU is ON. (ON LINE)

Table 6-21 Start-Up When Basic, Application Software, andOffice Data Installed [Procedure #2] (Continued)

This page is for your notes.

CHAPTER 7 ROUTINE MAINTENANCE PROCEDURE

1. GENERAL

When a fault has occurred in the system, (for example when a fault has occurred to No. 1 circuit on the 16LC card), the stations connected to No. 1 circuit become unserviceable. When the 16LC card has been replaced with a spare to analyze the cause of the fault or to repair the fault, other normal lines also become unserviceable. As in this example, even when the fault is restricted to a single component, it very often harms the system operations as a whole.

Even if the system is operating normally, it is necessary to perform a routine check to prevent a fault occurrence before it is too late to discover any latent cause of a fault.

This chapter categorizes the routine maintenance procedures of the PBX into the following three types, and explains the minimum required work steps and precautions pertaining to each of the three procedures.

- Daily Maintenance Procedure
- Monthly Maintenance Procedure
- Quarterly Maintenance Procedure

1.1 Flow of Procedures

The scheduling of routine maintenance (daily, monthly, quarterly) will vary with each installation and organization. Figure 7-1 shows the flow of the routine maintenance procedures.



Figure 7-1 Flow of Procedures

NDA-24300

1.2 Required Test Equipment and Tools

Table 7-1 shows the tools and equipment required for test procedures.

NO.	TEST EQUIPMENT/TOOLS	PURPOSE	REMARKS
1	Telephone Set	A telephone set is used when performing connection tests on trunks, etc.	
2	Blown Fuse	A blown fuse is used when performing alarm tests.	
3	VOM Digital Meter	VOM digital meter is used when checking output voltages of the rectifier and the battery.	
4	Phillips Screwdriver	A screwdriver is used when replacing the fan with a spare.	

 Table 7-1 Test Equipment and Tools

This section explains general routine maintenance procedures to be performed on a daily, monthly, and quarterly basis. Table 7-2 lists each procedure according to the time each procedure is to be performed. Use the Reference Section to locate the detailed procedure.

TIME	PROCEDURE	REFERENCE SECTION	REMARKS
Daily	Check the temperature and relative humidity in the switch room.	Section 2.1, Ambient Conditions in Switch Room Check	
	Check to see if any of the alarm indicator lamps on the TOPU are lit.	Section 2.2, Alarm Check	
	Check the operating status of the MAT and the printer, remaining quantity of paper, etc.	Section 2.3, MAT/Printer Check	
	Check to see if a system message indicating a fault is displayed.	Section 2.4, Collection of Sys- tem Messages	
	Check whether any station is in lockout state.	Section 2.5, Display of Locked- out Station	
	Check whether the FANU is operating normally.	Section 2.6, Fan Unit Check	
Monthly	Generate an alarm and check whether an indica- tion appears on the TOPU.	Section 2.7, Alarm Tests	
	Check the conditions of the rectifier and batteries.	Section 2.8, Main Power System Check	
	Check trunk circuits individually. Also check the RGU circuit in the PWR Supply of each Module.	Section 2.9, Trunk RGU Check	
	Check each operation and lamps of DESKCON/ ATTCON.	Section 2.10, ATTCON/ DESKCON Check	
Quarterly	Check the CPU, TSW, and line/trunk Port Micro- processors (PMs).	Section 2.11, System Check	

Table 7-2 List of Routine Maintenance Procedures

2.1 Ambient Conditions in Switch Room Check



-	Check the room temperature.	 Check whether the room temperature is within the range of 5° C (41°F) to 30°C (86°F).
-	Check the humidity in the room.	 Check whether the relative humidity in the room is within the 15% to 65% range.
	If the temperature or the humidity is outside the allowable range, adjust the air conditioner.	
<u>END</u>		

2.2 Alarm Check



2.3 MAT/Printer Check

ST	ART

	Check the MAT.	Turn ON the MAT's power. Confirm that the menu appears on the screen.
	System messages are automatically sent to the MAT HD for output.	Leave the MAT power ON continuously (lower the CRT brightness when not in use).
	System messages are automatically sent to	Confirm that printer power is ON and that the SEL lamp is lit. Check the remaining quantity of printer paper.
END		

2.4 Collection of System Messages



-	 Cause system messages to be displayed.		Refer to Chapter 3.
-	 When a system message is displayed.		If the system message indicates a fault, diagnose the fault by referring to Chapter 5, and perform fault recovery.
	 Check the results of routine diagnosis.	Τ	System message [7-O] indicates that the system is normal. System message [7-P] indicates that the system is abnormal. Perform fault recovery by referring to Chapter 3 or Chapter 5.
	 When the system is operating normally or after a fault is restored		Use the RALM command to clear the alarm indication and registered system message.

<u>END</u>

2.5 Display of Locked-out Station



	Check the displays of relevant commands to locate any locked-out stations.	 Check the displays of the following commands: DLSL: Display in the order of LENS DLSS: Display in the order of Station Numbers
END	When any station in locked-out	Recover the locked-out station(s) referring to Section 3, Indication of Lockout Stations, in Chapter 6.

2.6 Fan Unit Check



END

2.7 Alarm Tests

<u>START</u>

- An alarm is to be generated which will be displayed at the DESKCON/ATTCON. Be sure to inform the attendant of the test in advance.

- Replace the –48V fuse in the FANU with a blown fuse.
- Confirm that an alarm is indicated on the TOPU.
- Replace the blown fuse with the original –48V fuse.
 - Using the RALM command, reset all alarm indications.



2.8 Main Power System Check



Check the load voltage (DC -48V ±5 V) of the rectifier.
 Check the batteries.
 Check the batteries.
 Check the forced-charge voltage and floating voltage.
 Check the specific gravity, liquid level and rated capacity of each battery.

Note: For a longer battery life, observe the following items:

- Place the batteries in a dark, cool place.
- Keep the room temperature within the range of $10^{\circ}C$ to $35^{\circ}C$ ($40^{\circ}F$ to $85^{\circ}F$).
- Floating voltage must be kept within the range of the battery specification at all times.
- After discharging, perform equalized charging as per the battery specification.

2.9 Trunk RGU Check

<u>START</u>

- Check alarm lamps on the line/trunk circuit cards.

- Check to see if a system message pertaining to a circuit card has been output.

- Check the speech path for each PIM and also check ringing signal.

END

2.10 ATTCON/DESKCON Check

(1) Attendant Console Check

START

Ask the operator at each ATTCON if the ATTCON is operating normally.
 Each operator presses the LCHK button on the ATTCON and confirms that all the lamps on the control panel light up.
 When the ATTCON is equipped with a Time Indicator Section, the operator also checks the displayed time.

Note: Adjusting Time Method (see Figure 7-2.)

- If the Hour (H) button is pushed once, the time will advance one hour. (To push the button, use a thin object, such as a toothpick.)
- If the H button is held continuously, the time will advance one hour each second.
- If the Minute (M) button is pushed once, the time will advance one minute.
- If the M button is held continuously, the time will advance one minute each second.



Figure 7-2 Adjusting Time on ATTCON

(2) Desk Console Check

<u>START</u>

		Ask the operator at each DESKCON if the DESKCON is operating normally.
		On the DESKCON control panel, each operator presses the L3, SRC, and Release keys simultaneously and confirms that all the lamps on the control panel light red.
		Operator presses the # key and confirms that all the lamps on the same transverse line between the EMG and Mute lamps light green. Refer to Figure 7-3.
		Operator presses the # key and confirms that all the green lamps (in the step above) go OFF and the LCD on the DESKCON displays black.
		Operator presses the # key and confirms the black LCD display is cleared and a ringing tone is heard.
		Operator presses the # key and confirms the provided ringing tone has suspended.
		Operator presses the keys on the DESKCON one by one and confirms that each lamp, corresponding to the pressed key, emits a light and the name of the key displays on the LCD, respectively.
		Operator presses the * button and completes the lamp checks. Note 1
		Operator checks the displayed time on the right part of LCD. Note 2
EN	<u>ID</u>	

Note 1: *The lamp checks can be suspended any time when the * key on the control panel is pressed.*





Figure 7-3 Desk Console

NDA-24300

2.11 System Check





3. ROUTINE MAINTENANCE CHECK LISTS

This section provides check lists (Maintenance Procedure Reports) to be used when performing routine maintenance. The Routine Maintenance Check Lists consists of the following items:

- Maintenance Procedure Report
- C.O. Trunk/Tie Line
- Register/Sender Trunk (RST)
- Digital Conference Function
- Speech Path for each PIM, and Ringing Generator Unit
- Attendant/Desk Console

US		SIGNATURE OF SUPERVISOR			WORK TIME (FROM -)					
Name of Us	Date:	Date:			Maintenance Classification		Routine/Non- routine			
	Control	Control No.			Maintenance Company					
Name of Ec		Room Temperature - °C °F & humidity %		;	Name of Worker					
Reference Section	Item	Detail		Check	Reference Section	е	Item	Detail		Check
2.1	Check of Ambient Conditions in the	Ambient Temperature			2.9		Trunk RGU Check	SND Trunk		
	Switch Room	Relative hun	nidity		1			DCF Function		
2.2	Alarm Check	TOPU			-			Tone		
2.3	MAT/Printer Check	MAT			-			MAT	MAT	
		Printer			2.10		ATTCON Check	Ringing Signal		
2.4	Collection of	Related to Fa	ault		2.11		System Check			
	System Messages Result of Re Diagnosis		utine					CPU		
2.5	Display of Locked- out Station	Locked out Stations			-			TSW		
2.6	Fan Unit Check							РМ		
2.7	Alarm Tests	TOPU								
2.8	Main Power System Check	Rectifier								
		Battery								
2.9	Trunk RGU Check	C.O. Trunk			-					
		Tie Trunk								
		ORT								
		IRT								
Conditio	on And Cause									
Procedure	and Parts Used									
		1								

C.O. Trunk/Tie Line

TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
C.O. Trunk/Tie Line Speech Path Test	• Set up a speech path test by seizing a trunk using the Station or ATTCON/DESKCON connection test diagrammed to the right.	Connection Test-Station
		Connection Test-ATTCON/DESKCON C.O./Tie Line ATI TRK DESKCON

C.O. Trunk/Tie Line

NAME OF TRUNK ROUTE	ACCESS NUMBER	ROUTE NUMBER	TRUNK NUMBER	CHECK	REMARKS

TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
ORT Function	 Perform the test by specifying an ORT using the Connection Test-Station. Confirm that [6-1] system message displays as a result of the test. 	DP/PB
SENDER Function	 Perform the test by specifying an ORT using the Connection Test-Station. Confirm that [6-1] system message displays as a result of the test. 	

Register/Sender Trunk (RST)
RST (/)

		FUNCTION	O	RT	SENDED	
trunk n	0.		PB RECEIVING	DP RECEIVING	SENDER	REMARNO
	ORT0	SND0				
	1	1				
	2	2				
RST No	3	3				
KST NO.	4	4				
	5	5				
	6	6				
	7	7				
	0	0				
	1	1				
	2	2				
RST No	3	3				
KST NO.	4	4				
	5	5				
	6	6				
	7	7				
	0	0				
	1	1				
	2	2				
RST No	3	3				
ROT NO.	4	4				
	5	5				
	6	6				
	7	7				
	0	0				
	1	1				
	2	2				
RST No	3	3				
KST NO.	4	4				
	5	5				
	6	6				
	7	7				

TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
Three-way Conversation	 Perform the test by specifying an 8CFT using the Connection Test-Station. Confirm that [6-1] system message displays as a result of the test. 	LC INT / TSW (2) (2) (2) (2) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3

Digital Conference Function

FUNCTION TRUNK NO.	SPEECH	RELEASE	REMARKS
CFT0			
1			
2			
3			
4			
5			
6			
7			

Speech Path for Each PIM, and Ringing Generator Unit

NO.	TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
1	The ATTCON/ DESKCON is called from one station in each PIM.	Normal speech path is confirmed by calling the attendant from a station located in each PIM.	ATTCON/ DESKCON

ROUTINE MAINTENANCE PROCEDURE

NO.	TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
2	The operator calls the station back.	After normal speech path has been confirmed, the attendant calls the station back. Confirm that the station rings.	ATI ATTCON/ DESKCON PWR0, 1 RG C (RINGING)

Speech Path for Each PIM, and Ringing Generator Unit (Continued)

MOUNTING LOCATION			DEMADIZO	
MODULE NAME	UNIT NAME	CHECK	REMARKS	
	0			
DIM1	1			
1 11/11	2			
	3			
	0			
DIM2	1			
F 11V12	2			
	3			
	0			
DIM2	1			
F IIVIS	2			
	3			
	0			
	1			
F 11V14	2			
	3			

TEST TYPE	TEST ITEM	CONNECTION DIAGRAM
Call Termination Test	 Station dials the operator access code and confirm that the call termination is indicated at all the ATTCON/ DESKCON. Station dials the operator access code. An attendant answers and speaks with the caller. This process is repeated at all the ATTCON/ DESKCON 	ATTCON/ DESKCON
Call Origination Test	• Attendant originates a call to the station by pressing LOOP keys one after another.	ATTCON/ DESKCON (RINGING)

Attendant Console (ATTCON/DESKCON)

ROUTINE MAINTENANCE PROCEDURE

FUNCTION	CALL TE	ERMINATIO	N	CALL OR	GINATION	REMARKS
ATTCON/ DESKCON NO.	INCOMING CALL INDICATION	SPEECH	RELEASE	SPEECH	RELEASE	
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

CHAPTER 8 MAINTENANCE COMMANDS

1. GENERAL

This chapter explains various commands and list up commands which are used in the system administrative management procedure. The table below shows the list of commands.

COMMAND	COMMAND FULL NAME	REMARKS
ALLC	Assignment of Line Load Control	
ALMG	Assignment of Alarm Grade Data	
ATRF	Assignment of Traffic Measurement Order	
ATRFN	Assignment of Traffic Measurement Order for Fusion Network	
BOSD	Back Up One-Touch Speed Call Memory Data	
CADSD	Continuous Assignment of Station Data	
CARR	Continuous Assignment of Alternative Route Restriction	
CARRN	Continuous Assignment of Alternative Route Restriction for NDM	
САТК	Continuous Assignment of Trunk Data	
CBCN	Control of Broadcasting for NDM	
CCSE	Change of Common Signaling Channel Equipment	
CDBU	Change of Dch Backup	
CMOD	Change of System Mode	
CMWL	Control Message Waiting Lamp	
CMWL_T	Control Message Waiting Lamps – Telephone Number	
CPRS	Controlled Alternate PRSCs	
CSCL	Continuous Change of Station Class	
CSTN	Continuous Change of Station Number	
DCBD	Display of Call Block Entry Data	
DCEN	Display of Connection Trunk LENS Data for LDM	
DCON	Display of Connection Status	
DFTD	Display of System Message Details	
DISS	Display of Program Issue	
DLEN	Display of LENS Data	
DLSL	Display of Lockout Station - LENS	
DLSS	Display of Lockout Station - Number	

Table 8-1 Command List

COMMAND	COMMAND FULL NAME	REMARKS
DLSS_T	Display of Lock Out Station – Number – Telephone Number	
DLTEL	Display of Telephone Number from LENS for LDM	
DNTEL	Display of Telephone Number from LENS for NDM	
DPKG	Display of Setting Port Package	
DPSW	Display Package Switch Status	
DSTN	Display of Station Data	
DTELN	Display of Telephone Number Data for NDM	
DTF101	Display of Terminal Traffic Data	
DTF102	Display of Route Traffic Data	
DTF103	Display of Station Peg Count Data	
DTF104	Display of Attendant Peg Count Data	
DTF105	Display of Route Peg Count Data	
DTF201	Display of Service Peg Count Data	
DTF301	Display of UCD Route Peg Count Data	
DTF302	Display of UCD Group Peg Count Data	
DTF303	Display of Station Peg Count Data	
DTF501	Display of Attendant Answering Peg Count Data	
DTF601	Display of Connection Route Peg Count Data	
DTF602	Display of Connection Route Traffic Data	
DTF101N	Display of Terminal Traffic Data for Fusion Network	
DTF102N	Display of Route Traffic Data for Fusion Network	
DTF103N	Display of Station Peg Count Data for Fusion Network	
DTF104N	Display of Attendant Peg Count Data for Fusion Network	
DTF105N	Display of Route Peg Count Data for Fusion Network	
DTF201N	Display of Service Peg Count Data for Fusion Network	
DTF301N	Display of UCD Route Peg Count Data for Fusion Network	
DTF302N	Display of UCD Group Peg Count Data for Fusion Network	
DTF303N	Display of UCD Station Peg Count Data for Fusion Network	
DTF501N	Display of Attendant Answering Peg Count Data for Fusion Network	
DTF601N	Display of Connection Route Peg Count Data for Fusion Network	
DTF602N	Display of Connection Route Traffic Data for Fusion Network	

Table 8-1 Command List (Continued)

COMMAND	COMMAND FULL NAME	REMARKS
FLINST	File Install	
HDD_FDD	Data Control Between HDD and FDD	
HDD_MAT	Data Control Between HDD and MAT	
HDD_MAT_N	Data Control Between HDD and MAT for NDM	
HDFP	HDD Format of PBX	
MBCT	Make Busy of Connection Trunk for LDM	
MBLE	Make Busy of LENS	
MBPM	Make Busy of Port Microprocessor	
MBRT	Make Busy of Route	
MBRT_LR	Make Busy of Route-Logical Route Number	
MBSM	Make Busy of System Message Printout	
MBST	Make Busy of Station	
MBST_T	Make Busy of Station – Telephone Number	
MBTC	Make Busy of Trunk-Continuous	
MBTC_LR	Make Busy of Trunk-Continuous-Logical Route Number	
MBTK	Make Busy of Trunk	
MBTK_LR	Make Busy Trunk-Logical Route Number	
MEM_HDD	Data Control Between Memory and HDD	
MEM_HDD_N	Data Control Between Memory and HDD for NDM	
MFCH	Make Busy of FCCH	
PMBU	Port Microprocessor Back Up	
RALM	Release Alarm	
RALMN	Release Alarm for NDM	
RLST	Release Station/Trunk	
RLST_T	Release of Station/Trunk – Telephone Number	
SINZ	System Initialization	
SPTS	Scanning of Port Status	
SRTS	Scanning of Route Status	
SRTS_LR	Scanning of Route Status-Logical Route Number	
XHFD	X-RAY HD or FDD Diagnosis	

Table 8-1 Command List (Continued)

ALLC: Assignment of Line Load Control

ALLC: Assignment of Line Load Control

1. Functional Outline

This command is used to designate start and stop of line load control.

2. Parameters

Input data

ALL/ONE:	Operation Mode Selection			
	O/A=Only One LP/All LPs	2 is not valid for 1IMG-system.		
LP:	Local Partition (LP) Number N	lote		
	The data is designated as 00 for	r 1IMG-system.		
STATUS:	Line Load Control Status (0-3)			
	0=Stop Line Load Control			
	1=Start Line Load Control			
	2=Automatic Line Load Contro	ol is in effect (display only)		
	3=Status of all LPs do not match (display only)			

Note: This parameter appears when "O (only on LP)" is set in "ALL/ONE" input data.

ALMG: Assignment of Alarm Grade Data

1. Functional Outline

This command is used to make a flexible change of system message output grades. Thus, the PBX user can give a proper alarm grade to each system message according to their requirements. When no data is assigned, the default alarm grades are automatically adopted.

Note: This command cannot change the alarm grade for system message "6-A."

2. Parameters

Input data

FK:	Fault Message Kind (0-7, 10-17, 20-27, 30-37)
FI:	Fault Message Index (A-Z)
LMP:	Fault Message Lamp Data (0-3)
	0=Lamp OFF
	1=SUP Lamp ON
	2=MN Lamp ON
	3=MJ Lamp ON
GRD:	Printout Grade (0-3)
TYPE:	Listup Type
	1=All Data
	2=Changed Data
	3=Default Data
SYSM GRD:	System Message Output Grade

- Note: 0=All Messages 1=Not Used 2=MN/MJ Grade Messages 3=MJ Grade Messages
- **Note:** When using ALMG command for system message output grade assignment, be sure to set "ASYD, SYS 1, Index 91, b2 and b3 = 0, 0". For more information, refer to the Office Data Specifications.

ATRF: Assignment of Traffic Measurement Order

1. Functional Outline

This command is used to assign and delete traffic measurement programs. A request for traffic measurement is performed when a traffic measurement instruction has been assigned by this command. The collected traffic measurement data can be stored on the HD of the MAT, which can be designated on the basis of traffic measurement type.

2. Parameters

Input Data

TYPE:Type of Traffic Measurement (1-19) (See Table 8-2.)

DATA	MEANING	DATA	MEANING
1	Terminal Traffic	2	Route Traffic
3	Station Peg Count	4	ATT Peg Count
5	Route Peg Count	6	Service Peg Count
8	UCD Route Peg Count	9	UCD Group Peg Count
10	UCD Station Peg Count	15	ATT Answering Peg Count
18	Connection Route Peg Count	19	Connection Route Traffic

Table 8-2 Type of Traffic Measurement Explanation

PORT:	Traffic Information Output Terminal Number (0-7:IOC, 8:LAN, 9:NMS)
INTERVAL:	Output interval (0, 30-120)
	Assign the data (30-120) in 10 minute increments. When assigning 0 (available
	when any of TYPE 3-18 is selected), instead specify your desired output time in
	the "OUTPUT HOUR/MINUTE" parameters below.
START HOUR	Note 1
START MINUTE	Note 1
END HOUR	Note 1
END MINUTE	Note 1
OUTPUT HOUR:	This data is valid only when INTERVAL=0.
OUTPUT MINUTE:	This data is valid only when INTERVAL= 0.
START RT:	Start External Route Number (available when TYPE 2/5/8 is selected)
END RT:	End External Route Number (available when TYPE 2/5/8 is selected)
START C_RT:	Start Connection Route Number (available when TYPE 18/19 is selected)
END C RT:	End Connection Route Number (available when TYPE 18/19 is selected)

Note 1: Assign the traffic measurement time period between START HOUR/MINUTE and END HOUR/ MINUTE longer than an hour. Also, if the measurement should be executed throughout a day, assign the same data in both START HOUR/MINUTE and END HOUR/MINUTE parameters.

Note 2: Traffic Type 15 only works on Ring Down Trunks.

NDA-24300

ATRFN: Assignment of Traffic Measurement Order for Fusion Network

1. Functional Outline

This command is used to assign and delete traffic measurement programs available on the Ethernet. A request for traffic measurement is performed on a network basis when a traffic measurement instruction has been assigned by this command. The collected traffic measurement data can be stored on the HD of the MAT (connected to the NCN: Network Control Node), which can be designated on the basis of traffic measurement type. Note that this command can be used at the NCN only.

2. Parameters

Input Data

TYPE:Type of Traffic Measurement (1-19) (See Table 8-3)

DATA	MEANING	DATA	MEANING
1	Terminal Traffic	2	Route Traffic
3	Station Peg Count	4	ATT Peg Count
5	Route Peg Count	6	Service Peg Count
8	UCD Route Peg Count	9	UCD Group Peg Count
10	UCD Station Peg Count	15	ATT Answering Peg Count
18	Connection Route Peg Count	19	Connection Route Traffic

Table 8-3 Type of Traffic Measurement Explanation

PORT: Traffic Information Output Terminal Number (0-7: IOC, 8: LAN, 9:NMS) **INTERVAL**: Output interval (0, 30-120) Assign the data (30-120) in 10 minute increments. When assigning 0 (available when any of TYPE 3-18 is selected), instead specify your desired output time in the "OUTPUT HOUR/MINUTE" parameters below. START HOUR Note 2, Note 3 START MINUTE Note 2, Note 3 END HOUR Note 2, Note 3 END MINUTE Note 2, Note 3 **OUTPUT HOUR:** This data is valid only when INTERVAL=0. **OUTPUT MINUTE:** This data is valid only when INTERVAL=0. START RT: Start External Route Number (available when TYPE 2/5/8 is selected) END RT: End External Route Number (available when TYPE 2/5/8 is selected) START C RT: Start Connection Route Number (available when TYPE 18/19 is selected) END C RT: End Connection Route Number (available when TYPE 18/19 is selected)

Note 1: The selected traffic measurement data, except for TYPE 1 (Terminal Traffic), is collected with the whole network systems as a single unit.

Note 2: When time difference exists between the nodes, confirm that the related time difference data, based on the UCT (Universal Coordinated Time) standard, has been assigned at each node via the ATDF command.

Note 3: Assign the traffic measurement time period between START HOUR/MINUTE and END HOUR/ MINUTE longer than an hour. Also, if the measurement should be executed throughout a day, assign the same data in both START HOUR/MINUTE and END HOUR/MINUTE parameters.

Note 4: If the data for this command is once assigned, the node-level data by the ATRF command is not cleared, but loses its validity (the network-level data takes precedence).

BOSD: Back Up One-Touch Speed Call Memory Data

1. Functional Outline

- Save Function
- Saves the data residing in the One-Touch Speed Call Memory of DLC/ELC card onto a floppy disk.
- Verify Function
- Verifies the One-Touch Speed Call Memory data saved on the floppy disk with the data residing in the One-Touch Speed Call Memory of DLC/ELC card.
- Load Function
- Loads the One-Touch Speed Call Memory data saved in the floppy disk into the One-Touch Speed Call Memory of DLC/ELC card.

2. Parameters

Input data

Direction Select:	PBX Memory to MAT
	MAT to PBX Memory
	Verify MAT against MEM
Data Type Selection:	by Station
	by LEN
Begin TN:	Note 1
End TN:	Note 1
Begin STN:	Note 1
End STN:	Note 1
Begin LEN:	Note 2
End LEN:	Note 2
Auto Verify Afterward:	Click ON=Checked
	OFF=Unchecked

File Name and Path

Note 1: *When by Station is designated*

Note 2: *When by LEN is designated*

CADSD: Continuous Assignment of Station Data

1. Functional Outline

This command can assign/delete many station data simultaneously which have consecutive numbers.

2. Parameters

Input Data

Type:	Assign/Delete
-, , , , , , , , , , , , , , , , , , ,	1 1001810 2 01000

[When Assign is selected	l in the Type selection list box]	
TN(START):	Start Tenant Number	
TN(END):	End Tenant Number	
STN(START):	Start Station Number [Max. 6 digits]	Note 1
STN(END):	End Station Number [Max. 6 digits]	Note 1
STEP:	Station Count-up Step	Note 2
	If using $*$ and $\# \rightarrow [1-12]$	
	If not using * and $\# \rightarrow [1-10]$	
LENS(START):	First Line Equipment Number [6 digit	s]
LENS(END):	Last Line Equipment Number [6 digits	5]
GROUP(START):	First Group Number [0-31]	
GROUP(END):	Last Group Number [0-31]	
LEVEL(START):	First Level Number [0-7]	
LEVEL(END):	Last Level Number [0-7]	

- **Note 1:** In the bottom part of the display, a check box is provided to determine whether to use "*" and "#" as a part of the Station Number. If necessary, check the box.
- **Note 2:** *In the parameter here, specify the size of increment between the consecutive station numbers to be assigned. See the example below:*

Example:	Input data					Re	sult			
	STN(START)=100 -		Sta	ation Nu	ımber	r is ass	signed	by 1	0 incr	ements
	STN(END)=200 STEP=10 _	\rightarrow	V	When 100	* and 110	l# are 120	<i>not us</i> 130	sed a 	s <i>part</i> 190	of STN 200
			∇	When	* and	l#are	used a	as pa	rt of S	STN
				10*	118	126	134		1**	1#8

CADSD: Continuous Assignment of Station Data

	TEC:	Telephone Equipment Class [1-31]			
		1=DP (10pps)	2=PB		
		3=DP/PB	4=DP (20pps)		
		5-11=Not used	12=D ^{term}		
		13=Data Terminal via D ^{term}	14=Hot Line		
		15=CAS Line	16=Data Terminal via Data Module		
		17=Not used	18=Virtual Line Appearance (for D ^{term} Multi-Line)		
		19-22=Not used	23=ISDN Terminal		
		24-26=Not used	27=8 Conference Equipment		
		28-31=Not used			
	RSC:	Route Restriction Class [0-15]			
	SFC:	Service Feature Class [0-15]			
But	tons				
	Execute:	Click to make the input data val	id.		
	Cancel:	Click to cancel the input data.			
	Exit:	Click to exit this command.			
Disj	play Data (after "E	xecute" button is pressed)			
	TN:	Tenant Number			
	STN:	Assigned Station Number			
	LENS:	Line Equipment Number			
	STATUS:	Data Entry Result			
		OK=Data Assignment is success	sful Note		

Note: If not OK (i.e. the data entry is not successful), related error message is displayed here.

When Delete is selected in the Type selection list box

Input Data

TN(START):	First Tenant Number
TN(END):	Last Tenant Number
STN(START):	First Station Number [Max. 6 digits]
STN(END):	Last Station Number [Max. 6 digits]
STEP:	Station Count-up Step Note 1
	If using $*$ and $\# \rightarrow [1-12]$
	If not using $*$ and $\# \rightarrow [1-10]$

Note 1: *In this parameter, specify the size of increment between the consecutive station numbers to be deleted. See the example below:*

E	ample:	Input data				Res	sult				
		STN(START)=100 STN(END)=200 STEP=10	$\rightarrow \nabla$ Sta	tion N <i>When</i> 100	umber * <i>and</i> 110	is del # are 120	eted b <i>not us</i> 130	y 10 sed a 	increi s <i>part</i> 190	ments: <i>of STN</i> 200	
Buttons			∇	When 10*	* <i>and</i> 118	# are 126	used a 134	as pa 	rt of S 1**	STN 1#8	
Exect	ute:	Click to delete the inp	put data.								
Canc	el:	Click to cancel the de	eletion.								
Exit:		Click to exit this com	mand.								
Display D	ata										
TN:		Tenant Number									
STN:		Station Number									
STAT	'US:	Result of Deletion No	ote 2								

Note 2: When the deletion is successful, OK is displayed here. Otherwise (i.e. the deletion is rejected), related error message is displayed.

CARR: Continuous Assignment of Alternative Route Restriction

1. Functional Outline

This command is used to continuously assign/delete the restriction data of relay connections between the outgoing route and the incoming route.

2. Parameters

Input Data

	TYPE:	Assign/Delete
	ICRT (START/END):	Incoming Route Logical Number (External Route only)
	OGRT (START/END):	Outgoing Route Number (External Route only)
	ARI A-RES:	Restriction Data for Alternative Route Index-A [0/1]
		Restriction of the trunk-to-trunk (tandem) connection via ATTCON or station when a C.O./Tie Line call terminates.
		0=Alternate routing is restricted.
		1=Alternate routing is allowed.
	ARI D-RES:	Restriction Data for Alternative Route Index-D [0/2]
		Restriction of the trunk-to-trunk (tandem) connection by Direct Dial Access from a station when a C.O./Tie Line call terminates.
		0=Alternate routing is restricted.
		1=Alternate routing is allowed.
		2=Toll Restriction is restricted.
Dis	play Data	
	ICRT:	Incoming Route
	OGRT:	Outgoing Route

STATUS: OK or error message is displayed.

CARRN : Continuous Assignment of Alternative Route Restriction for NDM

1. Functional Outline

This command is used to continuously assign/delete the restriction data of relay connections between the outgoing route and the incoming route. The data assigned by this command is written in the Network Data Memory (NDM) of the Network Control Node (NCN), updating the NDM at each Local Node (LN).

2. Parameters

Input Data

TYPE:	Assign/Delete
IC LGRT (START/END):	Incoming Logical Route Number [1-899]
OG LGRT (START/END):	Outgoing Logical Route Number [1-899]
ARI A-RES:	Restriction Data for Alternative Route Index-A [0/1]
	Restriction of the trunk-to-trunk (tandem) connection via ATTCON or sta- tion when a C.O./Tie Line call terminates.
	0=Alternate routing is restricted.
	1=Alternate routing is allowed.
ARI D-RES:	Restriction Data for Alternative Route Index-D [0/2]
	Restriction of the trunk-to-trunk (tandem) connection by Direct Dial Access from a station when a C.O./Tie Line call terminates.
	0=Alternate routing is restricted.
	1=Alternate routing is allowed.
	2=Toll Restriction is restricted.
Display Data	

IC LGRT:	Incoming Logical Route Number [1-899]
OG LGRT:	Outgoing Logical Route Number [1-899]
STATUS:	OK or error message is displayed.

CATK: Continuous Assignment of Trunk Data

1. Functional Outline

This command can assign/delete many trunk data simultaneously which have consecutive numbers.

2. Parameters

Type/KIND Note Note::Assign/Delete

Note: Type KIND

[When "Assign" is selected in the "Type/KIND" selection list box]

Input Data

RT:	Route Number				
TK (START):	First Trunk Number [1-768]				
TK (END):	Last Trunk Number [1-768]				
STEP:	Trunk Count-up Step [1-10] Note 1				
LENS (START):	First Line Equipment Number [6 digits]				
LENS (END):	Last Line Equipment Number [6 digits]				
TN:	Tenant Number				
RSC:	Route Restriction Class [0-15] Note 2				
SFC:	Service Feature Class [0-15] Note 2				
GROUP (START):	First Group Number [0-31]				
GROUP (END):	Last Group Number [0-31]				
LEVEL (START):	First Level Number [0-7]				
LEVEL (END):	Last Level Number [0-7]				
TYPE:	Count-up Type [1-6] Note 3				
	$1 = \text{LEVEL} \rightarrow \text{GROUP} \rightarrow \text{UNIT}$				
	$2 = LEVEL \rightarrow UNIT \rightarrow GROUP$				
	$3 = \text{GROUP} \rightarrow \text{UNIT} \rightarrow \text{LEVEL}$				
	$4 = \text{GROUP} \rightarrow \text{LEVEL} \rightarrow \text{UNIT}$				
	$5 = \text{UNIT} \rightarrow \text{LEVEL} \rightarrow \text{GROUP}$				
	$6 = \text{UNIT} \rightarrow \text{GROUP} \rightarrow \text{LEVEL}$				

Note 1: *In the parameter here, specify the size of increment between the consecutive trunk numbers to be as-signed. See the example below:*

Example:	Input data					Resu	lt				
	TK(START)=1 \neg	ς.	Trur	nk Nun	nber is	s assigr	ned by	2 incre	ment	s:	
	STEP=2	\rightarrow	1	3	5	7	9	11		19	21

Note 2: Data entry for this parameter is necessary when "RT" is "901" or "915."

Note 3: *"TYPE" parameter here determines how to arrange the trunk data. See* [Details on Trunk Arrangement "TYPE"] (later pages) for details.

CHAPTER 8 Page 532 Issue 1

NDA-24300

Buttons

Execute:	Click to make the input data valid.
Cancel:	Click to cancel the input data.
Exit:	Click to exit this command.
Display Data	
TK:	Assigned Trunk Number
LENS:	Line Equipment Number
STATUS:	Data Entry Result OK=Data Assignment is successful Note 4

Note 4: If not OK (i.e. the data entry is not successful), related error message is displayed here.

[When "Delete" is selected in the "Type/KIND" selection list box]

Input Data

RT:	Route Number
TK(START):	First Trunk Number [1-768]
TK(END):	Last Trunk Number [1-768]
STEP:	Trunk Count-up Step [1-10] Note 1
Buttons	
Execute:	Click to delete the input data.

Cancel:	Click to cancel the deletion.
Exit:	Click to exit this command.

Display Data

TK:	Trunk Number
STATUS:	Result of Deletion
	OK=Deletion Success Note 2

Note 1: *In the parameter here, specify the size of increment between the consecutive trunk numbers to be deleted. See the example below:*

Example:	Input data					Resu	lt				
	TK(START)=1 – TK(END)=21	\rightarrow	Trui	nk Nur	nber is	delete	ed by 2	2 incren	nents	10	0.1
	STEP=2		I	3	5	1	9	11	•••	19	21

Note 2: When the deletion is successful, "OK" is displayed here. Otherwise (i.e. the deletion is rejected), related error message is displayed.

[Details on Trunk Arrangement "TYPE"]

When assigning the consecutive trunk data by using the CATK command, you must select the trunk arrangement type (1-6) in the "TYPE" parameter. See the detailed examples below:

The following are the examples when the 16 COT circuit cards are accommodated as shown below.



TYPE=1 (Level \rightarrow Group \rightarrow Unit)

Trunk data is arranged in the following numerical order.



TYPE=2 (Level \rightarrow Unit \rightarrow Group)

Trunk data is arranged in the following numerical order.



TYPE=3 (Group \rightarrow Level \rightarrow Unit)

Trunk data is arranged in the following numerical order.



NDA-24300

TYPE=4 (Group \rightarrow Unit \rightarrow Level)



Trunk data is arranged in the following numerical order.

TYPE=5 (Unit \rightarrow Level \rightarrow Group)

Trunk data is arranged in the following numerical order.



TYPE=6 (Unit \rightarrow Group \rightarrow Level)

Trunk data is arranged in the following numerical order.



CBCN: Control of Broadcasting for NDM

1. Functional Outline

This command is used to specify the destination of NDM data broadcast from the NCN. This command is available only at the NCN (Network Control Node).

2. Parameters

Input Data

TYPE:	ALL (All the Nodes)/ONE (One designated Node)
FPC:	FPC of the designated Node Note
Interval:	Broadcasting Interval

Note: *This parameter appears when ONE is selected at "TYPE" parameter.*

CCSE: Change of Common Signaling Channel Equipment

CCSE: Change of Common Signaling Channel Equipment

1. Functional Outline

This command is used to set/reset the make busy state of CCH circuit card.

2. Parameters

CCH LENS:	Line Equipment Number of CCH circuit card [5 digits]
	MG=XX, UNIT=X, GROUP=XX
LINK:	Link Status [0-2]
	0=Link Open
	1=Link Close
	2=Not Available
MB:	Make Busy Information [0-2]
	0=Make Idle
	1=Make Busy
	2=Not Available

Note: This command cannot be used for the ISDN-related circuit card (such as PRT, DCH card).

CDBU: Change of Dch Backup

1. Functional Outline

This command is used to execute the D-channel route changeover, associated with the D-CHANNEL BACKUP-PRI feature (for AT&T/NT/N-ISDN2).

2. Parameters

Input Data

	MG:	Module Group Number [00-07] Note
	CNT:	Number of Dch Backup Route [1-32] Note
But	tons	
	Get:	Click to get information on the Dch Routes.
	Change:	Click to execute the Dch route changeover.
	Stop:	Click to cancel the Dch route changeover.
	Exit:	Click to exit this command.
Dis	play Data	
	RT:	External Route Number
	STS0:	Primary-side DCH Status [ACT/ST-BY/OOS (out of service)]
	STS1:	Backup-side DCH Status [ACT/ST-BY/OOS (out of service)]
	P-LENS:	Primary DCH LENS (6 digits)
	B-LENS:	Backup DCH LENS (6 digits)
	CHG-STS:	Change Status [Completed/Executing]

Note: Data entry procedure by this command is as follows:

- 1. Specify the Module Group No. in the "MG" parameter.
- 2. Click the "Get" button. Then, the related Dch data appears in the display data field.
- 3. Referring to the display data, enter the "CNT" No. attached to the Dch to be changed over.
- 4. Click the "Change" button.

 \rightarrow Now, the Dch changeover starts automatically.

CMOD: Change of System Mode

1. Functional Outline

This command is used to execute ACT/ST-BY change of the processor (CPU)/TSW and display the status of CPU/CLK/TSW.

2. Parameters

Input Data

TYPE:	Type of Process (1,2)	
	1/2=Change Operating Mode/	Make Busy of TSW
DEVICE:	Device to be changed (1,2)	Note 1
	1=CPU	Note 2
	2=TSW	
SW:	Type of Switch	Note 3
	1=TSW (fixed)	
SYSTEM:	System of Switch (0,1)	Note 3
	0/1=System 0/System 1	

Note 1: *This parameter appears only when TYPE=1.*

- **Note 2:** When the CPU mode change is executed, the MAT (TCP/IP) is once disconnected. Then, log in to the system again.
- **Note 3:** *This parameter appears only when TYPE=2.*

Display data

Status:

CPU 0/1, TSW 0/1, PLO 0/1 (0-3) 0=Not Mounted 1=Standby 2=ACT 3=Make-Busy

CMWL: Control Message Waiting Lamp

1. Functional Outline

This command is used to indicate ON/OFF status and to control the Message Waiting Lamp ON/OFF (MW Lamp) at the station. If the station is a D^{term}, this command can also be used to control Message Waiting Display on the D^{term}.

2. Parameters

Input data

TYPE:	Type of Input (1,2)	
	1/2=Designation by Station Number	/Designation by LEN
TN:	Note 1	
STN:	Maximum 5 digits for Business system, and 6 digits for Hotel system. Note 1	
LENS:	Note 2	
MCI:	Message Center MW Status (0,1)	
	0/1=OFF/ON	
ATT:	Attendant Console MW Status (0,1)	See the parameter MCI.
STA:	Station MW Status (0,1)	See the parameter MCI.
VMM:	Voice Mail Module MW Status (0,1)See the parameter MCI.
MWLAMP:	MW Lamp Status	
	0/1=OFF/ON	

Note 1: *This parameter appears when TYPE= "1."*

Note 2: *This parameter appears when TYPE= "2."*

CMWL_T: Control Message Waiting Lamps – Telephone Number

CMWL_T: Control Message Waiting Lamps – Telephone Number

1. Functional Outline

This command is used to control/display the Message Waiting Lamp's ON/OFF status, by using Telephone Numbers. When the station is a D^{term}, this command can also be used to control the Message Waiting Lamp Display. This command is available at NCN (for Fusion network) only.

2. Parameters

Input Data

TYPE:	Designation by Telephone Number/I	Designation by LEN
UGN:	User Group Number	Note 1
TELN:	Telephone Number (max. 16 digits)	Note 1
LENS:	Line Equipment Number	Note 2
MWLAMP:	MW Lamp Status OFF/ON	
MCI:	Message Center MW Status OFF/ON	N
ATT:	Attendant Console MW Status OFF/	ON
STA:	Station MW Status OFF/ON	
VMM:	Voice Mail Module MW Status OFF	/ON

Note 1: *This parameter is valid when Type =1 is selected.*

Note 2: *This parameter is valid when Type =2 is selected.*

Display Data

FPC:	Fusion Point Code (1-253)	Note 3	
TN:	Tenant Number	Note 3	
STN:	Physical Station Number (max. 5 dig	gits for Business/max. 6 digits f	or Hotel system)

Note 3: These parameters are for display only.

Buttons

Get:	Click to get information on the MW status.
Set:	Click to execute the assigned MW lamp control.
Exit:	Click to exit this command.

CPRS: Controlled Alternate PRSCs

1. Functional Outline

This command is necessary for the Controlled Alternate PRSCs function. It either selects the class used between two priority restriction classes (Normal or Urgent), or indicates the class used. This command is allowed only when bit1 of SYS 1, INDEX 59 is "1" (Controlled Alternate PRSCs in service).

2. Parameters

N/U: Priority Restriction Class [N/U]

N=Normal

U=Urgent

CSCL: Continuous Change of Station Class

1. Functional Outline

This command can change the station class information (TEC, RSC, SFC) en bloc by designating the range of the station number.

2. Parameters

Input Data

TN:	Tenant Number	
STN(START):	First Station Number [0-9, #, * (Max. 6 digits)]	Note 1
STN(END):	Last Station Number [0-9, #, * (Max. 6 digits)]	Note 1
TEC(OLD):	Telephone Equipment Class before change [1-31]	Note 2, Note 3
TEC(NEW):	Telephone Equipment Class after change [1-31]	Note 2
RSC(OLD):	Route Restriction Class before change [0-15]	Note 3
RSC(NEW):	Route Restriction Class after change [0-15]	
SFC(OLD):	Service Feature Class before change [0-15]	Note 3
SFC(NEW):	Service Feature Class after change [0-15]	

Note 1: In the bottom part of the display, a check box is provided to determine whether to use "*" and "#" as a part of the Station Number. If necessary, check the box.

Note 2: *Details on TEC (Telephone Equipment Class) are shown below:*

1=DP (10pps)	2=PB
3=DP/PB	4=DP (20pps)
5-11=Not used	12=D ^{term}
13=Data Terminal via D ^{term}	14=Hot Line
15=CAS Line	16=Data Terminal via Data Module
17=Not used	18=Virtual Line Appearance (for D ^{term} Multi-Line)
19-22=Not used	23=ISDN Terminal
24-26=Not used	27=8 Conference Equipment
28-31=Not used	

Note 3: If you want to change all classes of all specified stations, enter "**" for this parameter.

Buttons

Execute:	Click to make the input data valid.
Cancel:	Click to cancel the input data.
Exit:	Click to exit this command.

Display Data

STN:	Station Number
STATUS:	Data Entry Result
	OK=Data Assignment is successful Note

Note: If not OK (i.e. the data entry is not successful), related error message is displayed here.

CHAPTER 8 Page 546 Issue 1

NDA-24300

CSTN: Continuous Change of Station Number

1. Functional Outline

This command can change the consecutive station numbers en bloc by designating the station number range.

2. Parameters

Input Data

TN:	Tenant Number	
OLD STN(START):	First Station Number before change [0-9, #, * (Max. 6 digits)]	Note
OLD STN(END):	Last Station Number before change [0-9, #, * (Max. 6 digits)]	Note
NEW STN(START):	First Station Number after change [0-9, #, * (Max. 6 digits)]	Note
NEW STN(END):	Last Station Number after change [0-9, #, * (Max. 6 digits)]	Note

Note: In the bottom part of the display, a check box is provided to determine whether to use "*" and "#" as a part of the Station Number. If necessary, check the box.

Buttons

Execute:	Click to make the input data valid.
Cancel:	Click to cancel the input data
Exit:	Click to exit this command.

Display Data

OLD STN:	Station Number before change
NEW STN:	Station Number after change
STATUS:	Data Entry Result
	OK=Data Assignment is successful Note

Note: If not OK (i.e. the data entry is not successful), related error message is displayed here.

DCBD: Display of Call Block Entry Data

DCBD: Display of Call Block Entry Data

1. Functional Outline

This command is used to display the following Call Block data, assigned to a station:

- Number of station/trunk whose call is to be blocked (in the remainder of this page, denoted as "Restriction Number")
- Registered "Restriction Numbers" in total

These data can be obtained by entering any of the station's Telephone Number (TYPE 1), Physical Station Number (TYPE 2) or LENS (TYPE 3) in the parameters below:

2. Parameters

Input Data

TYPE: Selection of Input Data Type

TYPE 1 (Input Data = UGN, TELN)NoteTYPE 2 (Input Data = FPC, TN, STN)Note

TYPE 3 (Input Data = FPC, LENS) Note

READ (button to view the Display Data)

EXIT (button to exit)

Note: When using this command, first choose the input data type (Type 1 - 3) in the "TYPE" selection list box. Then the following parameters appear, according to the selected data type.

•	When TYPE 1 is selected	: UGN	(User Group Number)
		TELN	(Telephone Number [Max.16 digits])
•	When TYPE 2 is selected	: FPC	(Fusion Point Code [1-253])
		TN	(Tenant Number [Max.3 digits])
		STN	(Physical Station Number [Max.6 digits])
•	When TYPE 3 is selected	: FPC	(Fusion Point Code [1-253])
		LENS	(Line Equipment Number)

Display Data

- CNT: Registered "Restriction Numbers" in total (1-5)
- DC: Each "Restriction Number"
 - When Physical Station Number is registered Max. 6 digits
 - When Telephone Number is registered Max. 16 digits
 - When Trunk Call Number is registered Max. 32 digits
DCEN: Display of Connection Trunk LENS Data for LDM

1. Functional Outline

This command is used to display the registered connection trunk/route data by designating LENS.

2. Parameters

Input Data

C_LENS:	Line Equipment Number [6 digits]
Display Data	
C_RT:	Connection Route Number [1-1023]
C_TK:	Connection Trunk Number [1-4095]
RT:	External Route Number
TK:	Trunk Number [1-255]
TN:	Tenant Number

DCON: Display of Connection Status

1. Functional Outline

This command displays the connection status of the station and trunks. If the specified station or trunk is busy, the connected party is displayed.

2. Parameters

Input data

Type:	Kind of Connection Status (1-4)
	1=Station of Connection Status
	2=Trunk of Connection Status
	3=LENS of Connection Status
	4=Connection Trunk of Connection Status (Fusion Network)
TN:	Note 1
STN:	Maximum number of digits is 5 for Business system, and 6 for Hotel system. Note 1
RT:	Note 2
TK:	Note 2
LEN:	Note 3
C_RT:	Connection Route Number (1-1023) Note 4
C_TK:	Connection Trunk Number (1-4095) Note 4
Note 1: <i>This data is valid when Type=1.</i>	
Note 2: <i>This data is valid when Type=2.</i>	
Jote 3: <i>This data is valid when Type=3.</i>	
ote 4: This data is valid when Type=4.	

DFTD: Display of System Message Details

1. Functional Outline

This command is necessary to print the system messages detected by the Fault Diagnostic programs.

When the fault scanning (Scanning PBX) is effective, the MAT can scan the PBX status by polling every 20 sec, (default setting is Effective.)

If the PBX has faults, this command executes automatically.

2. Parameters

Input data

New/Old

Show Details: YES/NO

DISS: Display of Program Issue

1. Functional Outline

This command outputs to the printer and displays at the MAT, the program information (version, issue No. and date) in the main memory, and the program information (SP No.and issue No.) in the port microprocessor memory mounted in each circuit card in the PBX.

2. Parameters

Input data

Type of Issue:	Main Memory	
	Port Microprocessor	
Module Group:	Note 1	
Unit:	Note 1	
Display data		
Туре:	Main Memory	
	Boot ROM	
	IP	
	ACDP Note 2	
Version:	Note 2	
Issue:	Note 2	
Date:	Note 2	
Group:	00-23	Note 1
SP No.:	4 digits	Note 1
Issue:	ASCII 2 digits	Note 1

Note 1: *This data is valid when Port Microprocessor is designated.*

Note 2: This data is valid when Main Memory is designated.

DLEN: Display of LENS Data

1. Functional Outline

This command displays the data (station data or trunk data) assigned for a designated LEN. For Hotel system, Room Class and Floor Service Data [Annex (ANX), Ground/Underground (G), Floor (FLR)] displays also.

2. Parameters

Input data

LENS

Display data

TN

STN: Maximum 6 digits

TEC: Telephone Equipment Number (1-31) (See Table 8-4.)

Table 8-4 Telephone Equipment Number Explanation

DATA	MEANING	DATA	MEANING
1	DP (10pps)	2	РВ
3	DP/PB	4	DP (20 pps)
5-11	Not used	12	D ^{term}
13	Data Terminal via D ^{term}	14	Hot Line
15	CAS Line	16	Data Terminal via Data Module
17	Not used	23	ISDN Terminal
18	Virtual Line Appearance (for D ^{term} Multi-Line)	19-22	Not used
24-26	Not used	27	Eight Conference Equipment
28-31	Not used		

RSC: Route Restriction Class (0-15)

SFC: Service Feature Class (0-15)

ROOM CLASS: (0-15)

ANX: Annex (0-3)

G:	0=Ground
	1=Underground
FLR:	Floor (1-127)
RT:	Internal Route Number (See Table 8-5.)

Table 8-5 Internal Route Number Explanation

DATA	MEANING	DATA	MEANING
901	Attendant Console	902	Originating Register Trunk
903	Incoming Register Trunk	904	MF Receiver
905	Sender Trunk DP/PB	906	PB Receiver for Automated Attendant Service
907	AMP	908	Not used
909	Three-Way Conference Trunk	910, 911	Not used
913	Three-Way Conference Trunk for ATTCON	914	Not Used
915	Night Attendant Console	916	MFC Register
917	MFC Sender	918	Not used
919-926	Modem	927, 928	Not used
929	Data Signaling Trunk-Option	930	Rate Adapter Conversion Trunk
931-947	Not used		

ΤK

C_RT: Connection Route Number (1-1023)

C_TK: Connection Trunk Number (1-4095)

DLSL: Display of Lockout Station - LENS

DLSL: Display of Lockout Station - LENS

1. Functional Outline

This command prints the LENS of stations in lockout state.

2. Parameters

Input data

Туре:	Type of Printout (1-3)
	1=Printout of all LEN in lockout
	2=Printout of locked out LEN in the designated Module Group
	3=Printout of locked out LEN in the designated Unit
MG:	Note 1, Note 2
UNIT:	Note 2

Note 1: *The parameter is valid only when Type=2.*

Note 2: *The parameter is valid only when Type=3.*

Display data

LENS

DLSS: Display of Lockout Station - Number

1. Functional Outline

This command prints the stations in lockout state by station number.

2. Parameters

Input data

Type:	Type of Printout (1-3)	
	1=Printout of all lockout station	s
	2=Printout of lockout stations by	y tenant
	3=Printout of lockout stations w	ithin a specified range of station number.
TN:	Note 1, Note 2	
Start STN:	Maximum 6 digits	Note 2
End STN:	Maximum 6 digits	Note 2
Note 1: <i>The parameter</i>	r is valid only when Type=2.	
Note 2: The parameter is valid only when $Type=3$.		

Display data

CNT: Count

TN

STN

LENS

DLSS_T: Display of Lock Out Station – Number – Telephone Number

DLSS_T: Display of Lock Out Station – Number – Telephone Number

1. Functional Outline

This command is used to print out stations in lockout state, by using Telephone Numbers. This command is available at NCN (for Fusion network) only.

2. Parameters

Input Data

TYPE: Printout of all lockout stations		
	Printout of lockout stations by tenant	
	Printout of lockout stations within a specified	range of station number
UGN:	User Group Number	Note 1, Note 2
Start TELN:	First Telephone Number (max. 16 digits)	Note 2
End TELN:	End Telephone Number (max. 16 digits)	Note 2

Note 1: *This parameter is valid when "Type =Printout of lockout stations by tenant" is selected.*

Note 2: This parameter is valid when "Type =Printout of lockout stations within a specified range of station number" is selected.

Display Data

	FPC:	Fusion Point Code (1-253)
	TN:	Tenant Number
	Start STN:	First Physical Station Number (max. 5 digits for Business/max. 6 digits for Hotel system)
	End STN:	End Physical Station Number (max. 5 digits for Business/max. 6 digits for Hotel system)
	CNT:	Count
	UGN:	User Group Number
	TELN:	Telephone Number (max. 16 digits)
	LENS:	Line Equipment Number
But	tons	

Get:	Click to get information on the lockout status.
Exit:	Click to exit this command.

DLTEL: Display of Telephone Number from LENS for LDM

1. Functional Outline

This command, available at each Local Node (LN), is used to display the Telephone Number or other station data by designating a specific LEN.

2. Parameters

Input Data

LENS:	Line Equipment Number [6 digits]
Display Data	
UGN:	User Group Number
TELN:	Telephone Number [Max. 16 digits]
TN:	Tenant Number
STN:	Station Number [Max. 6 digits]
TEC:	Telephone Equipment Class [1-31]
RSC:	Route Restriction Class [0-15]
SFC:	Service Feature Class [0-15]

DNTEL: Display of Telephone Number from LENS for NDM

1. Functional Outline

This command, available at Network Control Node (NCN) only, is used to display the Telephone Number or other station data by designating a specific FPC and LEN.

2. Parameters

Input Data

FPC:	Fusion Point Code [1-253]
LENS:	Line Equipment Number [6 digits]
Display Data	
UGN:	User Group Number
TELN:	Telephone Number [Max. 16 digits]
NID:	Network ID Note
TN:	Tenant Number
STN:	Station Number [Max. 6 digits]
TEC:	Telephone Equipment Number [1-31]
RSC:	Route Restriction Class [0-15]
SFC:	Service Feature Class [0-15]

Note: Network ID (NID) is allocated automatically when the Module Group/Unit data is assigned by the AFMU command. Refer to the "Fusion Network System Manual" for more information.

DPKG: Display of Setting Port Package

1. Functional Outline

This command is used to display the circuit card name accommodated in each Group of a specific UNIT.

Note: When using this command, make sure that each circuit card related database files have already been installed to your MAT. (See FLINST command for more information.)

2. Parameters

Input Data

MG:	Module Group (MG) number [00-07]
UNIT:	Unit (U) number [0-3]

Buttons

Get:	Click to get information on mount	ed circuit cards.
------	-----------------------------------	-------------------

Close: Click to exit this command.

- **Note:** When the Input Data above is entered and the "Get" button is pressed, the related circuit card name is displayed on a Group basis. However, if the name is not found for some reasons, the following mark may appear in the relevant display field.
 - # \rightarrow Unidentifiable firmware type.
 - $\#\# \rightarrow Data \text{ not found in the FMID (database).}$
 - $### \rightarrow Group \ data \ not \ assigned.$
 - * \rightarrow Circuit card name not found (for the card is in make-busy state, etc.).

DPSW: Display Package Switch Status

1. Functional Outline

This command is used to display the following information on a Line/Trunk or Control circuit card: [When MAT is in On-Line Mode (=connected to the system)]

- Current status of each switch
- Explanation of each switch function

[When MAT is in Off-Line Mode (= not connected to the system)]

• Explanation of each switch function

Note 1: When using this command, make sure that each circuit card related database files have already been installed to your MAT. (See FLINST command for more information.)

2. Parameters

Input Data

KIND:	Display Kind (selection)	
	• (MAT=) On-Line Mode	
	• (MAT=) Off-Line Mode	
TYPE:	Circuit Card Type (selection)	
	 Line Trunk Package 	
	Control Package	
PMN:	Port Micro Processor Number	
PKG NAME:	Circuit Card Name	
LP:	Local Partition Number [00-06	
	(Even Number only)]	Note 2
SYSTEM:	System	Note 2
	0=No.0 System	
	l=No.1 System	
MG:	Module Group Number [00-07]	Note 2
UNIT:	Unit Number [0-3]	Note 2
ACT/STBY:	ACT/ST-BY information	Note 2
	0=ACT	
	l=ST-BY	
	2=Not used	
No:	IOC Card Number [0/1]	Note 2

Note 2: *This parameter may appear when "Control Package" is selected in the "TYPE" parameter.*

Buttons

Get:	Click to view the display data
Page Up:	Click to view the next page data (when next page exists).
Page Down:	Click to return to the previous page data.
Exit:	Click to exit this command.

Display Data

PKG Name:	Circuit Card Name
Firm Name/Issue:	Firm Name/Issue of the circuit card

Each switch data is also displayed on the dedicated display page.

CHAPTER 8 Page 562 Issue 1

NDA-24300

DSTN: Display of Station Data

1. Functional Outline

This command is used to display the registered Station Data corresponding to the designated Tenant and Station Number. In addition, the information of Hot Line, D^{term} Key Layout, Hunting, and Call Pickup, etc, can also be displayed as the data related to the designated stations.

2. Parameters

Input Data	
TN:	Tenant Number
STN:	Station Number [0-9, #, * (Max. 6 digits)]

Buttons

[For display c	lata selection]	
SHP:	Station Hunting Group-Pilot	Note
KYD:	Key Data for D ^{term}	Note
CPG:	Call Pickup Group	Note
CPE:	Call Pickup Expand Group	Note
PHN:	Phantom Station Number	Note
SHC:	Station Hunting-Circular	Note
SHU:	Station Hunting-UCD	Note
HLS:	Hot Line Station	Note

Note: When the designated station has any of these data, the corresponding button(s) can be selected. If the data is necessary, click the button(s).

[For execution order]Get:Click to view the display data.Close:Click to exit this command.

Display Data (by Parameters)

ETN:	Effective Tenant Number		
LENS:	Line Equipment Number (6 digits)		
TEC:	Telephone Equipment Class [1-31]		
	l=DP (10pps)	2=PB	
	3=DP/PB	4=DP (20pps)	
	5-11=Not used	12=D ^{term}	
	13=Data Terminal via D ^{term}	14=Hot Line	
	15=CAS Line	16=Data Terminal via Data Module	
	17=Not used	18=Virtual Line Appearance (for D ^{term} Multi-Line)	
	19-22=Not used	23=ISDN Terminal	
	24-26=Not used	27=8 Conference Equipment	
	28-31=Not used		
RSC:	Route Restriction Class [0-15]		
SFC:	Service Feature Class [0-15]		

DTELN: Display of Telephone Number Data for NDM

1. Functional Outline

This command is used to display the registered station data corresponding to specified User Group Number (UGN) and Telephone Number (TELN). The following data related to Number Group can be displayed by clicking the selection button for each data. This command can be used only when logging in to Network Control Node (NCN).

- ACPGN: Call Pickup Group (NDM)
- ACPEN: Call Pickup Expand Group (NDM)
- ASHUN: Station Hunting Group-UCD (NDM)
- ASHCN: Station Hunting Group-Circular (NDM)
- AHLSN: Hot Line Station (NDM)
- ASHPN: Station Hunting Group-Pilot (NDM)
- AKYD: Key Data for D^{term}

2. Parameters

Input Data

UGN:	User Group Number
TELN:	Telephone Number

Display Data

FPC:	Fusion Point Code (1-253)	
TN:	Tenant Number	
STN:	Station Number	
LENS:	Line Equipment Number (6 digits)	
	MG:	Module Group Number
	UNIT:	Unit Number
	G:	Group Number
	LV:	Level Number
TEC:	Telephone Class (1-31)	
RSC:	Route Restriction Class (0-15)	
SFC:	Service Feature Restriction Class (0-15)	

CHAPTER 8 Page 564 Issue 1

NDA-24300

Selection Button

CPGN:	Call Pickup Group (NDM)
CPEN:	Call Pickup Expand Group (NDM)
SHUN:	Station Hunting Group-UCD (NDM)
SHCN:	Station Hunting Group-Circular (NDM)
HLSN:	Hot Line Station (NDM)
SHPN:	Station Hunting Group-Pilot (NDM)
KYD:	Key Data for D ^{term}

DTF101: Display of Terminal Traffic Data

DTF101: Display of Terminal Traffic Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=1 (Terminal Traffic) assigned by the ATRF command.

Terminal Traffic-DTF101
Route Traffic-DTF102
Station Peg Count-DTF103
Attendant Peg Count-DTF104
Route Peg Count-DTF105
Service Peg Count-DTF201
UCD Route Peg Count-DTF301
UCD Group Peg Count-DTF302
UCD Station Peg Count-DTF303
Attendant Ans. Peg Count-DTF501
Connection Route Peg Count-DTF601
Connection Route Traffic-DTF602

DTF102: Display of Route Traffic Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=2 (Route Traffic) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF103: Display of Station Peg Count Data

DTF103: Display of Station Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=3 (Station Peg Count) assigned by the ATRF command.

Terminal Traffic-DTF101
Route Traffic-DTF102
Station Peg Count-DTF103
Attendant Peg Count-DTF104
Route Peg Count-DTF105
Service Peg Count-DTF201
UCD Route Peg Count-DTF301
UCD Group Peg Count-DTF302
UCD Station Peg Count-DTF303
Attendant Ans. Peg Count-DTF501
Connection Route Peg Count-DTF601
Connection Route Traffic-DTF602

DTF104: Display of Attendant Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=4 (ATT Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF105: Display of Route Peg Count Data

DTF105: Display of Route Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=5 (Route Peg Count) assigned by the ATRF command.

Terminal Traffic-DTF101
Route Traffic-DTF102
Station Peg Count-DTF103
Attendant Peg Count-DTF104
Route Peg Count-DTF105
Service Peg Count-DTF201
UCD Route Peg Count-DTF301
UCD Group Peg Count-DTF302
UCD Station Peg Count-DTF303
Attendant Ans. Peg Count-DTF501
Connection Route Peg Count-DTF601
Connection Route Traffic-DTF602

DTF201: Display of Service Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=6 (Service Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF301: Display of UCD Route Peg Count Data

DTF301: Display of UCD Route Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=8 (UCD Route Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF302: Display of UCD Group Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=9 (UCD Group Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF303: Display of Station Peg Count Data

DTF303: Display of Station Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=10 (UCD Station Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF501: Display of Attendant Answering Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=15 (ATT Answering Peg Count) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF601: Display of Connection Route Peg Count Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=18 (Connection Route Peg Count) assigned by the ATRF command.

Terminal Traffic-DTF101
Route Traffic-DTF102
Station Peg Count-DTF103
Attendant Peg Count-DTF104
Route Peg Count-DTF105
Service Peg Count-DTF201
UCD Route Peg Count-DTF301
UCD Group Peg Count-DTF302
UCD Station Peg Count-DTF303
Attendant Ans. Peg Count-DTF501
Connection Route Peg Count-DTF601
Connection Route Traffic-DTF602

DTF602: Display of Connection Route Traffic Data

1. Functional Outline

This command displays the result of traffic measurement data for Type=19 (Connection Route Traffic) assigned by the ATRF command.

Traffic Data 1:	Terminal Traffic-DTF101
	Route Traffic-DTF102
	Station Peg Count-DTF103
	Attendant Peg Count-DTF104
	Route Peg Count-DTF105
Traffic Data 2:	Service Peg Count-DTF201
Traffic Data 3:	UCD Route Peg Count-DTF301
	UCD Group Peg Count-DTF302
	UCD Station Peg Count-DTF303
Traffic Data 5:	Attendant Ans. Peg Count-DTF501
Traffic Data 6:	Connection Route Peg Count-DTF601
	Connection Route Traffic-DTF602

DTF101N: Display of Terminal Traffic Data for Fusion Network

DTF101N: Display of Terminal Traffic Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=1 (Terminal Traffic) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF102N: Display of Route Traffic Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=2 (Route Traffic) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF103N: Display of Station Peg Count Data for Fusion Network

DTF103N: Display of Station Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=3 (Station Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF104N: Display of Attendant Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=4 (ATT Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF105N: Display of Route Peg Count Data for Fusion Network

DTF105N: Display of Route Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=5 (Route Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF201N: Display of Service Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=6 (Service Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF301N: Display of UCD Route Peg Count Data for Fusion Network

DTF301N: Display of UCD Route Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=8 (UCD Route Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N

DTF302N: Display of UCD Group Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=9 (UCD Group Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N
	Route Traffic-DTF102N
	Station Peg Count-DTF103N
	Attendant Peg Count-DTF104N
	Route Peg Count-DTF105N
Traffic Data 2:	Service Peg Count-DTF201N
Traffic Data 3:	UCD Route Peg Count-DTF301N
	UCD Group Peg Count-DTF302N
	UCD Station Peg Count-DTF303N
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N
Traffic Data 6:	Connection Route Peg Count-DTF601N
	Connection Route Traffic-DTF602N
DTF303N: Display of UCD Station Peg Count Data for Fusion Network

DTF303N: Display of UCD Station Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=10 (UCD Station Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N	
	Route Traffic-DTF102N	
	Station Peg Count-DTF103N	
	Attendant Peg Count-DTF104N	
	Route Peg Count-DTF105N	
Traffic Data 2:	Service Peg Count-DTF201N	
Traffic Data 3:	UCD Route Peg Count-DTF301N	
	UCD Group Peg Count-DTF302N	
	UCD Station Peg Count-DTF303N	
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N	
Traffic Data 6:	Connection Route Peg Count-DTF601N	
	Connection Route Traffic-DTF602N	

DTF501N: Display of Attendant Answering Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=15 (ATT Answering Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N	
	Route Traffic-DTF102N	
	Station Peg Count-DTF103N	
	Attendant Peg Count-DTF104N	
	Route Peg Count-DTF105N	
Traffic Data 2:	Service Peg Count-DTF201N	
Traffic Data 3:	UCD Route Peg Count-DTF301N	
	UCD Group Peg Count-DTF302N	
	UCD Station Peg Count-DTF303N	
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N	
Traffic Data 6:	Connection Route Peg Count-DTF601N	
	Connection Route Traffic-DTF602N	

DTF601N: Display of Connection Route Peg Count Data for Fusion Network

DTF601N: Display of Connection Route Peg Count Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=18 (Connection Route Peg Count) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N	
	Route Traffic-DTF102N	
	Station Peg Count-DTF103N	
	Attendant Peg Count-DTF104N	
	Route Peg Count-DTF105N	
Traffic Data 2:	Service Peg Count-DTF201N	
Traffic Data 3:	UCD Route Peg Count-DTF301N	
	UCD Group Peg Count-DTF302N	
	UCD Station Peg Count-DTF303N	
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N	
Traffic Data 6:	Connection Route Peg Count-DTF601N	
	Connection Route Traffic-DTF602N	

DTF602N: Display of Connection Route Traffic Data for Fusion Network

1. Functional Outline

This command is used for displaying the result of traffic measurement data for "Type"=19 (Connection Route Traffic) assigned by the ATRFN command.

Traffic Data 1:	Terminal Traffic-DTF101N	
	Route Traffic-DTF102N	
	Station Peg Count-DTF103N	
	Attendant Peg Count-DTF104N	
	Route Peg Count-DTF105N	
Traffic Data 2:	Service Peg Count-DTF201N	
Traffic Data 3:	UCD Route Peg Count-DTF301N	
	UCD Group Peg Count-DTF302N	
	UCD Station Peg Count-DTF303N	
Traffic Data 5:	Attendant Ans. Peg Count-DTF501N	
Traffic Data 6:	Connection Route Peg Count-DTF601N	
	Connection Route Traffic-DTF602N	

FLINST: File Install

1. Functional Outline

This command is used to install the DPSW-dedicated database files to your MAT. This command is necessary to provide each circuit card's various information (such as circuit card name, equipped switch names, etc.) when your system uses the DPSW/DPKG command.

2. Parameters

Input Data

None

Buttons

Copy:	Click to start the data file install.

Exit: Click to exit this command.

<Data Install Procedure>

- (1) Start up the FLINST command from the Start menu.
- (2) Initial Display of the FLINST command appears. Make sure the proper FD drive name is selected in the FDD parameter.
- (3) Click the Copy button. Then, a message, requiring to insert the first FD into the FDD drive, appears.
- (4) Insert the first FD into the FDD of the MAT. Then, click OK.
- (5) File copy starts automatically, and the Copy End message appears upon completion.
- (6) Click OK. Another message asks you whether the next FD is to be installed or not.
- (7) Click OK.
- (8) A message, requiring you to insert the second FD into the FDD drive is displayed. Insert the second FD into the FDD, and click OK.
- (9) File copy starts automatically, and the Copy End message appears upon completion.
- (10) Click OK. A message asks you whether the next (fourth) FD is to be installed or not.

(11) Click Cancel.

NDA-24300

HDD_FDD: Data Control Between HDD and FDD

1. Functional Outline

This command is used to install the program data from FDD of PBX to HDD of PBX, and to verify the program data between FDD of PBX and HDD of PBX.

2. Parameters

Input data

System Select:	HFD0/HFD1
Direction Select:	Floppy Disk to Hard Disk/Verify HDD against FDD Note
Data Type Selection:	Program data (others are invalid.)
LP Select:	Not used
Auto Verify Afterward	I

Note: "Hard Disk to Floppy Disk" cannot be selected.

Input data

System Select:	HFD0/HFD1			
Direction Select:	Floppy Disk to Hard Disk/Verify HDD against FDD/Hard Disk to Floppy Disk			
Data Type Selection:	Data Memory Note 1			
	Name Display	Note 1		
	Wireless Call Forwarding	Note 1		
	Program data	Note 2		
	Call Forwarding	Note 4		
	Speed Calling	Note 4		
	User Assign Soft Key	Note 4		
	Number Sharing	Note 3	Note 4	
	Call Block	Note 4		
	ACD Data Memory	Note 1		

NDA-24300

File Name Select

Auto Verify Afterward

- **Note 1:** When this data is selected, specify the file names in the "File Name Select" parameter.
- **Note 2:** "Program data" can be valid when you select "Floppy Disk to Hard Disk" or "Verify HDD against FDD" in the "Direction Select" list box.
- **Note 3:** By saving the Number Sharing data, the data concerning "Dual Station Calling Over-FCCS" is also saved/verified automatically.
- **Note 4:** When this data is selected, an "LP Select" dialog appears. Then, specify the LP number in the "LP Select" parameter.

HDD_MAT: Data Control Between HDD and MAT

1. Functional Outline

This command is used to save the following data from HDD of PBX to MAT.

2. Parameters

Input data

Direction Select:	PBX Hard Disk to MAT	
	MAT to PBX Hard Disk	
	Verify HDD against MAT	
Data Type Selection:	Data Memory	Note 1
	Name display	
	Wireless Call Forwarding	;
	Program data	Note 2
	Call Forwarding	
	Speed Calling	
	User Assign Soft Key	
	Number Sharing	Note 3
	Call Block	
	ACD Data Memory	
LP Select:	This data appears only when Call Forwarding, Speed Calling, User Assign Soft Key, Number Sharing, or Call Block data is designated.	

Auto Verify Afterward

- **Note 1:** When Data Memory is selected, Network Data Memory (NDM) and Local Data Memory (LDM) are also saved/verified simultaneously.
- **Note 2:** *Program data can be valid when MAT to PBX Hard Disk option in the Direction Select list box is selected.*
- **Note 3:** *By saving the Number Sharing data, the data concerning Dual Station Calling Over-FCCS is also saved/verified automatically.*

HDD_MAT_N: Data Control Between HDD and MAT for NDM

1. Functional Outline

This command, available at the NCN only, installs (overwrites) the updated Program data from the centralized MAT onto the HDD of all local nodes. To use this command, first install the updated program data on the HDD of the MAT and then execute the program installing onto the HDD of each LN.

2. Parameters

Input data

Data Type Selection:	Select all the listed program data
Execution Button:	Installing of program data is to be executed

HDFP: HDD Format of PBX

1. Functional Outline

This command is used to execute the formatting of the HDD of PBX.

2. Parameters

Input Data (Selection by check)

0 System:	HDD of No.0 System
1 System:	HDD of No.1 System
Buttons	
Execute:	Click to execute the formatting.
Close:	Click to exit this command.

MBCT: Make Busy of Connection Trunk for LDM

MBCT: Make Busy of Connection Trunk for LDM

1. Functional Outline

This command is used to set/reset the make busy state of the connection trunk.

2. Parameters

Input Data

C_RT:	Connection Route Number [1-1023]
C_TK:	Trunk Number [1-4095]
MB:	Make Busy Information [0/1] 0=Make Idle 1=Make Busy (Outgoing)

MBLE: Make Busy of LENS

1. Functional Outline

This command assigns the IDLE/BUSY status of Line Equipment Numbers (LENS).

2. Parameters

Input data

LENS

MB: 0=Make Idle

1=Make Busy

MBPM: Make Busy of Port Microprocessor

MBPM: Make Busy of Port Microprocessor

1. Functional Outline

This command sets or resets the make-busy state of the circuit card that contains the port microprocessor. This setting and resetting is performed individually for each circuit card. If the location of the circuit card containing the port microprocessor is specified in this command, the operating state of all circuit cards mounted in the associated unit is displayed.

2. Parameters

Input data MG Unit Group MB Display data MB: 0=Make Idle

1=Make Busy

Note: Idle/Busy status can be displayed and assigned by the MB parameter.

MBRT: Make Busy of Route

1. Functional Outline

This command assigns Idle/Busy status for all the trunks in the route designated.

2. Parameters

Input data

RT: Route Number of the external route/internal route. Table 8-6 provides the meaning of the internal route numbers.

MB: 0=Make Idle

1=Make Busy

DATA	MEANING	DATA	MEANING
901	Attendant/Desk Console	902	Originating Register Trunk
903	Incoming Register Trunk	904	MF Receiver
905	Sender Trunk DP/PB	906	PB Receiver for Automated Attendant Service
907	AMP	908	Not used
909	Three-Way Conference Trunk	910-912	Not used
913	Three-Way Conference Trunk for ATTCON	914	Not used
915	Night Attendant Console	916	MFC Register
917	MFC Sender	918	Not used
919-926	Modem	927, 928	Not used
929	Data Signaling Trunk-Option	930	Rate Adapter Conversion Trunk
931-947	Not used		

Table 8-6 Route Number Explanation

MBRT_LR: Make Busy of Route-Logical Route Number

1. Functional Outline

This command is used for assigning IDLE/BUSY status of all the trunks in the logical route designated. Route number of the MBRT command can be assigned by using logical route.

Note 1: When logging in to the NCN (Network Control Node), the data of other LN (Local Node) can be changed. If logging in to a LN, only the DM of self-Node can be changed by this command.

2. Parameters

Input Data

LGRT:	Logical route number allocated to the external/internal route. Refer to the MBRT com- mand as to the Internal route number and its meaning. Note
MB:	Make Busy Information
	Make Idle
	Make Busy

Note: Prior to this command, logical route number must be allocated by using the ALRTN command.

Display Data

FPC: Fusion Point Code [1-253]

RT: External Route Number

MBSM: Make Busy of System Message Printout

1. Functional Outline

This command allows or inhibits the system message printer to output system messages.

2. Parameters

Input data

PORT NO.:	Port Number of the printer
MB:	0=Make Idle
	1=Make Busy

MBST: Make Busy of Station

1. Functional Outline

This command assigns the Idle/Busy status of stations.

2. Parameters

Input data

TN

STN: Maximum 5 digits for Business system/Maximum 6 digits for Hotel system.

MB: 0=Make Idle

1=Make Busy

MBST_T: Make Busy of Station – Telephone Number

1. Functional Outline

This command is used to assign the IDLE/BUSY status of stations, by using Telephone Numbers. This command is available at NCN (for Fusion network) only.

2. Parameters

Input Data

UGN:	User Group Number			
TELN:	Telephone Number (max. 16	Telephone Number (max. 16 digits)		
MB:	Make Busy/Make Idle	Make Busy/Make Idle		
Display Data				
FPC:	Fusion Point Code (1-253)	Note		
TN:	Tenant Number	Note		
STN:	Physical Station Number (max. 5 digits for Business sy	stem/max. 6 digits for Hotel system)		

Note

Note: This data is for display only.

Buttons

Get:	Click to get information on the station.
Set:	Click to execute the BUSY/IDLE performance.
Exit:	Click to exit this command.

MBTC: Make Busy of Trunk-Continuous

MBTC: Make Busy of Trunk-Continuous

1. Functional Outline

This command is used to assign the IDLE/BUSY status of trunks. By using this command, plural trunks can be placed into IDLE/BUSY state simultaneously per a route designated in "RT" parameter.

2. Parameters

Input Data

RT:	Route Number	
TK:	Trunk Number	Note 1
MB:	0=Make Idle	
	1=Make Busy (Outgoing)	
	2=Make Busy (Bothway)	Note 2

Note 1: Multiple trunks can be assigned simultaneously per a route designated in "RT" parameter.

Note 2: 2=Make Busy (Bothway) is not used.

MBTC_LR: Make Busy of Trunk-Continuous-Logical Route Number

1. Functional Outline

This command is used to assign the IDLE/BUSY status of trunks. By using this command, plural trunks can be placed into IDLE/BUSY state simultaneously per a logical route designated in "LGRT" parameter. Route number of the MBTC command can be assigned by using logical route.

Note 1: When logging in to the NCN (Network Control Node), the data of other LN (Local Node) can be changed. If logging in to a LN, only the DM of self-Node can be changed by this command.

2. Parameters

Input Data

LGRT:	Logical route number allocated to the Route Number. Note 1
TK:	Trunk Number Note 2
	START
	END
MB:	Make Busy Information [0-2]
	0=Make Idle
	1=Make Busy (Outgoing)
	2=Make Busy (Bothway) Note 3

- **Note 1:** *Prior to this command, logical route number must be allocated by using the ALRTN command.*
- **Note 2:** *The status of plural trunks can be changed simultaneously, according to the range of trunk number assigned and per a logical route.*

Note 3: 2=Make Busy (Bothway) is not used.

Display Data

FPC: Fusion Point Code [1-253]

RT: Route Number

MBTK: Make Busy of Trunk

1. Functional Outline

This command assigns the Idle/Busy status of trunks.

2. Parameters

RT:	Route Number
TK:	Trunk Number

MB: 0=Make Idle 1=Make Busy (Outgoing)

MBTK_LR: Make Busy Trunk-Logical Route Number

1. Functional Outline

This command is used to assign the IDLE/BUSY status of trunks. Route number of the MBTK command can be assigned by using logical route number.

Note 1: When logging in to the NCN (Network Control Node), the data of other LN (Local Node) can be changed. If logging in to a LN, only the DM of self-Node can be changed by this command.

2. Parameters

Input Data

LGRT:	Logical route number [1-899] Note 1
TK:	Trunk Number [1-255]
MB:	Make Busy Information [0-2] 0=Make Idle 1=Make Busy (Outgoing) 2=Make Busy (Bothway) Note 2

Note 1: *Prior to this command, logical route number must be allocated to the route number by the ALRTN command.*

Note 2: 2=Make Busy (Bothway) is available in Australia only.

Display Data

- FPC: Fusion Point Code [1-253]
- RT: Route Number
- STATUS: Make Busy Status for MB=2 Self trunk MB Other trunk MB Both trunk MB Self trunk MB ready Both trunk MB ready

MEM_HDD: Data Control Between Memory and HDD

1. Functional Outline

This command is used to save the following data from MEM of PBX to HDD of PBX, and vice versa.

2. Parameters

Input data

Direction Select:	Memory to Hard Disk	
	Hard Disk to Memory	
	Verify HDD against ME	Μ
Data Type Selection:	Data Memory	Note 1
	Name Display	
	Wireless Call Forwarding	5
	Call Forwarding	
	Speed Calling	
	User Assign Soft Key	
	Number Sharing	Note 2
	Call Block	
	ACD Data Memory	
LP Select:	This data is valid when C Number Sharing or Call	Call Forwarding, Speed Calling, User Assign Soft Key, Block data is designated.

Auto Verify Afterward

- **Note 1:** When Data Memory is selected, Network Data Memory (NDM) and Local Data Memory (LDM) are also saved/verified simultaneously.
- **Note 2:** By saving the Number Sharing data, the data concerning Dual Station Calling Over-FCCS is also saved/verified automatically.

MEM_HDD_N: Data Control Between Memory and HDD for NDM

1. Functional Outline

This command, available at the NCN only, is used to save/verify a series of Office Data from the Memory of all Local Nodes to the HDD of each same node.

2. Parameters

Input data

Dir	ection Select:	MEM to HDD		
		Verify HDD against MEM		
Da	ta Type Selection:	Data Memory	Note 1	
		Name Display		
		Wireless Call Forwarding		
		Call Forwarding		
		Speed Calling		
		User Assign Soft Key		
		Number Sharing	Note 2	
		Call Block		
LP	Select:	The parameter is valid wh Key, Number Sharing or C	en Call Forwarding, Speed Calling, User Assign Soft Call Block data is designated.	
Au	to Verify Afterward			
Note 1:	Note 1: When Data Memory is selected, Network Data Memory (NDM) and Local Data Memory (LDM) are also saved/verified simultaneously.			
Note 2:	Note 2: By saving the Number Sharing data, the data concerning Dual Station Calling Over-FCCS is also saved/verified automatically.			
Display data				
Inf	ormation:	FPC of Node in which sav	ing/verifying is executed	
		Result of the execution		
Dir	ection:	MEM to HDD		
		Verify HDD against MEM		

Data Type: Selected Data Type

MFCH: Make Busy of FCCH

1. Functional Outline

This command is used to set or reset the make busy state of the FCH card.

2. Parameters

Input Data

FCHN:	FCH Number [1-255]
MB:	Make Busy Information [0/1]
	0=Make Idle
	1=Make Busy

PMBU: Port Microprocessor Back Up

1. Functional Outline

This command saves the contents of Port Microprocessor (PM) onto Floppy Disk (FD) or verifies them. Information of firmware (Program Code) also appears on the screen.

2. Parameters

Input data

	Direction Select:	Port Microprocessor to MAT	
		Verify Port Microprocessor	
		Verify PM with Error List Auto Verify Afterward can be performed when designating Port Microprocessor to MAT.	
	PM Information:	Module Group	
		Unit	
		Group	
		Data Size (1-6)	
		1=2 Kbytes	
		2=4 Kbytes	
		3=8 Kbytes	
		4=16 Kbytes	
		5=32 Kbytes	
		6=64 Kbytes	
Disj	play data		
	Office		
	SP Number:	Information of firmware (Program Code)	
	SP Issue:	Information of firmware (Program Code)	

RALM: Release Alarm

1. Functional Outline

This command clears the fault indications.

2. Parameters

Input data

WRT: Y=Alarm is released N=Not released RETURN TO MENU?: Y=Return to MENU

N=Start operation again

Display data

Alarms Released

RALMN: Release Alarm for NDM

1. Functional Outline

This command, available at the NCN only, clears the fault indications of all the Nodes by clicking the release button on the display.

2. Parameters

Display data

FPC:	FPC of alarm released Nodes
Status:	Result of releasing the alarm
	OK/NG

RLST: Release Station/Trunk

1. Functional Outline

This command releases a station or trunk.

2. Parameters

Input data

TYPE:	Type of Select (1-4)	
	1=Stations	
	2=Trunk	
	3=LENS	
	4=Connection Trunk	
TN:	Note 1	
STN:	Maximum 6 digits	Note 1
RT:	Note 2	
TK:	Note 2	
LENS:	Note 3	
Connection RT:	(1-1023)	Note 4
Connection TK:	(1-4095)	Note 4
Note 1: This parameter is ve	alid only when TYPE=1.	
Note 2: This parameter is vo	alid only when TYPE=2.	
Note 3: <i>This parameter is vo</i>	alid only when TYPE=3.	
Note 4: This parameter is vo	alid only when TYPE=4.	
Display data		
STATUS:	Status of Station/Trunk (1-	-4)
	1=Idle	
	2=Busy	
	3=Lockout	
	4=Make Busy	
FPC:	Fusion Point Code (1-253)	
INFORMATION:	Information of the connect	ed party Note

Note: *This parameter appears only when STATUS*=2.

CHAPTER 8 Page 614 Issue 1

NDA-24300

RLST_T: Release of Station/Trunk – Telephone Number

1. Functional Outline

This command is used to release a station/trunk, by using Telephone Numbers. This command is available at NCN (for Fusion network) only.

2. Parameters

Input Data

TYPE:	Telephone Number Trunk LENS Connection Trunk	
UGN:	User Group Number	Note 1
TELN:	Telephone Number (max. 16 digits)	Note 1
RT:	External/Internal Route Number	Note 2
TK:	Trunk Number	Note 2
LENS:	Line Equipment Number	Note 3
C_RT:	Connection Route Number (1-1023)	Note 4
C_TK:	Connection Trunk Number (1-4095)	Note 4

Note 1: This parameter is valid when "Telephone Number" is designated in the "TYPE" selection list box.

Note 2: This parameter is valid when "Trunk" is designated in the "TYPE" selection list box.

Note 3: This parameter is valid when "LENS" is designated in the "TYPE" selection list box

Note 4: This parameter is valid when "Connection Trunk" is designated in the "TYPE" selection list box.

Display Data

FPC:	Fusion Point Code (1-253)	
TN:	Tenant Number	Note 5
STN:	Physical Station Number (max. 5 digits for Business/max. 6 d	igits for Hotel system) Note 5

Note 5: This data is displayed when "Telephone Number" is designated in the "TYPE" selection list box.

RLST_T: Release of Station/Trunk – Telephone Number

STATUS:	Status of Station/Trunk (1-5) 1=Idle 2=Busy 3=Lockout 4=Make Busy 5=Now Calling	
INFORMATION:	Information on the connected party	Note 6
ERN:	Area Number (1-32)	Note 7
GRN:	Group Number (1-8)	Note 7
CSN/ZTN:	CS/ZT Number (1-32)	Note 7
PCN:	PHS Community Number (1-1024)	Note 7

Note 6: *This data is displayed when "STATUS" =2 (Busy).*

Note 7: This data is for Wireless System only.

Buttons

Get:	Click to get information on the station/trunk.
Release:	Click to execute the station/trunk release.
Exit:	Click to exit this command.

SINZ: System Initialization

1. Functional Outline

This command initializes the PBX from the MAT. At the time of system initialization, this command allows the programs and the office data to be loaded from a Hard Disk of PBX into the RAM of PBX.

2. Parameters

Input data

TYPE:	Kind of Initialization (1-4)
	1=System Initialize
	2=System Initialize Office Data Load & System Initialize
	3=System Initialize Program Load & System Initialize
	4=System Initialize Program & Office Data Load & System Initialize

Note: When the system is initialized, the MAT is once disconnected. Then, log in to the system again.

SPTS: Scanning of Port Status

1. Functional Outline

This command displays momentarily the working status of Port Microprocessor (PM) on Module Group (MG), Unit, and Group basis.

2. Parameters

Input data	
MG	
Unit	
Group	
Interval:	Unit for this parameter is in seconds.

Entry Procedure

Type 1: By MG

Display of Scanning by Designating MG (Figure 8-1)

Package Status	PM:	Not Mounted Note
	ID:	Idle at least one
	BY:	All Busy
	MB:	Under Make Busy Status
	BY: MB:	All Busy Under Make Busy Sta

Note: This information appears when the circuit card is in make busy status (*MB* key is set upward) or when the designated location has no circuit card.

SPTS (Scanning of Port Status) Type Image: SCAN Image: SCAN 1: by MG 3: by MG, Unit, Grou 0 10 STOP EXIT
Dynamic Port Status Report (MG)
Package Status PM: Package is not Mounted or Package is make Busy. ID: More than one port in a Group is Idle. BY: All Port in a Group is Busy. MB: All Port in a Group is Hard Make Busy or Soft Make Busy. 4: —
Group 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Unit 0 PM ID ID ID ID ID ID PM PM PM PM PM PM PM PM MB MB PM PM PM PM PM PM PM
Unit 1 PM PM PM PM PM PM ID ID PM PM MB MB ID ID MB MB PM PM PM PM PM PM PM PM MB MB PM
Unit 2 PM
Unit 3 PM

Figure 8-1 Port Status Report (MG) Display

Table 8-7 provides a list of the circuit cards and the working status of PM in each group.

TYPE OF CIRCUIT CARD	FUNCTION NAME
LC	Line Circuit
ТК	Analog Trunk
RS	Register Sender
AI	Attendant Interface
DL	Digital Line Circuit
CF	3-Party Conference
МО	Modem Pool Trunk
DT	Digital Interface Trunk
DS	DST
DT	Digital Trunk

Table 8-7 Type of Circuit Cards

Type 2: By MG, Unit

Display of Scanning by Designating Unit (Figure 8-2)

Port Status on Circuit Card Basis

ID:	On-Line Status
BY:	Make Busy/Not Mounted
Port Status on	
Circuit Level Basis	
0:	Not Assigned
1:	Line Idle
2:	Line Busy
3:	Make Busy
4:	Lockout
5:	Status 5

SPTS	SPTS (Scanning of Port Status)																															
	Type																															
Q																																
Dynamic Port Status Report (MG/UNIT)																																
Port Sta 0: Not A 2: Line 4: Lock	tus \ssi Bus Out	gne sy	d	1: 3: 5:	Lin Ma Sta	ie Ic ike I itus	lle Bus ₅5	ÿ																								
Group	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Type Status Level	 BY	 BY	 BY	 BY	 BY	 BY	DL ID	 BY	 BY	 BY	 BY	TK ID	 BY	DT ID	 ВҮ	DT ID	- <u></u> BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY	 BY
7 6 5 4 3 2 1 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 3 1 1 3	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0	1 1 1 1 1 1	0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 br>0											

Figure 8-2 Port Status Report (MG, Unit) Display

Type 3: By MG, Unit, Group

Display of Scanning by Designating Group

When Group is Designated (Figure 8-3)

STATUS:	Idle = Idle
	= Unassigned Port
TN:	Tenant Number
STN:	Station Number
TEC:	Telephone Equipment Class

SF	TS (Scanning Type O 1: by MC O 2: by MC	g of Po G G, Unit	rt Status)	y MG, Uni	t, Grou	MG	Unit Group 1 06	Interval	SCAN STOP EXIT
PKG PKG SP No Issue:	Type: DL Status: ID b: 3124 5			Dynam	ic Port Statu	s Repo	ort (MG/UNIT/G	ROUP)	
Level 7 6 5 4 3 2 1 0	STATUS Idle Idle Idle 	TN 1 1	STN 2002 2001 2000	TEC Dterm Dterm Dterm	RT	ТК	TCL		

Figure 8-3 Port Status Report (MG, Unit, Group) Display—Designating Group
When Group-Trunk is Designated (Figure 8-4)

RT:	See Table 8-8.
TK:	Trunk Number
TCL:	Trunk Class

SPTS (Scanning of Port Status)			
O 1: by MG	ou N O	MG (Unit Group Interval SCAN 0 13 10 STOP EXIT
Dynamic Po	ort Statu	s Repor	rt (MG/UNIT/GROUP)
PKG Type: TK PKG Status: ID SP No: 3010 Issue: 5			
Level STATUS TN STN TEC 7 6 5 4	RT	тк	TCL
3 Idle 2 Idle 1 Idle 0 Idle	10 10 10 10	4 3 2 1	TIE Line TIE Line TIE Line TIE Line

Figure 8-4 Port Status Report (MG, Unit, Group) Display—Designating Group-T	Status Report (MG, Unit, Group) Display—Designating Group-Trui	۱k
---	--	----

DATA	MEANING	DATA	MEANING
901	Attendant Console	902	Originating Register Trunk
903	Incoming Register Trunk	904	MF Receiver
905	Sender Trunk DP/PB	906	PB Receiver for Automated Attendant Service
907	AMP	908	Not used
909	Three-Way Conference Trunk	910, 911	Not used
913	Three-Way Conference Trunk for ATTCON	914	Not used
915	Night Attendant	916	MFC Register
917	MFC Sender	918	Not used
919-926	Modem	927, 928	Not used
929	MFC Sender	930	Rate Adapter Conversion Trunk
931	Not used	932-947	Not used

Table 8-8 Route Number Explanation

SRTS: Scanning of Route Status

1. Functional Outline

This command displays the designated trunk status (busy/idle) at predetermined intervals. A maximum of 15 routes can be scanned.

2. Parameters

Input data

RT: Route Number

Interval Time

Display data

Number of Idle TK

Number of Busy

SRTS_LR: Scanning of Route Status-Logical Route Number

SRTS_LR: Scanning of Route Status-Logical Route Number

1. Functional Outline

This command displays the designated trunk status (Busy/Idle) at predetermined intervals (maximum 15 routes). Route number of the SRTS command can be assigned by using logical route number.

Note 1: When logging in to the NCN (Network Control Node), the data of other LN (Local Node) can be changed. If logging in to a LN, only the DM of self-Node can be changed by this command.

2. Parameters

Input Data

LGRT:	Logical route number [1-899] Note
Interval:	Interval Time of two scan [2-999]

Note: *Prior to this command, logical route number must be allocated by the ALRTN command.*

Display Data

FPC: Fusion Point Code [1-253]

RT: Route of Route Number

Number of Idle/Busy TK

XHFD: X-RAY HD or FDD Diagnosis

1. Functional Outline

This command is used to execute the following diagnoses.

• Hard Disk Diagnosis

By executing read/write check on the files in the hard disk of the PBX, this command diagnoses the hard disk for its normality.

If an error has been found as a result of the diagnosis, this command displays the information on the faulty logical drive and the number of faulty sectors on the MAT screen. The information can also be output by the printer.

• Floppy Disk Diagnosis

By executing cleaning of the floppy disk drive in the PBX, this command diagnoses the floppy disk drive for its normality.

If the cleaning has not finished normally, a diagnosis error has been found as a result of the diagnosis. The result message may be displayed on the MAT screen or printed out by the printer.

2. Parameters

Input Data

FUNCTION:	HD/FDD Designation [1/2]
	1=Diagnosis of HD (Hard Disk)
	2=Diagnosis of FDD (Floppy Disk Drive)
AREA:	Area Designation [0/1] Note
	0=All Files
	1=Program Files
SYSTEM:	System (0/1)
	0=No.0 System
	1=No.1 System

Note: *"AREA" parameter appears only when "1(=HD)" is selected in the "FUNCTION" parameter.*

Buttons

Exe:	Click to execute the diagnosis.
Close:	Click to exit this command.

Display Data

FAULT DRIVE:	Fault Drive Number [0-4]
	0=-
	1=#0
	2=#1
	3=#2
	4=#3
FAULT SECTOR:	Number of Fault Sector [0-65535]
MESSAGE:	Result of diagnosis [0-255]
	0=Normal End
	1=Hard disk read test practice error
	2=Floppy disk drive cleaning practice error
	3=Common part parameter error (Data length error)
	4=FDD cleaning abnormal end (FD not in drive)
	5=Individual part parameter error (Function error)
	6=Individual part parameter error (Sub function error)
	7=Individual part parameter error (Device error)
	8=Individual part parameter error (Drive selection error)
	9=Individual part parameter error (Data ID error)
	10=Individual part parameter error (Processor ID error)
	11=Individual part parameter error (File ID error)
	12=Individual part parameter error (File name error)
	13=Request order error (Health check send error)
	14=Request order error (Data send signal error)
	15=Internal error (File open error)
	16=Internal error (File read error)
	17=Internal error (File close error)
	18=Internal error (FAT error)
	19=Internal error (SCSIC error)
	20=Internal error (other)
	21=Hard interface abnormal end
	22-255=-

NDA-24300