

FM 4-30.13 (FM 9-13)

AMMUNITION HANDBOOK:
TACTICS, TECHNIQUES, AND
PROCEDURES FOR
MUNITIONS HANDLERS

HEADQUARTERS
DEPARTMENT OF THE ARMY

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By Order of the Secretary of the Army:

Official:



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PREFACE

This field manual provides ready reference and guidance for units and soldiers that handle munitions items. It is not a comprehensive manual, but it does provide useful data on important points of munitions service support. Also, it is a training tool for munitions units and soldiers.

Focus is on tactics, techniques, and procedures used by soldiers handling munitions. The information and guidance contained herein will help them to safely receive, ship, store, handle, maintain, and issue munitions. The manual provides information on processing unit turn-ins, destroying unserviceable munitions, and transporting munitions in new, maturing, or mature theaters of operations in support of the force projection Army. The information in this manual conforms to the procedures of MOADS, MOADS-PLS, and modularity, and will take munitions units well into the twenty-first century.

The proponent for this publication is United States Army Combined Arms Support Command & Ft Lee (USACASCOM&FL). Send comments and recommendations on DA Form 2028 (or in 2028 format) directly to Commander, USACASCOM&FL, Directorate of Combat Developments, ATTN: ATCL O, 3901 A Avenue, Suite 250, Fort Lee, VA 23801-1809.

Ammunition Handbook: Tactics, Techniques, and Procedures for Munitions Handlers

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Chapter 1

Tactical Unit Operations

This chapter discusses munitions support and tactical unit operations within the theater structure. Munitions directly impact the success of tactical operations. It is the function of ammunition companies and modular ammunition platoons in the theater of operations to best support the operational plans of tactical commanders. Ammunition unit tactical-level operations include activities necessary to support and win in combat as well as activities that precede and follow them.

STRATEGIC, OPERATIONAL, AND TACTICAL FUNCTIONS

1-1. *Power projection* is the ability of a military force to deploy air, land, and sea forces to any region of the world and to sustain them for any type of mission. Power projection is a central strategic concept of US military strategy. *Force projection*, the Army's contribution to this joint effort, is the demonstrated ability to rapidly alert, mobilize, and field a force that is deployable, lethal, versatile, expandable, and sustainable.

1-2. Army CSS operates in a seamless continuum throughout the strategic, operational, and tactical environments. *Strategic* CSS maintains the national sustainment base and supports force projection. *Operational* CSS accomplishes operational plans by linking tactical requirements to strategic capabilities. Operational level support personnel are aware of the combat commander's theater strategic perspective and requirements at the tactical level. *Tactical* CSS focuses on coordinated, tailored warfighter support by manning, arming, fueling, fixing, moving, and sustaining the soldier and his equipment. The following section briefly describes theater structure to provide context for the discussion of tactical unit operations.

THEATER STRUCTURE

1-3. A theater is a geographical area located OCONUS for which a commander is assigned military responsibility. International military cooperation and the degree of dedicated US forces influence how the Army conducts operations in each theater.

THEATER OF WAR

1-4. When combat operations are authorized, a strategic theater of war is delineated. It may include part or all of the original peacetime theater. Part of the theater may be in a state of war while other areas remain at peace.

THEATER OF OPERATIONS

1-5. To contend with more than one threat, the theater of war may be subdivided into subordinate theaters or areas of operation. Theaters of operation are those portions of an area of war required for military operations and for administering those operations.

COMMUNICATIONS ZONE

1-6. The COMMZ extends from the rear of the combat zone in the theater of operations to the CONUS base. Its size depends on the size of the theater of operations and the size of the force required for operation and sustainment. Within the COMMZ is the theater logistics base. It contains logistic facilities needed to support the theater; these include APOD/SPOD, storage areas, logistics headquarters, and units essential to munitions support.

CORPS/DIVISION OPERATIONS

1-7. A corps and/or division(s) operates in a defined theater as a forward presence to deter or combat threats. A corps normally fights as an element of a joint/combined or multinational force in cooperation with the Air Force, Navy, Marine Corps, and allied forces. It is tailored for the theater and mission operations and can fight only as long as the COSCOM provides munitions and logistical support.

MUNITIONS SUPPORT

1-8. Munitions units are required to provide support for SASO and offensive, defensive, and contingency operations. Also, they support other missions as assigned in both theater and corps areas of operation.

OFFENSIVE OPERATIONS

1-9. Logistic assets, including ammunition companies/platoons, are essential to maintaining the momentum of offensive operations. The corps goal is to support maneuver and CS units engaged in the main battle. Units that handle, store, and supply munitions must be mobile and prepared to move as often as the combat force requires. Types of offensive operations include movement to attack, hasty attack, deliberate attack, exploitation, and pursuit.

DEFENSIVE OPERATIONS

1-10. At any time, combat units defend, delay, move out of contact, or execute withdrawals. The object of defensive operations is failure of an enemy attack. Defensive operations also allow US forces to gain time, to concentrate elsewhere, to hold key objectives, or to wear down the enemy before going on the offensive. Types of defensive operations include support of a covering force, main battle force, or a mixture of heavy, light, and reserve forces.

CONTINGENCY OPERATIONS

1-11. US forces may be required to serve as a contingency force in an undeveloped area where a US military infrastructure does not exist. Such an operation typically might be one in which an undeveloped, friendly HN requests military assistance. A contingency force would conduct combat operations short of war but necessary to defeat threat forces or expel them from occupied territory. The size of this force would be tailored to the threat and the environment. Initially, it could be smaller than a division but could be expanded rapidly. The munitions support structure would also be tailored

and, depending on METT-TC, may include only elements of DS companies or modular ammunition platoons to operate ASPs or ATPs.

STABILITY AND SUPPORT OPERATIONS

1-12. SASO may be necessary to maintain a negotiated truce or to achieve, restore, or maintain a diplomatic resolution or peace in a hostile area or an area of potential conflict. Forces involved in such operations are traditionally multinational. The munitions force structure may be tailored to support both US and multinational forces for short or extended periods in a bare-base environment in conjunction with HNS. Most likely, the munitions force would consist of DS companies, modular ammunition platoons, or ammunition transfer point sections.

ORGANIZATION FOR AMMUNITION SUPPORT

1-13. The munitions force structure is evolving. This should be remembered, regardless of the type of operation ammunition units are required to support. In the near term, and well into the twenty-first century, ammunition units will continue to become smaller in size. At the same time, they will become more flexible and capable of deploying more rapidly, operating more efficiently at higher levels of productivity. This process will be in cooperation with elements from other services, multinational forces, other governmental and nongovernmental organizations, DOD civilians, and contract personnel.

MODULARITY

1-14. The structure of ammunition units and the munitions support concept is revised as combat doctrine evolves. MOADS doctrine and force structure were designed to support a forward-deployed force. In the near future, MOADS will transition to a more flexible distribution system based on the concept of modularity. A munitions structure based on modularity will more effectively meet the needs of a force projection Army. Under this concept, only the number of soldiers, DOD civilians, and the equipment needed to support the force are deployed.

1-15. The advent of modular munitions units has drastically increased the flexibility of the ASCC and joint commanders during combat and SASO. Unlike MOADS-PLS units, modular companies and platoons are 100 percent mobile (less munitions stocks). This mobility is particularly important for split-based and contingency operations. The ability of a modular platoon to deploy independent of its company headquarters allows the ASCC to right-size his forces for combat and SASO. Although modular platoons and companies are 100 percent mobile, they *are not* 100 percent sustainable. These units must be attached to a higher headquarters (i.e., company or battalion) for administrative and logistical support and C2.

1-16. The following sections provide a general overview of the typical ordnance company/battalion structure. The C2 structure in a tactical environment may not follow a functional “stovepipe” alignment. Modular ammunition platoons may be required to operate independent of their companies and within a C2 structure that is multifunctional, particularly at battalion and higher.

COMPANY STAFF AND RESPONSIBILITIES

1-17. The company typically has a rudimentary structure and relies on its parent battalion for CSS assets. Key personnel within the structure have major responsibilities that impact unit operations. These personnel, along with their duties and responsibilities are discussed below. Ammunition TOE must be consulted for specific type units.

Company Commander

1-18. The company commander is responsible for unit training, safety, and discipline and directs and supervises all phases of operations and employment. The CO is advised and assisted by his officers and NCOs. Among the most important duties and responsibilities of the company commander are the following:

- Leads, plans, directs, and supervises company operations; guides the unit in carrying out its mission.
- Establishes unit policies and procedures.
- Establishes and maintains operations security consistent with guidance from higher headquarters.
- Initiates and ensures adherence to the unit safety program.
- Ensures that unit readiness is maintained.

1-19. The company commander must be personally involved in planning and carrying out unit training IAW FM 25-100 and FM 25-101. Other related duties include the following:

- Performs periodic inspections to determine unit readiness.
- Stresses principles of accountability and maintenance.
- Instructs and cross-trains subordinates.

Executive Officer

1-20. The XO coordinates administrative and logistical support for the company. In the absence of the commander, the XO is in command. During modular or split-based operations, the XO takes command of the portion of the company in the rear location. Supervision of internal security and coordination with the battalion staff are among the XO's responsibilities.

First Sergeant

1-21. The first sergeant is the senior NCO in the company and assists the company commander in carrying out his responsibilities. The first sergeant must fully understand the company's mission and be able to adjust administrative requirements to accomplish that mission. First sergeant duties include the following:

- Calls formations.
- Manages the company headquarters.
- Coordinates company headquarters.
- Serves as intermediary between the commander and unit enlisted personnel.

- Assumes duties of the commander in the absence of all other officers.
- Plans and posts company details in cooperation with operational personnel.
- Maintains duty rosters.
- Exercises supervisory responsibility over housekeeping, work details, police, maintenance, and construction projects in the company areas.
- Assists the commander in advising enlisted personnel on personal matters.
- Advises the company commander on personnel and morale problems.

Ammunition Warrant Officer

1-22. The ammunition warrant officer at the company level is responsible for all technical aspects of munitions operations. His primary focus is the safe receipt, storage, and issue of munitions stocks in support of the operation designated by the ASCC or joint commander. He instructs unit personnel in all aspects of munitions operations. He normally serves as the accountable officer or storage officer for all munitions stocks stored by the company. He will also act as the accountable officer for stocks held by a platoon during split-based operations. During split-based operations he may assume more administrative duties while serving as second in command to the platoon leader. Also, he may be called on to provide technical and munitions doctrinal advice to the ASCC as one of the senior munitions logisticians in the AO. Other specific duties of the ammunition warrant officer include—

- Directs and coordinates destruction and demilitarization of conventional ammunition, missile explosive components, and other explosive items.
- Directs and coordinates surveillance tests, modifications, and maintenance of conventional ammunition, missile explosive components, and other explosive items in coordination with QASAS/qualified military ammunition inspectors.
- Supervises and manages SAAS-MOD (ASP) and its associated ADP equipment.
- Prepares and/or reviews ammunition storage waivers.
- Prepares, reviews, and/or implements firefighting procedures.
- Plans, reviews, and/or implements emergency destruction of ammunition, missiles, and other explosive items.
- Manages, examines, interprets, disseminates, and verifies requirements for ammunition technical publications in the unit.
- Plans for and schedules work requirements, observes work practices, detects and corrects unsafe or improper procedures and techniques.
- Ensures ammunition QA/QC procedures are followed.

Automotive Maintenance Warrant Officer

1-23. The automotive maintenance warrant officer is responsible for maintaining unit automotive equipment and training and supervising maintenance personnel. The maintenance tech coordinates with maintenance support units and performs the following duties:

- Manages the unit maintenance program.
- Assists and advises the company commander in assigning maintenance personnel.
- Advises the commander on maintenance matters and problems.
- Prepares the maintenance portion of the unit SOP.
- Ensures that replacement parts are available or are on request.
- Conducts maintenance inspections, supervises maintenance inspections, and ensures that records are maintained.

Motor Sergeant

1-24. The motor sergeant is chief assistant to the maintenance officer and responsible for the proper maintenance of unit vehicles. The motor sergeant is supervised by the automotive maintenance warrant officer. He assists in organizing the maintenance program and operates it IAW sound maintenance procedure, as follows:

- Assigns tasks.
- Implements work schedules established by the maintenance officer.
- Inspects work performed by unit mechanics.
- Enforces safety practices.

Platoon Leader

1-25. Much like platoon leaders in any military unit, the munitions unit platoon leader is responsible for training and discipline. Also, the platoon leader of a munitions unit supervises personnel in munitions storage, receipt, issue, and maintenance operations.

1-26. The platoon leader ensures that the platoon carries out the company commander's instructions. He trains the platoon with a dual purpose. First, the platoon must be developed and trained as part of the company team. Second, the platoon must be trained to be self-reliant since it may be detached from the company and operated as a separate unit. In the latter case, the platoon leader functions as commander of an independent detachment and is responsible for the administration, operation, supply, and security.

1-27. The platoon leader must be encouraged to develop and exercise the command and leadership qualities required of the position. When the company operates as a unit, the platoon leader has added duties assigned by the company commander. These duties may include the following:

- Supervising the training of soldiers in all phases of their duties, including maintenance services.
- Inspecting platoon members' individual clothing and equipment for serviceability and availability.
- Inspecting platoon billets and areas to ensure that standards of cleanliness and sanitation are kept.
- Preparing a daily availability report of platoon personnel.
- Enforcing discipline and internal control during convoy operations.

- Conducting preliminary investigations and preparing reports related to accidents.
- Enforcing environmental laws and regulations.
- Instructing the platoon or company as prescribed by the unit training schedule.
- Organizing, in coordination with other platoons, defense of the platoon AO, preparing and submitting sketches of the defense plan to the unit commander.
- Undertaking additional duties (such as security officer, investigating officer) as may be assigned by the appointing authority.
- Informing the unit commander of all phases of platoon training and operations; discussing with and advising the company commander on matters regarding training and operations.

Platoon Sergeant

1-28. The platoon sergeant is the assistant to the platoon leader. He assists with the training of the platoon and supervises both tactical and technical operations. Through section sergeants, the platoon sergeant directs and supervises munitions operations, unit maintenance, and tactical operations; trains soldiers in the operation and care of motor vehicles and MHE; and assumes the duties of the platoon leader in the absence of the platoon leader and warrant officer. The platoon sergeant also—

- Coordinates the duties of his section sergeants.
- Inspects storage locations to ensure compliance with regulatory requirements.
- Supervises, through his section sergeants, the performance of unit level maintenance of assigned equipment.
- Inspects vehicles and BIIs for accountability and serviceability.
- Coordinates with the motor sergeant for the repair of vehicles and equipment that need service beyond the drivers' capability.
- Coordinates section training and operational activities.
- Coordinates platoon operations.
- Inspects the platoon defensive perimeter and bivouac site and takes corrective action.
- Enforces safety rules and techniques.
- Enforces environmental laws and regulations.

Section Sergeant

1-29. The section sergeant is directly responsible to the platoon sergeant for the training, discipline, appearance, and performance of assigned soldiers. He directs section personnel in storage operations, safe driving and MHE operating practices, and maintenance of equipment records. Among other duties, the section sergeant—

- Maintains a record of availability of personnel and equipment under his control.

- Ensures that each soldier is familiar with his part in storage operations.
- Supervises the performance of vehicle and equipment maintenance.
- Reports to the platoon sergeant the mechanical defects beyond the soldiers' ability to repair.
- Ensures that living areas meet proper standards of cleanliness.
- Enforces environmental laws and regulations.

BATTALION STAFF AND RESPONSIBILITIES

1-30. Battalions are authorized a headquarters staff organized to meet unit requirements. Staff activities must focus on assisting the commander and will contribute to mission accomplishment. Munitions units may not always be subordinate to an ordnance battalion. Battalion and higher CSS organizations are largely multifunctional and capable of delivering nearly total support. This allows units to deal with a single point of contact for support. Munitions units may be assigned to either a corps support battalion or ordnance battalion. Battalions without organic ammunition surveillance support may be augmented with QASAS personnel upon or after deployment.

Battalion Commander

1-31. The battalion commander commands the battalion and all attached units. He administers, supervises trains, directs, controls, and coordinates activities of the battalion and attached units. Other responsibilities of the battalion commander include:

- Planning for, making decisions concerning, and publishing orders and directives governing personnel, discipline, operations, training, supply, and maintenance matters.
- Evaluating and estimating the needs of the organization.
- Supervising the execution of orders and inspecting completed assignments.
- Upholding environmental protection standards by conducting all training and operations IAW relevant environmental regulations, SOFAs, and SOPs.
- Ensuring that risk management and safety procedures are incorporated in all operations.

Executive Officer

1-32. The XO is second in command. He assists the commander in all phases of work and takes command in the commander's absence. The XO assists in interpreting, formulating, and disseminating policy. He takes the commander's decisions to the appropriate staff officers to prepare necessary staff directives. Also, the XO—

- Exercises staff supervision and direction over all operations and training.
- Formulates and announces policies for general operation of the staff.
- Ensures that the commander's orders and instructions are carried out through personal observation and inspection.

- Studies continually the overall operation of the battalion headquarters and subordinate units.
- Functions as the principal staff-coordinating agent of the battalion.

Operations Officer

1-33. The S3 handles staff matters pertaining to operations, training, security, and intelligence. He prepares and coordinates operational plans for the battalion and subordinate units and coordinates planning activities of subordinate units. To accomplish his mission, the S3 performs the following duties:

- Prepares operational SOPs and coordinates them with higher and subordinate units.
- Maintains operational records and statistical reports.
- Conducts liaison with supported agencies and activities.
- Maintains centralized operational control over subordinate units.
- Studies plans and operations on a regular basis and prepares estimates, plans, and directives.
- Assigns workloads and specific operational tasks to subordinate units.
- Plans and supervises training for the battalion and subordinate units.
- Conducts training inspections.
- Maintains contact and exchanges information with security and intelligence personnel of higher, adjacent, and subordinate units.
- Receives and distributes intelligence information.
- Directs and supervises OPSEC and advises the commander on operational, security, and training matters.
- Prepares and publishes security directives.
- Make security inspections of battalion and subordinate units.
- Prepares and distributes security and intelligence SOPs.
- Coordinates and supervises security and defense measures for the battalion and subordinate units (with the executive officer).
- Requests road clearance for convoys and movement of oversize loads.
- Coordinates and monitors subordinate unit environmental risk assessments and advises the commander on their status and outcome.

S3 Operations Sergeant

1-34. The battalion S3 operations sergeant is the senior NCO in the operations section. He supervises the duty performance of the section's enlisted personnel. Other duties of the operations sergeant are as follows:

- Assists the operations officer and ensures that administrative policies and procedures are properly carried out.
- Coordinates the functions of the operations section.
- Maintains statistics on operational capabilities and performance of subordinate units.
- Establishes and maintains liaison with supported units and activities.

- Supervises documentation and report procedures and performs such other duties as directed by the operations officer.

Supply Officer

1-35. The S4 maintains accountability for operation and maintenance funds. He also coordinates supply activities with higher headquarters and supporting services and prepares and coordinates supply SOPs and directives. Other duties of the S4 are as follows:

- Monitors priorities assigned to requisitions by battalion units as well as submission of requests to supporting supply activities.
- Consolidates requisitions submitted by subordinate units.
- Receives supplies, establishes schedules for issue, and issues supplies.
- Designates POL points and makes distribution of POL.
- Supervises and inspects subordinate unit supply procedures and records.
- Establishes, supervises, and directs the food service program.
- Establishes and maintains liaison with supporting services and activities.
- Prepares and supervises maintenance of battalion property records and accounts.
- Procures, allocates, and releases billet areas, buildings, and other facilities used by all battalion elements.

The S4 advises the commander concerning supply, mess, and real estate matters; property accountability within the battalion; contracting; and matters pertaining to munitions and hazardous materials.

Materiel Officer

1-36. An ordnance battalion TOE typically includes a materiel section supervised by a materiel officer. This section monitors munitions support requirements and the operational ability of subordinate ordnance units but does not manage munitions stocks. The MATO advises the commander on munitions support planning and equipment and the personnel status of subordinate units. He monitors the equipment and personnel status of subordinate units and recommends actions to maintain support capability. He recommends actions to maintain mission support capability. In a CSB, the support operations officer may assume this function with assistance of a COSCOM materiel management team.

MATO Ammunition Warrant Officer

1-37. The ammunition technician (ammunition warrant officer) at the battalion level is assigned to the materiel section. He is normally the senior ammunition warrant officer in the battalion and is the principal technical advisor to the battalion commander and the materiel officer on requirements for munitions support planning. He monitors equipment and personnel status of subordinate units and recommends actions to maintain support capability. He also monitors the stock status of SSAs, ensures that subordinate units are conducting safe and efficient operations IAW SOPs, and ensures compliance

with theater reporting requirements and munitions policy. As a senior munitions logistician, he may be called on to provide technical and doctrinal advice to the ASCC or joint commander in a contingency or SASO environment.

MATO Operations Sergeant

1-38. The MATO operations sergeant is the senior NCO assigned to the MATO. He supervises the duty performance of the assigned enlisted personnel. He assists the materiel officer and the ammunition warrant officer and ensures those administrative policies and procedures are properly conducted. The MATO operations sergeant maintains statistics on ammunition support performance and the capabilities of assigned ammunition companies and/or platoons. He manages subordinate unit through higher headquarters reporting procedures. Also, he performs other duties as directed by the materiel officer and ammunition warrant officer. Under certain TOE, the MATO operations sergeant's duties may be combined with those of the battalion S3 operations sergeant.

TACTICAL MOVEMENT OPERATIONS

1-39. Units are required to plan and execute tactical operations when moving to a new location. When a move is to be made, site selection, area preparation and layout, defense, security, and area damage control are important considerations. The warning order for displacement normally includes the general area in which the unit will conduct future operations, the movement date, and a list of any special requirements or instructions deemed necessary. Upon receipt of notification of impending move, the company commander alerts unit personnel and begins planning for the move.

SOP PREPARATION

1-40. A detailed field SOP must be prepared to cover movement operations. To ensure a successful move under stressful conditions, units must train on movement operations until they become proficient. The following items must be addressed in the field SOP:

- Organization of march units.
- Organization and duties of the advance party, the rear party, and reconnaissance element.
- Densities and speeds for different types of moves.
- Control measures.
- Actions in event of enemy attack.
- Refueling procedures.
- Mess procedures.
- Communications methods.
- Vehicle loading plans for personnel and equipment.

TRANSPORTATION

1-41. Units organized under the MOADS-PLS TOE have limited mobility. Since organic transportation is not sufficient to permit movement of the unit

in one lift, additional transportation must be requested. Transportation requests are normally made to the battalion headquarters operations section. The operations section places the requirement with the supporting MCT. The request will contain the following relevant information:

- Date of move.
- Routes.
- Destination.
- Time and place transportation is required.
- Number of personnel to be moved.
- Quantity, type, weight, and volume of materiel to be moved (see FM 55-30).

Modular units are fully capable of moving all TOE equipment and personnel, less munitions stocks. Both MOADS-PLS and modular units require augmentation to move munitions stocks stored in their locations.

AREA SELECTION

1-42. The area selected for unit operations must be capable of being defended, yet suitable for technical operations. Often these considerations are not compatible, and defense risks must be weighed against the operational mission. An alternate area is selected in case the unit position becomes unsustainable due to enemy action or effects of weather on the terrain.

AREA LAYOUT

1-43. Area layout requirements for each unit vary according to the tactical situation, the proximity to forward areas, and the type and amount of munitions handled. A good layout is one that achieves the following:

- Facilitates the workflow.
- Minimizes the movement of munitions, tools, and equipment.
- Permits easy entry and exit for heavy traffic.
- Provides for effective control of unit operations.
- Permits defense of the area.
- Provides for easy access to a communications node.

Proper positioning of weapons, construction of defensive works and obstacles, organization of unit defense, and security are prime considerations.

1-44. An overlay is prepared to include the defense plan and operational layout for new area. If appropriate, route overlays or schematic diagrams are also prepared. The overlays are used by the advanced, main, and rear parties. A copy is submitted to higher headquarters.

RECONNAISSANCE

1-45. After the new area is selected, the commander or platoon leader makes a personal reconnaissance of the route to the new area. If this is not possible, a map reconnaissance is made. The route, the surrounding terrain, and road network in the new area must be evaluated for suitability. The following route characteristics must be noted:

- Strength and clearance of underpasses.
- Durability, capacity, and width of roads and bridges.
- Terrain characteristics that would favor an ambush of the convoy.

A thorough reconnaissance is extremely important, as the results determine planning for the unit move, and may dictate the use of alternate routes.

ADVANCE PARTY

1-46. Once reconnaissance of the route and new area is complete, an advance party is dispatched to prepare the area for occupancy and to mark the route. The advance party usually consists of personnel representing all sections of the unit. The number of personnel included must be sufficient to carry out the following tasks:

- Clear the route of obstacles and warn the main body of known or suspected enemy activity along the route.
- Check the area for chemical contamination by conducting monitoring operations, if required.
- Place route markers.
- Provide platoon and section guides from the release point to guide vehicles to their assigned areas.
- Secure the area.
- Check area for mines, booby traps, and enemy activity.
- Set up and man temporary outposts.
- Lay communication wire from the CPs to the defense positions and work areas.
- Prepare positions for crew-served weapons.
- Prepare hasty fortifications to cover likely avenues of approach.

PRIORITY OF ACTIONS

1-47. After moving into the new area, the commander of the battalion headquarters is informed of the new location. The commander is briefed on the situation in the area, the units supported, and any problems or specific requirements relating to the support mission. Other tasks to be performed upon arrival in the area include the following:

- Complete perimeter defense and coordinate with base defense operations center or base cluster operations center.
- Prepare for operations and concurrently establish liaison with supported units.
- Complete billeting for unit personnel.
- Coordinate defenses with adjacent units.

REAR PARTY

1-48. The rear party closes out operations in the old area. Composition of the party depends upon the work required to complete these operations. Communication is maintained between the rear party and higher headquarters until the CP in the new area becomes operational.

UNIT DEFENSE AND SECURITY

1-49. Detailed planning and training in conducting defense operations is required. Rapidly moving tactical operations, pockets of enemy resistance, and enemy infiltration that result from widely spread tactical formations are the rule rather than the exception. Units in rear areas are targets of enemy actions.

1-50. Defense planning must take into account all technical mission requirements so that operations will run as smoothly as possible in adverse conditions. Plans to meet any type of enemy attack will be incorporated in the unit security SOP. These plans are revised as necessary and are rehearsed regularly to ensure that all individuals know their duties and responsibilities.

1-51. At times, defense of a conventional ammunition unit will be at the expense of mission activities. The commander must continually evaluate mission requirements in light of the enemy situation. Security must provide early warning to allow unit personnel sufficient time to move to prepare defensive positions and reserve assembly areas.

Defense Plan

1-52. A defense plan is published as an integral part of the unit security SOP. The RAOC reviews and coordinates defense plans and area damage control plans. The defense plan includes all routine security and defense activities/procedures to include:

- Designation of specific responsibilities.
- Primary and alternate means of communications.
- Emergency destruction procedures.
- Coordination and identification of mutually defensive procedures with local unit higher headquarters.
- Active and passive individual and unit security and defense measures, such as communications security, operations security, and noise and light discipline.
- NBC defenses.

1-53. The defense plan must incorporate the fundamentals of defense. However, these fundamentals will be adapted to the peculiarities of the ammunition unit. At minimum, the plan must detail procedures and responsibilities, including the following:

- Surveillance and security.
- Organic and supporting weapons.
- Preparation of positions.
- Communications.

- Reserve forces such as QRF or TCF.
- Rear area protection.
- NBC defense plan.

1-54. The ASCC and others commanding joint operations must understand that the requirements and size of munitions operations will demand some type of augmentation for physical security of an ASA. This does not absolve the ammunition unit commander of the responsibility to plan and coordinate the ASA defense. Often, due to the scale of the operation, the ammunition unit commander is the base or base cluster commander responsible for security of the entire base.

AREA DAMAGE CONTROL

1-55. The unit commander develops an area damage control plan as part of the defense plan. The plan lists those measures to be taken by the unit before, during, and after an attack or natural disaster. The area damage control plan addresses actions required in the event of an NBC attack, including composition of the NBC monitoring and decontamination teams. The object of this plan is to minimize casualties and destruction, speed recovery, and reestablish support.

1-56. Planning, training, and practice alerts must be conducted before an attack or natural disaster occurs. Dispersion, camouflage, construction of fortifications and emplacements, and other actions common to defensive operations must be covered if training is to be effective. During the attack or disaster, emphasis is on survival and assistance to the injured. After the attack the emphasis is on resuming operations, which includes the following:

- Regaining control.
- Assessing damage.
- Treating and evaluating casualties.
- Clearing isolated and danger areas.
- Conducting chemical agent detection and radiological monitoring and surveys and reporting results.
- Conducting salvage and emergency resupply operations.
- Reestablishing communications.

1-57. Furthermore, the unit must remain alert to the possibility of a follow-up attack by enemy forces. The unit must be prepared to defend itself and to provide personnel to area damage control forces. Regular enemy forces may try to surprise or capitalize on the surprise and confusion caused by an attack or disaster. The unit must be capable of quick and proper action. Company plans for area damage control must be a part of the battalion plan. The area security controller coordinates these plans with other units and is responsible for preparing and implementing plans for a specific area. The battalion or the RAOC may direct that unit plans be modified. Battalion headquarters provides instructions on submitting unit plans and necessary modifications to the submitted plans.

SUMMARY

1-58. Offensive, defensive, and contingency operations and SASO discussed earlier in this chapter require that munitions units be capable of conducting efficient tactical moves. This efficiency ensures that personnel and equipment are in the right place at the right time to support mission requirements. Other chapters in this manual discuss specific technical support requirements that must be completed to provide safe, efficient, and timely supply of munitions to the user. The command must emphasize training and leadership at all levels to ensure that munitions units are thoroughly familiar with munitions support in a tactical environment.

Chapter 2

Planning Combat and Stability and Support Operations

This chapter describes general ammunition planning considerations necessary to support combat operations and/or SASO. It includes development of contingency plans and SOPs, prepacking of unit material, transportation for unit movement, retrograde of ammunition, and transitions to and from combat operations or SASO.

DEFINING COMBAT AND SASO MISSIONS

2-1. The term, *combat operations*, is generally used to describe both war and contingency operations. War is a major conflict between nations employing total resources and may be of a limited or general nature. Generally, war involves large-scale combat operations for an indefinite period until a favorable conclusion is reached.

2-2. The term, *contingency*, is generally used to describe a crisis, often with complex political implications, that may happen anywhere in the world where US interests are threatened. Such a crisis may lead to hostilities where the military mission and threat may not be specifically defined but where strategic objectives are identified. Although contingencies may evolve slowly, the decision to use a military option may be made with short notice. Contingency operations are expected to be of short duration with a quick, clear victory. They almost always take place in a new or a maturing theater where there are either no or few established US forces. In combat operations, US services may be fighting as part of joint or combined forces with allied participation.

2-3. The term, *stability and support operations*, is generally used to describe the use of armed forces to help keep tensions between nations below the level of conflict. Typical operations include disaster relief, nation assistance, security and advisory assistance, counter-drug operations, arms control, treaty verification, support to civil authorities, and peacekeeping. In this manual, combat operations and SASO are synonymous for Class V support operations. The main differences are the nature of the activity, the size and structure of the combat force, the support structure on the ground, and METT-TC.

2-4. Future military operations will require that ammunition units be effective and efficient, highly mobile organizations. Battles may be nonlinear and require rapid movement, multiple relocations, and the ability to support and sustain maneuver forces in a variety of mission profiles. Thus, ammunition support units must be capable of adapting to many scenarios and configurations. Depending on the size of the supported force, an ammunition unit may conduct support operations in either a company or modular configuration. Modular configurations will be used based on operational needs. This may mean that a single modular platoon could be deployed to support a brigade contingency, or a number of platoons and/or companies could be deployed to support a mature theater. These units must be self-

sustaining for a period of time, able to operate as part of a multifunctional organization, and 100 percent mobile using organic assets. Training for combat operations and SASO is an essential element of readiness, effectiveness, and success.

2-5. The mission of ammunition support units is to provide the required type and amount of ammunition to the combat user at the needed time and location. Therefore, ammunition units are organized and deployed to meet mission support requirements. In peacetime, they operate out of fixed sites with all associated support and facilities in place. When deployed, they operate in an unfriendly or hostile environment to support a combat force. The condition of facilities may be uncertain, and operational support may be unstable for an undetermined period.

2-6. Since there is no one scenario for combat operations/SASO, ammunition units must be prepared to support operations ranging from peacekeeping to regional conflicts to major war. Like other logistical support, ammunition support requires that the unit have the appropriate mix of personnel, MOS skills, and tools and equipment to accomplish the mission.

CLASS V SUPPORT OPERATIONS

2-7. A review of US Army involvement in recent operations clearly indicates the need to improve logistical planning. Plans must be developed to support all levels of combat operations/SASO. It is critical that Class V support planning be detailed and threat-based. See FM 100-5 for discussions covering the following:

- Five tenets of Army operations doctrine.
- Five logistics characteristics essential to supporting combined arms operations.
- Four support considerations for incorporating sustainment imperatives into support planning.

Ammunition units will apply this guidance when developing plans to support ASCC or CINC plans and priorities.

2-8. Ammunition support planners must stay ahead of the situation as operational campaigns unfold by reinforcing successes with priority of support, planning for forward logistics bases, and extending lines of support. As tactical developments render earlier support plans obsolete, ammunition support planners formulate new ones. For more information on CSS, see FM 100-10.

2-9. Because units must deploy quickly, they do not have time for detailed, last minute planning. For example, when a unit deploys to a maturing theater, a support infrastructure may not be available to provide the logistical information needed to perform the mission. The unit commander must identify the logistical support structure that will sustain the unit. This type of contingency planning must be done in peacetime so that the unit can develop detailed SOPs and plans. At a minimum, the following factors must be considered during planning:

- Local POCs for unit support (i.e., computer, engineer, signal, security, defense, transportation, and POL).
- Status charts for unit personnel, equipment, and ammunition, including organic basic load (see Appendix A).
- Replacements for equipment, personnel, ASL, and PLL.
- Factors affecting the mission (i.e., stock objectives; chain of command; site locations/grid coordinates of supported units; identifying supporting MMC and MCCs, and QASAS; and HAZMAT certified personnel).
- Equipment staging location and procedures.
- Organization of march units.
- Organization of duties for advance and rear parties and reconnaissance element.
- Densities and speeds for different types of moves.
- Maintenance of records, including ammunition accountability and serviceability.
- C2 procedures.
- Actions to take in the event of attack.
- Accident and maintenance procedures.
- Messing and refueling procedures.
- Communications methods.
- Load plans for personnel, equipment, and ammunition-related materiel.
- Night operations.
- Continuity of operations plan.
- Directional signs, fire symbols, and FSU stack signs sufficient for three storage locations.
- Retrograde operations.
- Identification of QASAS source organization and method of acquiring support.

Less complex local and field SOPs will be developed as necessary. For more information, refer to FM 100-5.

STANDING OPERATING PROCEDURES

2-10. Field SOPs of ammunition units are based on logistical field SOPs of the command organizational element. They provide guidance in developing SOPs for supported units to facilitate the ammunition support process. SOPs must be adapted to actual operational conditions. Regardless of the SOP being written, considering worst-case situations is the key to useful, effective planning. At a minimum, external SOPs must cover the following:

- Unit and Class V WHNS.
- Communications, engineer, and transportation support.
- Safety.
- Ammunition issue and turn-in procedures.
- Protecting ammunition from the elements.

- Emergency resupply procedures.

At a minimum, internal SOPs must cover the following:

- Deployment (i.e., staging) procedures.
- Field setup, including storage, perimeter defense, and storage facility layout plans.
- Operational procedures, including ammunition receipt, storage, issue, and maintenance operations.
- Link to C2 element.
- Routine and emergency destruction plans.
- Fire-protection plans and other safety concerns.
- Air resupply procedures.
- Logistical plans for required augmentation elements (e.g., QASAS personnel).

During actual combat operations or SASO, there is no time to develop plans and procedures. Development of simple, realistic SOPs are essential for fulfillment of the unit Class V mission.

PREPACKING

2-11. To make any plan work in the changing combat/SASO environment, everything possible must be done in advance. Prepacking is one of the most useful actions a deploying unit can take. While expendable supplies are generally available through normal supply channels, a period is likely when these items may not be obtainable. Units must prepack as many expendable supplies as possible (e.g., blank forms, directional signs, ammunition placards, banding, paint, and stencils) that can be packaged and/or palletized for transport. Consideration must be given to developing packing lists that cover a variety of METT-TC environments.

2-12. Another critical asset to prepack is a complete, up-to-date Class V reference library that also includes applicable transportation publications. Commanders must ensure that manuals required to complete support tasks and maintain organic equipment are included in packing preparations.

TRANSPORTATION

2-13. MOADS-PLS ammunition companies are only 50 percent mobile, less ammunition stocks. Because they do not have sufficient organic transportation to move an entire unit at one time, additional transportation must be requested. Transportation requests are normally coordinated through the unit C2 element to the nearest MCT and/or local transportation activity. For information on motor transportation request procedures, see FM 55-10. Transportation requests will include the following information:

- Move date.
- Routes.
- Destination.
- Time and place transportation required.
- Number of personnel to be moved.

- Quantity, type, weight, and cube of cargo.

Although modular ammunition platoons are 100 percent mobile minus ammunition stocks, they must still coordinate unit movements through their supporting higher headquarters.

RETROGRADE

2-14. Upon completion of combat operations or SASO, the ammunition retrograde process begins. This process includes the following steps:

- Collecting.
- Identifying.
- Inspecting.
- Requesting disposition instructions.
- Repackaging.
- Load planning.
- Shipping.

Retrograde of ammunition generally includes the return of unserviceable ammunition, CEA, and serviceable ammunition to rear supply or depot facilities.

2-15. In recent operations, excessive amounts of munitions were requisitioned and issued to deploying forces, placing a tremendous burden on the ammunition support system. The high cost and low density of current and emerging technology munitions mandate the planning and development of a system for retrograde operations that begins at the onset of combat operations or SASO. The functions of estimating and monitoring the amount of repackaging materials needed for the retrograde of munitions are critical. Requisitioning these materials at the last minute may be difficult, particularly during redeployment when competition for movement of all types of materials is intense. Retrograde operations must be covered in field SOPs, and strong emphasis given to return of packaging materials by using units.

TRANSITION TO COMBAT/SASO

2-16. The transition from a peacetime mission and the move from an installation, post, camp, or activity are major steps for ammunition units. Commanders must ensure that officers and NCOs understand the transition process, and that unit training is given priority. This understanding and training prepare the unit to deploy to its assigned area and perform its mission effectively and efficiently.

2-17. During movement, units must continue to execute contingency plans and tactical operations. When a move is to be made, the following must be considered:

- Planning.
- Equipment and personnel.
- Transportation.
- Reconnaissance and site selection.
- Area preparation and layout.

- Defense, security, and area damage control.

2-18. Command elements analyze many factors when making decisions concerning unit deployment. These factors include the following:

- Location or theater of deployment.
- Operational situation (i.e., forced or permissive entry).
- Date and time of deployment.
- Support structure in theater.

2-19. Many deployment decisions are made based on answers to critical questions. Questions that must be addressed prior to deployment include the following:

- Will the deployment be as a unit, and will advance, main, and rear parties be required?
- Will the deployment be in phases?
- What organization will act as the POC in the theater?
- What is the deployment mission (i.e., forward in support of a brigade-, corps-, or division-size force)?
- What is the theater situation?

2-20. The warning order for deployment normally includes the general location of the area in which the unit will conduct its operations, the movement date, and a list of special requirements or instructions. When notified of an impending move, the unit commander alerts unit personnel and initiates planning. The move is coordinated with the supporting C2 element and transportation activity. The commander determines the type of move to be made (unless specified), requests additional transportation as necessary, takes steps to phase out current operations, and schedules a reconnaissance of the area.

2-21. Rapid, efficient deployments are subject to the detailed contingency planning and preparation of simplified field SOPs discussed earlier. To ensure a successful move under stressful conditions, unit training must employ these contingency plans and SOPs, making adjustments as necessary, until procedures are understood thoroughly by all unit personnel. See Appendix B for guidance that commanders can use in preparing for deployment. There likely will be a continuing need to forecast and manage training ammunition effectively. See Appendix C for information and guidance.

POST-COMBAT/SASO TRANSITION

2-22. One of the major missions of all ammunition support units, following completion of combat operations/SASO, is the retrograde of Class V materiel and components. Retrograde operations often signal the beginning of the redeployment process (see earlier discussion on retrograde operations). The same amount of detail given to transitioning to combat operations/SASO should be given to redeployment operations. Post-combat/SASO transitions may constantly change. Unit commanders must maintain close coordination and contact with their C2 element to ensure that their unit's deployment is carried out as smoothly as possible. Briefings should be conducted frequently

to control rumors and prevent erroneous information from having a negative effect on morale and operations.

2-23. Command emphasis must be given to training for transition to and from combat operations/SASO. Scenario-based training is often the most effective method since preplanning and transitions can be emphasized separately. A unit's ability to develop situational SOPs may be somewhat dependent on logistical guidance from their C2 element and higher logistical headquarters. However, it is always appropriate to maintain a standard SOP package that can be tailored to meet operational requirements. Preplanning and training can ease the strain and stress characteristic of deployment, unit movement, and redeployment.

SUMMARY

2-24. Combat operations and stability and support operations require detailed munitions support planning consistent with the Army's doctrine, logistic characteristics, and support considerations. Support planners must adapt quickly to changing requirements as a result of tactical successes. Combat/SASO and post-combat/SASO transitions are major missions of munitions units.

Chapter 3

Munitions Supply Procedures

This chapter describes combat/SASO ammunition supply operations. These operations include receipt, turn-in, issue, shipment, and retrograde.

RECEIPT

3-1. The term, *receipt*, refers to a shipment of ammunition received from an ASP, a CSA, or a TSA, or directly from a port, depot, or manufacturing plant. Receipt must not be confused with unit turn-in. Ammunition receipt operations include completion of administrative details, inspection of vehicles, and unloading of ammunition at the designated storage location. Stocks received by an ammunition supply unit are recorded on stock records, reported to the appropriate MMC, and stored for subsequent shipment or issue.

3-2. The supporting MMC normally notifies an ammunition unit in advance of a scheduled incoming shipment. However, unscheduled emergency resupply shipments may arrive at any time. To ensure that notification is received, the unit should maintain close coordination and communication with the MMC. Once the unit receives a notice, it selects storage locations and makes plans to unload and store the ammunition. During the planning stage, the unit must examine storage compatibility, Q-D requirements, and security factors. Also, it must consider any mission requirements for configuring stocks into MCLs. It may be necessary to rewarehouse or consolidate some stocks already in storage to make room for additional stocks and to facilitate vehicle off-loading at the planned storage location. Planning also includes assigning enough people and equipment to complete the operation safely and efficiently.

3-3. Receipts at TSAs and CSAs are normally in large quantities. TSAs receive 100 percent of stocks directly from the POD, and CSAs receive 50 percent from the POD and 50 percent from the TSA. Receipts may arrive on trailers or PLS flatracks in palletized break-bulk configuration or in containers. It is also possible that some will arrive as configured loads. In a mature theater, representatives of ammunition units may be tasked to assist with the off-loading and distribution of stocks at the POD. In an immature or maturing theater, an LSE or AST coordinates off-loading and distribution of stocks to storage areas. See FM 9-6 for more information.

3-4. When the shipment arrives at the storage location, the convoy commander or supervisor provides the control section with a copy of the shipping/receipt documentation. Vehicles are inspected in the vehicle holding area before entering the ammunition storage area.

GUIDELINES

3-5. Attention to the following guidelines makes the receipt of ammunition safer and easier to control:

- Be aware that a single shipment may contain mixed DODICs, NSNs, and lot numbers. Conduct a detailed inventory during or after the unloading process. Use advanced notices of receipts for planning storage location operations.
- Inspect ammunition thoroughly for damage and safety hazards.
- Check unit SOP for guidance if ammunition is arriving by a particular mode of transportation.
- Check planographs, magazine drawings, or FSU sizes to determine if rewarehousing is needed to accommodate the receipt. Complete rewarehousing before shipment arrives.
- Consider the amount of labor, MHE/CHE, and time required for off-loading.

DOCUMENTATION

3-6. The forms listed below are generally required when receiving ammunition. An “R” following the form number indicates that the unit may reproduce the form.

- DA Form 3020-R. Prepared for each lot and stack of ammunition stored during receiving operations.
- DA Form 3151-R. Used to record storage locations of all items in the shipment.
- DD Form 626. Used by storage facility personnel to inspect arriving vehicles before unloading. Prepared IAW 49 CFR and DOD Regulation 4500.9-R.
- DD Form 1348-1A. Prepared by the shipper, an accountable document used to complete the shipment. Contains detailed information about the shipment.
- DD Form 1384. Prepared by shipper, provides vital data concerning the shipment. Stays with ammunition during shipment.

PROCEDURES

3-7. The flowchart in Figure 3-1 is a guide for planning and conducting receiving operations at the ASA based upon a receipt of notification from the MMC. It can also be used for writing SOPs for ammunition receipts.

TRANSPORT INSPECTION

3-8. Military ammunition inspectors, QASAS, or other qualified personnel inspect all incoming, loaded transports before they enter the storage area, regardless of the transportation mode. Since ammunition is especially sensitive to fire, the transports (e.g., tractors, trailers, railcars) and their cargo must be inspected for safety and fire hazards. Also, inspectors must check the transports for evidence of tampering or sabotage. Inspectors will inform the driver or convoy commander of any deficiencies. If the deficiencies cannot be corrected, the driver or convoy commander will coordinate with his unit to ensure that serviceable transports are provided.



No	Activity	Document	○	●	■	▲	⊗	⊕
1	Initiate Shipment	DD 1348-1A	○					
2	Provide Advanced Notice to Receiver	DD 1348-1A		●				
3	Conduct Advanced Planning for Receipt					▲		
4	Ship Ammunition	DD 1384 DD 1348-1A		●				
5	Arrive at ASA				■			
6	Inspect Vehicles Prior to Entry	DD 626						⊕
7	Correct Deficiencies - if Noted	DD 626			■			
8	Park Loaded Vehicles in Holding Area				■			
9	Present Documentation to ASA Office	DD 1384 DD 1348-1A			■			
10	Review Documentation	DD 1348-1A DD 1384				▲		
11	Select Storage Locations	PLANOGRAPH				▲		
12	Prepare Stores Slip for each Vehicle	DA 3151-R				▲		
13	Prepare Magazine Data Card for Each Lot/Location	DA 3020-R						⊗
14	Assign Checkers, Unloading Crews, MHE					▲		
15	Give Stores Slips and Mag Data Cards to Checkers					▲		
16	Escort Vehicles to Storage Locations				■			⊗
17	Verify Type, Lot, Condition, Quantity Received	DA 3151-R			■			⊕
18	Sign Stores Slip	DA 3151-R			■			⊗
19	Annotate Magazine Data Card							⊗
20	Conduct Receipt Inspection							⊕
21	Drive Empty Vehicles to Assembly Area				■			
22	Return Stores Slip to ASA Office	DA 3151-R						⊗
23	Verify Stores Slips for Accuracy and Completeness	DA 3151-R				▲		
24	Total Stores Slips by Lot and Location	DA 3151-R				▲		
25	Review Suspension File for Lots Received					▲		⊕
26	Cross Check Stores Slip With Receipt Documents	DA 3151-R DD 1348-1A, 1384				▲		

Figure 3-1. Receipt Procedures

27	Recheck Actual Receipts - if Discrepancy Noted								
28	Record Actual Receipts on Receipt Documents	DD 1348-1A DD 1384							
29	Sign Receipt Documents	DD 1348-1A DD 1384							
30	Depart ASA With Signed TCMD	DD 1384							
31	Post Lot Locator Records	SAAS							
32	Forward Materiel Receipt Transaction to Supporting MMC	SAAS							
33	Record and File Documentation	ALL							

Figure 3-1. Receipt Procedures (Continued)

Motor Vehicles

3-9. Motor vehicles are inspected as they arrive at the storage facility using DD Form 626, which is carried with each shipment. The driver must have a valid vehicle operating permit and HAZMAT qualification unless exempted by an HN agreement. Also, the following items on the vehicle will be inspected:

- Cargo area for excessive debris and POL products.
- Steering for safe operation.
- Windshield and wipers for adequate operation.
- Fire extinguishers for serviceability.
- Brakes and lights (especially for night operations) for proper operation.
- Exhaust system for accumulation of grease, oil, or gasoline and carbon monoxide fumes leaking into the cab.
- Fuel tanks and lines for leaks.
- Trailer coupling device for serviceability.
- Tires for any dangerous condition.
- Ammunition load to ensure it is securely blocked and braced or secured with cargo straps.

Under no circumstances will a vehicle be allowed into an ASA with a defect that endangers the load or the ASA.

Railcars

3-10. In most cases, a QASAS is available when the railcar is spotted and opened. Inspections are conducted at a designated inspection area. If sabotage or other unsafe condition is suspected, the railcar will be moved to another area so that authorized security and/or EOD personnel can inspect it. Off-loading can begin as soon as the car passes inspection.

Aircraft and Vessels

3-11. The assistance of other services is necessary to ensure that aircraft and vessels are inspected properly. Also, a QASAS/qualified military inspector must be available at the storage area since transporting with aircraft and vessels requires motor vehicles or railcars to move munitions to and from the actual storage site.

3-12. Transport inspections ensure that the mission can be completed with minimal danger to personnel and that there will be no loss of munitions due to unsafe conditions. Peacetime inspection criteria are stringent. While criteria or standards may be relaxed to speed the flow of ammunition during combat/SASO, it must not be enough to cause unwarranted safety hazards. Unit commanders must ensure that any relaxation of the inspection policy is fully understood by ammunition unit personnel and that safety standards are clarified to using units. See DA Pam 385-64 for added guidance.

STORAGE PROCESS

3-13. The control section initiates the storage process when it reviews receipt documentation, selects storage locations, and prepares a DA Form 3151-R. Checkers and other personnel and equipment are assigned to off-load the vehicles. Checkers escort vehicles or group of vehicles to the storage locations where type, lot, condition, and quantity of load are verified and inspections are conducted. As ammunition is stored, the checker/storage personnel will either prepare a DA Form 3020-R for each lot number by condition code and location or update the existing form.

3-14. After each motor vehicle is off-loaded, it is driven to the vehicle assembly area and returned to the control of the convoy commander. The checker returns the DA Form 3151-R to the control section where it is reviewed for accuracy and completeness. The total quantity of each item as shown on the DA Form 3151-R is cross-checked against the total quantity shown on the shipping/receipt document. The accountable officer signs the shipping/receipt document, and posts accountable stock records. A signed copy of this document is given to the convoy commander or supervisor. All transaction documents are filed for use as backup for posting accountable records.

3-15. If a discrepancy is noted between the two transaction documents, a recount is made. The actual quantity verified as received by the control section is entered on the shipping/receipt document. Discrepancies in quantity or condition of ammunition are reported to the shipper using an SF 364, Report of Discrepancy.

3-16. Depending on the storage facility, some modification of the process in Figure 3-1 may be necessary. However, any modification will be based on maintaining flexibility, simplicity, and adequate control during receipt operations. See Chapter 9 for more information on the storage process.

TURN-INS

3-17. The term, *turn-in*, refers to the return of unexpended ammunition and salvage items to a storage facility by the using unit. Turn-ins must not be

confused with receipts. During combat/SASO, the quantity of turn-ins is difficult to predict and depends on mission requirements, redeployment schedules, and a variety of other factors. Turn-ins may include unserviceable items, unused ammunition, and CEA. Regardless of the quantity or rate, all items must be thoroughly inspected and reported to the control section. For safety and economy, commands must encourage units to return munitions in original packaging. Ammunition support units must develop an SOP that outlines operations and procedures for returning ammunition and residue. See AR 710-2 and DA Pam 710-2-1 for more information.

3-18. Using units may be required to turn in salvage and residue materiel, including expended cartridge cases, containers, wooden boxes, and metal cans. To ensure that explosive items are not mixed in, all such materiel must be thoroughly inspected. Salvage materiel is stored in the inert salvage area. It is inventoried, recorded, and reported to the appropriate MMC for disposition instructions. The accountable officer must ensure that required documents are maintained.

GUIDELINES

3-19. For safer and easier control of the munitions turn-in process, the following guidelines must be observed:

- Encourage units to return munitions in original packaging.
- Discourage units from opening more rounds and packages than they need for their operations.
- Inspect all turn-ins thoroughly to identify unserviceable and hazardous munitions and mixed lots.
- Inspect all salvage and residue items thoroughly to ensure that they do not contain any explosive or hazardous materials.

The above points must be emphasized throughout the logistic and combat chains. Emphasis is more stringent in SASO where using units must exercise greater control. Also, the potential exists for operations to be concluded without expenditure of munitions. The greater the control, the smoother and more economical the retrograde/redeployment process. Munitions managers at the unit, brigade, division, corps, and MMC levels must be consistent in the guidance they provide.

DOCUMENTATION

3-20. The forms listed below are used for processing turn-ins. An "R" following the form number indicates that the unit may reproduce the form.

- DA Form 581. Prepared by using unit for turn-in of munitions and munitions-related items. Presented to storage facility at arrival.
- DA Form 581-1. Used by unit when number of DODICs requested is more than can fit on the DA Form 581.
- DA Form 3020-R. Prepared by storage facility for each lot and stack of munitions turned in. Checkers post transactions to existing form and ensure it is completed accurately.

- DA Form 3151-R. Prepared by storage facility as temporary receipt or storage document. Directs relocation of specific items to specific storage locations. Used to track the movement of munitions within the storage facility.
- DD Form 626. Used by storage facility to inspect vehicles for hazardous conditions before they enter the storage area.

PROCEDURES

3-21. The flowchart in Figure 3-2 helps in planning for and efficiently conducting receipt of using unit turn-ins. Also, it may be helpful for writing SOPs. Depending on the storage facility, some modification of this process may be necessary. Salvage and munitions turn-ins are handled in much the same way with the following exceptions:

- Salvage materiel must be inspected for hazardous materials and certified that none are present.
- Salvage materiel is stored in an area separate from munitions.
- Salvage turn-ins must also be accounted for on stock records.
- Small arms residue is not individually counted; its weight is converted to rounds using brass conversion factors (see Appendix D).

Salvage and recoverable items are listed in DA Pam 710-2-1, Appendix J. Within the theater, the MMC may direct the recovery of additional salvage materiel.

ISSUES

3-22. The term, *issue*, refers to the transfer of ammunition stocks from a munitions storage facility to an authorized user, but not to another storage facility. Issues should not be confused with shipments. Units use the supply point distribution method to issue ammunition to using units. Responsible activity managers must support mission requirements. However, they must do so IAW guidance provided by higher headquarters relative to munitions support of using units in the AO. This process must be established as early as possible and understood by ammunition support units and using units. The OPOD logistical support annex and SOPs are developed to define issue operations and procedures.

3-23. Issues are based on S3 identified munitions requirements processed from the using unit's battalion S4 up to the brigade S4. The brigade S4 consolidates munitions requests and forwards them to the supporting FSB and to the DAO. The DAO coordinates with the corps MMC to meet unit ammunition requirements. Also, the brigade S4 and the DAO monitor the CSR, critical item shortages, and unit priority for munitions resupply. The CMMC supports these requirements by sending an MRO to the appropriate ammunition storage or supply activity.

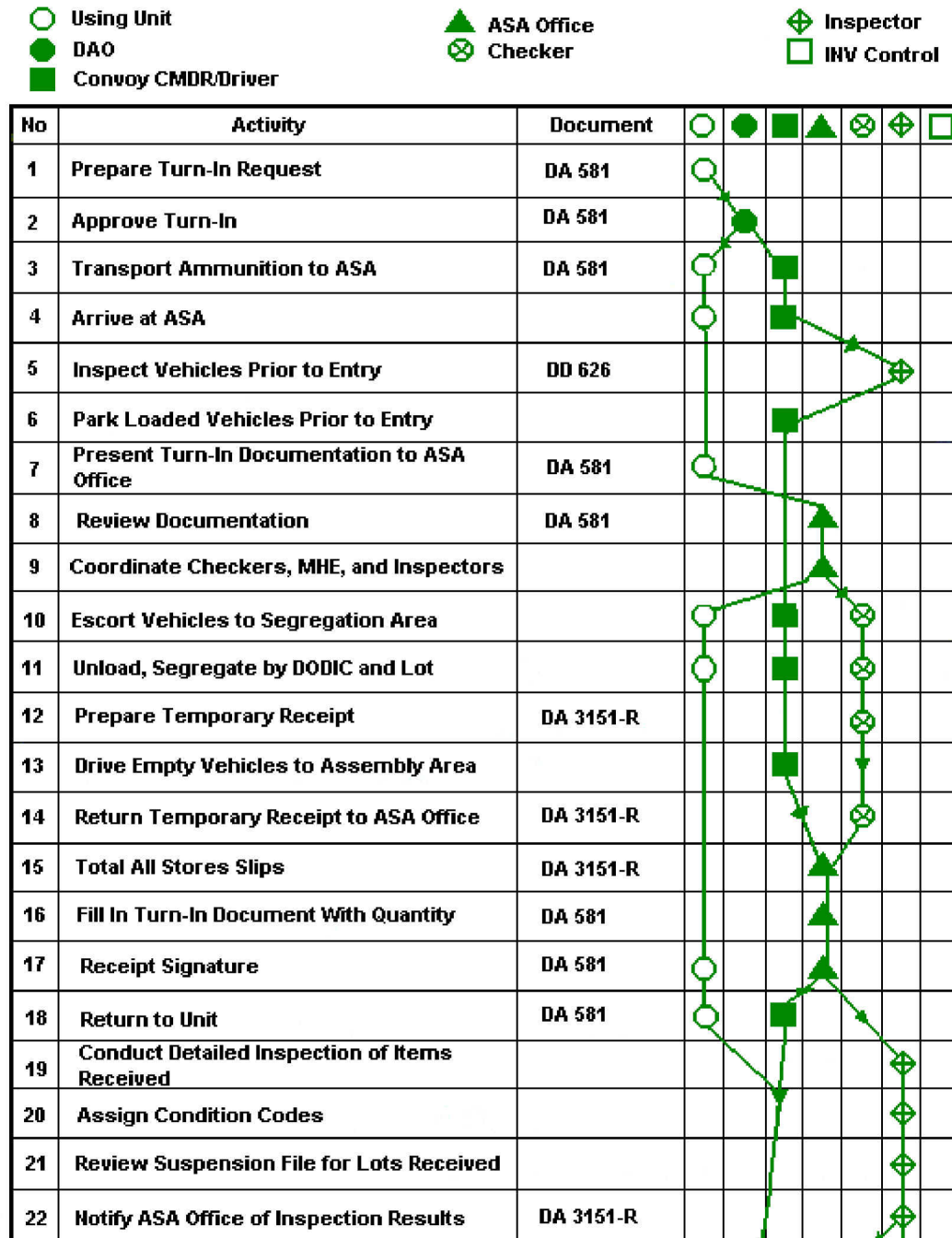


Figure 3-2. Turn-In Procedures

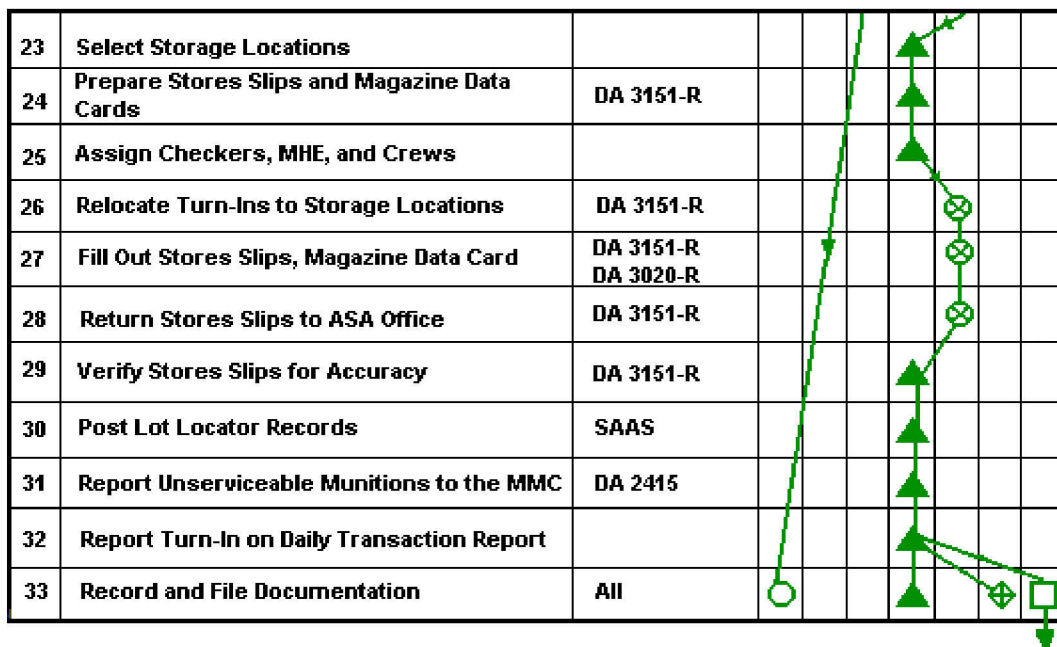


Figure 3-2. Turn-In Procedures (Continued)

GUIDELINES

3-24. The following guidelines will assist ammunition units in providing efficient support:

- Issue only serviceable munitions. See Appendix E for Ammunition Condition Codes.
- Advise using units about limitations on the use of restricted munitions and munitions suspended from issue and use except for emergency combat. Depending on the type of operation, some munitions may not be authorized for issue, even if they are available at the storage facility. Ammunition units must ensure that any policy regarding such specific items is clearly understood. The supporting MMC is a good source of information.
- Never issue munitions classified as “suspended from issue and use.”
- Closely monitor issues of miscellaneous small lots of artillery munitions so that using units do not constantly have to adjust registration.

3-25. Munitions must be issued as follows:

- *Priority 1.* Smallest lots of munitions issued first.
- *Priority 2.* Munitions designated as "priority issue."
- *Priority 3.* Acceptable substitutes from excess stocks. Coordinate approval of substitution with requesting officer.
- *Priority 4.* Oldest munitions of type being issued.
- *Priority 5.* All other stocks.

DOCUMENTATION

3-26. The forms listed below are needed to issue munitions. An “R” following the form number indicates that the unit may reproduce the form.

- DA Form 581. Prepared by the requesting unit and presented to the storage facility for issue.
- DA Form 1687. Properly completed form presented to storage facility by using unit. Used to ensure that DA Form 581s have the proper signatures.
- DA Form 3020-R. Prepared by storage facility for all munitions in storage. Checkers post transactions affecting the on-hand balance to the existing DA Form 3020-R and ensure that forms are accurately completed.
- DA Form 3151-R. Prepared by storage facility as a temporary receipt or storage document. Directs the relocation of specific items to specific storage locations. Used to track movement of munitions within the storage facility.
- DD Form 626. Used by storage facility to inspect vehicles for hazardous conditions before they enter storage area.
- DD Form 836. Prepared by storage facility for each driver of a vehicle that leaves the facility loaded with munitions. Drivers must keep this form in their possession *at all times* while transporting munitions.

PROCEDURES

3-27. As stated above, the DA Form 1687 is used to ensure that DA Form 581 has the proper signatures. In a division, the DAO or designated representative authenticates the DA Form 581 or facsimile-formatted document before the requesting unit arrives at the storage facility. In corps artillery, the S4 officer may be designated to authenticate the request. Authentication gives tactical commanders control of ammunition issues. With proper controls, ammunition managers at all levels can comply with sudden changes in priorities and allocations of munitions assets.

3-28. Combat operations/SASO and mission requirements are subject to constant change. Based on a last-minute change, for example, the using unit may arrive at the issue facility with a verbal request to change the quantity or type of items to be issued. The ASA, in coordination with the DAO or other command representative and the MMC, must then determine whether stocks are sufficient to support the requirement. All responsible parties will verify the issue. The ammunition unit SOP must contain guidelines to cover such situations.

3-29. Each storage facility maintains a list of the units it supports. While a basic list should be available from the supporting MMC or DAO, operational considerations may cause the list to evolve constantly. The storage facility must coordinate closely with the MMC to maintain mission continuity and to identify theater-specific policies that differ from the policies used by ammunition units in ordinary circumstances. The flowchart in Figure 3-3 is a guide for planning and conducting efficient issue operations. It may also be used for writing SOPs for munitions issues.

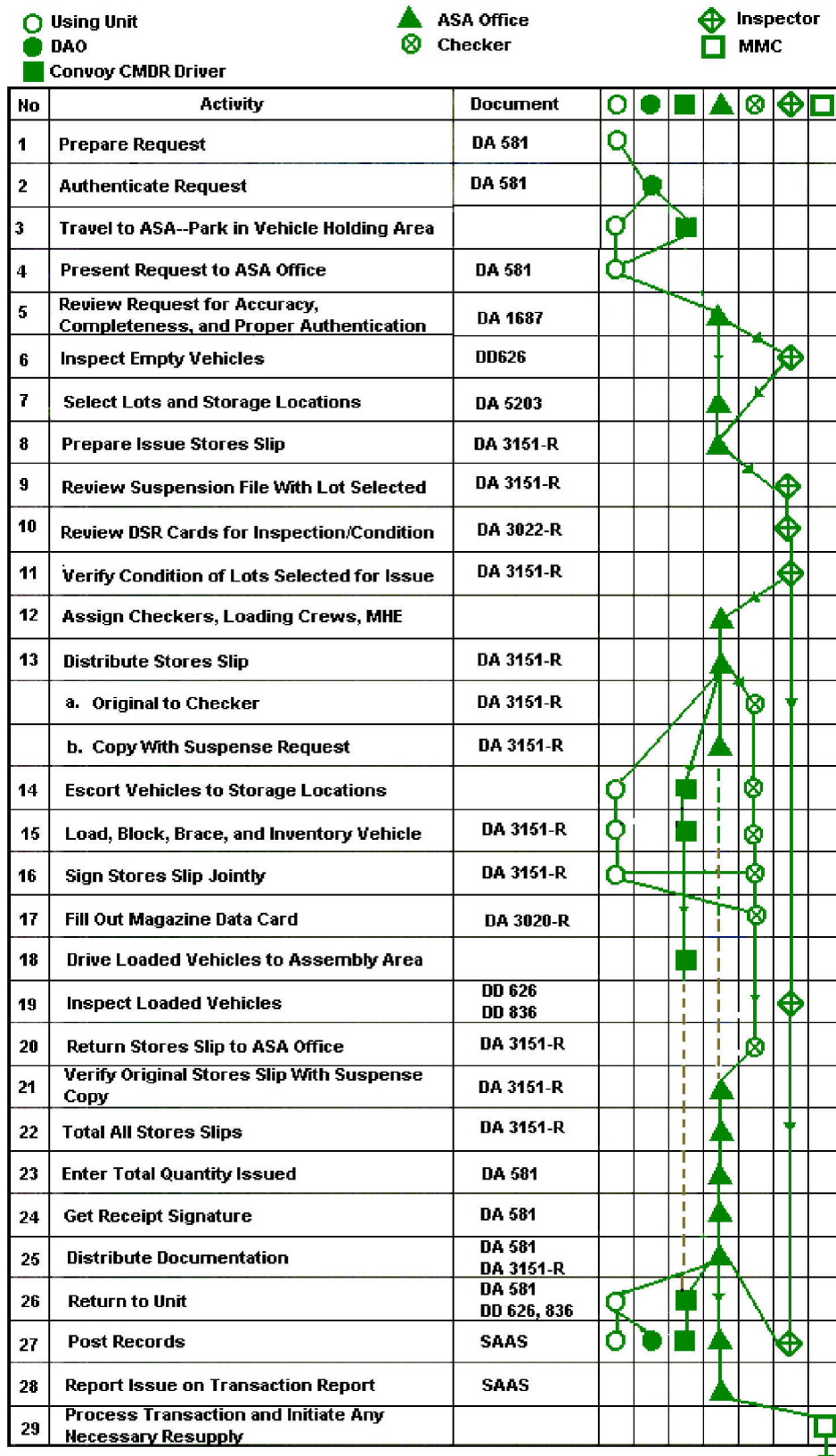


Figure 3-3. Issue Procedures

SHIPMENTS

3-30. The term, *shipment*, indicates the movement and transfer of ammunition stocks from one storage facility to another—either into, within, or out of the theater. It includes movement to an ATP using transportation assets not organic to ammunition units. Also, it includes retrograde of serviceable and unserviceable munitions and CEA to the theater rear or out of the theater. Normally, theater, corps, or HN transportation assets are used for transportation. Shipments are not to be confused with issues.

3-31. In routine operations, ammunition shipments between storage facilities are directed by MRO only from the supporting theater or corps MMC. These shipments are made up from operating stocks arriving in the theater or from those stored in the TSAs or CSAs. Shipments over and above established CSR constraints may be made provided the theater Class V stock level exceeds theater demand and if approved through higher command channels. Shipments out of the theater to support other contingencies may also be made when directed. The DAO determines the munitions status of the division ATPs and decides if munitions in the division can be cross-leveled to meet division requirements.

3-32. In most situations, shipments in the combat/SASO zone are limited to highway transport. The MCA schedules transportation according to theater or corps priorities. Rail and water facilities may be used when available and if feasible. Aircraft are used only when absolutely necessary, usually for emergency resupply or special operations.

3-33. Munitions shipments to TSAs and CSAs are mostly containerized or palletized in break-bulk and uploaded on trailers or PLS flatracks. In most cases, only containerized munitions arrive at the TSA/CSA where they are unstuffed, configured into MCLs, and shipped forward to ASPs. If the mission requires, and if transportation is available, munitions are throughput as close to the using units as possible.

3-34. Munitions shipped from CSAs to ASPs are either in MCLs or break-bulk/single DODIC loads on PLS flatracks. ATP shipments from the CSA and the ASP are either in MCLs, break-bulk, or single DODIC loads. See FM 9-6 for more information on munitions flow in the theater of operations.

GUIDELINES

3-35. The supply facility begins planning the mechanics of the specific shipment upon receipt of an MRO, shipping instructions, or other shipment authority. The thoroughness of advance planning largely determines the efficiency of any shipping operation. Plans vary depending on the tactical situation, operational environment (i.e., METT-TC), type of shipment, and existing workload. Most accidents involving Class V items occur during transportation, movement, and handling. A detailed, step-by-step SOP will make shipment activities safer and more effective. The following actions must be considered when planning a shipment:

- Verify availability of ammunition for shipment against on-hand assets.
- Select adequate loading points for the operation.

- Verify the condition code and any restrictions or suspension of the ammunition planned for shipment.
- Determine total gross weight, cube, and security risk classification of the ammunition.
- Determine ammunition compatibility for transportation IAW applicable motor vehicle/rail compatibility tables.
- Coordinate with supporting MMC to ensure advance notice of munitions shipments.
- Determine personnel necessary to complete the mission.
- Determine MHE required.
- Determine safety equipment, tools, packaging, and blocking and bracing materials required.
- Establish timeline for entire operation.
- Determine vehicle load plans and placarding requirements prior to start of operation.
- Ensure security of munitions throughout entire operation.

3-36. The responsible MCC maintains liaison with local transportation agencies and designates an MCT to be the single point of contact for each shipping or receiving activity. The MCT is the link between the shipping activity and the transportation service organization. It receives transportation service requirements from the MCC and processes the requests. The MCT coordinates the activities of transportation operators and expedites movements of incoming and outgoing carriers.

3-37. The ammunition unit must coordinate with the MCT to ensure efficient transportation and ammunition service support. The unit must provide timely, accurate data on pending shipments. This way, the MCT can supply advance information on the mode of transportation, the time of arrival, and the positioning (spotting) of carriers.

3-38. The MCT notifies the receiving activity of the departure time, estimated time of arrival, transportation mode and number of transportation units involved, and other information needed to plan for receipt. Supporting transportation agencies should provide an SOP based on the policies and directives of the higher headquarters.

SHIPPING REGULATIONS

3-39. Ammunition shipments within a theater of operations must comply with theater and DA directives, safety regulations, and HN requirements (METT-TC-dependent). These directives may or may not be compatible with those used in CONUS. See DOD 4500.9-R for more information on shipments of ammunition. ARs 55-38, 710-2, 735-5 and 735-11-2 contain information on using required transportation documents.

TRANSPORT INSPECTION

3-40. Military ammunition inspectors, QASAS, or other qualified personnel will inspect vehicles as discussed in the Receipts section of this chapter.

TRAILER/TERMINAL TRANSFER POINTS

3-41. A TTP is a point on the route between the origin of supplies and the destination where supplies are transferred from one means of transport to another (e.g., transfer of Class V supplies from railcar to cargo truck or from cargo truck to aircraft). Normally, TTPs are the responsibility of transporters. However, when Class V items are involved, transportation personnel may require technical advice and assistance from ammunition unit personnel. TTPs should not be confused with ATPs.

RAIL SHIPMENTS

3-42. Railhead operations, US/WHNS, may be part of ammunition supply operations. A railhead is a transfer point where ammunition is moved from truck to railcar, or vice versa. Specific guidance for shipping by rail—including safety precautions, loading, blocking and bracing, positioning (spotting) of loaded cars, certifying cars, and inspecting loads—are found in DA Pam 385-64; CFR, Title 49; and if available, AMC drawings. Inspection standards during combat operations/SASO are based on theater policy, METT-TC, and criticality of mission.

WATERBORNE VESSEL SHIPMENTS

3-43. While ammunition supply units may be required to provide technical assistance, MTMC and transportation units are responsible for loading and off-loading waterborne vessels in the theater of operations. See DA Pam 385-64 and CFR, Title 49 for more information. Also, USCG regulations govern the classification, compatibility, and stowage of ammunition aboard all waterborne vessels in waters under US jurisdiction. The Coast Guard is usually responsible for the security and supervision of waterborne vessels, including barges.

MOTOR VEHICLE SHIPMENTS

3-44. All ammunition supply facilities use motor vehicle procedures for shipping operations. DD Form 1384 or a facsimile formatted document may be used to request transportation for a shipment. Requirements may be coordinated via computer, telephone, or radio links. See DA Pam 385-64 for motor vehicle shipment regulations, precautions and safe handling procedures, inspection criteria, and technical escort procedures. Shipper and carrier responsibilities are contained in DOD 4500.9-R and theater-specific transportation regulations.

AIR SHIPMENTS

3-45. Air shipments of ammunition may be made at USA and USAF airfields, at heliports, and at ammunition sling-load areas. The Air Force controls air terminal operations at USAF airfields. Munitions shipments into and out of USAF facilities require careful coordination to prevent disruption of service.

Airfields must have staging areas where documents may be prepared and bulk shipments can be received and prepared for shipment.

3-46. Air shipments are preplanned for each aircraft by weight, cube, and compatibility. When possible, the arrival of loaded vehicles will coincide with aircraft availability. Normally, Army/Air Force personnel escort vehicles to the aircraft. The aircraft commander, loadmaster, or crew chief is responsible for supervising the stacking and lashing of the cargo.

3-47. The Class V storage facility is usually responsible for sling-load areas. Loaded cargo nets must be placed in the landing area so that helicopters can hover to pick them up. Cargo nets may be loaded at the airfield or at the ammunition supply facility and transported to the airfield.

3-48. A Hazardous Materials Declaration, or facsimile-formatted document, must be attached to each pallet of ammunition to be shipped by military or commercial aircraft. This document certifies that the shipment complies with the provisions of TM 38-250 or 49 CFR. An individual who has successfully completed the Special Handling Data/Certification Course must sign all copies of the form. For information on aircraft specifications, operating regulations, loading and unloading procedures, and special handling certification, see AR 95-27, DA Pam 385-64, TM 38-250, and 49 CFR.

DOCUMENTATION

3-49. The forms listed below are needed to ship ammunition. An "R" following the form number indicates that the unit may reproduce the form.

- DD Form 1384. Prime transportation information document prepared for each shipment by the supply activity making the shipment; carries transportation data throughout the movement cycle. Basis for advance planning; speeds movement of cargo at terminals and other transshipment and transfer points. Provides information needed to trace, locate, and divert shipments. During combat/SASO, a facsimile-formatted document prepared manually, by computer, or in message format may be used.
- DD Form 626. Used by storage facility to inspect vehicles for hazardous conditions before entering the storage area and, once loaded, before leaving the storage facility.
- DD Form 836. Prepared by storage facility for each driver of a vehicle that leaves the facility loaded with munitions. Drivers must keep the form in their possession at all times while transporting munitions.
- DD Form 1348-1A. Accountable document prepared by the shipper for each NSN/TCN combination. Includes ammunition management data required to process the transaction in SAAS. Also serves as MRO, confirmation or denial, and advance notice of shipment.
- DA Form 3151-R. Used to record storage locations of all items in the shipment. Tracks the movement of munitions within the storage facility.
- Placards and labels. Ensure that appropriate placards and labels are properly affixed to vehicles before loading.

PROCEDURES

3-50. The flowchart in Figure 3-4 below may assist in planning and conducting shipping operations and in writing SOPs. This chart can be modified to meet special requirements and conditions.

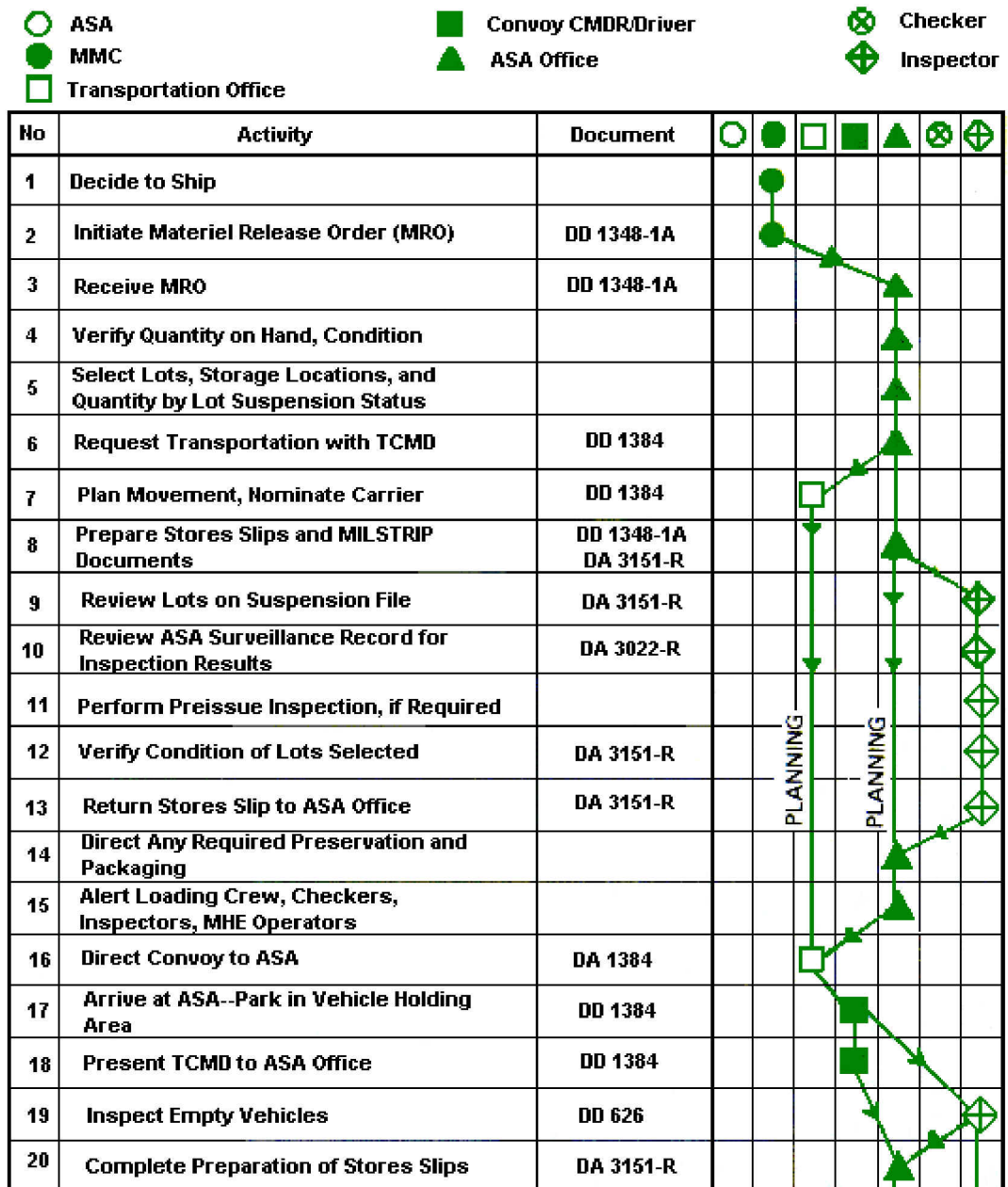


Figure 3-4. Shipping Procedures

21	Distribute Stores Slips	DA 3151-R																				
	a. Original and Copy to Checker	DA 3151-R																				
	b. Copy With Suspense Shipping Documents	DA 3151-R																				
22	Escort Vehicles to Storage Locations	DA 3151-R																				
23	Load, Block, Brace, and Inventory Vehicles	DA 3151-R																				
24	Sign Stores Slip Jointly	DA 3151-R																				
25	Fill Out Magazine Data Card	DA 3020-R																				
26	Drive Loaded Vehicles to Assembly Area	DA 3151-R																				
27	Inspect Loaded Vehicles	DD 626 DD 836																				
28	Return Stores Slips to ASA Office	DA 3151-R																				
29	Verify Stores Slip Against Suspense Copy	DA 3151-R																				
30	Complete Shipping Document for Each Vehicle	DD 1348-1A																				
31	Total All Stores Slips--by Quantity and DODIC	DA 3151-R																				
32	Prepare and Sign Final TCMD	DD 1384																				
33	Release Convoy - Jointly																					
34	Convoy Departs																					
35	Post Records	SAAS																				
36	Provide Notice of Departure to Receiver	DD 1348-1A																				
37	Provide Materiel Release Confirmation to the MMC	SAAS																				
38	Record and File Documentation	ALL																				

Figure 3-4. Shipping Procedures (Continued)

SUMMARY

3-51. Ammunition supply operations such as receipt, turn-in, issue, shipment, and retrograde are likely to be requested to support both combat operations and SASO. The theater or CMMC is a key organizational element in the shipment and retrograde process in terms of authorizing movement of munitions and packaging material. The MCA and its MCTs play a critical role in the transportation process.