1.0. General.

Have you ever heard some combatant asking such questions as "Where is my ammo?" "Where did I go wrong?" Perhaps he did not understand the munitions supply business. Believe it or not, munitions resupply is one of the least known and understood of any of the commodities managed. For years tactical commanders have planned major battles without taking into consideration where the munitions assets are coming from. Ammunition service support has become a victim of its own efficiency. When the tactical force has required munitions, the ammunition logistical system has placed the required types of munitions, in sufficient quantities, in the right place, at the right time. Because of this, tactical commanders have taken the attitude of "Don't worry about the munitions; it will be there." This lesson will provide you with an overview of the major elements in the Army's ammunition service support structure in a theater of operations. It will describe the planning process for transition to war, compute requirements for a theater of operations, and list the functions and responsibilities of the Division Materiel Management Center (DMMC) and Division Ammunition Officer (DAO).

2.0. Background for Munitions Support.

This section of the lesson will provide background on the Army's ammunition support system. Munitions are the dominant factor in determining the outcome of combat or stability and support operations (SASO). It is a critical component of fire and maneuver operations performed by the force projection Army. Munitions provide the means to defeat as well as destroy the enemy. They give the force the ability to block, screen, or protect itself. The limited quantity of our modern munitions and weapons systems requires that munitions be managed to ensure availability and enhance combat readiness. In the future, most major military operations will be joint or coalition and based on unexpected contingencies. These operations will require the munitions logistic system to be modular, tailorable, easily deployed, and flexible.

2.1. Mission.

The overriding mission of US forces is to deter war. Our national security needs form the basis of our national military strategy. We must support the four basic demands that are fulfilled by the military. They are:

- Guarantee strategic deterrence and defense.
- Exercise a forward presence in vital areas of the world.
- Respond effectively to a crisis.
- Retain the capacity to reconstitute forces.

The Army's ability to react and sustain the battle improves the chances of conducting a successful operation. The munitions soldier's mission is to ensure munitions arrive in the hands of the warfighter in the right quantities and proper types at the decisive time and place. Munitions logistic plans must mesh the tactical level commander's plan with the operational and strategic plans. This helps ensure timely support and sustains the operation.

Commanders, with advice from logisticians, tailor support packages to meet theater requirements for a variety of strategic contingency plans. The use of modular ammunition units increases our ability to meet theater munitions requirements. Modular units will be deployed based on operational needs and will help ease strategic lift requirements.

The Army's ability to meet its force projection requirements calls for highly mobile, multifunctional organizations capable of projecting munitions support anywhere in the world. The measure of success is the ability to accomplish the following effectively and efficiently:

- Provide munitions to operational and tactical commanders.
- Support current and future generations of combat power anywhere in the world.
- Sustain maneuver forces in a wide variety of mission profiles.
- Support the tenets of Army operations doctrine.
- Retrograde munitions to the continental United States (CONUS) or other theaters of operations.

2.2. Supported Units.

Almost every unit on the battlefield will require munitions support, but the primary focus of munitions supply operations will be to support maneuver forces and their combat support. Providing sufficient types and quantities of munitions at the right place on time is critical to the success of combat operations and stability and support operations (SASO). When the Army fights as part of a joint, multinational, or combined force, US Army ammunition units may support other US services and allied forces.

2.3. Support Environment.

Ammunition units must push munitions forward on the battlefield. At the same time, they must maintain minimum essential stocks throughout the distribution system to retain maximum flexibility and mobility for future combat operations. The need to protect ammunition support activities (ASAs) from rear area threat activities complicates munitions support operations. Military Police (MP) units augment ammunition units to provide security for ASAs. Ammunition units may find themselves close to combat. In such situations, units must continue to provide essential munitions support while relocating away from the threat. Disruptions from threat forces are likely to occur throughout the theater of operations, from brigade support areas to deep within the communications zone (COMMZ).

2.3.1. Combat Service Support (CSS) Characteristics.

The tenets of Army operations doctrine, as presented in FM 100-5 (see Figure 1), are basic to operational and tactical success on the battlefield. These tenets also establish the framework for organizing sustainment.

Figure 1. Five Tenets of Army Operations Doctrine

TENETS OF ARMY OPERATIONS DOCTRINE
• Initiative
• Agility
• Depth
• Synchronization
• Versatility

Doctrine enables the combat force to take advantage of opportunities to achieve tactical or operational success. Ammunition units must follow the five logistics characteristics, as presented in FM 100-5 (see Figure 2), to support combined arms operations.

Figure 2. Five Logistics Characteristics

LOGISTICS CHARACTERISTICS
• Anticipation
• Integration
• Continuity
• Responsiveness
• Improvisation

- **Anticipation.** Combat service support (CSS) commanders must ***anticipate*** future events and the needs of combat commanders. Staffs must devise and develop new methods for supporting those needs. While the unit is still supporting current operations, the logistics planner must forecast munitions demands based on future operations plans. Logistics planners must anticipate events and still remain flexible enough to accommodate likely contingencies. Successful anticipation in munitions support operations is the ability to meet shifting demands resulting from rapidly changing tactical conditions. To best support combat units, it is imperative that logistics officers be tactically and technically competent. See FM 100-5, Chapter 3, for a more detailed explanation of this characteristic.

- **Integration.** Unity of effort requires that CSS commanders fully ***integrate*** logistical support into the tactical and operational plans of the combat commanders. Munitions support must be bold, innovative, and based on a clear understanding of the commander's intent; however, guidelines for safe, secure operations must be followed. Combat commanders require the greatest possible freedom of action; therefore, ammunition units must organize to support the combat forces and their operations. Also, munitions support must be fully integrated into deception plans.

- **Continuity.** ***Continuity*** in munitions support is a critical factor in allowing combat commanders to have depth, retain momentum, and maintain the initiative. The ***continuity*** of sustainment is paramount to the continued success of the operation. While the tempo of combat operations varies, sustainment operations never cease. During lulls in combat, ammunition units must rebuild combat loads and replenish stocks. Also, they must conduct inspections, preventive maintenance services, repacking, demilitarization, destruction, and retrograde operations.

- **Responsiveness.** All ammunition support units must be ***responsive*** to the changing needs of the combat user. They must be prepared to relocate their support base and redirect incoming munitions without interrupting the flow of munitions to the fighting force. CSS plans must be flexible to allow the combat commander the ability to fully exploit a tactical opportunity.

- **Improvisation.** ***Improvisation*** is the ability that allows the commander to react to unexpected and unanticipated events and to exploit them to the fullest to accomplish his mission. No amount of planning can account for all possible contingencies on the battlefield. When the normal supply of munitions is interrupted, extraordinary effort, innovative supply procedures, and other unconventional methods may be needed to support combat operations. However, improvisation is not the answer for poor prior planning on the part of the commander.

2.3.2. Planning Guidance.

The CSS commander should use the four support considerations (see Figure 3) as a guide when incorporating combat service support sustainment into operational plans.

Figure 3. Four Support Considerations

SUPPORT CONSIDERATIONS
• Support combat commander's intent.
• Support forward.
• Maintain total asset visibility.
• Rely upon the Army's system of effective leadership.

- **Supporting the combat commander's intent.** The commander's intent may change with the situation and depends on many variables.

- **Supporting as far forward as possible.** As munitions containers arrive in theater, they are sent forward to a TSA or CSA. At the CSA the containers are unloaded, and the munitions are configured into mission configured loads (MCLs). The MCLs are then sent forward to ASPs or ATPs.

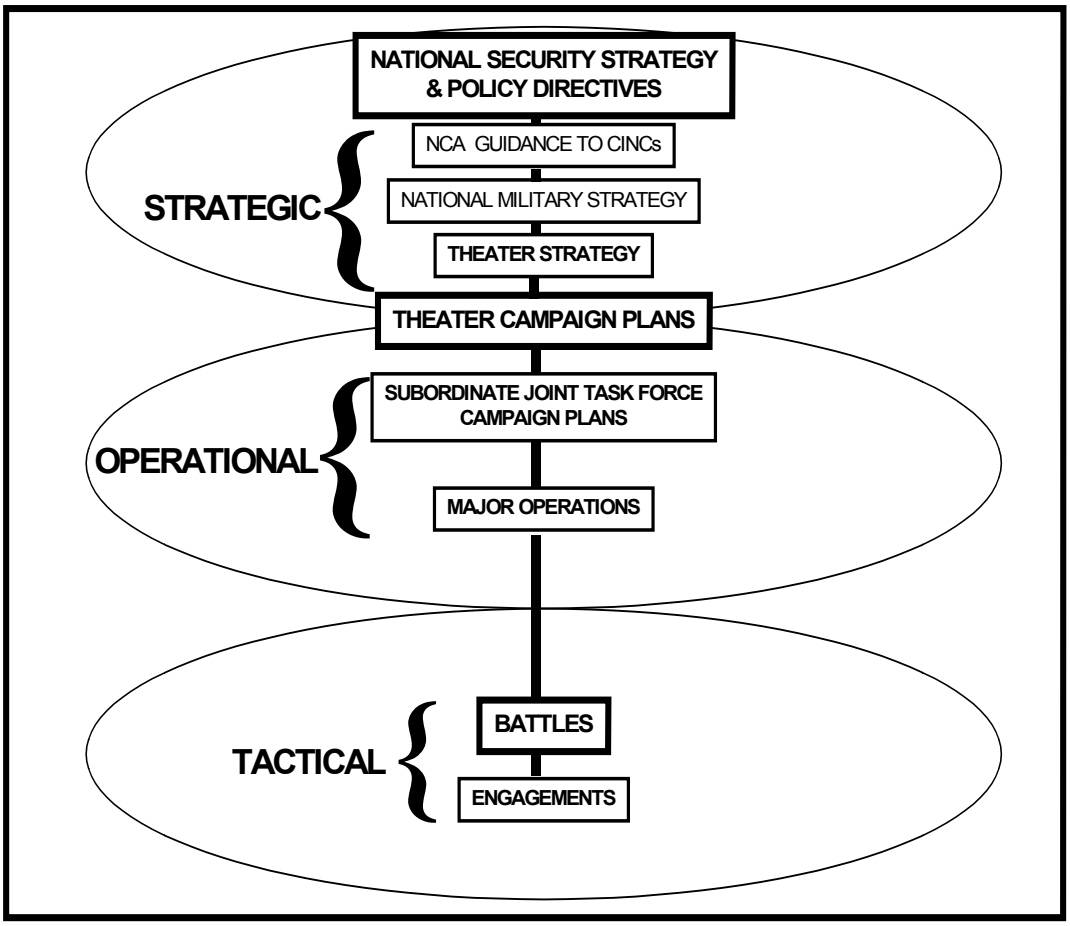
- **Maintaining total asset visibility (TAV)**. TAV means that munitions supplies are tracked from the time that they are introduced into the distribution pipeline until they arrive at their final destination so that their exact location is known at all times.

- **Relying upon the Army's system of effective leadership to adapt to the changing needs of the battlefield.** Effective leadership enables ammunition unit commanders to accomplish their critical ammunition support mission to the combat forces. All commissioned officers, warrant officers, and noncommissioned officers must be effective leaders as well as technically and tactically proficient.

3.0. Munitions Strategic, Operational, and Tactical Logistics Levels.

Levels of munitions support parallel the strategic, operational, and tactical levels of war (see Figure 4). At the strategic level, the national military strategy determines the theater strategy. The theater campaign plan is derived from the theater strategy and links the operational level (joint task force [JTF] campaign plans) to the strategic level (theater strategy). Plans for conducting major operations are derived from the JTF campaign plan. Battles and engagements are the tactical level components of major operations. Munitions support is an integral part of the plan at each of these levels. Munitions support is instrumental to the commander in building, sustaining, and projecting combat power to shape the battle. It is an essential part of the logistics system at each level of war. The theater (operational level) munitions system links the strategic and tactical levels of war. For more information, see FMs 100-5, 100-10, and 100-6.

Figure 4. Levels of War and Guidance Hierarchy



3.1. Strategic Level of Munitions Logistics.

The strategic level of the ammunition logistic system is the support base for all deployed forces and provides munitions based upon projected munitions expenditures. The strategic ammunition logistic system includes special activities under Department of the Army (DA) control. These include national inventory control points (NICPs), national maintenance points, depots, arsenals, plants, and factories. Supporting the strategic level of munitions is the function of these CONUS organizations or the theater base in the COMMZ and is coordinated with the logistics support element (LSE).

The LSE is the forward element of the munitions logistical base. It provides limited strategic level or other directed logistics support in the theater on an interim basis. The Army service component commander (ASCC) (formerly known as the theater commander) has command and control of the LSE.

An LSE consists of military, contractors, and civilian employees. They provide support within, as well as outside, the theater of operations, producing a seamless system. To optimize the logistics flow, the ammunition logistics system is centrally managed at the strategic level and decentralized at the operational and tactical levels.

The United States Army Materiel Command (USAMC) coordinates strategic organization actions through the LSE deployed in the theater. The early deployment of the LSE ensures a positive link to deploying ammunition units. Also, the LSE may have to fill gaps in the munitions support force infrastructure until the deploying units arrive in theater. The initial deployment will be for logistical assistance along with the other logistics personnel assigned to major units. The LSE does not replace capabilities provided by ammunition support units in the force structure. Rather, it provides an interface between the strategic and operational ammunition logistics levels.

3.2. Operational Level of Munitions Logistics.

The ASCC links Army plans to the combat commander's strategic level plans. The Army forces (ARFOR) commander links his plans to the operational level plans. These links enable the operational level of munitions logistics to support the commander in chief's (CINC's) plan. See FM 100-7 for more information.

Providing this support in a force projection environment presents new challenges. The ARFOR commander establishes priorities for operational level munitions. Operational bases within a theater provide strategic and operational munitions support to the tactical forces. Based on METT-T, the CINC develops a munitions organization capable of executing ammunition CSS tasks to support the campaign plan.

The difference between the operational and tactical levels of munitions logistics is the longer planning and preparation time required to support extended operations. The operational level of

munitions logistics encompasses support required to sustain campaign plans and major operations. It attempts to balance current consumption of munitions supplies with the needs of future major operations. It also enables success at the tactical level of war.

Operational munitions support significantly impacts the ARFOR commander's decision process. The commander uses METT-T to determine logistics time and distance factors, throughput, and lines of communication (LOCs). Assured logistics communications supporting high data transmission rates with the national industrial base provide TAV of critical items. In-transit visibility (ITV) allows the commander to know the location of resources in transit and to allocate them based on their projected arrival. The operational level of the ammunition logistic system provides the link between the strategic and tactical levels.

3.3. Tactical Level of Munitions Logistics.

The tactical level of munitions logistics sustains the tactical commander's ability to fight battles and engagements. Successful tactical level munitions logistics provide the right munitions, on time, at the correct location to the requesting unit. Mobile, responsive capabilities are essential for preparation and execution of the tactical level of munitions logistics.

The ammunition distribution system includes all supply activities needed to provide munitions to the using units within a theater of operations. Munitions requirements from combat battalions and brigades proceed through the materiel management channels of the divisions, corps, and theater until they ultimately reach the CONUS-based NICP.

The use, and therefore the structure, of ASAs have evolved. ASAs vary in size, capability, and mission. They are not bound by strict, hierarchical support structures but are based on projected mission requirements.

4.0. Support Structures.

Ammunition support units are organized to meet mission support requirements. Each unit has the appropriate mix of personnel, MOS skills, tools, and equipment to accomplish assigned missions. This section describes the ammunition support structure and distribution system. Topics include the two types of ammunition support units: MOADS-PLS units and modular ammunition units. Also discussed is the flow of munitions, information, and documents, as well as the responsibilities of distribution managers at each echelon.

4.1. Ammunition Surge Support.

Major operations and deployments create a tremendous demand on CONUS ammunition depots and port facilities. The Army no longer has massive stockpiles of munitions outside CONUS (OCONUS), and the amount of Army prepositioned stocks (APS) is limited. This leaves stateside depots and ports to provide most of the munitions required in an operation. Very early in the deployment process, planners must provide augmentation support to these depot and port facilities. A significant number of the Army's ammunition units are in the Reserve Components

(RC). For that reason, RC units should assist in the planning process. Also, RC ammunition units will probably assist in providing both planning and surge support.

When planning to use RC units to provide surge support, planners must consider the time required to mobilize and deploy the units. It usually takes an RC unit at least two weeks to complete the mobilization process. This time must be factored into all operational plans.

When the modular ammunition unit concept is implemented, one or more medium or heavy lift platoons may be assigned to each depot and port requiring augmentation. The number assigned will depend on several factors:

- Projected size and duration of the operation.
- Projected amount of munitions to be shipped.
- Size of the depot or port and the facilities, equipment, and personnel organic to the depot or port.
- Readiness level of augmentee units.

Providing surge support to CONUS depots and ports is critical to the success of any operation. Munitions sitting in stateside storage facilities do not win battles; the failure to get it to the theater of operations may result in unnecessary casualties and an unsuccessful operation.

4.2. Support Structure Overview.

The mission of the ammunition support structure is to deliver the required type and amount of munitions to the combat user at the time and location they are needed. This requires an efficient, effective, and flexible ammunition distribution system. To meet the needs of combat commanders, the ammunition distribution system must adhere to the sustainment imperatives presented in FM 100-10 and Chapter 1 of FM 9-6.

4.3. Ammunition Support Activities.

Three types of ASAs are in the theater: TSAs, CSAs, and ASPs. An ammunition transfer point (ATP) is not considered an ASA because of its temporary nature. The ASA mission is to receive, store, issue, and maintain the theater's conventional munitions stocks. Also, ASAs configure munitions into MCLs. Once configured, MCLs are shipped forward to ATPs for issue to combat units.

4.3.1. Theater Storage Area Operations.

The TSA encompasses the storage facilities located in the COMMZ. This is where the bulk of the theater reserve munitions stocks is located. TSAs are operated and maintained by one or more general support (GS) ammunition companies, or by one or more medium or heavy lift

modular ammunition platoons. Besides shipping munitions to CSAs, the TSA provides area munitions support to units operating in the COMMZ.

A TSA receives most of its munitions in International Standardization Organization (ISO) containers. The unit operating the TSA must have the capability to move containers on and off rail cars and line-haul transporters. To facilitate shipment, TSAs must be located where there is easy access to highways, railroads, airheads, and ports (see Figure 5). When a TSA's wartime stockage objective exceeds 25,000 short tons (ST), a second TSA should be established.

The TSA stockage objective is determined by the ASCC. AR 710-2 contains basic days of supply (DOS) policy for Class V. The theater army area command (TAACOM) ammunition group must keep the operational level materiel management center (MMC) informed of storage limitations or shortages in each TSA.

4.3.2. Corps Storage Area Operations.

The CSA is the primary source of high-tonnage munitions for the division and corps. It is operated by one or more GS ammunition companies or one or more medium or heavy lift modular ammunition platoons. The number of units assigned to operate a CSA depends on the corps authorized munitions stockage level. CSAs receive 50 percent of their munitions from the port of debarkation (POD) and 50 percent from the TSA. At a minimum, each corps will identify an ASA to meet these requirements.

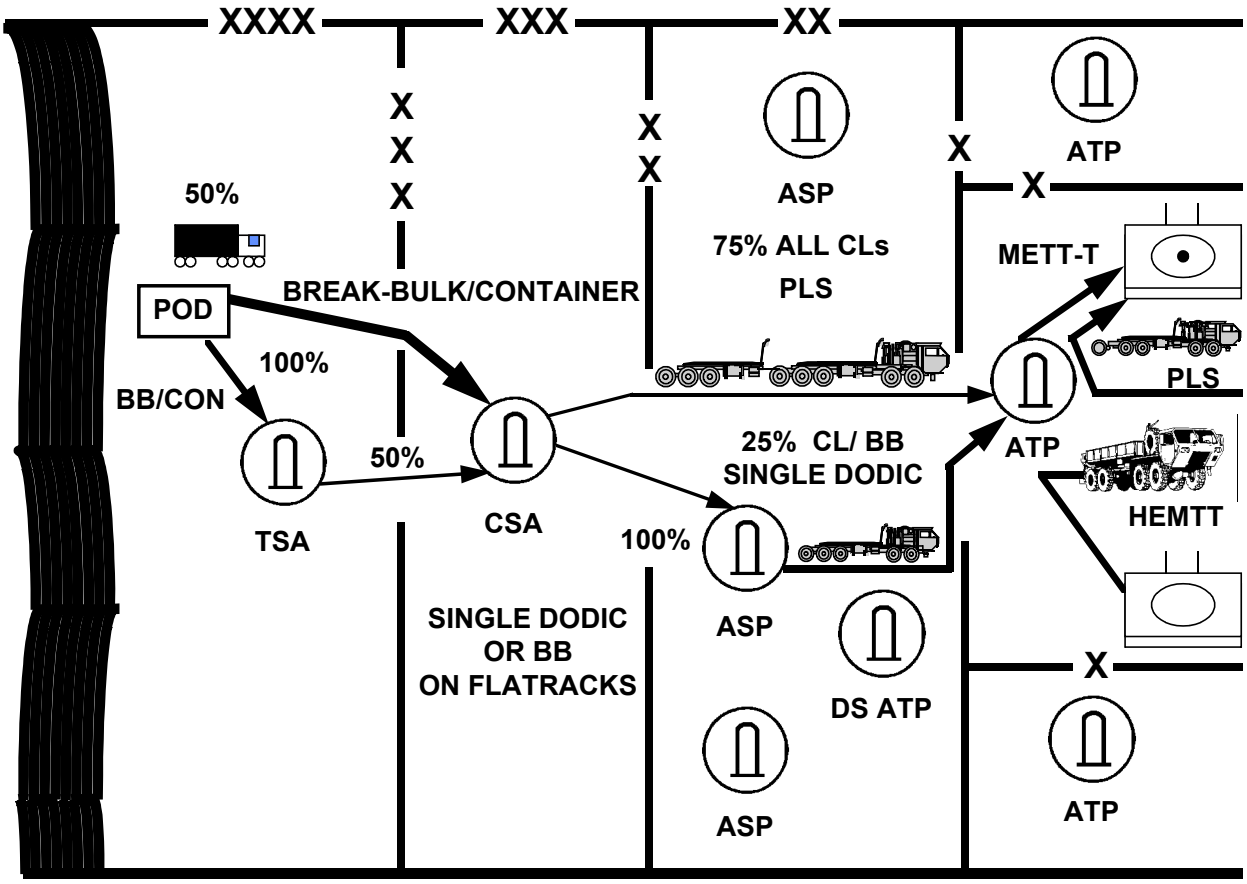
CSAs provide 100 percent of the ASP's munitions and 75 percent of the ATP's munitions, configured as MCLs. Besides providing munitions to ASPs and ATPs, CSAs provide area munitions support to units operating in the corps rear.

One CSA is normally required to support ASP and ATP operations for each committed division. Stockage objectives for the CSA are established by the corps support command (COSCOM) and are based on projected theater combat rates. Initially, the stockage objective of a CSA should be 10 to 15 days of supply. After the initial combat drawdown, the CSA should maintain 7 to 10 days of supply. When a CSA's wartime stockage objective exceeds 25,000 ST, a second CSA should be established.

The COSCOM ammunition battalion analyzes workload requirements based on the forecast and resupply requirements provided by the division ammunition officer (DAO). From this requirements analysis, the battalion determines how to best provide munitions resupply to the combat units it supports.

The ammunition battalion must synchronize ASA operations with corps transportation assets to ensure the timely movement of munitions stocks. With the incorporation of modular units, the number of medium lift and heavy lift platoons will be based on workload. At a minimum, one MLP will be required at each CSA to meet MCL workload.

Figure 5. Flow of Munitions in a Theater of Operations



4.3.3. Ammunition Supply Point Operations.

ASPs are another source of munitions for the division. ASPs receive, store, issue, and maintain a one- to three-day supply of munitions. ASP stockage levels are based on tactical plans, the availability of munitions, and the threat to the resupply operation.

ASPs are located in the division rear. Normally, three MLPs are required to support a division and to provide manning for the division rear ATP. An ASP is normally operated by a direct support (DS) ammunition company or one or more medium lift modular ammunition platoons. (A DS ammunition company can operate up to three ASPs plus an ATP.) If the ASP must handle containerized munitions, based on METT-T, HLPs must be assigned to the ASP. Depending on METT-T, engineer support may be required to establish and maintain the ASP. During the ASP site selection process, commanders should focus on locations that minimize the need for engineer support. Possibilities include villages, commercial buildings, or farm complexes.

ASPs provide 25 percent of each ATP's munitions requirement in the form of MCLs. Besides supporting ATPs, ASPs provide munitions to units operating in the division rear area. These nondivisional and corps units normally receive support from the closest ASA.

4.3.4. Munitions Transfer Point Operations.

ATPs are the most mobile and responsive of the munitions supply activities. CSAs and ASPs deliver munitions to the ATP using corps transportation assets. These munitions are kept loaded on semitrailers or PLS flatracks until ATP personnel transload it to using unit vehicles. If the situation demands, the munitions can be transferred immediately to using unit tactical vehicles.

ATPs receive about 75 percent of their munitions as throughput from the CSA. The other 25 percent comes from an ASP and is in the form of MCLs.

ATPs are located in each brigade support area (BSA) with an additional one in the division support area (DSA). The mission of each ATP is to provide 100 percent of the munitions required by all infantry, armor, artillery, combat aviation, combat engineer, and air defense units in its sector. This includes divisional and non-divisional units (i.e., corps artillery) operating in the brigade area. A DAO noncommissioned officer (NCO) is located at each ATP to control the issue of munitions.

The corps DS ammunition company operates the ATP in the DSA. This ATP supports all corps, divisional, and nondivisional units in the DSA. It receives mission guidance and responds to the priorities established by the DAO.

Each maneuver brigade has a forward support battalion (FSB) that operates an ATP. ATPs are operated by the ammunition section of the supply company in the FSB. These ATPs provide munitions support to all units in the brigade support sector and receive mission guidance from the DAO.

The FSB support operations officer, in conjunction with the DAO NCO representative, coordinates directly with non-organic units supported by the ATP. Their munitions requirements are consolidated by the support operations officer/DAO, and their request for resupply consolidated with the brigade request. The DAO/movement control battalion (MCB) and the FSB support operations officer coordinate the location, amount, and type of munitions (MCLs) to be received at the ATP. Munitions are delivered by corps transportation assets. ATP personnel interrogate radio frequency (RF) tags of arriving PLS shipments to gain immediate visibility of the shipment and to identify the organization to which it will be issued.

Units arriving at the ATP to pick up munitions drop off empty, or partially empty, PLS flatracks and retrieve fully loaded flatracks. ATP personnel assist units without the PLS to transload munitions. Uploaded flatracks are normally issued in the same configuration as received.

All empty flatracks are shipped back to the nearest ASP, CSA, or TSA as soon as possible. All issues and turn-ins are reported by the DAO representative. The unit munitions turn-ins are

picked up for immediate retrograde by corps transportation assets used to deliver munitions resupply. A DAO representative attaches RF tags to retrograde shipments. The movement tracking system (MTS) tracks munitions returns as they are retrograded. The MTS also allows shipments to be redirected if necessary.

5.0. Ammunition Units.

The ammunition force structure is evolving. In the near future, and well into the twenty-first century, ammunition units will continue to become smaller and more flexible and capable of deploying more rapidly.

5.1. Headquarters and Headquarters Company, Ordnance Group (Munitions) (DS/GS).

The mission of the headquarters and headquarters company (HHC), ordnance group (munitions), is to command and control assigned or attached DS and GS ammunition units (see Figure 6). The ordnance group is primarily responsible for the ordnance support structure for ordnance units assigned to echelons above corps (EAC). It is responsible for TSA operations. Also, the ordnance group commands, controls, and plans munitions missions, to include the following:

- Retrograde activities.
- Enemy munitions inspection, processing, and shipping.
- Operating ASAs for COMMZ transient units.
- Advising ASCC on theater-wide munitions policy.
- Establishing munitions supply and maintenance procedures consistent with the policies and directives of the ASCC and the corps.

The ordnance group executes missions through subordinate ordnance battalions or in coordination with area support groups (ASGs). The ordnance group provides technical assistance through the materiel section to ASG ordnance planners. Also, the group can provide coordination for resolving support problems between subordinate units, supported units, and CONUS depots.

Ordnance group technical assets can be deployed before, during, and after operations to work in concert with the TAACOM, the LSE, and the theater army materiel management center (TAMMC).

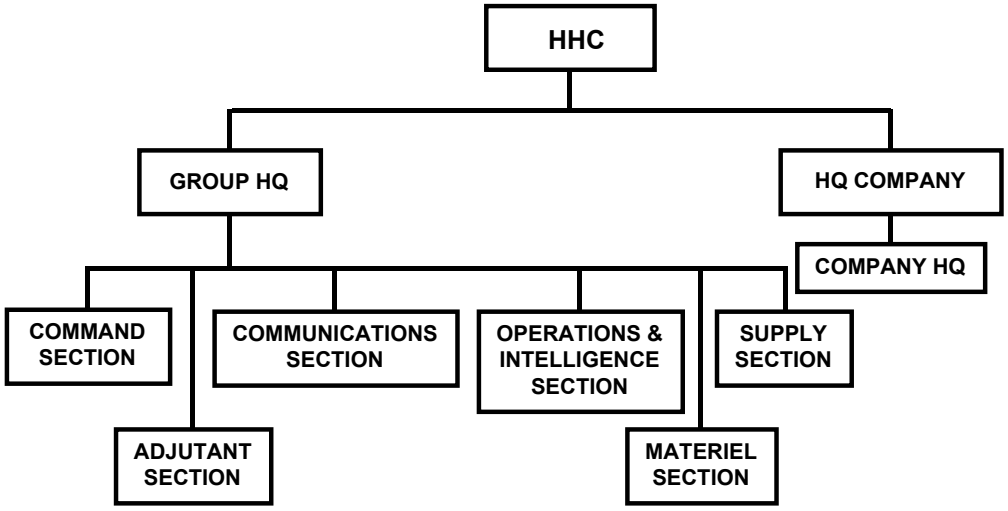
The ordnance group (munitions) is assigned to a TAACOM. It is allocated one per theater or one per two to six battalions commanded. At 100 percent of assigned personnel, ammunition group missions include the following:

- Command, control, and staff planning for up to six subordinate units.
- Technical direction of subordinate unit ammunition support operations, except for inventory management functions for which the TAACOM MMC is responsible.

Figure 6. Ordnance Group, Ammunition (DS/GS) (TOE 09662L000)

Headquarters and Headquarters Company

Ordnance Group, Ammunition



Mission: Command and control assigned or attached, DS and GS ammunition units or other attached units.

Assignment: Assigned to a TAACOM.

Capabilities: At 100 percent of assigned personnel, this unit can provide:

- Command, control, and staff planning for up to six subordinate units.
- Technical direction over ammunition support missions of subordinate units, except for inventory management functions for which the operational level MMC is responsible.

Basis of Allocation: Normally one per TAACOM or one per two to six battalions commanded.

Mobility: This unit is required to move 50 percent of its TOE equipment and personnel in a single lift, using organic vehicles.

5.2. Headquarters and Headquarters Detachment, Ordnance Battalion (Munitions) (DS/GS).

The mission of the headquarters and headquarters detachment (HHD), ordnance battalion (munitions) (TOE 09466L000 or TOE 09666L000), is to command and control assigned units or attached DS and GS ammunition units or other attached units (see Figure 7, and Figure 8). These units ensure compliance with munitions supply and maintenance procedures established by the TAACOM.

This unit is assigned to a COSCOM or a corps support group (CSG). It may also be assigned to a TAACOM, normally attached to an HHC, conventional ammunition group (DS/GS). A minimum of one ammunition battalion is required per COSCOM to support a fully deployed corps. This battalion is allocated one per three to five companies commanded. It can provide:

- Command, control, and staff planning for up to five subordinate units.
- Technical direction over munitions support operations of subordinate units. The exception is inventory management functions, for which the operational level MMC is responsible.

5.3. MOADS–PLS Units.

The structure of ammunition units and the munitions support concept are revised as combat doctrine evolves.

Under MOADS, a large number of troops were deployed OCONUS to maintain and distribute the vast stockpiles of munitions stored in overseas depots. The MOADS system was designed for break-bulk resupply and multiple transfers of munitions.

The conversion of units to MOADS–PLS has resulted in the more rapid movement of supplies and less frequent transfers through the use of MCLs. Other results under MOADS–PLS include the requirement for fewer soldiers and less equipment. Also, this system provides limited ammunition unit flexibility and ITV of munitions stocks. Table 1 shows the lift capability and manpower requirement for each type of materials handling equipment (MHE) listed.

- ***General Support (GS) Ammunition Companies (MOADS-PLS).*** General support companies, which are organized under TOE 09433L000 and TOE 09633L000, establish a CSA/TSA in the COMMZ and corps rear area and behind each committed division. Also, one or more GS ammunition companies will establish a CSA or TSA. Allocation of these companies is based on theater stockage objectives and supported force requirements.

The CSAs provide munitions support throughout the corps and serve as the primary source of high-tonnage munitions for the division. Figure 9 and Figure 10 illustrate the structure of GS MOADS-PLS units.

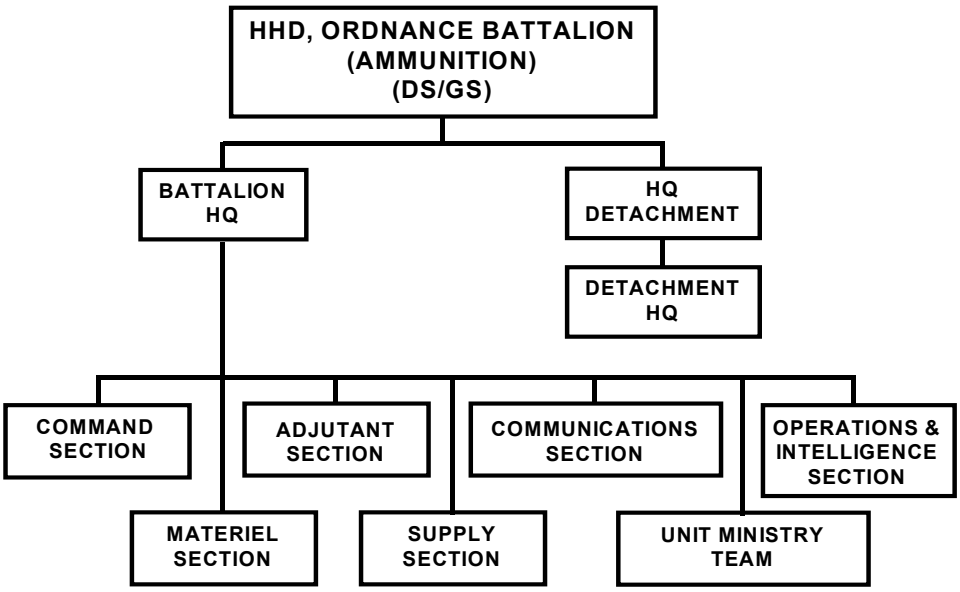
- ***Direct Support (DS) Ammunition Companies (MOADS-PLS).*** Direct support companies, which are organized under TOE 09484L000, establish three ASPs and a rear ATP to support

divisional and nondivisional units in the division area. One DS company is allocated per division. Figure 2-11 illustrates the structure of DS MOADS-PLS units.

Figure 7. Ordnance Battalion, Ammunition (DS/GS) (TOE 09466L000)

Headquarters and Headquarters Detachment

Ordnance Battalion, Ammunition, DS/GS



Mission: Command and control of assigned or attached companies or modular ammunition platoons or other attached units.

Assignment: Assigned to a CSG.

Capabilities: At 100 percent of assigned personnel, this unit can provide:

- Command, control, and staff planning for two to five subordinate units.
- Technical direction over ammunition support missions of subordinate units, except for inventory management functions for which the operational level MMC is responsible.

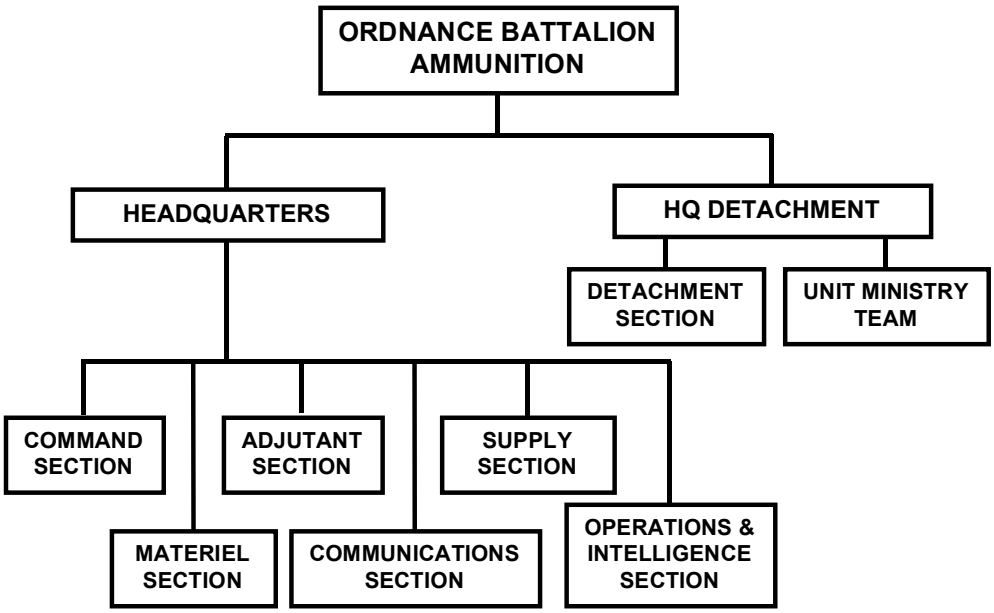
Basis of Allocation: Normally one per two to five companies commanded.

Mobility: This unit is required to move 50 percent of its TOE equipment and personnel in a single lift, using organic vehicles.

Figure 8. Ordnance Battalion, Ammunition (DS/GS) (TOE 09666L000)

Headquarters and Headquarters Detachment

Ordnance Battalion, Ammunition, DS/GS



Mission: Command and control assigned or attached, ammunition companies or modular ammunition platoons or other attached units.

Assignment: Assigned to a TAACOM or ordnance ammunition group.

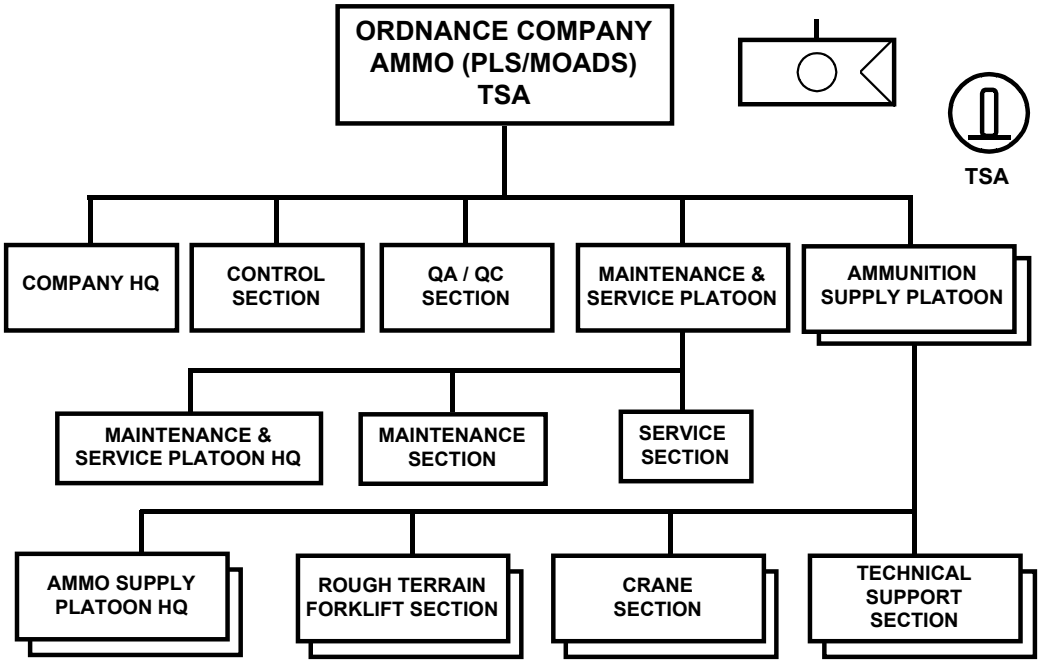
Capabilities: At 100 percent of assigned personnel, this unit can provide:

- Command, control, and staff planning for two to five subordinate units.
- Technical direction over ammunition support missions of subordinate units, except for inventory management functions for which the operational level MMC is responsible.

Basis of Allocation: Normally one per two to five companies commanded.

Mobility: This unit is required to move 50 percent of its TOE equipment and personnel in a single lift, using organic vehicles.

Figure 9. Ordnance Company, Ammunition (MOADS/PLS) (TSA) (SRC 09633L000)



Mission: Establishes and operates an ammunition supply facility engaged in the receipt, storage, rewarehousing, container unstuffing, and issue of conventional ammunition using the PLS.

Capabilities: At level 1, this unit (objective TOE) has a daily capability to receive 2,333 STONs containerized/palletized break-bulk ammunition on theater semitrailers from the port and 2,333 STONs containerized/palletized break-bulk ammunition PLS racks uploaded on theater semitrailers from the port. The unit unstuffs containers and issues up to 3,500 STONs of ammunition on PLS racks for a total of 7,000 STONs per day.

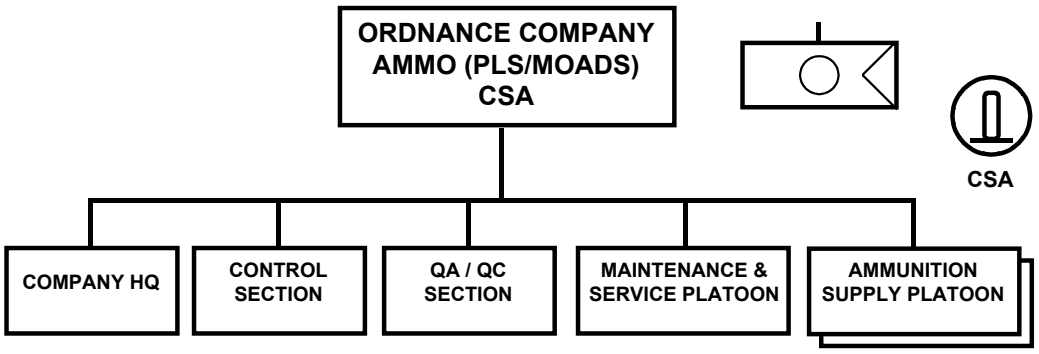
Assignment: To TAACOM ammunition group, ordnance battalion, ammunition, DS/GS, TOE 09666L000.

Basis of Allocation: One company per every 7,000 STONs of ammunition received, stored, issued, and configured.

Mobility: Unit is 50 percent mobile, less ammunition stocks.

References: FM 63-4

Figure 10. Ordnance Company, Ammunition (MOADS-PLS) (CSA) (SRC 09433L000)



Mission: Establishes and operates an ammunition supply facility engaged in receiving, storing, rewarehousing, combat configuring, and issuing conventional ammunition using the PLS.

Capabilities: At level 1, this unit (objective TOE) has a daily capability to receive 1,750 STONs palletized break-bulk ammunition on theater semitrailers from the port and 1,750 STONs palletized break-bulk ammunition PLS racks uploaded on theater semitrailers from the TSA. The unit configures and issues up to 3,500 STONs of ammunition loaded on PLS racks for a total of 7,000 STONs per day.

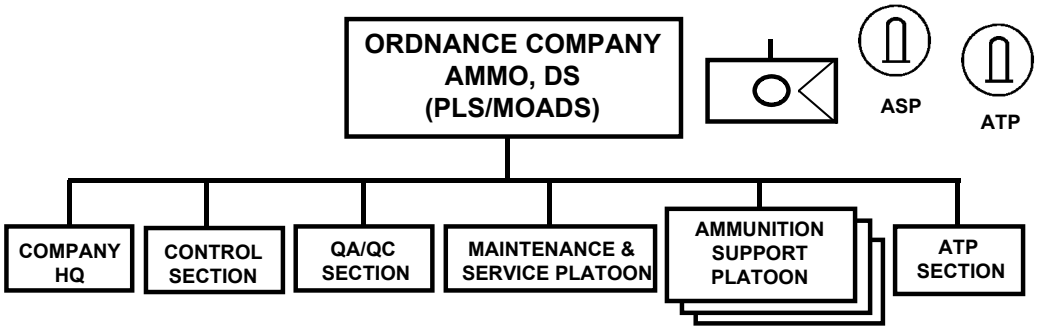
Assignment: To rear CSGs; ordnance battalion, ammunition, DS/GS, TOE 09466L000.

Basis of Allocation: One company per every 7,000 STONs of ammunition received, stored, issued, and configured.

Mobility: Unit is 50 percent mobile, less ammunition stocks.

References: FM 54-30
FM 63-3

Figure 11. Ordnance Company, Ammunition (DS) (MOADS-PLS) (SRC 09484L000)



Mission: Establishes and operates three geographically dispersed ASPs and an ATP engaged in receiving, storing, rewarehousing, combat-configuring, and issuing conventional ammunition using the PLS.

Capabilities: At level 1, this unit (objective TOE) provides the following lift capability: ASP, 2,530 STONs; and ATP, 970 STONs. Lift is normally divided between receipt, issue, configuration into MCLs, and storage.

Basis of Allocation/Employment: One per division; assigned to a COSCOM, attached to a CSB in a CSG.

Mobility: Unit is 50-percent mobile, less ammunition stocks.

References: FM 54-30
FM 63-3

Table 1. MAN/MHE Team Lift Capabilities by STONs per Day

MHE	GS (TSA/CSA)	DS (ASP)	ATP
6,000-lb variable-reach forklift	187	119	88
4,000-lb rough-terrain forklift	126	58	NA
7 1/2-ton rough-terrain crane	NA	219	NA
65-ton container crane	295	NA	NA
6,000-lb rough-terrain forklift	165	74	75
10,000-lb rough-terrain forklift	116	52	NA
5-ton rough-terrain crane	NA	200	NA
20-ton rough-terrain crane	257	NA	NA

*** When being operated, all *forklift* man/MHE teams *require* two persons per forklift plus a ground assistant. *Crane* men/MHE teams require three persons per crane–an operator and two ground assistant operators. Ground assistants are for safety purposes; any personnel in the area may perform this task.**

5.4. Modular Ammunition Units.

With the end of the cold war, the Army began to evolve from a forward-deployed force to a primarily CONUS-based force capable of projecting combat power to any part of the world and to any type of theater.

The MOADS doctrine and force structure were designed to support a forward-deployed force. Conversely, the wide variety of possible missions facing the CONUS-based force projection Army requires a munitions distribution system capable of supporting any contingency. This more flexible distribution system is based on the concept of modularity.

Under the modularity concept, only the number of soldiers or amount of equipment needed to support the forces are deployed. This might mean deploying a single platoon to support a brigade contingency or a company with added platoons attached to support a mature theater.

The initial deployment of modular ammunition units to a theater will consist of one or more platoons. Heavy lift modular platoons are capable of loading, moving, and unloading 20-foot ISO containers. The MLP has no container handling capabilities.

As the theater matures and more modular ammunition units arrive in theater, a conventional command and control structure is established, and the modular platoons are formed into company-sized units. Table 2 illustrates modular ammunition platoon lift capacities.

Table 2. Modular Ammunition Platoon Lift Capabilities

HEAVY LIFT PLATOON	
MISSION	LIFT CAPACITY
RECEIVE	886 ST
REWAREHOUSE/RECONFIGURE	886 ST
ISSUE	886 ST
TOTAL LIFT CAPABILITY	2,658 ST
MEDIUM LIFT PLATOON	
MISSION	LIFT CAPACITY
RECEIVE	376 ST
REWAREHOUSE/RECONFIGURE	376 ST
ISSUE	376 ST
ATP	393 ST
TOTAL LIFT CAPABILITY	1,521 ST**
MAXIMUM STORAGE PER PLATOON	
HEAVY LIFT PLATOON	7,100 ST***
MEDIUM LIFT PLATOON	7,046 ST***

* Short tons (ST) per day.

** When operating in a CSA or TSA with no ATP mission, the MLP has a total lift capability of 1,521 ST (507 ST per mission). When the ATP section of the MLP is employed separately, it has a lift capability of 393 ST/day. Each MLP can provide one-third of a rear ATP. The figures are based on 24-hour operations.

*** This capacity represents a portion of the designated level of the theater stockage objective.

A modular ammunition company consists of a company headquarters platoon and from two to five heavy and/or medium lift platoons. The headquarters platoon (Figure 12) is capable of commanding and controlling multiple geographically separated platoons as METT-T requires. However, the headquarters platoon must be collocated with at least one of these platoons for logistical support. This headquarters is capable of consolidating platoons in the COMMZ and providing support to corps and division areas.

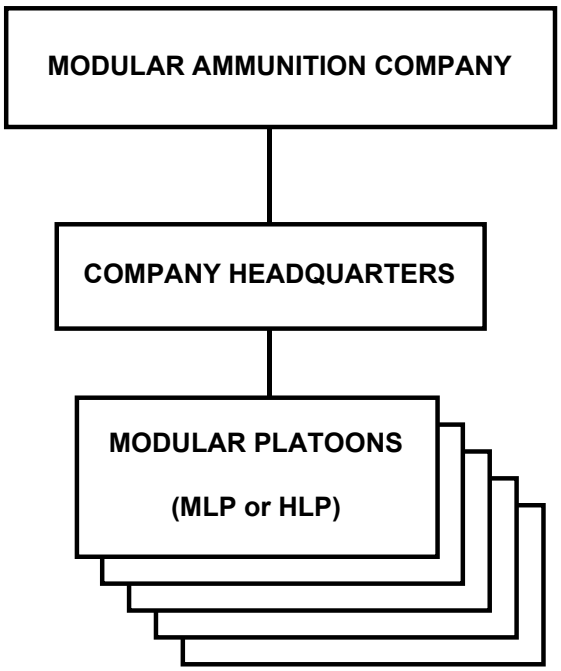
The ammunition platoon (heavy lift) (Figure 13) is capable of supporting units on an area basis through receipt, storage, stock management, inventory control, and issue. Also, this platoon is capable of loading or off-loading 20-foot ISO containers from inbound or outbound transportation assets. It employs PLS vehicles to move stocks, rewarehouse, move configured loads to a holding area, and move organic equipment. The prepositioned munitions ships will have a portion of the unit's equipment aboard. Therefore, at least one of these platoons must

arrive in theater at the same time or before the prepositioned ships. A platoon can operate independently from an ammunition company headquarters, but needs outside support for sustainment. It is 100 percent mobile, less munitions stocks.

The ammunition platoon (medium lift) (Figure 14) does not have container-handling equipment. This platoon can unstuff a 20-foot ISO container, if necessary, to mission configure break-bulk munitions. The ammunition platoon is capable of receipt, storage, stock management, inventory control, mission-configuring, and issuing to supported units on an area basis. The ammunition platoon can operate independently from an ammunition company headquarters, but it requires outside support for sustainment. It is 100 percent mobile, less munitions stocks on hand, and has PLS vehicles to enable the rapid movement of munitions within the ASA.

Figure 12. Modular Ammunition Company Headquarters Platoon

Modular Ammunition Company
Company Headquarters
SRC 09408L000



Mission: Provides command, control, administrative, planning, and logistical support for two to five modular ammunition platoons.

Assignment: Depends on assigned mission.

When assigned the ASP function, the unit is assigned to a CSB (TOE 63426L000).

When assigned the CSA function, the unit is assigned to a CSB (TOE 63426L000) or a corps ammunition battalion (TOE 09666L000).

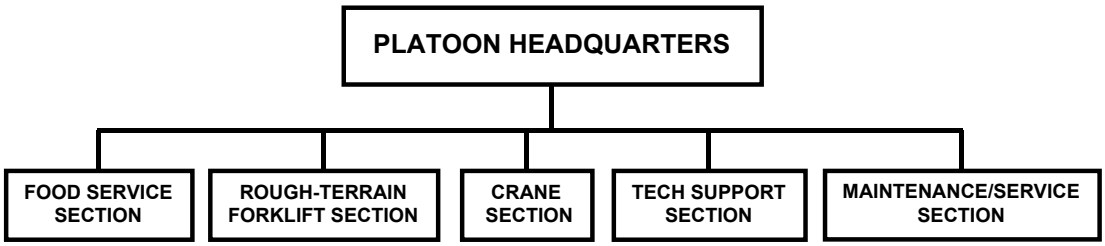
When assigned the TSA function, the unit is assigned to an ammunition battalion (EAC) TOE 09666L000.

Basis of Allocation: As required by theater operations and the number of modular ammunition platoons deployed.

Mobility: The company headquarters is 100 percent mobile.

Figure 13. Modular Ammunition Platoon (Heavy Lift)

Modular Ammunition Platoon
Heavy Lift (HLP)
SRC 09503LB00



Mission: Receives and ships containerized ammunition. Configures, inspects, issues, manages, ships, and retrogrades ammunition stocks. Operates independently or as part of a larger unit.

Assignment: Assigned to a modular ammunition company headquarters (TOE 09408L000).

When deployed independently to perform the CSA function, platoons are assigned to a CSB (TOE 63426L000) or an ammunition battalion (corps) (TOE 09466L000).

When deployed independently to perform the TSA function, the unit is assigned to an ammunition battalion (EAC) (TOE 09666L000).

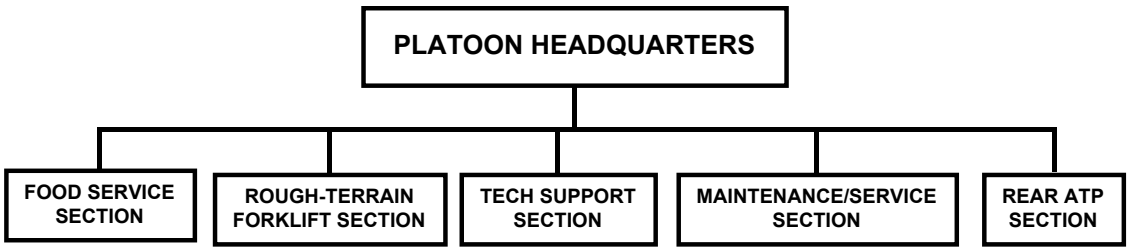
Capabilities: See Table 2-1 forklift capabilities.

Basis of Allocation: As required by theater operations, daily tonnage lift requirements, or theater ammunition stockage requirements.

Mobility: The platoon is 100 percent mobile, minus ammunition stocks. Unit depends on nonorganic transportation assets to move any ammunition supplies on hand. This platoon should expect to move every 3 to 10 days.

Figure 14. Modular Ammunition Platoon (Medium Lift)

Modular Ammunition Platoon
Medium Lift (MLP)
SRC 09503LA00



Mission: Receives, configures, inspects, issues, manages, ships, and retrogrades noncontainerized ammunition stocks. Operates independently or as part of a larger unit.

Assignment: Assigned to a modular ammunition company headquarters (TOE 09408L000).

When deployed independently or as part of a unit to perform the ASP or the CSA function, platoons are assigned to a CSB (TOE 63426L000); or when deployed to perform the CSA function, platoons are assigned to an ammunition battalion (corps) (TOE 09466L000).

When deployed independently or as a unit to perform the TSA function, the unit is assigned to an ammunition battalion (EAC) (TOE 09666L000).

Capabilities: See Table 2-1 for lift capabilities.

Basis of Allocation: As required by theater operations, daily tonnage lift requirements, or theater ammunition stockage requirements, and the number of modular ammuntion platoons deployed.

Mobility: The platoon is 100 percent mobile, less ammunition stocks. Unit depends on nonorganic transportation assets to move any ammunition supplies on hand. This platoon should expect to move every 3 to 10 days.

5.5. Ammunition Support Team.

The USAMC ammunition support team (AST) arrives at immature theater PODs before prepositioned munitions vessels, sustainment shipments, or munitions units. It establishes a point at the PODs where munitions stocks can be accounted for. Also, the team coordinates the off-loading and distribution of stocks either to storage areas or for direct issue to units from the PODs. Early arrival of ammunition units is essential to move Class V from the port area.

The concept for employing the AST is dissimilar to the employment of all other LSE organizations. The AST mission is tied specifically to the accountability and management of APS munitions. These preconfigured loads, stored on logistics ships, are available for rapid delivery to the theater.

During the early stages of any contingency operation requiring APS munitions, the AST deploys with mirror image prepositioned (APS) accountable records and quality assurance specialist (ammunition surveillance) (QASAS) support. Normally, this coincides with the deployment of the LSE advance party. The early departure of the AST from CONUS is necessary to assure that its arrival is before the port acceptance of the Army's APS vessels.

The AST provides technical expertise and assistance in the following areas:

- Supply.
- Storage.
- Maintenance.
- Surveillance.
- Demilitarization.
- Transportation.
- Security.
- Explosive safety.
- Supplies.
- Packaging.
- Accountability for munitions materiel and associated equipment.

AST responsibilities may include, but are not limited to, the following activities:

- Providing theater munitions units with technical assistance in establishing and managing munitions storage areas.

- Conducting inventories. Maintaining initial theater-accountable records.

- Providing for the transfer of DA-owned, NICP-accountable Army reserve stocks assigned to the theater.

- Developing and administering contract statements of work.
- Planning and executing retrograde operations.

Deployment of the AST should be based on the tempo of logistical operations in the theater. The major functions of the AST include the following:

- Preparing for overseas deployment.
- Deploying to theater ports of debarkation.
- Setting up the support team base of operations.
- Transferring the accountability of APS assets from NICP-accountable officers to theater-accountable officers.
- Providing initial theater accountability and Standard Army Ammunition System (SAAS) operations.
- Linking the CONUS sustainment base and the combat logisticians.
- Submitting status reports through NICP to HQ, USAMC, and HQDA.
- Coordinating joint munitions operations as required.
- Providing initial QASAS support to the theater.

Once the AST has established itself in the theater, the ground component commander may expand the AST mission based on the specialized training and technical expertise of the team. Any expansion of responsibilities must be coordinated with the parent organization at the time, either the LSE or USAMC.

5.6. Headquarters and Headquarters Detachment, Ordnance Battalion (Ammunition) Wartime Host Nation Support (WHNS) (DS/GS).

The mission of the headquarters and headquarters detachment, ordnance battalion (ammunition) (WHNS) is to command and control assigned or attached units (see Figure 15). This unit provides:

- Command, control, and staff planning for up to nine ammunition companies (TOE 09574LB000).
- Technical direction over munitions support operations of subordinate units, the exception being inventory management functions for which the operational level MMC is responsible.

This detachment is also involved in the coordination and management of US-owned Class V stocks being received, stored, and issued by host nation (HN) ammunition units. It can be assigned to a CSG; it can also be assigned to a munitions group in the TAACOM.

5.7. Ordnance Company (Munitions) (WHNS).

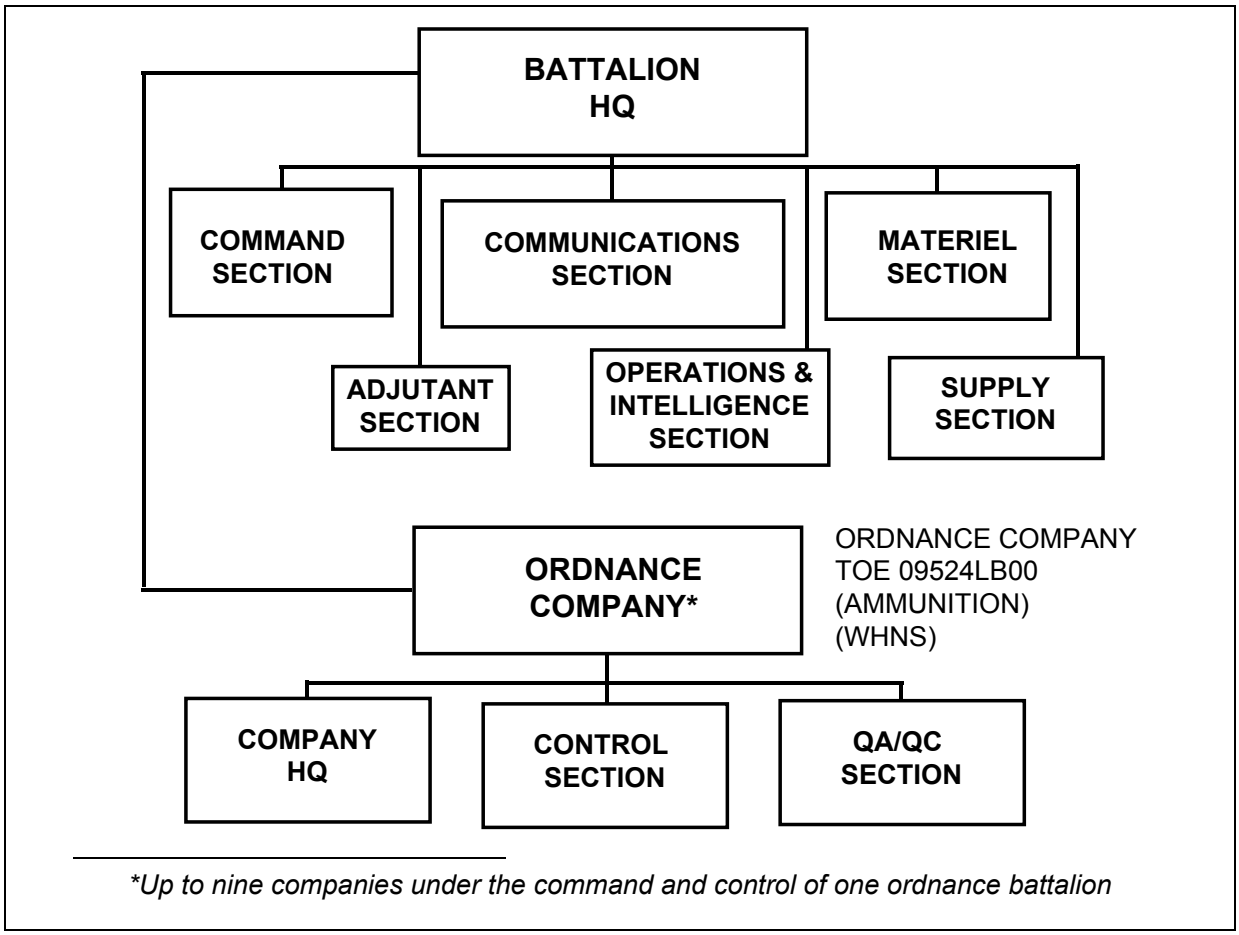
The mission of the ordnance company (munitions) (WHNS) is to provide operational control over US-owned munitions stocks being received, stored, warehoused, and issued by HN units to US forces combat units. This company is assigned to an ordnance battalion (TOE 09574LA00) with one company allocated per HN ammunition company. On a 24-hour basis this unit provides:

- Expertise required to perform stock accountability, stock status reporting, and QA/QC functions for US-owned munitions stocks being received, stored, warehoused, and issued by HN ammunition units.

- Coordination needed for maintenance support for US equipment operated by HN units.

- Coordination for operational taskings.

Figure 15. Headquarters and Headquarters Detachment, Ordnance-Battalion, Ammunition (WHNS) (DS/GS)



6.0. Munitions Flow in the Theater.

The theater receives munitions from CONUS or OCONUS locations through air and water ports or by logistics-over-the-shore (LOTS) operations. From there, munitions are transported to the appropriate ammunition support activity.

Several factors determine the quantity of munitions moved forward. These factors are as follows:

- Quantity of munitions on hand.
- Current and projected consumption.
- Available transportation.
- Available personnel and equipment.

6.1. Determining or Requesting Munitions Requirements.

Combat commanders control the flow of munitions in their areas of responsibility by using two munitions supply rates, the required supply rate (RSR) and the controlled supply rate (CSR). Commanders at each level submit their RSR to the next higher headquarters. These headquarters review, adjust, and consolidate RSR information and forward it through command channels. At the ASCC level, the total, unrestricted munitions requirements are compared against total munitions assets available (on hand or expected) to develop the CSR.

To request munitions, each unit consolidates its on-hand quantities and forwards its report to the battalion supply officer (S4), with information copies to the battalion commander and operations and training officer (S3). Company commanders will indicate in their situation report (SITREP) remarks any critical munitions shortages or forecasted changes in munitions requirements.

The battalion S4 requisitions munitions based on information provided in the company SITREPs and guidance received from the battalion commander and S3. The battalion S4 consolidates the entire battalion munitions requirement and submits it to the brigade S4. When necessary, battalion commanders cross-level within companies or throughout the battalion to meet mission requirements. The battalion S4 also reports the unit's on-hand quantities by Department of Defense Identification Code (DODIC) or nomenclature, any critical shortages, and any forecasted changes in requirements in the battalion’s SITREP to the brigade.

The brigade S4 consolidates the requests for munitions and passes them to the support operations officer in the supporting FSB. An information copy is forwarded to the DAO. The DAO, in conjunction with the corps materiel management center (CMMC), uses the information copy to determine if on-hand stocks in the ASP are sufficient or if munitions from the CSA or TSA will be required.

The brigade S4 monitors the munitions on the commander's tracked items list (CTIL) that require special attention, such as emergency resupply. The support operations officer consolidates the brigade's munitions requirements and forwards them to the division support command (DISCOM).

6.2. Controlled Supply Rate/Priority of Issue.

The support operations officer, with guidance from the brigade S3 and S4, informs the DAO about the brigade's CSR breakout and unit priority of munitions resupply. Forecasted critical shortages and changes in requirements, as reported in the brigade SITREP, are provided to the DAO.

6.3. Munitions Resupply.

The preferred method of munitions resupply is to deliver as far forward as possible. Munitions containers are shipped only to the TSA or CSA. There, they are unstuffed, and the munitions configured into MCLs sent to forward ASAs. If the situation requires it or transportation assets are available, munitions may be throughput as close to the unit as possible.

The CMMC determines whether the munitions resupply will come from the ASP or the CSA. The DAO determines the munitions status of the brigade ATPs in the division. This information will determine whether munitions within the division can be cross-leveled to meet munitions requirements.

If the munitions are coming from the ASP, the CMMC prepares a materiel release order directing the munitions shipment. If the munitions must be brought forward from the CSA, the CMMC submits a request for munitions resupply to the corps assistant chief of staff (logistics) (G4).

Munitions may arrive in theater in configured loads. The supporting activity, either the ASP or CSA, reconfigures these loads into MCLs before transportation assets arrive. The Movement Control Battallion (MCB) schedules transportation according to corps priorities. The ammunition units are notified by the MCB of where and when transportation will arrive.

After munitions have been loaded, the RF tags are verified along with the correct cargo and destination. All munitions shipments are tracked through ITV. Delivery coordinates and time are forwarded to the receiving unit or activity, with information copies furnished to the DAO, the FSB support operations officer, the DAO representative, and the S4. In the event a munitions shipment must be diverted within the brigade, the brigade commander or designated representative retains sole authority to do so. This is accomplished through the FSB support operations officer. Munitions shipments that must be diverted within the division are directed by the division commander to the DISCOM commander for implementation.

6.4. Aerial Resupply.

Air resupply missions are categorized as preplanned or emergency. Preplanned missions make up the routine air transport service that supports preplanned or programmed requirements. Emergency air movements are initiated by requirements that cannot be determined in advance.

The movement control officer coordinates the movement of supplies with the main support battalion (MSB) and the movement manager in the FSB support operations section. If the movement control officer determines that air resupply is appropriate, he passes a request through the division transportation officer (DTO) to the assistant chief of staff (operations and plans) (G3). The G3 allocates helicopters on the basis of all aviation tasks by balancing combat, combat support (CS), and CSS requirements. The G4 must ensure the CSS role for helicopters is developed and considered concurrently with the tactical mission. The priorities for helicopter resupply should be addressed in the operations order (OPORD) and used by the movement control officer.

Emergency requests are passed through supply channels the same as routine requests. However, they are also passed simultaneously through command channels from the user to the G3. The G3 approves emergency requests and tasks the aviation brigade to perform the mission. At the same time, the G4 coordinates with the DISCOM support operations branch so it can task the appropriate supply activity to prepare the shipment. A liaison officer from the aviation brigade coordinates with the movement control officer and the requesting unit. Prerigged loads of standard resupply packages may reduce response time for emergency air resupply. More details on requests for aerial resupply are in FMs 55-2 and 100-27.

7.0. Command and Support Relationships.

Army, joint, and/or combined units or elements may be required to perform their missions within the area of operations (AO) of a corps, division, brigade, or battalion with which they have no formal command or support relationship. Unless attached for logistical support, parent units are responsible for providing support to their elements dispersed throughout the battlefield. At times, mission requirements may exceed the organic support capabilities of the parent unit. When this happens, the parent unit must coordinate support for its elements with the headquarters controlling that element's AO. Once coordination is accomplished, the headquarters controlling the AO assumes responsibility for providing logistical support for the units in the AO. The rear command post (CP) facilitates support of nondivisional units by identifying the name and location of the divisional coordinating staff element or host unit.

Munitions support for nondivisional units operating in the division's AO is coordinated by the DAO. Nondivisional units attached to or supporting the brigade combat trains (BCTs) forward their munitions requests through the FSB support operations officer to the DAO. Nondivisional units attached to or supporting the division and operating in the division's rear area forward their munitions requests through the DISCOM support operations officer to the DAO. Specific procedures for supporting nondivisional units are detailed in the Class V section of the service and support annex of the OPORD.

8.0. Functional Responsibilities.

Each activity or unit in the ammunition supply system has functions unique to it. These functions are discussed below.

8.1. Army Service Component Commander.

The ASCC has overall responsibility for in-theater receipt, accountability, and management of munitions stocks. The ASCC is also responsible for the following functions:

- Establishing ASPs, CSAs, and TSAs.

- Coordinating distribution between storage sites and storage sites and forward ATPs; coordinating direct issue to using units on an area support basis.

8.2. Operational Level Materiel Management Center.

The operational level MMC is the support unit responsible for providing theater-wide munitions supply management and allocation. Support is based on priorities established by the theater CINC. The MMC is the prime interface between the theater and the CONUS sustaining base, which includes the Defense Logistics Agency (DLA), NICPs, and USAMC. The operational level MMC communicates with the operational level movement control agency (MCA), the TAACOM, CMMCs, and CONUS.

The MMC provides initial resupply to the corps from several possible theater munitions sources, as follows:

- Army prepositioned stocks. This includes either munitions preconfigured on logistics ships that is available for rapid delivery to the theater or prepositioned munitions available on a regional basis to support contingencies worldwide.

- Sustainment base production stocks. This includes munitions either off the production line or stored in depots. These stocks are shipped to the theater as needed.

8.3. Corps Materiel Management Center.

When a corps is the ARFOR, the CMMC is the operational level MMC. In a theater with more than one corps, the ASCC may establish a centralized MMC to which CMMCs report.

The CMMC provides centralized control of munitions and all other classes of supply within the corps. It is the interface between corps units and the theater/operational level MMC.

8.4. Missile and Munitions Division.

In the CMMC, the missile and munitions division includes three branches: the missile and munitions support branch; the missile and munitions parts supply branch; and the missile and munitions maintenance branch.

The missile and munitions division is responsible for munitions management to include the following:

- Processing requisitions.
- Reviewing the RSR and computing the CSR.
- Directing storage and distribution of munitions.
- Coordinating with the corps movement control center (CMCC) to integrate munitions movement requirements into movement programs.
- Providing guidance to division materiel management centers (DMMCs).

8.5. Munitions Support Branch.

The munitions support branch exercises staff supervision over munitions support operations. These include supply and maintenance operations relating to munitions, missiles, special weapons, and associated repair parts, special tools, and test equipment. Responsibilities include:

- Developing plans and policies involving munitions supply and maintenance.
- Providing staff input for munitions planning to COSCOM CSS plans staff branch.
- Developing munitions surveillance policies.
- Maintaining a running estimate of munitions requirements.
- Coordinating munitions requirements with corps G3 and G4 staff.
- Establishing munitions supply levels based on corps directives.
- Recommending munitions supply and storage site locations to the corps rear CP CSS cell.

Missile and ammunition officers assigned to the munitions support branch develop operating procedures and plans to implement munitions supply policies prescribed in ARs 710-1 and 710-2 and SAAS technical manuals (TMs). Other duties include:

- Providing technical advice and assistance to ammunition officers in subordinate CSGs and ammunition supply units.
- Coordinating with CSG ammunition officers on cross-leveling munitions support personnel and equipment.

- Recommending establishment and movement of ASAs as the situation dictates.
- Reviewing and updating munitions planning factors to the theater scenario.
- Monitoring munitions suspensions.
- Recommending adjustments to munitions stockage levels.
- Coordinating resupply of munitions stocks for attrited units at regeneration sites.

8.6. Ammunition Battalion Materiel Office.

In the absence of an ordnance group in theater, the conventional ammunition battalion is normally assigned to the COSCOM/ TAACOM (Figures 7 and 8, pages 16 and 17) to establish and operate ammunition supply activities. The materiel office (MATO) of this battalion serves as the initial point of coordination for resolving munitions support problems. The MATO acts in concert with the COSCOM staff and CMMC ammunition and transportation managers to accomplish the following:

- Coordinating of assets.
- Monitoring and cross-leveling of stocks.
- Directing the implementation of COSCOM/TAACOM support operations directives, CMMC/TAMMC taskings, and CMCC/theater army movement control center (TAMCC) commitments.

The MATO's responsibilities include the following:

- Analyzing CSS/CS data, which interfaces with SAAS to determine trends and efficiency of stock operations.
- Monitoring supply status data on munitions stock at ASAs.
- Monitoring RSR, CSR, ammunition basic load (ABL), quantity on hand, and movement requirements data.
- Assisting in synchronizing activities of subordinate ammunition units with habitually supporting truck companies.
- Providing technical assistance and monitoring quality assurance, munitions surveillance, and munitions maintenance programs of subordinate units.

- Coordinating with the COSCOM/ TAACOM on cross-leveling munitions support personnel and equipment.

- Recommending to the COSCOM/ TAACOM that, when in-transit, munitions stocks should be diverted based on METT-T.

8.7. Division Materiel Management Center.

The DMMC is part of the DISCOM. The ammunition supply section of the DMMC manages munitions for the division. The DAO is in charge of the ammunition supply section. Its mission includes the following:

- Providing technical assistance on all munitions-related matters to the division staff and units.

- Assisting the division, brigade, and battalion commanders in determining RSRs and implementing CSRs.

- Managing munitions and providing status of munitions to the DISCOM and other division commands and staffs.

- Providing staff supervision of FSB ATPs.

8.8. Division Ammunition Officer.

The DAO is responsible for munitions resupply for all units operating in the division AO. He represents the MMC and DISCOM commander on all munitions-related matters. The DAO has five broad missions:

- Consolidating division munitions requirements.

- Preparing plans and procedures for munitions operations.

- Maintaining munitions stock records and reports (Standard Army Ammunition System–Modernization [SAAS-MOD] data entry point).

- Conducting and supervising munitions operations.

- Validating munitions requests.

The DAO maintains liaison with the ASA supporting the division and with ammunition staff officers at the COSCOM.

8.9. Brigade S3.

The brigade S3's munitions responsibilities include:

- Determining brigade munitions requirements based on input from subordinate battalions and knowledge of upcoming tactical operations.
- Determining consolidated brigade RSR and submitting it to the division G3 and DAO.
- Determining the best location for the BSA.

8.10. Brigade S4.

The brigade S4's munitions responsibilities include:

- Coordinating an issue schedule with the support operations office, FSB, and DS munitions company, ATP.
- Providing a unit issue priority list to the DAO. Forwarding the consolidated unit munitions requirements to the DAO.
- Providing subordinate battalion S4s with their allocations of the brigade CSR. (This information is also provided to the DAO so battalion units do not exceed their authorizations when transloading at the ATP.)

8.11. Forward Support Battalion.

The Class V section of the FSB supply company operates one ATP in the BSA. It provides area support to division and corps units. Each ATP has DAO representatives assigned to control the flow of munitions.

When munitions arrive at the ATP, the FSB Class V section inspects, inventories, and signs for the shipment. A copy of the shipping document is returned to the originating ASA. The DAO representative forwards a copy of the receipt document to the DMMC.

The brigade S4 coordinates with the FSB support operations officer to establish an issue schedule. When supported units arrive at the ATP, they submit munitions requests that have been authenticated by the battalion S4. Before a unit is issued munitions, the DAO representative at the ATP validates the request. Once munitions are issued to a unit, the unit assumes accountability and uses its transportation assets to move the munitions forward.

9.0. Conventional Ammunition Allocations.

The object of the ammunition distribution system is to provide munitions at the right time, place, and quantity to ensure the success of an operation. Munitions planning and operations must be

versatile. They must complement combat plans and operations and improve the ability of the supported unit to accomplish its mission.

The supported commander's concept of operations, priorities, and allocations dictates the actions of the munitions planner. Munitions planning includes:

- Determining munitions requirements.
- Echeloning capabilities and munitions units.
- Establishing split-based operations.
- Preconfiguring munitions basic loads and resupply amounts.
- When required, using civilian contractor, allied, and HN capabilities.

The Deputy Chief of Staff for Operations and Plans (DCSOPS) is responsible for developing munitions programming and budgeting requirements. Requirements determination establishes what is essential to support a strategy, campaign, or operation. During a conflict, resupply quantities must constantly be reviewed and adjusted based on historical usage data gathered as the conflict progresses.

9.1. Operational Planning Factors.

The United States Army Combined Arms Support Command (USACASCOM) validates munitions operational planning factors. The Deputy Chief of Staff for Logistics (DCSLOG) is the approving agency. An automated tool called the Operational Logistics (OPLOG) Planner is the authorized method for determining munitions planning data at all levels. **FM 101-10-1/2 is not an authorized tool for determining operational munitions planning factors.**

Munitions consumption rates for all operations, including SASO, are determined using the OPLOG Planner. Units base their munitions requirements on METT-T, their projected mission, and the supported commander's concept of the operation and intent. Developing munitions requirements for using units is the responsibility of their operations section. To obtain the OPLOG Planner software, write to:

Force Development Division
DIR OF CBT DEVS CBT SVC SPT
700 Quarters Road Suite 210
Fort Lee, VA 23801-1703

9.2. Munitions Basic Load.

Munitions basic load is that quantity of munitions either allocated to or issued to (depending on the major Army command's [MACOM's] policy) a unit to sustain its operations in combat until it can be resupplied. Basic load requirements are based on unit weapons density (WD) and mission requirements. Units must be able to transport ABL using organic vehicles, equipment, and personnel.

9.3. Munitions Control Procedures.

To sustain tactical operations for specific periods, units determine their munitions requirements and submit a required supply rate (RSR). The RSR is the amount of munitions a maneuver commander estimates will be needed to sustain tactical operations, without munitions expenditure restrictions, over a specified time period. The RSR is expressed as rounds per weapon (on hand) per day, or as a bulk allotment per day or per mission.

RSR computation and routing are normally done by unit S3/G3s. As such, it is not a logistics function, but the S4/G4 may be called on to assist in the process. RSRs can be computed using manual or automated procedures. WD and mission are key to determining RSR. Determine RSR using the following formula:

Total Rounds =
WD x Expenditure Rate x Days

RSRs are developed by maneuver commanders and submitted to the next higher headquarters. Headquarters at each level review, adjust, and consolidate RSR information and forward it through command channels. The ARFOR determines the controlled supply rate (CSR) by comparing the total unrestricted munitions requirements against the total munitions assets on hand or due in.

Several factors limit the amount of munitions available for an operation (e.g., stockage or lift capabilities). Accordingly, munitions issues are controlled by CSRs. The ARFOR establishes the CSR, which is based on the amount of munitions available for issue. When a munitions item is in short supply, the CSR is low. The commander determines who receives the munitions. The DAO informs the G3 of the quantity available.

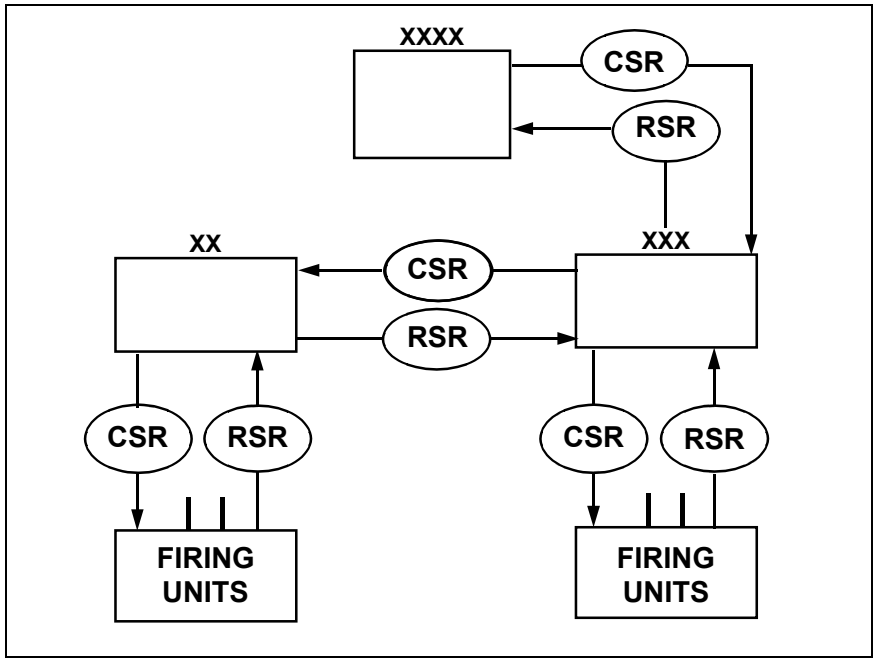
The ARFOR commander gives the corps commanders the CSR for each munitions' item. The CSR may vary from corps to corps based on the mission objectives and priorities of each corps, the projected threat, and the munitions availability. The corps gives subordinate combat commanders their unit CSR. Each combat commander gives the CSR to each subordinate combat commander. Commanders making CSR allocations to subordinate units should retain a portion of the CSR to meet unforeseen contingencies. The CSR is disseminated to units through the OPORD. The CSR should appear in the OPORD in paragraph 4, or in either the service support or fire support annex.

The munitions requirements of other services and coalition members must be considered when computing the RSR and CSR. Also, munitions items in the Army inventory that are unique to other services or coalition members must be considered in supply rate computations. Figure 16 illustrates the flow of RSRs and CSRs.

9.4. Logistics Preparation of the Theater.

At the strategic level, logistics preparation of the theater (LPT) combines the peacetime actions taken by logisticians at all echelons to maximize means (e.g., force structure, resources, and strategic lift) of logically supporting the commander's plan.

Figure 16. Munitions Supply Rate Flow



For the munitions planner at DA, planning is based on the Defense Planning Guidance (DPG). The DPG provides scenarios that are modeled and integrated into Army force structure, budgeting, procurement actions, and operational plans (OPLANs).

Munitions planning at the DA level considers the following:

- Mission synchronization.
- Threat capabilities.
- Production base.
- Transportation assets.
- Consumption rates determined by the US Army Concepts Analysis Agency (USACAA).
- Depot stocks.
- Prepositioned stockage afloat.
- Worldwide munitions stocks.
- Echeloning of units using time-phased force deployment (TPFD).

At the operational and tactical levels, logistics preparation of the battlefield is as critical as intelligence preparation of the battlefield (IPB). Some products generated under IPB should become a part of the data file of logistics essential elements of information. The munitions

planner uses the tactical commander's mission analysis to ensure a complete understanding of what must be accomplished. The munitions planner participates in the orders process by preparing the munitions' piece of the logistics estimate.

9.4.1. Movement.

The logistics planners supporting the ASCC and geographic combatant commander must consider total force munitions requirements when planning for the movement of stocks and support forces. The number of HLPs in a theater must be considered prior to requesting containerized munitions. For more information on this aspect of planning, see FM 100-16.

9.4.2. Communications.

Ammunition units must have reliable communications to accomplish their mission. Effective communications networks must be established to ensure the success of munitions support in the theater of operations. These networks must relay accurate and timely information between supported and supporting units, the MMCs, and the DAO. Also, they must interface with the combat and combat support networks of units supported by ammunition units. The most critical link is the one between the accountable SAAS level and those responsible for stock status reporting. This link provides necessary data to the ASCC, enabling crucial decisions to be made in support of the combat force.

9.4.3. Joint Operations.

Joint integration of munitions support is crucial to unity of effort. Army ammunition units will support the requirements of other services during joint operations. In computing the RSR/CSR, these requirements must be forecasted and considered. Failure to plan for this support may result in severe shortages of critical munitions items and handling capability.

Plans must consider efficiencies gained by having integrated munitions support. The plans must be coordinated with the various services involved to ensure adequacy of personnel, storage requirements, MHE, accountability procedures, and safety.

9.4.4. Combined and Coalition Operations.

Combined and coalition logistics operations require integration for unity of effort. Procedures for munitions support must be worked out during the planning phase of a deployment or operation. This ensures interoperability and that handling capability is available. During emergency deployments, there may not be time to develop formal intercountry agreements. Planners must develop methods to preclude competition for resources, particularly infrastructure and LOCs, that could adversely affect operations.

Planners should consider options for contracting, acquiring host nation support (HNS), or obtaining support from other national forces, and then integrating this support into the multinational force.

10.0. Chemical Ammunition Support Structure.

Toxic chemical munitions (CMS), unitary and binary (when assembled), are high-cost, low-density, high-lethality munitions allocated and controlled at the highest military and political levels. Unitary chemical munitions will be distributed through theater-unique distribution channels. This section of the lesson outlines national policy on the use, allocation, control procedures and transition-to-war for binary chemical munitions (BCMs). Binary chemical munitions are munitions designed to use two non-lethal chemicals that combine only during the flight of the weapon to the target to produce a lethal chemical warfare agent.

10.1. National Employment Policy.

US policy prohibits the first use of lethal chemical warfare agents; however, the US government has reserved the right to retaliate if threat forces use lethal chemical warfare agents against US forces or our allies. Only the national command authority (NCA) can grant the authority to employ BCMs. BCMs will be issued only upon receipt of a properly authenticated release order. Theater support of BCMs is considered a transition-to-war and a wartime mission only. When BCMs are authorized for theater defense, either during the transition-to-war phase or after hostilities have begun, they are deployed into the theater.

10.2. Allocations.

An allocation is the designation, for planning purposes, of BCMs a commander may expend when the use of such munitions is authorized. It does not necessarily indicate physical custody or possession. BCMs will not be included in the peacetime unit basic load. The joint chiefs of staff (JCS) establishes BCM allocations biannually for each unified and specified command. BCMs are allocated and positioned on the basis of the threat, theater mission, national policy, host nation agreements, availability of items, and other operational considerations.

10.3. Control Procedures.

Because of the political sensitivity and strategic military value of BCMs, the NCA exercises rigid control over all BCMs. The president holds the ultimate authority for their release and employment. The NCA through the JCS will provide the theater commander or joint forces commander with deployment and release confirmation for BCMs. AR 50-6 establishes the chemical personnel reliability program as the method of ensuring only the most reliable and qualified persons are used in all phases of chemical operations.

10.4. Transition to War.

BCMs may be deployed to an operational theater for support of OPLAN execution prior to or after enemy first use. During peacetime, theater component logistics agencies submit pre-positioned Military Standard Requisitioning and Issue Procedures (MILSTRIP) requisitions for BCMs with the US Industrial Operations Command (IOC) and the national inventory control point (NICP). During OPLAN execution, the theater commander submits requests for BCM

deployment to the JCS. Commanders of conventional munitions companies must be prepared to assume custody of BCMs.

10.5. BCM Support Structure and Operations.

The following portion of the lesson will focus on the support structure to BCM and BCM support operations.

10.6. Combat Unit Operations.

Commanders must be prepared to integrate BCMs into their fire support plans upon chemical release confirmation. Upon authorized release, firing units pick up their allocated BCMs from the appropriate munitions issuing facility. Normally, during BCM supply operations, firing units pick up their BCM allocations from the convention ATP while resupplying their conventional munitions needs. Custody of BCMs is transferred using DD Form 1911 and DA Form 581 (Request for Issue and Turn-In of Ammunition). Normally, BCMs are assembled at the ASP prior to being issued to the firing unit. However, under emergency conditions, unassembled binary munitions may be issued directly to the firing unit. Turn-ins are handled like conventional munitions turn-ins. However, BCMs must undergo close inspection for leakage, damage, or defects that could cause contamination of stocks and personnel.

10.7. Ammunition Transfer Point Operations.

The ATP is a transload area for munitions. The ATP receives assembled BCMs from either the CSA or the ASP. At the ATP, a courier officer or NCO assumes custody and coordinates security until the BCMs are issued. The ATP may also act as a transfer point for returned BCMs being retrograded. Due to the limited number of personnel at the ATP, BCMs are not assembled at the ATP.

10.8. Ammunition Supply Point Operations.

ASPs may receive, store, assemble, and issue BCMs to using units at ATPs. The ASP normally receives unassembled BCMs from the CSA (or directly from the port), stores the munitions as non-lethal component canisters, assembles the components upon receipt of properly authenticated release orders, and ships the assembled munitions forward to the ATPs for issue to firing units. Ammunition units assemble BCMs as far forward as possible to reduce the likelihood of a chemical accident or incident. Assembly of BCMs is performed by technically proficient personnel IAW the appropriate technical manual. Guidance for chemical safety is in AR 385-32 and TM 10-277.

10.9. Corps Storage Area Operations.

The CSA is the primary storage location for BCMs. The CSA has the necessary personnel and storage space to store BCMs safely. CSA personnel receive unassembled BCMs directly from

the port, store them, and normally ship unassembled components forward to the ASPs. The same storage and handling considerations that apply to storage of BCMs at the ASP apply at the CSA.

10.10. Theater Support Structure.

The TA commander retains overall control of CSS operations, including the resupply of BCMs, to ensure support is allocated throughout the combat zone and the COMMZ. The corps commander is given responsibility for movement and storage of deployed BCMs in the corps area. The COSCOM commander is responsible for the storage, handling, and movement of BCMs IAW guidance provided by the corps commander. It requires intensive coordination between the CMMC and COSCOM commander to ensure the movement of BCMs is kept to a minimum consistent with operational requirements. Movement should be made by the safest means and over the safest route practical. Special consideration must be given to the following when planning BCM movement:

- Known and potential hazards.
- Current intelligence estimates of the general and local threat relating to point of origin, routes, enroute stops, and destinations.
- Type and means of shipment.
- Availability of security resources.
- Source and availability of emergency assistance.

10.11. Communications.

Chemical control orders are passed using existing communications equipment and communications networks as previously described in this lesson. Special emphasis on processing chemical control orders is essential at all levels of command.

10.12. Summary of the Chemical Ammunition Support Structure.

Commanders at all levels must maintain strict control and ensure safe handling of BCMs at all times. Only the most reliable personnel should perform chemical munitions support tasks; they must be well trained and have a thorough knowledge of filler agents and their effects. Only constant monitoring, surveillance, and inspections can ensure safe and secure logistical operations.

11.0. Explosive Ordnance Disposal Support Structure.

EOD support is designed to detect, identify, render safe, recover, evacuate, and dispose of items of unexploded US and foreign ordnance. This chapter defines an EOD incident, explains how response priorities are established, and introduces the EOD support structure. For more on EOD force structure, see FM 9-15.

11.1. EOD Role.

The mission of EOD is to support the national security strategy during peacetime, wartime, and SASO by reducing or eliminating the hazards of explosive ordnance that threaten personnel, operations, installations, or materiel.

In all operations, EOD participates in security and advisory assistance, anti-terrorism, counterdrug operations, training, ordnance disposal, arms control, treaty verification, and support to domestic civil authorities. Many of these tasks are routinely performed in CONUS and include the following:

- Providing EOD support to the United States Secret Service (USSS) and other federal agencies for presidential and VIP protection.
- Advising and assisting the civil authorities in the removal of military ordnance that threatens public safety. See AR 75-15 for authorization information.
- Examining, identifying, and reporting new and unusual explosive ordnance for technical intelligence purposes.
- Supporting nuclear and chemical weapons shipments.
- Conducting range clearances. EOD supports range clearance operations by disposing of UXO on impact areas.
- Destroying munitions (see FM 9-15).
- Neutralizing government-owned ordnance shipments (see FM 9-15).
- Responding to improvised explosive devices (IEDs).
- Advising on mines and minefield clearance. Mines and minefields are not specifically an EOD matter. EOD personnel give technical advice and assistance when asked and when priorities allow. Large-scale minefield breaching is an engineer function.

- Supporting the cleanup of UXO from formerly used defense sites and active installations.

- Providing instruction to host or allied nation military or civilian EOD personnel on UXO hazards and disposal techniques.

During war, preserving the commander's combat power becomes more challenging for EOD because of the increasingly complex and lethal battlefield. EOD integration into staff planning must be sufficiently explicit to provide for battle synchronization, yet flexible enough to respond to change or to capitalize on fleeting opportunities. EOD command and control itself must respond quickly and adapt to the rapid changes on the battlefield.

UXO, including improved conventional munitions (ICMs), is emphasized now more than ever before because of its potential negative impact on the commander's combat power. ICMs (because of their sheer numbers, various means of functioning, and enhanced lethality) have significantly impacted EOD efforts to preserve the commander's combat power and provide a safe operational environment for all friendly forces on the ground. EOD missions include:

- Detecting UXO hazards.
- Identifying unexploded US and foreign ordnance.
- Rendering safe UXO.
- Recovering UXO for technical intelligence exploitation.
- Disposing of UXO.
- Advising commanders on UXO hazards and protective measures.

EOD provides the force projection Army with rapidly deployable support for the elimination of UXO from any operational environment. EOD serves as a combat force multiplier by neutralizing UXO that is restricting freedom of movement and denying access to supplies, facilities, and other critical assets. For detailed information on EOD support, see FM 9-15.

11.2. EOD Incidents.

An EOD incident occurs when a unit detects or suspects the presence of UXO or damaged ordnance that presents a hazard to operations, installations, personnel, or materiel. Anyone can detect and report an EOD incident through command or operations channels.

The operations officer at either the corps tactical operations center (CTOC) or TAACOM operations center prioritizes EOD incidents according to the priorities established by the corps or ARFOR. (For example, a Priority 1 asset may be an ASP and a Priority 2 asset, a POL point.) Once incidents have been prioritized, they are referred to the EOD staff officer.

Upon receiving the incident list, the EOD staff officer assigns each incident a category designation. The EOD categories are as follows:

- **Category A**. Incidents that constitute a grave and immediate threat: "war-stoppers." These incidents are first in priority for EOD support.

- **Category B**. Incidents constituting an indirect threat.
- **Category C**. Incidents constituting little threat.
- **Category D**. Incidents constituting no threat at the present time.

The priority and EOD category assigned each incident together determine the order in which the incidents will be handled.

The EOD staff officer forwards the incident workload list to the supporting EOD battalion. The EOD battalion, in turn, assigns the incidents to its subordinate companies for elimination of the suspected UXO hazards.

11.3. Control Procedures.

The limited EOD assets available to the commander are force multipliers that far exceed their actual numbers. For that reason, EOD operations must be controlled in a manner that has the greatest impact on supporting the commander's mission. Centralized control and decentralized control are the two methods of controlling the operations of EOD units.

11.3.1. Centralized Control.

Centralized EOD control relies on good communications and a complete and accurate evaluation of the threat to the war effort. Once the EOD battalion receives the request for EOD support (relayed through the TAACOM or corps command post from the requesting unit's operations channels), the EOD battalion assigns the incident to an EOD company. The EOD company then dispatches an EOD response team to handle the incident. Figure 17, page 51, illustrates centralized EOD incident reporting.

11.3.2. Decentralized Control.

Decentralized EOD control is used most often in peacetime operations. A unit needing EOD support requests that support directly through operational channels. The EOD company receives the request, notifies the EOD battalion, and dispatches a response team. Decentralized control works well in peacetime or when there is no requirement for a massive response by a large number of EOD assets to a major incident (e.g., a large-scale attack with denial-type munitions on a key facility).

The decentralized method depends less on total area communications than does the centralized method. With good communications, the centralized method is more flexible and responsive to changing situations. If communications support is not reliable, and massing EOD assets is not required, the decentralized method is best since it is less vulnerable to communications failure. With the decentralized method, each sub-area can operate independently while the EOD battalion monitors the reported incidents. Figure 18, page 52, illustrates decentralized EOD incident reporting.

11.4. Transition to War.

Assigned EOD assets must be incorporated into the war plans of separate divisions, corps, and TAACOMs. This includes coordination with rear area operations center (RAOC) and HN EOD units. Also, planning must include coordination between peace-time CONUS EOD units and their wartime OCONUS higher headquarters.

11.5. Support Structure and Operations.

EOD support is provided geographically to units both in and passing through the area. Also, support may be provided for maneuvers by assigning or attaching EOD units to maneuver forces.

11.6. User Level Support.

Any unit can report an EOD incident through operational or command channels to a central operations center. The center can be a division tactical operations center (DTOC), CTOC, or the TAACOM operations center. The center's operations officer, with assistance of the EOD staff officer, sets the priority of EOD incidents based on the threat posed by the incident. Incidents are coordinated, based on the operational mode used, through the EOD battalion or company for the assignment of an EOD response team. Lastly, the EOD response team is dispatched to the scene.

11.7. EOD Response Team.

Basic EOD support is normally provided by a two-person (light) or three-person (heavy) response team organic to an EOD company. The team may function independently of the parent company for up to 72 hours before returning to the company. Also, several light teams can be grouped to work on large multi-UXO incidents or other high priority incidents. If required, a response team may be attached temporarily to a unit other than its parent company for rations, quarters, and logistical support. However, command and control remain with the parent company. A responding EOD team may need added support (e.g., engineers, medical) to reduce potential and/or actual hazards. The responding EOD team will advise whether added support is needed and what type is required.

11.8. EOD Company.

The EOD company provides command and control for its organic EOD response teams. The mission of EOD companies is to provide EOD support to corps and TAACOM units. In the TAACOM, they provide DS to the ASG by covering the ASG area of operations and all units within it. Any EOD companies not DS to the ASG will be in GS to the TAACOM. In the corps, EOD companies are positioned throughout the CSG AO and are normally collocated and attached to the CSBs. Command and control remain with the parent EOD battalion. EOD companies provide GS to the corps on an area basis and can be placed in DS of a specific maneuver unit, normally a division or task force equivalent element. Because of limited personnel and equipment assigned to an EOD company, the company depends on the unit to which it is attached or supporting for rations and administrative and logistical support. EOD companies have a limited number of personnel available for base security and other details.

11.9. EOD Company (CONUS-Based).

The CONUS-based EOD company provides command and control for its organic EOD response teams. Its mission is to reduce or eliminate the hazards of munitions and explosive devices throughout the continental United States. This company provides EOD service on an area basis for a maximum routine incident response capability of 120 incidents per day (based on 12 teams). Also, it may respond to civilian requests for EOD support and assist public safety and law enforcement agencies in handling IED and terrorist threats. The CONUS-based EOD company may provide support to other federal intelligence agencies as outlined in DOD directives and support installations by clearing ranges and destroying unserviceable munitions.

Figure 17. Centralized EOD Incident Reporting

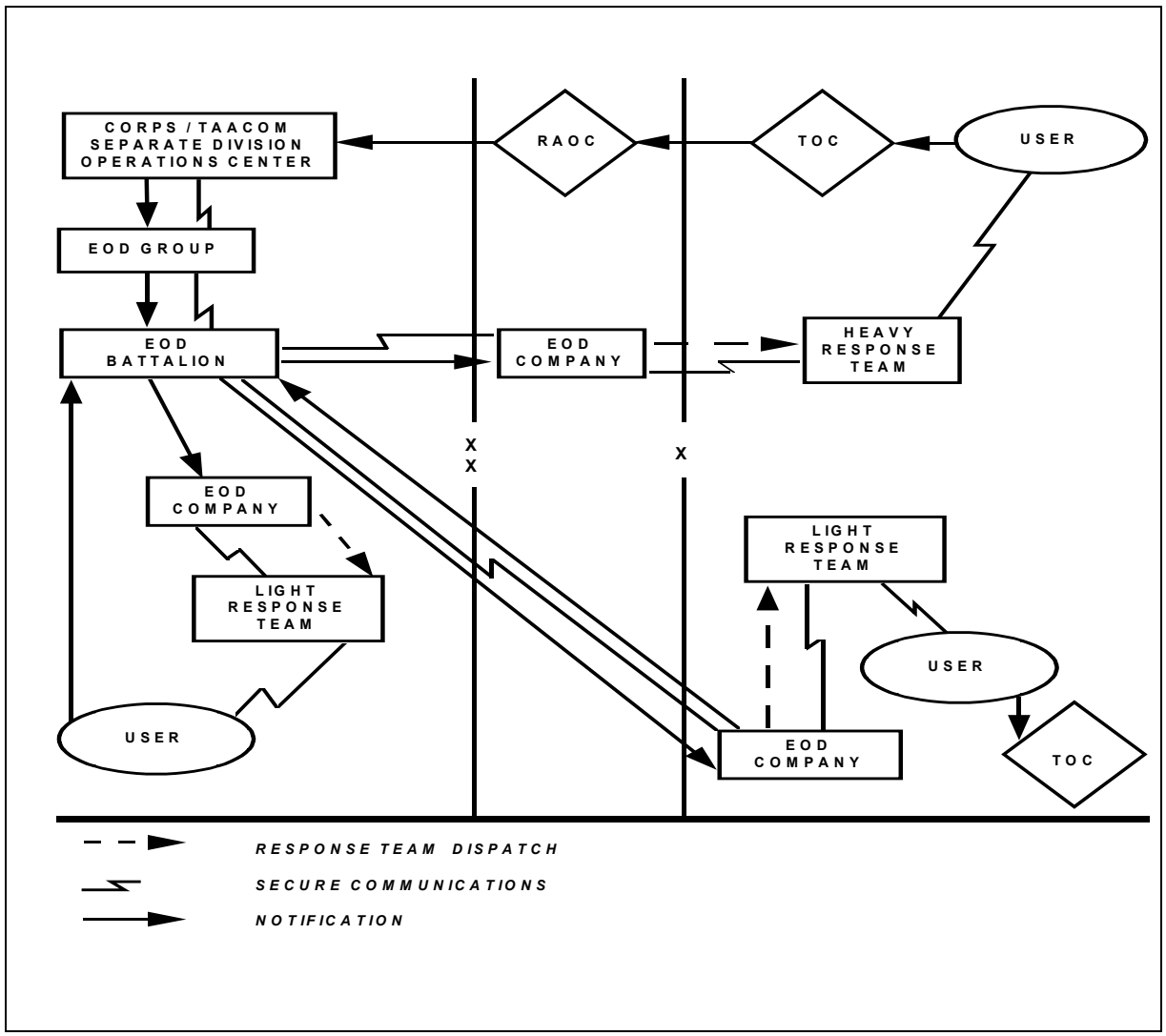
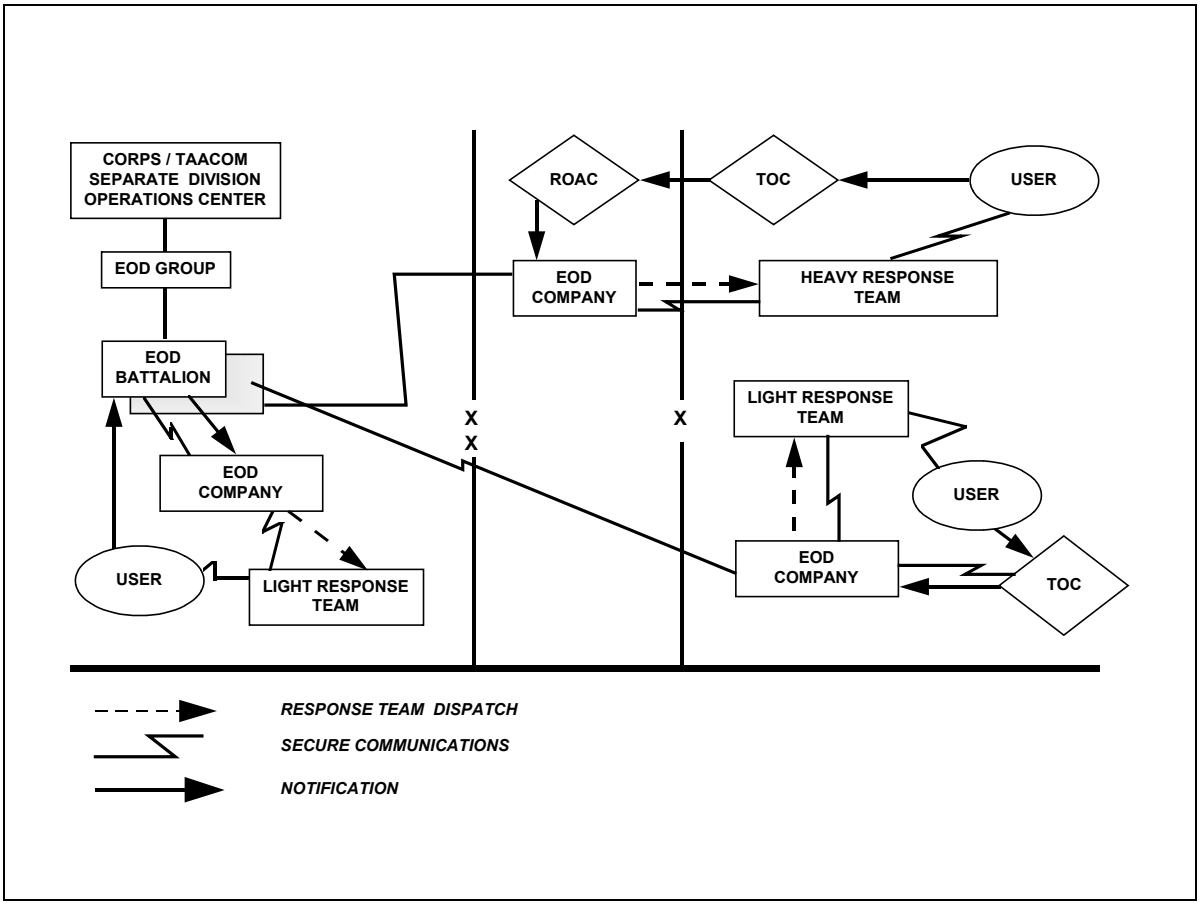


Figure 18. Decentralized EOD Incident Reporting



11.10. EOD Battalion.

An EOD battalion provides command and control for three to ten EOD companies. A battalion with eight EOD companies is allocated to a TAACOM. A corps is allocated one EOD battalion with ten subordinate EOD companies. The EOD battalion has a limited number of personnel and equipment. Therefore, it is dependent on the unit to which it is assigned or attached for rations and administrative and logistical support.

11.11. Ordnance Group (EOD).

The ordnance group (EOD) has two major functions: theater EOD planning and EOD command and control. This group is composed of two to six EOD battalions.

11.12. User Level Support.

Any unit can report an EOD incident through operational or command channels to a central operations center. This center can be a DTOC, a CTOC, or the TAACOM operations center. The center's operations officer, with the assistance of the EOD staff officer, sets the priority of EOD incidents. Priority is based on the threat posed by the incident. Incidents are coordinated,

based on the operational mode used, through the EOD battalion or company for the assignment of an EOD response team. Lastly, the EOD response team is dispatched to the scene.

11.13. EOD Staff Officer.

The ranking EOD officer serves as the EOD staff officer to the TACOM, TAACOM, corps, or division. This officer is normally dual-hatted as the respective EOD group, battalion, or company commander.

Responsibilities of the EOD staff officer include the following:

- Recommends policy and distribution of EOD assets.
- Monitors incident reports, establishes workload priorities, and serves as POC for technical intelligence coordination.
- Coordinates EOD support while ensuring that proper communications have been coordinated at each level supporting EOD operations.

The EOD staff officer and staff are located within the theater army command (TACOM), the TAACOM, the corps, and wherever a division is deployed as a separate unit. Also, an EOD staff element (joint service) will be located at the joint, unified, or combined command staff to assist in managing interservice EOD support.

If no ASCC staff headquarters exists in the theater of operations, an EOD officer and staff are included in the ARFOR element of a joint, unified, or combined command task force staff to manage Army EOD operations.

11.14. Host Nation Interface.

HN EOD assets generally have limited chemical or biological expertise and normally no capability for supporting nuclear weapons accidents or incidents. However, most HN forces do have an EOD identification capability. When US EOD support is not available, the area damage control cell of the RAOC interfaces with HN assets to use the appropriate HN EOD assets. If US EOD support is used, it must be properly coordinated and must comply with government, HN, state, and local requirements. If the HN does not have environmental laws and regulations, US statutes will apply. Emergency operations or EOD operations that take place during wartime will adhere to protocols as outlined in the Military Munitions Rule (MMR).

11.15. Communications.

EOD units need a wide range of communications to accomplish their mission. Long-range communications are required among the deployed teams, the companies, the EOD battalion, and the EOD group. EOD units are linked to the area communications network through mobile subscriber equipment (MSE). Also, EOD response teams and units require a data processing capability for electronic transmission of record traffic. When operating at an incident site, EOD response teams need secure, short-range, wireless interteam communications for the coordination of team member activities and safety. The response teams dispatched on the battlefield require a position navigation device with digital data capability for precise location determination.

PRACTICAL EXERCISE
LESSON 55B40A02

This practical exercise will reinforce the information covered in this lesson. Answer the following questions. Cite the appropriate paragraph and figure number (if applicable) in the lesson that supports your answer.

1. What are the four basic demands that are fulfilled by the military?

ANSWER: _____

_____

_____

REFERENCE: _____

2. What is the primary focus of munitions supply operations on the battlefield?

ANSWER: _____

_____

_____

REFERENCE: _____

3. What are the five logistics characteristics?

ANSWER: _____

_____

_____

REFERENCE: _____

4. What are the four support considerations?

ANSWER: _____

_____

_____

REFERENCE: _____

5. What is meant by the strategic level of munitions operations?

ANSWER: _____

_____

_____

REFERENCE: _____

6. How are munitions support units organized?

ANSWER: _____

_____

_____

REFERENCE: _____

7. How does a TSA receive most of its munitions?

ANSWER: _____

_____

_____

REFERENCE: _____

8. What organization normally operates an ASP?

ANSWER: _____

_____

_____

REFERENCE: _____

9. What supply activity is the most mobile and responsive of the munitions supply activities?

ANSWER: _____

_____

_____

REFERENCE: _____

10. How did the conversion of units to MOADS-PLS result in the more rapid movement of supplies and less frequent transfers?

ANSWER: _____

_____

_____

REFERENCE: _____

11. Under the modularity concept, how are soldiers and equipment deployed?

ANSWER: _____

_____

_____

REFERENCE: _____

12. In what areas does an AST provide technical expertise and assistance?

ANSWER: _____

_____

_____

REFERENCE: _____

13. How many ammunition companies can an HHD, Ordnance Battalion (Ammunition) (WHNS) (GS/DS) provide command and control for?

ANSWER: _____

_____

_____

REFERENCE: _____

14. What are the two means by which combat commanders control the flow of munitions to their areas of responsibility?

ANSWER: _____

_____

_____

REFERENCE: _____

15. What is the preferred method of munitions resupply?

ANSWER: _____

_____

_____

REFERENCE: _____

16. How do nondivisional units attached to or supporting the brigade combat trains forward their munitions requests?

ANSWER: _____

_____

_____

REFERENCE: _____

17. What organization is responsible for providing the interface between corps units and the theater/operational level MMC?

ANSWER: _____

_____

_____

REFERENCE: _____

18. Who manages munitions for the division?

ANSWER: _____

_____

_____

REFERENCE: _____

19. What are the five broad missions of the DAO?

ANSWER: _____

_____

_____

REFERENCE: _____

20. What is the formula for computing the RSR?

ANSWER:_____

_____

_____

REFERENCE:_____

21. What is the US policy on the use of lethal chemical warfare agents?

ANSWER:_____

_____

_____

REFERENCE:_____

22. Define a Category A EOD incident.

ANSWER:_____

_____

_____

REFERENCE:_____

PRACTICAL EXERCISE
SOLUTION

1. Answer: Guarantee strategic deterrence and defense, exercise a forward presence in vital areas of the world, respond effectively to a crisis, and retain the capability to reconstitute forces.
   Reference: Paragraph 2.1.

2. Answer: It will be to support maneuver forces and their combat support.
   Reference: Paragraph 2.2.

3. Answer: Anticipation, Integration, Continuity, Responsiveness, and Improvisation.
   Reference: Paragraph 2.3.1, figure 2.

4. Answer: Support combat commander's intent, support forward, maintain total asset visibility, rely upon the Army's system of effective leadership.
   Reference: Paragraph 2.3.2, figure 3.

5. Answer: It is the support base for all deployed forces and provides munitions based upon projected munitions expenditures.
   Reference: Paragraph 3.1.

6. Answer: They are organized to meet mission support requirements.
   Reference: Paragraph 4.0.

7. Answer: In International Standardization Organization (ISO) containers.
   Reference: Paragraph 4.3.1.

8. Answer: A DS ammunition company or one or more medium lift modular ammunition platoons.
   Reference: Paragraph 4.3.3.

9. Answer: Ammunition Transfer Points.
   Reference: Paragraph 4.3.4.

10. Answer: Through the use of mission configured loads (MCLs).
    Reference: Paragraph 5.3.

11. Answer: Only the number of soldiers and equipment needed to support the forces are deployed.
    Reference: Paragraph 5.4.

12. Answer: They provide support in: supply, storage, maintenance, surveillance, demilitarization, transporation, security, explosive safety, supplies, packaging, and accountability for munitions materiel and associated equipment.
    Reference: Paragraph 5.5.

13. Answer: Up to nine.
    Reference: Paragraph 5.6.

14. Answer: Through controlled supply rates and required supply rates.
    Reference: Paragraph 6.1.

15. Answer: To deliver as far forward as possible.
    Reference: Paragraph 6.3.

16. Answer: Through the FSB support operations officer to the DAO.
    Reference: Paragraph 7.0.

17. Answer: The Corps Materiel Management Center (CMMC).
    Reference: Paragraph 8.3.

18. Answer: The munitions supply section of the DMMC.
    Reference: Paragraph 8.7.

19. Answer: The five broad missions are: consolidating division munitions requirements, preparing plans and procedures for munitions operations, maintaining munitions stock records and reports, conducting and supervising munitions operations, and validating munitions requests.
    Reference: Paragraph 8.8.

20. Answer: Total rounds equals weapons density X Expenditure Rate X days.
    Reference: Paragraph 9.3.

21. Answer: US policy prohibits the first use of lethal chemical warfare agents.
    Reference: Paragraph 10.1.

22. Answer: They are incidents that constitute a grave and immediate threat: “war-stoppers.”
    Reference: Paragraph 11.2.