

FM 55-80

ARMY CONTAINER OPERATIONS

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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PREFACE

PURPOSE

This manual has been prepared by the USACASCOM as a consolidated container reference incorporating policy, doctrine, and procedures needed to conduct container operations across the range of military operations. Existing Army policies and doctrine relating to intermodal containerization date back to 1975. Publications are being revised in view of lessons learned from operations in the Persian Gulf, Somalia, Haiti, Bosnia, and other conflicts. The transition from a forward deployed Army to a CONUS-stationed force demands new approaches to operations. Improving force projection depends on maximizing strategic lift, improving force closure, and updating doctrine which incorporates new ways of doing business.

Army units should consult this FM when conducting intermodal container operations. This FM does not preclude the need to consult other regulatory publications to ensure compliance with federal directives and standards when transporting commodities through the DTS.

SCOPE

This manual provides guidance for container users who ship commodities within the DOD intermodal container system. The DOD system includes intermodal containers and container services, either DOD-owned or leased, or commercially provided. It also includes other ANSI/ISO configured equipment held by DOD activities before, during, and after intermodal shipment in the DTS.

The Army's environmental strategy into the 21st century defines our philosophy and commitment in protecting and preserving the environment and natural resources for present and future generations. Sound environmental practices and considerations must be integrated into all Army documents, missions, and operations. In keeping with the Army's vision to be a national leader in environmental stewardship, commanders and leaders must ensure that all local, state, federal, and HN laws and regulations pertaining to the environment are included in the planning process and strictly followed.

The proponent of this publication is HQ TRADOC. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, USACASCOM, Directorate of Combat Development for Transportation, ATTN: ATCL-T, 3901 A Avenue, Suite 240, Fort Lee, VA 23801-1809.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

CHAPTER 1

INTRODUCTION TO INTERMODALISM

This chapter outlines responsibilities within the DTS for implementing containerization policy and procedures. A paragraph on container procurement is included in this chapter. This chapter includes an overview of intermodalism.

1-1. BACKGROUND. The DOD relies on commercial sealift to move 85 percent of cargo during contingency operations. The US and world merchant fleets are dominated by large, fast containerships with supporting corporate infrastructure (for example, CHE, terminals, information systems, tractors/chassis, and experienced personnel). Experience in ODS revealed that DOD was unprepared to use effectively, containers and containerships to move UE and ammunition. This contributed, in conjunction with port saturation and lack of ITV, to the slow deployment of CS/CSS forces and resulted in significant delays in moving Class V resupply. Also, large numbers of small, slow breakbulk vessels were used instead of containerships which resulted in significant costs in time and money.

The transition to a CONUS-based, power projection force increases the need for the Army to be able to rapidly deploy anywhere, anytime. Strategic lift must be maximized to rapidly project power to meet our force projection goals. Strategic lift is supplied by either ocean-going vessels or air transport. Both are limited resources. Having the largest requirement for strategic lift demands that the Army maximize its use of containerization. Containerization increases the types of ships available to support strategic deployment as well as increasing the cargo capacity of other available ships. It also streamlines handling requirements within the distribution system. Other added bonuses of containerization are increased protection against shipping damage and safeguards against pilferage.

1-2. RESPONSIBILITIES WITHIN THE DEFENSE TRANSPORTATION SYSTEM. The trend in container operations is towards the establishment of an intermodal container-oriented distribution system. This system will meet DOD-wide transportation requirements and result in a fleet of containers designed for common-use among the Services. The information in this manual conforms to guidance contained in Joint Publication 4-01.7 (Draft) and DOD Regulation 4500.9-R-1.

The Army's goal is to increase the use of containers to improve the use of strategic lift and improve force closure for UE and sustainment supplies. The Army's effective use of containers improves both materiel distribution throughout the battlefield and field warehousing.

As DOD transitions from a Service-unique container system to a DOD-wide common-use container system, the Army system must have sufficient capability to meet DOD-established required delivery dates for mobilization, deployment, employment, sustainment, and redeployment. The resulting container system must be interoperable among Service components and commercial industry. The DOD container system includes intermodal containers, infrastructure, and information systems. The CJCS, through an assigned lead agent, provides oversight on all the Services' programs in relation to their interoperability within the DTS.

1-3. DEPARTMENT OF DEFENSE. DOD is responsible for providing overarching policy that will enable the establishment of a DOD-wide common-use container fleet. DOD Regulation 4500.9-R-1 specifies the 20- and 40-foot ANSI/ISO containers as the standard for DOD unit equipment and sustainment. The goal is to ship UE primarily in 20-foot containers and sustainment in either 20- or 40-foot containers. The 20-foot ANSI/ISO container is designated as the DOD standard for containerized munitions shipments. Therefore, only 20-foot containers will be used in the CADS fleet. Equipment acquisitions and support systems interface with the DOD intermodal container system. In support of this, ANSI/ISO standards are incorporated into all requirements, designs, and development of military equipment and logistics support.

1-4. ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE, TRANSPORTATION POLICY. The ADUSD-TP, provides oversight for continued development of the DOD intermodal container system. The ADUSD-TP maintains liaison with federal, executive, regulatory, trade, and private sector organizations relating to container issues. The ADUSD-TP reviews, at least annually, the status of programs supporting containerization within the DTS.

1-5. SECRETARY OF THE ARMY. The Secretary of the Army ensures that organizations are adequately trained, equipped, and manned to operate, support, or interface with the DOD container system. The Secretary of the Army procures and maintains all Army-owned containers to ANSI/ISO standards to ensure compatibility with the commercial intermodal transportation system. He also makes optimum use of the vast capability of intermodal container resources and services furnished by the commercial transportation industry when doing so is responsive to military requirements. In conjunction with the Navy, he supports development of container offload and onward movement capability for LOTS operations.

1-6. SUPPORTED COMMANDER IN CHIEFS. Supported CINCs determine requirements and increase their use of the DOD container system for cargo movement between origin and destination. They ensure container management is carried out within their AORs. Specifically, they provide for the receipt, movement, and return of DOD common-use and CADS containers and associated equipment entering their areas of interest.

1-7. ARMY SERVICE COMPONENT COMMANDER. The ASCC through the TAACOM or, when approved, the future TSC develops and implements procedures that support the container system IAW Army policy contained in AR 56-4. If approved, the TSC proposes to combine all theater CSS functions under a single command structure to provide more responsive logistics support to the commander.

The CINC's logistician should advise the CINC on container issues and recommends delegation of implementing responsibilities to subordinate commands to facilitate container inspection requirements, accountability, maintenance, and distribution of containers throughout a theater. Subordinate units forward their inspection certifications and maintenance report on containers to the servicing MCT. For Army-owned, common-use, CADS, and DOD-owned common-use containers, the MCT forwards the inspection reports and consolidated maintenance information through command channels to MTMC for input into the container master data file.

1-8. COMMANDERS. Commanders at every level are responsible for ensuring Army container policies are enforced. Users of the DOD intermodal container system will benefit by using the guidance in this manual by gaining access to more rapid and flexible deployment options. The

shipping resources that a DOD common-use fleet of containers provides enhanced unit readiness by offering additional deployment options. Failing to follow the guidance provided in this manual as well as other DOD and Army publications results in unnecessary delays as cargo needlessly becomes frustrated and/or damaged. Commanders must also monitor the use of containers to ensure they are available for transportation purposes. Abuses are common as containers have frequently been modified for use as underground bunkers or fighting positions, tactical field shelters, field living quarters, and expedient toilets or shower facilities.

1-9. UNITED STATES TRANSPORTATION COMMAND. USTRANSCOM manages the DOD common-use container systems as the DOD single manager for transportation. As such, they serve as the single manager for DOD common-use containers. They also exercise command authority over all DOD container system assets, except for Service-unique or theater-assigned assets. Management of DOD common-use containers is exercised through the MTMC.

1-10. MILITARY TRAFFIC MANAGEMENT COMMAND. As a USTRANSCOM TCC, MTMC provides operational management and control of DOD common-use containers, as required. Also, when agreed to by USTRANSCOM and the DOD Component concerned, MTMC will provide management support for Service-unique or theater-assigned containers. Lastly, MTMC through its recently formed JTMO, acts as DOD's sole agent to procure and/or lease containers.

As a MACOM, MTMC provides operational management and control, including maintenance and repair, of the Army-owned CADS fleet of containers. MTMC also functions as the single manager for Army-owned or leased ANSI/ISO common-use containers and tracks the location and condition of such assets. MTMC manages container assets through the CFD, an organizational element of MTMC-EA.

1-11. PROCUREMENT AND LEASING OF COMMON-USE CONTAINERS. MTMC acts as the Army's agent to procure containers. MTMC established the JTMO by consolidating staff sections previously aligned separately under MTMC and MSC in August 1996. Except for CADS, the JTMO coordinates container leasing and purchasing requirements for all Services.

a. **Procurement.** The information JTMO requires to process procurement requests is as follows:

- (1) Detailed description/type of container or intermodal equipment needed. This includes specifications for ANSI/ISO type and size and any marking or drawing arrangements desired. If MILSPEC is used, provide detailed specification and documentation. Also, any special request, such as the ability to mount RF tags, must be included in the requirements.
- (2) Quantity required (option for additional purchases).
- (3) Required delivery date and location.
- (4) Technical point of contact.

MTMC purchases new commercial containers and intermodal equipment used in day-to-day common-use service. The requesting activity provides the necessary information which the JTMO uses to procure intermodal equipment at minimal cost to the government within the time required. The time to procure equipment varies. Used equipment, depending on availability, can be procured

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in a matter of days. New ANSI/ISO containers can typically be procured in 60 days or less. Nonstandard items, such as QUADCON, TRICON, or ISU can take up to six months from the time the request is received until the award is made, provided the information is complete and no changes are made to it during the procurement process. On all purchases, the JTMO will try to consolidate procurements across Services to gain the best price.

Upon receipt of the requirement, the JTMO will estimate procurement cost and request MIPR or fund cite to cover contracting action. The RFP for procurement will not be issued until funding is received.

b. **Leasing.** The JTMO acts as the Service's sole agent to lease containers. The JTMO coordinates all unit requirements on container leasing arrangements. The JTMO will lease new or used containers and intermodal equipment used in day-to-day common-use service. The requesting activity supplies specific information, through channels, to the JTMO to ensure that the equipment is leased at minimal cost to the government within the time required. However, the time to complete a leasing action depends on the requirement. A contract for equipment to be used in a national emergency or contingency can be completed in a few days if equipment is available on the commercial market. Normal leasing time from receipt of request to contract award is 15 working days. Information required typically includes:

- (1) Detailed description/type of container or intermodal equipment needed. This must include size, type, and any special items required.
- (2) Quantity required (option for additional leases).
- (3) Number of containers for unit equipment.
- (4) Number of containers required for sustainment (in 30 day increments).
- (5) Term of lease (number of days equipment will be leased).
- (6) Intended use of equipment. (Equipment must be used for intermodal transportation in the DTS.)
- (7) Estimated dates of on-hire and intended redelivery location(s). Equipment drop-off destination. (NOTE: Equipment leased at one location and returned at another requires coordination and must be included in the contract.)
- (8) Chassis support. Specify requirement and intended use. State whether chassis is still needed after intermodal containers are loaded.
- (9) Reefer support. Specify requirement for additional support; for example, generator sets, spare part kits, and reefer mechanic (shore and/or shipboard) manuals.
- (10) Inspection requirements for containers carrying DOD material as shown in MIL-HDBK 138B.
- (11) Required delivery date at requester's facility. Give location, hours of operation, address, points of contact, and telephone numbers.

(12) Ship on which intermodal equipment will be loaded, date ship will be at berth, and location.

(13) Whether requester provides intermodal equipment inspector(s) for on-hire/off-hire of equipment.

Upon receipt of the requirement, the JTMO will estimate lease cost and request MIPR or fund cite to cover contracting action. The RFP for procurement will not be issued until funding is received. Estimated lease cost will include lease per diem, estimated repair cost, drop-off charges, funds for special items, on-hire/off-hire inspection fees, and any line haul/drayage fees.

c. **Sources.** Common-use containers are leased, procured, or made available from DOD-owned inventories to support the intermodal transportation requirements of all Services. These containers are managed and controlled, through MTMC, by USTRANSCOM while they are in the DTS. The JTMO leases or procures commercial containers for common-use requirements. The ATCOM centrally procures particular MILSPEC containers when required.

Special containers designed to support Service/program-unique mission requirements include the Navy's Deployable Medical System containers and the Army's contingency containers dedicated to a particular need, such as refrigerated containers for mortuary requirements. These containers are also managed and controlled by USTRANSCOM while in the DTS.

Unit-owned containers in the EDSS family of containers, such as QUADCONs, TRICONs, and ISUs, support the transportation and logistical needs of military units and are listed on the unit's MTOE or CTA.

While the preceding paragraphs provide a general description of the latter two types of container assets, the focus will be on the common-use containers which can be used by all Services.

Commercial containers are generally available through two sources: ocean carriers as part of their intermodal service and container-leasing companies for use in the DOD-operated system. It should be noted that carriers lease a significant number of their containers from container lessors. Initially, DOD must rely on the commercial transportation/container industry to supply containers across the range of military operations. If containers cannot be obtained commercially from the transportation/container industry, the Maritime Administration has authority to allocate containers or obtain priority for their use to meet military requirements.

1-12. NATIONAL-LEVEL MANAGEMENT. DOD container management provides visibility and control of all DOD-owned or leased intermodal ANSI/ISO containers for both common-use transportation and Service-unique missions. DOD ANSI/ISO containers are managed and controlled in four basic categories. These categories are:

- DOD-owned or leased common-use containers.
- Service-owned containers procured for a dedicated need (for example, prepositioning).
- Service-owned UE containers (for example, QUADCONs and TRICONs).
- Commercial containers carrying DOD cargo.

As the DOD single manager for transportation, USTRANSCOM manages DOD intermodal containers while they are moving in the DTS. USTRANSCOM uses the WPS to pass container information to port operators. A deploying unit's equipment and container information enter the WPS through the TC-ACCIS. Once in this data base there are a host of other automated systems that can use this information. Figure 1-1 shows the flow of UMD, which includes containers, from home station to an area of operations. Also shown are some of the other automated systems with which TC-ACCIS interfaces (for example, the GCCS, JOPES, MASS, ALM, and COMPASS). TC-ACCIS capabilities will be incorporated into the TC AIMS II when fielded.

Sustainment cargo, discussed in Chapter 4, is not shown in Figure 1-1 as it goes through a different process to enter the automated information environment. Chapter 5 also provides additional information on these automated systems.

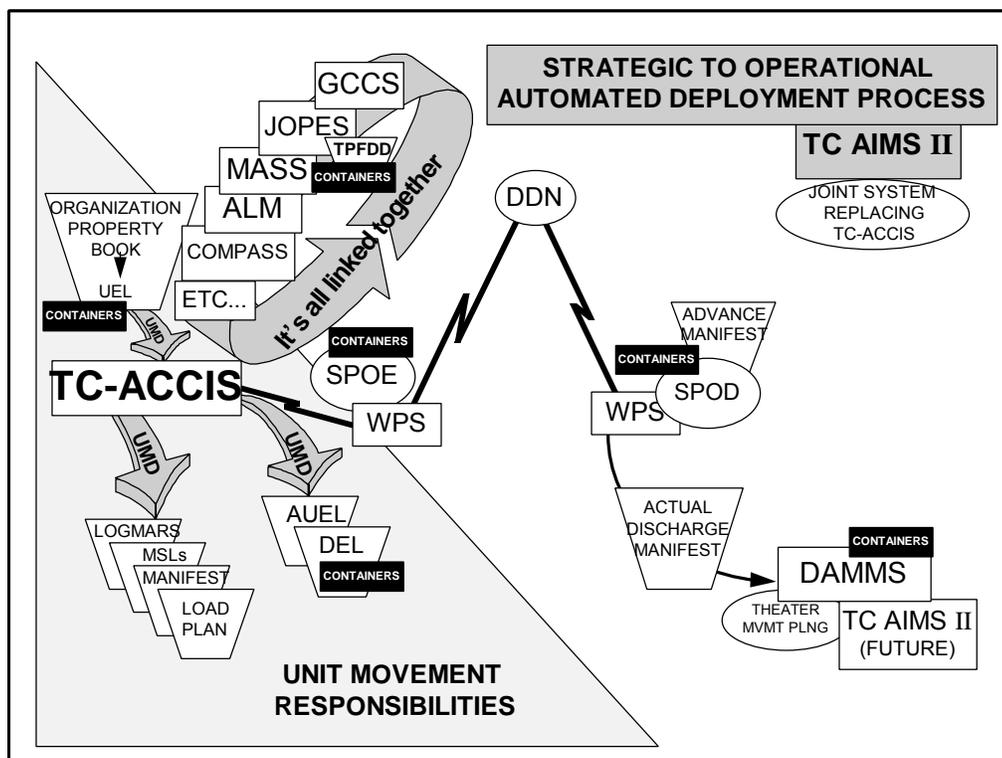


Figure 1-1. TC-ACCIS Automation Interface for Unit Deployments

USTRANSCOM exercises command authority over DOD container system assets, except Service-unique or theater-assigned. It also provides management support to the Services and commanders of unified commands for Service-unique or theater-assigned container system assets when directed by the Secretary of Defense or by agreement with the Chief of a Service or geographic combatant commander. Each Service has Service-owned containers controlled and managed by the owning Service that must be tracked and accounted for in the DTS. This category has two sub-categories:

- Containers procured for transportation of UE.
- Containers for prepositioned or sustainment cargo.

Examples of Army-owned UE containers include hospitals, maintenance facilities, PLS flatracks and modular ANSI/ISO containers, QUADCONs, and TRICONs. Army-owned or leased containers for prepositioned or sustainment cargo are general purpose common-use containers that are managed by MTMC. Containers that are supplied by the carrier or an intermodal marketing company as part of their transportation service remain under their control, even though carrying military cargo.

DOD component and Service-managed general purpose intermodal 20- and 40-foot containers, whether owned or leased, are potential DOD common-use container fleet assets when approved for use by the owning or leasing Service. AWR containers fall into this category and could be released into the DOD common-use container fleet, but strategic planners must consider the ramifications of such a decision.

Some 2,000 plus containers, in the right combination of sizes, would be needed to reconfigure the AWR-3 prepositioned vessels. If these containers are not readily available, a timely reloading of these vessels cannot be accomplished. This would cause significant delays if downloaded afloat prepositioned stocks were redirected in response to another contingency. When prepositioned containers are to be used as part of the DOD common-use container fleet, containers from the ashore stocks should be used first. Planners are advised to treat afloat prepositioned containers as ship's gear and make the decision to offer these containers up to the DOD common-use container fleet only after advising the supported CINC of the ramifications of such a decision.

DOD ANSI/ISO containers are maintained in serviceable condition IAW established standards and regulations to move the cargo for which they are assigned (for example, ammunition, general cargo, and refrigerated cargo). DOD and DOD component regulations delineate accountability procedures and outline acceptable maintenance standards which containers must meet before being permanently added or temporarily transferred to the common-use container fleet.

Through MTMC, USTRANSCOM manages and monitors the status of DOD-owned/ leased and commercial intermodal surface containers while these containers are in the DTS. MTMC also provides operational management and control of the CADS container fleet. As the Army's single container manager, MTMC tracks the location and condition of Army-owned common-use containers. MTMC's single container manager responsibility does not encompass operational control nor include decision authority on inspection or repair. The DOD common-use container fleet can be augmented by leasing and/or procurement of commercial containers, or transfer of DOD component and Service-owned container capability that are not in use, upon request to USTRANSCOM. This transfer is approved by the Service or, when appropriate, by the geographic combatant commander.

During contingency operations, when DOD requirements impinge on the commercial sector, the Joint Staff, in coordination with the DOT and USTRANSCOM, allocates commercial container capability made available by DOT among Services and DOD agencies in support of geographic combatant commanders.

The types of ships available to the commercial maritime fleet largely determine US military use of containers. National transportation policy requires the DOD to use existing commercial

transportation equipment to the maximum extent possible. As such, much of the material that will arrive in a theater of operations will be in containers. Effective logistics support will require the efficient movement and handling of containers throughout the DTS and within SSAs.

Army-owned containers such as EDSS which include QUADCONs, TRICONs, and ISU-60s, -90s, and -96s are moved IAW the provisions of MILSTAMP. Commercial containers while documented IAW MILSTAMP, are moved under the provisions of the JTMO Global Container Contract. The rate guide provides rates, terms, and conditions for worldwide intermodal movement of containerized cargo for the DOD.

1-13. THEATER-LEVEL MANAGEMENT. Regional CINCs are responsible for the management and control of DOD intermodal container assets and systems in their AOR. Intermodal container systems are managed IAW the policies delineated in DOD Regulation 4500.9-R-1 and Joint Publication 4-01.7 consistent with the tactical situation and concept of operations.

Employment of intermodal containers and systems within a theater is essential to the sustainment of forces. As such, CINCs ensure that these vital systems receive command emphasis at the highest levels. CINCs implement their container management programs through the TMCA. The DAMMS is the theater system to maintain control of containers. During the deliberate planning process, the CINC must decide how robust a container capability is needed. CSS units must be deployed early enough to handle reception requirements. Depending on the personnel strength of the TMCAs or MTMC agencies involved, they often will require augmentation to implement the CINCs container mission.

In CONUS, container management is accomplished through the network of ITOs. When OCONUS, the servicing MCT is aligned under the TMCA. The ITOs request all container support through their MACOM to MTMC. Ammunition movements requiring container support will be identified and validated by the JMTCA and forwarded to the CFD for disposition (see paragraph 6-3). The TMCA has the following two options:

- Work through MTMC.
- Coordinate contracts directly through the ASCC.

The servicing MCTs and ITOs are responsible for maintaining location and status visibility of all Army-owned or leased common-use, CADS, and DOD-owned/leased common-use containers in their geographic AORs. This information is provided to MTMC for the master data file. The goal is to raise visibility and reduce the number of containers retained on installations and ultimately decrease unit-owned containers held outside the Army and the DOD common-use container fleets.

Figure 1-2 shows the CONUS ITO and OCONUS TMCA organizations that support the container system. In the division, units request container support through their higher HQ. This request is passed to the MCO who will support the request to the extent of available internal assets. Support requirements which exceed division assets are passed to the DTO who coordinates with forward stationed movement control teams which are DS to the division. These MCTs will coordinate the requirement with corps MCBs. The MCT reports container status to its MCB, and these reports are forwarded to the TMCA. The TMCA, as the theater container manager, compiles the theater data base for containers and passes this information onto MTMC. MTMC provides visibility of arriving and departing containers through two MTMC agencies (OCCA and OCBO).

These agencies are assigned to the MTMC area command. MTMC supports ammunition movement through CFD and leasing and procurement services through the JTMO.

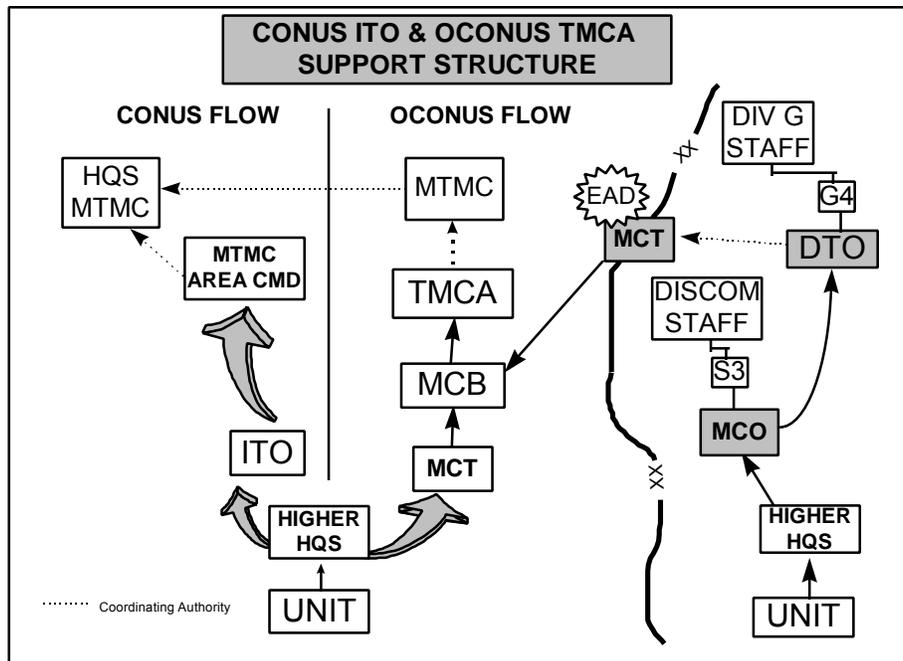


Figure 1-2. Container Request Flow

1-14. FUNDAMENTALS OF INTERMODALISM AND INTERMODAL CONTAINER USE. Army operations involve intermodal movement of personnel, equipment, mail, and supplies by air, land, and sea from installations, depots, or commercial vendors to areas requiring the deployment of Army forces. Intermodalism is the transferring of passengers or transshipping of cargo among two or more modes of transportation (for example, sea, highway, rail, or air). Containerization, in concert with intermodalism, facilitates and optimizes carrying cargo without intermediate handling of the container contents. Figure 1-3, page 1-10, summarizes six principles which apply to intermodalism. They improve efficiency and effectiveness when using containerization to improve mobility and transportation support.

1-15. PRINCIPLES OF CONTAINERIZATION. An understanding of these principles helps readers make effective use of intermodalism. Applying these principles to containerization will help achieve Army goals expressed throughout this manual when using containers.

a. **Seamless Flow of Materiel and Information.** A factory to foxhole distribution system aims to eliminate boundaries between wholesale and retail logistics. This improves responsiveness to soldiers in the field.

The Army designs and employs assets and systems to facilitate the rapid movement of personnel, equipment, supplies, and information which decreases impediments in the deployment flow.

In the surface transportation system, a significant number of the vessels are self-sustaining RO/RO which are characterized by large cargo capacities and rapid loading and discharge rates. Containerships are usually nonself-sustaining and are equipped to carry only containers without associated equipment, in all available cargo spaces, either below or above deck. RO/RO vessels and containerships are linked to land transportation (highway/rail) through port and water terminal systems. RO/ROs provide the primary means of strategic sealift for initial unit deployment and UE (for example, tanks, towed artillery, armored personnel carriers, and rolling stock). Containerships are the ideal means of transport for sustainment and resupply. Due to the limited numbers of RO/ROs and force closure requirements, all units/forces with container compatible equipment should be prepared to deploy by containership. A unit's accompanying supplies and equipment, to include ammunition, are well suited for containerization and rapid deployment using containerships.

Other ship types (for example, breakbulk and large ocean going barges) are also intermodal sealift assets, but they will primarily augment RO/RO vessels and containerships. Their capabilities are used when RO/ROs and containerships are insufficient or impractical for the operation being undertaken, when theater infrastructure constraints dictate, or when the tactical mission or situation precludes the use of containers in delivering materiel and equipment.



Figure 1-3. Principles of Containerization

b. **Mobility and Readiness.** The efficient and effective use of containerization increases flexibility with regards to strategic lift options resulting in faster deployment and improved force readiness.

DOD uses intermodal transportation that is flexible and fast to build a ready force with the required mobility to accomplish its mission.

The DOD airlift system is keyed to fast response using military aircraft and commercial aircraft as required. Common-use organic military aircraft and certain commercial aircraft can be configured to rapidly load containers using RO/RO ramps. More typically, cargo destined for transport via airlift is configured on 463L pallets. These pallets share common documentation practices with containers.

The CONUS land transportation system uses highway and rail as well as inland waterway systems to move materiel to APOE or SPOE for loading and transport on strategic airlift and sealift assets. Rolling stock can be loaded directly on rail cars via end ramps to facilitate fast loading at originating points and discharge at ports of debarkation during deployment operations. Intermodal containers can be quickly loaded and unloaded from rail cars using specially designed CHE or overhead cranes. Containers moved by highway can proceed directly to pier side for loading aboard containerships using commercial shore-based terminal cranes, referred to as gantry cranes or the ship's self-sustaining cranes. They may also be offloaded from the chassis by specially designed CHE and positioned in the terminal's container yard for subsequent loading aboard ship. Containers moved by rail car usually require CHE for off-load and transfer to pier side.

The DOD sealift system is keyed to provide rapid support using government-owned and chartered vessels. Commercial containership capability is available to DOD through time or voyage charters and on a day-to-day basis via worldwide container agreement rate guides and other dedicated/special agreements.

RO/ROs and containerships can be efficiently loaded using intermodal systems at established facilities. Planners should consider the offload destination while the ship is being loaded to determine what assets will be available to discharge the ship. Experience gained during ODS at the port of Ad Dammam, Saudi Arabia revealed that commercially available MHE/CHE could not perform all the handling procedures required when a piece of cargo or container was loaded at the port of embarkation with MHE/CHE assets which were not available at the port of debarkation.

Prior planning, training, and preparation to deploy UE, ammunition, and follow-on sustainment using rail, land, air, and sea transport ensures responsive and effective support to the CINCs.

c. **Throughput Distribution.** The increased application of throughputing materiel from origin to destination reduces stops along the way, reduces delivery time, and raises customer satisfaction.

As shown in Figure 1-4, page 1-12, effective intermodal movement of personnel, equipment, and supplies begins at or near the origin and continues unimpeded to or near the final destination.

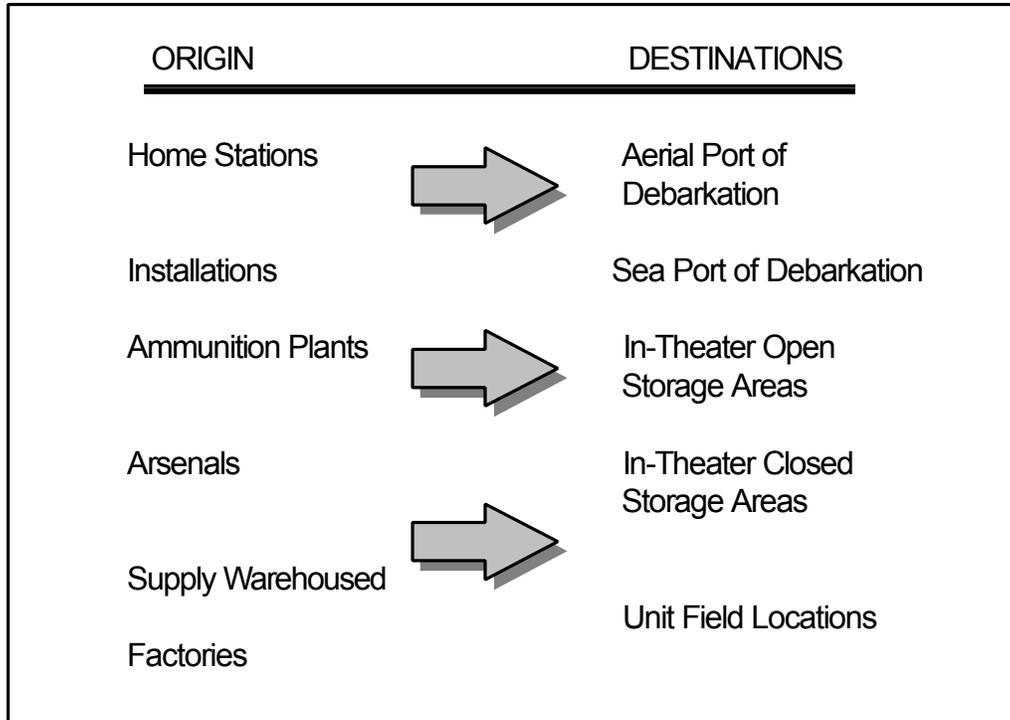


Figure 1-4. Effective Intermodal Movement

d. **Standardization.** Standardized procedures allows all users of containers easier understanding of shipping requirements and regulations and ensures efficient operations among the Services.

Intermodal containers are transportation assets designed to improve cargo throughput with minimum handling of cargo at mode transfer points. This capability demands standardization for ease of handling. Intermodal containers used within the DOD surface transportation system for international shipping are designed to conform to the ANSI/ISO specifications. DOD specifies the 20-foot and 40-foot ANSI/ISO containers as the standard for DOD unit equipment and sustainment. Intermodal containers used within the airlift system conform to the military 463L pallet standard. These include both pallets and containers.

e. **Container Status/In-Transit Visibility.** ITV provides commanders with accurate near real time logistics information capabilities vital to the CINCs concept of operations.

Container status and ITV are essential for effective and efficient use of intermodalism employing containerization. Supported CINCs need to know where their critical resources are and when those resources will arrive to execute or modify courses of action during contingencies. This information also provides the necessary data needed to prioritize, allocate, and reroute resources between theaters if required. Because of the volume of containers moving in the DTS and the resulting inventories, this capability should come via an automated system.

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