FM 3-35 (FMI 3-35 and FM 4-01.011)
April 2010

Army Deployment and Redeployment

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Headquarters, Department of the Army

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Field Manual
No. 3-35 (4-01.011)

Headquarters
Department of the Army
Washington, DC, 21 April 2010

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***This publication supersedes FMI 3-35, 15 June 2007 and FM 4-01.011, 31 October 2002.**

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Preface

FM 3-35 is the Army's authoritative doctrine for planning, organizing, executing, and supporting deployment and redeployment. This manual represents the culmination of our efforts to consolidate all deployment doctrine (FM 100-17, FM 100-17-3, FM 3-35.4, FM 100-17-5, and FM 4-01.011) into a single manual to align Army deployment doctrine with joint deployment doctrine.

FM 3-35 has five chapters and 12 appendices.

- Chapter 1 presents an overview of force projection and the deployment process.
- Chapter 2 spells out activities units engage in prior to being alerted for deployment.
- Chapter 3 outlines the procedures involved in the movement of units from home station to the port of embarkation (POE) and from the POE to the port of debarkation (POD).
- Chapter 4 details the process of reception, staging, onward movement, and integration (RSOI).
- Chapter 5 explains redeployment.

New appendices were developed in response to requests from the field. These appendices cover installation support, duties of the Mobility Officer, organization and operation of an arrival/departure airfield control group, unit movement officer (UMO), and unit movement plan, and the influence of senior commanders on deployment.

Joint Publication 3-35 describes the joint process in terms of planning; pre-deployment; movement; and joint reception, staging, onward movement, and integration (JRSOI).

PLANNING	PREDEPLOYMENT	MOVEMENT	JRSOI	REDEPLOYMENT

On the other hand, the Army process is defined by the phases of pre-deployment; movement (includes the fort to port and port to port segments); and RSOI. Planning occurs continuously throughout the entire process. In the current operating environment of persistent conflict, the rotation of Army forces is similar to the deployment process described in this manual.

PREDEPLOYMENT	MOVEMENT	RSOI	REDEPLOYMENT
PLANNING			

FM 3-35 applies to the Active Army, the Army National Guard (ANG)/Army National Guard of the United States (ARNGUS), and the United States Army Reserve (USAR) unless otherwise stated.

Headquarters, U. S. Army Training and Doctrine Command, is the proponent for this publication. The preparing agency is the Deployment Process Modernization Office. Send comments and recommended changes on a DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Director, Deployment Process Modernization Office, ATTN: ATZL-DP, 2401 Quarters Road, Fort Lee, VA 23801.

Chapter 1
Overview

The transformation of the Army was based on an environment characterized by a wider spectrum of potential contingencies, increased uncertainty, and a more complex range of operational conditions. The situation demanded swift action by the United States. The Army transformation plan focused on providing the joint force commander with expeditionary capability with forces organized and equipped to be modular, versatile, and rapidly deployable with institutions capable of supporting them. Understanding and applying the deployment process outlined in this manual is essential to achieving the desired expeditionary characteristics.

FORCE PROJECTION

1-1. Force projection is the military element of national power that systemically and rapidly moves military forces in response to requirements of full spectrum operations. It is a demonstrated ability to alert, mobilize, rapidly deploy, and operate effectively anywhere in the world. The Army, as a key member of the joint team, must be ready for global force projection with an appropriate mix of combat forces together with support and sustainment units. Moreover, the world situation demands that the Army project its power at an unprecedented pace. The flexible and rapidly deployable Army forces with sufficient depth and strength to sustain multiple, simultaneous operations contributes to defusing the crisis.

FORCE PROJECTION PROCESSES

1-2. Force projection encompasses a range of processes including mobilization, deployment, employment, sustainment, and redeployment. These processes have overlapping timelines that are repeated continuously throughout an operation. Each force projection activity influences the other. Deployment, employment, and sustainment are inextricably linked so one cannot be planned successfully without the others. The operational speed and tempo reflect the ability of the deployment pipeline to deliver combat power where and when the joint force commander requires it. A disruption in the deployment will inevitably affect employment. Force projection operations are inherently joint and require detailed planning and synchronization. Decisions made early in the process directly impact the success of the operation.

- **Mobilization** is the process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activating all or part of the Reserve Components as well as assembling and organizing personnel, supplies, and equipment.
- **Deployment** is movement of forces to an operational area in response to an order and is the focus of this manual.
- **Employment** prescribes how to apply force and/or forces to attain specified national strategic objectives.
- **Sustainment** is the provision of logistics, personnel services, and health service support necessary to maintain and prolong operations until successful mission accomplishment.
- **Redeployment** involves the return of forces to the home or demobilization station.

DEPLOYMENT

1-3. Deployment is composed of activities required to prepare and move forces, supplies, and equipment to a theater. This involves the force as it task organizes, tailors itself for movement based on the mission, concept of operations, available lift, and other resources.

1-4. The employment concept is the starting point for deployment planning. Proper planning establishes what, where, and when forces are needed and sets the stage for a successful deployment. Consequently, how the combatant commander (CCDR) intends to employ forces is the basis for orchestrating the deployment structure. All deployment possibilities must be examined as they dramatically influence employment planning. Deployment directly impacts the timing and amount of combat power that can be delivered in order to achieve the CCDR's desired effects.

ARMY DEPLOYMENT GOALS

1-5. The Army Campaign Plan identifies the Army's deployment goals as follows—

- Deploy and employ brigade combat team (BCT) capability in 4-7 days.
- Deploy and employ 3 BCTs with a division headquarters in 10 days.
- Deploy and employ 9 BCTs with multi-division headquarters in 20 days.
- Deploy and employ 15 BCTs with multi-division headquarters in 30 days.

1-6. Supporting metrics are being developed to synchronize these goals with the Army Force Generation (ARFORGEN) model that is discussed later in this chapter.

DEPLOYMENT PRINCIPLES

1-7. Four principles apply to the broad range of activities encompassing deployment—

- **Precision** applies to every activity and piece of data. Its effect is far-reaching, and the payoff is speed. For example, precise unit deployment lists (UDLs) ensures that correct lift assets are assigned against the requirement. Precision includes accurate weights, dimensions, and quantities. This degree of precision eases loading requirements and improves departure speed and safety. Precision allows units to meet the CCDR's timeline and supports the concept of employment.
- **Synchronization**. Deployment activities must be synchronized to successfully close the force. Effective synchronization of scarce lift assets and other resources maximizes their use. Synchronization normally requires explicit coordination among the deploying units and staffs, supporting units and staffs, a variety of civilian agencies, and other Services. Realistic exercises and demanding training are paramount to successful synchronization.
- **Knowledge.** One of the more critical pieces at this stage of deployment is the knowledge upon which decisions are made. There is a short period of time during which the deploying commander must make crucial decisions on employment. These decisions set the tone for the remainder of the deployment. Many decisions are very hard to change and have significant adverse impacts if changed; others are irrevocable.
- **Speed** is more than a miles per hour metric. The proper focus is on the velocity of the entire force projection process, from planning to force closure. Critical elements of speed associated with force projection include agile (state-of-the-art) ports, submission of accurate information, safe and efficient loading, trained unit movement personnel at all levels, timely arrival of throughput enablers, maintaining unit integrity, delivering capability rather than entire units, and force tracking information

DEPLOYMENT PHASES

1-8. The Joint deployment process is divided into four phases -- deployment planning; predeployment activities; movement; and JRSOI. The terminology used to describe the Army deployment phases is in synch with the Joint process. The Joint process includes a planning phase at the outset whereas the Army considers planning to be woven through all the phases. Moreover, the movement phase in the Army process is discussed in two segments – fort to port and port to port. The Army relies on U.S. Transportation Command (USTRANSCOM) to provide the strategic lift to and from the port of embarkation (POE).

1-9. Deployments consist of three distinct but interrelated phases. A successful deployment requires implementation of each phase with seamless transitions and interactions among all of them. The phases are not always sequential and could overlap or occur simultaneously.

Predeployment Activities

1-10. An expeditionary Army requires that units are prepared for potential deployments consistent with ARFORGEN model. During predeployment units constantly plan for various contingencies and hone their deployment skills. When units train and exercise their predeployment activities, they become second nature and are accomplished efficiently. Not only should units be trained, personnel must be nearly 100 percent compliant with respect to Soldier readiness processing (SRP), encompassing those administrative, medical, and dental checks required to prepare a Soldier for deployment. This level of readiness and training requires school-trained, dedicated mobility officers, UMOs, hazardous cargo certifiers, and load planners. Their requirements are documented in organizational equipment lists (OEL), UDLs, and loaded into the Transportation Coordinators Automated Information for Movements System II (TC-AIMS II). In addition, units must acquire movement expertise, knowledgeable deployment support teams, joint deployment process improvement tools, and an understanding of the Joint Operation Planning and Execution System (JOPES) to enable seamless deployment operations.

1-11. Movement requirements developed during deployment planning must be validated prior to deployment execution. Validation confirms the need for the movement requirement, shipment configuration, dimensions, and routing and ensures that all parties, including the chain of command, are cognizant of the requirement. Movement requirements are validated during execution planning by the supported CCDR who validates all joint force movement requirements for USTRANSCOM movement scheduling.

Movement

1-12. **Fort-to-Port.** The receipt of the Air Mobility Command (AMC) air tasking order and Surface Deployment and Distribution Command (SDDC) port call message initiates POE operations and specifies the dates on which units must arrive at the POE. At the installation staging areas unit movement data is verified and equipment is inspected and configured for movement. It is then typically moved to the POEs by convoy or commercial surface transport. The installation coordinates and/or provides support to assist the deploying force by using non-deploying units, installation resources, or contracted support. Support may include load teams, materiel handling equipment (MHE), maintenance teams, arrival/departure airfield control groups (A/DACGs), and deployment support teams. Other support should be identified during deployment exercises and then written into installation deployment support plans. The Mission Support Element is a TDA-augmentation capability used by the mission commander to develop and maintain the deployment support plan.

1-13. Deploying units immediately configure for deployment, reduce/prepare vehicles and aircraft for movement, properly stow and tie down secondary loads, construct 463L pallets, and prepare the required documentation. The sea and air POEs should quickly initiate operations. MHE must be on hand, and procedures previously established for the joint inspection process at the aerial terminal commences. Units begin assembling equipment for air movement and chalks are staged awaiting sortie allocation. The POE must offer sufficient staging and inclement weather facilities.

1-14. **Port-to-Port.** USTRANSCOM operates the Defense Transportation Service (DTS) and provides common user strategic transportation to support the CCDR for deployment. The port to port phase begins with strategic lift departures from POEs and ends with lift assets arrival in the designated theater PODs. Fundamental to the success of the port-to-port movement is the ability of the CCDR to synchronize the arrival of airlift and sealift force packages so that vessels can be brought to a berth or offloaded in-stream with minimal delay. This ensures that cargo can be received and cleared from the port in a timely manner.

Reception, Staging, Onward Movement, and Integration

1-15. RSOI is the process that delivers combat power to the Joint Force Commander (JFC) in the operational theater. The very nature of seizing the initiative demands expeditious processing of personnel and equipment throughout the deployment pipeline. Consequently, facilities must be available on or near the PODs for personnel reception and equipment staging and preparation (to include refueling). One of the essential requirements at the APOD is adequate parking and operational areas to sustain the required number of aircraft to meet the throughput requirements. RSOI support, whether provided by theater support contracts, external support contracts (primarily the Army Logistics Civil Augmentation Program or LOGCAP), or regionally available commercial host nation support, and/or military assets, must be sufficient to immediately support the arrival of deploying units. Effective RSOI matches personnel with their equipment, minimizes staging and sustainment requirements while transiting the PODs, and begins onward movement as quickly as possible. A plan to accomplish integration and maintain combat readiness must be understood, trained, and ready to implement upon arrival.

THE DEPLOYMENT PROCESS

1-16. A deploying unit is broken down into multiple segments to be moved through the deployment pipeline – typically personnel move by airlift and equipment by sealift from the port of embarkation to port of debarkation. The culmination of a deployment is bringing the separate entities of the unit back together to become a combat-ready force. A well organized and trained RSOI support organization executing a comprehensive plan is fundamental to success.

DEPLOYMENT PLANNING

1-17. The initial activity in planning a development plan using the military decision making process. The objective is to synchronize deployment activities to facilitate execution. The steps used in planning and preparation during predeployment activities include: analyze the mission, structure forces, refine deployment data, prepare the force, and schedule movement. Successful deployment planning requires knowledge of the unit's deployment responsibilities, an understanding of the total deployment process, and an intellectual appreciation of the link between deployment and employment.

- **Analyze the mission** – The mission is examined and courses of action (COAs) are developed bearing in mind that the employment considerations are paramount. The primary purpose of a deployment is to provide the right force at the right place and at the right time.
- **Structure forces** – The COAs outline the ways (employment) and the means (forces) to accomplish the mission. Initially capabilities are identified but as the COAs are further defined the requirements are being translated into type units.
- **Refine deployment data** – As forces are identified the development of the time-phased force and deployment data (TPFDD) is begun. The supported combatant commander defines his intent for deployment which may be very specific and direct the sequence of units or just identify a general deployment timeline. In any case the intent should clearly express how the deployment postures the force for employment.
- **Prepare the force** – Force packages are developed, ensuring the right capabilities are in the proper combinations to meet the intentions of the supported combatant commander.
- **Schedule the movement** – The supporting combatant commands must clearly and completely define their mobility requirements and milestones based on the concept of operations. The right sequencing of forces will provide the commander with the capabilities required to achieve the desired objectives. Once the strategic lift schedule is put in motion it is difficult to change without losing use of the transportation capacity.

1-18. Deployment planning is a logical process that focuses on Soldiers, supplies, and equipment, ways to deploy them, and the required information to track them. In particular, deployment plans require detailed information. Knowing the right details will help to guide the unit through an effective deployment. The heart of deployment planning is an accurate list of Soldiers and equipment that will deploy—the UDL. The UDL is developed in TC-AIMS II and is validated by the commander. Its importance is exemplified by its

use: to manifest units for deployment and to update the TPFDD so appropriate lift is scheduled for the deployment.

OPERATIONAL ENVIRONMENT

1-19. Today's operational environments have given the Army cause to review its organizational structure. The BCT is the primary organization for fighting tactical engagements. BCTs will have one of three standard designs: heavy brigade combat team, infantry brigade combat team, and Stryker brigade combat team and each will include battalion-sized maneuver, fires, reconnaissance, and sustainment units. The BCTs provide the CCDR with the capability to employ an integrated combat force sooner.

1-20. Logisticians and other sustainment personnel must be prepared to support a wide range of simultaneous operations: deployment, employment, sustainment, and redeployment. The theater sustainment command (TSC), expeditionary sustainment command (ESC), and sustainment brigades are responsible for establishing the support procedures and functional relationships to sustain multinational forces in a joint operations area.

1-21. The TSC plans, prepares, and executes, command and control of operational level sustainment (less medical) within an area of operations. The ESC is a rapidly deployable, regionally focused, forward-based command and control element for sustainment forces (less medical) under the operational control of the TSC. The sustainment brigade is subordinate to the TSC as a flexible, multifunctional sustainment organization (less medical) and tailored to support units within its assigned area of operation.

ARMY FORCE GENERATION

1-22. ARFORGEN is the structured progression of increased unit readiness over time resulting in recurring periods of availability of trained, ready, and cohesive units prepared for operational deployment in support of civil authorities and combatant commander requirements. ARFORGEN uses personnel, equipment, and training to generate forces to meet current and future requirements of combatant commanders. These cyclical readiness process forces commanders to recognize that all units are not ready all the time. Units must build their readiness over time as they progress through the three operational readiness cycles shown in figure 1-1—

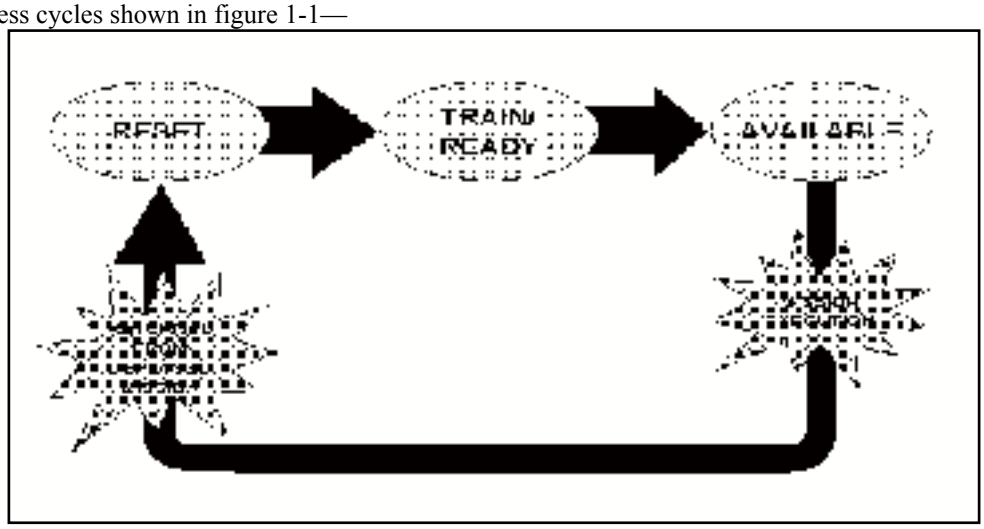

Figure 1-1. ARFORGEN model.

- **Reset.** Units returning from operations or have experienced significant organizational changes are placed in the reset phase. Active Army units typically stay in the pool for 6 to 9 months, while Reserve Component units will probably stay up to 4 years. It is during this phase that replacement personnel arrive and are assigned additional duties, such as the UMO.
- **Train/Ready**. Units determined to be at a ready level are capable of beginning their mission preparation and collective training with other operational headquarters. They are eligible for

sourcing; may be mobilized if required; and can be trained, equipped, resourced, and committed to meet operational requirements, if necessary. It is during this phase that the individual training that could not be accomplished during reset is completed and collective training is *begun*. A critical event that occurs during this phase is the handoff of units from the peacetime mission commander to the wartime commander. The handoff may involve a significant number of changes to deployment data, once the wartime commander outlines the scope of the intended mission and the OEL transitions into the UDL.

- **Available**. Units are capable of conducting a mission under any combatant commander. All Active and Reserve Component units pass through a 1-year available force pool window. Generally, Active Army units will rotate through this pool 1 in every 3 years; Active Reserve units 1 in every 5 years; and Army National Guard units 1 in every 6 years.

1-23. Prior to the implementation of ARFORGEN, redeployment focused on returning the troops to their home station with minimal emphasis on equipment closure. That paradigm has now changed and it has become evident that redeployment is equally important as deployment in terms of future operations and the success of ARFORGEN. Units must rapidly close on their home station or mobilization site with their personnel and equipment to begin the reset phase.

1-24. As the ARFORGEN model matures, there should be corresponding improvements realized in deployment and redeployment; however, ARFORGEN is not just about preparing units for worldwide deployments. It changes the way the Army resources, recruits, organizes, trains, equips, sources, mobilizes, and sustains units on a recurring basis. The goal is to generate combat power on a sustained cyclic basis.

Chapter 2
Predeployment

The Army's effort to be more responsive begins at home station. Predeployment activities are actions taken to prepare forces for deployment and are not limited to the deploying unit, but include supporting units and the installation staff. Planning, document preparation, equipment readiness, and training are the foremost predeployment unit activities. This chapter discusses predeployment activities of the deploying unit as well as those in a support role. Moreover, deployments are a function of dedicated personnel, attention to detail, and following the guidelines in regulations, doctrinal manuals, and other related source material.

PLANNING

2-1. The deployment planning process begins with the supported CCDR requesting the force requirements necessary to support the operation/contingency plan. The Secretary of Defense and the joint staff review the requirements before passing them to US Joint Forces Command (USJFCOM). USJFCOM further passes the requirement to one of their three service component commands for sourcing. Forces Command (FORSCOM), the Army service component command to USJFCOM, analyzes the requirement for conventional forces, coordinates with other Army commands, and recommends a sourcing solution. Unit commanders and staffs analyze the requirement and determine the personnel and equipment necessary to accomplish the stated mission. This deployment planning process may cover a period of several months or be compressed to days or even hours for crisis action planning.

DEPLOYMENT PLANNING

2-2. Contingency planning is typically used in those cases where the deployment and employment of forces is in response to anticipated operations. It is designed to produce a detailed operational plan for a potential event and relies heavily on a number of assumptions ranging from the threat to anticipated host nation support. Conversely, crisis action planning is accomplished in response to a time-sensitive, imminent threat that may result in an actual military operation. The plan is based on circumstances existing at the time planning occurs. In either contingency or crisis planning, prescribed procedures are followed to formulate and implement a response. Deployment planning is a key element of both contingency and crisis action planning and aims at delivering the right force, at the right place, and at the right time.

2-3. Planning for deployment is based on mission requirements and time. During deployment operations, supported combatant commanders are responsible for building and validating movement requirements, determining predeployment standards, and balancing, regulating, and effectively managing the transportation flow. Supporting combatant commands and agencies source requirements not available to the geographic combatant commander and are responsible for verifying supporting unit movement data, regulating the support deployment flow, and coordinating during deployment operations. Each of these activities is an element of effective deployment planning. To facilitate these processes, the joint planning and execution community (JPEC) uses a common framework of directives, guidance, and decision support tools within JOPES.

2-4. JOPES is the integrated, joint command and control system used to support military operational planning, execution, and monitoring activities. JOPES incorporates policies, procedures, personnel and systems, and underlying Global Command and Control System (GCCS) information technology support to provide senior-level decision-makers and their staffs with enhanced capability to plan and conduct joint

operations. JOPES provides the mechanism to submit movement requirements to lift providers in the form of a TPFDD. The TPFDD is both a force and a transportation requirements document.

Time-Phased Force and Deployment Data

TPFDD is the JOPES data-based portion of the operational plan; it contains time-phased force data, nonunit related cargo and personnel data, and movement data for the operational plan including—

- In-place units.
- Units to be deployed to the joint operational area with a priority indicating the desired sequence for their arrival at the POD.
- Routing of forces deployed.
- Movement data associated with deploying forces.
- Estimates of non-unit related cargo and personnel movements to be conducted concurrently with the deployment of forces.
- Estimates of transportation requirements, which are fulfilled by common user lift resources, as well as those requirements that can be fulfilled by assigned or attached transportation resources

2-5. The geographic combatant commander begins preparation of COAs based on the tasking received from the Chairman, Joint Chiefs of Staff (CJCS). Combatant commanders receive tasking through the Joint Strategic Capabilities Plan for contingency planning or guidance through a CJCS warning order during crisis action planning. These directives establish command relationships, identify the task/mission, and provide any planning constraints. In addition, these directives will either identify forces and strategic mobility resources and establish tentative timing for execution, or request the supported combatant commander develop these factors.

2-6. Force requirements are initially identified in the planning process during mission analysis and COA development. Force composition is derived from the troops apportioned for deployment/employment planning and the supported combatant commander's need for a particular unit capability to accomplish the mission.

2-7. COAs outline the scheme of employment and force requirements to accomplish the assigned mission. The Services monitor development of COAs and begin planning for support forces, sustainment, and mobilization, if required. As force requirements are identified, TPFDD development commences for each COA. The supported combatant commander normally publishes a TPFDD Letter of Instruction (LOI) with planning guidance, procedures, and coordinating instructions. The intent of the supported combatant commander's TPFDD LOI is to eliminate confusion, facilitate parallel planning, and expedite TPFDD refinement by supporting commands, and agencies with a single set of instructions for input and management.

2-8. It is at this point that USTRANSCOM begins a series of force flow conferences to review the proposed COAs and, in coordination with the supported combatant commander, prepares deployment closure estimates. As detailed planning continues after COA selection, force refinement begins with consideration of the forces and time available, identification of needed unsourced force capabilities, understanding of the anticipated operational environment, and consideration of the actual constraints imposed as part of the assigned mission.

2-9. Once force requirements are identified, selected forces must be organized and time-phased to support the concept of operations. Time-phasing requires careful consideration. Unit supplies and equipment moved by sealift must leave before the troops so that it is available to them upon their arrival. Moreover, some troops as the advance party must fly early to receive the unit equipment and organize it for the arrival of the main body.

2-10. All movement priorities and phasing are based on the supported CCDR's required date for the deploying force capability. Movement data on the required delivery date, time phasing of units is documented in the TPFDD. Ideally, forces and supporting materiel are time phased to support the CCDR's

concept of operation. The CCDR must be able to track forces flowing into the theater to make the decision on when decisive operations can be initiated.

2-11. Finding the proper balance between projecting the force rapidly and projecting the right mix of combat power and materiel for the ultimate mission is critical. The CCDR must seek a balance of security, efficient deployment, adequate support, and a range of response options to the threat. The availability of mobility assets is most often a constraining factor, so difficult trade-off decisions continuously challenge supported commanders.

2-12. Flowing forces in accordance with a TPFDD results in the delivery of sequenced force packages to the combatant commander and makes the best use of the apportioned strategic lift, while at the same time providing situational awareness of arriving forces to the CCDR. Operational requirements and force flow decisions resulted in TPFDD sequence adjustments via requests for forces (RFF) during recent operations. In addition, revised or updated deployment orders, commonly referred to as a deployment order, were used to alert and move affected units. The joint staff and services are developing future systems to provide the necessary agility to accomplish such real-time adjustments to the complex problem of revising the TPFDD flow during execution.

2-13. USTRANSCOM analyzes TPFDDs for transportation feasibility in conjunction with the supported combatant commander during the planning process. Analysis is conducted using models, simulations, and transportation expertise. Dependable strategic transportation feasibility analysis depends on accurate combatant command analysis of theater transportation infrastructure capacity. The objective of TPFDD maintenance is to systematically incorporate required changes while the plan is active. It is essential that units maintain up-to-date data so the JOPES database is accurate.

2-14. Units require extensive support to prepare for deployment. The support can include assistance related to equipment inspection, maintenance, property transfer, and loading. It can also include assistance in the staging areas and help with life support. These support requirements are usually identified in unit standing operating procedures (SOPs) and movement plans and installation SOPs. Installation and non-deploying units are tasked and contractors are hired to provide the support. Typical support includes—

- Life support. The designated installations provide life support (i.e. meals, lodging, and medical support) at staging areas and POEs.
- MHE/cargo handling equipment (CHE). Units must be specific when requesting MHE/CHE and identify the exact weight, dimensions, and characteristics of what is to be moved.
- Containers. Units typically use containers to move their supplies and equipment. The containers may be unit-owned or are provided upon request.
- Fuel. Deploying units that need to drain their fuel tanks or remove excess fuel must plan for the proper disposal of fuel.

MOVEMENT PLANNING

2-15. To meet contingency support requirements, units develop movement plans and SOPs. An effective movement plan contains sufficient detail to prepare units to execute strategic deployments while the SOP outlines functions that should occur upon notification of a unit movement. In addition to movement plans and SOPs, units maintain movement binders containing movement information and instructions.

Unit Movement Plans

2-16. Movement plans define responsibilities, functions, and details for each part of a unit deployment from mobilization station or installation to reception in theater. There may be more than one plan required depending on the number of contingencies/operations plans (OPLANs) the unit must prepare to support. Movement plans are written in a five-paragraph OPLAN format. Appendix H describes the steps in developing a unit movement plan and provides a sample plan that can be tailored to a deploying unit's requirements.

2-17. Containerization must be addressed during deployment planning. The key to successfully using containerization operations to maximize shipping options is to identify units with high percentages of equipment compatible with containers.

2-18. The USTRANSCOM's component commands schedule lift against the unit line number (ULN) to meet the earliest arrival date (EAD)-latest arrival date (LAD) window. AMC publishes airflow schedules to call forward personnel and equipment to the APOE. These schedules are in GCCS. The call forward schedules are movement directives that specify when units must have their equipment at the POE to meet the available-to-load dates (ALD). Based on these schedules, deploying units and their respective commands backward plan movements to the POE to meet the ALD. Movement directives (if published) provide windows by mode for cargo arrival at the POE.

Unit Movement SOP

2-19. The unit movement SOP defines the day-to-day as well as alert functions. The SOP defines the duties of subordinate units/sections that will bring the unit to a higher state of readiness. These duties can be written in separate annexes that can be easily separated and issued to leaders for execution. Functions addressed in the SOP could include unit property disposition, supply draw, equipment maintenance, vehicle and container loading, security, marshalling procedures, purchasing authorities, unit briefings, in-transit visibility (ITV), and other applicable deployment activities.

Deployment Binder

2-20. Units maintain deployment binders containing the unit movement plan; unit movement SOP; appointment orders; training certificates; recall rosters; a current OEL; copies of load cards and container packing lists; prepared copies of transportation requests; convoy movement requests and special handling permits; and blocking, bracing, packing, crating, tie-down (BBPCT) requirements. The binder also serves as a continuity bridge from one UMO to the next.

TRAINING

2-21. Individual and unit deployment training are essential in developing the skills required to rapidly project combat power.

DEPLOYMENT TRAINING

2-22. Units with deployment missions are required to have an appropriate number of personnel trained to perform special deployment duties. These duties include unit movement officer, unit loading teams, hazardous cargo certifying officials, and air load planners. Some commands and installations maintain a local capability to provide deployment training to ensure the supported units have ready access to the required training.

Unit Movement Officer

2-23. The commander is responsible for all aspects of deployment preparation, training, and execution and appoints the UMO as his designated representative. The UMO must know the unit's mission and the commander's intent for the appropriate coordination, planning, and execution to take place. Appendix D provides more detailed information on the UMO.

Loading Teams

2-24. Units must have personnel trained in vehicle preparation and aircraft and rail loading/unloading techniques. The type and quantity of equipment to be loaded and the time available for loading determines the composition of the team. Training is arranged through the installation unit movement coordinator (UMC) and once completed the load teams are put on unit orders.

Hazardous Cargo Certification

2-25. At least one individual will be on orders and trained to certify hazardous cargo at each unit level. The hazardous cargo certifying official is responsible for ensuring the shipment is properly prepared, packaged, and marked. The certifying official is also responsible for personally inspecting the item being certified and signing the hazardous material (HAZMAT) documentation. Hazardous cargo certifiers must be trained at a Department of Defense (DOD) approved school within the past 24 months and receive refresher training every two years. Upon training completion, they are authorized to certify documentation for commercial and military truck, rail, sea and air. A common mistake occurs when the HAZMAT certifier is sent with the advance party leaving no one to accomplish the HAZMAT inspections during departure operations.

Air Load Planning

2-26. Air load planners are appointed and trained to prepare, check, and sign unit aircraft load plans and in the planning and execution of airlift operations. The Air Mobility Command offers an Airlift Planners Course to those units aligned under the AMC Affiliation Program. The course is also taught at Fort Eustis, VA; Fort Bragg, NC; and Fort Campbell, KY.

COLLECTIVE TRAINING

2-27. Companies and battalions train to meet unit and individual training requirements for deployment operations. Deployments can occur at any time leaving the deploying unit with little or no time to correct training deficiencies. The objective of collective deployment training is to implant the knowledge, skills, attitudes, and abilities so it becomes a reflex activity executed with precision. Units must identify deployment as a mission essential task, annotate it on their mission essential task list (METL) and gain and maintain proficiency. Many Army training programs offer the opportunity to include deployment training in major training events.

2-28. Units with deployment missions normally participate in periodic Emergency Deployment Readiness Exercise (EDRE)/ Sealift Emergency Deployment Readiness Exercises (SEDRE). These events are designed to exercise unit or command movement plans for overseas deployment. EDREs/SEDREs may involve the unit moving to POEs and loading unit equipment on strategic sealift/airlift assets. Major commands, installation, and brigade level commands normally have SOPs and/or deployment regulations and policies establishing subordinate unit required activities in an hourly deployment sequence. These documents guide unit activities during EDREs/SEDREs.

2-29. Deployment training begins in the train/ready phase and ideally culminates in a meaningful deployment exercise that challenges all facets of unit deployment in a realistic venue. A well planned deployment exercise includes a process to assess the performance of the Soldiers, units, and support agencies. For the assessment to be effective it must identify the areas needing attention in terms of additional training, revision to a SOP, or coordination with one of the support agencies.

ROUTE AND LOCATION RECONNAISSANCE AND REHEARSAL

2-30. Reconnaissance of the route to pre-designated POEs and of the POEs themselves should be an ongoing activity. It may be accomplished through passive means such as map surveillance or, optimally, through site visits. Walking the terrain at the power projection platform and designated port facilities allows commanders to understand space limitation, see choke points, survey facilities, understand the simultaneous nature of the operation, and visualize the deployment operation. Terrain walks can be useful as a unit level activity, but are more beneficial when they involve all participating and supporting units.

2-31. Rehearsals validate deployment plans and permit commanders and unit movement officers to see possibilities and limitations. The physics of the operation can become plainly evident. Conducting rehearsals—

- Orients participants.
- Defines the standards.

- Visualizes and synchronizes the concept of the operation.
- Highlights areas that need emphasis or change.

INITIAL NOTIFICATION ACTIVITIES

2-32. The CJCS publishes a formal warning order to prepare for possible military response to a crisis situation. The force provider/Army command then alerts the units and installations. Following receipt of a warning order the deploying unit reviews its deployment readiness status and modifies an existing movement plan or develops a new plan. The units next higher headquarters confirms the readiness status and identifies actions needed to raise the deficient unit to standard. The deploying unit—

- Updates OEL and develops a UDL based on the warning order.
- Identifies equipment shortages.
- Reviews and updates training status
- Reviews maintenance posture; performs scheduled services; begins expediting repairs; and calibrates equipment.
- Identifies and reports personnel shortfalls.
- Reviews leave and pass status of personnel.
- Reviews SRP.
- Submits updated unit status report.
- Reviews and tests unit recall procedures.
- Reviews and updates vehicle load plans and container packing lists.
- Validates and submit requisitions.
- Requests additional containers.

2-33. Army Commands normally pass a Joint Chiefs of Staff (JCS) project code to its subordinate elements which allow units to commit resources for deployment preparation. Deploying units receive the project code and funding guidance and use them to begin the supply requisition process.

2-34. The installation adjusts its plans and procedures to support the anticipated deployment and notify the elements (personnel, supply, maintenance, transportation, and training) that are required to support the deploying unit. Based upon a SDDC port call message or an AMC airflow message, the installation publishes schedules for movement to POE. Predeployment support from the installation is critical. Installations facilitate the movement of forces from the installation to the POE. Previously installations could call upon a large pool of forces (sometimes called “pusher units”) to support deploying units but the availability of those forces has diminished. The challenge is to have the right balance of military from the deploying unit and other non-deploying personnel, government civilian employees, and contractors trained and organized to provide the required support. The U.S. Army Installation Management Command (IMCOM) manages Army installations worldwide. IMCOM and its garrison commanders play a critical role in ensuring successful mobilization, demobilization, and force projection operations in CONUS and OCONUS. Installations should establish and maintain habitual relationships with all deployment support organizations - the USAF contingency response element (CRE) and the deployment and distribution support teams (DDSTs) from SDDC. Refer to Appendix F for detailed information about installation support.

2-35. The force provider/Army Command passes a detailed alert order to its subordinate elements. If not already provided, the Army Command receives the JCS project code that allows units to commit resources toward the deployment. To improve its readiness posture, the deploying unit cross-levels equipment and submits requisitions for unit basic load and other needed supply classes. The filling and receipt of supplies is dependent upon the deployment timeline and availability of stocks. Some units have been directed to leave equipment behind during rotations; equipment transfer can take time and should be included in the planning time. The unit also requests supplies to support movement operations (BBPCT, dunnage, containers, and 463L pallets). This is a continuing process within the deploying unit based on unit status and changes imposed as a result of force tailoring or higher headquarters guidance. The unit verifies that assigned ULNs are consistent with the unit’s movement increments for deployment. The unit also verifies

equipment status compared to the UDL and updates load plans, equipment dimensions and weight, and declarations of dangerous goods. Once corrections are made, the unit prints and applies military shipping labels (MSLs) and attaches radio frequency (RF) tags. Additionally, the unit will identify the equipment that will accompany the troops and finalize the UDL as early as possible.

2-36. If not previously provided by the Army Command, the deploying unit activates derivative Department of Defense Activity Address Code (DODAAC) and derivative unit identification code (UIC). The UMO finalizes lift and load plans, shipping documentation, and convoy clearances as secondary loads and pallets are built and containers are stuffed.

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Chapter 3
Movement

The Army has repositioned forces since its inception. Early movement was by road and sea and rail was introduced during the Civil War. Movement of troops, supplies, and equipment from the Continental United States to Cuba, Puerto Rico, and the Philippines began during the War with Spain and throughout its history the Army has executed a wide array of deployments. The situation facing the Army today is very different – the uncertainty of where we deploy, the likelihood of austere operational conditions, and the requirement to fight soon after completion of minimal RSOI presents significant challenges for the foreseeable future. However, movement remains at the core of deployment.

MOVEMENT TO THE POE

3-1. Movement to the POE normally begins with receipt of an execute order from the Army Command; the order, along with any additional guidance is forwarded to the appropriate subordinate commands, deploying units, and installations. SDDC issues a port call message that identifies the date the unit must have their equipment at the seaport of embarkation (SPOE) to meet the ALD. The port call message or the operations order for sealift will also normally include details for vehicle reduction and preparation. AMC enters the aerial port of embarkation (APOE) and airflow scheduling information into Global Transportation Network (GTN). Scheduling information is also available in the JOPES. Based on port call messages and air schedules, the organization backward plans movements to the POEs. Deploying unit equipment normally moves from unit marshalling areas to a central staging area on the installation for further processing. The name, organization and responsibilities for these installation level staging or marshalling areas may differ; however, the functions performed to prepare units for movement are essentially the same.

3-2. Each installation has an associated strategic aerial port and/or seaport, but must be prepared to deploy from other ports as necessary. The proximity of the port facilities to the installation determines the type of movement and the numbers and types of assets required to complete the movement to the port. In some cases, the distance to APOE and SPOE is short, allowing units to maximize the use of organic equipment and convoys. In other cases, the distance to the APOE or SPOE is longer; in which case, units may have to rely heavily on commercial road and/or rail transport to complete the move to the port.

CONVOY OPERATIONS

3-3. In some cases, units convoy their vehicles and equipment to the POE. A convoy is a group of vehicles organized for the purpose of control and orderly movement under the control of a single commander. In the absence of policies to the contrary, a convoy consists of six or more vehicles. Vehicles in a convoy are organized into groups to facilitate command, control, and security and normally move at the same rate. Refer to FM 4-01.45 for specific guidance on planning and conducting convoy operations.

3-4. To assist in the centralized convoy management, FORSCOM has implemented a Mobilization Movement Control Automation System (MOBCON) in each state. The unit will submit a DD Form 1265 (*Request for Convoy Clearance*) and/or a DD Form 1266 (*Request for Special Hauling Permit*) through the installation UMC. MOBCON uses the National Highway Network database to schedule and deconflict convoys within CONUS. The deconfliction process allows only one convoy to operate over a segment of

highway at any given time. The program links the Defense Movement Centers and provides visibility of all convoys. Refer to FORSCOM Regulation 55-1 for specific information regarding MOBCON.

3-5. Procedures for processing convoy clearances (including the number of vehicles that constitute a convoy) are established by theater policy, standardization agreement, or the host nation (HN) support agreement

RAIL OPERATIONS

3-6. Responsibility for planning and executing rail movements of vehicles and equipment is split between the deploying units and the installation transportation office (ITO). The deploying unit—

- Determines its movement requirements and submits them to the ITO.
- Prepares their equipment for rail loading.
- Load railcars and chock, block and tie down equipment under the technical supervision of the ITO, who is ultimately responsible for approving all rail loads.

3-7. The ITO is responsible to--

- Obtain rail cars based on deploying unit requirements.
- Validate railcar requirements based on unit rail load plans.
- Maximize the use of the available rail assets.
- Serve as the official liaison with SDDC and the railway agent and inspect all railcars for serviceability before units begin loading.

3-8. The movement control team (MCT) performs the ITO functions in OCONUS locations and obtains the rail cars, validates railcar requirements, serves as the liaison with the railway agent, and inspects the railcars before the units begin loading.

MOVEMENT OF PASSENGERS

3-9. Once the equipment and material are moved to the POE the movement of troops is addressed. Most troops move long distances by air and are configured as advance party, main body, and trail party. In addition, some troops move with the equipment to provide security, property accountability, and assist in reception activities.

3-10. The unit prepares personnel rosters for each chalk or plane load. The UMO requests busses and trucks to move the personnel and their baggage from the unit area to the A/DACG. As the personnel arrive at the A/DACG manifests are prepared by the A/DACG and the personnel information verified by checking the CAC (common access card). The baggage is palletized and moved to the ready line. The Soldiers remain in the sterile area until the chalk is called forward to load and the AF moves the chalk to the aircraft for loading.

IN-TRANSIT VISIBILITY

3-11. The radio frequency identification device (RFID) is a transponder that contains information about the contents of the container or the vehicle to which it is attached. In-transit visibility (ITV) is achieved as the progress of the container or vehicle is recorded as it passes through the network of interrogators. ITV preparation begins during predeployment and continues through the load out of vehicles and equipment. Ensuring the automated identification technology (AIT) storage devices are accurate, properly attached, and readable facilitates ITV throughout the transportation pipeline. AIT readers and interrogators report the movement to automated information systems (AIS) allowing deployment managers to track and control the flow of equipment.

3-12. Prior to departing their deployment stations units must write RFID and attach them to vehicles and equipment. Detailed guidance for writing and attaching RFID is outlined in Appendix J.

ACTIVITIES AT THE POE

MOVEMENT BY SEA

3-13. There are essential activities that occur at the SPOE during deployment operations as units prepare for shipment by strategic sealift. The tasks are performed by a number of Department of Defense (DOD) and Army units and ad hoc organizations. Figure 3-1 is a graphic representation of a SPOE outlining the areas discussed in the following paragraphs.

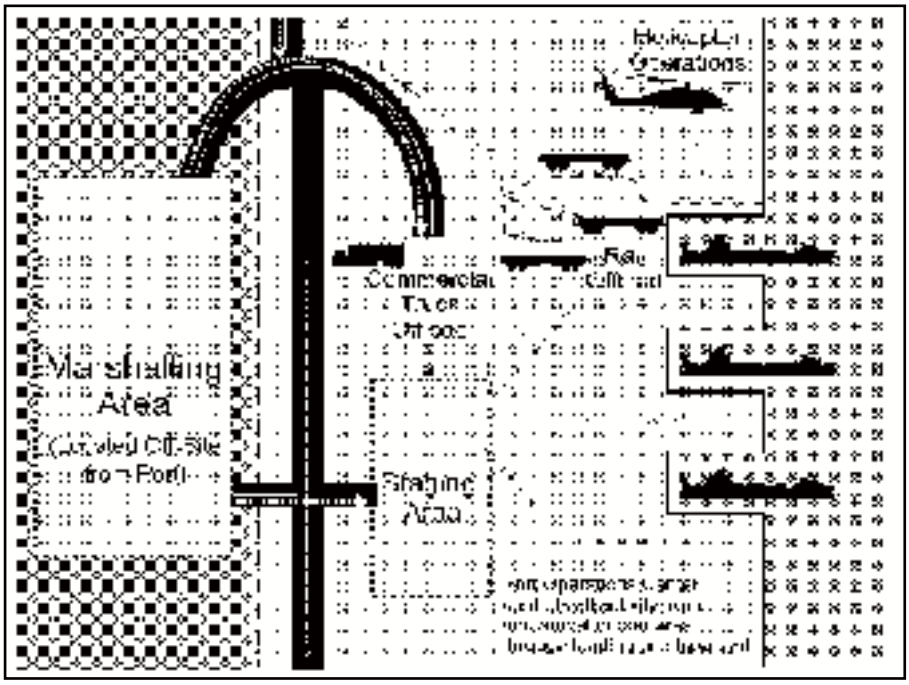

Figure 3-1. Notional SPOE

Marshalling Area

3-14. For movement to SPOEs deploying units and equipment may use an en route marshalling area. These areas are ideally located near the port staging area and in the immediate vicinity of rail and truck discharge sites. The SPOE marshalling area is the final en route location for preparation of unit equipment for overseas movement prior to the equipment entering the port staging area. Establishment of a marshalling area reduces congestion within the terminal area and provides space for sorting vehicles for vessel loading. The layout of a marshalling area is not fixed but is contingent on available space and needs of the unit. Equipment arriving in the marshalling area is normally segregated in accordance with the vessel stow plan.

Staging Area

3-15. The equipment is moved from the marshalling area to the staging area based on the vessel work plans and as directed by the port commander. The SDDC port commander assumes custody of the cargo at this point. Activities within the area include equipment inspection for serviceability, packing lists/load card, accuracy of dimensions and weights, properly secured secondary loads, and documentation of any cargo requiring special handling. Military shipment labels affixed to equipment will be scanned using bar code readers. The data will then be loaded into the Worldwide Port System (WPS) to produce the ship manifests and serve as the basis for status reports. Additionally, WPS feeds data to GTN.

3-16. The port support activity (PSA) is a flexible support organization designed to assist SDDC with the loading or discharge of cargo, vehicles, and equipment at seaports. The PSA is normally composed of

contractors hired by SDDC to augment their personnel and equipment capability. IMCOM and US Army Materiel Command (USAMC) will reimburse SDDC for the support services. In those instances where the contractor cannot provide the required support (aircraft assembly/disassembly, convoy reception) the deploying unit or a designated support unit will be responsible for fulfilling the requirement.

3-17. Moreover, the deployment and distribution support battalions and their subordinate teams may be at the SPOE assisting deploying units with documentation, ITV, and vehicle inspection. In a mature OCONUS theater, there is a similar PSA arrangement. Additional manpower may be provided by host nation support.

3-18. In some situations, particularly in remote and austere locations, SDDC will not have access to the usual contract or host nation resources to perform the PSA function. In those cases the port operator will request assistance from sustainment forces or the deploying force to satisfy the requirement. The PSA is operationally controlled by the military port or TTB commander.

3-19. When processed, equipment may be segregated into different lots within the staging area by type, size, and any other special considerations such as hazardous materials, sensitive and classified items, and containerized equipment. From the staging area, vehicles are called forward to load the ship based on the stow plan and call forward schedules.

Supercargo

3-20. Supercargoes are unit personnel designated on orders to accompany, secure, and maintain unit cargo on board ships. They perform liaison during cargo reception at the SPOE, vessel loading and discharge operations, and SPOD port clearance operations. The supercargoes are attached to the port operator and remain with the port manager at the SPOD until the offload is complete and they are released back to their units. Deploying unit commanders recommend the composition of supercargoes based on several factors including the amount and types of equipment loaded aboard the ship and the number of units with equipment on the ship. Military Sealift Command (MSC) determines the actual number of supercargo personnel permitted onboard, based on the berthing capacity of the ship.

MOVEMENT BY AIR

3-21. Preparation for air movement begins with receipt of the mission directive or order and continues through the planning phase until execution. A series of local joint conferences is required during the planning phase for close coordination and to ensure a clear understanding of responsibilities. As a minimum, a joint planning conference will be held as soon as possible after receipt of the air movement order or directive. A final coordination conference will be held immediately before the move. Participating elements should be represented at these conferences by key personnel who can make decisions for their organization. These conferences do not rule out the need for continuous coordination throughout the planning cycle. The CCDR or representative will conduct a final joint coordination meeting with the representative of the deploying unit, the DACG, and the CRE. The CRE is a deployed Air Mobility Command organization that provides on-site management of airfield operations. At this meeting, the deploying unit, DACG and CRE will present planning status and identify any problems. Air movement requirements will be based upon unit movement data (UMD) and provided to FORSCOM IAW FORSCOM Reg 55-1 or as otherwise specified by the movement order or tasking directive. FORSCOM consolidates and provides these refined lift requirements to JFCOM, the supported combatant commander, and USTRANSCOM. USTRANSCOM uses the unit movement requirements to generate airlift schedules that are loaded in JOPES. Installation JOPES operators should coordinate the dissemination of these lift schedules to ITOs/division transportation officers (DTOs), DACGs, and respective UMOs.

3-22. The APOE is the transition point for Army units deploying by air. There are four distinct areas—marshalling area, alert holding area, call forward area, and loading ramp area associated with an APOE as shown in figure 3-2. The following paragraphs outline the tasks performed by the deploying unit at each of the areas.

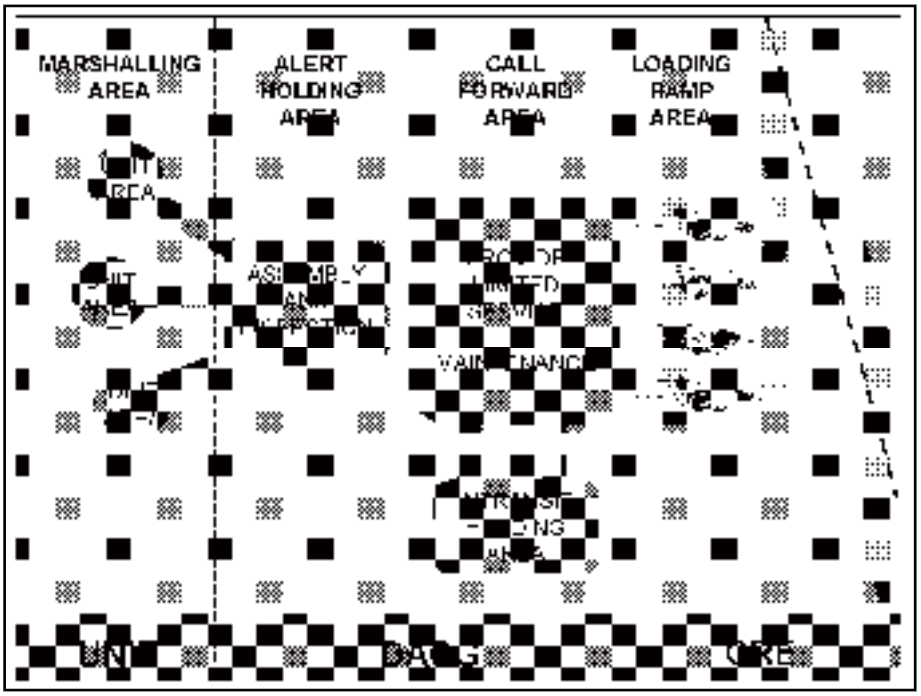

Figure 3-2. Notional APOE

3-23. Normally there will be Army and USAF personnel working together to process, inspect, document, and load the personnel and equipment. At some locations, the Army must carry out all of the APOE functions and in those cases the Army personnel are trained and certified to fulfill the USAF roles. The duties of the departure airfield control group (DACG) and the CRE are discussed in Appendix G as part of complete discussion of the operation of the aerial terminal

Marshalling Area

3-24. The primary purpose of the marshalling area is to provide a location near the APOE to assemble personnel, supplies, and equipment and make final preparations for air shipment. Unit marshalling areas are used to receive convoys and process vehicles before they are staged for loading. Marshalling areas is the responsibility of the deploying commander, assisted by the ITO, supporting units, or other designated organizations; operations are based on local policy and standing operating procedures. The deploying unit—

- Establishes liaison with the DACG.
- Coordinates a joint planning conference with the DACG and CRE to discuss aircraft allowable cabin load, pallet restrictions, aircraft configuration, equipment preparation requirements, airflow schedule, and any other issues impacting deploying unit preparation and processing.
- Prepares vehicles and equipment.
- Ensures adequate shoring material is available.
- Prepares personnel and cargo manifests.
- Assembles personnel, supplies, and equipment into aircraft loads.
- Ensures planeload commanders are appointed and briefed.
- Provides escorts for sensitive items.
- Builds 463L pallets.

Alert Holding Area

3-25. The alert holding area is the equipment, vehicle, and passenger control area. It is normally located in the vicinity of the departure airfield and is used to assemble, inspect, hold, and service aircraft loads. Control of loads is transferred from the individual unit to the DACG at this point. The deploying unit—

- Ensures the aircraft loads arrive at the scheduled times.
- Provides manifests to the DACG.
- Corrects load discrepancies identified during pre-inspection.
- Ensures vehicle drivers remain with the vehicles until released.
- Passes control of unit aircraft loads to the DACG.

Call Forward Area

3-26. The call forward area is the joint responsibility of the CRE and the DACG and is the location for the joint inspection of deploying unit equipment and cargo. The DACG, the deploying unit, and the CRE conduct the inspection. They complete a DD Form 2133 (*Joint Airlift Inspection Record*) to indicate to the loadmaster that it has completed the required inspection. Deficiencies are corrected by the unit and rechecked by the inspection team. Once the inspection sequence is complete, the deploying unit arranges its vehicles, pallets, and equipment into load or chalk sequence. A final briefing is provided to deploying troops and the CRE reviews all manifests for accuracy.

Loading Ramp Area

3-27. The loading ramp area, including ready line area, is controlled by the CRE. At this point control of units, for movement purposes, passes to AMC.

3-28. The chalk commander—

- Follows directions of load team chief.
- Monitors and controls aircraft passengers.
- Retains one copy of the final passenger/cargo manifest.
- Provides assistance in loading and securing the load as required.
- Ensures vehicle/equipment operators follow instructions of load team chief or loadmaster in loading equipment on the aircraft.

3-29. The load team—

- Receives loads at the ready line.
- Loads and secures vehicles and equipment in the aircraft under the supervision of the loadmaster.
- Provides the loadmaster with manifests.
- Informs CRE of load completion time.

MOVEMENT TO THE POD

3-30. The combination of strategic airlift, sealift, and prepositioned equipment, referred to as the Strategic Mobility Triad, provides the capability to respond to contingencies. Each element of strategic lift has its own unique advantages and disadvantages. In general, airlift transports light, high priority forces and passengers required to rapidly form units with prepositioned equipment and supplies. Airlift is fast and fairly flexible but has limited capacity; it is also expensive and depends on airfield availability. On the other hand, sealift is slower (compared to airlift) and has limited flexibility; however, it is cheaper and has much greater capacity. Sealift is also dependent on port availability or assets for in-stream discharge. Afloat prepositioning of unit equipment reduces the reaction time required to move the force packages to the JOA. Forward stationing of Army watercraft reduces the sail time required to link up with arriving vessels and begin intra-theater water transportation operations. The disadvantages associated with prepositioning are the high costs associated with the periodic offload of vessels and the maintenance of equipment; also there is a risk that the forward deployed assets may not be close to the contingency.

3-31. During the early stages of a deployment strategic airlift is the primary means of moving forces and remains so until the sea line of communication is established. Strategic airlift assets are provided by Air Mobility Command and include both military aircraft and commercial aircraft activated as required under the Civil Reserve Air Fleet program. (See JP 3-17 for more information about air mobility).

3-32. Strategic sealift normally moves the majority of unit equipment identified for deployment. Strategic sealift assets are provided by Military Sealift Command and include both military and commercial vessels. Additional capacity can be mobilized under the Voluntary Intermodal Sealift Agreement which is a partnership between government and industry to provide commercial sealift and intermodal shipping services. (See JP 4-01.2 for more information on sealift support).

3-33. In many cases unit equipment is moved by commercial liner service operating over scheduled routes on a regular basis. The carrier often picks up the equipment, moves it to the POE, and loads it aboard the ship, reducing the requirement for DOD transportation assets. In that most liner service vessels are container ships the equipment being moved must be containerized or loaded on flat racks. In-transit visibility of unit equipment moved by liner services is an issue that is being addressed by the Joint Deployment and Distribution Enterprise.

3-34. If sited appropriately, Army prepositioned stocks reduce the amount of strategic lift required to support a rapid buildup of forces to demonstrate US resolve. Forward stationing of Army watercraft in a combatant command AOR reduces the sailing times required to link up with afloat Army prepositioned stocks (APS). Army watercraft are also co-located with land-based APS to reduce movement times if these stocks need to be shifted in a theater. (See FM 3-35.1 for more information on Army prepositioned operations).

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Chapter 4

RSOI

An expeditionary Army depends on its ability to project combat power where needed. The process of reception, staging, onward movement, and integration is designed to rapidly combine and integrate arriving elements of personnel, equipment, and materiel into combat power that can be employed by the CCDR. This chapter discusses the segments of RSOI.

OVERVIEW

4-1. The purpose of RSOI is to build the combat power necessary to support the CCDR's concept of operation. Force closure is that point which the combatant commander determines that an adequate combat-ready force is available. Force closure requires well-defined criteria by which unit commanders can measure their readiness. Assessment of combat power begins with established standards for readiness and is based on unit capability, rather than simple tallies of vehicles and weapon systems on hand. Readiness and reporting are inherently operational matters, normally handled through operations channels.

SEGMENTS OF RSOI

4-2. RSOI operations are necessary for commanders to build combat power. The four segments of RSOI are—

- **Reception.** Unloading personnel and equipment from strategic transport assets, managing port marshalling areas, transporting personnel, equipment, and materiel to staging areas, and providing logistics support services to units transiting the PODs.
- **Staging.** Organizing personnel, equipment, and basic loads into movement units; preparing the units for onward movement; and providing logistics support for units transiting the staging area.
- **Onward movement.** Moving units from reception facilities and staging areas to the tactical assembly areas (TAAs) or other theater destinations; moving non-unit personnel to gaining commands; and moving sustainment supplies to distribution sites.
- **Integration.** The synchronized transfer of capabilities into an operational commanders force prior to mission execution.

PRINCIPLES OF RSOI

4-3. The following principles guide the planning and execution of RSOI operations—

- **Unity of command**. One commander should control and operate the RSOI process - adjusting resources based upon deployment flows, controlling movements in the area of operations, and providing life support to arriving personnel.
- **Synchronization**. Synchronization occurs when the right units, equipment, supplies, and capabilities arrive in the correct order at the appropriate locations, and supporting activities are coordinated to operate with one another to ensure the tempo of deployment is uninterrupted.
- **Unit integrity.** Moving unit personnel and equipment on the same strategic lift platform provides distinct advantages for units and the force closure process. It leverages the strength of the chain of command, simplifies force tracking, and increases training opportunities. While it is impossible to put an entire armored battalion on one airplane, the increased sealift of the LMSR allows movement of all the battalion equipment on a single ship. Maintaining unit integrity during strategic lift can simplify the RSOI challenge of incrementally building combat power.

- **Balance**. Defining the size of the required support structure required is essential to effectiveness. The goal is to avoid burdening strategic lift, infrastructure, and the commander with more support than is necessary, yet deploy minimum assets necessary to optimize throughput of units and materiel. Supporting assets must be deployed in a properly timed sequence to leverage their capabilities and may be increased to reduce vulnerability of the overall force. Increasing the RSOI capability to clear backlogs in ports and staging areas can be a tool to reduce force vulnerability.

SECURITY

4-4. All military operations have some element of risk. To build combat power at an acceptable rate the RSOI process must be protected from enemy threats. The arriving force is most vulnerable when it is closing on the POD and undergoing reception, staging, and onward movement. It is the responsibility of the CCDR to protect the arriving force and his staff must coordinate with the inbound unit to mitigate any risk.

RSOI INFRASTRUCTURE

4-5. RSOI operations are the responsibility of the CCDR and his designated command and control headquarters, normally a theater sustainment command. The TSC controls the physical facilities and collaborates with the advanced echelon of the arriving headquarters to establish the throughput rate it can handle. The deploying forces have a responsibility for their own security, organization, and movement through the RSOI process to the extent possible. The process is supported by outside entities such as host nation operators and contractors.

4-6. The complex RSOI system is usually composed of several elements, each contributing to the process—

- In-place command and control forces.
- Advanced echelon of the deploying units.
- Deploying forces.
- Host nation and multinational support elements.
- Contractor support.
- Army prepositioned stocks.

4-7. The RSOI infrastructure also includes some of the theater's distribution nodes. Nodes are a location in a distribution system where a movement requirement is originated, processed for onward movement, or terminated.

RSOI EXECUTION

4-8. RSOI effectiveness is dependent upon proper TPFDD development. For example, the combatant commander places rapid port clearance capabilities early in the TPFDD and coordinates personnel and equipment flows on the TPFDD so they can be united without delay at ports or staging areas. Decisions on force mix and sequence are critical, because adjustments after deployments begin become difficult to implement. Moreover, changes cause ripple effects and may seriously disrupt the flow of forces into the JOA.

4-9. Communication is necessary at all levels, and across all modes and nodes. The communication system must link the combatant commander, the supporting combatant commands, the deploying units, the RSOI providers, and the tactical commanders who will integrate the deploying force into their structures. Mission, enemy, terrain and weather, troops and support available-time available and civilian considerations (METT-TC) may cause certain units to be in high demand or necessary for immediate employment. Critical resources like heavy equipment transporters, fuel support, or buses to move personnel may have to be diverted to rapidly move these units.

4-10. Secure, assured, compatible, and reliable means of relaying deployment data is essential. Most importantly, the JFC must be able to influence the outcome of the deployment. To do this, he must know what force capabilities he has and what will be available in the near future.

Optimization

4-11. The commander's planning and operational dilemma is balancing the need for early deployment of combat forces against the requirement to deploy tailored logistical units that maximize throughput of sustainable combat forces. To resolve this dilemma, the commander must have the ability to see, understand, and balance the flow. The combatant commander defines force requirements in terms of size, location, and time while the TPFDD defines the force flow needed to meet these requirements. Knowledge of the RSOI infrastructure present in the theater, coupled with assets arriving via the TPFDD, is critical to understanding the flow.

4-12. The relationship between throughput volume and RSOI infrastructure is important to commanders trying to optimize force closure capacity. Accelerating the arrival of combat forces in the TAA requires an increased deployment of RSOI forces. Deploying additional RSOI forces costs space on strategic lift and requires additional positions in the TPFDD. The combatant commander applies the necessary command and control to ensure unity of command, and establishes communications for a seamless flow of information to manage and influence the force buildup. Achieving the correct balance will maximize the ability to throughput forces and ultimately improve force closure times.

Coordination

4-13. The Army operates in diverse environments and conducts a variety of operations as part of joint, multinational, or interagency teams. This fact increases the difficulty of RSOI and reaffirms the need for established procedures, mutually understood relationships, and robust liaison. Army commanders need to understand how best to integrate their forces into the various organizations under which they will operate.

Joint

4-14. Joint integration of planning and execution is key to successful RSOI. This, however, does not occur automatically; it requires trained staffs, pre-established procedures, and ongoing coordination. Even though logistics is a Service responsibility, the combatant commander may direct that a particular Service perform certain common user logistics functions, based on the dominant-user or most-capable-Service concept. For example, the Army may be designated the lead Service responsible to provide all common user logistics transportation and movement control for RSOI within the operational area. In this case, the Army service component commander must be familiar with the total transportation and movement control requirements of the other Services to permit optimum resource allocation necessary to address their needs.

Multinational

4-15. Major differences in logistics doctrine, mobility, resources, interoperability, and language create problems in coordinating the use of highways, rail lines, seaports, and airfields, as well as providing support and services for multinational RSOI operations. Considerable planning is required to integrate multinational forces requirements for ship berthing and unloading facilities, port staging space, transportation, and labor which are critical elements of RSOI.

4-16. While logistics is ordinarily a national responsibility, it frequently falls to the United States to provide strategic lift and logistics support. It is imperative to establish clear responsibilities, and identify support roles early in the planning process. Whenever possible, multinational organizations should be formed to coordinate RSOI operations. This should allow multinational members to use common items, and to set up commonly understood control measures.

4-17. Plans and operations for multinational RSOI should be as simple as possible, using common terms and procedures, and clear and concise language. Where possible, coalition commanders may combine staffs of two or more nations to better coordinate RSOI capabilities, facilitate exchange of vital

information, and reduce friction, congestion, and duplication associated with multiple users of limited assets.

Host Nation Support

4-18. Host nation support is civil and military assistance rendered by a nation to foreign forces within its territory during peacetime, crises or emergencies, or war. This assistance is normally outlined in host nation support agreements mutually concluded between nations. In many cases, US forces must rely on host nation support to supplement or provide services, supplies, and facilities. This is especially significant when the combatant commander tries to minimize the support forces early in the deployment.

4-19. It is beneficial to establish host nation agreements beforehand, when possible. Where no agreements are in place, the combatant commander's staff and RSOI manager should understand the RSOI capabilities or resources of prospective host nations and the contractual procedures necessary to obtain them. It is also important that the host nation understand overall US requirements. Moreover, as early as possible, representatives, with interpreters and translators, must be sent to negotiate the acquisition of host nation services

4-20. Host nation support, by providing a variety of services and facilities, relieves US forces from the task of establishing and maintaining equivalent capabilities, thereby reducing the US logistical footprint and RSOI "overhead." Additional lift becomes available for transport of combat forces, expediting force closure. Services and facilities that might be considered for host nation support are as follows:

- Logistics support.
- Medical facilities.
- Construction and engineering.
- Police and paramilitary organizations.
- Transportation assets and infrastructure.
- Labor force.
- Emergency services.
- Fuel and power facilities.
- Communications facilities.

Interagency

4-21. In the course of joint and multinational operations, the Army operates alongside US and non-US government agencies, non-governmental agencies. In most cases, these organizations and agencies will compete for space at ports, airfields, and facilities being used for military operations. They will also travel over the same lines of communication (LOCs) and may require a variety of support from the military.

4-22. To promote unity of effort and assess the impact of these agencies and organizations on the RSOI effort, the JFC can establish a civil-military operations center. In addition, it may be necessary to develop formal agreements between the military and civilian organizations to improve coordination and effectiveness.

Liaison

4-23. Liaison with forces of each Service, nation, and higher and adjacent headquarters is a prerequisite for effective RSOI and timely transfer of critical information. Whenever possible, liaison personnel should be familiar with operational organizations, doctrine, and procedures of the force with which they will work. For multinational operations, they should either speak the language of the force they are with or use qualified interpreters.

4-24. Liaison elements need to be familiar with the overall RSOI plan. They must understand how their Service fits into the overall plan for building combat power. It is helpful if the liaison members are experienced in joint/multinational operations.

Command and Control

4-25. RSOI operations will have one commander. The CCDR may designate a subordinate commander to execute RSOI, but they report to him. The commanders of the theater sustainment command, expeditionary sustainment command, or a sustainment brigade are potential candidates for the role. All organizations engaged in RSOI whether units arriving or those operating the arrival nodes report to the designated commander. There are obvious advantages of designating one organization as the RSOI command and control element. It avoids duplication of effort and competition for critical facilities. It optimizes use of valuable strategic lift and allows integrated reporting of activities related to the buildup of combat forces. Although the specific responsible organization may change from one phase to another or between different contingencies, the principle of unity of command must be maintained.

PORT OPENING

4-26. The planning and execution of rapid port openings are essential for expeditionary operations. The successful opening of multiple ports facilitates expansion into a robust theater deployment and distribution system. The Joint Task Force-Port Opening (JTF-PO) and the Transportation Theater Opening Element (TTOE) are organizations designed to open ports and establish the initial distribution network.

JTF-PO

4-27. Responding to crisis situations ranging from humanitarian missions to major combat operations requires a capability to rapidly establish initial theater deployment and distribution operations. The joint and expeditionary nature of this requirement demands a joint force structure, comprised of air and surface elements.

4-28. The JTF-PO combines USAF, Navy, and Army capabilities to provide USTRANSCOM and the theater commander with a ready-to-deploy, trained force for opening ports and establishing the initial distribution network. In addition, JTF-PO facilitates JRSOI and theater distribution by providing an effective interface with the theater CCDR's Joint Deployment and Distribution Operations Center (JDDOC). Functions that the JTF-PO may perform in the accomplishment of its mission include:

- APOD/SPOD assessment.
- Distribution network assessment.
- Establishment of command and control (C2) connections with the JDDOC.
- APOD/SPOD opening and initial operation.
- Distribution node management.
- Cargo and passenger transfer operations and cargo movement to distribution nodes.
- Movement control including coordination for onward movement of arriving cargo and passengers.
- In transit visibility (ITV).

TRANSPORTATION THEATER OPENING ELEMENT

4-29. When the sustainment brigade is given the mission to manage a theater opening operation it is augmented with a mix of functional and multifunctional organizations. The transportation theater opening element provides staff augmentation to a sustainment brigade headquarters engaged in theater opening operations. The TTOE provides transportation functional expertise for staff planning and supervision of units engaged in force reception and distribution operations.

4-30. TTOE functions include—

- Monitors movements program, maintains operational status, and commits transportation assets in support of RSOI operations.

- Advises on the use of assigned motor, air, and rail transport assets, monitors the status of all mode operations.
- Advises on the use of assigned terminal and watercraft operations and provides terminal infrastructure assessments.

RECEPTION

4-31. As the initial step in introducing combat power, reception can determine success or failure of the RSOI operation. Reception from strategic lift is implemented at or near designated air and seaports of debarkation, normally under control of the combatant commander. It must be thoroughly planned and carefully executed. While the reception plan for each theater may vary, reception capacity should at least equal planned strategic lift delivery capability.

4-32. The intelligence preparation of the operating environment and analysis of theater reception capability provide an understanding of how competition for reception at airfields and seaports could affect the force flow. For example, in Desert Storm at the Port of Dammam, 33 total berths were available, yet no more than 17 were used because the remaining berths were dedicated to domestic Saudi commerce. It is also possible that Marine forces will arrive in the theater simultaneously with Army forces and compete for the same ports.

4-33. For the initial period of deployment, the aerial port is the lifeline to the front-line. All that is not pre-positioned or available from the host nation comes through the aerial terminal. Then the first surge sealift ships begin to arrive, dramatically increasing forces. Airlift remains a critical element regarding delivery of personnel, but most unit equipment to build the combat power arrives through seaports.

RECEPTION FUNCTIONS

4-34. Synchronizing transportation reception activities are critical to facilitating throughput at the ports of debarkation. They include command and control, movement control, and port operations.

Command and Control

4-35. Like any other in-theater activity, reception is under command and control of the combatant commander. However reception planning and execution is the responsibility of the commander assigned the responsibility for RSOI. In most combatant commands the commander will designate a senior leader to command and control RSOI operations.

4-36. The arrival of strategic air and sealift will be controlled by the combatant commander through the USTRANSCOM element attached to his staff. The APOD and SPOD will normally be managed by AMC and SDDC respectively, and operated by the designated logistics organization under command and control of the lead Service.

Movement Control

4-37. Efficient movement control allows commanders to redirect forces and rapidly compensate for disruptions in the LOCs. A movement control element must be positioned at each reception node, and remain in constant communication with USTRANSCOM elements on-site, and with other movement control elements in-theater. A well-disciplined and centralized system must be implemented to control movements along all LOCS. The movement control system is responsible for establishing protocols with host/allied nations concerning use of available transportation nodes and infrastructure.

4-38. Two factors determine reception throughput: reception capacity and clearance capability. All ports have finite processing and storage space, and unless personnel and equipment are cleared quickly, the port will become congested, cargo will be frustrated due to inaccurate or lost documentation, and the infrastructure will be unable to receive forces at the required rate of delivery. Factors contributing to efficient port clearance are proper documentation, professional movement control expertise, adequate materiel/container handling equipment, and trained personnel. Port operators need timely and accurate

documentation including advance information on forces and equipment arriving in-theater. Efficient movement control assures best use of available infrastructure and proper metered flow of forces and equipment according to operational priorities.

Port Operations

4-39. The RSOI command and control headquarters must control the deployment flow so that reception capabilities are not overwhelmed. APODs and SPODs should be considered integral parts of a single reception complex, unless the distance separating them precludes mutual support. Reception capacity depends on—

- Port and airfield infrastructure, condition, and characteristics.
- Availability of host nation labor and port services.
- Off-loading and holding space.
- Weather.
- Enemy situation.

4-40. **Port Selection.** Seaport and airfield throughput capacities significantly influence the speed, order, and, to a large extent, the types of units that can deploy through them. Consequently, before thought is given to actual deployment of forces, planners must evaluate available airfield and port facilities within the area of operations, as well as the transportation networks linking them with each other and to the interior. As was the case during Operation Desert Storm, it may be better to use a world class port hundreds of miles away from TAAs rather than conduct an in-stream discharge operation or use a smaller, degraded port facility with limited capacity and throughput. Diplomatic and military contacts should be made at the earliest possible opportunity with the host nation controlling key facilities and rights of way.

4-41. The combatant commander in conjunction with USTRANSCOM selects the PODs that will be used for deployment. METT-TC considerations and the theater transportation infrastructure will drive the sequence, type, size of forces, and materiel arriving at ports of debarkation. These decisions impact the speed of combat power buildup and continued development of the theater. Ports of debarkation may need improvement and repair to accommodate high throughput rates required for rapid force closure. Thus, the early entry of units such as cargo transfer companies, Army watercraft, causeway detachments, and engineer assets can be critical to off-loading materiel, clearing ports and consequently speeding deployment.

4-42. **APOD.** Deployment by air is often constrained by the capabilities of the arrival airport more often than a shortage of aircraft. Issues such as concurrent civilian use, competition for landing and takeoff slots, ramp space, number of aircraft on the ground at one time, and political restrictions limit its use to military aircraft. Consequently, maximum throughput at limited airports is paramount. The APOD is by its very nature a joint facility and will likely be a multinational facility. It is a POD for deploying forces, and a POE for forces moving to other theaters and noncombatant evacuation. The host nation may limit the APOD to coalition military use, or the military may be sharing the facility with commercial activities. Governmental, non-governmental, and private organizations will likely be competing for use of the APOD along with military forces.

4-43. The APOD serves as the primary port of entry for all deploying personnel, as well as for early entry forces normally airlifted into theater together with their equipment. USTRANSCOM through AMC is the DOD-designated single port manager (SPM) for all common user APODs worldwide. The SPM performs those functions necessary to support the strategic flow of forces and sustainment supplies through the APOD. The SPM is responsible for providing deployment status information to the supported CCDR and clearing the airfield in accordance with the CCDR's priorities. Responsibility for APOD functions is divided between the USAF and the Army, with the USAF responsible for airfield operations including air terminal control, loading, unloading, and servicing of aircraft. The Army is responsible for clearing personnel and cargo off the tarmac and for required logistics support for transiting units. USAF/Army interface occurs between the USAF contingency response group (CRG)/CRE and the Army arrival/departure airfield control groups (A/DACG) and MCTs.

4-44. Necessary communication, personnel, and cargo handling equipment must be in place to facilitate rapid movement out of the airport. Both the CRE and the A/DACG must be included in the lead elements of the deploying force. The CRE controls all activities at the off-load ramp area and supervises aircraft off-loading. The A/DACG escorts loads and personnel to holding areas, thus clearing the airfield and ensures airfield operations and strategic airflow are not obstructed and limited due to the accumulation of cargo.

4-45. With responsibility divided between the USAF and the Army, and sometimes multinational forces, multiple chains of command exist within the aerial terminal, which may result in a variety of unforeseen challenges. Given this potential command relationship, potential for conflicting priorities necessitates careful planning and coordination during the reception process. For example, something straightforward as security responsibilities becomes complicated when there are two chains of commands at the same site. Special attention must be paid to ensure that airfield security, the USAF responsibility, and area security, an Army responsibility, are well coordinated among themselves as well as with multinational forces and the host nation.

4-46. **SPOD.** Activities at seaports are normally joint, multinational, and intermixed with commercial operations. Seaports can serve as ports of debarkation for arriving forces and simultaneously as ports of embarkation for forces deploying to other theaters of operations. The CCDR has several options for management of seaport operations in his theater. USTRANSCOM through SDDC is the DOD-designated single port manager (SPM) for all common user ports worldwide. The SPM (normally a transportation terminal group) performs those functions necessary to support the strategic flow of the deploying forces' equipment and sustainment supplies through the SPOD. The SPM is responsible for providing strategic deployment status information to the CCDR and to workload the SPOD port operator based on the CCDR's priorities and guidance. The SPM is responsible through all phases of theater port operational continuum from a logistics over-the-shore (LOTS) operation to a totally commercial contract-supported deployment.

4-47. Theater planners must consider several factors when assessing the port’s capacity to receive the planned strategic flow. Some of the factors include state of repair, commercial utilization considering not only the port's capability, state of repair, commercial utilization, congestion, and throughput capacity. Throughput capability is based on the port’s ability to receive, process, and clear personnel and equipment. The cargo reception function is based on the number and size of the berths, material handling equipment (MHE) and water depth; the cargo process function is based on staging area and the time it takes to marry units with their respective equipment; the cargo clearing function is based on truck and rail out loading facilities; gate capacity, and links to the theater transportation networks.

4-48. Seaport operations are similar to airport operations; once the vessels are off-loaded, unit equipment is moved to temporary holding areas within the port to be configured into convoys, rail loads, or watercraft loads. Unit equipment clearing the port moves to an intermediate staging base (ISB), an inland water terminal, or directly to the TAA.

4-49. The volume of cargo arriving in the theater in a small window of time can drive the need for multiple seaports to meet deployment timelines. The physical size of roll-on/roll-off ships and depth of water required to bring vessels of this class alongside a pier may also present a challenge. If world-class port facilities are available, off-loading can be rapidly accomplished. If facilities are less than world class or austere, then multiple ports and slower in-stream operations may be required.

4-50. The ability to receive forces in an operational area, despite degraded or austere ports is essential to the Army's force projection strategy. Army watercraft is the primary enabler in this process; they allow ships that cannot get to a pier to be off-loaded in-stream. Additional watercraft then moves the cargo to smaller coastal ports or directly over the shore. In-stream discharge operations are sensitive to weather and seas conditions and generally require a protected anchorage. (See JP 4-01.6 for additional information on LOTS).

STAGING

4-51. Staging is that part of the RSOI operation that reassembles and reunites unit personnel with their equipment and schedules unit movement to the tactical assembly area, secures or uploads unit basic loads, and provides life support to personnel. These activities occur at multiple sites in controlled areas called

ISBs that are required because space limitations normally preclude reassembly of combat units at seaports of debarkation. In general, there will be at least one intermediate staging base (ISB) for each SPOD/APOD pairing.

INTERMEDIATE STAGING BASE

4-52. An ISB is a secure staging base established near but not in the area of operations. ISBs are temporary staging areas enroute to an operation and also may be used to sustain forces in the area of operations. ISB tasks and capabilities are contingent on the operational situation and are located where they can best support the force.

4-53. No two ISBs will be alike; some will be in operation for a few days while others will operate for an extended period. Although we refer to an ISB as if it were a single unit it is in reality a collection of brigade combat teams, sustainment, signal, military police, engineer, and support units brought together for a specific purpose. Figure 4-1 provides a graphic overview of how ISBs might be arrayed in a theater.

4-54. ISBs must deploy early to be prepared to receive deploying forces and to operate the nodes inherent in the theater distribution plan. The availability of appropriate reserve component units early in the flow is a risk in the ISB organization and may require host nation or contract support. Refer to DA Pamphlet 700-33 for guidance on establishing and operating an ISB.

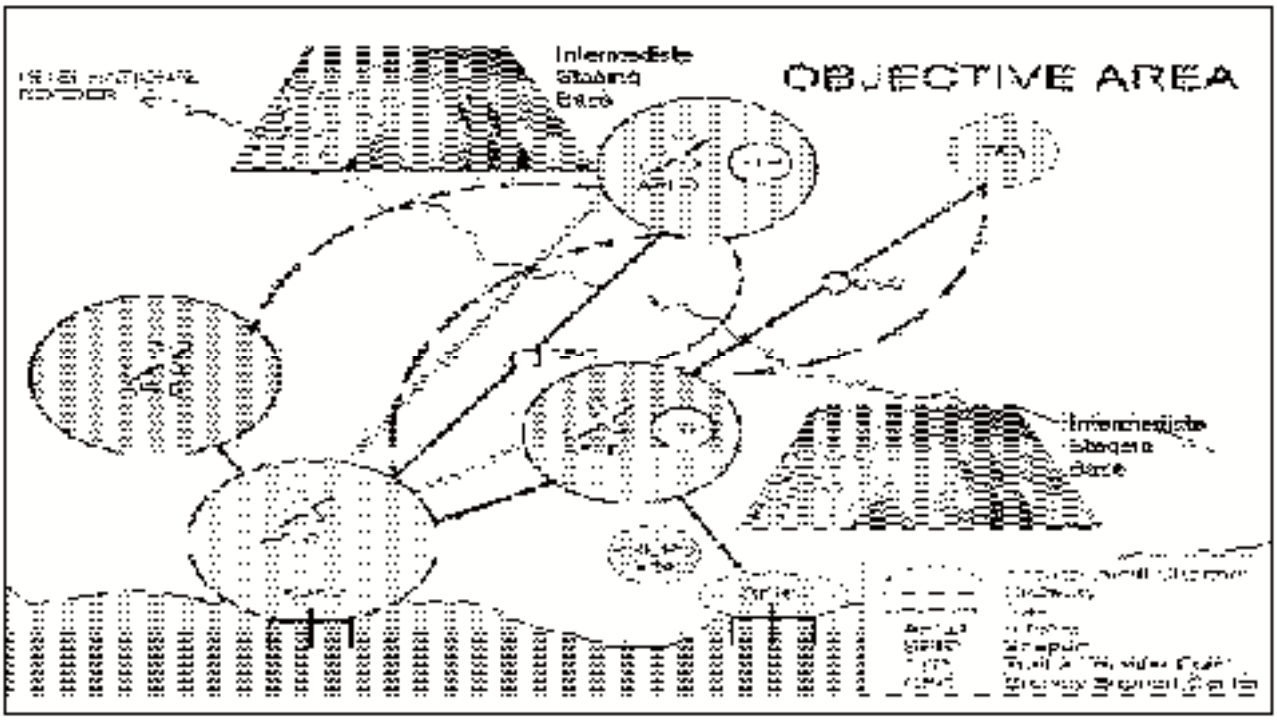

Figure 4-1. Theater with multiple ports and ISBs

ISB FUNCTIONS

Communications

4-55. Reliable, secure, and compatible communications are essential to operations in the theater staging base. The CCDR must know when forces are combat-capable and prepared for onward movement to give him the capability to control and employ these forces at the decisive point and time.

4-56. Force tracking provides situational awareness of combat-ready units within the operational area. While in transit visibility begins at home station, the process of force tracking begins in the staging area, where equipment and personnel are reassembled into combat-ready units. Staging operations must have the communications, data processing equipment, and personnel assets to provide and manage force tracking data. Efficient movement control can provide force tracking information but it must be able to communicate directly with operational commanders.

4-57. ITV acts as a staging enabler by providing commanders with clear pictures of locations of units and materiel in RSOI and deployment. For the ISB commander, ITV provides an awareness of the scheduled arrival of personnel and equipment, so the resources required to support them, as well as time required to assemble the unit in a mission-ready configuration, are available.

4-58. At present, there are a number of joint systems in various stages of development that provide visibility of force deployment and sustainment. Unfortunately, present systems do not completely satisfy the requirements of force tracking and much of the process must be accomplished manually.

Life Support

4-59. Regardless of time actually spent in the ISB, troops staging through it will require support, including housing, sustenance, sanitation, and health care. RSOI planners must ensure that the force provider units are sequenced early in the TPFDD to be in place and functioning by the time the first units arrive. Even if this requires displacement of some combat capability, it pays dividends later in the operation in the form of higher throughput, faster buildup of combat power, and earlier force closure. The Army Force Provider units, each designed to provide base camp support to 550 people, as well as USAFs Prime Beef and Prime Rib units, are viable options for providing support to transient forces.

Arming, Fueling, and Fixing

4-60. Equipment arriving at the ISB may require maintenance before it becomes combat ready. This includes calibration of equipment, bore sighting of weapons, replacement of parts damaged in transit, painting, and re-fueling. The ISB should provide adequate facilities to support these activities, including marshalling areas, maintenance shelters, fuel and ammunitions storage, a test-driving loop, and range areas.

Preparation of Units for Onward Movement

4-61. In addition to preparing equipment, units at the ISB undergo training and reorganization. Communications networks are established, vehicle loads are reconfigured and RFID tags are updated so that tracking systems allow senior commanders to monitor the buildup of combat power. Commanders must participate in planning the onward movement including route planning, unit tracking, and movement control.

Security

4-62. ISBs are high-value targets. Their destruction or damage results in serious delays in force closure and disruption of the CCDR's concept of operations. Maintaining the flow of forces through the ISB can be the best means of reducing their vulnerability to attack.

FORCE CLOSURE

4-63. In order to meet the force closure requirements, the time that units spend in the ISB must be minimized. Staging should not be a lengthy process, but inefficiencies can cause delays, for example, personnel arriving before their equipment, equipment arriving before its personnel, frustrated cargo, and gaps in matching troops with proper equipment. In fact, a battalion-sized unit should strive to spend no more than two days in the ISB.

4-64. ISBs should be located in areas convenient to both the SPOD and APOD, with good lines of communication back to ports of debarkation and forward to designated TAAs. In addition, the ISB should have sufficient space to accommodate the largest force scheduled to stage through it, together with

facilities for vehicle marshalling, materiel handling, equipment maintenance and calibration, and possibly bore sighting and test firing of weapons. All of these are needed if the ISB is to fulfill its function of converting personnel and equipment into mission-ready combat units.

4-65. Other factors affecting selection of an ISB include geography and terrain and availability of organic and host nation assets. These factors, together with the size of the deploying force, may often necessitate multiple ISBs. The requirement for multiple staging bases is most evident in the urban sprawl of Europe and Korea, particularly around seaport facilities. In many cases, it is tremendously difficult to find even one square mile of open terrain much less the total space requirement for an ISB.

4-66. Under normal circumstances, troops deploy by air, while equipment deploys by sea and or rail. The speed differential between air and sea surface transportation is the fundamental cause of complexity and potential difficulties in the staging process. Troops and equipment must be sequenced in the TPFDD so that both arrive (nearly) simultaneously, expeditiously unite, and ready themselves for onward movement.

4-67. Troops arriving too early must be provided with meals and quarters while waiting for their equipment to arrive. The TSC or one of its sustainment brigades would be expected to accommodate these needs. Moreover, the mass of immobile, unprotected troops presents an inviting and vulnerable target. On the other hand, if equipment arrives much earlier than the troops, ports of debarkation can become congested, and space management becomes critical.

4-68. Early deployment of essential support units at the expense of combat units pays dividends later by speeding the flow of the entire force, enhancing the CCDR's ability to build combat power and increase operational flexibility. Conversely, front loading the TPFDD with combat forces may jeopardize the CCDR's ability to build up forces as rapidly as required and reduce his flexibility.

ONWARD MOVEMENT

4-69. Personnel and equipment reassembled as combat-ready units must be moved to the TAA based on the CCDR's priorities. Onward movement is a joint/multinational effort using capabilities and organizational structures of other Services, allies, host nation and other governmental entities. It is an iterative activity in which units advance from one LOC node to another. Onward movement occurs when units move from ports to theater staging bases or forward to the TAA. Three primary factors affecting onward movement are movement control, transportation infrastructure, and security.

MOVEMENT CONTROL

4-70. Movement control is defined as planning, routing, scheduling, and control of forces and sustainment over lines of communication, while maintaining in-transit visibility and force tracking. This is not a passive activity. Successful movement control requires continual analysis of requirements, capabilities, shortfalls, alternatives, and enhancements. Bottlenecks within the theater must be identified and potential interruptions to the flow minimized. One of the biggest challenges of movement control is rapidly adjusting to changes in the operational environment and the commander's priorities. The challenge of a theater movements program is to merge the CCDR's concept of operations and priorities in a movement plan and execute them. This challenge can be met by employing an adequate number of movement control resources, appropriately enabled by communications, to anticipate and improvise. Efficient movement control enables the commander to redirect forces and rapidly overcome disruptions in the LOC.

TRANSPORTATION INFRASTRUCTURE

4-71. The transportation infrastructure routes, control factors, host nation support, and specialized handling requirements must be coordinated to maximize speed of movement. Capabilities of the transportation network must be balanced against movement requirements, so that modes and routes are neither saturated nor underused.

4-72. The other services and allied forces will be competing for the same networks as the Army and congestion will result if proper coordination is not accomplished. Planners should anticipate simultaneous

demands on limited infrastructure, difficulties with communications, and differences in transportation capabilities.

4-73. During onward movement, mode selection determines whether the commander of the unit in transit maintains control during the move or whether control of the move is exercised by elements of the TSC. Ideally, tracked vehicles should be moved by rail or heavy equipment transporters and wheeled vehicles should move in a convoy. Inland and coastal waterways should be used when available if they afford useful solutions.

4-74. Establishment of convoy support centers and trailer transfer points along main supply routes and other support centers at temporary airfields, rail sites and waterway drop off points, further aids onward movement. These allow units and line haul drivers to rest, eat, perform vehicle maintenance, and contact unit/movement control personnel to receive operational updates, revised priorities, and when necessary diversions.

SECURITY

4-75. The onward movement phase can provide the enemy with numerous opportunities to inflict serious losses and delay the build-up of combat power by exploiting vulnerability of units in transit from the ISB to the TAA. Security consists of those actions taken by the unit to protect it against all acts designed to, or may impair its effectiveness.

4-76. Enemy interdiction of onward movement presents special challenges that can be partially overcome by using alternative routing and mode substitution when feasible but all units must be prepared to defend themselves. OIF convoys are organized and tightly controlled to afford a higher degree of security. Moreover, hardened gun trucks escort the convoys and additional armed personnel ride in the vehicles to immediately engage insurgents as required.

4-77. Security is an important component of warfighting. Security is the responsibility of the moving force itself and forces of the CCDR. Care must be taken to avoid or neutralize explosive devices and attacks on the movement with direct or indirect fires.

INTEGRATION

4-78. During integration, combat-ready units are transferred to the operational commander and merged into the tactical plan. The transfer may require interaction and familiarization among units and that arriving units meet certain standards before being completely integrated into the combat plan. Consequently, requirements for integration planning and coordination must occur early in the force projection process and modified according to METT-TC until force closure is achieved.

4-79. The time required for integration may vary, depending upon the size of the total force, contingency conditions, and amount of predeployment and ongoing planning and coordination. Rapid integration, however, is critical to the success of combat operations, and adequate planning and coordination can reduce integration time.

4-80. Thorough integration has to be completed before a unit is operational and can perform its mission. Integration is complete when the CCDR establishes positive command and control over the arriving unit, usually in the TAA, and the unit is capable of performing its assigned mission.

4-81. Control measures, such as liaison officers or movement control teams can reduce confusion between integrating units, RSOI forces, and receiving headquarters. These measures act as guardians of the commander's intent and focus effort on force integration. These measures should be established immediately as part of the planning process and be maintained throughout the RSOI process.

Chapter 5
Redeployment

Redeployment involves the return of personnel, equipment, and materiel to home and/or demobilization stations and is considered as an operational movement critical in reestablishing force readiness. The CCDR defines the conditions for redeployment. The same elements that operate and manage the theater distribution system during deployment and sustainment will usually perform support roles during redeployment. Redeployment planning is an integral part of employment planning and should be coordinated with mission termination or transition plans.

OVERVIEW

5-1. Commanders plan for redeployment within the context of the overall situation in the theater. The phases of redeployment are redeployment planning, preredeployment activities, movement, and reception and integration at the home or demobilization station.

PREPARATION ACTIVITIES

5-2. When a unit is identified for redeployment, the CCDR issues a redeployment operations order releasing units from their missions and authorizing movement. Redeploying forces move to designated assembly areas. Redeployment operations at the assembly areas are under the control and supervision of the TSC commander and include actions necessary to prepare the unit for movement. In some cases, a FRAGO to a deployment order may be used instead of a separate redeployment order. Redeployment planning by the theater Army, Army Service Component Command (ASCC), or Army Forces (ARFOR) normally precedes the actual issuance of an order and tentatively outlines information about the support network, follow-on operations, security requirements, and movement limitations imposed by infrastructure and resources. Redeployment operations must be conducted at a pace that does not disrupt the ability of the CCDR to execute continuing missions, including deployment of replacement forces.

5-3. The redeploying units plan is nested within the plans of their higher headquarters. The redeployment plan conveys the commander's intent and includes responsibilities, priorities, and guidance for movement of forces, individuals, and materiel. Issues that must be addressed in the plan are—

- Scheduling of redeployment activities.
- Personnel accountability.
- Cleaning of equipment.
- Transfer of equipment.
- Ammunition turn-in.
- APS procedures.
- Security of the force.
- Availability of theater transportation assets.
- Availability of strategic lift.

5-4. Redeployment priorities are outlined in the OPLAN by the supported CCDR. During redeployment preparation units must update movement data to reflect gains and losses to the OEL. The changes are normally attributed to combat losses, maintenance, or supply. Moreover, the redeploying force is directed to leave equipment and materiel behind for use by a follow on force or by host nation or other multinational forces. Subordinate organizations and component commands must verify unit movement data

to the supported combatant commander. USTRANSCOM develops the redeployment strategic movement schedule after receiving the validated requirements from the supported combatant commander.

5-5. A movement order may be issued sequentially for each movement or may be contained in one movement order designating the timing and means of transport to the POE. The theater movement control element issues movement tables that give detailed movement instructions to redeploying units. The TSC usually manages the redeployment support that can be performed by a subordinate organization.

5-6. The unit begins the redeployment process by identifying requirements and determining current unit status. Other actions include—

- Submitting personnel and pay actions.
- Maintaining personnel accountability.
- Conducting medical screening.
- Performing equipment checks and services.
- Conducting equipment inventory.
- Refining the UDL.

DEPLOYMENT REDEPLOYMENT COORDINATION CELL

Once the magnitude and complexity of the rotational operations was recognized CENTCOM established the Deployment Redeployment Coordination Cell. The cell was staffed with a cross-section of staff officers providing theater movement management in support of OIF and OEF rotations. Management was exercised through a network of "czars" responsible for every aspect of support associated with the rotation – wash racks, base camps, port facilities, APODs, and buses. The key to the success of the operation was a series of rehearsals detailing the actions and requirements for the support nodes and movement sequences and briefed to both inbound and outbound supported units.

In spite of the challenges and changes involved with the rotation of more than a quarter of a million troops there was no adverse affect on combat operations in the theater. During the course of the rotation there was a daily average of 34 inter-theater flights, 4 ships loading or discharging, and 1,800 trucks moving to and from Iraq. During the rotation 14,000 containers were moved, completed 23,500 truck movements of over 5.9 million miles, washed and inspected 40,000 vehicles, processed 3,000 flights carrying 130,000 Soldiers, and loaded or unloaded nearly 100 ships with 97,000 pieces of equipment.

"Maintaining Momentum in the War on Terrorism"
Lt. Gen. David D. McKiernan
ARMY Magazine, October 2004

MOVEMENT

5-7. Redeployment planning results in a network of transit areas designed to efficiently move forces from their area of operations to their final destinations. Use of these areas may vary with the situation.

ASSEMBLY AREA

5-8. Units move to an assembly area to prepare for redeployment after being relieved from their operational mission. The assembly area should be away from the immediate employment area. Movement to, and within, the area is under control of a redeployment coordination cell. Units in the assembly area inventory, inspect and process equipment for turn-in or transfer; load containers; prepare documentation; conduct US Customs inspections; finalize unit movement data; and plan rail loads, bus movements, barge movements, and convoys for movement to a POE or APS turn-in site for movement to the port holding area based on movement instructions. Units update UDLs, generate documentation, RFID tags, and MSLs using TC-AIMS II. Equipment moving from the assembly area to the POE must have RFID tags and MSLs applied prior to loading.

5-9. Units wash major end items to satisfy US Department of Agriculture standards. Customs and agricultural inspection standards are based on the destination and types of equipment being redeployed.

Units should make plans to perform the activities necessary to meet these standards. The time required to wash vehicles can be considerable and likely will be the overriding factor in redeployment scheduling. For example, a M1098 high mobility multi-purpose wheeled vehicle (HMMWV) can take approximately 12 hours to wash to meet the agricultural standards, and larger equipment can take a day or more to wash. Considerations in computing the estimated time to wash unit equipment should include the equipment density, estimated time for each piece of equipment, the number of wash points, and the staffing at each location. Once the equipment is cleared by customs inspectors it will be held in a secure sterile area until it is moved to the POE.

CUSTOMS PROCEDURES

All DOD-sponsored cargo is inspected at the overseas point of origin by customs and border clearance agents. Military equipment is inspected at the time it is placed in boxes, crates, or containers for movement and secured until departure from the overseas area. Vehicles and similar items to be shipped are inspected and secured immediately prior to loading on the departing aircraft or vessel. After the inspection is completed a DD Form 2855 (*U.S. Military Agriculture and Customs Preclearance Program*) is prepared and securely affixed to the container or vehicle.

Inspectors normally check a minimum of 10 percent of all baggage 24 hours before the departure time. Once inspected, baggage is stored in a sterile area until transported and loaded at the APOE, approximately 4-6 hours prior to the scheduled departure. Soldiers process through customs with their carry-on bags and once cleared remain in the sterile area until they board the aircraft.

Detailed requirements of the military customs preclearance program can be found in Part V of the Defense Travel Regulation.

ACTIVITIES AT THE SPOE

5-10. Units normally move to the SPOE staging area from assembly areas. Some SPOEs may not have total use of the port area. Port managers and operators must closely coordinate their activities with host nation authorities as well as joint and multinational elements. Joint-use facilities and limited real estate availability may require port authorities and redeploying forces to modify processes to accommodate port capabilities.

5-11. SDDC, as the single port manager, directs water terminal operations to include supervising contracts, cargo documentation, security operations, and the overall flow of information. SDDC is responsible for providing strategic redeployment information to the CCDR and to workload the port operator based on the CCDR's priorities and intent. Activities associated with moving Army units through SPOEs are outlined in Chapter 3.

ACTIVITIES AT THE APOE

5-12. The agencies and processes involved in moving Army units through an APOE during a deployment are similar to those at an APOE during redeployment. Customs and agricultural inspections are based on US standards.

POE STAGING AREA

5-13. Intratheater transportation assets may move units directly to a POE staging area or to an intermediate staging area. These movements are largely determined by the distance to be traveled, the size of the redeploying force, and theater capabilities. Units that were issued APS equipment usually turn it in at a separate location prior to moving to the POEs. Procedures for return of APS to storage locations are established during redeployment planning. Refer to FM 3-35.1 for additional information regarding APS.

5-14. SPOE staging operations prevent congestion within the terminal area and provide space for segregating vehicles for vessel loading. This is the final en route location for preparation of unit equipment

for strategic movement prior to the equipment entering the port holding area. The redeployment coordination cell monitors the flow of vehicles and equipment into the port and notifies the theater movement element when there is a backlog. The TSC establishes and operates the SPOE staging area and assists with opening the staging area at the SPOE.

5-15. Movements into the POE staging area must be carefully managed to preclude congestion and to avoid exceeding the capacity of the facility. Early planning in the assembly area ensures that units arrive at the POE on time and fill scheduled modes of transportation. Instructions directing movement to the port will come in the form of a call forward message from SDDC and is based on the availability of space in the port and the TPFDD timelines.

5-16. The theater human resources (HR) manager, in coordination with the TSC is responsible for personnel accountability at the theater processing centers. The unit remains responsible for conducting strength accounting through the S-1. The HR element at the processing centers verify unit manifests, coordinate manifest changes with the USAF, and transmit final flight manifests to the appropriate commands, HR agencies, and destination installation commanders.

MOVEMENT TO POD

5-17. The combination of strategic airlift and sealift provides the capability to redeploy forces, albeit in different timeframes and along separate routes. Personnel are transported by strategic airlift to the destination APOD and then moved by bus to the destination installation. Vehicles, unit equipment, and containers are moved by strategic sealift to the designated SPOD, unloaded, and transported by convoy, commercial truck, or rail to the destination installation.

5-18. It is extremely important for the redeploying unit, assisted by their home station ITO, to maintain visibility of their vehicles and unit equipment. A small investment in maintaining visibility throughout the redeployment pipeline can be rewarded by having your vehicles equipment delivered to the right place at the right time. Otherwise there may be a delay in beginning the reset phase of ARFORGEN.

MOVEMENT TO HOME OR DEMOBILIZATION STATION

5-19. The destination for active component units is normally their home station whereas reserve component units return through a demobilization station. Typically the demobilization station is the same installation that served as the unit's mobilization station.

5-20. The supporting installation is responsible to assist returning forces until they reach their destination. The installation coordinates the support for the arrival ports and airfields and establishes en route sites as required by the redeployment plan. Once the unit vehicles and equipment arrive at the SPOD, the destination installation has the primary role of coordinating with SDDC for onward movement. The unit is responsible to provide load/unload teams and drivers at the POD and railhead. The supporting installation has the following responsibilities at the POD—

- Stage equipment for movement to the final destination.
- Coordinate for customs clearance inspections.
- Complete equipment inspections and process movement documentation.

5-21. Units returning by air to an APOD are off-loaded under the control of the CRE and moved to the holding area where they are released to the AACG. The unit remains in the holding area briefly to ensure that they have accounted for their personnel and equipment and then moves to the marshalling area where they are loaded on appropriate transportation for movement to home station, demobilization site, or other destination.

5-22. The installation will—

- Maintain a central control and inspection point.
- Provide a security area for sensitive items.
- Coordinate life support facilities.

5-23. The unit will—

- Ensure that all aircraft pallets and nets are returned to the CRE or A/DACG.
- Perform required maintenance checks and refuel equipment.

5-24. In most instances vehicles and unit equipment are transported to their destination by commercial transportation, contracted by SDDC in coordination with the destination ITO. The ITO receives the movement documents for all equipment flowing through their areas of responsibility. They receive the commercially delivered assets, process all paperwork, and release the equipment to the unit.

5-25. The installation coordinates with SDDC and other affected agencies to provide commercial transportation and MHE as needed and monitors operations, resolves problems, and complete reports as required to higher headquarters and other coordinating organizations. Functions of the destination installation include—

- Activating emergency operations center as required.
- Notifying supporting units and key agencies, including Public Affairs offices and family readiness groups.
- Activating Soldier readiness point.
- Opening billets, dining halls, and morale, welfare, and recreation (MWR) facilities as required.
- Conducting reception for returning units.
- Processing personnel (health services, legal assistance, financial management, and personnel actions).
- Providing maintenance, transportation, and MHE support.
- Establishing turn-in of weapons and special equipment.

5-26. The unit performs the following tasks upon arrival at the destination—

- Download and receive unit equipment.
- Report closure of personnel and equipment.
- Begins Reset activities.

CLOSURE REPORTING

5-27. Redeploying units must also be tracked back to their home stations and reported to the original force provider and Headquarters, Department of the Army (HQDA). This facilitates reintegration into ARFORGEN. Once redeployment begins, force tracking is conducted until the force has completed movement through the redeployment pipeline and has emerged intact at the destination. Actions taken to track and then report the closure of units back to their home stations is a command responsibility.

5-28. Reporting closure of unit personnel and equipment involves two separate but related processes. The USTRANSCOM business process, through its transportation component commands, moves personnel and equipment aboard commercial or military transportation assets. As personnel and equipment arrive at their home stations, the ITO/UMCs verify arrival by signing carrier delivery documents and reporting the arrivals back to SDDC/Air Mobility Command, noting whether or not RDDs were met. This closes the transportation business process and allows for payment to the commercial carriers.

5-29. The unit also reports their progress through their chain of command to the HQDA Army Operations Center (AOC). Interim reports begin as soon as the first elements arrive at home station and will continue until the unit commander's report that all unit personnel and equipment are accounted for at home station and the unit is prepared for its next mission.

- Equipment in transit is reported to the ITO and transportation discrepancy reports are submitted if it does not arrive by the RDD.
- Forward final Unit Closure Report through chain of command to FORSCOM. (Reporting Chain of Command is dependent on C2 of given unit and installation. FORSCOM will determine and include specific reporting procedures in FORSCOM Regulation 55-1).
- FORSCOM receives, consolidates and forwards closure reports to Army AOC/ALOC.

- HQDA AOC/ALOC confirms receipt of closure report, completing the closure reporting process.

Appendix A
Deployment Process

The purpose of this appendix is to provide an understanding of the components and systems that support the Army deployment process to enable mission accomplishment. This appendix outlines use of the TC-AIMS II—Joint Force Requirements Generator II (JFRG II)/Computerized Movement Planning and Status System (COMPASS) deployment tools to support the deployment process.

OVERVIEW

A-1. The Army deployment process must satisfy the CJCS requirement to develop an accurate TPFDD for the first 7 days of deployment after initial deployment instructions are received. The TPFDD is a collection of movement requirements data to support deployment planning. The TPFDD includes a list of what, when, where and how equipment and personnel are to be moved. The deployment data processed through TC-AIMS into JOPES allows transportation and operational planners to perform a transportation feasibility analysis. This analysis of an OPLAN's TPFDD determines supportability in terms of the type and amount of strategic lift assets required to accomplish planned movements within specified movement dates.

A-2. TC-AIMS II is the system of record for the Army used for the deployment of units. It includes automated support to assist unit commanders to create, maintain, manage, and update unit equipment, personnel lists, and deployment databases. TC-AIMS II integrates the Automated Air Load Planning System (AALPS) database on a single platform to enhance air load planning. Integrating AALPS provides TC-AIMS II users an enhanced capability to quickly develop balanced air load plans for deployment of cargo and passengers. AALPS allows users to configure load plans according to specific delivery methods and available aircraft. Additionally, TC-AIMS II interfaces with the Integrated Booking System (IBS) and the WPS cargo booking and manifesting application to support preparation of detailed deployment plans.

A-3. The unit movement functions are contained in four modules of TC-AIMS II:

- **Asset Management**. Provides the capability to maintain personnel readiness data (licenses, equipment qualifications, medical, and immunization status, etc.), equipment, supplies, deployment support equipment, and create reports.
- **Movement Planning**. Provides the capability to receive movement requirements and analyze the requirements to create tailored movement plans.
- **Movement Coordination**. Provides the capability to request transportation assets and coordinate land, sea, air freight, and passenger movement requirements from origin to destination. Allows user to prioritize loads.
- **Movement Execution.** Provides the capability to execute the segments and legs developed in the movement plan in a logical order. TC-AIMS II gives the user the ability to monitor unit move information and track unit cargo and assets during movements using AIT devices.

A-4. Interface capabilities allow deployment execution requirements to be reflected by exporting plan data to JFRG II/COMPASS for eventual import into JOPES. JFRG II is comprised of the following primary modules:

- **Plan Administration.** Provides the capability to create and maintain adaptive and crisis action plans.
- **Unit Type Code (UTC) Summary.** UTCs are alphanumeric codes used to identify a type unit and its functional description. This module provides standard planning information (table of

organization and equipment (TOE)) for personnel and cargo to include accompanying supplies associated with deployable units.

- **ULN Summary.** ULNs are alphanumeric codes used to rapidly identify and associate cargo and personnel detail requirements with the movement detail to build a TPFDD.
- **Force Module Development.** Provides the capability to group or aggregate ULNs and movement detail and extract them from the TPFDD. The purpose is to create manageable data sets which allow individual commands to rapidly associate TPFDD requirements with specific units and their UDL for sourcing.
- **JFRG II – TC-AIMS II Data Exchange.** Provides the capability to import 'force requirements' into TC-AIMS II from JFRG II and to export UDL sourced 'force requirements' from TC-AIMS II into JFRG II.

A-5. JFRG II is a GCCS application that supports strategic force movement and sustainment. JFRG II supports TPFDD requirements associated with adaptive, crisis action, and operational planning for deployment and redeployment. JFRG II supports the Computerized Movement Planning and Status System (COMPASS) as the interim JOPES feeder system that passes TPFDD requirements from JOPES into TC-AIMS II and the validated unit deployment list back into JOPES.

A-6. JFRG II supports tactical and administrative planning by providing rapid force lift creation and lift analysis. It allows commanders visibility of allocated forces and equipment to determine the feasibility of planned movement of those forces. It also allows for analysis of lift assets required to move the force.

A-7. The process described below and depicted in figure A-1 presents an overview of TC-AIMS II in support of the deployment process. Its web-enabled capability allows users access to the system to perform their unit move operations from anywhere in the world, provided they have an Internet Explorer browser, a DOD-issued Internet Protocol (IP) address, and an authorized user-identification and password. The Enterprise uses web server software called CITRIX to allow users to access the TC-AIMS II database. The move to an Enterprise permits units to more easily share information and pass data between higher and lower echelons and other interface partners.

A-8. The force provider will provide specific guidance and procedures to be used in creating, validating and transmitting TPFDD data via JOPES to JFRG II to TC-AIMS II. This function consists of importing a classified JOPES plan (TPFDD) into JFRG II, creating force modules and declassifying the plan. A plan is then created on the TC-AIMS II Enterprise Server prior to importing the declassified JFRG II force module.

A-9. Force modules are created to distribute TPFDD requirements data with ULNs and movement data to TC-AIMS II. Force modules contain a grouping of unit ULNs with cargo, passenger and movement data for major subordinate elements identified for deployment. Force modules are created for all non-corps major subordinate units that have JFRG II systems, including installations with brigade or smaller sized units. Declassified TPFDDs are created for other subordinate non-divisional units without JFRG II at their level. Force modules are also created and transmitted to National Guard and USAR units tasked to deploy.

A-10. After creating a plan on the TC-AIMS II Server, the force provider imports the TPFDD and announces through the newsgroups and emails (collaboration tools) that the plan is available to the installations. Once the installation and corps have reviewed the plan they will notify the units the plan is available to match assigned personnel and equipment to plan requirements.

A-11. The step-by-step sequence for using a UDL to source a TPFDD is as follows:

- **Step 1. Create TPFDD.** The TPFDD is created based on coordination between the supported CCDR and the supporting CCDR and the force provider to create an OPLAN in JOPES to outline the requirements of the supported CCDR.

- **Step 2. Copy JOPES Execution Plan.** The supporting CCDR accesses JOPES to create a copy of the Execution Plan with force provider requirements.

- **Step 3. Create Force Modules (FM) in JOPES.** Force modules contain a grouping of unit UIC/ULNs with cargo, passenger and movement data for elements identified for deployment. Force

modules are created for all units that will have a plan in TC-AIMS II for sourcing. Force modules are also created and transmitted to National Guard and USAR units tasked to deploy. JOPES operator exports FM to JFRG II.

• **Step 4. JFRG II Imports the FM From JOPES.** After importing the FM, the JFRG II operator conducts a series of evaluations of the data contained in the Force Module, including a function called "Plan Evaluation" as well as reviews of GEOLOC data. When critical errors are found using 'Plan Evaluation", the JFRG II operator must have them corrected in JOPES before continuing, otherwise erroneous data could be forwarded to the TC-AIMS II application. This could have devastating effects on boat and aircraft scheduling and loading plans in other interfaces with TC-AIMS II. If new GEOLOC codes are found (present in JOPES but not in JFRG II) the operator manually updates the JFRG II database with the information found in the JOPES editing tool. At the conclusion of all evaluations within JFRG II, an export is made from JFRG II to the TC-AIMS II application. JFRG II automatically strips out any references to the Plan Identifier during this export. The user is thus notified with a popup message indicating it is safe to proceed with the export. This is the first step in the J6 approved Air Gap procedures (see next step).

• **Step 5. Declassify TPFDD.** Supporting COCOM Staff performs J6 approved Air Gap procedures to ensure no classified data is passed to unclassified systems. Air gap procedures involves following certain procedures to remove classified data prior to passing TPFDD requirements data with ULNs and movement data to an unclassified TC-AIMS II. The result is an unclassified JFRG II file transferred from the Secret network to the Unclassified net using a 3-5 inch floppy disk. The unclassified JFRG II file is then forwarded by email to the installation or unit.

• **Step 6. Import Unclassified JFRG II File.** The installation creates a plan on the TC-AIMS II Enterprise/Garrison server and imports the JFRG II file into the plan. The installation reviews the plan requirements and then announces through newsgroups and email (collaboration tools) that the plan is ready for UDL sourcing.

• **Step 7. Source Plan.** UMOs log in to TC-AIMS II to review requirements and source (match assigned equipment and personnel to plan requirements) their portion of the plan.

• **Step 8. Review Sourced Plan.** Units with TC-AIMS notify higher headquarters that sourcing is completed and unit equipment data in the form of a UDL has been loaded onto the server and is available for review.

• **Step 9. COMPASS and JFRG II Exports.** FORSCOM installations will submit both COMPASS and JFRG II exports from TC-AIMS II to FORSCOM Headquarters. Both files are sent simultaneously to the following email addresses: jfrgii-1@conus.army.mil and compass-1@conus.army.mil. Other Army agencies outside of FORSCOM may choose not to export anything to COMPASS, only JFRG II.

• **Step 10. Import TC-AIMS II Plan.** FORSCOM currently (2009) imports the COMPASS file into COMPASS and performs several data edit checks before updating the JOPES TPFDD with this UDL data. However, when errors are discovered, the Installation is notified to correct and resubmit. FORSCOM also reviews the data received in the JFRG II export from TC-AIMS II and compares that information with that sent to COMPASS. Other agencies may choose not to use COMPASS and will import the TC-AIMS II UDL data into JFRG II for review and verification before sending to JOPES.

• **Step 11. Export Plan to JOPES.** The supporting CCDR/Force Provider exports the JFRG II file to update the TPFDD in JOPES and notifies the supported CCDR. FORSCOM is waiting on several changes requested of the JFRG II Program Manager (some since 2004) before using JFRG II as the system of record to update the JOPES TPFDD as other world-wide agencies are currently doing. Until then, FORSCOM is using COMPASS to update the JOPES TPFDD.

• **Step 12. Export UDL.** Installation reviews plan and exports files to IBS, GATES (includes WPS) and other deployment systems.

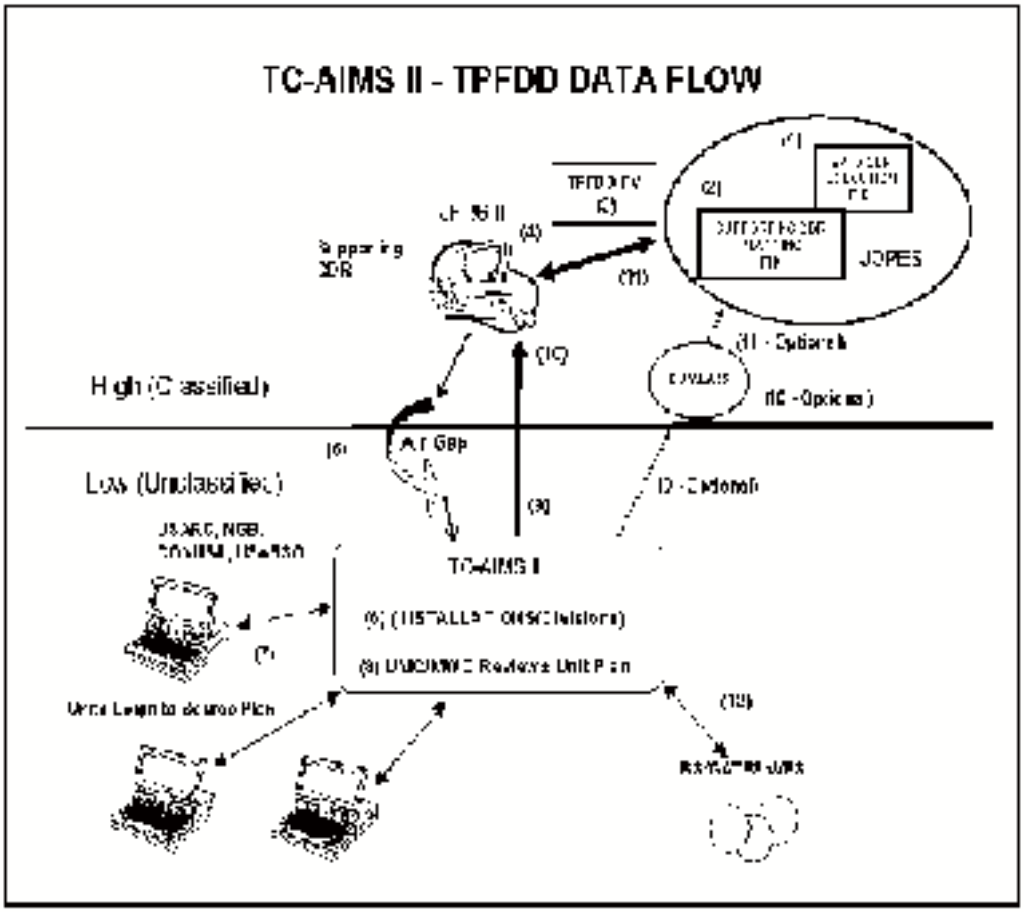

Figure A-1. TC-AIMS II deployment process

TC-AIMS II FUNCTIONALITY

A-12. The company UMO uses TC-AIMS II to--

- Create, maintain, manage, and update unit equipment, personnel, and deployment information files. The UMO must contact the battalion with the changes that need to be made in the deployment files or source database.
- Develop plans for known exercises and deployment scenarios.
- Prepare and execute convoys
- Creates a UDL from the OEL based on information supplied either through a TPFDD or from the battalion commander. The UDL is forwarded to the battalion mobility noncommissioned officer (NCO) for further action.

A-13. The battalion plan is a UDL for the battalion (to include the headquarters company) and it is built by consolidating the company UDLs to match the requirements. Battalion movements can be constructed for the entire battalion or for slice elements depending on the mission requirement.

A-14. The battalion mobility NCO provides assistance to the company UMOs. Battalion UMO responsibilities include (but are not limited to) using TC-AIMS II to--

- Consolidating company movement plans and develops them into movement plans for the battalion.
- Auditing the company's asset management sections for accuracy.
- Forwarding battalion movement plans to brigade for further consolidation.

A-15. The mobility officer or NCO in the BCT use TC-AIMS II to--

- Consolidate battalion movement plans and develop them into movement plans for the brigade.
- Insert movement mode data into the movement plan.
- Forward brigade movement plans to the UMC.
- Consolidate unit support requests for commercial transportation and forward them to the UMC.
- Submit requests for unit convoy clearances and special hauling permits to the UMC.

A-16. At the installation level, the UMC coordinates strategic movements and assists units in developing and executing unit movement plans. UMC responsibilities include but are not limited to—

- Providing movement guidance to all units moving from the installation.
- Verifying the number of vessels and aircraft (determined by SDDC) required by each unit and assisting in designating loading sites and coordinating times to start and complete unit loading.
- Assisting units in identifying and obtaining BBPCT.
- Ensuring unit equipment is properly marked prior to movement by any mode.
- Serving as the primary point of contact for special assignment airlift mission and exercise airlift.
- Maintaining and managing containers and 463L pallet/cargo net allocations.

A-17. The UMC uses TC-AIMS II to--

- Receive and process convoy clearances and special hauling permits.
- Advise the unit on preparing movement documentation.
- Review and export files to WPS, IBS, GATES and JFRG II.
- Export the UDL source data to COMPASS (for a data quality check) and JFRG II.
- Coordinate MHE requirements.
- Coordinate movement documents for commercial lift of unit.
- Support unit movement at railheads and airfields.
- Coordinate airlift requests.
- Maintain and manage containers and 463L pallet/cargo net allocations.

A-18. Army units will use TC-AIMS II for planning, managing and executing deployments. TC-AIMS II is located at battalion and separate company level up through the chain of command. This appendix provides commanders, deployment/movement planners and operators descriptive information for using TC-AIMS II to coordinate and execute movements. Deployment planners and operators are provided a matrix or template (table A-1) that identifies basic roles and responsibilities and functions necessary to effectively and efficiently use TC-AIMS II to accomplish the unit's deployment and redeployment missions. The intent of the matrix is to allow commanders and planners the ability to associate major functions and tasks in TC-AIMS II and supporting roles with the unique deployment business processes as practiced by your unit/installation.

Table A-1. TC-AIMS II task-user matrix

FUNCTIONAL MODULE & TASKS	UNITS			JOB PROFICIENCES			
	CO	BN	BDE	UMO	UMC	MO	ITO
ASSET MANAGEMENT							
MAINTAIN EQUIPMENT LIST	*	*	*	*			
MAINTAIN PERSONNEL LIST	*	*	*	*			
BUILD UNIT DEPLOYMENT LIST	*	*	*	*			
IMPORT MILPO/PROPERTY DATA	*	*	*	*			
CREATE MOBILE/SECONDARY	*	*	*	*			
MOVEMENT PLANNING							
LABEL SHIPMENT UNIT		*	*		*	*	
DOCUMENT HAZARDOUS CARGO		*	*		*	*	
CREATE MOVEMENT PLANS		*	*		*	*	
CREATE LOAD PLANS	*	*	*				
CONTAINERIZE CARGO	*	*		*			
PALLETIZE CARGO	*	*		*			
COORDINATE MOVEMENT			*		*	*	*
SCHEDULE MOVEMENT					*	*	*
SELECT CARRIER					*		*
CREATE & EDIT RAIL CBL					*		*
CREATE & EDIT TCMDs							*
CONVOY PLANNING	*	*	*	*	*	*	*
MOVEMENT EXECUTION							
CONSOLIDATE/LOAD ASSETS		*	*		*	*	
EXECUTE PLAN LEG		*	*		*	*	
PROCESS SHIPPING DOCUMENTS		*	*		*	*	*
CREATE/EDIT TCMD						*	*
CREATE/EDIT BILL OF LADING					*	*	*

Table A-1. TC-AIMS II task-user matrix

FUNCTIONAL MODULE & TASKS	UNITS			JOB PROFICIENCES			
	CO	BN	BDE	UMO	UMC	MO	ITO
SHIPPERS DECLARATION					*	*	*
CARGO/PAX MANIFEST					*	*	
INTERFACES							
JFRG II			*		*	*	
WPS			*		*		*
IBS			*		*		*
AALPS			*		*	*	*
COMPASS			*		*	*	
ITV SERVER			*		*	*	
GATES			*		*		*
GTN			*				*
AIT/RF-ID							
WRITE RF TAGS		*	*	*	*	*	
CREATE TAV FILES FOR TIPS		*	*	*	*	*	
UPLOAD RF TAG DATA		*	*	*	*	*	
CREATE MSL FROM TAG DATA		*	*	*	*	*	
SCAN MSL				*	*	*	
TRANSMIT DATA TO ITV SERVER			*	*	*	*	
PRINT DOCUMENTATION							
DD FORM 1387 (MSL)			*	*	*	*	*
DD FORM 1384 (TCMD)			*		*	*	*
DD FORM 1265/1266 (Convoy/Haul Req)					*	*	*
DD FORM 1750 (Packing List)	*	*	*	*		*	
DD FORM 2777 (Convoy/Haul Req)		*	*		*		*
CBL (Bill of Lading)					*		*

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Appendix B

Automated Mobility Systems

Commanders and staffs must have the capability to plan, execute, and monitor deployments and redeployments. This appendix provides the description and role of the automated mobility systems in the deployment process.

AUTOMATED AIR LOADING PLANNING SYSTEM (AALPS)

B-1. AALPS is a knowledge-based expert system that assists users in the planning and execution of aircraft loads. It has been selected as the aircraft load planning system for the DOD. AALPS performs air load planning and execution for contingency planners and force designers. This entails the use of preplanned data and the use of actual data for both "real-world" and "what-if" scenarios. AALPS is used for estimating airlift requirements (by specific aircraft type and delivery method), producing USAF certified "flyable" load plans, and providing airlift/movement summary data and load reports ranging from a single mission to full-scale division deployments.

AUTOMATED MOVEMENT FLOW TRACKING SYSTEM (AMFT)

B-2. AMFT is a developmental installation-level system, which provides deploying unit commanders and staffs with continuously updated deployment status. It is a tool to monitor movements of unit equipment and personnel through the successive installation processing points to meet load-out schedules.

AUTOMATED MANIFEST SYSTEM (AMS)

B-3. AMS is a Defense Logistics Agency (DLA) initiative that utilizes laser-readable optical memory cards in place of paper packing slips on the exterior of shipment containers. The card contains a detailed list of the contents of the multi-pack including TCN, National Stock Numbers and Document Numbers. AMS is used at depots, central receiving points (CRPs), and supply support activities (SSAs) such as the Direct Support Unit in a forward support battalion. AMS facilitates manifesting and tracking of multi-pack shipments from the depot to the CRP or SSA. AMS provides "in the box" asset visibility and may be used as the source of ITV data. The AMS reader can be connected directly to the Automated Information System (AIS) at the receiving unit, thereby increasing the accuracy of data by automating the input of source data.

CARGO MOVEMENT OPERATION SYSTEM (CMOS)

B-4. CMOS is a sustainment system that automates and streamlines installation-level cargo movement processes for both peacetime and deployment cargo. Workstations in ITO functional areas support one-time data capture for the preparation of documentation for all modes of shipment. The specific functional areas supported are the receipt, preparation, and movement of cargo; the reporting of movement to GTN for ITV; and military airlift passenger travel. The electronic reporting of cargo movement makes CMOS a vital component of the logistics community's effort to provide in-transit asset visibility. The CMOS capabilities have been incorporated into TC-AIMS II and provide electronic reporting of cargo movement at the installation level.

COMPUTERIZED MOVEMENTS PLANNING AND STATUS SYSTEM (COMPASS)

B-5. COMPASS is an Army information management system that supports validation of unit movement requirements data prior JOPES update. The system was designed to support unit movement planning and requirements for Active and Reserve Component Units. This system provides the AUEL which reflects the go-to-war equipment profile of deploying units.

GLOBAL AIR TRANSPORTATION EXECUTION SYSTEM (GATES)

B-6. GATES automates support for receipt, movement and billing of cargo and passengers. GATES provides the AMC, DOD, and commercial partners with an automated management system to process and track cargo and passenger information, support management of resources, provide logistical support information, generate standard and ad hoc reports, and provide message routing and delivery service for virtually all aircraft movement data. In the force projection scenario, GATES is the AIS that send aircraft arrival and departure ITV data to GTN.

GLOBAL COMBAT SUPPORT SYSTEM (GCSS)

B-7. GCSS is a DOD-level initiative to ensure interoperability across sustainment AIS functions, as well as between sustainment and command and control (C2) AIS functions. It is neither an acquisition program nor a standard information system, but a strategy for enhancing sustainment effectiveness within and between the Services. GCSS requires each Service to implement common technical standards for their AIS in accordance with the Defense Information Infrastructure Common Operating Environment. This includes the use of standard data elements to improve interoperability and understanding when sharing information among the Services during joint operations.

GLOBAL COMMAND AND CONTROL SYSTEM (GCCS)

B-8. Global Command and Control System (GCCS) is the key C2 Information and Intelligence system. It is a system of interconnected computers that provides an integrated capability to the entire joint community. It provides up to SECRET-level information from a variety of applications that have migrated, or are in the process of migrating from other systems. GCCS is used by the JPEC to document movement requirements, transportation closure, and other significant force projection events. GCCS is flexible enough for combat operations or humanitarian assistance missions. GCCS integrates deliberate and crisis action planning, force deployment and employment, fire support, air operations and planning, intelligence, and force status. It is designed to allow the expansion of planning and execution capabilities as new systems are designed. GCCS is based on a common operating environment allowing greater software flexibility, reliability, and interoperability with other automated systems. GCCS receives logistics information from Joint Total Asset Visibility, GCSS, and GTN.

GLOBAL TRANSPORTATION NETWORK (GTN)

B-9. GTN is an automated C2 information system that provides transportation users and providers with an integrated view of transportation information. It gives USUSTRANSCOM the ability to perform C2 operations, planning and analysis, and business operations, to meet customer requirements. GTN provides ITV for the DTS. GTN collects and integrates transportation information from selected DOD systems for use by transportation data customers, the Joint Staff, Combatant Commanders, and the Services. The system provides these users the ability to monitor movement of forces, cargo, passengers, and patients and the movement of military and commercial airlift, sealift and surface assets. GTN is accessible on the World Wide Web.

INTEGRATED BOOKING SYSTEM (IBS)

B-10. IBS is the lead SDDC execution system of the DTS for the movement of military cargo by surface overseas. IBS manages and conducts these responsibilities by providing a single, worldwide, automated

booking system to support the peacetime and wartime movement of sustainment cargo in an efficient and timely manner. IBS allows shippers to automatically book requirements instead of manually processing them through SDDC booking offices. Automatic booking of requirements reduces the level of manual intervention required. TC AIMS II interfaces with IBS for movements originating from the CONUS. UDLs can be pushed to IBS to create the export traffic release request in IBS.

INTEGRATED COMPUTERIZED DEPLOYMENT SYSTEM (ICODES)

B-11. ICODES is an AIS designed to support cargo management, shipload planning, and stowage at common-user and military ocean terminals. Responsibility for this function is shared among the SDDC and FORSCOM Active and Reserve components, The US Navy and US Marine Corps also perform this mission, as well as loading and stowing functions for primarily tactical land-based and seabased operations. ICODES provides the user with decision-support capabilities for planning and executing the ship loading and stowage of military cargoes including unit equipment. The planning function enables the user to execute the loading and stowage of military cargoes for movement to support DOD objectives during training, humanitarian assistance, preposition, and contingency operations. The reporting and networking functions support the mission to provide Commanders with strict accountability of these cargoes during loading, transshipment, and discharge at the port of debarkation.

JOINT FORCE REQUIREMENTS GENERATOR II (JFRG II)

B-12. JFRG II is a TPFDD manipulating and editing application designed to facilitate deployment planning and execution while in garrison or forward deployed. It sources, analyzes, and refines TPFDDs and is capable of remote, low bandwidth operation or client/server operations via GCCS. It imports and exports JOPES executable TPFDDs and provides an interface between unclassified unit deployment planning systems and classified JOPES. JFRG II has been as the interim interface for all data movements between JOPES and TC-AIMS II.

JOINT OPERATION PLANNING AND EXECUTION SYSTEM (JOPES)

B-13. JOPES standardizes the joint planning system used to execute complex multi-service exercises, campaigns, and operations. It is a combination of joint policies, procedures, personnel, training, and a reporting structure supported by automated data processing systems, reporting systems, and GCCS. JOPES is a GCCS application. JOPES furnishes joint commanders and war planners, at all levels, standardized policy procedures and formats to execute a variety of required tasks. It assists planners in development of OPLANs, contingency plan, functional plans, and operations orders. JOPES is used for TPFDD management and development. It defines requirements and gains visibility of the movement of forces into the combatant commanders' area of responsibility. This system assists planners with the development of detailed deployment requirements, logistics estimates, transportation requirements, and assessment of the OPLAN for transportation feasibility. JOPES also tracks, plans, prioritizes, and monitors deployment status and requirements.

MOBILIZATION MOVEMENT CONTROL SYSTEM (MOBCON)

B-14. MOBCON is an automated system that assists in scheduling and deconflicting convoys in CONUS. It produces convoy clearance requests required by state authorities to approve convoy movements from a unit's origin to the POE. MOBCON models convoy routes, selects the optimum route, and deconflicts convoy movements, providing commanders with visibility of the vehicles moving between installations. It provides the means to control military traffic flow, eliminate bottlenecks and traffic conflicts on the roadways, and plan for loading out aircraft and ships. The system is being integrated into TC-AIMS II.

RADIO FREQUENCY IDENTIFICATION (RFID)

B-15. RFID is a family of technologies that enables hands-off processing of materiel transactions for cargo moving through the DTS. RFID provides operators a means to remotely identify, categorize, and locate materiel automatically within relatively short distances. Data is digitally stored on RFID transponder

devices, such as tags or labels. Remote interrogators (located a few inches to 300 feet from the transponder device) electronically retrieve the data via electromagnetic energy (radio or microwave frequency) and send the data to the AISs.

SINGLE MOBILITY SYSTEM (SMS)

B-16. SMS is a web based computer system that integrates numerous independent command and control systems supporting DTS to provide visibility of air, sea, and surface transportation assets in a collaborative planning environment. SMS provides functional users and mission planners a single integrated view of cargo and passenger movements reported to USTRANSCOM and the mobility systems of the transportation component commands (TCCs).

TRANSPORTATION COORDINATORS' AUTOMATED INFORMATION FOR MOVEMENT SYSTEM II (TC-AIMS II)

B-17. TC-AIMS II is the Army software system designed to support deployment and redeployment operations. The program is designed for commanders and their staffs, UMOs, planners, movement controllers, and transportation operators at all levels to translate information about the mission into detailed movement plans. TC-AIMS II is being developed incrementally to provide a variety of transportation support functions. Enhancements incorporated include a simplified unit movement module (wizard) that gives the UMO the ability to create OEL/UDL, load plans and certain transportation control movement documents quicker and earlier in the movement planning process. Deployment managers use TC-AIMS II to coordinate strategic lift missions via air and water; schedule unit convoy movements; schedule interrelated deployment events; prepare load plans for vehicles, rail cars, aircraft, or ships; prepare military shipping documentation; create documentation authorizations to validate services and expend funds and account for personnel and equipment. TC-AIMS II supports the UMO in managing deployment data, creating deployment plans, and monitoring deployment status throughout all phases of the deployment. Recent enhancements include convoy planning and deconfliction functions, management of transportation movement requirements and requests, tracking unit movements, and improved map graphics.

WORLDWIDE PORT SYSTEM (WPS)

B-18. WPS is the SDDC worldwide unclassified system for managing export and import of DOD cargo at water ports. It provides detailed data concerning items of cargo arriving, departing, and on-hand at the water terminal. WPS collects cargo data for surface movements; captures receipt, staging, and loading data at ports; and generates the ship manifest/booking upon completion of vessel loading. WPS supports ITV for both general cargo and unit moves. It produces those reports necessary for terminal operations and generates the Defense Transportation Regulation ocean cargo manifest. WPS produces and reads/interrogates Automated Information Technology data storage devices (bar code and RFID) through a business process server. WPS receives advanced data from TC-AIMS II and IBS and provides ITV data to GTN. For other than CONUS movements, WPS receives the deployment cargo requirements from TC AIMS II to assist the Military Cargo Ocean Booking Office with scheduling ships.

Appendix C
Responsibilities

Deployment operations occur through the efforts of numerous agencies and individuals and the following paragraphs outline their roles and responsibilities.

USTRANSCOM

C-1. USTRANSCOM is a functional combatant command responsible for providing and managing strategic common-user airlift, sealift, and terminal services worldwide. As the distribution process owner, USTRANSCOM is responsible for integrating and synchronizing strategic and theater deployment execution and distribution operations within each CCDR's area of responsibility. Ensures deployment/redeployment requirements are met through the use of both military and commercial transportation assets based on supported commander business rules and best business practices. Determines when commercial channels can meet requirements and relieve stress on limited military assets.

C-2. It accomplishes this requirement by providing personnel augmentation to the CCDR's JDDOC. USTRANSCOM's major subordinate commands include AMC as the USAF component command; Military Sealift Command (MSC) as the Navy component command; and the SDDC as the Army service component command.

C-3. The JDDOC is a forward deployed element of representatives from the combatant command, USTRANSCOM, DLA, and the service departments to provide the visibility and synchronization of personnel and materiel moving in DTS. They typically collocate with the theater distribution staff and have the ability and authority to reach back to their parent organizations to promote integration between the strategic and theater systems for deployment and distribution. The JDDOC maintains visibility of all of the personnel, supplies, and equipment moving into the theater and manages the distribution in accordance with the supported CCDR's priorities.

AMC

C-4. AMC is the USAF component command of the USTRANSCOM and serves as the SPM for air mobility. AMC aircraft provide the capability to deploy Army forces anywhere in the world and help sustain them in a conflict. AMC performs single port management functions necessary to support the strategic flow of deploying forces equipment and supplies from the APOE to the theater. APOEs/APODs are usually designated joint aerial complexes and managed by AMC. Where designated, AMC is also the operator of common-use APOEs/APODs. Air terminal operations include supervising cargo documentation, cargo loading and unloading, providing clearance, movement operations, and security.

MSC

C-5. MSC is the Navy component command of USTRANSCOM. The mission of MSC is to provide ocean transportation of equipment, fuels, supplies, and ammunition to sustain US forces worldwide during peacetime and in war as long as operational requirements dictate. MSC provides sealift with a fleet of government-owned and chartered US-flagged ships. MSC executes Voluntary Intermodal Sealift Agreement contracts for chartered vessels. Sealift ships principally move unit equipment from the US to JOA anywhere in the world. In addition to sealift ships, MSC operates a fleet of prepositioned ships strategically placed around the world and loaded with equipment and supplies to the force. These ships remain at sea ready to move to a JOA at a moments notice.

SDDC

C-6. SDDC is the ASCC to USTRANSCOM and is the SPM at the SPOE and SPOD. SDDC is assigned to USTRANSCOM for operational control (OPCON) and is a major subordinate command of Army Material Command who has administrative control (ADCON) for Title 10 functions. SDDC is responsible for common-user land transportation and common-user ocean terminal services to deploy, employ, sustain, and redeploy US forces. The SDDC—

- Determines movement requirements and coordinates vessel selection with MSC.
- Prepares and issues port call messages, including notification to receiving installations and commands of arriving redeployment cargo.
- Manages the activities of the deployment and distribution support battalions (DDSBs) and DDSTs, transportation groups, and transportation battalions.
- Receives, stages, and transships unit equipment.
- Establishes and directs port communications, safety policies, and physical security procedures.
- Assists ITOs in shipping unit equipment and supplies to the POE.
- Develops stow plans, supervises vessel loading, inspects vessel readiness, and provides documentation.

C-7. The **Transportation Terminal Group (TTG)** is an active component SDDC TDA headquarters responsible for command and control of assigned water terminals. TTGs perform staff functions and management in support of subordinate transportation units.

C-8. The **Transportation Battalion** is an active component SDDC TDA unit under the command and control of the TTG. It is designed to conduct surface deployment, distribution, and water terminal port operations directly supporting the warfighter in its assigned area of responsibility. The Transportation Battalion —

- Plans, establishes, and conducts port operations to include cargo reception, staging, load planning, vessel load/discharge operations.
- Commands and controls Terminal Management Teams engaged in supervising and managing civilian contract operations at a SPOE/SPOD.
- Transition from command and control of TOE terminal operating units to managing and supervising civilian contract capabilities at SPODs/APODs.
- Provides a port common operational picture.
- Serves as a SPM of a strategic seaport.
- Supports port opening operations.

C-9. The **Deployment Support Command (DSC)** is a USAR TDA headquarters with the mission to command and control SDDC assigned or attached Army Reserve units and provide standardized training and readiness oversight to all Army units engaged in water terminal, deployment and distribution support, container management, and movement control operations. The DSC is OPCON to SDDC and ADCON to the 377th Theater Sustainment Command.

C-10. The T**ransportation Group** is a USAR TDA headquarters that commands, controls, and technically supervises assigned or attached SDDC TDA and TOE battalions engaged in terminal operations, terminal supervision and management operations, movement control operations, and other mobility support operations.

C-11. The D**eployment and Distribution Support Battalion** (**DDSB**) is typically a USAR TDA headquarters designed to command, control and technically supervise TOE terminal companies and detachments operating at installations and seaports. The strength of the DDSB is concentrated in its deployment expertise. Each battalion will have from one to three DDSTs and a Terminal Management Team integral to it. The DDSB—

- Commands and controls the DDSTs, which provide technical deployment related support to deploying units worldwide, and provide container management in theater.

- Commands and controls surface mobility units performing terminal operations in a SPOE/SPOD.
- Commands and controls USAR Terminal Management Teams engaged in supervising and managing civilian and contractor operations in a SPOE/SPOD.
- Assists deploying units worldwide by providing DDST's to deploying unit locations.
- Support port opening operations.

C-12. Attaching Port Management Teams and Terminal Supervision Teams increases the terminal management capability of the DDSB. The addition of the Automated Cargo Documentation Team capability increases the DDSB's berth capability. The exact number of teams in any given DDSB will depend on routine, daily operations in CONUS or OCONUS as well as theater wartime requirements. When deploying to new port areas they may be supplemented with teams from other active battalions and backfilled by USAR battalions.

C-13. The **Deployment and Distribution Support Team (DDST)** assists units with deployment planning and with staging and preparing unit equipment and personnel for worldwide movement by surface or air. When deployed to a theater of operations the DDST will manage, control, and maintain in-transit visibility of containers moving in-theater. DDSTs can be attached to USAR DDSBs or active transportation battalions. The DDST provides the DDSB/transportation battalion with integral, modular capability to meet deployment support mission requirements and can—

- Provide deployment assistance to the Brigade Mobility Officer or Installation Transportation Officer and the air/sea port operating units.
- Assist units with movement to designated POE or POD.
- Provide deployment support from fort to port through movement planning, preparation and communication.
- Ensure accuracy of documentation associated with deploying equipment.
- Provide liaison between the port and installation to minimize the frustrated cargo and equipment at the port.
- Ensure the conduct of safe operations (rail load / line haul) through effective management and control.
- Provide technical guidance/assistance to unit in preparing, maintaining, and executing movement plans, UMD, and related documentation to include BBPCT.
- Inspect equipment to ensure that vehicles are correctly identified, cargo is properly loaded on the vehicles, and no equipment is missing that would impair the loading operations at the port.
- Provide HAZMAT qualified personnel to assist unit HAZMAT certifiers in preparation of hazardous cargo documentation.
- Coordinate with USCG Container Inspection & Training Assistance Team to conduct training and inspect containers/HAZMAT cargo at installations for OCONUS deployments and Redeployment Assistance Inspection Detachment Team for USCG mission support within theater.
- Provide daily situation report and ITV updates.
- Provide personnel to monitor and report on container movements in theater.

U.S. FORCES COMMAND (FORSCOM)

C-14. FORSCOM is the Department of Army executing agent for CONUS force mobilization, deployment, and demobilization planning and execution in the Army Mobilization and Operations Planning and Execution System. The FORSCOM Mobilization and Deployment Planning System provides standardized policies and procedures for ASCCs to ensure coordinated action in mobilizing and deploying Army Forces to support approved operation plans and contingency operations. FORSCOM is the ASCC to JFCOM.

U.S. ARMY SUSTAINMENT COMMAND (ASC)

C-15. ASC is responsible for a wide range of logistics missions (less medical) in support of combat operations, ongoing Army training cycles, and worldwide humanitarian and disaster relief efforts. ASC has brigades in CONUS and OCONUS with more than 60 battalions and logistical support elements dispersed around the globe. Major ASC responsibilities are—

- Field Support – ASC operates a network of Army field support brigades and battalions, logistics support elements, and brigade logistics support teams which identify and resolve equipment and maintenance problems, as well as materiel readiness issues for combatant commands.
- Materiel Management – ASC matches materiel to mission and assures logistics readiness in the ARFORGEN process. This includes issuing, maintaining and managing theater-provided equipment in combat theaters, and left-behind equipment that can be made available to non-deployed units for training. ASC reissues fully mission-capable equipment to deployed units upon their return.
- Contingency Contracting – ASC provides support services like food and lodging through commercial sources, freeing Soldiers for combat missions. The Logistics Civil Augmentation Program (LOGCAP) uses civilian firms to provide a wide range of support services to deployed forces worldwide, while contingency contracting brigades and battalions deploy with expeditionary forces.
- APS – ASC maintains, accounts for and manages combat equipment and supplies, and humanitarian mission stocks, at land- and sea-based positions strategically located around the globe. The US Army Medical Materiel Agency manages the Class VIII portion of APS.

INSTALLATION MANAGEMENT COMMAND (IMCOM)

C-16. IMCOM is a Direct Reporting Unit of the Assistant Chief of Staff for Installation Management, Headquarters, Department of the Army, and is responsible for managing Army installations in support of readiness and mission execution (including deployment). In the CONUS installation, commanders have specific support responsibilities for movement planning and execution. In overseas commands, support groups have similar deployment support responsibilities. Installation responsibilities supporting deploying units range from maintaining a DACG and PSA capability to providing marshalling area support. Each CONUS installation is required to appoint a UMC as the unit's contact within the installation staff for deployment transportation support and instructions.

C-17. The A/DACG is an ad hoc organization provided by the supporting installation and is designed to assist AMC and the deploying unit in receiving, processing, and loading personnel and equipment. Its composition is mission dependent but cargo transfer companies are best suited for the role. In CONUS, the A/DACG is a shared responsibility between IMCOM installations and FORSCOM units.

C-18. The UMC—

- Provides deployment guidance.
- Assists units with the OEL and UDL.
- Processes convoy clearances and special hauling permits.
- Verifies strategic lift requirements and assists in designating loading sites and times.
- Assists in identifying and obtaining BBPCT materials, containers, and pallets.
- Coordinates MHE.
- Ensures unit equipment is properly marked.
- Supports unit movement at railheads and airfields.
- Coordinates airlift requests.
- Reviews and approves deployment plans annually.
- Provides in-transit visibility support to deploying units.
- May conduct annual movement planning and execution workshops for Active Army unit movement officers.

C-19. Refer to Appendix D for the responsibilities of the UMO.

C-20. Refer to Appendix E for the responsibilities of the mobility officer.

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Appendix D

Unit Movement Officer

The well trained UMO will be prepared for any contingency. Many variables may require changes to plans and data, so the UMO must be technically proficient to meet the changing demands. UMO proficiency will not only enhance unit readiness, but expedite response time in a crisis that is critical to project the proper force.

DUTIES

D-1. The UMO is the commander's appointed representative and attends to the details of getting the unit ready for movement. This appendix outlines the responsibilities of the UMO and provides the references for them. Commanders appoint, in writing, an officer or NCO (E6 or above) as a UMO and an alternate (E5 or above). The designated persons will attend an approved school.

D-2. The UMO must focus on thorough planning, coordination, training, and execution of unit deployment. Specific responsibilities of the UMO include—

- Preparing and maintaining documentation for unit movement in TC-AIMS II. This includes maintaining the unit movement data, from which the OEL is generated, and creating and processing the UDL.
- Preparing the unit movement plan.
- Planning convoy movements.
- Requesting commercial and military transportation.
- Coordinating with higher headquarters and support activities for unit movements.
- Coordinating logistical support for the move.
- Coordinating with the A/DACG and CRE at the APOE and APOD.
- Coordinating with SDDC representatives at the SPOE and SPOD.
- Transporting of the units' organic equipment and cargo.
- Establishing and training unit loading teams.
- Obtaining 463L pallets, containers; and BBPCT materials.
- Ensuring all cargo is properly labeled with MSLs and RF tags when directed.
- Ensuring unit personnel are authorized to certify HAZMAT.
- Ensuring packing lists are prepared for containers.
- Maintaining movement binders or continuity books that include appointment orders, training certificates, recall rosters, OEL, transportation requests, and BBPCT requirements.

D-3. The UMO will maintain a deployment binder for reference and continuity. The following is a list of recommended contents—

- Unit movement SOP.
- Appointment orders and training certificates for UMOs, load teams, and HAZMAT certifiers.
- Recall rosters and instructions.
- Coordination requirements for plan execution and a list of supporting agencies and POCs.
- Major equipment shortage list.
- Supply list by supply support activity, coordination requirements, and prepared requisitions.
- List of BBPCT on hand and due out.
- OEL.

- Copies of packing lists.
- Prepared copies of transportation requests, convoy movement requests, and special hauling permits.
- Strip maps for convoy routes.
- Advance party composition and instructions.
- Sample forms required for personnel support during deployment.
- Transportation requirements.
- Rear detachment and family support group operations plans.
- Unit-generated checklists or SOPs to assist in deployment planning and execution.
- Off-duty hours contact telephone numbers for deployment support organizations.

REFERENCE LIST

D-4. Table D-1 identifies the primary references for the functions performed by the UMO.

Table D-1. Functional reference list

FUNCTION	*REFERENCE*
Duties of UMO	DTR Part III
Unit movement data	DTR Part III; FORSCOM Reg 55-2
Unit movement plans	FM 3-35 Appendix H; TEA Pam 700-2; FORSCOM Reg 55-1
Transportability of unit equipment	TEA Pam 700-5; TB 55-46-1
Motor transport operations	FM 55-30; TEA Pam 700-2; TEA Pam 55-20
Convoy plan	FM 55-30
Rail operations	FM 4-01.41; TM 55-2220-058-14; TEA Pam 55-19; TEA Pam 700-2
Port operations	FM 55-60
Airlift operations	DTR; TM 38-250; TEA Pam 55-24; TEA Pam 700-2
Sealift operations	DTR; TEA Pam 700-2; TEA Pam 700-4
Vehicle load plans	TEA Pam 55-20
Aircraft load plans	TEA Pam 55-24
Tiedown of equipment in aircraft	TEA Pam 55-24
Containerization	DTR Part IV; FM 55-80; MIL HDBK 138A; TEA Pam 55-23; TEA Pam 700-2
HAZMAT	Title 49 CFR; TM 38-250
AIT/RF tags	DTR; DA Pam 700-85

Appendix E
Mobility Officer

The purpose of this appendix is to provide an understanding of the roles and responsibilities of the Mobility Officer, Specialty 882A. The Mobility Officer program was implemented to provide units with embedded expertise in the planning and execution of deployment and redeployment operations. Their initial training or basic course is designed to give them the tools to successfully deploy and redeploy brigade combat teams. These officers represent a significant investment on the part of the Army leadership to achieve the desired expeditionary qualities in Army forces. It is incumbent on commanders to use the mobility officers to plan and execute deployments and to train unit personnel to perform the tasks related to deployment.

BRIGADE

E-1. Assignment as a Brigade Mobility Officer is normally the initial duty assignment after completing the Basic Course. The mobility officer works in the S-4 section but routinely coordinates with the S-3. Duties include—

- Advising commanders and staffs on deployment and distribution processes, procedures, and issues.
- Planning and coordinating deployments and redeployments.
- Assisting in the preparation of deployment/redeployment plans, orders, and SOPs.
- Developing, coordinating, and monitoring deployment training for unit movement officers, TC-AIMS II operators, air load planners, hazardous materials certifiers, and unit load teams.
- Review company and battalion input into TC-AIMS II.
- Providing accurate unit movement data to the JPEC to influence the TPFDD.
- Coordinating with installation activities for deployment support.
- Assisting commanders in planning and conducting operational maneuver.

DIVISION

E-2. The mobility officer at the division usually has worked in a brigade and has moved up to the division staff. The position is in the G-4 Division DTO but spends considerable time coordinating with the assistant chief of staff, operations (G-3) and assistant chief of staff, plans (G-5). Duties include—

- Planning and supervising deployment and distribution operations.
- Coordinating movement requests with military and commercial agencies.
- Translating and submitting unit movement requests in the DTS.
- Training unit personnel in unit movement processes and on their tasks associated with unit movement information systems.
- Overseeing the use of deployment automation systems such as TC-AIMS II (in some instances they may be the system administrator).
- Review company and battalion input into TC-AIMS II.
- Advising and assisting commanders and staffs with unit movement operations
- Coordinating with installation activities for deployment support.
- Conducting transportation feasibility analyses.
- Providing accurate unit movement data to the JPEC to influence the TPFDD.

- Providing continuity in planning and monitoring division deployment and distribution operations.
- Mentoring junior mobility officers.
- Promoting the Mobility Officer program.

CORPS

E-3. The mobility officer is located in the Corps G-4 Transportation Office as part of the commander's logistics staff. The duties are similar to those of the Division Mobility Officer and include the oversight of those Corps units without a mobility officer.

ARMY SERVICE COMPONENT COMMAND

E-4. The mobility officer is normally a functional manager for JOPES in the Movements and Distribution Division, G/C4 Logistics, Army Component Command. As a functional manager for the JOPES the mobility officer has responsibility for the coordination and movement of forces. Maintains working knowledge of JOPES and supporting systems, command roles and relationships, Joint and component policies, operational procedures, directives, communications and related automated data processing specifications, files, applications and capabilities that directly support DOD-wide time-sensitive planning for operations; and executing OPLANs/contingency plans and operational orders (OPORD). As a staff authority on the use of the automated planning processes in JOPES and related planning and deployment execution systems, provide essential continuity in analysis and implementation of progressive improvements to Army component command and control procedures and methods. Duties include—

- Validating and monitoring movements and movement data.
- Coordinating JOPES actions with other governmental agencies.
- Coordinating staff actions on all matters pertaining to JOPES.
- Preparing and distributing JOPES data reports and validation messages.
- Monitoring newsgroups for critical planning and actions to include validation and unlock messages.
- Building and validating ULNs.
- Mentoring junior mobility officers.
- Promoting the Mobility Officer program.

THEATER SUSTAINMENT COMMAND/EXPEDITIONARY SUSTAINMENT COMMAND

E-5. The mobility officer is responsible for managing the movement of units and providing a strong knowledge base for automated deployment systems and processes. Normally, this senior mobility officer (CW4) is located in the support operations section. He is the technical expert in the deployment and RSOI processes for the theater and provides guidance and mentorship to those units within the theater. Duties include—

- Planning and monitoring full spectrum theater transportation support to deployment and distribution operations.
- Determining theater transportation requirements to support deployment and distribution.
- Performing transportation feasibility analyses of deployment and theater distribution operations to optimize the throughput capacity of the theater network.
- Performing transportation feasibility analysis of the TPFDD.
- Providing infrastructure analysis on the different modes of transportation within the theater.
- Coordinating with Joint and multinational forces to plan and execute their movements in theater.
- Coordinating and managing theater-level common user land transportation (CULT) assets.
- Planning, coordinating, and monitoring RSOI operations for Army forces.
- Determining theater transportation requirements.

- Mentoring junior mobility officers.
- Promoting the Mobility Officer program.

SUSTAINMENT BRIGADE

E-6. The mobility officer in the sustainment brigade is responsible for—

- Overseeing the execution of full spectrum transportation support to deployment and distribution operations in their area of operations.
- Managing mode assets to ensure distribution priorities are met.
- Coordinating the execution of sustainment and operational convoys.
- Planning and coordinating the execution of RSOI operations for Army forces.
- Optimizing the capacity and throughput capabilities for each node (railhead, seaport, airport, marshalling/staging area, etc.) to support customers in their area of operations.
- Coordinating and managing CULT assets.
- Mentoring junior mobility officers.
- Promoting the Mobility Officer program.

RAPID PORT OPENING ELEMENT (RPOE), JOINT TASK FORCE-PORT OPENING (JTF-PO)

E-7. The mobility officer is assigned to the Distribution Control Section and is responsible for planning and executing the deployment/redeployment of the RPOE and planning and operation of the ground distribution network. Other duties include—

- Providing technical expertise to the RPOE commander, staff, and USAF elements on all aspects of deployment and distribution.
- Planning and coordinating the use of the available automated support tools.
- Planning and establishing an ITV system to track and report the movement of personnel, supplies, and equipment through the port and into the distribution system.
- Assisting the Joint Assessment Team in determining theater transportation requirements to support deployment and distribution
- Coordinating support with Joint and multinational forces and host nations to facilitate JRSOI.

SPECIAL FORCES GROUP

E-8. Assignment as a Special Forces Group Mobility Officer is similar to being assigned to a BCT and is normally the initial duty assignment after completing the Basic Course. The mobility officer works in the S-3 or S-4 section and assists in the planning and execution of Group movements. Duties include—

- Advising commanders and staffs on deployment and distribution processes, procedures, and issues.
- Planning and coordinating deployments and redeployments.
- Coordinating movement requests with military and commercial agencies.
- Assisting in the preparation of deployment plans, orders, and SOPs.
- Developing, coordinating, and monitoring deployment training for unit movement officers, TC-AIMS II operators, air load planners, hazardous materials certifiers, and unit load teams.
- Overseeing the use of deployment automation systems such as TC-AIMS II (in some instances they may be the system administrator).
- Providing accurate unit movement data to influence the TPFDD.
- Coordinating with installation activities for deployment support.
- Assisting commanders in planning and conducting operational maneuver.
- Providing continuity in planning and monitoring group deployment and distribution operations.

MOVEMENT CONTROL BATTALION

E-9. The mobility officer is assigned to the S-3 section and is responsible for planning and monitoring the employment of the attached MCTs. In addition, the mobility officer—

- Provides technical expertise to the battalion commander, staff, and MCTs on all aspects of deployment and distribution operations.
- Coordinates individual and unit training.
- Coordinates the installation and use of automated deployment and distribution information systems.
- Coordinating CULT assets.
- Mentoring junior mobility officers.
- Promoting the Mobility Officer program.

SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND

E-10. SDDC has a mix of active and Reserve forces to carry out their deployment responsibilities:

E-11. **DSC:** The DSC is a reserve component unit organized under a TDA structure. Mobility officers are assigned to the G3/5 Operations Division (CW2), G3/5 Plans Division (CW2), two in the G7 Mobility Systems Division (CW2), and two in the G7 DSB/MC Training Division (CW3/2) and responsible for—

- Providing a strong knowledge base for automated deployment systems and processes.
- Training assigned deployment support and movement control personnel in unit movement processes and on their tasks associated with unit movement information systems.
- Developing, coordinating, and monitoring training for units providing deployment, distribution, movement control, terminal operations, watercraft operations, and rail support; and automated deployment support tools.

E-12. **Transportation Group:** The SDDC transportation groups are active units organized under a TDA structure**.** Each has one mobility officer who is responsible for providing a strong knowledge base for automated deployment systems and processes. This senior Mobility Officer (CW4) is located in the deployment and movement control section. He is the technical expert in the deployment and RSOI processes for the SDDC operations and provides guidance and mentorship to the mobility officers in the subordinate battalions. His responsibilities include—

- Planning and monitoring full spectrum SDDC support to deployment and distribution operations.
- Performing transportation feasibility analyses of deployment and SDDC operations to optimize the throughput capacity of the theater network.

E-13. DDSB. The DDSBs are reserve component units organized under a TDA structure. Each DDSB has two mobility officers (CW2) assigned to the S2/3 section and responsible for—

- Providing movement guidance to deploying units.
- Verifying ship and aircraft requirements (determined by USTRANSCOM) for the unit.
- Coordinating container and materials handling equipment with commercial and military sources and load start and completion times at terminals.
- Supporting unit moves at railheads, seaports, and airfields.

NATIONAL GUARD

E-14. The mobility officer is located at the Joint Force Headquarters and is responsible for providing technical expertise and training to assist units in peacetime, mobilization, contingency movement planning and State Active Duty missions to include convoy operations, load planning, UMD reporting procedures, deployment planning, UMO training and Mobilization Movement Plan Development and updates. These duties include—

- Conducting unit movement workshops. This training includes movement plan development, convoy operations, load planning, AUEL training, and deployment movement planning.
- Assisting units in collecting UMD and ensure that it is accurate. Assist the Defense Movement Coordinator (DMC) with inputting unit data into TC-AIMS II and reporting annual updates to FORSCOM.
- Assisting the DMC in processing convoys for Active Duty, National Guard, and Army Reserve units moving within the state. Obtain blanket permits when required. Monitor convoy movements as required.
- Assisting the DMC in coordinating airlift to support training. Observe aircraft loading and obtain data for departure reports.
- Assisting deploying units in all areas of transportation for personnel and equipment from home station to mobilization station. Liaison between units and state headquarters.
- Building load plans and provide expertise to maximize the loading of planes, rail cars and vessels.
- Advising units on requirements for transportation of hazardous materials on various modes of transportation both in CONUS and internationally.
- Assisting with the development and updating of unit movement SOPs.
- Coordinating the movement of oversize/overweight equipment with the state Department of Transportation.
- Conducting evaluations of unit's movement operation during readiness exercises.
- Providing guidance and training for maintaining and updating TC-AIMS II.
- Training personnel in the use of MOBCON for convoy management.
- Providing technical expertise to mobilizing units for transportation of unit equipment and personnel from home station to mobilization station.
- Providing interface with receiving installations for transportation requirements. When requested by installations, assist unit with deployment transportation issues.
- Promoting the Mobility Officer program.

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Appendix F
Installation Support

Heretofore deploying forces were supported by other military units as they prepared to move from the installation to the POE. The garrison staff, with civilians and contractors as the majority of their work force, has now assumed this role because military units are no longer available. The purpose of this appendix is to identify the functions performed by the garrison staff to support deploying and redeploying forces.

INSTALLATION SUPPORT

Installations are an integral part of the deployed force from home station to the foxhole. Operational deployments and rotational assignments across the globe mean installation capabilities will transcend more traditional expeditionary support requirements associated with mobilizing, deploying, and sustaining the force. More than a jump point for projecting forces, installations serve a fundamental role in minimizing their footprint through robust connectivity and capacity to fully support reach back operations.

Installation facilities must readily adapt to changing mission support needs, spiraling technology, and rapid equipment fielding. Installation connectivity must also support en route mission planning and situational awareness. Education and family support will use the same Installation support connectivity to sustain the morale and emotional needs of our Soldiers and their families.

United States Army White Paper -- *Serving a Nation at War*

INSTALLATION DEPLOYMENT SUPPORT

F-1. The installation deployment support plan (IDSP) defines the concept of support and should include measures to address the quality of its services as it prepares units for deployment. For example, installations should exact quality control measures in each of its deliverables from training to facilities management to the delivery of emergency/medical services. Further, quality control ensures units have the proper HAZMAT certificates, and customs and movement control documents required for all modes of transit. Quality control ensures ITO/UMC reviews movement planning and readiness checklists for completeness to the civilian worker responsible to make certain unit equipment is properly configured, safe and transportable. The ultimate challenge for installations is to consolidate its resources to ensure the delivery of qualified, deployable units on time to the right location.

F-2. The garrison is the organization that provides services and resources to their installation customers. The senior commander (SC) is a general officer who is also a corps or division commander; in the capacity of a corps or division commander the focus is on mission. On the other hand the SC focuses on the installation including oversight of IMCOM services provided to all units. The garrison commander is institutionally focused and provides a common level of service to all on the installation.

F-3. AR 5-9 designates the areas installations must be prepared to support and the units within the boundaries are the responsibility of the installation to support. The installation must establish, and operate the infrastructure to assemble and process the units. Certain installations are designated a power projection platform (PPP) or a power support platform (PSP). A PPP is an Army installation that strategically deploys one or more BCTs and/or mobilizes and deploys high priority Army reserve component units. A PSP is an active Army or federally activated state operated installation that strategically deploys individuals from all

services, civilians, and mobilized reserve components. PSPs also house training facilities and heavy equipment for reserve component combat units.

F-4. A typical installation deployment processing flow diagram (Figure F-1) provides an indication of the magnitude of support involved. The installation deployment-processing site is a centralized location where deploying units process and assemble their equipment for movement to the POE. The site has several different labels, such as alert holding area, installation support area (ISA), and deployment readiness reaction fields, but the functionality is the same.

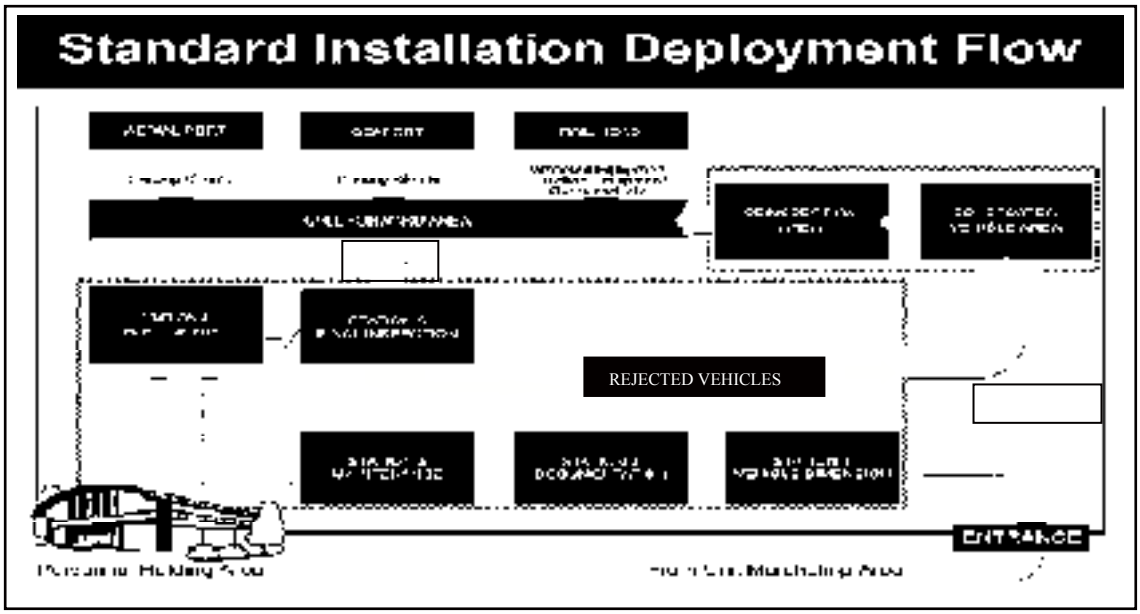

Figure F-1. Installation deployment processing site

DEPLOYMENT SUPPORT

F-5. Once the unit has prepared their equipment for deployment, the equipment moves to a central staging area on the installation for further processing. The name, organization and responsibilities for these staging areas may differ between installations however the functions performed to prepare units for movement are essentially the same. The size of the units supported and the frequency of their deployments will have a direct bearing on the size of the installation deployment processing facility.

F-6. Human Resources

- **SRP.** The supporting installation or area command normally establishes SRP checks as a part of the predeployment process to ensure personnel readiness status. These checks include personnel readiness status, military pay support, legal, medical, dental, security, and unit ministry support. The installation will assist commanders, Soldiers, emergency essential civilian employees, and their Families in preparing for deployment. Additional responsibilities include conducting predeployment briefings to assist Soldiers, deploying Army civilians, and their Families in putting their personal affairs in order, and to inform them of available support services.
- **Deployment support process.** This comprehensive process that ensures Soldiers, DA Civilians, and their Families are better prepared and sustained throughout deployments. The goal of deployment support process is to facilitate Soldier, DA Civilian, and Family well-being throughout the deployment and provides a means to identify those who may need assistance when faced with the challenges of deployments.

F-7. Directorate of Family, Morale, Welfare and Recreation

- **Family support.** Procedures should be in place for family support while the Soldiers are deployed and may include forming family support groups to assist in resolving problems and

formally interacting with Army Community Services, the garrison ministry team, the Staff Judge Advocate, and the family life center. The families of single Soldiers should also be included in the family support network. Family support is the responsibility of the deploying commander and the garrison commander. A family assistance officer may be appointed to facilitate a family support network; advise family members of services available through the Red Cross, Army Emergency Relief, and Army Community Services; and advise family members of their entitlements for travel and shipment or storage of household goods or privately owned vehicles.

F-8. Directorate of Plans, Training, Mobilization and Security

- **Emergency operations center (EOC).** The multitude and variety of actions required of an installation staff during a force projection operation mandates the need for centralized control. The installation activates an EOC to satisfy this need. These centers provide the commanders with the ability to schedule facilities, secure resources, manage diverse requirements, track deploying forces and most importantly, manage change. EOCs are activated and operated to provide the commander with the ability to monitor unit progress, schedule facilities, secure resources, manage diverse requirements, track deploying forces and most importantly, manage change. Installations assist units with coordination, preparation and reporting readiness status and unit movement flow tracking.
- **Training.** Unit commanders are responsible for training their Soldiers for deployment and to be capable of fulfilling their assigned mission. The garrison staff coordinates the equipment and training areas to assist deploying units during preparation for deployment. Installations should coordinate with units to establish training priorities and publish training schedules according to deployment dates, assess and track status of training and equipment availability. Individual training is normally conducted on subjects supported by the installation. The goal is to build Soldiers confidence in their equipment and weapons and provide specialized information regarding theater operations.
- **Security.** The command security programs, such as SAEDA, and physical, information, and personnel security, to ensure the safety and safeguarding of deploying units and the installation. Installations coordinate with units to provide for the security, maintenance and periodic inventory of left behind unit equipment and personal property belonging to deploying unit members. Deploying units coordinate with the installation to dispose of nonessential files, consults installation security or information management directorate for disposition of classified or cryptographic material, prepares classified cargo for shipment, and ensures escorts or supercargoes are cleared by installation security to handle classified cargo. Equipment should be guarded while it is being staged at the installation, or at railheads, or en route to POEs. Units may consider assigning supercargoes to accompany equipment during transit from the SPOE to the seaport of debarkation SPOD. As a minimum, equipment should be protected against theft and pilferage. A key custodian should be appointed to assist with specialized cargo that may require keys. Two sets of keys will be available for each locked item (one set for the supercargoes or escorts and one set for the custodian).

F-9. Directorate of Logistics (DOL)

- **ISA**. The initial preparation of unit equipment for deployment, including preparation of TCMDs, RFID tags and MSLs, hazardous cargo documentation, vehicle preparation, building 463L pallets, and containerization of equipment is begun in the unit motor pool. Once the equipment is prepped and documented, it is moved to the ISA for inspection and further processing. The installation is normally responsible for the operation and organization of the ISA, but may be augmented by unit teams from SDDC DDSBs. The installation normally provides command and control of the ISA by establishing a control center to monitor unit movements and validate unit equipment preparation.
- **Container/pallet management.** The installations staff manages container/pallet purchasing - leasing programs. Additionally, installations coordinate with units for issue and receipt of commercial/military shipping containers and pallets. This should include coordinating with units to identify special/material handling equipment requirements. Installations manage container/pallet purchasing and leasing programs. Installations coordinate with the Army

Intermodal and Distribution Platform Management Office for order, delivery, and turn–in of leased ISO containers; for acquiring or transferring Army–owned ISO containers; and for obtaining disposition of commercially owned ISO containers. Additionally, installations coordinate with deploying units for issue and receipt of commercial/military shipping containers and pallets and to identify special/material handling equipment requirements. Installations are responsible to maintain inventory of Army owned and leased containers, flatracks and other distribution platforms in storage and/or issued to deploying units.

- **Maintenance.** Maintenance performed at installation facilities is designed to minimize the impact to deploying units and their maintenance organizations. The DOL generally provides support maintenance to deploying units to meet required mission capable readiness status and deployment timelines. Installations support the Army Reset Induction program to sustain/restore a unit to combat readiness prior to, during and after deployment. Support maintenance provided by the installation normally consists of repairs to major end items, tactical and support vehicles, aircraft, combat vehicles, modules, range devices, components and assemblies.
- **Transportation.** Installations review unit movement plans to assess transportation needs for each deploying unit. They coordinate with SDDC to acquire transportation resources to support deployment by all modes from home station to mobilization station to port of embarkation. The ITO coordinates with units for the number and type of rail cars, containers or commercial trucks required to move the units. Support also includes coordination with USAR units for timely movement to mobilization sites. Installations should be prepared to unload and secure unit equipment when the unit personnel may not be available.
- **Unit movement data.** Accurate and timely submission of air, rail, convoy, or container requirements is essential to the commitment of lift assets. Units coordinate with ITO/UMC to obtain convoy clearances and special hauling permits, route information, etc., to meet deployment requirements. Units use deployment automated information systems to routinely update their unit movement data. The UMC coordinates with the Mobility Officer to ensure a valid unit deployment list is provided to the ITO/UMC prior to requesting lift assets, additional BBPCT or conducting movements.
- **Personal property.** The ITO provides personal property services such as storage, movement, and shipment of personal property. ITO coordinates with deploying units to ensure processing of personal property, accuracy of inventories, and legal matters are regarded to ensure delivery, receipt and release of personal property to owners or designated representatives when required. As a key element of the sustaining base, installations are essential to the process of sustaining redeploying forces by caring for personal property. The ITO responsibilities include services such as storage, movement and shipment of personal property. The ITO coordinates with redeploying units to ensure processing of personal property, accuracy of inventories, and legal matters are regarded to ensure delivery, receipt and release of personal property to owners or designated representatives upon return.
- **A/DACG.** The installation has the responsibility for establishing and operating the A/DACG when units are departing or arriving by air. Refer to Appendix G for guidance on A/DACG operations.
- **Rail operations.** Rail is used to move large concentrations of equipment and/or when the movement of heavy forces is involved. The installations that fall in this category are normally well versed in ordering equipment, documentation, and loading. The ITO orders railcars in the types and quantities required based on the deploying unit's UDL and inspects all railcars for serviceability before units begin loading. The ITO also coordinates service with the SDDC and the railway agent. The ITO provides technical advice, publishes loading schedules, and provides HAZMAT documentation as required. Also the ITO prepares the Government Bill of Lading (GBL), commercial bill of lading (CBL), and provides a DD Form 836 (*Dangerous Goods Shipping Paper/Declaration and Emergency Response Information of Hazardous Materials Transported by Government Vehicles/Containers/Vessels*), if necessary, for HAZMAT.
- **ITV.** To ensure asset tracking and provide ITV of distribution platforms, installations will provide RFID/AIT technology as required to support deployment operations. Accountability is essential to control costs and ensure sufficient assets are available for reuse. Installations are

responsible to account for and report inventory balances of all owned and leased distribution platforms returned to the installation by redeploying forces. Radio frequency tags and military shipping labels are used to report automated data capture of assets and to track movements at key nodes. Installations are responsible to develop and implement an ITV network of AIT devices to provide 24 hour access to ITV database servers to track or locate tagged items in congested ports, container yards and staging areas and to monitor movement of unit equipment through the DPC enroute to the A/SPOE. Installations should ensure key nodes, such as the A/DACG and A/SPOE are outfitted with appropriate AIT hardware to ensure uninterrupted ITV reporting of unit movements. Units apply RFID tags and military shipping labels to vehicles, pallets, and containers to provide in-transit tracking of their assets. Radio frequency tags report information in real time and track movement of unit equipment from point of origin to final destination. Installations should implement ITV plans to acquire and install AIT hardware at key installation nodes to ensure in-transit visibility of unit equipment and cargo within and around the installation and through the DPC.

F-10. Directorate of Public Works

- **BBPCT material**. All vehicles, crates, containers, boxes, barrels, and loose equipment on a vehicle must be blocked, braced, and tied down to prevent shifting during transit. Units should identify necessary supplies and equipment which cannot be moved by organic transportation assets to the ITO. Installations determine the transportation requirements and support unit load preparations by acquiring sufficient BBPCT to protect unit equipment from damage during movement to the embarkation sites.

REDEPLOYMENT SUPPORT

F-11. The significance of returning units to their home station in a timely manner has risen dramatically to meet the Army Force Generation and Reset requirements. All systems and procedures used during deployment operations apply to redeployment operations. Installations designated as demobilization sites complete processing of units and individuals being separated or released from active duty and returning to reserve status. It should be noted that when forces are relocating to their home station their focus is on reestablishing force readiness for subsequent contingency mission requirements.

F-12. Installations provide support at the POD to receive inbound unit personnel, equipment and cargo and to provide onward movement to the next destination. Installations will coordinate with the supporting commander(s) to—

- Prepare returning units for onward movement to home station or mobilization station.
- Receive and ship outbound unit equipment and cargo
- Provide readiness processing for returning Soldiers
- Sustain returning forces and individuals until they arrive at final destination
- Assist in obtaining transportation of all modes for movement of unit equipment

F-13. The IDSP should include measures to ensure the quality of its services as it prepares to receive redeploying units. Effective redeployment support at the installation level means transportation is coordinated, Unit equipment is clean and in proper shipping configuration, HAZMAT identified and documentation completed to include unit movement documentation. The ultimate challenge of installations is to maintain unit integrity to ensure the successful return of a unit's equipment to aerial and sea ports of debarkations and ultimately its final destination.

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Appendix G

A/DACG Operations

The A/DACG is an ad hoc Army organization responsible for supporting Army units departing or arriving by air. A model organization is outlined with military grade structure however there are countless instances where an A/DACG is operated by trained civilian personnel. Units other than transportation have been tasked to establish and operate an A/DACG operation out of necessity and this appendix is designed to provide guidance on establishing and operating such a facility.

ORGANIZATION

G-1. The USAF normally exercises overall control of airlift and loading/unloading operations at the departure and arrival airfields. Airlift resources will at all times, remain under the operational control of the USAF. The USAF will establish a CRE at both departure and arrival airfields. The CRE provides the commander, command and control staff, and communications required to support AMC's worldwide refueling and airlift operations. The CRE may also include additional contingency support elements such as aircraft maintenance, aerial terminal, weather, intelligence, flight surgeon, etc. These contingency support elements are under the direct command of the CRE commander and are organizationally subordinate to the CRE. The CRE conduct worldwide operations from airfields ranging from austere locations to established facilities at civilian airports or military airfields. They provide minimum essential onload, offload, and enroute AMC mission support during deployment, employment, and redeployment operations. It provides continuous liaison with all interested agencies to ensure the operation proceeds according to plan.

G-2. The A/DACG will coordinate and control loading and offloading of units for deployment or redeployment. The A/DACG is organized as an element within the installation table of distribution and allowances. Personnel and equipment resources come from units or activities which are not required to move with the transported force. The installation must plan manning for continuous operations. The A/DACG will be in place before the first deploying unit arrives. The A/DACG must be structured to provide essential support for the transported force. Each group will be made up of at least a command and control element, and other administrative and support personnel as determined by the size and scope of the operation (see DTR Reg 4500.9-R, Part III for the recommended organization). The A/DACG is the liaison with the USAF at the airfield. Commanders of units and installations that have a directed or implied contingency mission involving air movement operation should continuously identify, maintain, and train the personnel who will staff the A/DACG to ensure that responsibilities can be fully accomplished, even on short notice. When possible marshalling/outload areas should be surveyed to provide current and accurate information on facilities available and support considerations. Designated A/DACG personnel must undergo appropriate training for carrying out functional responsibilities to support an air movement. Personnel responsible for out loading must know loading procedures that apply to the types of aircraft to be loaded and be trained to inspect and certify hazardous material. DTR Reg 4500.9-R, Part III, provides additional guidance on the operation of an air terminal.

PLANNING AND PREPARATION

G-3. Preparation for air movement begins with receipt of the mission directive or order and continues through the planning phase until execution. A series of local joint conferences are required during the planning phase for close coordination and to ensure a clear understanding of responsibilities. As a minimum, a joint planning conference will be held as soon as possible after receipt of the air movement order or directive. A final coordination conference will be held immediately before the move. Participating elements should be represented at these conferences by key personnel. Conference personnel must be able

to resolve problems and make decisions for their organization to include interface requirements. These conferences do not rule out the need for continuous coordination throughout the planning cycle. The task force commander or representative will conduct a final joint coordination meeting with the representative of the deploying unit, the A/DACG, and CRE. At this meeting, the deploying unit, A/DACG and CRE will present planning status and identify any problems. Air movement requirements will be based upon UMD and provided to FORSCOM IAW FORSCOM Reg 55-1 or as otherwise specified by the movement order or tasking directive. FORSCOM consolidates and provides these refined lift requirements to JFCOM, the supported combatant commander, and USTRANSCOM. USTRANSCOM provides the unit movement requirements to generate strategic lift schedules which are published in GCCS. Once in GCCS, these schedules are available to the Joint Deployment Community. Installation GCCS operators should coordinate the dissemination of these lift schedules to ITOs/DTOs, A/DACGs, and respective UMOs.

ARRIVAL/DEPARTURE AIRFIELD CONTROL GROUP

G-4. The A/DACG is an ad hoc Army organization established to control and support arrival at the APOD and departure from the APOE. Elements of a movement control team and an inland cargo transfer company typically operate the A/DACG however the mission can be performed by almost any unit with the properly trained personnel and equipment. The organizational elements of an A/DACG, command, operations, joint inspection, and loading/unloading, remain constant but the size and capabilities are mission dependent.

G-5. In CONUS the A/DACG will normally work for the DOL however OCONUS a sustainment brigade may be assigned the responsibility to oversee the establishment and operation of the A/DACG. Although an ad hoc organization the A/DACG should be organized so that the command and control of the activity is clearly understood. As a minimum the following steps should take place:

- Exercise overall operational planning, supervision and management of the A/DACG activities within installation as pertains to safety, training and operations.
- Develop a SOP outlining safety, training, and operations procedures.
- Ensure all civilian personnel involved in A/DACG operations are sufficiently manned, trained and funded for mission accomplishment. Ensure A/DACG personnel receive annual training.
- Ensure all A/DACG personnel with a need to drive on the flight line are trained and certified by the appropriate authority. This certification should be annotated on the individual's U.S. Government Motor Vehicle Operator's Identification Card, OF 346.
- Establish and provide guidance on security requirements.
- Brief all personnel engaged in A/DACG operations.
- Establish communications.
- Obtain parking and flow plan from the mobility force.
- Coordinate MHE with the mobility force.
- Ensure sufficient loading team personnel and vehicles are available to accomplish the mission.
- Advise the deploying units of the airflow and expected arrival of aircraft.
- Receive passenger and cargo manifests from the loadmaster.
- Supervise off-loading the aircraft (normally accomplished by the aerial port squadron), including removal of shoring and dunnage.
- Ensure communications between CRE and A/DACG and all functional areas of CRE.
- Inform unit of any change in operations.

DEPARTURE OPERATIONS

G-6. The DACG normally performs the following functions while processing Army forces moving by air from an aerial terminal or designated airfield:

- Liaison with the AF.
- Assist with load planning.
- Command and control of Army units prior to release to AF.
- Manage flow of Army personnel and equipment.

- Weigh and measure specified equipment.
- Provide emergency maintenance, defueling, and related services.
- Coordinate MHE.
- Coordinate pallets, shoring, and dunnage.
- Conduct safety briefings and escort chalks to ready line.
- Report status.

G-7. Figure G-1 is a notional layout for an embarkation operation at an aerial terminal.

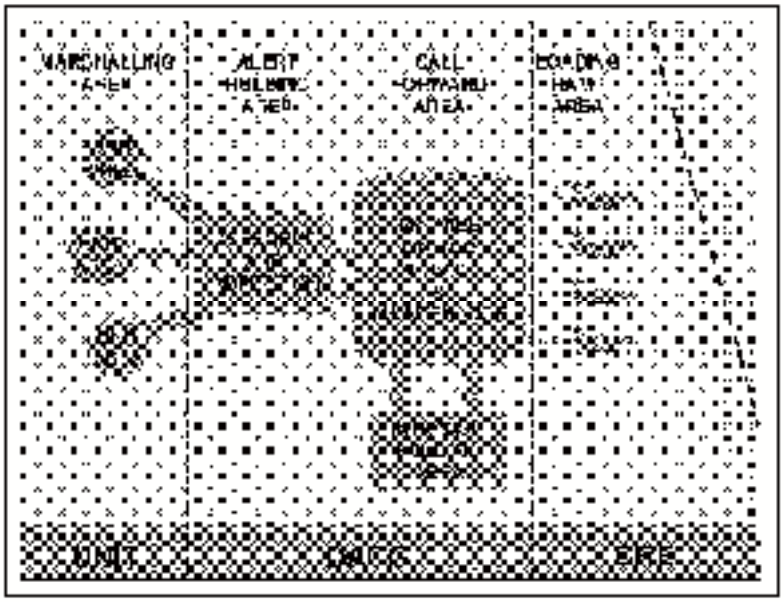

Figure G-1. Notional APOE

G-8. Approximately 35 to 40 personnel are required to operate a departure airfield support activity on a 24-hour basis. Table G-1 lists the Army personnel that are needed to perform the Army responsibilities at a departure airfield. The number could be higher or lower depending on the type and size of the move. Maximum on ground or MOG is the term used when determining USAF aerial terminal sizing and refers to the maximum number of aircraft that can be accommodated on an airfield (parking MOG).

Table G-1. Minimum essential personnel for A/DACG (Per Shift)

GR	*QTY*	*DUTY TITLE*
LT	1	OIC
SFC	1	Shift Leader
SSG	1	Operations NCO
SSG/SGT	2	Trans NCO/AMO
SSG/SGT	2	Pax NCO
SGT	1	Mechanic
SGT/SP	2	Scale Operator
SP	2	Truck Driver
SP	2	Forklift Operator

Table G-2. Minimum essential equipment for A/DACG

EQUIPMENT	*QTY*
Utility Vehicle	2
M915 Tractor and M872 Trailer or civilian equivalent	2
10K Rough Terrain Forklift	2
Tine Extenders	2

G-9. Other equipment that should be available to an Army contingent operating as a DACG (the equipment and the quantities will vary depending on the magnitude of the operation):

- TC-AIMS II equipment.
- AIT equipment.
- Communications equipment.
- Generators.
- Light sets.
- Scales.
- Measuring tapes.
- 463L pallets and nets.
- Straps, chains, and devices.
- Mechanics tool boxes.
- Fueling/defueling equipment.

G-10. The primary purpose of a marshalling area is to provide a location near the APOE to assemble personnel, supplies, and equipment and make final preparations for air shipment. Unit marshalling areas are used to receive convoys and processing vehicles before they are staged for loading. Marshalling areas are the responsibility of the deploying commander who is normally assisted by the ITO, supporting units, or other designated organizations, based on local policy. The DACG—

- Maintains liaison with the deploying unit and the CRE.
- Coordinates with the CRE for technical assistance.
- Calls aircraft loads forward from the marshalling area and assumes control in the alert holding area.

G-11. The alert holding area is the responsibility of the DACG and is normally located in the vicinity of the departure airfield. It is used to assemble, inspect, hold, and service aircraft loads and control of the load is transferred from the individual unit to the A/DACG at this point. The DACG—

- Ensures loads arrive at the alert holding area at scheduled times.
- Receives, inventories, and controls aircraft loads as they arrive.
- Inspects aircraft loads to ensure that they are complete and correctly prepared.
- Ensures required shoring, floor protection materials, 463L pallets, tiedown straps/chains, and dunnage are available (identified in the BBPCT requirements).
- Verifies weight and balance markings.
- Establishes a discrepancy correction area.
- Inspects documentation for accuracy and completeness.
- Inspects HAZMAT for proper documentation.
- Provides emergency maintenance, defueling, and related services.
- Coordinates MHE support.
- Directs aircraft loads to the call forward area.

G-12. The call forward area is the joint responsibility of the CRE and the DACG and is the location for the joint inspection (JI) of deploying unit equipment and cargo. The DACG, the deploying unit, and the CRE

conduct the inspection. They complete a DD Form 2133 (*Joint Airlift Inspection Record*) to indicate to the loadmaster that the required inspection is complete. Deficiencies are corrected by the unit and rechecked by the inspection team. Once the inspection sequence is complete, the deploying unit arranges its vehicles, pallets, and equipment into the call forward load or chalk sequence.

G-13. The DACG—

- Reviews HAZMAT documentation and load plans.
- Ensures manifests are correct.
- Ensures the deploying unit adheres to the established movement schedule.
- Changes aircraft loads and manifests when required.
- Ensures that discrepancies found during the JI are corrected.
- Provides loading team personnel and support as required.
- Escorts chalks to the ready line and briefs personnel on flight safety.
- Retains copies of manifests and inspection records.

G-14. The CRE—

- Coordinates with the DACG on all changes required by aircraft configuration.
- Conducts the JI together with the DACG and unit representatives.
- Provides guidance to DACG and deploying Soldiers concerning flight line procedures.
- Provides a team chief for each loading team.
- Notifies the DACG to dispatch chalks to the loading ramp/ready line.
- Provides airflow status to the DACG.

G-15. The loading ramp area, including ready line area, is controlled by the CRE. At this point, control of units for movement purposes passes to AMC.

G-16. The DACG—

- Transfers control of the loads to the CRE.
- Maintains coordination with the deploying unit and CRE.
- Obtains chalk completion times from the CRE.

G-17. The CRE—

- Accepts chalks from the DACG at the ready line and loads them aboard aircraft.
- Ensures each aircraft load is positioned at the proper aircraft at the scheduled time.
- Briefs all personnel on flight line procedures and escorts passengers to the aircraft.
- Ensures each chalk is positioned at the proper aircraft at the scheduled time.
- Maintains liaison with the aircraft crew and the DACG.
- Coordinates with the loadmaster to ensure the aircraft is loaded on time to meet the scheduled departure.
- Provides MHE and special loading equipment, as required.
- Produce electronic manifests and ensure data submission to ITV systems.
- Provides loadmaster with manifests and retains copies for file.

ARRIVAL OPERATIONS

G-18. An APOD is an airfield designated to serve as an authorized port of entrance into the country in which it is located. Reception at the APOD is coordinated by a CRE and an arrival airfield control group. Elements of a MCT and an inland cargo transfer company typically operate the A/DACG however the mission can be accomplished by almost any unit with the properly trained personnel and equipment. Both USAF and Army have responsibilities at an APOD.

G-19. The main areas of the APOD are the off-load ramp, the holding area, and the unit marshalling area which are laid out in Figure G-2 and described in subsequent paragraphs. The CRE supervises off-loading

arriving aircraft. The AACG escorts the chalks to the holding area and assists the unit in assembling and moving to the marshalling area.

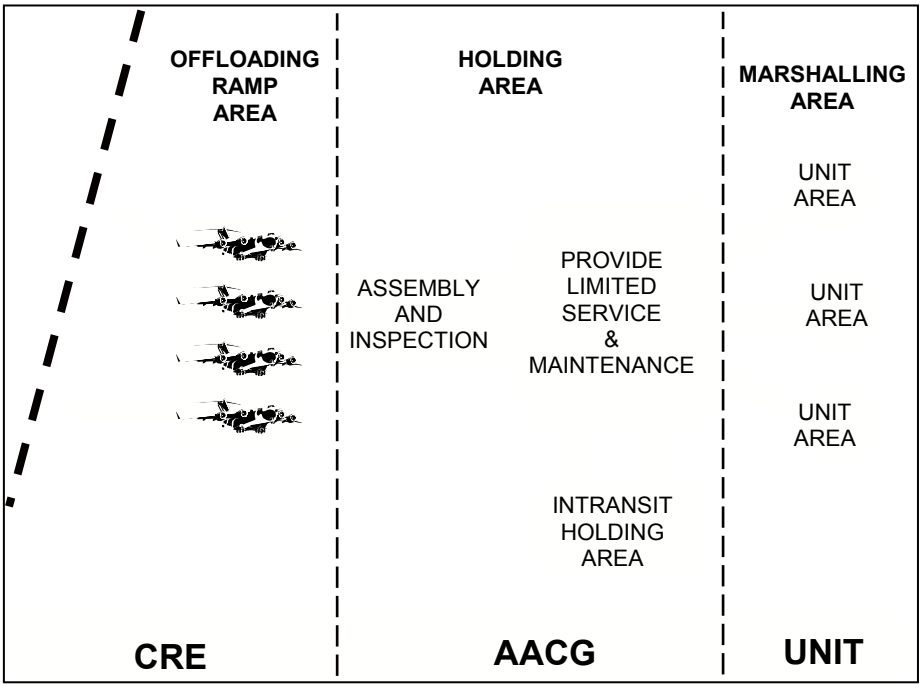

Figure G-2. Notional APOD

G-20. The off-load ramp area is where the aircraft are off-loaded. The CRE controls the off-load ramp area activities. Each load is released to the AACG for return to unit control at the holding area.

G-21. The AACG—

- Maintains coordination with the arriving unit and CRE.
- Provides support to arriving units as determined during the joint planning conference.
- Coordinates for a detail from the arriving unit.
- Provides off-load teams and support equipment to the CRE as required.
- Accepts each planeload from the CRE at the established release point.
- Ensures that shoring and dunnage from the aircraft is removed and transferred to the arriving unit.

G-22. The CRE—

- Advises the AACG of the airflow and expected arrival of aircraft.
- Plans and supervises aircraft parking.
- Receives passenger and cargo manifests from the aircraft loadmaster.
- Supervises off-loading the aircraft, including removal of shoring and dunnage.
- Provides off-loading equipment including operators.
- Receives cargo manifests and ensures inbound cargo data is scanned by ITV interrogator.

G-23. The holding area is a location normally adjacent to the ramp where the unit halts briefly to ensure that they have their personnel and equipment before moving to the marshalling area. The AADG—

- Coordinates with the CRE and the arriving unit.
- Provides support to arriving unit outlined in planning conference.
- Scans inbound unit equipment and cargo and submits the information to the server.
- Coordinates movement of aircraft pallets to the unit marshalling area for pallet breakdown.

- Provides fuel, oil, and minor maintenance for transported vehicles.
- Provides emergency services as required.

G-24. The marshalling area is a location next to the port where units reconfigure and prepare their equipment for onward movement. Prompt clearance of cargo from the APOD is essential to the efficiency and success of the aerial terminal.

TRAINING AND CERTIFICATION REQUIREMENTS

G-25. Many of the duty positions in the A/DACG require formal training and certification—

- Shift leader – qualified in all the duties of the A/DACG personnel.
- Transportation NCO – equipment preparation, HAZMAT certification, and load planning.
- Passenger shelter supervisor – Tactical Personnel System.
- Scale operator – weighing and marking equipment for air movement.
- Forklift operators – military operator's license and airfield operating rules.
- Truck driver – military operator's license and airfield operating rules.

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Appendix H

Unit Movement Plan

This appendix provides guidance on the development of a unit movement plan. The plan is written in operation order format (FM 5-0). It becomes an order when the required data and specific times are added. A unit may have several plans, each one for a specific contingency.

MOVEMENT PLAN

H-1. Movement plans define responsibilities, functions, and details for each segment of a unit deployment from origin to reception in theater. There may be more than one movement plan required depending on the number of contingencies/OPLANS the unit must plan to support. Movement plans are written in five paragraph OPLAN format.

H-2. GCCS is the system used to manage deployments. Deployment related information is contained in the GCCS database and is accessible through ad hoc queries or via JOPES, a GCCS application. Units deploying under a JOPES OPLAN must increment their movements consistent with OPLAN TPFDD requirements, as delineated by ULNs. A ULN is a seven-character alphanumeric code that defines a unique increment of a unit. For example, it may be used to identify an advance party, the main body, and the equipment sealift and airlift requirements for any specific segment of the move. The Army command or other designated deploying unit higher headquarters assigns ULNs to units. It is essential that deploying units use the correct ULN for equipment to be scheduled for movement at the right time by the correct mode. This is the key to the JOPES database validation process. An incorrect ULN could overstate or understate airlift requirements and delay movements.

H-3. Unit line numbers available on JOPES OPLAN reports divide the unit by transportation mode, ports of embarkation or debarkation, and dates. Dates correspond to the established C-day (day on which a deployment operation begins or is scheduled to begin) for the designated plan TPFDD. The unit movement is phased by the following dates relative to C-day:

- **Ready-to-load date** is the date in the TFPDD when the unit will be prepared to depart its origin.
- **ALD** is the TPFDD specified date when the unit will be ready to load on an aircraft or ship at the POE.
- **EAD** is the date specified by the supported combatant commander that is the earliest that a unit, a resupply shipment or replacement personnel can be accepted at a POD during a deployment. It is used with the latest arrival date to define a delivery window for transportation planning.
- **LAD** at the APOD/SPOD. A date specified by the supported combatant commander that is the latest date when a unit, sustainment, or replacement personnel can be accepted at a POD and support the concept of operations. It is used with the earliest arrival date to define a delivery window for transportation planning.
- **Required delivery date (RDD)** is the date when a unit must arrive at its destination and complete offloading to properly support the concept of operation.

H-4. At the predeployment conference the unit requests a ULN for each element and/or separate movement. The Army Command or ASCC assigns ULNs to units. It is essential that deploying units use the correct ULN for equipment scheduled for movement at the right time by the correct mode. Using the correct ULN is key to the JOPES database validation process. An incorrect ULN could overstate or understate strategic and inter-theater lift requirements and delay passenger and cargo movements.

DEVELOPING A PLAN

H-5. The following paragraphs describe a recommended step-by-step process for developing a unit movement plan:

- **Step 1 - Identify what needs to be moved.** Based upon METT-TC and command guidance, deployment planning must reflect personnel, equipment, supplies, and how the unit will accomplish the move. For planning purposes, units plan to deploy with assigned personnel and on-hand equipment. Upon execution, the plan may need to be modified if additional personnel are assigned or equipment cross-leveled to bring the unit to the required readiness level. Units should plan to move their basic load of supplies to sustain their operations upon arrival in the theater. The quantities to be deployed are normally defined in OPLANs, unit or Army Command SOPs, or ASCC instructions. The UMO must have a detailed listing of each piece of equipment to be deployed based on the AUEL. All outsize, oversize, overweight, or hazardous equipment/cargo must be identified, as it will require special considerations.
- **Step 2 - Identify equipment to accompany troops.** Yellow to accompany troops (TAT) equipment must accompany troops and be accessible enroute. Examples include Class I basic load items, individual carry-on baggage, and weapons. For personnel traveling via commercial air, this is generally only the baggage that will fit under the seat. Red TAT items must be available at the destination before or upon unit arrival. This equipment may be sensitive cargo that requires special security or handling at the POE or POD. Red TAT must be unitized/palletized and reported on the AUEL/DEL. Not-to-accompany-troops equipment is normally shipped by surface and consists of all other equipment required by the unit to perform its mission.
- **Step 3 - Identify what needs to move by air.** This could include personnel, advance parties, baggage, and some equipment. The balance of equipment normally moves by sea. For deployments supporting combatant commander OPLANs/OPORDs, the TPFDD will designate the strategic movement mode.
- **Step 4 - Identify hazardous (also sensitive and classified cargo) for packaging, labeling, segregation, and placarding for movement.** CFR 49 Transportation provides guidance on the packaging, labeling, placarding, and movement of hazardous materials.
- **Step 5 – Identify bulk cargo that needs to be moved and develop packing lists.** All consolidated cargo (boxed, crated, etc.) loaded in vehicles, containers, and on 463L pallets must display a separate packing list, DD Form 1750 (*Packing List*) that shows all contents. Packing lists are not required for items that do not need identification, such as empty vehicles, nested cans, or bundled shovels, however, they must be listed on the load diagram if loaded in a truck or container.
- **Step 6 - Develop vehicle load plans for unit equipment.** Equipment that cannot be loaded on organic vehicles should be planned for movement by other means (container, commercial rail or highway, or military assets). Vehicle load plans are recorded on DD Form 1750 for organic vehicles and trailers carrying secondary loads. FORSCOM units may use FORSCOM Form 285-R (*Vehicle Load Card*) for preparing vehicle load plans. The ITO is responsible for obtaining commercial transportation to move equipment to POE that is beyond the unit's organic capability. Unit cargo (vehicles and equipment) is prepared for shipment according to the mode of transportation. Depending on the strategic lift full reduction may or may not be required. Reduction details are normally in the SDDC port call message or the operations order for sealift. For deployment by air, reduction is determined by type of aircraft. Transportation Engineering Agency (TEA) Pamphlet 55-24 provides guidance for preparing vehicles for airlift. Vehicle modifications (that is, shelters, bumper modifications, and so forth) made by the unit which change the vehicle configuration/dimensions/weight normally must be approved by the unit's Army Command/ASCC and ultimately by TEA. Vehicle modifications must be reflected on the AUEL and deployment equipment list (DEL). Information on dimensions, weights, and cubes for all Army equipment is in CD-ROM and World Wide Web versions of TB 55-46-1. The hard copy version only contains major end items.

- **Step 7 - Identify BBPCT requirements.** All crates, containers, boxes, barrels, and loose equipment on a vehicle must be blocked, braced, and tied-down to prevent shifting during transit. The POC for blocking and bracing requirements is normally the UMC. Chapter 6 of FORSCOM/ARNG Regulation 55-1 describes policy for obtaining and stocking BBPCT materials and related railcar loading equipment for deploying units. Additional tie down guidance is in TEA Pamphlet 55-19 and TEA Pamphlet 55-20.
- **Step 8 - Translate what needs to be moved into transportation terms.** Personnel and equipment data are translated into transportation terminology as UMD and recorded on the OEL. Upon deployment execution, units use TC-AIMS II to update the OEL and create the DEL. The UMC provides assistance to deploying units for OEL updates and DEL development.
- **Step 9 - Determine how the personnel and equipment will move to the POEs.** In CONUS wheeled vehicles and tracked vehicles move via commercial rail, truck, or barge. Unit personnel usually move to the POE by military or commercial buses. Army rotary wing aircraft normally self-deploy to the POE, where they will be disassembled for shipment.
- **Step 10 - Prepare the unit deployment plan.** The administrative, logistical and coordination requirements for the plan must be determined. Items such as enroute medical, messing, and maintenance for movement to POEs must be coordinated and documented.
- **Step 11 – Maintain the plan.** Update the OEL as changes occur in the OPLAN, equipment, commander's intent, and mission execution. The OEL is used to produce the unit's equipment manifest and MSLs and errors can result in the equipment being lost while in transit.

SAMPLE UNIT MOVEMENT PLAN

The unit plans the move using the movement plan and executes the move under an operation order. The movement plan contains all annexes and appendices. Those not used are marked not applicable (NA) so that later developing planning data may be added to the existing plan. The operation order has specific movement instructions and is dated and signed. The annexes contain information required to support the plan.

UNCLASSIFIED

Classification
Copy no__of__copies
(Issuing Unit)
(Street Address)
(City, State, ZIP Code)
(Date of Plan)

MOVEMENT PLAN

References: FM, AR, STARC, installation, etc.
Mobilization, Exercise, and Deployment Plan, (Any other maps, SOPs, manuals, etc.)____include dates of publications.
Time Zone Used Throughout the Plan:_____
Task Organization
HQ, HHC,___Bn_____,___
Co A _____,__
Co B _____,__
Co C _____,__
Co D _____,__
____Det_____,__

1. SITUATION: Description of when and how the plan is to be implemented.
a. Attachments and Detachments: Listed with appropriate units or the word "none."
b. Assumptions: These are conditions a commander believes will exist at the time the plan becomes a movement order.

2. MISSION: A concise statement of what is to be accomplished and its purpose. It identifies unit(s); origin and destination; date and time movement begins and ends; methods of movement--organic and commercial; and mode--truck, rail, air, or sea; and the reason for moving (OPLAN, etc.).

3. EXECUTION: Outlines the necessary planning, coordination, and execution functions that takes place in order to accomplish the mission.
a. Concept of Movement: Clarifies the purpose of the plan and addresses:
(1) Receipt of movement orders.
(2) Update and validation of OEL.
(3) Recovery of equipment.
(4) Commercial movement of personnel (buses, etc.).
(5) Deadline to complete packing and loading.
(6) Advance party.
(7) Main body.
(8) Order of march and convoy numbers for highway movement.

Figure H-1. Sample Unit Movement Plan

(9) Shuttle of equipment.
(10) Commercial movement of vehicles/equipment.
(11) Priority of support.
(12) UMC/ITO coordination.
(13) ITO designated load dates and locations.
(14) UMO duties and responsibilities.
(15) Projected POEs.
(16) Applicable OPLAN.
(17) Actions at POE (reduction, receipt of cargo, etc.).

b. Tasks to Subordinate Units and Elements: Outlines tasks to ensure action by subordinates.
(1) Company, platoon, or section tasks.
(2) Maintenance.
(3) Supply.
(4) Food service.
(5) Rear detachment.
(6) CBRN.
(7) Loading teams.
(8) Training.
(9) Rail guards, convoy guides, supercargoes, etc.
(10) Reports.

c. Coordinating Instructions: Planning and executing with:
(1) Higher headquarters.
(2) Destination and ITO.
(3) Installation.
(4) Transportation terminal nodes.
(5) Local agencies.
(6) All elements internal to unit.

4. **SERVICE SUPPORT:** Outlines the support needed for the unit move. The information must be in the basic plan (if less than a page in length) or in an annex (if the information requires more than one page).

a. Supply.
b. Maintenance.
c. Transportation.
d. Procurement.
e. Facilities/Equipment.
f. Medical Evacuation Procedures.
g. Personnel.
h. Civil/Military Coordination.
i. Other.

5. **COMMAND AND SIGNAL**.

a. Chain of command, to include convoy commanders, bus troop commanders, etc.
b. Personnel control (formations, briefings, safety, etc.)
c. Command locations.
d. Signal instructions (telephone, radio, etc.)
(1) Commercial telephone.
(2) Expedited Movement Reports procedures.
(3) Radio procedures.
(4) Current signal operating instructions (SOI).

Figure H-1. Sample Unit Movement Plan (continued)

e. N-Hour sequence (See Annex __).
The movement plan must be signed by the commander or specifically authorized representative. If the signature is not reproduced or on subsequent copies, authentication by the appropriate coordinating staff officer is required.
ANNEX A - Procurement. ANNEX B - Class I. ANNEX C - Class II. Clothing, individual equipment, tentage, organizational tool sets, CBRN protective clothing and individual/personal decontamination items, hand tools, electronics, administrative housekeeping supplies, and weapons. ANNEX D - Class III. ANNEX E - Class IV. This includes information on material for securing vehicle secondary loads and securing major end items to transportation assets. Appendix 1 - (BBPCT) material for secondary cargo loads in vehicles, trailers and containers, dunnage and shoring for air deployment, and plastic pallet covers for 463L pallets. Appendix 2 - Required documentation. ANNEX F - Class V. ANNEX G - Class VII. - Includes final combinations of end products that are ready for their intended use (that is, tanks, launchers, mobile machine shops and vehicles, MHE, compressors, and construction equipment ANNEX H - Class VIII. Medical material including medical peculiar repair parts. Also covers enroute medical support. ANNEX I - Class IX. ANNEX J - Premovement maintenance support. This annex covers such items as equipment status, contact teams, drivers' licenses, PMCS, sequence of events for maintenance operations, nonrepairable equipment, tow bars, and topping off of vehicles. ANNEX K - Equipment maintenance support. ANNEX L - Air transportation. Appendix 1 - Documentation. Appendix 2 - Listing of pintle-hook vehicles. Appendix 3 - Air loading procedures. ANNEX M - Convoy requirements. Appendix 1 - Request for Convoy Clearance, DD Form 1265 (FM 55-30). Appendix 2 - Request for Special Hauling Permit, DD Form 1266 (for outsized and overweight equipment). Appendix 3 - Commander's checklist. Appendix 4 - Drivers' strip maps. Appendix 5 - Convoy commander's safety briefing. ANNEX N - Rail Requirements (Included only for those units where rail movement is projected). Appendix 1 - Loading team SOP. Appendix 2 - Documentation and procedures for rail loading. ANNEX O - Commercial movement requirements. Appendix 1 - Packing list (DD Form 1750). Appendix 2 - Miscellaneous. ANNEX P - Facilities and equipment. ANNEX Q - Points of contact ANNEX R - Safety. ANNEX S - N-hour sequence.

Figure H-1. Sample Unit Movement Plan (continued)

ANNEX T - Plan coordination documentation. ANNEX U - Appointment memoranda, training certificates and/or validations. ANNEX V - Plan approval. ANNEX W - Unit movement data.

Figure H-1. Sample Unit Movement Plan (continued)

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Appendix I

Special Cargo

This appendix provides general guidance on the preparation and shipment of HAZMAT, ammunition, and classified and sensitive material. The nature of these types of cargo requires special attention. If there are any questions consult the appropriate regulation or seek the assistance of an expert.

HAZMAT

I-1. Hazardous material is any material including waste, which may pose an unreasonable risk to health, safety, property, or the environment, when they exist in specific quantities and forms. It also includes any other materials that may endanger human life or property because of its quantity, properties, or packaging. Special storage, use, handling and shipment safety procedures and protocols must be followed to help protect against accidental exposure.

I-2. HAZMAT must be properly prepared and documented IAW DTR Regulation 4500.9-R, Volume II and III, Department of Transportation (DOT) regulations, TM 38-250, and other service or command publications. Documentation must include the total HAZMAT quantity and a certificate stating that the HAZMAT is properly classified, described, packaged, marked, and labeled. Only specially trained individuals have authority to certify HAZMAT for transportation. Contact the ITO or MCT for assistance in determining what certification requirements apply to each HAZMAT item being prepared for shipment.

I-3. The deploying unit must ensure that:

- All ammunition and explosives are secured properly in containers and vehicles. SDDC issues authorization for ammunition to be in the port and aboard vessels.
- Provisions for DOT exemptions which may be used for shipment are followed. (For example, vehicle fuel tanks will be no more than three-quarters full when shipping under DOT Exemption 7280. Otherwise, fuel tanks must be only one-quarter full when shipping aboard a commercial vessel that is carrying civilians in addition to military cargo.)
- Fire extinguishers in racks designed expressly for them will not be removed from motor vehicles.
- Oxygen and acetylene tanks are labeled and marked with the UIC and shipment unit number and removed from the vehicle and placed on a separate pallet.
- Fuel tanks of trailer mounted equipment containing combustion engines are only 50 percent full.
- Five-gallon fuel cans, field cans, water heaters, gasoline lanterns, portable generators, blow torches, and similar equipment (in which combustibles other than diesel fuel are stored) are completely drained and cleaned before shipment. In a declared national emergency, 5-gallon cans can contain fuel.
- Battery boxes and covers are serviceable and positioned so as not to touch the terminals and to prevent arcing.
- Batteries of non-self-propelled equipment are disconnected and terminal ends protected from arcing and corrosion.
- When mode or other regulatory guidance requires, bulk fuel carriers are drained and purged and the proper placards affixed to them. A purge certificate should be prepared and kept available.
- Fueled vehicles shipped in closed freight containers have their battery cables disconnected and secured. Moreover labels should be affixed to the access doors of the container warning of a potential explosion when the doors are opened.

I-4. It is important to refer to the references listed in table I-1 whenever HAZMAT is prepared for shipment.

Table I-1. Preparing and documenting hazardous materials

REQUIREMENT	*REFERENCE*
Identify and classify hazard; identify subsidiary hazards	Title 49 CFR, Part 173, Subpart A
Determine proper shipping name, hazard class, United Nations Identification number (UN/ID), and packing group	Title 49 CFR, Hazardous Materials Table
Determine mode of transport and ensure shipment complies with modal requirements	Title 49 CFR, Parts 174 thru 177 TM 38-250 - Military Air
Determine proper packaging (consider quantity per package)	Title 49 CFR, Part 173 TM 38-250 - Military Air
Determine proper package marking	MIL-STD 129
Select and apply proper labels (labels are not required for fuel in vehicle fuel tanks)	Title 49 CFR, Hazardous Materials Table
Prepare packing lists. HAZMAT packed inside vehicles or containers is listed first using only authorized abbreviations	Title 49 CFR, Hazardous Materials Table
Segregate HAZMAT based on mode and combination/class groupings	Title 49 CFR, Parts 173-177
Determine placards required	Title 49 CFR, Part 172, Subpart E
Determine blocking and bracing required	Title 49 CFR, Part 171, Subpart A; 174 Subpart C/E
Document Air, Water & Special Handling Codes on DEL	DTR 4500.9-R, Part II, App. Z; LL
Emergency response information	Title 49 CFR, Part 172, Subpart G
Certify HAZMAT. Dangerous Goods Declaration & Certificate required for each vehicle or freight item containing HAZMAT	Title 49 CFR, Part 172, Subpart C
Prepare shipping documents (CBL/GBL)	Title 49 CFR, Part 172

AMMUNITION

I-5. Ammunition shipments are usually scheduled through military ammunition ports. Designated military ammunition ports serve the strategic purpose of routinely handling shipments of ammunition. To meet deployment requirements, ammunition may be moved through a commercial port. If the unit is deployed through a commercial seaport and must carry basic load ammunition with them, the SDDC manager for the port must first be notified of the intent to ship ammunition. The unit submits the following data through the ITO/MCT early in movement planning:

- DOD Ammunition Code.
- DOT proper shipping name.
- Total quantity.
- Number of packages.
- Total net explosive weight in pounds.
- Weight of each package in pounds.
- Cube of each package.
- UN identification number.
- Classification code consisting of hazard class and division number followed by compatibility group letter.

- Shipment configuration. This will allow processing of DOD explosives safety waivers and Coast Guard permits.

CLASSIFIED MATERIAL

I-6. Classified material is cargo that requires protection in the interest of national security. The nature of classified cargo requires that shippers and transporters handle it in a way that it be identified, accounted for, secured, segregated, or handled in a special way to safeguard it. Detailed instructions are included in DTR 4500.9R. Do not identify classified cargo on the outside of the shipping containers.

I-7. When transporting classified material, enclose it in two sealed containers, such as boxes or heavy wrappings. Detailed instructions for packing classified material are contained in AR 380-5. Among its implementing instructions are the following excerpts from Chapter 8, AR 380-5: Classified information will be transmitted and transported only as specified in this Chapter 8, AR 380-5. Communications security information will be transmitted in accordance with AR 380-40. Special Access Programs material will be transmitted and transported in accordance with Appendix I of AR 380-5, AR 380-381 and applicable special access program procedure guides. Commands will establish local procedures to meet the minimum requirements to minimize risk of compromise while permitting use of the most effective transmission or transportation means.

I-8. **Preparation of Material for Transmission in Envelopes or Containers.** When classified information is transmitted, it will be enclosed in two opaque, sealed wrappings or containers, durable enough to properly protect the material from accidental exposure and to ease in detecting tampering. Classified material will be prepared for shipment, packaged, and properly sealed to minimize the risk of accidental exposure or undetected deliberate compromise. The following exceptions apply:

- If the classified material is an internal component of a packageable item of equipment, the outside shell or body can be considered as the inner enclosure provided it does not reveal classified information.
- If the classified material is an inaccessible internal component of a bulky item of equipment, the outside or body of the item can be considered to be a sufficient enclosure provided observation of it does not reveal classified information.
- If the classified material is an item or piece of equipment that is not easily packageable and the shell or body is classified, it will be concealed with an opaque covering that will hide all classified features.
- Specialized shipping containers, including closed cargo transporters, can be considered the outer wrapping or cover when used.

I-9. Consignor/consignee responsibility for shipment of bulk material. The consignor of a bulk shipment will—

- Select a carrier that will provide a single line service from the point of origin to destination, when such a service is available.
- Ship packages weighing less than 200 pounds in closed vehicles only.
- Notify the consignees and military transshipping activities of the nature of the shipment, including level of classification, the means of shipment, the serial number of the seals, if used, and the anticipated time and date of arrival by separate communication, at least 24 hours in advance of arrival of the shipment.
- Advise the first military transshipping activity that, in the event the material does not move on the conveyance originally anticipated, the transshipping activity should advise the consignee with information of the firm date and estimated time of arrival. Upon receipt of the advance notice of a shipment of classified material, consignees and transshipping activities will take appropriate steps to receive the classified shipment and to protect it upon arrival.
- Annotate the bills of lading to require the carrier to notify the consignor immediately, by the fastest means, if the shipment is unduly delayed in route. Such annotations will not under any circumstances disclose the classified nature of the commodity. When seals are used, annotate substantially as follows: "***DO NOT BREAK SEALS EXCEPT IN EMERGENCY OR UPON***

AUTHORITY OF CONSIGNOR OR CONSIGNEE. IF BROKEN, APPLY CARRIER'S SEALS AS SOON AS POSSIBLE AND IMMEDIATELY NOTIFY CONSIGNOR AND CONSIGNEE."

- Require the consignee to advise the consignor of any shipment not received more than 48 hours after the estimated time of arrival furnished by the consignor or the transshipping activity. Upon receipt of such notice, the consignor will immediately trace the shipment. If there is evidence that the classified material was subjected to compromise, the procedures set forth in AR 380-5, Chapter 10 for reporting compromises will apply.
- Packaging material must be strong and durable enough to provide security protection while in transit, to keep items from breaking out of the container, and to help detect any tampering with the container. The wrappings must conceal all classified characteristics.
- Use closed and locked vehicles, compartments, or cars for shipment of classified material except when the appropriate authority authorizes another method.
- When classified material is transported, it will not be stored in any detachable storage compartment such as automobile trailers, luggage racks, aircraft travel pods, or drop tanks.
- When transporting classified material across international borders, arrangements must be made to ensure that customs, border, or other inspectors (either US or foreign) do not open the material.
- Place a serial-numbered seal on doors of containers, vehicles, or compartments that contain classified or protected cargo. The serial number must be entered on the shipment unit packing list and on all shipping documents.
- The unit authorizing the transport of the classified equipment must notify the ITO/MCT and appropriate carrier in advance.
- Shipping classified material by rail may require commanders to provide guards or escorts.

I-10. When traveling by motor convoy, escorts must ensure constant surveillance of classified material. Classified material must stay within the escort's personal possession and observation at all times. Larger pieces of secret shipments, such as missiles, may require outside storage. If so, take special protective measures to include constant and continuous surveillance by at least one or more escorts in the area.

SENSITIVE MATERIAL

I-11. Sensitive material is cargo that could threaten public safety if compromised. Sensitive cargo must be properly secured and identified to port personnel so sufficient security can be provided. Do not identify security cargo on the outside of the shipping containers. Detailed instructions are included in DTR 4500.9R.

I-12. For sensitive cargo, units must adhere to the following:

- Remove crew-served weapons from vehicles. Place them in containers that are sealed and secured with an approved device.
- Ensure packaging material is strong and durable enough to provide security protection while in transit.
- Secure containers, vehicles, or compartments with an appropriate locking device as directed by the installation security officer. Also, place a serial-numbered seal on the door. Enter the serial number on the shipment unit packing list.
- Identify sensitive items in the commodity code on the unit's OEL/UDL.
- Eliminate indications of sensitive items from outside of the container, vehicle, or compartment that it contains sensitive items. Identify this fact on the unit's OEL/UDL.
- Provide guards or escorts when shipping sensitive material by rail.

CUSTOMER SUPPORT

I-13. For assistance determining and complying with DOD packaging requirements contact DLA, DOSO-DH, DSN 695-4788 or (804) 379-4788, FAX X3793. Additionally, a performance-oriented

database is available to assist with determining and selecting appropriate packaging materials. To obtain access contact DLA. Container loading diagrams for ammunition and explosive items can be obtained by contacting the US Army Defense Ammunition Center, 1C Tree Road, Building 35, ATTN: SJMAC-DET, McAlester, OK 74501-9053.

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Appendix J

Automatic Identification Technology

AIT is a suite of technologies that enables the automatic capture of source data and enhances the ability to identify, track, and document deploying and redeploying forces, equipment, and personnel. Commanders face many challenges during deployment, and one is maintaining visibility of forces. ITV is intended to provide them with the information necessary to track forces from point of origin to final destination. AIT provides timely and accurate ITV data when combined with web-enabled AIS. Effective management of deployment operations can be enhanced with AIT. This appendix outlines the structure and components of AIT and the responsibilities of the participants to maintain visibility of forces during deployment.

SIGNIFICANCE OF AIT

J-1. AIT alone is not the solution for maintaining ITV throughout the deployment and redeployment process. The AIT suite of capabilities significantly improves the accuracy and speed of ITV when combined with automated information systems, re-engineered operational procedures and staff engaged in force tracking and reporting. These capabilities can provide detailed, accurate, and timely information about the location of personnel, unit equipment, and sustainment cargo as they move from fort to foxhole and back.

J-2. To produce an accurate force tracking picture for the commander, an AIT network of trained personnel and equipment must be in place at each node of the deployment pipeline to collect and report the data. Moreover, established operational procedures must outline the process for the network to capture, report, and transfer the source data necessary to access the resulting force tracking data.

J-3. The resources of G1, G3, and G4 are brought together to build the force tracking network. The G1 has the responsibility to establish the procedures for collecting personnel data; the G3 establishes the readiness standards and the procedures for reporting force closure; and the G4 has the responsibility to provide AIT devices at appropriate locations to collect deployment movement data. The interrogator and transponder devices capture and report data as the equipment arrives and departs each node when RFID tags or military shipping labels are interrogated or scanned. The data is passed at preset intervals (usually one hour) to a local automated information system and then to web-enabled ITV servers. Personnel data is collected through the use of smart cards that are scanned as personnel arrive and depart each location. This information will also be passed to the local automated information system and then to the appropriate web-enabled AIS.

CONFIGURATION

J-4. Radio frequency identification combines the features of a portable data collection device, a two-way radio, interrogator and transponder. RF tags contain information that can range from a permanent identification number to item level commodity data. Information can be written to tags using a fixed interrogator, a tag docking station, or hand held interrogator (HHI). After the initial data is written to the RFID tag, the data is passed from the host AIS to the regional ITV server. Once the tag is attached to a piece of equipment, pallet, or container and passes through the system, the interrogator sends out a RF signal that "wakes up" the tag. The tag then transmits information back to the interrogator. The interrogator communicates with a host computer which, in turn, passes the data to the appropriate CONUS/regional ITV server updating the status (Figure J-1).

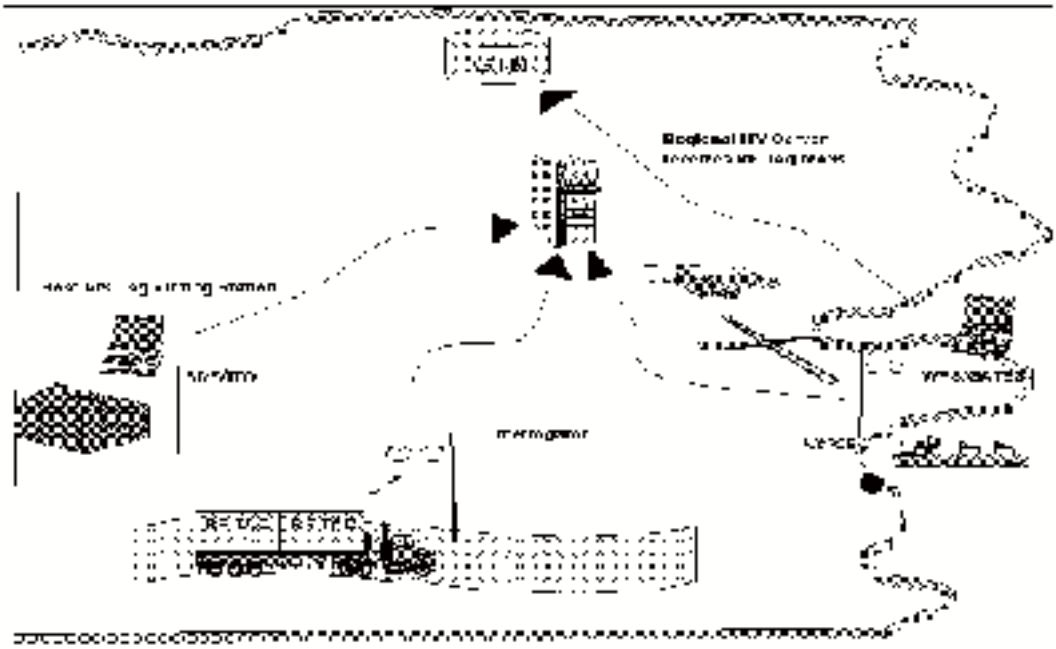

Figure J-1. RFID/ITV data collection

J-5. The active RF tag is the key to providing inside-the-box content visibility. Unlike a barcode, the RFID tag transmits the information wirelessly without human intervention. An RFID reader/interrogator reads and writes data to and from the tag. A Soldier with an interrogator can view the contents of the container/pallet/vehicle without having to open or unload them. This hands-off capability is what sets RF tags apart from other AIT devices that require some form of intervention to capture the asset data.

STORAGE DEVICES

J-6. The Army will deploy in a joint environment, and there are numerous AIT devices available within DOD and the Army to support deployment missions. These devices capture and report arrivals and departures to GTN. AIT data storage devices contain or store essential transportation and supply data. It is printed or created and is then attached to equipment. The information on the AIT data storage device is also present in AIS and is passed to web-enabled AIS that provide global asset/movement visibility. The Army currently uses MSLs, RFID tags and other assorted media as data storage devices for deployment. Data storage devices include but are not limited to the following:

- **Linear Bar Code**: A bar code can be thought of as a key in the form of a unique number that is coded in a series of black and white bars. The key allows you to enter a database that contains detailed information about the item represented by the key. Linear bar codes are limited in the amount of information they contain and are one-dimensional.
- **2D Bar Code:** 2D bar codes store data horizontally and vertically and therefore have a larger storage capacity. MSLs use this format.
- **RF Tags:** Radio frequency identification combines the features of a portable data collection device and a two-way radio. RF tags contain information that can range from a permanent identification number to item level commodity data. Information can be written to tags using a fixed interrogator, a tag docking station, or HHI.

COMPONENTS

J-7. Basic components of AIT used to support unit deployments and redeployments are shown in Figures J-2 through J-5.

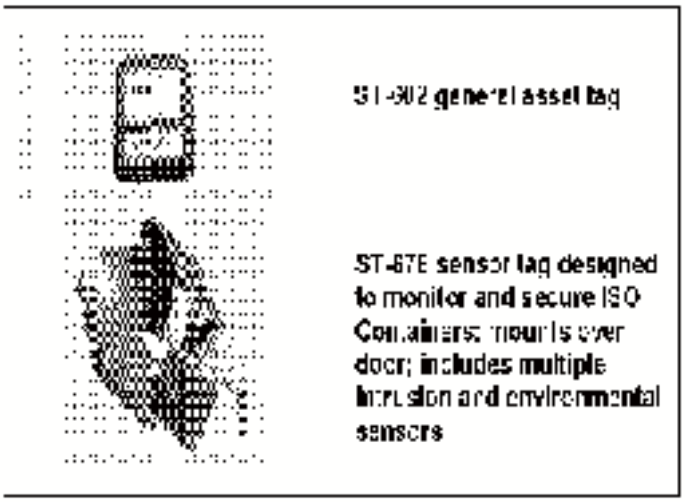

Figure J-2. AIT/RFID tags

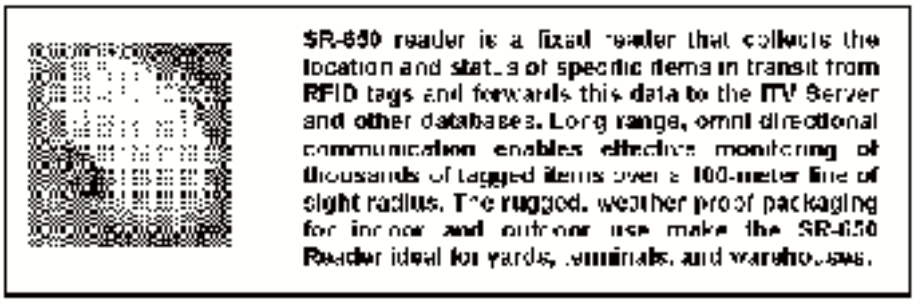

Figure J-3. Fixed interrogator

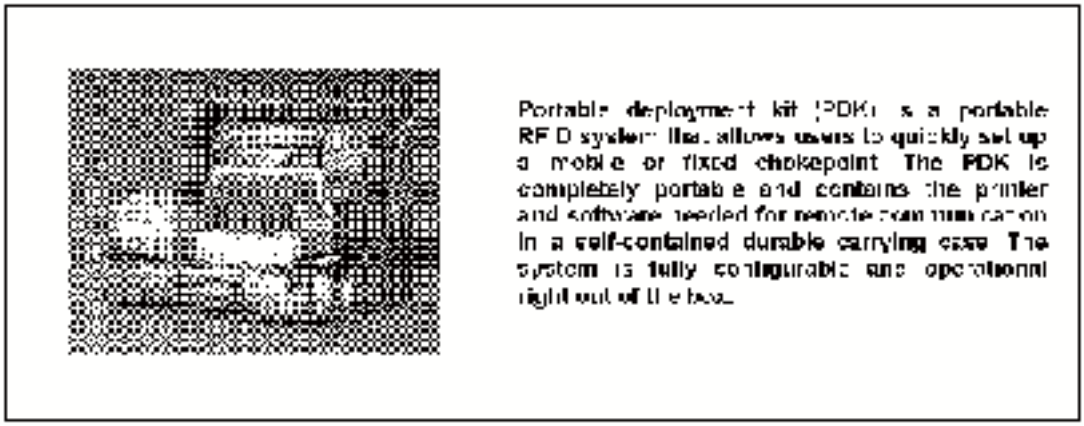

Figure J-4. Portable deployment kit (PDK)

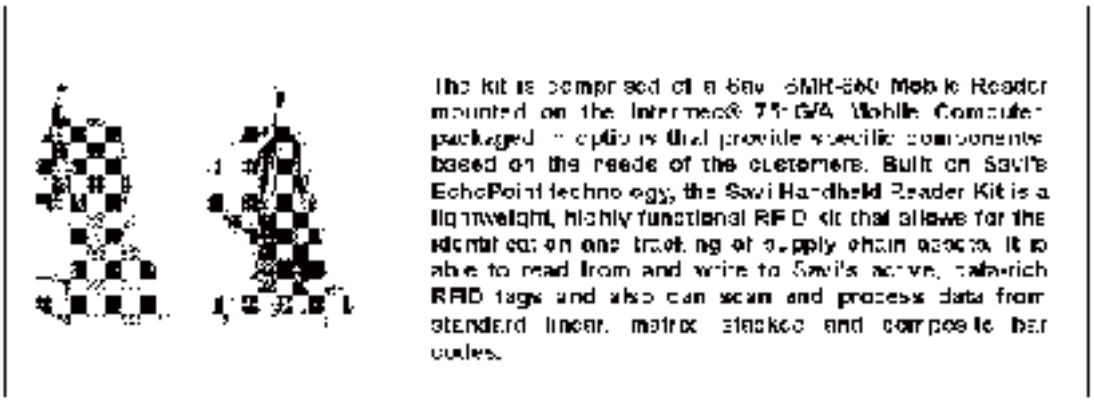

Figure J-5. Handheld interrogator/reader

APPLICATIONS

INSTALLATIONS

J-8. A plan must be in place to create a local area network (LAN) that links each installation deployment node and all headquarters possessing TC-AIMS II and associated AIS. This network must be capable of operating 24 hours a day to support the deployment flow throughout the operation. A direct dial-up capability should be considered if a LAN is not available. In addition to linking all the TC-AIMS II and global combat support systems to this LAN, procedures must be in place to link AIT interrogators/readers that are supporting service AIS. These procedures allow for the automatic capture and transfer of movement data with limited human intervention. Figure J-6 depicts a notional installation AIT laydown.

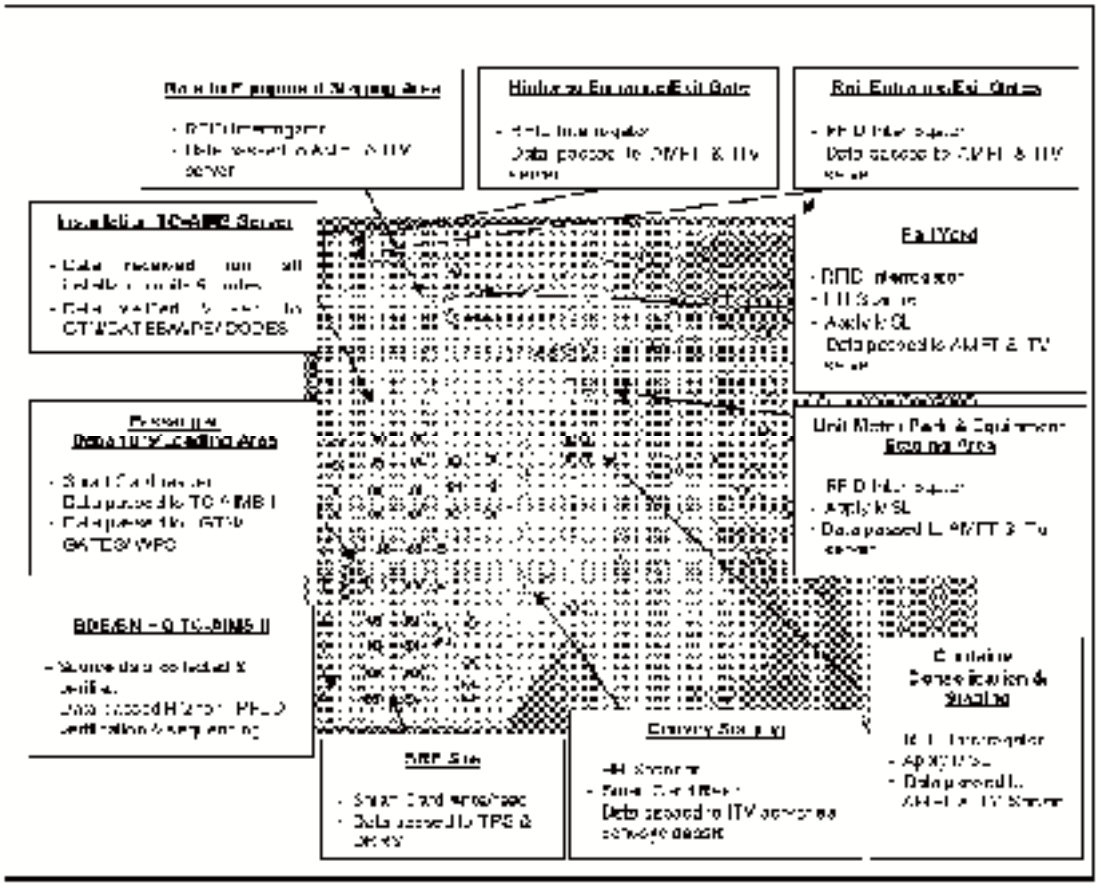

Figure J-6. Notional installation AIT laydown

J-9. Installations have a responsibility to help build a deployment plan for all units and equipment deploying from their location. The information used to develop the deployment plan comes from UDLs and passenger manifests. As movements occur, installations take the data that is rolled up in TC-AIMS II and transmits to GTN. The installation will be the first location where AIT data storage devices are scanned/interrogated and verified against data resident in service AIS. Closely checking the AIT data storage devices of the first deploying units provide the installation and deploying commanders a benchmark to measure how well units are conducting their AIT and mission. Follow-on deploying units can be informed of AIT problems and correct deficiencies before departing the installation.

J-10. The installation must examine the deployment process and determine the best location to install fixed and temporary AIT interrogators and readers. Possible locations for the installation of interrogators include entry and exit gates, convoy marshalling/staging areas, loading areas, container consolidation points, ammunition supply points, and vehicle scales. Soldier readiness processing sites and passenger holding/staging areas are also possible locations for interrogators and CAC card readers.

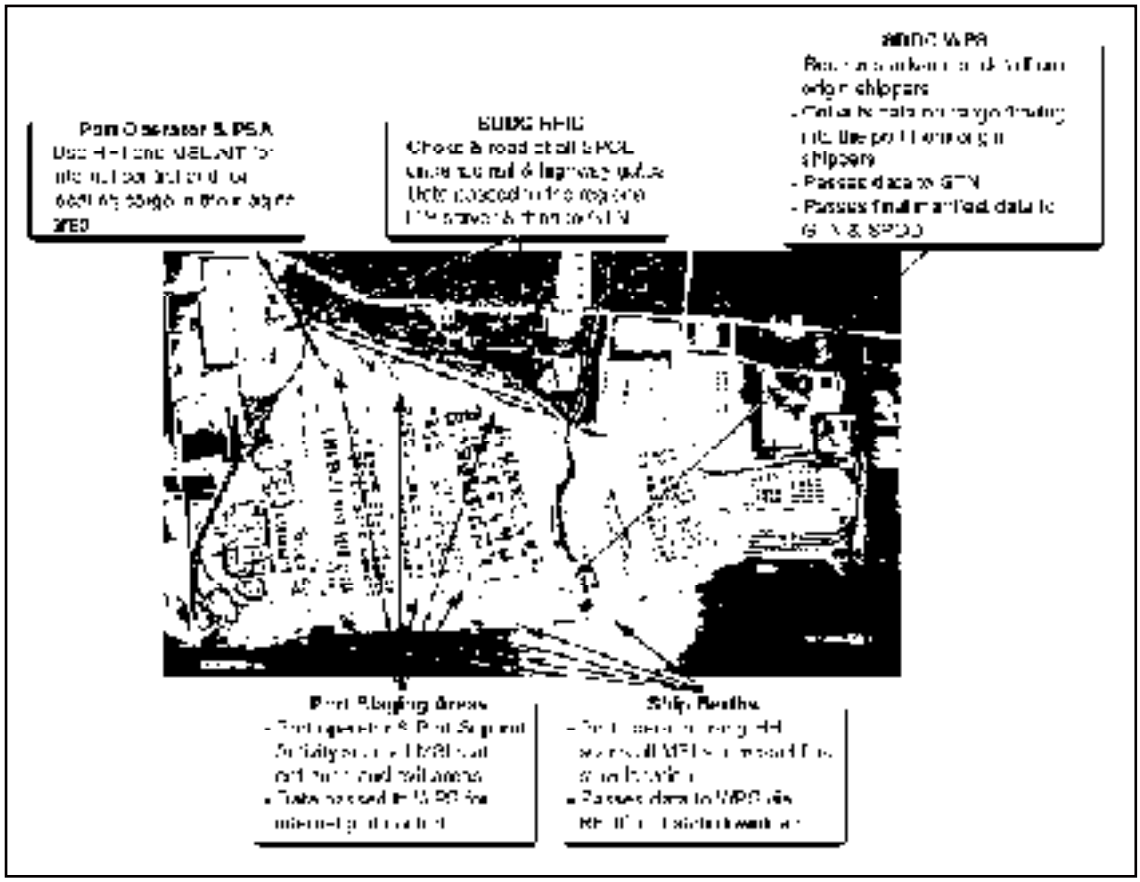

Figure J-7. Notional APOE/APOD AIT laydown

J-11. installations must plan for the use of HHIs to scan labels attached to equipment. Data capture from the scanned labels is then used to create new RFID tags to restore ITV.

AERIAL PORT

J-12. The arrival and departure of all unit equipment, personnel, and sustainment air cargo transiting the aerial terminals must be captured in service AIS and reported to GTN. Detailed planning and coordination should be performed in advance of operations detailing AIT requirements at the aerial terminals. The A/DACG will coordinate with the USAF for specific AIT requirements, infrastructure, and support in order to collect and report data on Army unit and equipment arrivals. The A/DACG will then communicate with deploying units the ITV plan for providing and collecting in-transit visibility data of their unit equipment and cargo.

Processing Passengers

J-13. Passengers moving through an APOE can expect to process through a marshalling area and a passenger holding area. Marshalling areas may be located at the home station, the APOE, or both depending on the situation. If the marshalling area was at home station and this is the first time data has been collected on the arrival of passengers at the airfield, procedures must be established to pass this data to GTN. While in the marshalling area, the unit verifies personnel manifests and ensures that all Soldiers have a current CAC card. The Army support element controlling the marshalling area will scan the arriving Soldier's CAC card for internal accountability and for ITV reporting requirements. Following the correction of any CAC card deficiencies, units should rescan all CAC cards and match the data against the manifest as Soldiers depart the marshalling area for the passenger holding area.

J-14. Normally, a passenger holding area will be established near the APOE that is jointly operated by the Army and USAF. As Soldiers arrive, the Army support element will scan CAC cards and verify the information against the unit manifest. The Army support element will assist in making any final manifest corrections and when notified, pass control of deploying Soldiers to the USAF along with an electronic copy of the personnel manifest. The USAF element will load this electronic data into GATES and pass departure data to GTN.

Processing Unit Equipment

J-15. Unit equipment proceeds through four areas on or near the APOE when processing for deployment: by air-marshalling area, by alert holding area, by call-forward area, and by ready line/loading area. There are potential overlapping responsibilities at these locations, and prior coordination is essential to minimizing such occurrences.

J-16. An equipment marshalling area can be located on the installation, in the vicinity of the airfield, or both depending on the deployment situation. The marshalling area is normally operated by the supporting installation. A plan should be in place that clearly defines AIT responsibilities at the APOE. FORSCOM has a memorandum of understanding in place with the USAF addressing responsibilities at CONUS locations. While in the marshalling area and with the assistance of the support element, deploying units are responsible for preparing their equipment for shipment, to include the proper AIT tagging and marking. The Army support element will capture the arrival and departure data and report it to GTN if the marshalling area is on the airfield. Any problems or deficiencies found with AIT data storage devices should be corrected by the unit before moving to the call-forward area. After preparing their equipment for air movement, units will arrange vehicles and equipment in chalk order before movement to the alert holding area.

J-17. The alert holding area is normally on the airfield and controlled by the DACG where they will coordinate operations between the unit and the USAF. In the alert holding area, the DACG scans the MSLs of arriving and departing equipment for internal accountability and control purposes. If the alert holding area is the first place where Army equipment is accounted for on the airfield, this arrival data must be passed on to GTN. Any deficiencies should be corrected by the unit before the equipment is moved to the call-forward area. This is the last place where Army AIT deficiencies can be corrected prior to air movement.

J-18. The call-forward area of the airfield is under the control of the DACG. It's where the joint inspection of equipment is conducted and manifests are reviewed for accuracy. The unit and the USAF conduct a joint inspection of all equipment to ensure it is properly prepared for airlift. With assistance of the DACG, the unit corrects all deficiencies found during the joint inspection.

J-19. The ready line/loading area is under the operational control of the USAF. The DACG passes control of Army unit equipment to the USAF at the ready line. The USAF ensures that the aircraft is loaded properly and sends aircraft departure and ITV data to GTN via GATES.

SEAPORT

J-20. The SDDC is the military port manager for all common-user water terminals and is responsible for SPOE operations (Figure J-8). Also operating in the port complex will be MSC, the PSA, and the unit. Other possible operators at the port are civilian port managers and operators as well as the Army port operators and movement control team. SDDC coordinates operations between Army units and MSC and all activities with the civilian port authorities and operators.

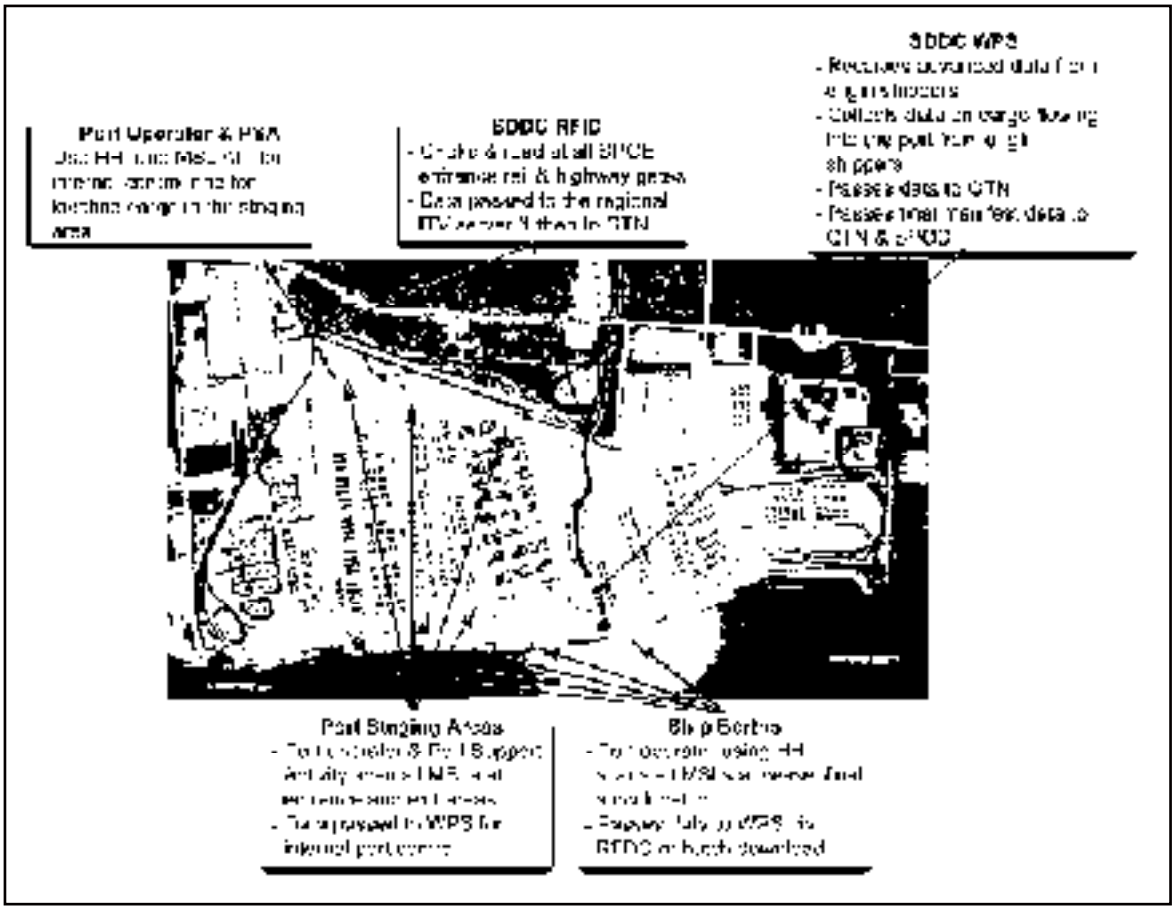

Figure J-8. Notional SPOE/SPOD AIT laydown

J-21. SDDC is responsible for installing, operating, and maintaining the AIT network within the port complex. The PSA will use AIT to capture the movement of unit equipment through the port complex and to locate tagged unit equipment in the port area. PSAs constituted from TOE units will normally have organic AIT equipment, while ad hoc PSAs must rely on the supporting installations for the necessary AIT resources.

Processing Unit Equipment

J-22. Unit equipment transiting a SPOE will generally pass through a marshalling area (normally outside the port) and a staging area before vessel loading. Depending on the amount of unit equipment involved, a marshalling area may not be established. The purpose of a marshalling area is to provide a location near the port complex to assemble unit equipment and make final preparations before entering the port.

J-23. Fixed AIT interrogators/readers can be installed at port entrance and exit gates, marshalling and staging areas, container consolidation points, and off/on load sites established to assist in data capture and internal port control. Captured arrival/departure data will be passed to WPS and sent to the GTN.

J-24. The staging area is the final location where equipment is assembled prior to loading the vessel. Equipment is usually lined up by piece type or in the order it is to be moved onto the ship. SDDC will control all equipment departing the staging area for loading on vessels. Normally, the equipment is scanned at the final stowage location and the data is passed to WPS and is sent to GTN in the form of a final ships manifest.

J-25. Port managers and operators will rely on hand held scanners to collect data from the MSLs and transfer the data into WPS. The data will be used for internal port control of the equipment, to develop the final stow location of unit equipment aboard the vessel, and to prepare the final ships manifest.

J-26. Care must be used when establishing the location of fixed RFID interrogators. The interrogator must be properly positioned to capture the arrival and departure of all unit equipment moving past its location, while at the same time, not interrogating tags already staged. An interrogator located too close to RFID tags can query tags constantly and drain the tag batteries before the equipment is loaded.

Processing Passengers

J-27. A final SPOE AIT consideration is capturing the movement of personnel by ship. This can be accomplished by means of support agreements with SDDC, the Navy, or the use of organic unit AIT equipment. Planners must identify the requirement as early as possible to ensure the system is in place to capture the data and transmit it to GTN.

RESPONSIBILIES

INSTALLATIONS

J-28. Installations are the mainstay of deployment operations, and there are numerous AIT functions performed by the installation activities that support and enhance deployment. Plans must be in place defining the respective AIT responsibilities to ensure that the most accurate data is entered into the AIS in a timely fashion. The foremost installation AIT tasks are—

- Install and maintain AIT interrogators/readers.
- Ensure data is accurate and forwarded within established time standards.
- Confirm units have properly labeled/tagged their equipment and Soldiers have a current CAC card.
- Implement and maintain an installation business process that is supportive of operations throughout the system.

J-29. Other AIT issues to be considered in developing an installation plan include location of source data, quality control procedures, funding, support, accountability, and training.

UNITS

J-30. Accurate and complete initial source data must be entered in automated information systems before the deployment begins. For units, this means ensuring the unit equipment list in TC-AIMS II is accurate and up-to-date. In addition, procedures must be followed to ensure MSLs and RF tags are produced using the data in TC-AIMS II. Once produced, these AIT data storage devices must be attached to the proper piece of equipment and then scanned/interrogated to verify readability and accuracy. Commanders must ensure that every Soldier has an updated CAC card after completing the Soldier readiness process. For passenger movements, these cards will be used to manifest and account for Soldiers at arrival and departure locations throughout the deployment operation.

J-31. The UMO will use TC-AIMS II to create an accurate UDL that identifies all items to be tagged and labeled for deployment. The Brigade Mobility Officer and UMC will review the file. When the review process is complete, the file will be passed to JFRG II and then to JOPES.

J-32. One-time capture and passing of source data between AISs is the preferred method for meeting ITV and force tracking timeliness standards. All deployment nodes use this data to update their automated information systems for ITV.

THEATER

J-33. The Army's use of AIT in a deployment operation will be based on the supported combatant commander's movement control and RSOI plan. The plans will be designed to enable the in-theater

distribution systems to meet force closure requirements. ITV plans will vary based on the geographic area of operation, mission requirements, and the supporting transportation and communication infrastructures. The ASCC G-4 in coordination with the G-3 develops the Army's portion of the theater ITV and RSOI plans. The G-4's input to these plans includes the use of AIT and enables executing agencies to properly plan their local AIT requirements.

J-34. Once source data is verified, plans and procedures must be in place to ensure the information is passed to other automated information systems (TC-AIMS II at higher headquarters, the installation, and WPS and GATES/RGATES at POEs), GTN, and other appropriate web-enabled asset tracking systems. After initial source data has been provided to automated information systems and proper AIT data storage devices have been produced, manual means to input similar information can be avoided.

MARKING STANDARDS

J-35. Creating the tags and labels correctly is important, but the effort is wasted if they are not properly fastened to the equipment. It is also advisable to check each tag to ensure the data is readable and the battery is in working order. Positioning tags and labels on vehicles and equipment is as follows:

Figure J-9. Vehicle marking

- Vehicles. Vehicles will be marked with one RF tag attached to the grill or front of the bumper using nylon zip ties and two MSLs—one attached to the left front bumper (driver's side) and one to the left door (driver's door).

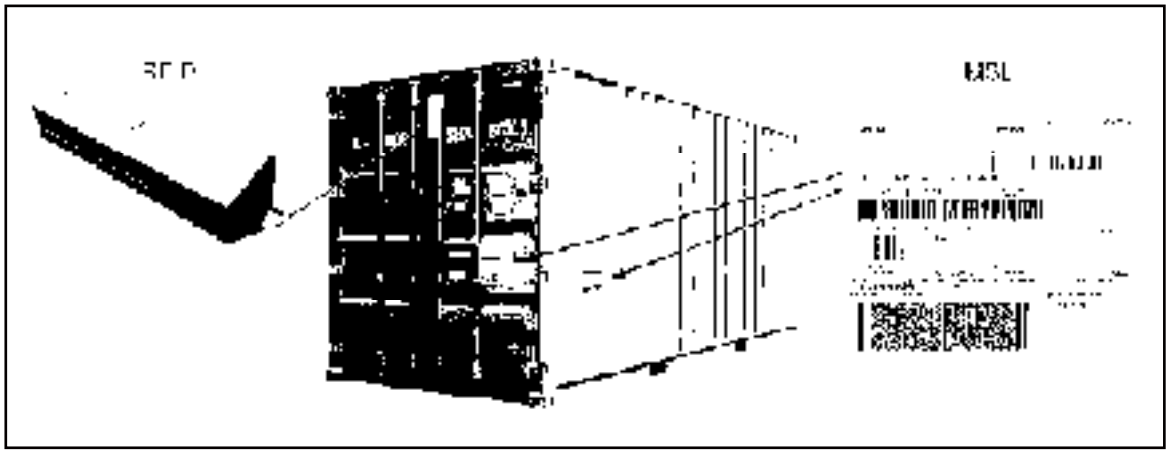

Figure J-10. Container marking

- Containers. Depending on type tag used, containers will be marked with one RF tag attached over the door or to the locking bar on the upper right side of the container using nylon zip ties. Two MSLs are required—one attached to the door and one attached to the right side of the container (as you look at the door).

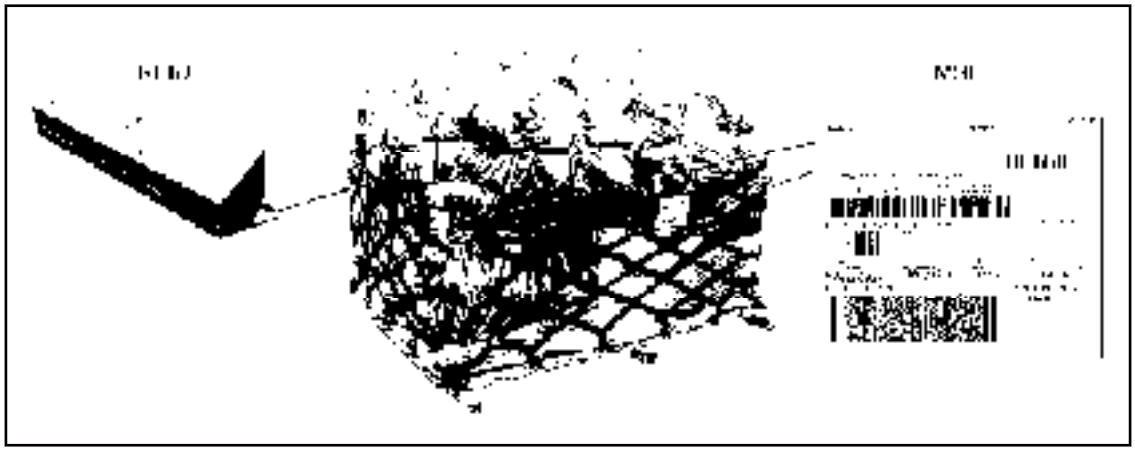

Figure J-11. Pallet marking

- Pallets. Pallets will be marked with one RF tag attached to the side of the pallet using nylon zip ties and two MSLs—one attached to the side of the pallet and one on the adjacent side. Ensure that both the RF tag and MSLs are on the outside of any protective wrapping.
- Other Items. Other items will be marked with one RF tag attached near a MSL with nylon zip ties and two MSLs as described in preceding paragraphs. They will be mounted 2.5 feet (0.762 meter) to 6 feet (1.828 meter) off the ground on vehicles and 2.5 feet off the ground on items that will be loaded on vehicles for transport. The labels should be placed in protective pouches and positioned so that they can be readily scanned.

CONSOLIDATING UNIT EQUIPMENT FOR MOVEMENT

J-36. AIT interrogators/readers can be used to capture the source data and improve asset visibility of containers, multi-packs, pallets, and other consolidated shipments. As units load equipment into containers or build pallets, the supply accountability bar codes can be scanned using the TC-AIMS II hand held interrogator/reader. After the packing is complete, the data can then be used to generate a packing list and written to a data rich active RFID tag. The RFID tag contains a detailed listing of all the unit equipment consolidated within the container. The RFID tag is then attached to the consolidated shipment for in-transit visibility tracking.

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Appendix K
Security

Army forces are especially vulnerable during deployment. Potential adversaries will invariably focus on perceived weaknesses giving rise to the need for a comprehensive strategy for the protection of forces. Security is essential to operations and protecting geographically dispersed forces once they depart their installations. This appendix highlights those actions taken to prevent or mitigate hostile actions against DOD personnel, resources, facilities during deployment operations.

PREDEPLOYMENT

K-1. Security must occur at home station on a consistent basis for units to be prepared to face the potential terrorism threat during deployment and redeployment. The deploying units are supported by numerous agencies in planning antiterrorism measures including:

- Movement planning.
- Intelligence gathering.
- Threat assessment.
- Security planning.
- Antiterrorist awareness training.

MOVEMENT PLANNING

K-2. Units prepare detailed movement SOPs to support unit movement planning. The SOP should define the roles and responsibilities of all unit personnel from brigade to company level. The SOP should outline preparations for all modes of movement: air, rail, sea and highway. Functions addressed in SOPs should include risk assessments, antiterrorism/security measures, and other deployment activities. Department of the Army provides overall guidance on antiterrorism to include the rules of engagement and desired standard of training.

INTELLIGENCE GATHERING

K-3. The intelligence needs of a deploying unit can be met by using several sources. During the predeployment the unit has access to installation and national intelligence sources. They also get an intelligence update on the theater to which they are deploying from the combatant command in the theater of operations.

THREAT ASSESSMENT

K-4. Units conduct threat assessments to determine their own vulnerability before deployment. These assessments must be conducted sufficiently in advance of deployments to allow for the development of security procedures, acquisition of necessary materials, obtaining focused intelligence, coordination of necessary security augmentation forces, and to request necessary HN support. Assessments must address rest areas, refueling locations, and movement routes.

K-5. Moreover the assessments should provide the commander a baseline to implement appropriate antiterrorist measures to reduce and/or mitigate risk. Predeployment assessments must occur in a timely manner, and should be incorporated in pre-deployment planning and training. These assessments will assist commanders in updating theater-specific training and in obtaining necessary security materials and equipment to implement protective measures.

K-6. These assessments identify weaknesses that may be exploited and suggest options that address those weaknesses. For example, a vulnerability assessment might reveal weaknesses in a seaport's security systems, police force, computer networks, or unprotected key infrastructure, such as water supplies, bridges, and tunnels. Evaluate potential threats on the basis of factors such as capabilities, intentions, and past activities. These assessments represent a systematic approach to identifying potential threats before they materialize. However, even if updated frequently, threat assessments may not adequately capture all emerging threats. This is true when threat assessments are only based on higher-level regional assessments that do not focus on the individual rail, sea, or airport facilities

K-7. At the theater level, component commanders provide transiting forces assessments of ports, airfields, and inland movement routes prior to their arrival. Transiting units may be required to augment component commanders with assessment personnel. This is normally accomplished with advance party personnel conducting liaison with the HN intelligence agency or security force. They communicate current local threat information to the transiting unit; enabling more effectively tailored protective measures to the specific threat environment.

SECURITY PLANNING

K-8. Units use the results of the assessments to develop security plans for self-protection while in-transit. Although emphasis must be on movements through high threat areas, commanders should not discount appropriate security measures for movements in lower threat areas. Security plans for movements through high threat areas must be completed and approved by the next higher command (at a minimum, the battalion commander).

K-9. Commanders must implement appropriate security measures to reduce risk and vulnerability. Advanced or on-board security augmentation should be considered for travel through high threat areas. Equipment such as advanced surveillance cameras and monitors, explosive detection devices, and blast mitigation equipment can significantly enhance a transiting units' posture against terrorist threats

K-10. Commanders and senior Army representatives accompanying the movement are responsible to ensure security measures sufficiently address vulnerabilities. Security measures taken to establish defense and protection must be continually reviewed and progressively updated to counter the changing threat and add an element of unpredictability to the terrorist calculation. This responsibility cannot be ignored in any situation. Local security must be 24/7 to provide observation, early warning, and if necessary, live fire capability. Additionally, rest and recuperation facilities located within the operational-level commander's area require close consideration. These facilities are frequently vulnerable due to their location and easy access. Movements may require tailored intelligence/counterintelligence support, HN assistance, or preplanned alternate routes based on the vulnerabilities associated with the movement.

ANTITERRORISM AWARENESS TRAINING

K-11. Units moving through high threat areas ensure personnel receive pre-deployment training on rules of engagement, use of force, theater threat orientation, defensive tactics, techniques, and procedures and security equipment. Training is performance oriented and provides Soldiers and leaders the training required to defend against a terrorist threat and/or mitigate the effects of an attack. Antiterrorist awareness training must be conducted by awareness instructor and include:

- Introduction to terrorism.
- Terrorist operations.
- Communications.
- Individual protection measures.
- Terrorist surveillance techniques.
- Improvised explosive device attacks.
- Kidnapping and hostage survival.
- Explanation of terrorist threat levels.

MOVEMENT

K-12. Deploying units traditionally focus security efforts primarily on their deployment area of operations. Before arriving in an overseas region, commanders are required to submit security plans to the geographic combatant commander, responsible for the protection of all military forces in their region. The procedures in the deploying units' plan must match the guidance developed by the combatant commander, who coordinates and approves the individual plans. This allows the commander to ensure that a unit's plan takes into account all current threats that could affect the mission and to accept or mitigate any security risks that arise.

K-13. The situation for the domestic phases of an overseas deployment is different: there may not be a designated commander with centralized security responsibilities similar to those of the overseas-geographic combatant commander. This may create gaps, during the domestic phases of a deployment, in the deploying unit's ability to coordinate individual plans, identify gaps that may exist, and mitigate the identified risk. IMCOM provides guidance to the installations on the development of a security/anti-terrorism plan and the implementation and execution of training.

SEA MOVEMENT

K-14. SDDC directs and coordinates the deployment of units through its SPOE by dispatching port call messages to the affected units. Port call messages provide an earliest and latest unit arrival date at the port complex to facilitate vessel loading (and sailing) to meet TPFDD requirements. These port call messages provide schedules for units to arrive at the port complex in sufficient time for the unit to process through the marshalling area and the staging area on a schedule that permits loading to meet vessel sailing schedules.

K-15. Because the security activities that DOD may conduct outside its installations are limited, it must work closely with a broad range of federal, state, and local agencies to ensure that adequate security measures exist and are executed during deployments through strategic seaports. Security responsibilities for DOD deployments through commercial seaports are divided among a number of DOD organizations including the USTRANSCOM components, particularly SDDC and MSC, FORSCOM, and individual deploying units.

K-16. Port readiness committees at each strategic port provide a common coordination structure for DOD, the Coast Guard, and other federal, state, and local agencies at the port level and are the principal interface between DOD and other officials at the ports during the movement of military equipment. However, port readiness committees are focused largely on preparing for potential military movements through a port and not on day-to-day security concerns at the port. The deploying unit may have to provide supercargoes to accompany cargo aboard ships.

RAIL MOVEMENT

K-17. The ITO, with the assistance of SDDC, is responsible for planning and executing rail movements, however, the transiting unit commander retains responsibility for planning security measures for rail movements. The deploying unit commander makes the final determination based on security requirements and coordinates with the ITO in CONUS or the MCT OCONUS and authorized railroad representatives on guard/escort matters. Guards/escorts are armed at the installation commander's discretion. When armed guards are used, all participating railroads must be notified. All armed guards must be familiar with the rules of engagement and trained in the use of force.

K-18. Cargo guards or escorts maintain surveillance over the military equipment during the journey and notify railroad personnel of any problems. They must be thoroughly trained on AT measures and provided current terrorist threat information. The rail cargo escorts help railroad personnel protect and maintain security of Army equipment loaded aboard trains and protect Army interests. HN support may be used when appropriate. A copy of the trip itinerary is given to the cargo escort supervisor. It includes the rail routing by specific rail companies, interchange points, and stop off points within a given rail line. The escorts are given portable radios to maintain communication with escort supervisors and other escorts. Escorts are instructed on locomotive and railroad safety. Additionally, escorts will be briefed on rules of

engagement prior to the train leaving station. SDDC provides infrastructure information on surface transportation and SPOE terminal facilities and security for deploying units while within the SPOE.

AIR MOVEMENT

K-19. The Army deploys personnel, supplies, and equipment by air through an APOE that could be on an USAF base, an Army installation, or a commercial airfield. Deploying unit commanders are responsible for AT planning for movements to APOE and in the marshalling area. Army and USAF commanders conduct joint coordination for mutual defense.

K-20. The APOE is organized into four separate areas – marshalling area, alert holding area, call forward area, and loading ramp area (See Figure 3-2 for the notional layout of an APOE). Once the deploying unit moves to the alert holding area the USAF is responsible for security until the unit is released from the APOD.

HIGHWAY MOVEMENT

K-21. In those instances where the home station is less than 100 miles from the POE, the deploying unit may convoy their vehicles and equipment to the port. The unit submits the request for convoy clearance to the ITO who forwards the request to the Defense Movement Coordinator in the state of origin. Refer to FM 55-30 for convoy operations procedures. The moving unit is normally responsible for providing security and must make provisions to maintain contact with the installation operations center.

K-22. The ITO is responsible for ordering commercial trucks for movement of equipment and supplies from home station to the POE with assistance from SDDC. A commercial security escort service may be contracted by SDDC to provide the needed security when Army personnel are not available or when circumstances make it absolutely necessary. Private security escort services must be planned and implemented IAW JFC and Army command policies. At a minimum, these personnel must be briefed about the rules for the use of force and provided suitable communications.

Appendix L

Senior Commanders Role in Deployment

The decisions that commanders of brigades and divisions make in the early stages of deployment can have a significant impact on the build up of combat power. The coordination and planning of staff members as outlined in this appendix provide the foundation for the commander to make his decisions.

ANALYZE

L-1. Commanders are expected to make informed decisions on everything that might impact on the mission of their organization. These decisions are based on the staff work performed by technical experts within the organization and supporting activities. Deployment and redeployment operations are no different.

L-2. Commanders have skilled and knowledgeable people available to provide recommendations on all aspects of the operation. Mobility officers are skilled deployment technicians assigned to division and BCT staffs to provide senior commanders with the embedded expertise to plan and execute deployment and redeployment operations. Appendix E outlines the range of their assignments and capabilities in more detail.

L-3. The corps and division transportation officers, the installation transportation officers, and the unit movement coordinators have a wealth of deployment knowledge and can provide sound advice and suggestions. Other sources of information are the personnel of USTRANSCOM, including their component commands (AMC and SDDC).

L-4. During the analysis of the mission the commander and staff consider options related to the organizational structure and the sequence of RSOI in the area of operation. A slight change in the support force applied early in the flow may have a dramatic effect on the incremental build of combat power. The intent is to have the force close in the operational area and prepared for employment with the least delay. The commander issues planning guidance to his subordinate commanders to enable rapid employment upon arrival in theater and completion of RSOI.

PREPARE

L-5. Deployment planning focuses on critical points along a timeline that begins with the initial notification. The G3/S3 determines the date the unit should close and be available for employment. The deployment staff uses that date to begin detailed backwards planning and setting dates for critical events, such as:

- UDL submission.
- Container delivery.
- Passenger manifesting.
- Movement to port.

L-6. Automated Movement Flow Tracker (AMFT) is a software tool that provides automated support for deployment planning and execution. AMFT enables the user to build a schedule that reflects timing necessary for critical events to occur prior to the departure of strategic lift. Once the timeline is developed the senior commander chairs a pre-deployment briefing for commanders and their staffs outlining his command guidance. The DTO and/or the mobility officer brief the deployment process and the key deployment events. Meeting the established deadlines and submitting accurate deployment data are emphasized and avoids delays and cancellations.

L-7. Senior commanders often sponsor deployment exercises involving installation support facilities and ports of debarkation to provide an understanding of the overall process, especially the unique physical layout that sets the installation or port apart from others. The exercises also bring together key personnel from the deploying units and the support organizations so that once the process begins there is an understanding of the purpose behind certain procedures.

L-8. An area of constant concern is the selection and training of the UMO. While this is an additional duty the importance of assigning a talented officer/NCO to fill this position cannot be overemphasized as they are often called upon to make on-the-spot decisions that will have a major impact on the force flow and ability to perform the mission. Their assignment and training should be closely monitored and tracked as a command item of interest in readiness reporting.

MOVE

L-9. As the units begin to move through the installation support facilities it is beneficial to all commanders to know the status of the units. AMFT supports managing the flow of deploying troops and equipment through the marshaling and deployment process by making deployment status and information readily available to anyone involved in the process. Commanders can make adjustments in the flow to avoid bottlenecks at any of the critical seams that might jeopardize timely departure of strategic lift or the safety of the Soldiers.

L-10. Daily reviews of the activities of the day can pay dividends in the avoidance of costly delays and unforeseen problems. A list of critical information is usually developed based on the commander's desires and the organizational situation and serves as the framework for the briefing. The reviews also provide a forum for coordination that may not have been possible during the events of the day with the decision makers on the move.

L-11. The visibility of the chain of command at deployment sites speaks to the importance of the operation. Moreover it provides a firsthand look at the execution of the deployment plan and allows the commanders and staff the opportunity to collect observations to improve the plan for subsequent deployments.

Glossary

Acronym/Term	Definition
AACG	arrival airfield control group
AALPS	Automated Air Load Planning System
A/DACG	arrival/departure airfield control group
ADCON	administrative control
AIS	automated information system
AIT	automated identification technology
ALD	available-to-load date
ALOC	Army logistics operations center
AMC	Air Mobility Command; Army Materiel Command
AMFT	automated movement flow tracking
AMS	Automated Manifest System
AOC	Army operations center
APOD	aerial port of debarkation
APOE	aerial port of embarkation
APS	Army prepositioned stocks
AR	Army regulation
ARFOR	Army forces
ARFORGEN	Army force generation
ASC	United States Army Sustainment Command
ASCC	Army Service component command
AUEL	automated unit equipment list
BBPCT	blocking, bracing, packing, crating, tie-down
BCT	brigade combat team
C2	command and control
CAC	common access card
CBL	commercial bill of lading
CCDR	combatant commander
CFR	Code of Federal Regulations
CHE	cargo handling equipment
CJCS	Chairman of the Joint Chiefs of Staff
CMOS	Cargo Movement Operation System
COA	course of action
COMPASS	Computerized Movement Planning and Status System
CONUS	continental United States
CRE	contingency response element
CRG	contingency response group
CRP	central receiving point

Acronym/Term	Definition
CULT	common user land transportation
DA	Department of the Army
DACG	departure airfield control group
DDSB	deployment and distribution support battalion
DDST	deployment and distribution support team
DEL	deployment equipment list
DLA	Defense Logistics Agency
DMC	defense movement coordinator
DOD	Department of Defense
DODAAC	Department of Defense activity address code
DPC	deployment processing center
DSC	deployment support command
DOL	directorate of logistics
DOT	Department of Transportation
DTO	division transportation officer
DTR	defense transportation regulation
DTS	Defense Transportation System
EAD	earliest arrival date
EDRE	emergency deployment readiness exercise
EOC	emergency operations center
ESC	expeditionary sustainment command
FM	field manual; force module
FORSCOM	United States Army Forces Command
G-3	assistant chief of staff, operations
G-4	assistant chief of staff, logistics
G-5	assistant chief of staff, plans
GATES	Global Air Transportation Execution System
GBL	government bill of lading
GCCS	Global Command and Control System
GCSS	Global Command Support System
GTN	Global Transportation Network
HAZMAT	hazardous material
HHI	hand-held interrogator
HMMWV	high mobility multipurpose wheeled vehicle
HN	host nation
HQDA	Headquarters, Department of the Army
HR	human resources
IAW	in accordance with
IBS	Integrated Booking System
ICODES	Integrated Computerized deployment System

Acronym/Term	Definition
IDSP	installation deployment support plan
IMCOM	United States Army Installation Management Command
IP	internet protocol
ISA	installation support area
ISB	intermediate staging base
ITO	installation transportation office
ITV	in-transit visibility
JCS	Joint Chiefs of Staff
JDDOC	joint deployment and distribution operations center
JFC	joint force commander
JFRG	Joint Force Requirements Generator
JI	joint inspection
JOA	joint operations area
JOPES	Joint Operation Planning and Execution System
JP	joint publication
JPEC	joint planning and execution community
JRSOI	joint reception, staging, onward movement, and integration
JTF-PO	Joint Task Force – Port Opening
LAD	latest arrival date
LAN	local area network
LOC	line of communications
LOGCAP	logistics civilian augmentation program
LOI	letter of instruction
LOTS	logistics over-the-shore
MCT	movement control team
METL	mission-essential task list
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civil considerations
MHE	materials handling equipment
MOBCON	mobilization control
MOG	maximum on ground
MSC	Military Sealift Command
MSL	military shipping label
NCO	noncommissioned officer
NGO	nongovernmental organization
OCONUS	outside the continental United States
OEL	organizational equipment list
OPCON	operational control
OPLAN	operation plan
OPORD	operation order

Acronym/Term	Definition
PO	private organization
POC	point of contact
POD	port of debarkation
POE	port of embarkation
PPP	power projection platform
PSA	port support activity
PSP	power support platform
RDD	required delivery date
RF	radio frequency
RFID	radio frequency identification
RFF	request for forces
RPOE	rapid port opening element
RSOI	reception, staging, onward movement, and integration
S-3	operations staff officer
S-4	logistics staff officer
SC	senior commander
SDDC	Surface Deployment and Distribution Command
SEDRE	sealift emergency deployment readiness exercise
SMS	Single Mobility System
SOP	standing operating procedure
SPM	single port manager
SPOD	seaport of debarkation
SPOE	seaport of embarkation
SRP	Soldier readiness processing
SSA	supply support activity
TAA	tactical assembly area
TAT	to accompany troops
TC-AIMS II	Transportation Coordinator's Automated Information for Movement System II
TCC	transportation component command
TCN	transportation control number
TDA	Table of Distribution and Allowances
TEA	Transportation Engineering Agency
TOE	table of organization and equipment
TOFM	theater opening force module
TPFDD	time-phased force and deployment data
TRADOC	United States Army Training and Doctrine Command
TSC	theater sustainment command
TTB	transportation terminal battalion
TTG	transportation terminal group

Acronym/Term	Definition
TTOE	transportation theater opening element
UDL	unit deployment list
UIC	unit identification code
ULN	unit line number
UMC	unit movement coordinator
UMD	unit movement data
UMO	unit movement officer
USAF	United States Air Force
USAMC	United States Army Materiel Command
USAR	United States Army Reserve
USCENTCOM	United States Central Command
USCG	United States Coast Guard
USJFCOM	United States Joint Forces Command
USTRANSCOM	United States Transportation Command
UTC	unit type code
WPS	Worldwide Port System

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DOCUMENTS NEEDED

These documents must be available to the intended users of this publication. *DA forms are available on the APD website (www.apd.army.mil). DD forms are available on the OSD website (www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm).*

DA Form 2028, *Recommended Changes to Publications and Blank Forms*

DD Form 836, *Dangerous Goods Shipping Paper/Declaration and Emergency Response Information of Hazardous Materials Transported by Government Vehicles/Containers/Vessels*

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DD Form 1266, *Request for Special Hauling Permit*

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DD Form 1387, *Military Shipment Label*

DD Form 1750, *Packing List*

DD Form 2133, *Joint Airlift Inspection Record*

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FORSCOM Form 285-R, *Vehicle Load Card*

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READINGS RECOMMENDED

These readings contain relevant supplemental information.

None

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21 April 2010

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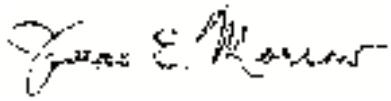

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