Joint Publication 4-01.8

Joint Tactics, Techniques, and Procedures for Joint Reception, Staging, Onward Movement, and Integration

13 June 2000

PREFACE

1. Scope

This publication provides overarching guidelines for planning and executing joint reception, staging, onward movement, and integration (JRSOI) of the Armed Forces of the United States. It explains the process of JRSOI using three major functions — command, control, communications, computers, and intelligence; force protection; and the JRSOI support organization. Its focus is at the supported combatant command level.

2. Purpose

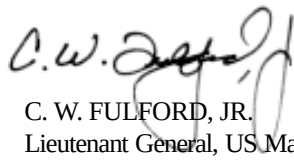
This publication has been prepared under the direction of the Chairman of the Joint Chiefs of Staff. It sets forth doctrine and selected joint tactics, techniques, and procedures (JTTP) to govern the joint activities and performance of the Armed Forces of the United States in joint operations and provides the doctrinal basis for US military involvement in multinational and interagency operations. It provides military guidance for the exercise of authority by combatant commanders and other joint force commanders and prescribes doctrine and selected tactics, techniques, and procedures for joint operations and training. It provides military guidance for use by the Armed Forces in preparing their appropriate plans. It is not the intent of this publication to restrict the authority of the joint force commander (JFC) from organizing the force and executing the mission in a manner the JFC deems most appropriate to ensure unity of effort in the accomplishment of the overall mission.

3. Application

a. Doctrine and selected tactics, techniques, and procedures and guidance established in this publication apply to the commanders of combatant commands, subunified commands, joint task forces, and subordinate components of these commands. These principles and guidance also may apply when significant forces of one Service are attached to forces of another Service or when significant forces of one Service support forces of another Service.

b. The guidance in this publication is authoritative; as such, this doctrine (or JTTP) will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise. If conflicts arise between the contents of this publication and the contents of Service publications, this publication will take precedence for the activities of joint forces unless the Chairman of the Joint Chiefs of Staff, normally in coordination with the other members of the Joint Chiefs of Staff, has provided more current and specific guidance. Commanders of forces operating as part of a multinational (alliance or coalition) military command should follow multinational doctrine and procedures ratified by the United States. For doctrine and procedures not ratified by the United States, commanders should evaluate and follow the multinational command's doctrine and procedures, where applicable.

For the Chairman of the Joint Chiefs of Staff:



C. W. FULFORD, JR.
Lieutenant General, US Marine Corps
Director, Joint Staff

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- **Details the JRSOI Process Including its Functional Areas, Elements, and Tasks**
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Introduction

Joint reception, staging, onward movement, and integration (JRSOI) is the final phase of deployment and is the critical link between deployment and employment of joint forces in the area of responsibility or joint operations area.

The US Government utilizes diplomatic, economic, informational, or military means to project power in order to respond to crises, contribute to deterrence, and promote regional stability. **With fewer US forces present overseas, US National Military Strategy relies heavily on the fundamental concept of force projection, the military element of power projection.** Successful force projection rests on the ability to alert, mobilize, and deploy forces to a regional crisis and then rapidly amass combat capabilities as personnel and materiel arrive in the theater. **A key element of force projection is deployment.** Deployment is movement of forces and their sustainment from their point of origin to a specific operational area to conduct joint operations. **This publication presents joint reception, staging, onward movement, and integration (JRSOI), the final phase of the four phases of the deployment process.** The JRSOI phase of joint force projection occurs in the operational area. This phase comprises the essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting operational requirements.

The **deployment process includes all planning and execution activities** beginning with notification of the need to accomplish a mission requiring deployment of US forces. Deployment ends when the supported combatant commander has sufficient

mission ready forces at the prescribed final destination. Although deployment is an iterative process overall, **JRSOI as the last deployment phase completes the deployment process for force elements**. It is also important to remember that JRSOI process functions are applicable to both the deployment and redeployment phases of military operations.

Principles of JRSOI

Unity of command, synchronization, and balance underscore the principles of JRSOI.

Successful **JRSOI is characterized by three overarching principles: unity of command, synchronization, and balance**. JRSOI expedites the continuous and controlled flow of forces and supplies into and within the theater. JRSOI enhances the efficient use of limited assets, personnel, and facilities by avoiding saturation at nodes and along lines of communications (LOCs) en route and within the theater. In order to accomplish this, **JRSOI depends on a well-planned and carefully managed time-phased force and deployment data (TPFDD) flow**.

- **Unity of Command** specifies that a single military individual is responsible for the overall coordination of JRSOI activities; whereas **unity of effort** emphasizes the need for a variety of international military and nonmilitary participants to be **directed toward a common purpose**. Both approaches are desirable to coordinate the efforts of all key players in the JRSOI process, to include supporting combatant commanders for orchestration or en route infrastructure. Multinational unity of effort requires coordinated policy, a common understanding, and trust and confidence.

- **Synchronization** links deployed personnel, equipment, and materiel in a timely manner. Ensuring visibility of assets between processing nodes is key to achieving synchronization of forces. A well-synchronized flow expedites buildup of mission capability and avoids saturation at nodes and along LOCs, thereby enhancing survivability.

- **Balance** applies to managing the TPFDD flow by allowing a continuous and controlled flow of forces and supplies into and within the area of responsibility (AOR). Balance is achieved by ensuring that people, equipment, materiel, and information flow are directed at a rate that can be accommodated at every point along the entire network from origin to destination. Achieving balance can result in efficient JRSOI operations and help minimize the time required to complete JRSOI.

Responsibility

JRSOI is the responsibility of the supported combatant commander receiving forces.

A variety of individuals, units, and organizations are accountable for ensuring the success of JRSOI. They include:

- Supporting Combatant Commanders
- Subordinate Joint Force Commanders
- Components
- Deploying Unit(s)
- Support Organizations (Enabling Units)
- Allies and Coalition Partners
- Host Nation
- Contractors

Fundamentals of JRSOI

During JRSOI, planned capability is turned into actual on-site capability to conduct specified missions.

JRSOI includes receiving personnel, materiel, and equipment; assembling them into units at designated staging sites; moving these units to a destination within the joint operations area or AOR; and integrating these units into a mission ready joint force. Often, these activities are performed concurrently rather than sequentially; they may be performed in a different sequence; and some steps may even be performed before a deploying unit enters the theater. For example, amphibious Marine air-ground task forces task-organize before they deploy, thereby eliminating most staging area activities associated with reuniting forces and equipment and organizing them for onward movement.

JRSOI must be responsive to the supported combatant commander's priorities.

Mission, enemy, terrain and weather, troops and support available, time available (METT-T) and civilian considerations influence decisions. METT-T factors may require certain types of units to be in high demand and prepared for immediate employment. For example, security force units would be the first units to deploy into some ports of debarkation to provide protection for deploying troops and equipment. Critical resources such as heavy equipment transporters, fuel support, and ground transportation to move personnel may require redirecting lift assets from other missions. Therefore, **flexibility and visibility are critical assets in planning JRSOI operations**. A robust **command, control, communications, computers, and intelligence infrastructure** is also essential for **distributing information and providing command and control** to manage this type of complex, dynamic support architecture.

CONCLUSION

This publication establishes a detailed understanding of joint staging, reception, onward movement, and integration operations. It provides joint tactics, techniques, and procedures on the fundamentals of JRSOI of the Armed Forces of the United States in response to mission tasking. The concepts of the JRSOI process are extensively addressed, with emphasis on planning and execution. It discusses the responsibilities and command relationships for supported and supporting combatant commands and Services with regards to these operations. Finally, consideration is given to the importance of supporting organizations and the automated information systems and associated emerging automatic identification technology that will provide worldwide asset visibility for the successful completion of JRSOI operations.

CHAPTER I
OVERVIEW

"Future force projection missions, like those throughout history, will demand well-developed operational and logistical planning, force mix, appropriate sequencing into and out of a theater, and a constant requirement for soldier and unit versatility. Such missions will require leaders and units that can operate in ambiguity and have the agility to adapt and adjust. Set piece thinking does not fit force projection. All of these requirements will occur in a joint or combined environment."

General Fredrick M. Franks, Jr.
Commander, VII Corps, Gulf War

1. General

In order to respond to crises, contribute to deterrence, and promote regional stability, the United States Government utilizes diplomatic, economic, informational, or military instruments to shape the international environment. With fewer US forces present overseas, **US National Military Strategy relies heavily on the fundamental concept of force projection, the military element of power projection**. Successful force projection rests on the ability to alert, mobilize, and deploy forces to a regional crisis and then rapidly amass combat capabilities as personnel and materiel arrive in the theater. **A key element of force projection is deployment.** Deployment is movement of forces and their sustainment from their point of origin to a specific operational area to conduct joint operations. This chapter presents an overview of joint reception, staging, onward movement, and integration (JRSOI), which is the final phase of deployment. It defines the segments, describes the principles, and identifies the essential elements of JRSOI as they support and enhance full spectrum dominance (see Figure I-1). It is **important to remember JRSOI process functions are applicable to both the deployment and redeployment phases of military operations**.

a. The deployment process requires continuous planning that begins with the requirement to deploy forces, and ends when units are assembled in the theater and are integrated into the joint force. **Deployment is conducted in four phases: predeployment activities; movement to and activities at a port of embarkation (POE); movement to a port of debarkation (POD); and JRSOI.** These segments describe the major activities of the joint force from point of origin to point of employment. The first three phases are further discussed in Joint Publication (JP) 3-35, *Joint Deployment and Redeployment Operations*. This publication will focus upon the final phase of deployment, JRSOI.

b. Joint force deployment is a dynamic and complex process that involves a multitude of organizations and processes that require training, continuous coordination, and integration during planning and execution. Process seams and friction may occur at functional or organizational interfaces when physical resources and information are transferred. A successful deployment requires the smooth implementation of each segment and seamless transition between segments.

c. **Force deployments can originate from the continental United States (CONUS) or**

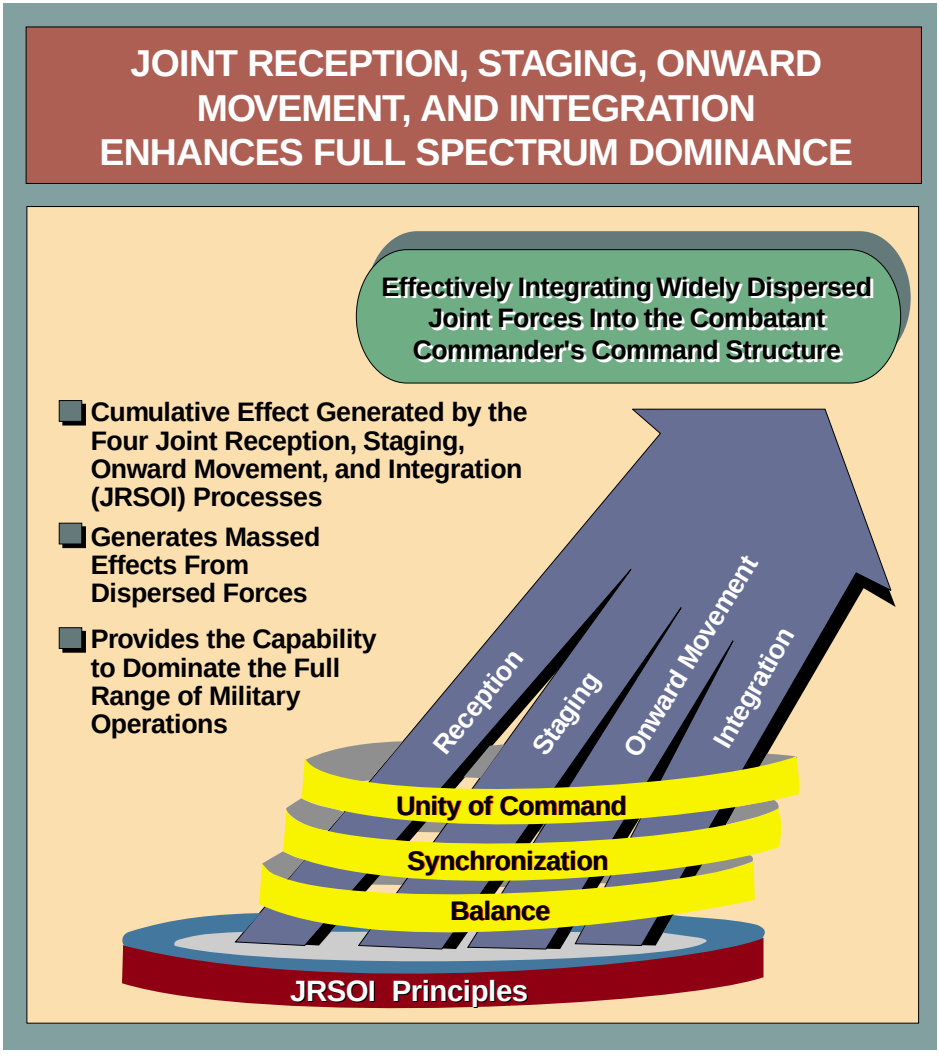

Figure I-1. Joint Reception, Staging, Onward Movement, and Integration Enhances Full Spectrum Dominance

forward locations outside of CONUS. Units may deploy with all or some of their supplies and equipment, use supplies and equipment made available through host nation (HN) or theater contract support, or they may use supplies and equipment that has been pre-positioned around the world both ashore and afloat. Figure I-2 illustrates the deployment process from POEs to final destination in-theater utilizing the strategic mobility triad of strategic airlift, strategic sealift, and pre-positioned equipment. **The combination of rapid lift, pre-positioned assets, and overseas presence provides the supported combatant commander with flexible mobility options that can be tailored to meet requirements.**

2. Segments of Joint Reception, Staging, Onward Movement, and Integration

a. In a force projection environment, the ability to execute a mission largely depends

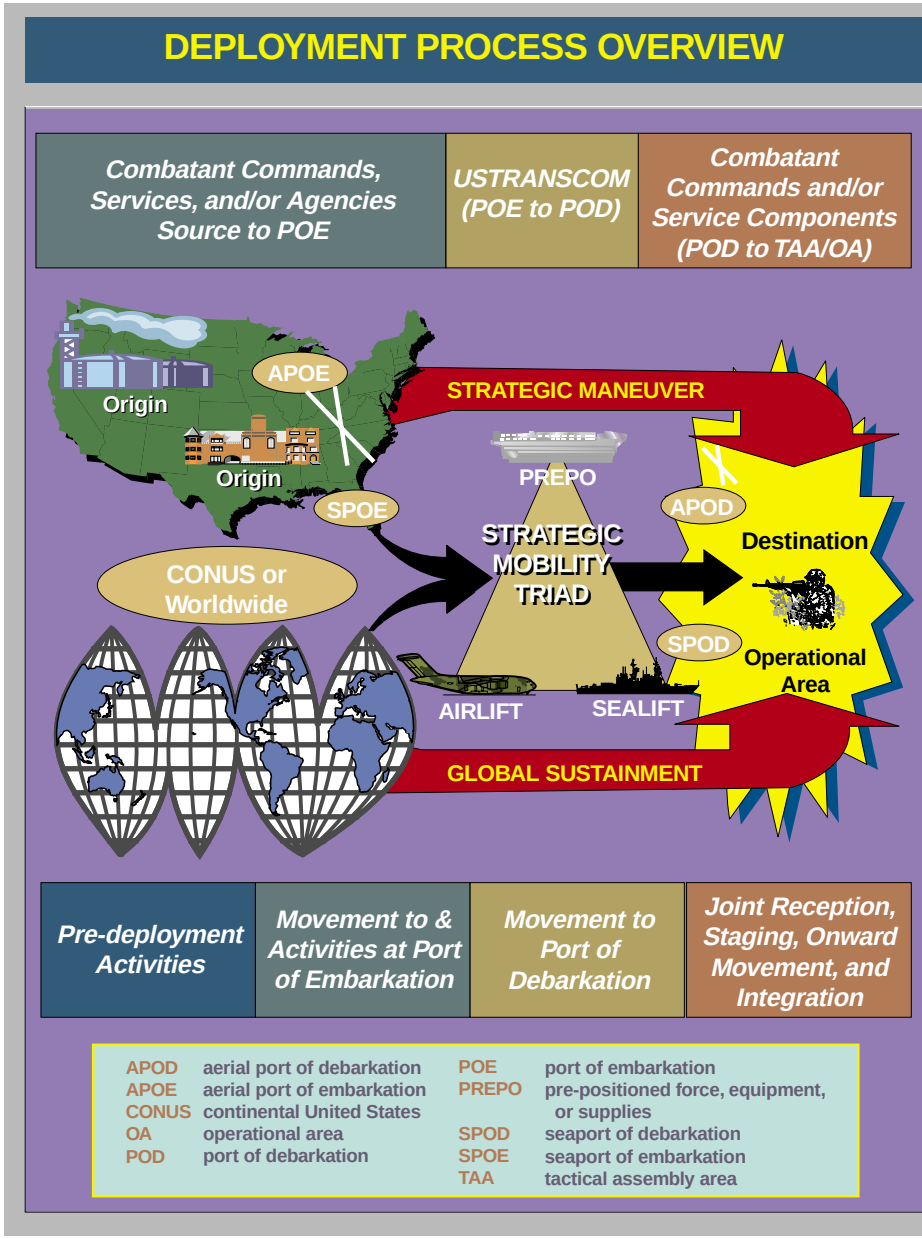

Figure I-2. Deployment Process Overview

on the speed with which forces assemble at the required location. **JRSOI is the essential process that transitions deploying forces, consisting of personnel, equipment, and materiel arriving in theater, into forces capable of meeting the combatant commander's operational requirements.** Maintaining effectiveness and promoting efficiency in JRSOI facilitates preparation for operations by providing adequately resourced, mission-capable forces to execute the combatant commander's mission. **The four segments of JRSOI are described below.**

- **Reception** operations include all those functions required to receive and clear unit personnel, equipment, and materiel through the POD.

- **Staging** assembles, temporarily holds, and organizes arriving personnel, equipment, and materiel into units and forces and prepares them for onward movement and tactical operations.

- **Onward Movement** is the process of moving units and accompanying materiel from reception facilities, marshalling areas, and staging areas to tactical assembly areas (TAAs) and/or operational areas (OAs) or other theater destinations.

- **Integration** is the synchronized hand over of units into an operational commander's force prior to mission execution.

b. **The supported combatant commander is responsible for JRSOI.** This includes all actions required to make arriving units operationally ready and then integrating them into the joint force. The capability of strategic lift to move personnel, equipment, and materiel to the reception points (e.g., the PODs) must be matched by the capability to receive and process the force. **The combatant commander must have visibility of the deployment flow** to control the rate as well as the sequencing and processing of deploying forces. Although the supported commander is responsible for JRSOI and other facets of logistic support, this does not relieve supporting commanders of responsibility for detailed oversight of the deployment flow and coordinating changes with the supported commander, when appropriate.

c. JRSOI is a critical operational challenge that relies on a logistic architecture for successful execution. Even self-sustaining units that arrive in-theater are heavily dependent on logistic systems until they are reunited with their equipment. As deploying units assemble, efforts focus on preparing for future operations and integrating into the joint force. Successful JRSOI requires command emphasis in planning, training, synchronization, and attention to detail. **JRSOI is an integral part of an operation and enhances employment potential.**

d. JRSOI provides a common framework to focus joint and Service component capabilities on land, at sea, and in the air into a coherent operation. The JRSOI process map (see Figure I-3) was developed as a guide to assist with planning and executing JRSOI. The joint functional areas associated with planning and executing JRSOI are depicted in the process map and are discussed in detail in subsequent chapters. The context of each JRSOI process may vary reflecting the nature of the operation, mission, enemy, terrain and weather, troops and support available, time available (METT-T), and civilian considerations. However, **deploying forces, regardless of Service, normally undergo some form of reception, staging, onward movement, and integration (RSOI)**. For example, a fighter squadron may complete JRSOI in a few hours at the reception point or aerial port. Other units may require 30 days or longer to complete the entire process.

3. Principles of JRSOI

There are three overarching principles of JRSOI as depicted in Figure I-4. These principles can assist commanders and their staffs in the planning and execution of JRSOI. Combatant commanders should consider these principles when planning JRSOI operations.

a. **Unity of command** specifies that **a single individual is responsible for the overall coordination of JRSOI activities**. **This individual is the combatant**

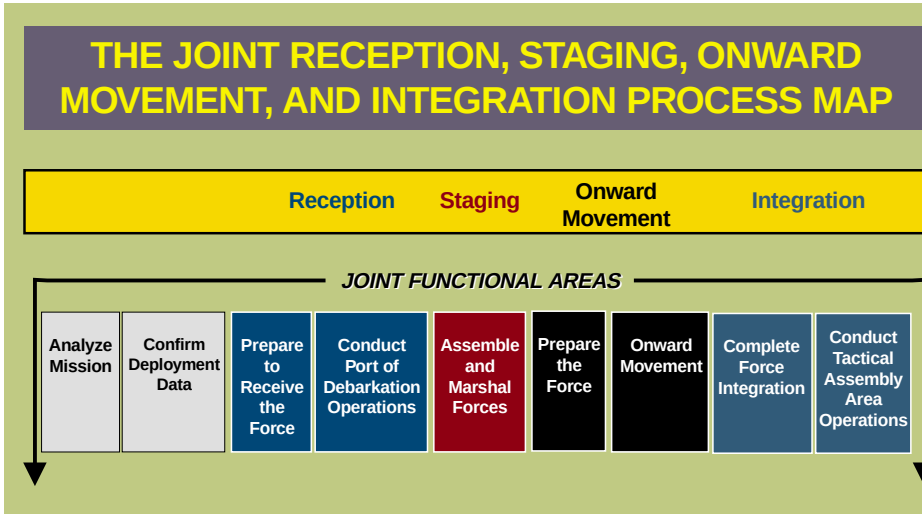

Figure I-3. The Joint Reception, Staging, Onward Movement, and Integration Process Map

commander of the theater in which the deploying force flows. The combatant commander adjusts resources based upon the deployment flow into the theater. The combatant commander also controls the movement of forces in the area of responsibility (AOR), provides support to personnel arriving into the theater, and centrally coordinates the efforts of all other key players in the JRSOI process to include supporting combatant commanders.

UNITY OF COMMAND

"Unity of command is the interlocking web of responsibility which is a foundation for trust, coordination, and the teamwork necessary for unified military action. It requires clear delineation of responsibility among commanders up, down, and laterally."

JP 0-2, *Unified Action Armed Forces (UNAAF)*

b. **Synchronization** links deployed personnel, equipment, and materiel in a timely manner. A well-synchronized flow expedites buildup of mission capability and avoids saturation at nodes and along lines of communications (LOCs), thereby enhancing survivability. **Synchronization requires**

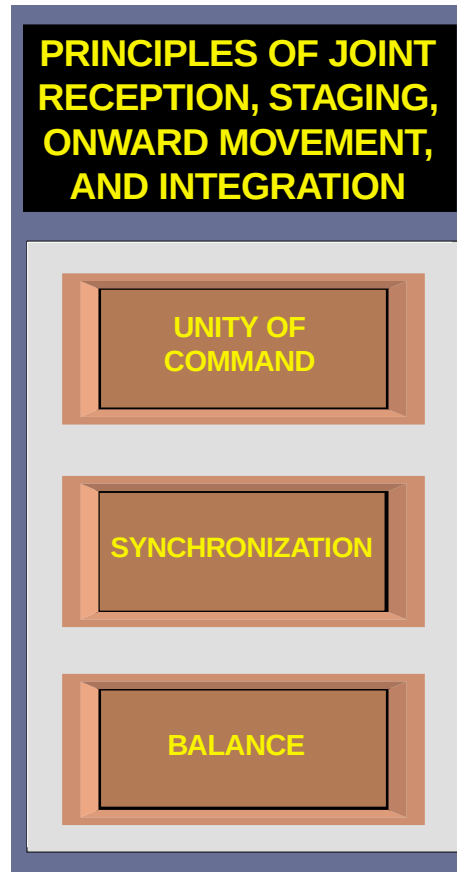

Figure I-4. Principles of Joint Reception, Staging, Onward Movement, and Integration

detailed joint planning, timely and predictable airflow and seaflow, visibility of assets moving through the distribution pipeline, and the ability to adjust movement schedules.

Synchronization occurs when the right units, equipment, supplies, and capabilities arrive in the correct order at the appropriate locations, and supporting activities are coordinated in such a fashion to operate in consonance with one another so that the tempo of force deployment, planning, and execution is uninterrupted. This enhances command and control (C2) and helps maintain unit integrity. **Managing the timing of the time-phased force and deployment data (TPFDD) flow up to the point of movement is a key activity for ensuring that the arrival time of personnel, equipment, and materiel coincide.** Force planners and supporting transportation deployment agencies must ensure that unit integrity is a dominant consideration when planning unit and equipment deployment and/or movement increments to their supporting transportation load plans and movement schedules.

c. **Balance** applies to managing the TPFDD flow. Managing the TPFDD allows the supported combatant commander to adjust the movement schedule for units as mission requirements or conditions change. **Joint total asset visibility** (JTAV) further provides users with timely and accurate information on the location, movement, status, and identity of units, personnel, equipment, and supplies. Balance is especially relevant to the relationship between deployment and theater distribution. **To achieve balance, the flow through the intertheater pipeline and the intratheater distribution network must be regulated and integrated to allow a continuous and controlled flow of forces and supplies into**

SYNCHRONIZATION

DESERT STORM synchronization required detailed joint planning, timely and predictable airflow and seaflow. In December, the primary cause of overcrowding (in the vicinity of [ports of debarkation]) was a lack of unit integrity in the sea flow. Property of individual units was frequently dispersed among multiple ships. An analysis of 19 randomly selected combat arms and combat support battalions indicate that, on average, a battalion's equipment arrived on seven vessels over a period of 26 days. On average, combat service support battalions came into port on 17 vessels over a period of 37 days. As an example of one extreme, all the equipment of the 121st Signal Battalion of the 1st Infantry Division (M), one of the lead units from [the continental United States], arrived on two ships within three days of each other. At the other extreme, gear belonging to the 143d Signal Battalion and 1st Maintenance Battalion from Europe was spread over 17 and 26 ships respectively, docking over periods of 25 and 45 days respectively. The disruption of throughput operations caused by dispersion of unit property on multiple ships was further exacerbated when single ships were loaded with partial unit sets bound for two different ports. The failure to synchronize airflow and sea flow and not maintain unit integrity contributed to excessively long stays in port by soldiers awaiting equipment. The consequent over concentration in the staging area strained available reception capability and provided the enemy a vulnerable target over an extended period.

SOURCE: 1st Infantry Division (Forward)
DESERT SHIELD/STORM After Action Report, 30 May 1991

and within the AOR. Supported combatant commanders regulate the transportation flow by ensuring that adequate support and reception assets, effectively coordinated through a theater reception plan, are available or deployed early in the movement schedule to facilitate JRSOI. Efficiency is enhanced to the degree that interface requirements among modes of transportation, ports, and storage facilities have been planned and implemented. **Continuous flow (balance) is improved by minimizing handling, the number of transfer points, and the number and variety of carriers.** Saturation can be avoided, survivability enhanced, and balance achieved by ensuring that people, equipment, materiel, and information flow are directed at a rate that can be accommodated at every point along the entire network, from origin to destination. The operation environment, concept of the operations, and available infrastructure are major considerations in determining how to balance the transportation flow and sequence the arrival of combat and combat support forces in theater.

4. Elements of JRSOI

In order to achieve unity of command, synchronization, and balance, **JRSOI relies upon essential and enabling elements** as shown in Figure I-5. These elements combine in various ways under differing circumstances to make the operations associated with JRSOI possible.

a. **Command, Control, Communications, Computers, and Intelligence (C4I)** is the means by which the combatant commander maintains unity of command to balance and synchronize joint force activities and achieve mission success. Joint forces operate in

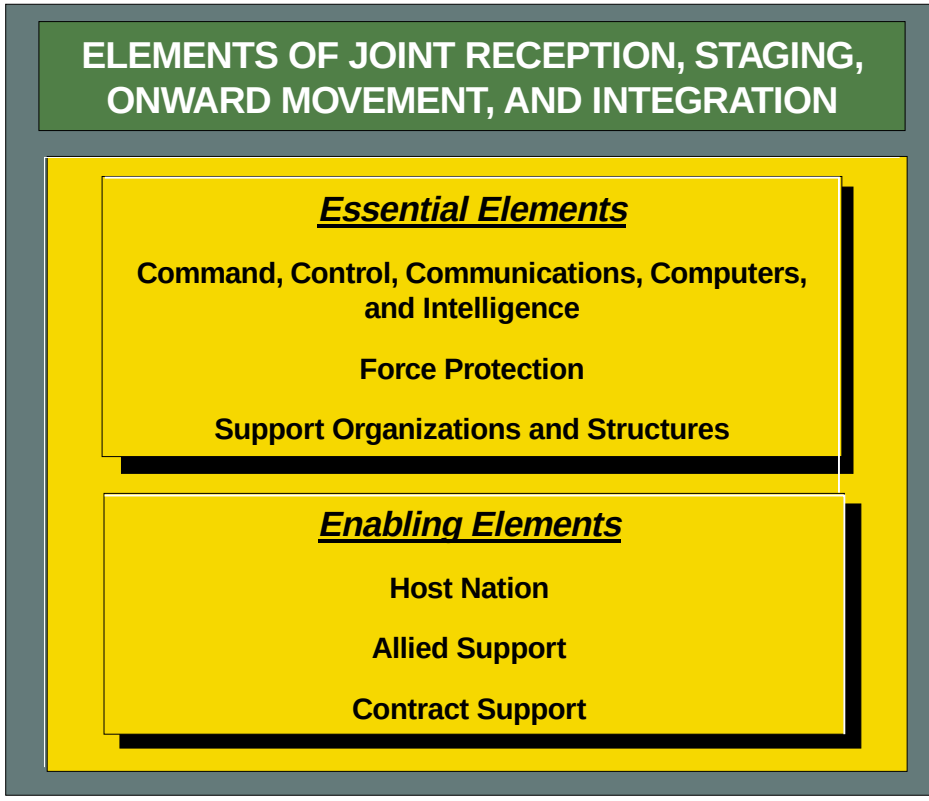

Figure I-5. Elements of Joint Reception, Staging, Onward Movement, and Integration

diverse environments and conduct a variety of operations as part of multinational or interagency teams. Rapid force projection, extended LOCs, and potential forcible entry prior to establishing operations in logistically bare-based areas require **a C4I infrastructure that is interoperable, flexible, responsive, mobile, disciplined, survivable, and sustainable**.

- **JRSOI requires effective C4I systems with responsive leaders and managers.** C4I systems must link the supported combatant commander, supporting combatant commanders, Service components, deploying units, JRSOI support organizations, and the tactical commanders who will integrate the deploying forces into their commands. Reporting and information systems should provide accurate, relevant, and timely information to the appropriate staffs and leaders to plan, integrate, direct, and execute their assigned part of the JRSOI operation.

- **Effective C4I must be responsive to the supported combatant commander for deployment and JRSOI management.** The supported combatant commander must be able to influence the outcome of the deployment. To do this, the commander must know what force capabilities are available and what capabilities will be available in the future. METT-T-influenced changes may cause certain units to be in high demand or needed for immediate employment. C4I systems must enable JRSOI providers to locate these units and divert resources to expedite their onward movement.

For detailed joint C4I planning guidance, see JP 6-0, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, *and JP 6-02,* Joint Doctrine for Operation/Tactical Command, Control, Communications Systems.

b. **Force protection** is an essential element of joint force operations. Commanders must ensure that requisite force protection measures are enforced consistent with the threat. For JRSOI, **the challenge is to protect those forces configured for**

Units rapidly organize for departure from ports of debarkation in order to reduce vulnerability from enemy threat.

deployment that are geographically dispersed and possess limited self-protection capability. Risk must be assessed and comprehensive force protection plans developed to address vulnerabilities and to counter potential threats to forces, infrastructure, and information systems. **The combatant commander's foremost force protection concern should be maintaining local security to preserve tactical and operational flexibility and freedom of action.** Effective and efficient JRSOI operations can reduce force vulnerability by ensuring that units quickly complete the process. Balance and synchronization ensure that forces do not remain static in vulnerable situations and is facilitated by:

- Coordinating the flow (achieving balance) so personnel, equipment, and materiel arrive nearly simultaneously;
- Minimizing the force footprint by time-phasing units so that those elements required to conduct JRSOI deploy initially;
- Synchronizing theater reception, staging, and onward movement capabilities to prevent bottlenecks; and
- Exercising the ability to control and adjust the TPFDD flow and movement schedules (unity of command).

  For additional force protection information see JP 3-10, Doctrine for Joint Rear Area Operations, *and JP 3-54,* Joint Doctrine for Operations Security.

c. **JRSOI support organizations** can consist of one or more of combinations of the following: **US forces, HN assets, contractors, or allied support forces**. These organizations are a **force multiplier** because they provide the means to expedite buildup of forces in the AOR. Normally, US forces are deployed to support JRSOI operations if the required capability does not exist in the AOR. The necessity to deploy US forces may be reduced if reliable support can be obtained through one of the other sources. To enhance JRSOI support, planners should initially evaluate support requirements (shown in Figure I-6), integrate support organizations into the deployment process, then schedule units that provide essential supplies and services to arrive early enough in the deployment flow to be operational when needed. As units arrive in the AOR, they are in a deploying status with no or limited self-sustainment capability and may require logistic support. Their requirements should be met until the units assemble and become capable of sustaining themselves and/or have been logistically integrated into the gaining command.

The list in Figure I-6 is self-descriptive; however, other services encompass life support requirements such as meals, water, shelter, sanitation, trash removal, and support elements for operating marshalling and staging areas, and reporting onward movements to the DOD in-transit visibility system. Logistics to support JRSOI requirements are supplied by organizations such as Army area support groups, combat service support element (CSSE) of the Marine air-ground task force (MAGTF), Navy advanced base functional components (ABFCs), the Defense Logistics Agency's contingency support teams, expeditionary logistic support facilities, contractor support, the HN, or other contracted agencies. Another important consideration is that organizations with JRSOI support functions sometimes have other missions that they execute simultaneously (e.g., sustainment, retrograde).

- **Host nations can provide valuable resources to support JRSOI operations.** Host-nation support (HNS) may include support operations at

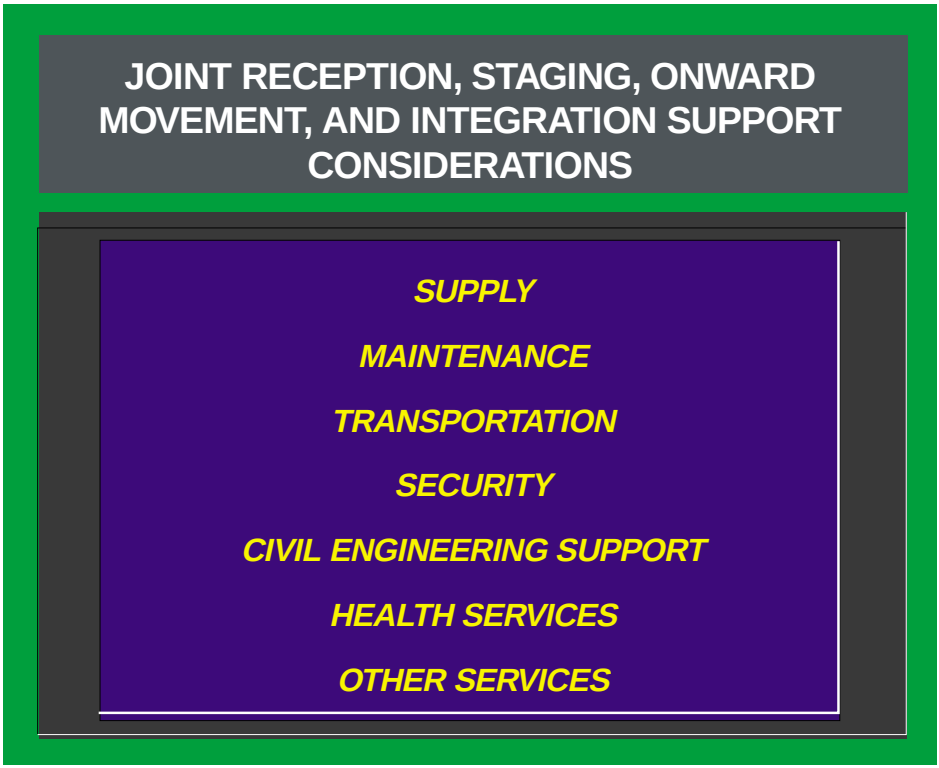

Figure I-6. Joint Reception, Staging, Onward Movement, and Integration Support Considerations

reception facilities, air and naval operating bases, staging facilities, and support areas, and may encompass a wide variety of commodities and services concerning supplies, medical, transportation, facilities, communications, rear area operations, petroleum, military police, prisoners of war and internees, and civil labor. **HNS can reduce the need for early arriving forces and materiel to support JRSOI, shrink strategic lift requirements, and minimize the in-theater logistic footprint.** In addition to established HNS agreements normally limited to use in war, this support can also be arranged using existing acquisition cross-Service agreements (ACSAs) or, at the local level, by directly contracting for support and services. HN capabilities should be assessed and validated as early on in the deployment process as possible. In contingency operations, an enormous saving in manpower, units, and equipment is possible by maximizing HNS. This is particularly true in the areas of transportation and specialized equipment.

- **Multinational support has been a traditional strong point for successful JRSOI.** Historically the United States has relied upon its allies to assist during major worldwide contingencies and smaller regional emergencies. This support has ranged across the spectrum of JRSOI operations. Complementary and unique multinational capabilities should be considered during planning.

- **Contracting support** is another force multiplier and, like HNS, should be

planned and coordinated in advance of an actual deployment. Normally HNS will be considered first before a decision is made to contract for required support. The supported combatant commander should ensure the early deployment of contracting, finance, resource management, and legal personnel to accomplish necessary contracting actions. In the context of JRSOI, contract support is the use of foreign or US civilian personnel and/or equipment to perform a function, such as offloading vessels or transporting supplies forward. **Using contractor personnel reduces the need for US military personnel in combat service support (CSS) roles.**

Additional guidance for JRSOI-related tasks and operations can be found in the following publications: JP 3-35, Joint Deployment and Redeployment Operations, *JP 4-0,* Doctrine for Logistic Support of Joint Operations, *JP 4-01,* Joint Doctrine for the Defense Transportation System, *JP 4-01.1,* Joint Tactics, Techniques, and Procedures for Airlift Support to Joint Operations, *JP 4-01.2,* Joint Tactics, Techniques, and Procedures for Sealift Support to Joint Operations, *JP 4-01.3,* Joint Tactics, Techniques, and Procedures for Movement Control, *JP 4.01.4,* Joint Tactics, Techniques, and Procedures for Joint Theater Distribution, *JP 4-01.5,* Joint Tactics, Techniques, and Procedures for Water Terminal Operations, *JP 4-01.6,* Joint Tactics, Techniques, and Procedures for Joint Logistics Over-the-Shore (JLOTS), *JP 4-04,* Joint Doctrine for Civil Engineering Support, *and JP 6-02,* Joint Doctrine for Employment of Operational/Tactical Command, Control, Communications, and Computer Systems.

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CHAPTER II
COMMAND RELATIONSHIPS

"Command is central to all military action, and unity of command is central to unity of effort. Inherent in command is the authority that a military commander lawfully exercises over subordinates and confers authority to assign missions and to demand accountability for their attainment."

JP 0-2, *Unified Action Armed Forces (UNAAF)*

1. General

Clear articulation of responsibilities is the first step in conducting a synchronized and coordinated deployment. This chapter describes the responsibilities, roles, and relationships of the primary commands and agencies involved in JRSOI.

Basic responsibilities for combatant commanders, subordinate joint force commanders (JFCs), and other supporting agencies are outlined in JP 0-2, Unified Action Armed Forces (UNAAF), *JP 3-0,* Doctrine for Joint Operations, *and JP 4-01,* Joint Doctrine for the Defense Transportation System.

Under provisions of title 10, US Code (USC), as revised by the Goldwater-Nichols Department of Defense (DOD) Reorganization Act of 1986, **the combatant commander directs subordinate commands and forces as necessary to carry out missions assigned to the command, including authoritative direction over all aspects of military operations, joint training, and logistics within the AOR**. A force assigned or attached to a combatant command may be transferred from that command only as directed by the Secretary of Defense and under procedures prescribed by the Secretary of Defense and approved by the President. When forces are transferred, the command relationship the gaining commander will exercise over those forces must be specified. The combatant commander exercises combatant command (command authority) (COCOM) over forces assigned by the National Command Authorities (NCA). Operational control (OPCON) is inherent in COCOM. Along with these command relationships there are roles and responsibilities that are important to JRSOI.

2. Roles and Responsibilities

a. **Chairman of the Joint Chiefs of Staff.** The Chairman of the Joint Chiefs of Staff (CJCS) **transmits** NCA orders to the combatant commanders (as directed by the NCA), **coordinates** all communications in matters of joint interest, and **acts** as the spokesman for the combatant commanders. Responsibilities of the Chairman come from a variety of sources such as title 10 USC and DOD Directive 5100.1. **Some CJCS responsibilities relating to deployment include:**

- Monitoring the projection of military force operations and keeping the NCA informed;
- Advising the Secretary of Defense on critical deficiencies in force capabilities;
- Preparing joint logistic and mobility plans to support strategic and joint operation plans (OPLANs); and
- Apportioning critical transportation assets.

b. **Military Departments.** Subject to the authority of the Secretary of Defense and of

the commanders of the combatant commands, **the Military Departments are responsible for administration and support of forces assigned or attached to the combatant commands** (10 USC Section 165(b)). These responsibilities include organizing, training, equipping, and providing logistic support for their respective Services. The Services fulfill their responsibilities by exercising administrative control through the commanders of the Service component commands assigned to the combatant commands. The Military Departments will normally monitor deployment operations through their respective operations centers to ensure that adequate resources are made available to the supported JFC so that the assigned task can be successfully accomplished.

c. **Supported Combatant Commanders** provide authoritative direction to subordinate commands, including authoritative direction over all aspects of military operations, joint training, and logistics. They provide force protection for all subordinate command and other US forces as required under memorandum of agreement or law within their AOR. **Supported combatant commanders are tasked with planning and executing joint military operations, including all facets of RSOI.** They must organize the available logistic resources to support JRSOI and sustainment operations. Forces deploy and are sustained through the distribution system, which the supported combatant commander is responsible for planning and operating. Responsibilities for theater support may include the following.

- Identification of the movement, timing, and sequence of the deploying forces in the TPFDD.
- Report theater in-transit visibility (ITV) theater movement data and ensure that communications infrastructure supports the timely transmission of ITV data from theater field activities to the Global Transportation Network (GTN).
- Validating the theater's JRSOI infrastructure.
- Development and operation of the LOC.
- Movement control through the LOC and force tracking.
- Security of the LOC and protection of forces in the LOC. A joint rear area coordinator (JRAC), if designated, will be responsible for key LOC security in the joint rear area.

  JP 3-10, Doctrine for Joint Rear Area Operations, *defines the mission of the JRAC.*
- Liaison for most strategic lift with the US Transportation Command (USTRANSCOM) or appropriate supporting combatant commanders and/or other agencies.
- Integration of pre-positioned (ashore and/or afloat) materiel in theater.
- Establishment of HNS agreements.
- Contracting and acquiring reception, staging, onward movement facilities, supplies, and services.
- Command and control of assigned, allocated, or attached forces.
- Managing JRSOI to centrally control critical assets and more effectively react to unforeseen circumstances by organizing functional boards and centers. The following functional boards or centers, if established, may have key roles in the planning and execution of JRSOI operations.

•• **Theater Joint Transportation Board (T-JTB) and/or Theater Joint Movement Center (T-JMC).** Transportation is a critical asset in any operation requiring the movement of military forces. Combatant and subordinate commands need the capability to rapidly change transportation resource allocation to adjust to changing circumstances or immediately react to emergency or unanticipated situations. One recommendation for effective control of theater transportation assets is the establishment of a supported combatant commander's T-JTB to interface with the CJCS Joint Transportation Board (JTB) and at the theater operational level as required. Procedures for establishing the T-JTB are developed during peacetime to facilitate rapid stand-up and execution under emergency or wartime conditions. The T-JTB's role is to **resolve contentious transportation issues within the command at the operational level as well as with the CJCS JTB**, such as allocating transportation assets apportioned to the theater among components for unit movement, non-unit movement, and resupply. Another effective transportation control option is the establishment of a supported combatant commander's T-JMC. The T-JMC is responsible for **coordinating the employment of all modes of theater transportation** (including that which is provided by allies, coalition partners, or the HN) **to support the theater concept of operations at the operational level with the joint task force (JTF) joint movement center (JMC).** When used, the T-JMC is the single coordinator for all movement into, through, and out of the theater. Specifically, it is the supported combatant commander's focal point for strategic movements and should oversee the execution of theater transportation priorities.

For additional information on the JMC and theater movement control, refer to JP 4-01.3, Joint Tactics, Techniques, and Procedures for Movement Control, *Appendix A, "Joint Movement Center Organization."*

•• **Logistics Readiness Center (LRC).** Combatant commanders and subordinate commands may form LRCs to monitor and coordinate the theater logistic effort. At the theater level, the LRC is operated by the combatant command logistics staff to **monitor the overall logistic status by commodity in theater**. The LRC receives reports from Service components and external sources, distills information for presentation to the combatant commander, and responds to questions. Within the LRC, the combatant command logistics staff performs **four key functions**: monitors current and evolving theater logistic capabilities; coordinates logistic support with upcoming operations; advises the combatant commander on the logistic supportability of proposed operations or courses of action (COAs); and acts as the combatant commander's agent and advocate to non-theater logistic organizations.

•• **Director of Mobility Forces (DIRMOBFOR).** The DIRMOBFOR works directly for the Air Force component commander or joint force air component commander as the designated coordinating authority for air mobility with all commands and/or agencies, both internal and external to the combatant command. The DIRMOBFOR **provides direction to the air mobility division in the air operations center (AOC)** and will normally be a senior officer with extensive air mobility expertise and familiarity with the AOR. The

DIRMOBFOR may be sourced by the theater Air Force component commander or nominated by the Commander in Chief, United States Transportation Command (USCINCTRANS); when USTRANSCOM intertheater air mobility forces are employed in support of a JFC, the DIRMOBFOR should have experience in intertheater air mobility operations, applicable laws, regulations, executive orders, and policy as well as conservation of natural, cultural, and historic resources.

For more information on organizations created for movement control purposes, see Appendix A in this publication, "Movement Control," or JP 4-01.3, Joint Tactics, Techniques, and Procedures for Movement Control.

"JFCs have the authority to organize forces to best accomplish the assigned mission based on their concept of the operations. The organization should be sufficiently flexible to meet the planned phases of the contemplated operations and any development that may necessitate a change in plan."

JP 0-2, *Unified Action Armed Forces (UNAAF)*

d. **Subordinate Joint Task Forces.** A JTF may be established on a geographical area or functional basis when a mission has a specific or limited objective. Normally, the JTF will be dissolved when the purpose for which it was created has been achieved, or it is no longer required. The commander, joint task force (CJTF) exercises C2 over forces assigned or attached to the JTF. **The CJTF is responsible for making recommendations to the superior commander on the proper employment of assigned and attached forces to accomplish the mission. The formation of a JTF may complicate JRSOI planning and execution because of the diverse elements that may come together to form a JTF.** This is especially true during crisis situations when limited planning time, lack of a fully coordinated OPLAN, or the ad hoc formation of a JTF, may require development of TPFDD while simultaneously executing deployment operations. The challenge, in this case, is building a TPFDD that deploys the proper mix of early JRSOI capability to meet force throughput mission requirements. **For effective management of change, the JTF should have the authority (unity of command) and capability to make TPFDD adjustments to achieve balance and synchronization.** The CJTF exercises logistic coordination or control only to the extent necessary to meet those logistic needs of the subordinate commanders that are essential to successfully accomplish the mission, and to meet any request of the subordinate commanders for logistic support.

e. **Supporting Combatant Commanders** are frequently tasked to support other geographic combatant commanders during the execution of joint operations. **Types of support for JRSOI may include the deployment of forces, provision of en route basing, in-transit staging areas, and the provision of sustainment.** Responsibilities of supporting combatant commanders include:

- Verifying supporting movement data.
- Regulating the support flow to maintain balance and synchronization.
- Coordinating effectively with the supported combatant commander (unity of command) to meet the supported commander in chiefs' (CINCs') needs.
- **USTRANSCOM. The mission of USTRANSCOMis to provide strategic air, land, and sea transportation** for the Department of Defense across the range of military operations. It has

COCOM over the three transportation component commands (TCCs); Air Mobility Command (AMC), Military Sealift Command (MSC), and Military Traffic Management Command (MTMC). **USTRANSCOM supports the movement requirements and required delivery dates of supported combatant commanders.** USTRANSCOM uses the Defense Transportation System to provide movement from origin to initial theater destination through its TCCs. To assist with movement operations, USTRANSCOM normally establishes forward elements within the theater to coordinate strategic transportation information with the supported combatant commander's agencies. **Among its numerous support, planning, and liaison functions, USCINCTRANS has been designated by the Secretary of Defense as the worldwide manager for all common-user aerial ports of embarkation (APOEs) and debarkation (APODs) and seaports of embarkation (SPOEs) and debarkation (SPODs).** USTRANSCOM exercises responsibility for global air, land, and sea transportation planning in support of the geographic combatant commander. This includes reviewing the Joint Strategic Capabilities Plan (JSCP) tasking, analyzing supported commanders' requirements for transportation feasibility, and advising on changes required to produce a supportable and sustainable force deployment concept.

For additional information on USTRANSCOM, see JP 4-01, Joint Doctrine for the Defense Transportation System.

- **United States Space Command (USSPACECOM).** USSPACECOM is the combatant command that provides significant space force enhancement to improve the effectiveness of distribution and logistic C4I operations. These capabilities include navigation (global positioning system), satellite communications, and weather and missile warning.

f. **Service Component Commands** normally exercise OPCON of the forces assigned or attached to the combatant command. Each Service is responsible for the logistic support of its own forces, unless logistic support is otherwise provided for by agreements with national agencies, allies, or by assignments to common, joint, or cross-Service agreements. **The supported combatant commander may assign specific joint support responsibilities to the Service components for JRSOI under directive authority for logistics for efficiency.** Each Service needs to ensure that proper unit movement documentation, to include manifest data, is provided to the supported combatant commander in order to have adequate ITV of forces and supplies arriving or departing the theater of operations. In addition to these responsibilities, logistic elements of the Services that provide key support and enable the operations staff to execute the geographic combatant commander's requirements for JRSOI are noted below.

- **Air Force Component Command.** The A-4, Logistics Director, on the Commander, Air Force Forces (COMAFFOR) staff, is responsible for civil engineers, supply, services, transportation, fuel, and logistic plans. The A-4 ensures that COMAFFOR component forces are sustained to meet the capability tasked by the JFC. The A-4 ensures the adequacy of supplies, storage, and beddown facilities in the AOR; interfaces with the AOC; and provides analysis of logistic requirements for the air tasking order.

The COMAFFOR ensures centralized direction and control of deployments, reception, execution, and redeployment of logistic assets and functions. The A-4 and/or the COMAFFOR staff will ensure that appropriate automated information systems (AIS) and key automatic identification technologies (AITs) are employed to facilitate data capture and reporting of transportation and supply information. The COMAFFOR is the Air Force component commander (AFCC) and will advocate with the JFC, the Logistics Directorate of a joint staff (J-4), the Joint Petroleum Office, and JMC to ensure that priorities are surfaced and accommodated within the JFC's capability and force objectives.

- **The Army Component Command.** Army component commanders and Army tactical commanders operate the Army-in-the-field segment of the Army logistics system. The Army-in-the-field segment consists primarily of those CSS units that are assigned or attached to operating forces in a theater. The composition of the Army-in-the-field logistics system may vary greatly and is flexible enough to be tailored to any given theater. **The major Army echelon above corps (EAC) multifunctional logistic command is the Theater Support Command (TSC). There are also other functional EAC support commands,** to include a Civil Affairs Command, Personnel Command, Medical Command, Transportation Command, Engineer Command, and the Theater Communications Command (Army).

  •• The TSC is the major Army support command responsible to provide JRSOI support to major operations. Its subordinate organizations include those that provide traditional logistic functions such as supply, maintenance, and field services. However, the geographic combatant commander's Army Service component commander may also choose to include transportation, health services, personnel, and finance support organizations under the TSC. In addition, the TSC has contracting and HNS resources on its staff, and it includes a movement control agency and a materiel management center (MMC). It also has a distribution management center organic to its headquarters. Its mission is to plan and manage Army distribution operations and reporting information to the DOD ITV system, the GTN. The support organizations at the Army corps and division levels also include distribution management centers to synchronize distribution operations. The TSC is an organization that is designed to deploy modularly to provide required capabilities early in a force projection operation with minimum logistic footprint.

  •• **The corps is the largest self-contained, tactical-level US Army organization that has combat, combat support (CS), and CSS functions.** It consists of a headquarters; a corps support command (COSCOM); a variable number of divisions; and other units, such as artillery, signal, military police, and engineer. **COSCOM is the logistic element of the corps.** It normally supports a corps with a headquarters and associated functional control centers, MMC, and a movement control center (MCC). The organization of COSCOM is tailored on a company building block basis to fit its mission requirements. A COSCOM normally includes two or more support groups, an ammunition group, transportation brigade, petroleum supply battalion, MMC, MCC, and explosive ordnance control center. A civil affairs and/or

chemical unit may be assigned to the COSCOM or corps. In an arid environment, a water supply battalion may be provided.

•• **In some conflicts, the theater of operations may be small. In such cases, the Army component of the theater may consist of a single corps or a smaller force.** The concepts of organization, mission, and functions are applicable to the smaller theater, modified as necessary to satisfy its requirements. When a corps is the major Army component of a theater, its COSCOM will be **tailored to provide the EAC Army** base support activities normally provided by the TSC and other EAC support commands. EAC-tailored packages can include functional modules and/or subordinate units. **When corps headquarters has theater Army responsibilities it is, in effect, the Army component command.**

- **Marine Component Command. The Marine Corps force service support group (FSSG) is the principal Marine element for logistics.** It functions as a major subordinate command under the Marine expeditionary force (MEF) and is organized to provide direct or general support in tactical-, operational-, and strategic-type scenarios. It can be the nucleus of a Marine Logistics Command (MLC). **The FSSG provides CSSEs to support units undergoing arrival and assembly operations (the deployment of combat-ready MAGTFs precludes the requirement for the full range of RSOI (i.e., reception, training, and unit integration)).** Depending on the size of the force being supported, duration of the support required, and magnitude of the operation, the CSSE could be as small as a detachment or as large as the FSSG. Each unit, after completing arrival and assembly operations, will then support the process with all facets of logistics and/or CSS and C2 to its task-organized capability. A Marine expeditionary unit's (MEU's) CSSE is referred to as the MEU service support group and provides CSS task-organized to suit the MEU tactical requirements.

Marine Corps C2 for logistics in sustained operations ashore will integrate within a joint construct. It will depend on communication of its requirements, sourcing, and distribution of its capabilities through a Marine Service component agency at the theater level. This is particularly true when the mission and scope of the operation is such that it requires more than one FSSG to support the Marine forces in theater. To address this need, the MLC concept has been developed.

•• The Commander, Marine Forces (COMMARFOR) may establish an MLC. **The MLC establishes the Marine Corps theater support structure to facilitate arrival and assembly operations.** On order, the MLC provides operational logistic support to Marine Corps forces (MARFOR) as the Marine component operational-level logistic agency in theater. MLC is a task-organization option, not a permanent organization. COMMARFOR may choose to assign a specific FSSG responsibility for MLC functions. The COMMARFOR assigns Marine component resources to an FSSG for detailed task-organization and conduct of MLC support operations in theater based on the operational situation, theater geography, C2 (for both tactical operations and logistics), and infrastructure requirements.

•• **The FSSG designated as the MLC deploys early and provides arrival, assembly, and initial CSS to the arriving MEF until its own CSSE can be established.** This ensures maximum flexibility on the ground should the situation change drastically before all forces have flowed into the theater. As augmentation arrives and the force matures, direct support CSS missions are taken over by the MEF's CSSE. The MLC then concentrates on general support missions and interaction with other theater logistic agencies as they arrive.

•• The MLC, perhaps representing the initial predominant logistics-capable force in a developing theater, would coordinate with joint and combined forces as the Marine component logistics agency. While it may initially be tasked to provide some lesser degree of support to other Services, due to its limited capabilities it is not envisioned that the MLC would assume the role of the permanent theater support agency in a mature theater. It would however, function as the Service component link to the theater distribution system, communicate Marine Corps sustainment requirements, and ensure capabilities in response to those requirements that are introduced into the theater and passed along to the warfighter.

•• **In the absence of an MLC**, the **MARFOR CSSE** (most likely a single FSSG or elements thereof task-organized as the MAGTF CSSE) **will coordinate logistic requirements for MARFOR at the tactical level**. The MAGTF CSSE further task-organizes to provide general support to the MAGTF, operate CSS areas, and provide direct support to the aviation combat element and the ground combat element in the form of CSS detachments and mobile CSS detachments respectively. Requirements exceeding CSSE capability at the tactical level are communicated through the MAGTF logistics officer to the JTF J-4 or agent designated to coordinate theater distribution (TD) and common-user logistics for the joint force at the operational level. Requisitions unable to be filled within the system or through alternate sources of supply in theater are forwarded to the deployed support unit at home station.

• **Navy Component Command.** The Navy Service component commander for the combatant commander is responsible for theater Navy logistics, including command and operational control of Navy logistic forces in theater. **Logistic support to afloat units is primarily the responsibility of a numbered fleet commander.** The principle organizations for performing naval RSOI functions are naval advanced support bases (ASBs), naval advanced logistic support sites (ALSSs), and naval forward logistic sites (FLSs). Advanced bases are overseas areas or localities in or near the theater of operations from which the Navy organizes logistic facilities to conduct and support joint and naval operations.

•• ASBs may be joint and may be configured to support multinational operations. ASBs may be permanent — long-term, well-developed installations — or temporary facilities established to support specific operations. Permanent bases are generally integrated into the logistic support capabilities of the HN and have, or have access to, well-established airlift, sealift, storage, and transshipment facilities. When logistic support from existing permanent bases is either inaccessible or inadequate for a particular contingency, the Navy may construct temporary ASBs for the situation. The use of situational (temporary) bases allows the Navy to

position logistic support nodes in the best proximity to the operation. Primarily established ashore, temporary support bases consist of ALSSs and FLSs.

•• **ALSSs serve as the primary shore-based reception and transshipment points for personnel, equipment, and materiel.** An ALSS is established at a secure location readily accessible to seaport and airfield facilities, but not in close proximity to a main operating base or combat area. ALSSs possess a full capability for handling, reception, storage, consolidation, and forwarding of supplies, munitions, petroleum, and personnel required to support deployed units operating in the area. The FLSs in theater receive personnel, equipment, and materiel transshipped through the ALSS for final delivery to the supported forces. FLSs may be located in close proximity to main battle areas to permit forward staging of services, throughput of high priority cargo, advanced maintenance, and battle damage repair. FLSs are linked to in-theater ALSSs by intra-theater airlift and sealift. ALSSs and FLSs also support shore-based aviation, fleet hospitals, air and surface cargo handlers, naval mobile construction battalions, and other shore-based units. The size and composition of these organizations are dependent on the required support and are tailored to meet mission requirements. The logistic infrastructure and functional capabilities supporting naval expeditionary operations can be augmented or provided new capabilities. Temporary bases are dynamic and, as the operation moves, additional FLSs may be established or disestablished as required.

•• **Temporary support bases may draw upon war reserve materiel (WRM), facilities, and HN-provided services.** They are staffed by Navy component theater support personnel and augmented by specialized packages of personnel, facilities, equipment, or materiel. **These groupings are known as ABFCs.** Each is designed to fulfill a specific capability. By combining a number of these packages, the geographic combatant commander can supplement or expand organic capabilities of assigned forces to meet operational requirements. Capabilities of an ABFC include administration, harbor control and/or defense, communications, supply, fuel, and/or transportation, maintenance, cargo handling, health services, ordnance, camp and welfare, construction and engineering, and special groups.

•• **The ultimate goal of advanced basing is a logistic structure that is flexible, supports the concept of operations, and meets the needs of the warfighters.** ASBs are an essential link in providing responsive and continuous logistic support when Navy forces are functioning independently or together with joint and multinational forces.

g. **Other Agencies.** DOD agencies are frequently tasked to provide support during the execution of joint operations. This support may include deploying personnel, equipment, and materiel into the AOR (e.g., Defense Logistics Agency's Contingency Support Team, Department of State personnel for noncombatant evacuation operations (NEOs) or foreign humanitarian operations).

3. Command and Control Options

a. **The Secretary of Defense may designate one or more Services to provide common resources to all DOD forces to assist the supported CINC. These are known as Service executive agents.** However, the exact nature and scope of the

authority must be stated in the document designating the executive agent. **An executive agent may be limited to providing only administrative support or coordinating common functions, or it may be delegated authority, direction, and control over specified resources for specified purposes.** For example, the Army is the Department of Defense's executive agent for joint mortuary affairs.

b. The combatant commander may exercise directive authority for logistics (or delegate directive authority for a common support capability). It is not to be considered as authorization to discontinue each Service's responsibility for logistic support. **The exercise of directive authority for logistics is necessary during JRSOI to ensure the:**

- Effective execution of OPLANs;
- Effective employment and use of AIS and AIT;
- Effectiveness and economy of operations; and
- Prevention or elimination of unnecessary duplication of facilities and overlapping of functions among the Service component commands.

c. The combatant commander must design and implement a C4I system enterprise architecture, consisting of organizations, procedures, and communications systems, that provides the ability to manage and control the rate of the flow and facilitate in-transit data documentation and reporting. Service executive agents and directive authority for logistics not withstanding, **the supported combatant commander may employ other options for C2 of JRSOI forces to include the following.**

- **Service Responsibility.** Each Service is responsible for the logistic support of its own forces.
- **Lead Service.** The combatant commander assigns responsibility for providing or coordinating JRSOI support to the Service component that is the dominant user. This option may include OPCON or tactical control (TACON) of other Service logistic organizations as determined by the combatant commander. Lead Service functions are managed by the lead Service within the parameters of the combatant commander's orders. JTF boards and centers may also be required.

No single C2 option works best for all JRSOI operations. Supported combatant commanders and their subordinates should be flexible in modifying command structures to meet the specific requirements of each situation with emphasis on unity of effort, whether it be a small foreign humanitarian operation up to a major theater war. **Joint logistics C2 may be best implemented by tasking an existing organization (lead Service) with the joint mission, authority, and responsibility to execute JRSOI operations.** The supported combatant commander organizes the headquarters (HQ) as necessary to carry out all duties and responsibilities and usually makes the final decision on the establishment of boards, centers, and cells that are necessary to support military operations in certain cases. Depending on which C2 option is utilized, the combatant commander may decide to augment the lead JTF J-4 staff with sufficient assets to exercise both staff planning and JRSOI management functions. The supported combatant commander may delegate appropriate logistics command authority to a subordinate Service component or JFC. For instance, a Service component

command may be delegated command authority to synchronize support functions, manage joint operational efforts, and identify resource shortfalls. This HQ would serve as a fusion point between strategic and theater JRSOI support organizations. **Advanced planning precludes the confusion that often results from rapidly establishing logistic organizations during contingencies.** The three levels of command authority that are normally delegated include OPCON, TACON, and support.

d. **Deploying forces are often split into elements (passengers and cargo) as they transit the various nodes of the theater LOC.** As these elements transit the theater nodes, they fall under the control of the transportation system until they are reunited with their equipment and are assembled and ready for onward movement. Accurate and timely reporting from theater processing nodes is critical. **A commander should be designated for each theater LOC node to ensure unity of command and to facilitate**

COMMAND AND CONTROL RELATIONSHIPS

1. Combatant Command (Command Authority)
COCOM is the authority of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training (or, in the case of United States Special Operations Command, training of assigned forces), and logistics necessary to accomplish the missions assigned to the command.

2. Operational Control
OPCON is the command authority that may be exercised by commanders at any echelon at or below the level of combatant command and may be delegated or transferred. OPCON is inherent in COCOM and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command.

3. Tactical Control
TACON is the command authority over assigned or attached forces or commands or the military capability made available for tasking that is limited to the detailed and usually local direction and control of movements or maneuvers necessary to accomplish assigned missions or tasks. TACON may be delegated to and exercised by commanders at any echelon at or below the level of combatant command. TACON is inherent in OPCON.

4. Support
Support is a command authority. A support relationship is established by a superior commander between subordinate commanders when one organization should aid, protect, complement, or sustain another force.

SOURCE: JP 0-2, *Unified Action Armed Forces (UNAAF)*

passenger and cargo throughput (balance). Regardless of the established C2 relationships, JRSOI operations require the accurate, timely exchange of essential elements of information concerning the deploying forces.

e. Delineation of responsibility and authority will help achieve effectiveness and economy of operations, and the prevention or elimination of unnecessary duplication of facilities and overlapping of functions among the Service component commanders.

f. **Joint Theater Logistics Management.** Joint theater logistics management (JTLM) is one way to help achieve a unified focus within theater by integrating information, product delivery, flexible response, and effective C2. JTLM ensures that the right product is delivered to the right place at the right time. The CINC may, as an option, establish a JTLM element to fuse movement control and materiel management to integrate and synergize the logistic capabilities of the joint force. JTLM should be planned for and documented in OPLANs, operation plans in concept format (CONPLANs), and functional plans as part of the deliberate planning process. JTLM allows the CINC to choose among a variety of options when selecting the logistic support function best suited to fulfill the needs of the AOR. Some options include the following: using a Service organization as its nucleus, for instance the Army Theater Support Command organizational concept; augment J-4; delegate to a JTF commander; establish a stand-alone logistic agency; ensure that the predominant Service manages joint requirements; or expand the LRC.

- JTLM key elements include increased reliance on common-user logistic support, a smaller logistic footprint, integrated logistic forces, increased tactical flexibility, single theater logistic management system, common logistic picture, asset visibility across the supply chain, anticipatory logistic management, and rapid access to operational information.

- JTLM relies heavily on improved communications and enabling technologies such JTAV, Global Combat Support System (GCSS), GTN, and AIS to track force and sustainment flow while eliminating redundancy and excess. Although these enabling technologies are not fully mature, the CINC should capitalize on all available AITs and the Services' AIS to integrate joint force requirements and capabilities into a single, common operating picture. Further, JTLM uses enhanced automation capability to link JRSOI and joint theater distribution in order to provide common-user and cross-Service logistic support.

- In the end, JTLM success depends on the supported CINC setting a common standard for support, enhanced logistic connectivity, and the flexibility and responsiveness of logisticians operating at the strategic, operational, and tactical levels.

See JP 4-0, Doctrine for Logistic Support of Joint Operations, *for more information.*

CHAPTER III
PLANNING

"To successfully fight and win wars, we must make war planning our central focus. We will develop the best possible plans using the collective wisdom available among all military planning staffs . . . The products of our planning efforts must be able to stand up to the strongest scrutiny, including the ultimate test: execution."

General John M. Shalikashvili
Chairman of the Joint Chiefs of Staff, 1993-1997

1. General

This chapter examines joint planning considerations and procedures concerning JRSOI. **The combatant commander is responsible for planning and executing military operations in the assigned AOR.** These responsibilities encompass all facets of RSOI. Based upon the CINC's guidance, planners must assess the theater's operational environment and determine JRSOI requirements for supporting the JFC's concept of the operations. JRSOI feasibility must be included in the COA development. Successful employment requires full integration of JRSOI into the CINC's campaign plan.

2. Joint Planning

a. **Joint operation planning begins in response to perceived or identified threats to US security, national vital interests, or to support other missions requiring deployment of US forces.** The JSCP initiates the deliberate planning process for the development of plans to support national security objectives. Joint operation planning is a coordinated process used by combatant commanders to determine the COA for accomplishing the assigned task and to direct the actions necessary to accomplish the mission. **Military planners use the Joint Operation Planning and Execution System (JOPES) as the primary tool for crisis action and deliberate planning, as well as executing strategic deployments.** JOPES is an integrated system of people, policies, procedures, and reporting systems. It is through JOPES that the following deliberate plans are developed.

- **Operation Plan.** An OPLAN is a complete and detailed joint operation plan. An OPLAN includes detailed annexes with associated appendices and a TPFDD.

- **Operation Plan in Concept Format.** A CONPLAN is a joint operation plan in an abbreviated "concept" format. A CONPLAN may or may not contain a TPFDD.

- **Functional Plan.** A functional plan is developed for specific military operations in a permissive or non-hostile environment (for example, intratheater logistics, C4I infrastructure, and continuity of operations).

Planners must be cognizant that combatant commander war planning documents contain the preponderance of JRSOI capabilities information. However, key Service documents contribute to deliberate planning, thus supporting the JSCP. These Service documents help confirm availability of forces and resources for performing JRSOI. Service documents supporting JRSOI planning are shown in Figure III-1. These documents along with

the JSCP combine to facilitate the joint planning process.

b. Regardless of whether deliberate or crisis action planning is used, **joint planning determines the requirements for joint force employment to achieve the military objectives**. Once the supported CINC's strategic concept is approved by the Chairman of the Joint Chiefs of Staff, it becomes the concept of operations upon which further planning is developed. **Planning is based on CINC(s) and Service(s) guidance and joint doctrine.** The

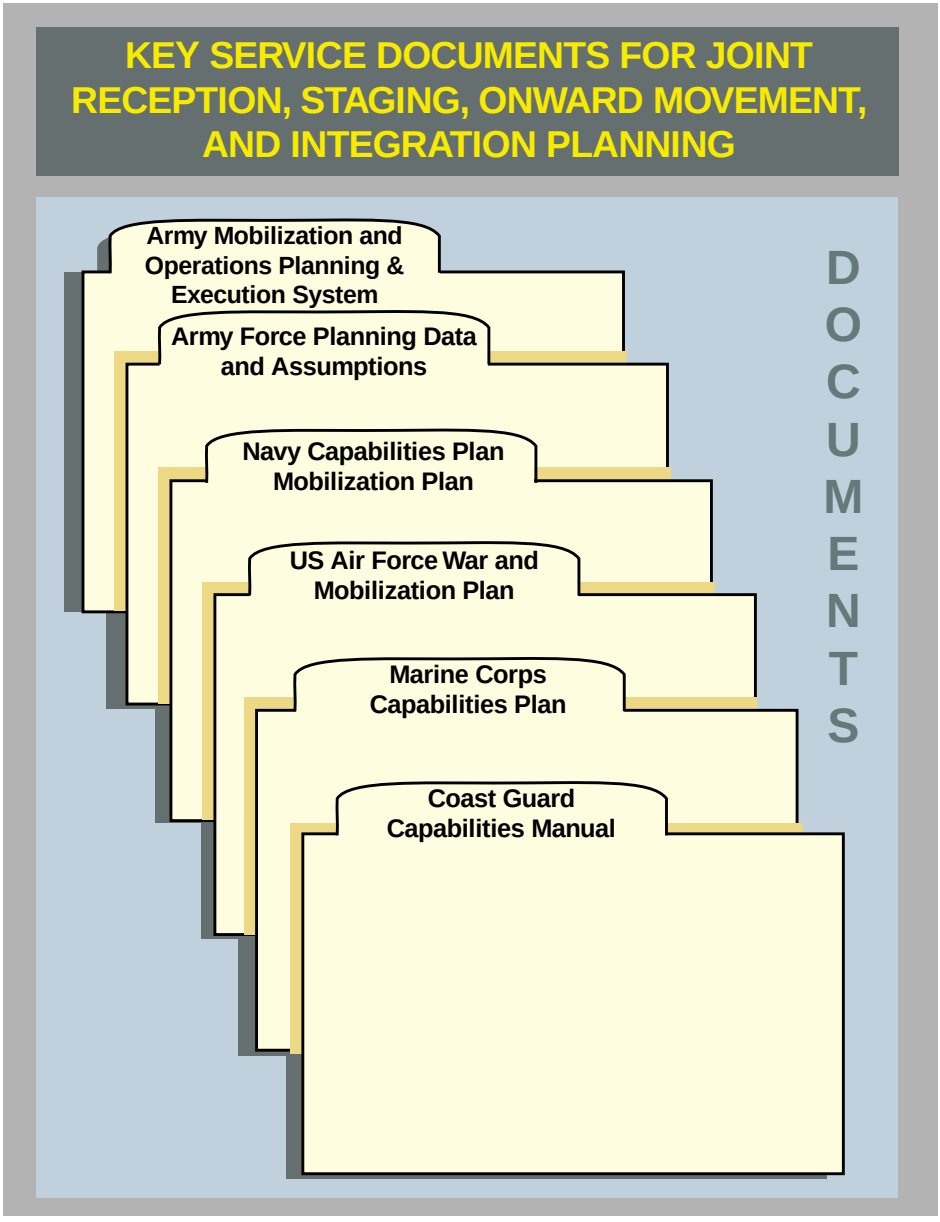

Figure III-1. Key Service Documents for Joint Reception, Staging, Onward Movement, and Integration Planning

supporting and subordinate commanders use the supported CINC's concept and the apportioned or allocated combat forces as the basis to determine necessary support, including JRSOI forces and sustaining supplies for the operation (mission analysis). The supported combatant commander's staff organization is established and command relationships are formulated to assist the commander in determining priorities and assigning tasks for receiving forces and conducting JRSOI in the OA. Supported CINCs may task assign Service components with the majority responsibility for JRSOI operations based upon various factors (e.g., dominant user, most capable Service). Each supporting or subordinate commander who is assigned a task in the CINC's strategic concept prepares a supporting plan. **The CINC consolidates these plans to build a recommended phasing of forces and JRSOI support, and performs a transportation analysis of the entire movement from the POD to the final destination.** In essence, the supported combatant commander uses the information to validate the adequacy of the theater and determine whether the JRSOI infrastructure is satisfactory for employment of assets, forces, facilities, and supporting systems. Joint intelligence preparation of the battlespace (JIPB) provides the framework for determining methods of accomplishing the assigned tasks. Following these actions, USTRANSCOM hosts TPFDD refinement conferences to validate the requirements and then allocate the strategic lift assets.

3. Environment and Threat Assessment

JRSOI planners must assess the impact of the operational environment and threats in relationship to the JRSOI mission. **JIPB must address whether and to what degree a potential threat can interdict, disrupt, or block JRSOI operations and assist in determining what infrastructure and other support assets are available to support JRSOI operations.** In this case, the operational environment consists of infrastructure and information resources. In cases where the joint operations area infrastructure is inadequate, the combatant commander's available options include increasing the JRSOI infrastructure, reducing the deployment flow, or extending allowable force closure times. Figure III-2 is a nominal listing of items that should be addressed in JIPB.

a. **Threat assessment** is the first step in understanding the operational risk to JRSOI operations and developing risk controls to mitigate the perceived threat. The **JIPB process** assists the **combatant commander in formulating planning guidance by identifying significant enemy capabilities and likely enemy COAs**. Based on the assessed threat, the combatant commander must determine where to accept risks, where to focus protection efforts, and how much of the force should be initially devoted to force protection. The **threat assessment should include threats to the following.**

- HNS
- Contracted support
- Nongovernmental organizations
- Information resources
- PODs
- Pre-positioned equipment facilities
- Staging areas
- Movement routes and en route support facilities
- Assembly areas

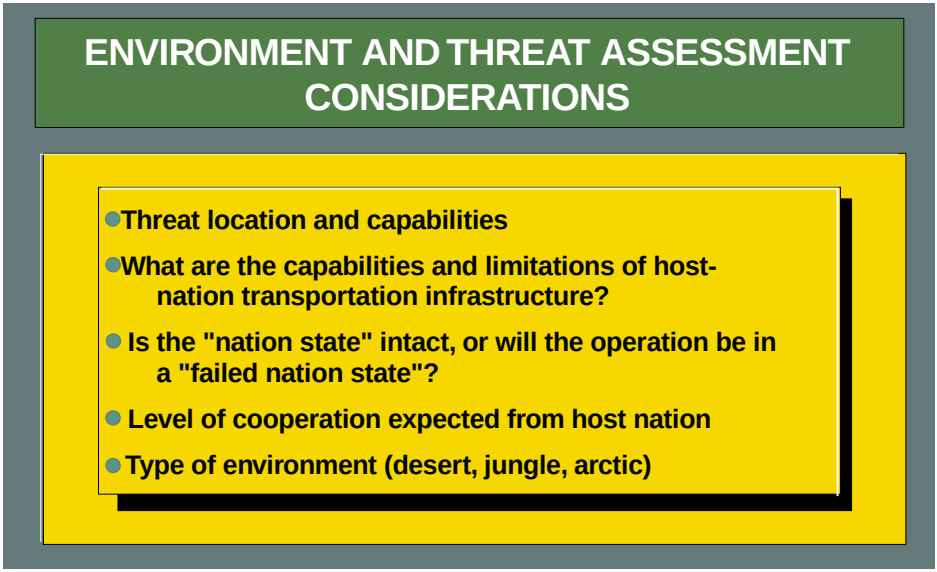

Figure III-2. Environment and Threat Assessment Considerations

- Other nodes deemed critical for successfully executing JRSOI

b. **Infrastructure Assessment.** Understanding the capabilities of the theater infrastructure and the time when assets become available are essential to developing a successful JRSOI operation. **An infrastructure assessment is key to understanding the capabilities and limitations of the operational area as well as the theater to support JRSOI operations.** It serves as a basis to determine the JRSOI forces, equipment, and materiel that must be deployed as well as facility upgrades required to enhance operations. **Theater infrastructure consists of two general categories: the physical network and the resource network.**

- **The type, number, and condition of facilities, transportation networks, real estate, and modes of transportation characterize physical networks.** Transportation infrastructure strongly influences JRSOI and a robust infrastructure of modern air- and seaports, highways, railroads, and inland waterways greatly expedite the throughput of forces, equipment, and supplies. A lesser-developed, austere, or damaged infrastructure impedes JRSOI and may require an early deployment of support capabilities such as port opening, joint logistics over-the-shore (JLOTS), or engineer units. The combatant command engineer and staff prepare a civil engineering support plan (CESP) as part of the JOPES planning process. Development of the CESP ensures that essential civil engineering capabilities are identified and will be provided at the required locations and at the appropriate times to support the mobilization, deployment, employment, sustainment, and redeployment of the joint force in support of joint operations. The CESP establishes theater-level requirements for facilities, Class IV (construction materiel), and civil engineering capability in support of deployed US forces. The Joint Engineer Planning and Execution System is a tool used to support the combatant command engineer and staff in development of the quantitative aspects of civil engineering

support planning and provides the general requirements for the CESP appendix to an OPLAN.

Additional information on CESP can be found in JP 4-04, Joint Doctrine for Civil Engineering Support, *and Appendix 6 to Annex D of CJCSI 3122.03,* Joint Operation Planning and Execution System Vol II: (Planning Formats and Guidance).

- **Resource networks are the personnel (uniformed and civilian, HN, government, military, and contractor), organizations, materiel, and equipment operating within the physical network of the distribution system.** The infrastructure capacity (net capability of the combined physical and resource nets) establishes the finite capacity of the distribution system. Figure III-3 depicts examples of the infrastructure (physical and resource networks).

c. **Information Resources.** Receiving detailed information concerning infrastructure and transportation capabilities, maintaining the visibility of assets that will move on that infrastructure, and the ability to C2 this information plays a key role for planning and working JRSOI. **Information resources can be divided into intelligence, automation, and communications networks.**

- The collection and maintenance of infrastructure data (**intelligence**) is the purview of the Services and numerous agencies that include the Defense Intelligence Agency, the supported combatant commander's joint intelligence center, USTRANSCOM's joint intelligence center, and Service organic intelligence services. **The data**

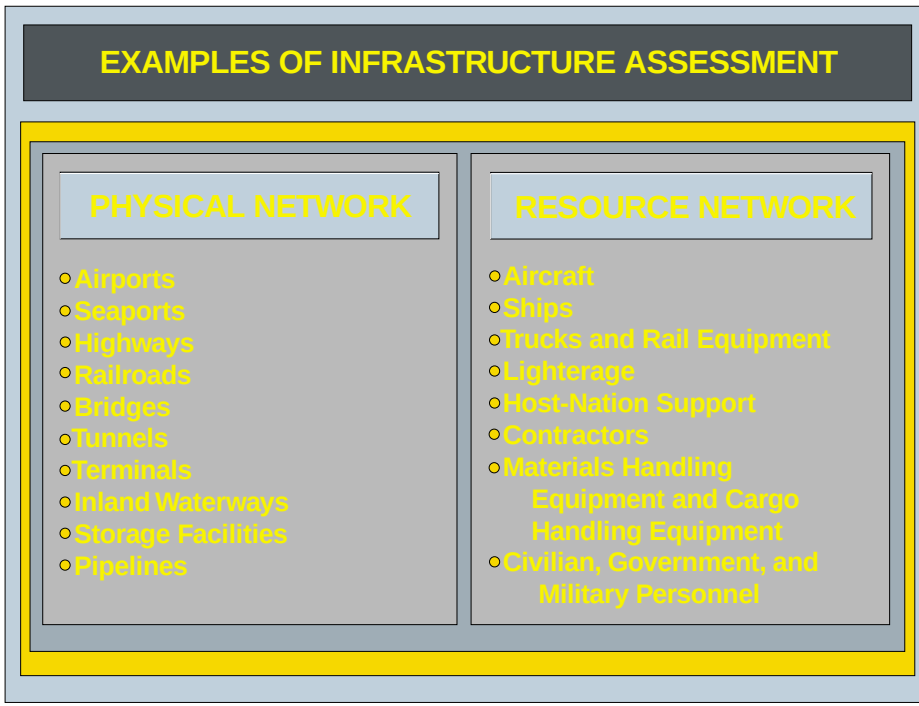

Figure III-3. Examples of Infrastructure Assessment

collected and available includes information on infrastructure capacity and condition as well as engineering capability (ports, railroads, inland waterways, roads, airfields, bridges, off-road land tractability, power plants, communications nodes) in most theaters. The characteristics of roads, ports, and rail lines within the theater are sometimes available in digital form. Such information serves as baseline data for planning. For example, the Military Traffic Management Command Transportation Engineering Agency (MTMCTEA) compiles unclassified and classified data on many seaports, to include throughput calculations and infrastructure assessments. MTMCTEA also develops and maintains detailed transportation infrastructure networks of various theaters for use in analyzing theater transportation capabilities using the Enhanced Logistics Intratheater Support Tool (ELIST).

- The **automation network** combines **all of the information collection devices, AITs, and AIS that either support or facilitate the JRSOI process**. Examples of these include JTAV, joint personnel asset visibility (JPAV), and GTN.

- The communications network is a critical infrastructure requirement that enables information collection and management. When combined with automated systems, knowledgeable commanders, and a robust communications network, C2 technology provides the efficiency and effective information management so critical to JRSOI. Effective information management, in turn, enables leaders to make sound and timely decisions regarding the JRSOI process. Communications networks are an intricately managed resource that requires detailed planning. Initial phases of a deployment may not have the robust communications network required for extensive use of Global Command and Control System (GCCS), GCSS, GTN, and other C2 and information systems. Phasing joint and Service communications systems into the TPFDD flow to give the JRSOI (as well as other activities) a system that allows them to take advantage of the automated tools available for force and sustainment tracking, provides the combatant commander with a potent tool for deployment and employment management.

d. **The combatant commander determines whether the theater is adequate for employment of assets, forces, facilities, and supporting systems.** In cases where the geographic area is inadequate, options available to the combatant commander include increasing the JRSOI infrastructure, reducing the deployment flow, or extending allowable force closure times.

4. JRSOI Planning

Military operations begin with an event that requires movement of forces somewhere in the world. This can be a planned or no-notice movement. Figure III-4 depicts the joint functional area and the four joint processes associated with mission analysis (see Figure I-3 for the master JRSOI process map). Analyzing the mission leads to the development of COAs and selection of the desired COA, and ends with the development of orders and their transmission. This process is a particular method of planning where procedures are individually, sometimes simultaneously executed, and often interrelated to produce the plan.

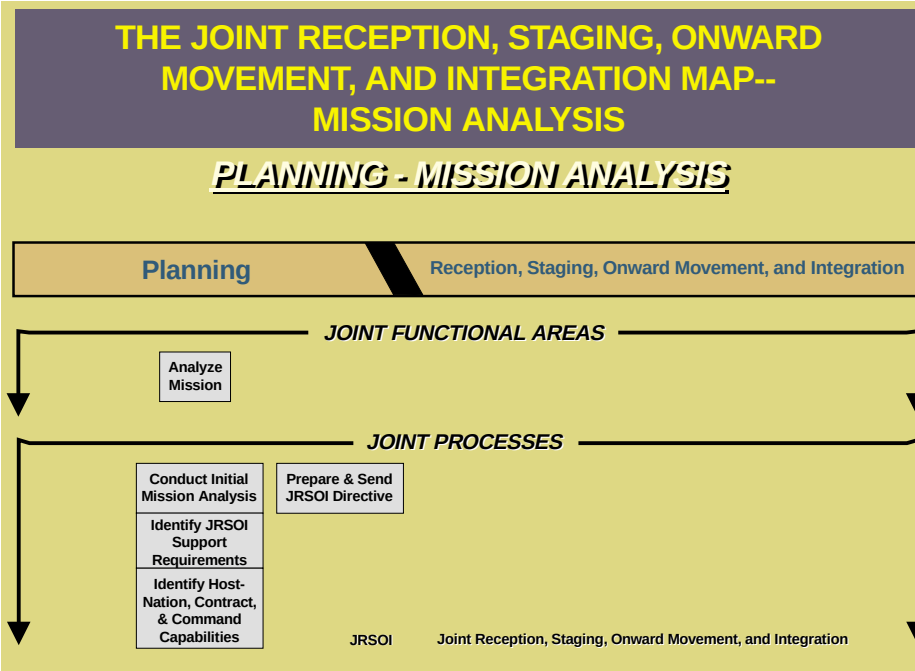

Figure III-4. The Joint Reception, Staging, Onward Movement, and Integration Map — Mission Analysis

a. **Conduct Initial Mission Analysis. Based upon early information acquired, planners assess potential scenario developments, mission requirements, and COAs.** This requires a thorough and continuous JIPB to account for a changing operational environment.

b. **Identify JRSOI Support Requirements.** Utilizing JIPB, the JRSOI mission planner identifies the specific JRSOI theater requirements. In this, the staff identifies the number of personnel and the amount of cargo and equipment to be throughput in the JRSOI process, to include movement from POD to any intermediate staging areas as well as unit moves to TAAs or OAs. **This information thus provides guidance for JRSOI planning and includes:**

- commander's intent for deployment;
- identification of size and composition of deploying forces;
- time-phasing of personnel, equipment, and materiel to support the mission; and
- force closure date.

Once this information is known, the planner, utilizing backward planning, determines the JRSOI requirements and develops plans that meet the operational timelines. This backward planning is useful in developing support requirements for JRSOI and the design of the theater LOC. This planning and force designing process helps develop the theater LOC structure by:

- determining locations of air and sea PODs;
- determining JLOTS throughput requirements and capabilities;
- determining the throughput capability of the PODs;

- estimating theater distribution capability required to move deploying forces forward;
- identifying locations of marshalling areas, staging areas, convoy support centers, and other supporting LOC nodes;
- establishing force and sustainment requirements with actual units;
- evaluating force, logistic, and transportation feasibility;
- recommending resource allocations; and
- producing COAs that have been assessed for JRSOI feasibility.

c. **Identify HN, Contract, and Command Capabilities.** Within each geographic combatant commander's AOR, **the US organizations available to accomplish JRSOI vary significantly**. Fundamental factors that cause this variance include geographical constraints such as the length of LOCs, capability of HN infrastructure, ACSA, anticipated threat and mission, and forward-stationed US force structure. Each Service component possesses unique, specialized forces and capabilities to support various aspects of JRSOI. The supported combatant commander must utilize this knowledge in assessing HN, contract, and command capabilities available to support key JRSOI functions. **Depending upon the existing infrastructure, the HN, contract, and command capabilities that are available may greatly reduce the type and amount of JRSOI support a combatant commander must deploy from outside the theater.** The inputs include requirements for:

- transportation;
- facilities;
- security;
- supplies;
- services;
- labor service; and
- POD support and other key functions.

There are many sources of logistic support that can be used as enablers and enhancements for JRSOI. These enablers combine in various ways under differing circumstances to make the operations associated with JRSOI possible. How these enablers combine will depend upon the condition of the HN infrastructure, what agreements exist (allied or otherwise), and

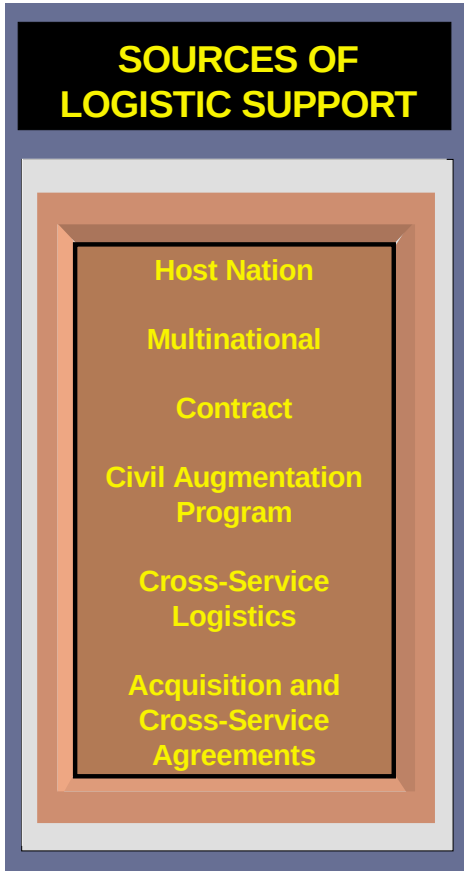

Figure III-5. Sources of Logistic Support

how or if civil augmentation programs, or cross-Service logistics, are necessary. Figure III-5 lists some sources of logistic support for the joint planner to consider during COA development.

- **Host-Nation Support.** When available, HNS successfully assists in executing JRSOI. Typical items that the combatant commander should negotiate with the HN are shown in Figure III-6. Maintaining current, comprehensive base support plans and conducting periodic site surveys are critical for validating HNS agreements required for implementing specific OPLANs and CONPLANs. If HNS agreements do not exist, or have limited application, then the combatant commander, in coordination with the State Department, should immediately start negotiation of HNS agreements and arrangements combined with an integrated contracting plan to obtain necessary support. It is recommended that counterintelligence teams be included for use in screening HN contractors.

- **Multinational Support.** Multinational support is another force multiplier. Many US allies have capabilities or functional units similar to US capabilities. The use of these units can enhance JRSOI operations, minimize US support requirements, and ensure mission success. The joint planner should consider complementary multinational capabilities during COA development. However, during the planning phase, this capability should be balanced against the potential for competition for US transportation assets to deliver those multinational units into the theater.

Figure III-6. Host Nation Negotiating Considerations

- **Contract Support.** To optimize contractor support among Services, a central contracting authority (CCA) should be designated. The goal of the CCA is to achieve and maintain controls and optimize contracting resources. Contracting officers should make every effort to ensure that clauses excusing contractor performance in the event of hostilities or war are not included in contracts that augment US forces during contingency or combat operations. MTMC and MSC, for example, routinely use civilian contractors to perform or augment their operations. In accordance with standing directives and with guidance from appropriate commanders, contractors should be used. However, the joint planner should be aware that in some cases wartime exclusion clauses may prevent contractor personnel from delivering goods and services.

"The shape of conflict is changing, too. It may be waged with little or no allied backing, and with unknown host-nation support or infrastructure. Any fighting that we do will probably occur where we are not, distant to our borders, and in a land that cannot adequately receive our ships and planes."

LTC Scott Conrad
***Moving the Force: DESERT STORM and Beyond*, 1994**

- **Civil Augmentation Program.** Civil augmentation programs are separate Military Department contracting options most often used when HNS is insufficient or unavailable. They employ pre-existing contracts with US and other vendors to provide support in many areas including facilities, supplies, services, maintenance, and transportation. Additionally, planners should consider initiating contracting services if status-of-forces agreements do not already contain those provisions. The goals of civil augmentation programs are to:

•• Allow planning during peacetime for the effective use of contractor support in a contingency or crisis;

•• Leverage global and regional corporate resources as facility and logistic force multipliers;

•• Provide an alternative augmentation capability to meet facility and logistic services shortfalls; and

•• Provide a quick reaction to contingency or crisis requirements.

Information concerning the logistics civilian augmentation program (Army),

CIVILIAN CONTRACTORS

One of the most dramatic lessons to come out of Operation JOINT ENDEAVOR is that civilian contractors are an integral part of the total force, particularly when it comes to providing logistical and engineering services . . . LOGCAP [logistics civilian augmentation program] uses a civilian contractor to perform selected logistics and engineering services to augment US forces during military contingency operations . . . The Corps [of Engineers] is also using LOGCAP in unison with Air Force Red Horse and Navy Seabee construction troops. Red Horse and Seabee trade specialists erect the tents while the Corps uses the LOGCAP contract to set up latrines, showers, heaters, dining halls, laundries, and other essential life support facilities.

SOURCE: Corps of Engineers News Release
31 January 1996

CONTRACTING — OPERATION JOINT ENDEAVOR

Supporting operations in the Balkans for Operation JOINT ENDEAVOR would have required a much more robust combat support and combat service support military organization had it not been for the use of logistics civilian augmentation program (LOGCAP) . . . LOGCAP has provided much of the critical logistics and engineering services, with costs exceeding $460 million for the first year's effort. Use of LOGCAP allowed the deployed combat units to focus on critical operational missions and the deployed engineering units to focus on horizontal construction.

On 26 November 1995, Brown & Root (the LOGCAP contractor) was activated to provide an intermediate staging base at Kasposvar and Taszar, Hungary...The initial work focused on renovating old communist barracks to bring them to minimum standards for use by US soldiers. Then working with the soldiers, the contractor's staff braved the same harsh weather and site conditions to provide warm tents, hot food, and adequate sanitary facilities during the start-up of operations throughout the theater.

After establishing the intermediate staging base, the contractor was tasked to support the 1st Armored Division's Task Force Eagle by setting up and operating camps in Croatia and Bosnia . . . In order to complete all the Bosnia camps by March 1996, Brown & Root was integrated with Army engineer units, Navy Seabees, and Air Force Red Horse engineers on a fast-tracked scenario. Specifically, Brown & Root's tasks were to —

- **Setup 12 camps**
- **Provide flooring materials for the Army, Navy, and Air Force engineer units charged with setting up all other camps.**
- **Upgrade camps to meet the Army's sustaining base standards, replacing soft-side, canvas tents with hardback tents or modular buildings (in areas with the harshest conditions).**
- **Provide all basic life-support services, such as food services, laundry, water delivery, garbage collection, and shower and sanitary facilities.**
- **Provide other logistics services such as transportation and cargo handling, vehicle maintenance and washing, port operations, road repair and maintenance, and storage yards.**

SOURCE: Lieutenant Colonel Nicholas J. Kolar, Jr.
LOGCAP: Providing Vital Services to Soldiers
***The Engineer Professional Bulletin*, March 1997**

emergency construction capabilities contract program (Navy) and Air Force contract augmentation program may be found in the applicable Service publications, JP 4-0, Doctrine for Logistic Support of Joint Operations, *and JP 4-04,* Joint Doctrine for Civil Engineering Support.

d. **Prepare and Send JRSOI Directives.** At this point in the planning process the supported combatant commander has nearly completed the JRSOI planning process map's first functional area of mission analysis. **Now the supported combatant commander begins to give specific JRSOI guidance in the form of directives.** These directives clarify the support that selected Services and nations should expect. Figure III-7 expands the joint process associated with the JRSOI planning process map.

Examples of the types of support directed by the supported combatant commander may include information from the following agreements.

- **Cross-Service Logistics.** The term **"cross-Service logistics" defines the process of one US Military Service providing dedicated logistic support to another.** If one Service has the preponderance of a particular skill, commodity, or class of supply in theater, such as fuel, ground transportation, or construction engineering, it may be tasked by the combatant commander or by the Secretary of Defense to provide support to other Services operating in that theater. The combatant commander tasks the Service components under his or her directive authority, whereas the Secretary of Defense tasks under the executive agent designation system. Employing cross-Service logistics helps eliminate CS and CSS redundancies among the Services.

- **Acquisition and Cross-Service Agreements.** While HNS agreements provide US pre-negotiated support for potential war scenarios, **ACSAs provide the legal authority for the US military and other nation armed forces to exchange logistic goods and services during contingencies**. Unlike HNS agreements, transactions under this program must be reimbursed, replaced in kind, or an exchange of equal value must take place.

5. Synchronizing and Balancing the Flow

Because JOPES is the system used to allocate and sequence movement assets, it is essential that movement data inputs are

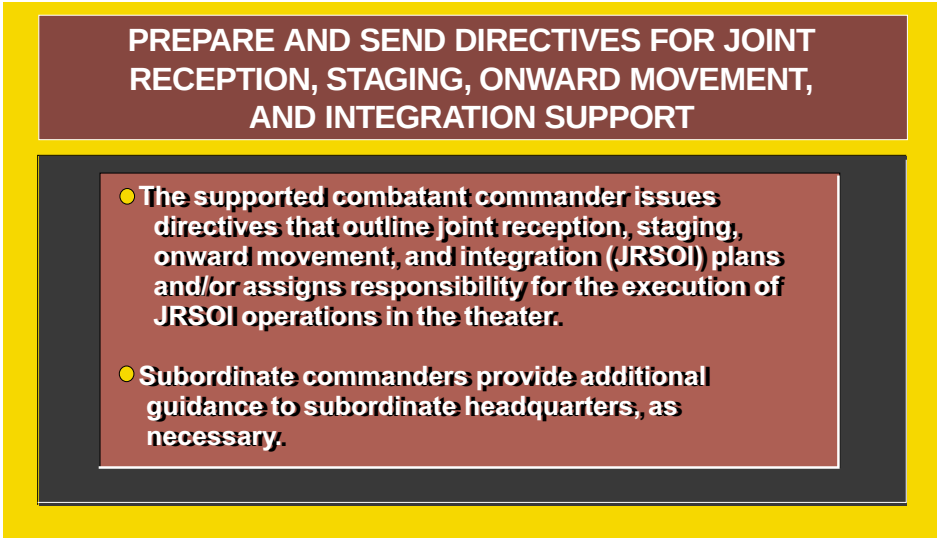

Figure III-7. Prepare and Send Directives for Joint Reception, Staging, Onward Movement, and Integration Support

accurate. The TPFDD is a computer-supported database portion of an OPLAN. It contains time-phased data for moving personnel, equipment, and materiel into a theater. The TPFDD reflects the requirements that strategic and intratheater lifts are assigned against to ensure that the full scope of JRSOI requirements are identified and satisfied. **Successful execution of the combatant commander's plan depends on integrating JRSOI within JOPES.**

For a detailed explanation of the joint planning process, its components, and their functions, see CJCS Manual 3122.01, Joint Operation Planning and Execution System Vol I: (Planning Policies and Procedures).

a. "**Confirm Deployment Data" is the second joint functional area of the planning phase of the JRSOI process map.** Deployment data is confirmed prior to entry into JOPES via the TPFDD. TPFDD refinement manipulates and confirms force flow data until the updated information is entered into JOPES. "Confirm Deployment Data" and its associated sub-elements are illustrated in Figure III-8 (see Figure I-3 for the master JRSOI process map).

b. **The TPFDD establishes the flow of units into the theater.** The supported combatant commander must carefully balance the force mix and arrival sequence of combat forces and CSS units to ensure that JRSOI support and throughput requirements can be met. The Service component responsible for JRSOI operations must continuously review and validate the TPFDD to determine its mission support requirements and request changes to its support force structure. As with any dynamic process, external changes in the environment, as well as those within the force, necessitate correspondent changes to the flow of forces (personnel, equipment, and materiel). The following recommended changes to the JRSOI support force structure are requested by the Service component responsible in order to maintain balance and synchronization (in accordance with combatant commander guidance) to accomplish the mission.

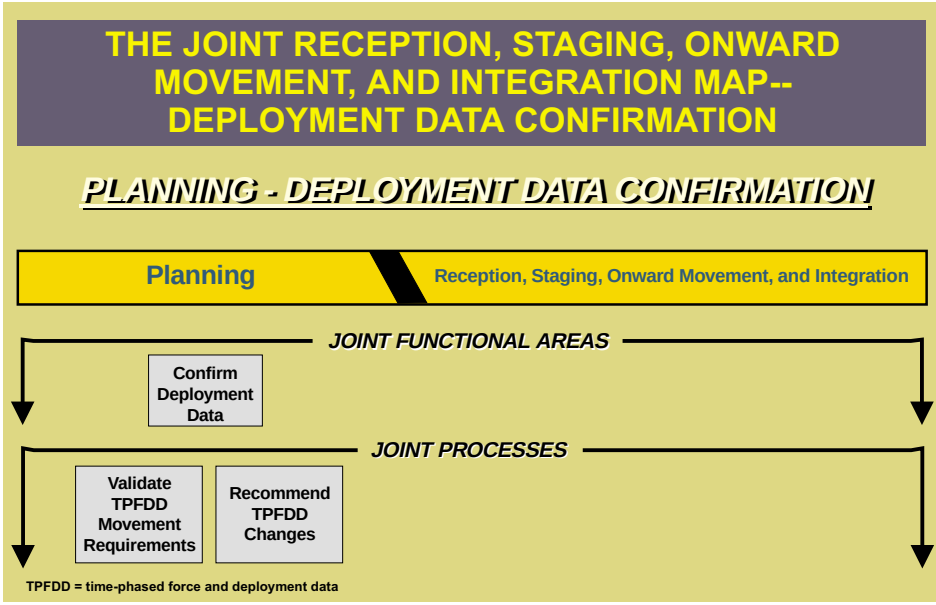

Figure III-8. The Joint Reception, Staging, Onward Movement, and Integration Map — Deployment Data Confirmation

- **Validate TPFDD Movement Requirements.** The command continuously evaluates the JRSOI mission capabilities of inbound units to ensure that JRSOI mission requirements can be met in a timely manner.

- **Recommend TPFDD Changes.** All assigned units within the JRSOI organization report through the chain of command on status of unit (personnel and equipment) capability to perform assigned missions. The command headquarters makes TPFDD change recommendations to the combatant commander based on assigned unit capability, JRSOI requirements, and projected missions to ensure that sufficient JRSOI support capability is present in theater to support unit throughput.

c. **Dependable transportation feasibility analysis relies on accurate analysis of strategic lift capability and JRSOI capability.** Port throughput data should consider not only port offload capability, but also the theater's ability to move and sustain forces away from the port. Matching the strategic TPFDD flow to the theater's reception, staging, and onward movement capability should prevent port saturation and backlogs that slow the build-up of mission capability.

d. While theater infrastructure is studied during the concept development phase before the TPFDD is developed, **this is no substitute for a feasibility study of the flow of the TPFDD through the theater**. Intratheater transportation feasibility may significantly impact upon port-to-port flow. It may show required changes to the type and sequence of strategic lift. It could also reveal whether the number, type, and sequence of units providing JRSOI are adequate to deliver planned capabilities to the combatant commander.

6. JRSOI Planning Requirements and Considerations

During deployment planning, all of the requirements to support JRSOI activities need to be addressed. **These requirements can be broken down into two broad categories: operational and support.** Operational requirements include training, force protection, and C4I systems that support the visibility of the JRSOI process. Support requirements include transportation, infrastructure, HNS, sustainment, and land management. **JRSOI requirements should appear in all planning documents and OPLANs.** The planner must demonstrate to the approving authority that an early investment of strategic lift for logistic enablers will actually increase the flow of combat forces into the theater.

a. **Loading Considerations for Deployment.** Planning deployments is based primarily on the commander's concept of the operations for employment. These factors determine the entry operations, deployment concept, and mobility options required to posture a joint force in the theater. **An important consideration in posturing forces is to determine how deploying forces should be configured when they arrive in theater.** This determines how deploying forces should be loaded for deployment. The manner in which units are loaded is an important factor in determining JRSOI reception requirements as well as the amount of time units must be supported at the reception and staging areas. Three loading methods are described below.

- **Combat loading** boards personnel and stows equipment and supplies in a manner designed to conform to the anticipated tactical operations of the organization embarked. Each individual item is stowed so that it can be unloaded at the required time. Combat loading is

TRANSPORTATION FEASIBILITY

OPLAN(s)/CONPLAN(s) are considered transportation feasible when the capability to move forces, equipment, and supplies exists from the point of origin to the final destination in accordance with the CINC's concept of employment. Transportation feasibility determination will require concurrent analysis and assessment of available strategic and theater lift assets, transportation infrastructure, and competing demands, and restrictions:

- **the supported CINC will analyze deployment; reception, staging, onward movement, and integration; and theater distribution of forces, equipment, and supplies to final destination.**
- **supporting CINCs will provide assessment on movement of forces from point of origin to air and sea ports of embarkation.**
- **USCINCTRANS will assess the strategic leg of the TPFDD for transportation feasibility, indicating to the CJCS and supported CINC that movements arrive at POD consistent with the supported CINC's assessment of JRSOI and theater distribution.**
- **following analysis of all inputs, the supported CINC is responsible for declaring a plan to be executable from end-to-end.**

SOURCE: CJCSI 3110.11C, *Mobility Supplement to the FY 98 JSCP*, 2 Jan 1998

desirable when deploying units must integrate into the force quickly, but is generally the least efficient method for maximizing strategic lift capacities. In cases where strategic lift is constrained, greater use of combat loading may delay force closure. Combat loading includes employing the loading methods of vertical and horizontal stowage and dispersion (spread loading), in order to support the landing plan and to effect selective unloading when required. "Selective unloading" is the controlled unloading and movement ashore of specific items of cargo from assault shipping at the request of the landing force commander.

- **Unit loading** places units with their equipment and supplies in the same vessels, aircraft, or land vehicles. This method may be more efficient in utilizing strategic lift than combat loading and maintains unit integrity better than administrative loading.
- **Administrative loading** maximizes troop and cargo space without regard to tactical considerations. However, equipment and supplies must be unloaded and sorted before they can be used.

b. **General Planning Considerations.** In considering planning for JRSOI, the general considerations are listed in Figure III-9. This is by no means a comprehensive listing but is provided to assist the planner.

7. Automated Support Planning Tools

Automated support planning tools assist combatant command planners to monitor, plan, and execute mobilization, deployment, employment, sustainment, and redeployment of US forces. The enhanced C2 inherent in

GENERAL PLANNING CONSIDERATIONS

- Threat location and capabilities.
- Level of cooperation expected from host nation.
- Amount of host-nation support required.
- Is the "nation-state" intact, or will the operation be in a "failed nation-state"?
- Type of environment (desert, jungle, arctic).
- Time expected between arrival and commencement of operations.
- Transshipment loading level 4 detail.
- Force protection during JRSOI.
- How does the combatant commander intend to exercise the statutory "directive authority for logistics"?
- How should the theater LOC be designed?
- What capability exists in theater to conduct effective JRSOI?
- What capability needs to be deployed for JRSOI?
- Is predeployment, deployment, and sustainment training required?
- What are US requirements and capabilities to track or conduct JRSOI for allied or coalition forces?
- Can the host nation perform any theater LOC functions or must US capabilities be deployed?
- Are military assets sufficient to conduct JRSOI and competing requirements (sustainment and/or NEO) in the event HN or contractor support is lost through military or other actions?
- How will deploying forces be sustained while conducting JRSOI?
- Have required transit agreements been negotiated?
- Are status-of- forces agreements adequate?
- Are there any existing contracts, or is there a need for new contracts?
- What kind of ACSAs should be negotiated?
- What kind of Allied support?
- What level of ITV is there?
- Are JRSOI operations being performed in a mature theater of operations or immature theater of operations?
- What throughput requirements must be met through the use of joint logistics over-the-shore operations?
- Have liaison officers been identified to support JRSOI operations?

Figure III-9. General Planning Considerations

PRIORITY IN PLANNING

The issue is educating users and following doctrine. In JOINT ENDEAVOR, controversy over aerial port management and airlift staging/support requirements resulted in the theater command not providing the personnel needed for the airlift control center to effectively coordinate with DIRMOBFOR and air mobility element (AME). Consequently, AME struggled to perform the missions. The DIRMOBFOR was assigned to Vincenza, Italy, isolated from the theater command in Stuttgart, Germany. This compounded coordination problems and hampered the interface between theater and strategic airlift.

SOURCE: General Walter Kross, *Single Port Management Joint Force Quarterly*, Winter 1996-97

the use of these advanced planning and execution tools provides the commander with the readiness, deployment, tracking, intelligence, theater movement, and employment details critical to effective JRSOI.

Joint operation planning is accomplished using JOPES. JOPES is resident on the GCCS. It provides the capability to develop the TPFDD and, along with the GTN and emerging JTAV capabilities, to monitor its execution. It is essential that deploying units document and transmit shipment information in electronic format to maximize electronic reporting of movement data via AIS feeding the GTN. Software and hardware improvements, such as seen in GCCS, allow commanders to more rapidly and accurately share vital information during planning and execution of joint operations. GCCS

EMPLOYMENT DRIVES DEPLOYMENT

At the conclusion of the planning phase of Operation JOINT ENDEAVOR, the Task Force Eagle (TFE) commander envisioned a deliberate, balanced deployment. The TFE lead force package augmented the Corps' national support element in establishing the intermediate staging base in Hungary. The task force would then follow with an engineer heavy force package to conduct a river crossing and open the lines of communications into Bosnia. It was not until the fourth force package that any substantial combat power would move into the TFE area of operations. With the signing of the General Framework Agreement for Peace (GFAP), the implementation requirements of the peace agreements required the immediate entry of a sizable combat force. To meet the unanticipated demands of the GFAP timeline, a "minimum essential force" was created, using a mix of employment capabilities and minimum logistic assets. Comprised mainly of Cavalry, Armor and Engineer assets, the force was re-sequenced to lead the task force deployment. This late — and significant — adjustment minimized the early deployment of combat service support assets and reflected the GFAP requirement to rapidly establish a significant and viable military presence. It also tended to desynchronize a wide range of deployment activities including reception, staging, onward movement, and integration as well as movement control.

SOURCE: Initial Impressions Report Task Force Eagle Initial Operations Operation JOINT ENDEAVOR, May 1996

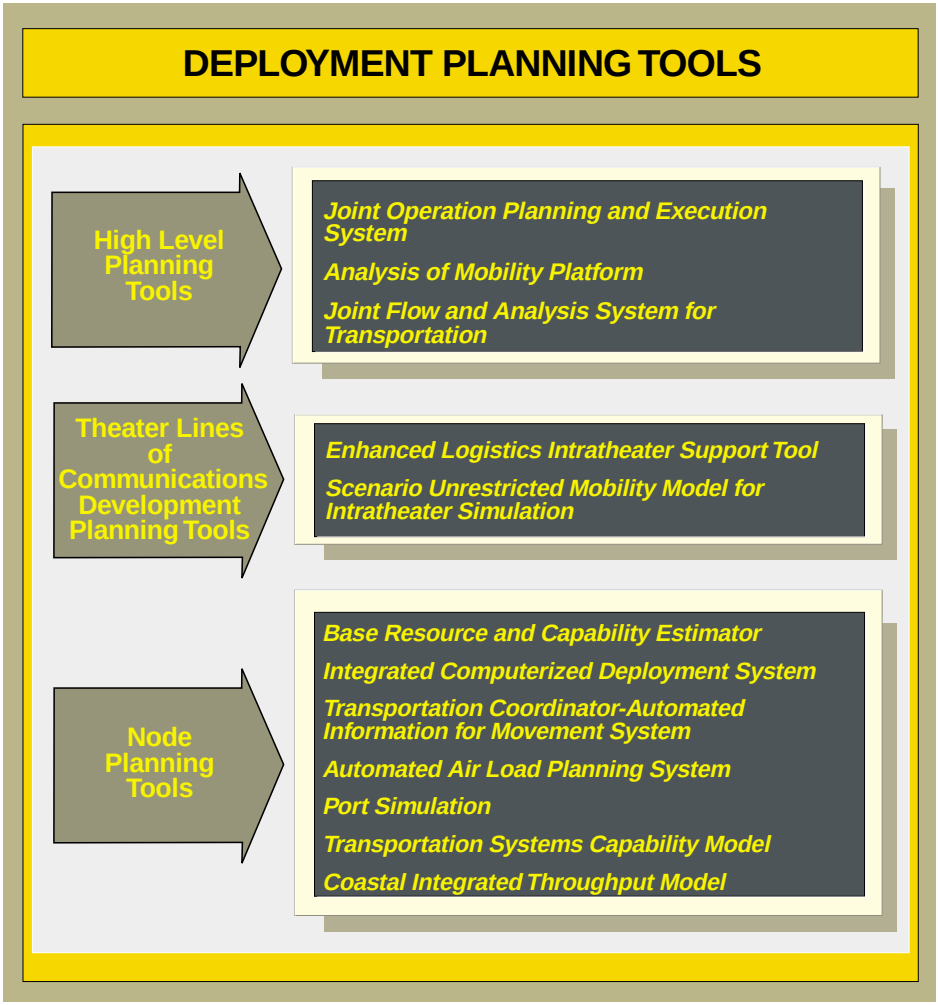

Figure III-10. Deployment Planning Tools

encompasses a myriad of enablers to assist in planning, directing, and managing logistics operations. Shown in Figure III-10 are other planning tools available.

See Chapter VIII, "Enablers," and Appendix C, "Deployment Planning Tools," for additional details on deployment support tools and enablers.

8. Summary

While this chapter endeavored to step through the JRSOI planning process map and explain the joint functional areas and processes in a logical manner, the planner must be aware that these steps are sometimes iterative, sometimes simultaneous, and often conflicting. Flexibility is one of the most important tools a joint planner can possess. Events may impact and overcome even the most indepth planning. Unity of command, by way of maintaining the big picture and paying attention to detail, will go far toward achieving the balance and synchronization necessary to successfully accomplish the mission.

CHAPTER IV
RECEPTION

"Aerial port of debarkation control in joint operations is complex. It requires personnel with special skills, available in sufficient numbers at the earliest opportunity."

Operation UPHOLD DEMOCRACY (1994-1996)
Joint After-Action Report

1. General

This chapter describes reception operations at theater PODs and other reception nodes. **Reception is the process of receiving, offloading, marshalling, and transporting of personnel, equipment, and materiel from strategic and/or intratheater deployment phase to a sea, air, or surface transportation point of debarkation to the marshalling area.** When the NCA directs deployment of military forces into a theater, their ultimate success substantially depends on how well the process of receiving that force in-theater is executed.

Reception begins with the arrival of deploying forces and equipment into an AOR. **During major strategic deployment, the preponderance of personnel arrive in-theater via strategic airlift and most equipment and materiel arrives by strategic sealift.** Exceptions to this rule include time-sensitive equipment such as C2 assets and other items identified as critical combat capabilities. Deployment is most often strategic, i.e., intertheater, but can be intratheater. In some cases, intertheater and intratheater airlift will compete for available APOD space and services.

An effective interface between the phases of strategic movement to POD and reception is crucial to the overall success of the JRSOI process. **Reception capacity, should, at a minimum, equal strategic lift and delivery capabilities.** This enables the port to be cleared in an efficient manner. The transition to theater responsibility can be facilitated by USTRANSCOM TCCs in conjunction with

The success of NCA deployment depends on the smooth execution of force reception in theater.

DESERT SHIELD RECEPTION

Although personnel were usually flown to the Gulf, most equipment and supplies were sent by sea. Close coordination among the entire transportation network was necessary to ensure that airlifted personnel reached the theater near the date their equipment was scheduled to arrive. Arrival of personnel before their equipment would increase the burden on the Saudi infrastructure. It also would expose troop concentrations in the port areas to possible enemy attack by ballistic missiles, aircraft, and terrorists.

SOURCE: *Conduct of the Persian Gulf War DOD Final Report to Congress*, April 1992

the Services and/or joint forces operating the air and sea PODs. Although the primary focus of reception is to receive, offload, marshal, and transport deploying forces, **the reception process inevitably shifts from receiving sustainment materials, replacement equipment, and personnel to ultimately supporting redeployment operations of in-theater forces**. At PODs, these activities may occur simultaneously with two-way traffic into and out of the theater. In all cases, detailed planning, force tracking, and the principles of movement control, as described in JP 4-01.3, *Joint Tactics, Techniques, and Procedures for Movement Control*, are essential to the overall success of reception.

2. Reception Process

The reception process is made up of two functions; prepare to receive the force and conduct POD operations. These two functional areas are further broken down into joint processes. Figure IV-1 depicts the JRSOI reception process (see Figure I-3 for the master JRSOI process map).

a. **Prepare to Receive the Force.** A critical step in the JRSOI planning process is the actual preparation to receive the force. Reception and accountability of personnel occur at either a Service reception center (SRC) or joint reception center (JRC). A JRC is activated as directed by the JFC at a theater

JOINT ENDEAVOR

As was demonstrated in 1995 during Operation JOINT ENDEAVOR (Bosnia), forces can move from origin to mission site within the same theater. During operational deployments to a contingency area located within the same theater as the stationed forces, units may deploy by various combinations of unit convoys, self-deploying aircraft, intratheater airlift, trucks, rail, barges or intercoastal shipping, and commercial surface transportation. Regardless of the transportation mode utilized during deployment, efficient reception is essential in assisting the debarkation of arriving forces that ultimately leads to the integration and subsequent rapid buildup of mission capability.

SOURCE: Initial Impression Report Operation JOINT ENDEAVOR (1995-)

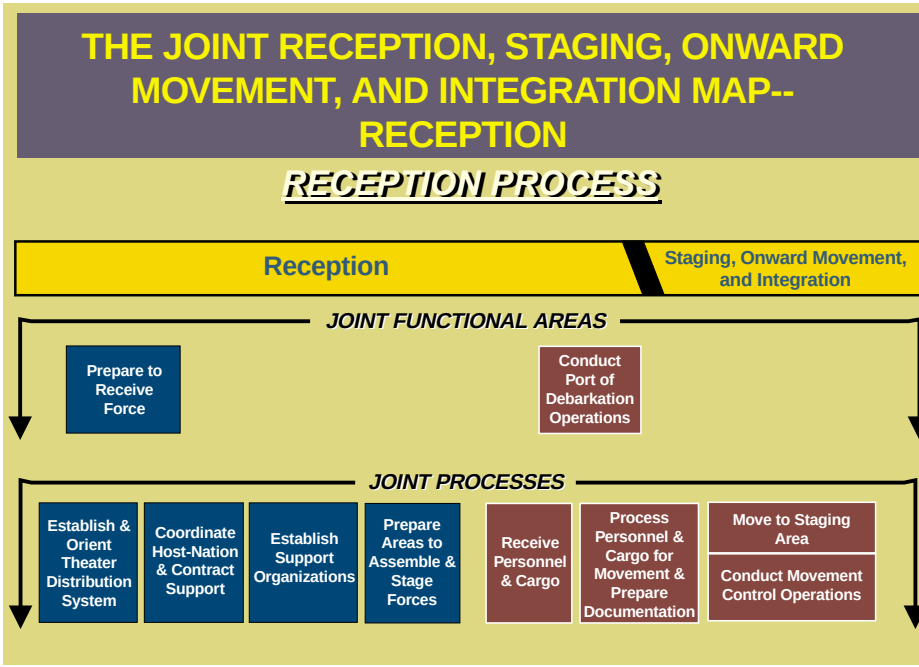

Figure IV-1. The Joint Reception, Staging, Onward Movement, and Integration Map — Reception

APOD or SPOD. **The theater capacity and supporting force structure must be synchronized with the scheduled arrival of deploying forces to ensure that the required support is provided.** This includes establishing the command structure and assigning JRSOI responsibilities to specific forces.

Refer to JP 1-0, Doctrine for Personnel Support to Joint Operations, *for detailed information on reception center operations.*

- **Establish and Orient Theater Distribution System.** Joint theater distribution is the system that enables the combatant commander to deploy, sustain, and redeploy forces and materiel to carry out the assigned mission. **Theater distribution synchronizes the complementary activities of movement control, mode operations, materiel management, and supply and service support.** The supported combatant commander establishes a theater logistic distribution system to support JRSOI operations from the POD to the designated area. The theater distribution system manager (J-4) advises the combatant commander on the best logistic methods to support the mission. The supported combatant commander's staff plans, tracks, and manages the theater logistic support, establishes adequate air and surface distribution operations, and captures the logistic data from the entire theater.

- **Coordinate Host-Nation and Contract Support.** Host nations may provide a variety of services through their national and commercial agencies in support of JRSOI operations. **It will be necessary to coordinate and contract with the HN and commercial agencies for the use of land, transportation, and services.** Rental cars, buses, cargo trucks, forklifts, and cranes are necessary for the basic transportation of troops and equipment during the reception phase. Contracting for HN transportation

resources may diminish as TPFDD-scheduled transportation units arrive in theater and begin to assist with the support of JRSOI. Also, it may take considerable time to generate HN transportation; transportation units must therefore be scheduled early in the flow. Consideration should be given to early arrival in the deployment flow of transportation units.

- **Establish Support Organizations.** The organizations designated to provide supply and service, security, maintenance, facility and other types of support must be established at key locations to support the JRSOI effort.

- **Prepare Areas to Assemble and Stage Forces.** PODs, marshalling areas, intermediate staging areas, convoy support centers, forward support bases, and TAAs and/or OAs must be readied to receive and support forces undergoing the JRSOI process.

b. **Conduct POD Operations.** The deploying forces will arrive at theater APODs and SPODs and be processed by either an SRC or JRC. Reception centers will receive, account, provide temporary life support (as necessary), and coordinate follow-on movement for deployment and redeployment of personnel. Reception is the process of offloading, marshalling, and transporting personnel, equipment, and materiel to complete the intertheater deployment phase to a sea, air, or surface transportation POD. **Reception operations at the POD include all those functions necessary to receive and clear unit personnel, equipment, and materiel through the POD.**

- **Receive Personnel and Cargo.** Personnel and cargo are offloaded at terminals. The support organization analyzes ITV data to determine how and where the arriving personnel and cargo are to be moved to appropriate holding areas. Status reports are provided to higher headquarters. The units are advised of the general situation and may be tasked for personnel to work on various work parties (i.e., drivers for offloading, security, cargo offload).

- **Process Personnel and Cargo for Movement and Prepare Documentation.** Personnel and cargo are received and processed for movement. Unit personnel and cargo may move on unit equipment and/or common-user transportation.

Reception operations at seaports of debarkation.

Appropriate documentation is prepared for subsequent movement.

- **Move to Staging Area.** Unit personnel and cargo will usually move to a staging area. In some situations, unit personnel and cargo may move directly to their final designated theater destination. If movement is to a staging area, preparations begin there for onward movement to the designated theater destination. In certain instances, the POD, staging area, and designated area may be collocated.

- **Conduct Movement Control Operations.** Movement control elements coordinate, monitor, and report movement in accordance with movement instructions. The movement control element also establishes procedures with HN, commercial contractor, and allied forces on the use of available transportation resources. The appropriate AIS at the movement control operation will capture the associated departure or receipt information and provide that information to the GTN.

3. Reception Nodes

The most critical nodes in the theater for supporting deployments are the APODs and SPODs. Seaport and airfield capacities and throughput capabilities significantly influence the speed with which forces can be deployed, the order in which forces must be deployed and, to a large extent, the types of units that can be deployed. **Port efficiency or throughput is a function of the operational environment and the level of port modernization (developed versus undeveloped).** Some instances may necessitate improving or constructing port facilities to meet operational requirements. In addition to the PODs and nodes, several other facilities and areas support the reception process. Figure IV-2 depicts an overview of the JRSOI support structure.

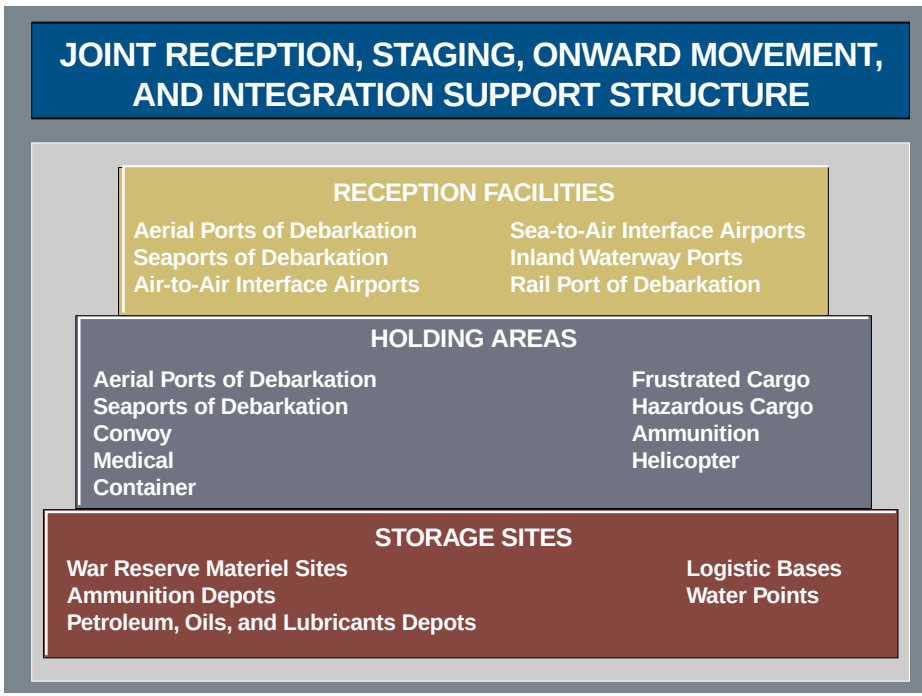

Figure IV-2. Joint Reception, Staging, Onward Movement, and Integration Support Structure

Appendix B, "JRSOI Support Structure," describes each of the supporting LOC nodes shown below.

Marshalling is another essential component of the reception process that facilitates port clearance. The timely movement of personnel, equipment, and materiel to a common assembly or holding area gives the commander the first opportunity to reassemble mission capability. This very important task of assembling forces is often complicated by the fact that units may arrive in-theater at separate PODs and at different times. **To further enhance port clearance, the combatant commander must designate marshalling areas that support unit re-assembly without impeding the arrival ports for follow-on units.** Figure IV-3 illustrates a notional marshalling area operation.

a. **Port Management.** The Department of Defense uses the **single port manager** approach for most APOD and SPOD operations. As outlined in the Unified Command Plan and USTRANSCOM Command Arrangements Agreement, USTRANSCOM has the mission to provide worldwide common-user aerial and seaport terminal management and may provide terminal services by contract. Thus

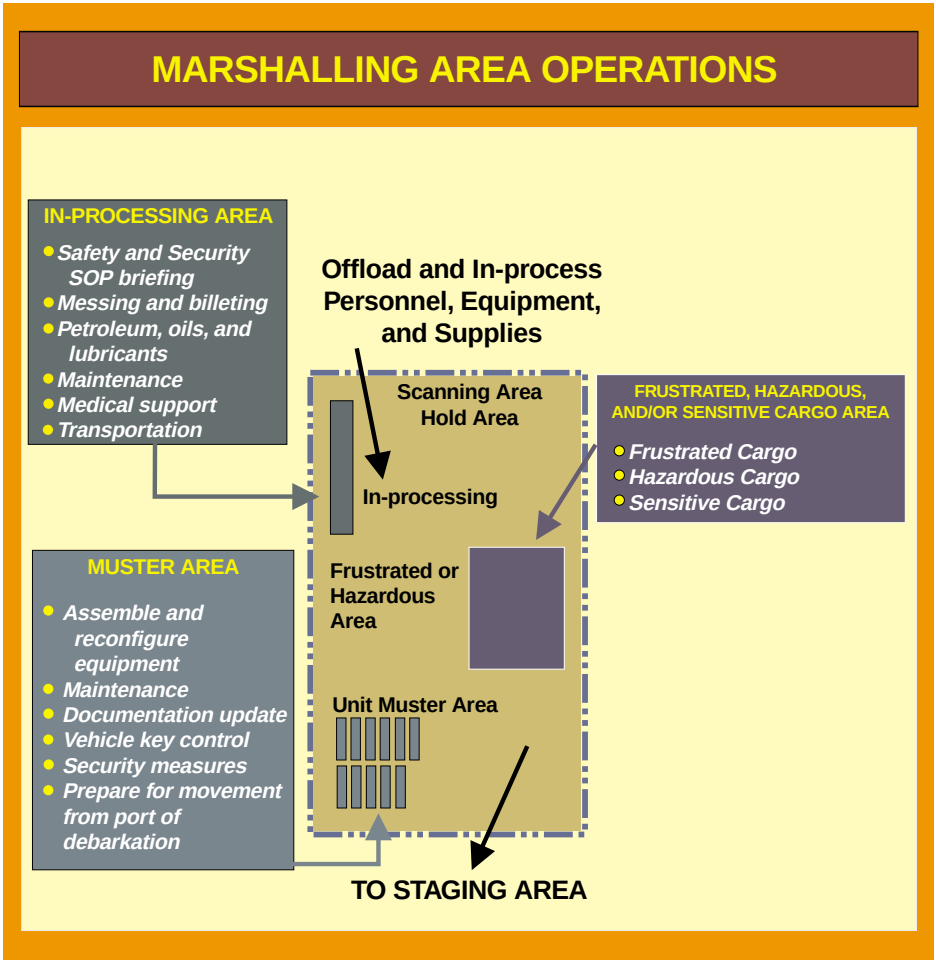

Figure IV-3. Marshalling Area Operations

USTRANSCOM, through AMC and MTMC, will normally manage common-use aerial ports and seaports respectively for the combatant commander. In areas not served by a permanent USTRANSCOM presence, USTRANSCOM will deploy an AMC mission support element including aerial port expertise. If mobile C2 is also required, a mission support team or tanker airlift control element (TALCE) will deploy as well as an MTMC port management cell to manage the ports in concert with the designated port operator. Based on availability of fixed-port terminals or operational environments or requirement, the port manager may also serve as the port operator.

b. **Theater Port Management.** To ensure efficient operations of the port (air or sea) and to achieve maximum throughput at the port, AMC and MTMC (as single port managers as designated by USTRANSCOM and in accordance with Command Arrangements Agreement with other geographic CINCs) are identified as common-user theater port managers with the mission of overseeing the entire reception phase of JRSOI. In doing this, JRSOI planners ensure that balance and synchronization are applied to the reception phase to achieve maximum throughput of the port.

c. **Aerial Port of Debarkation.** The APOD serves as the primary port of entry for deploying personnel, as well as for early entry forces airlifted into theater together with their equipment. **APODs by their very nature are facilities most often operated in conjunction with the HN.** Figure IV-4 depicts a notional aerial port complex.

- **APOD Functions.** Numerous operational and support functions occur at the APOD. **Primary operational functions are to receive, offload, marshal, provide essential field services, and transport deploying forces and their equipment.** Tasks include offloading cargo (both equipment and materiel), clearing personnel through air terminals, accomplishing movement control, and maintaining ITV. In addition to operational functions, there are APOD support functions as listed in Figure IV-5.

- **APOD Service Capabilities.** Various organizations provide the operational capabilities needed for APOD reception. For example AMC through its air mobility support squadrons and/or aerial port flights and TALCEs provides much of the operational and logistic support needed to receive arriving aircraft; Navy overseas air cargo terminal (NOACT) units unload aircraft and operate air cargo and passenger airheads. Through its cargo transfer company (CTC), the Army provides the required support to interface with the TALCEs and begin the staging and onward movement phases for the deploying personnel, equipment, and materiel. When performing this mission, the CTC is often referred to as the arrival/departure airfield control group (A/DACG). When a CTC is not available, other Army or Marine Corps units may be given the A/DACG mission. In addition, HNS, provided under the provisions of an existing agreement or contracted port services, may be used to free up finite reception assets and minimize the logistic footprint at the APOD. Close coordination with HNS activities is necessary to balance the operational requirements of all organizations competing for limited resources. The layout of a typical APOD is illustrated in Figure IV-6. Primary US and HN elements involved in APOD operations are shown in Figure IV-7.

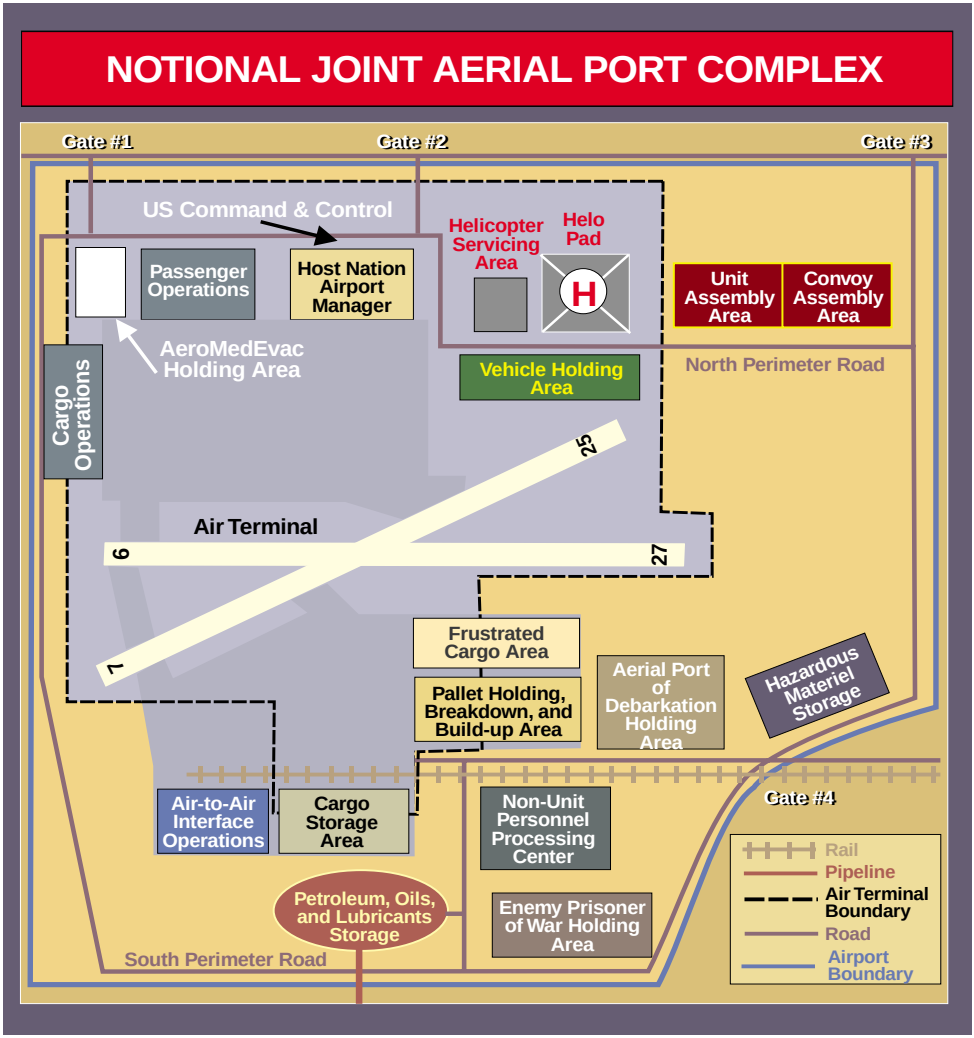

Figure IV-4. Notional Joint Aerial Port Complex

- **APOD Infrastructure Optimization.** Various factors can impede APOD reception, but the overriding considerations for any airfield operation are parking maximum (aircraft) on the ground (MOG) and working MOG. Parking MOG is the number of aircraft that can fit, or be parked, on the ground. Working MOG pertains to how many parked aircraft can be worked based on available personnel, materials handling equipment (MHE), and ramp space. Optimally, working MOG equals parking MOG. But this is seldom the case, since parking MOG usually exceeds working MOG. Service and HN operators must ensure that their activities do not reduce MOG capacities. For example, during Operation DESERT STORM there were 114 acres of 463L pallets on the ground when the ground war commenced. The inability to balance and synchronize the reception, staging, and onward movements phases of JRSOI significantly reduced the throughput of

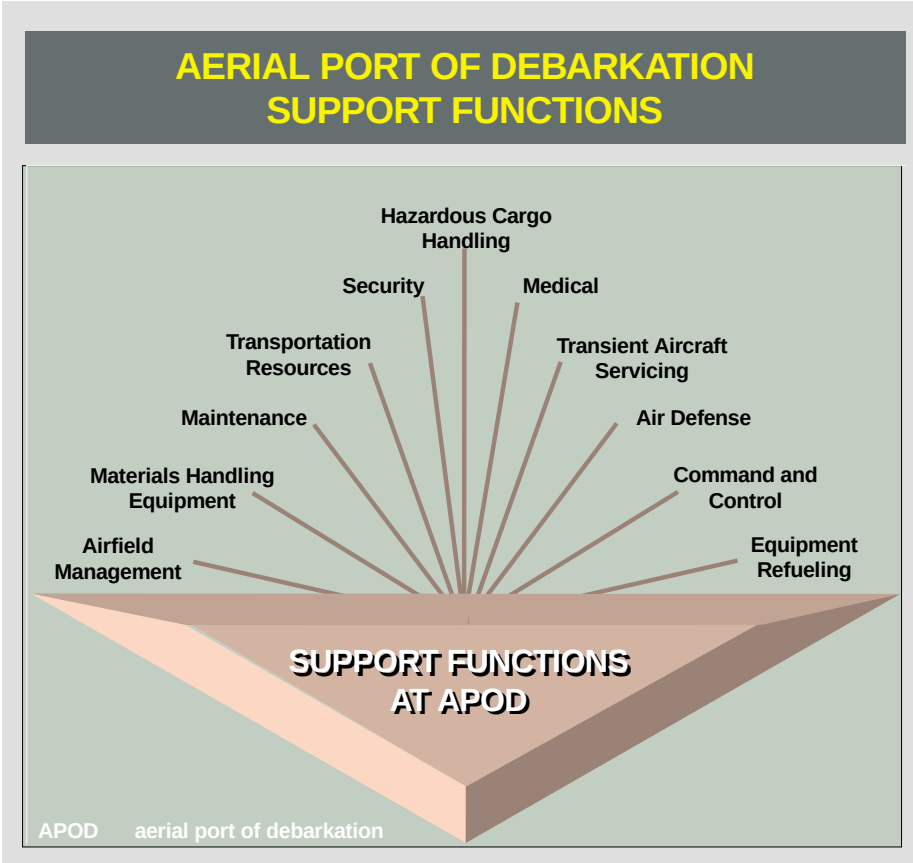

Figure IV-5. Aerial Port of Debarkation Support Functions

the airfield and led to a reduction of the MOG.

- **APOD Joint Use.** Another consideration is ownership and management of the APOD facility. The APOD may be controlled and/or operated by various HN military and civilian organizations. Additionally, other military and commercial activities may compete for limited facilities. These competing requirements undermine unity of command and may limit or reduce facility throughput capacities available for reception of forces. To overcome this obstacle, clear C2 relationships must be established for all APODs and JRSOI functions as outlined in paragraph 3a, above.

d. **Seaport of Debarkation.** The SPOD is the second primary LOC node and perhaps the most important because of its enormous throughput potential. The SPOD receives deploying forces through the offloading of their equipment and materiel from sealift vessels. **Historically, 90 percent of a deploying force's equipment and materiel are delivered to the theater via strategic sealift.** This is especially true for large equipment, bulk materiel, and supplies that are not required to arrive early in theater. There are three types of seaports that can function as an SPOD: fixed, which are improved, world class ports such as Dammam, Saudi Arabia or Pusan, Korea; unimproved or degraded ports such as those found in Somalia and Haiti; and bare beaches where fixed facilities are unavailable.

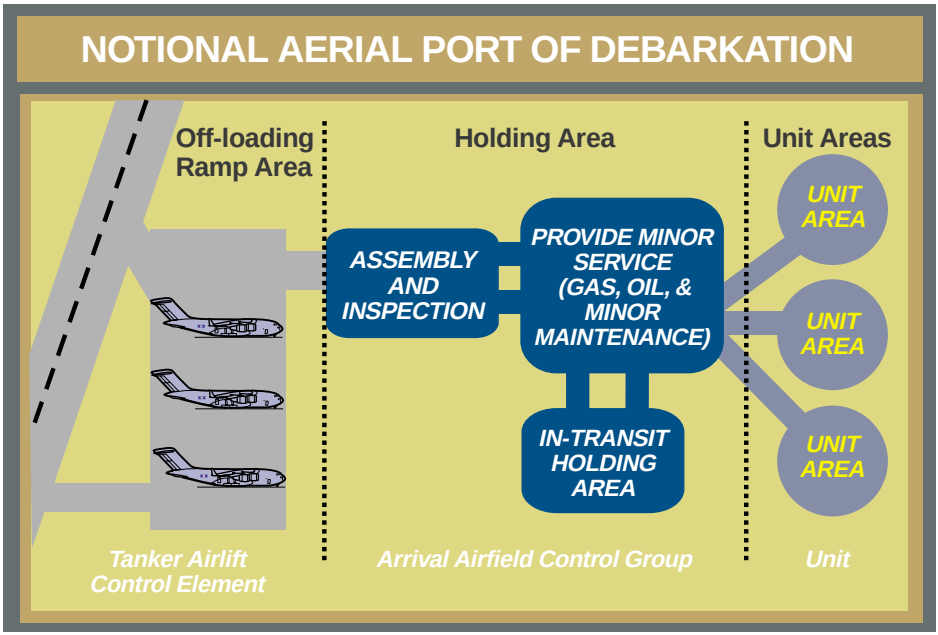

Figure IV-6. Notional Aerial Port of Debarkation

- **SPOD Functions and Responsibilities. Responsibility for essential SPOD functions is shared between HN seaport organizations and US DOD organizations** such as MSC and MTMC, military terminal service units, and contractors. Shown in Figure IV-8 are examples of essential SPOD functions.

- **SPOD operations** are normally conducted at established fixed water terminal facilities such as a sea or inland water port. **Pre-positioned port opening packages** are an option available to the combatant commander through the different Service's pre-positioned equipment located either in-theater or afloat. Pre-positioned port opening packages are capable of operating a water terminal and providing the initial transportation and logistic units necessary to receive forces. Primary US and HN elements involved in SPOD operations are shown in Figure IV-9.

- **SPOD water terminals** include both seaports and inland water facilities capable of receiving deep draft vessels, coastal vessels, and barges. Many

JOINT ENDEAVOR

In Operation JOINT ENDEAVOR, the Army established a heliport to reassemble helicopters that were shipped by air. The heliport occupied a portion of an airfield, which affected the number of aircraft that could be parked on the field. This reduced the throughput of the airfield and consequently slowed the deployment, an Army decision that impacted the strategic flow.

SOURCE: Operation JOINT ENDEAVOR (1995-) Draft Lessons Learned

ORGANIZATIONS AND FUNCTIONS AT AERIAL PORT OF DEBARKATION		
Organization or Activity	**Parent Organizations**	**Major Functions**
Aerial Mobility Support Squadron and/or Aerial Port Flight	USTRANSCOM Air Mobility Command (AMC)	Plan aircraft loads, process and document personnel and cargo, load and service airlift aircraft
Aeromedical Evacuation Liaison Team	USTRANSCOM (AMC)	Communicate and coordinate aeromedical evacuation requirements between medical facilities and the Global Patient Regulating Center
Facilities Management	Combatant Commander Designated Executive Agent and/or Host Nation	Plan and manage facilities maintenance, repair, and construction requirements
Arrival/Departure Airfield Control Group	Army and/or Marine Component Command	Coordination with the TALCE, clear arrival and departure airfield
Port Movement Control Detachment	Movement Control Agency	Assist deploying units with onward movement from port. Resolve problems with frustrated cargo
Area Support Group (ASG) Liaison Element	Theater Support Command	Coordinate ASG support at port
Noncombatant Evacuation Operation Liaison Element	Army Component Command	Coordinate all movements of noncombatants
Aircraft Maintenance Team	Army Component Command	Provide technical assistance to Army aviation units deploying through the joint aerial port complex
Postal Operations Terminal	Air Force or Army Component Command	Process inbound or outbound mail shipments
Tanker Airlift Control Element (TALCE)	USTRANSCOM (AMC)	Control, coordinate, and monitor US airlift operations
Port Security	Air Force Component Command, Army Component Command outside airfield	Provide physical security for the airfield and port complex
Airlift Clearance Authority	Air Force Component Command	Provide clearance for theater airlift of Air Force cargo from aerial port complex
Host-Nation Support Elements	Host Nation	Operate airfield, load and unload aircraft, service aircraft, provide local transportation, provide security, provide air defense
Navy Overseas Air Cargo Terminal	Naval Expeditionary Logistics Support Force	Operate expeditionary air cargo terminals; operate air terminal operations centers and remote consolidated aerial port systems; certify hazardous material cargo; tracks depot level repairables

Figure IV-7. Organizations and Functions at Aerial Port of Debarkation

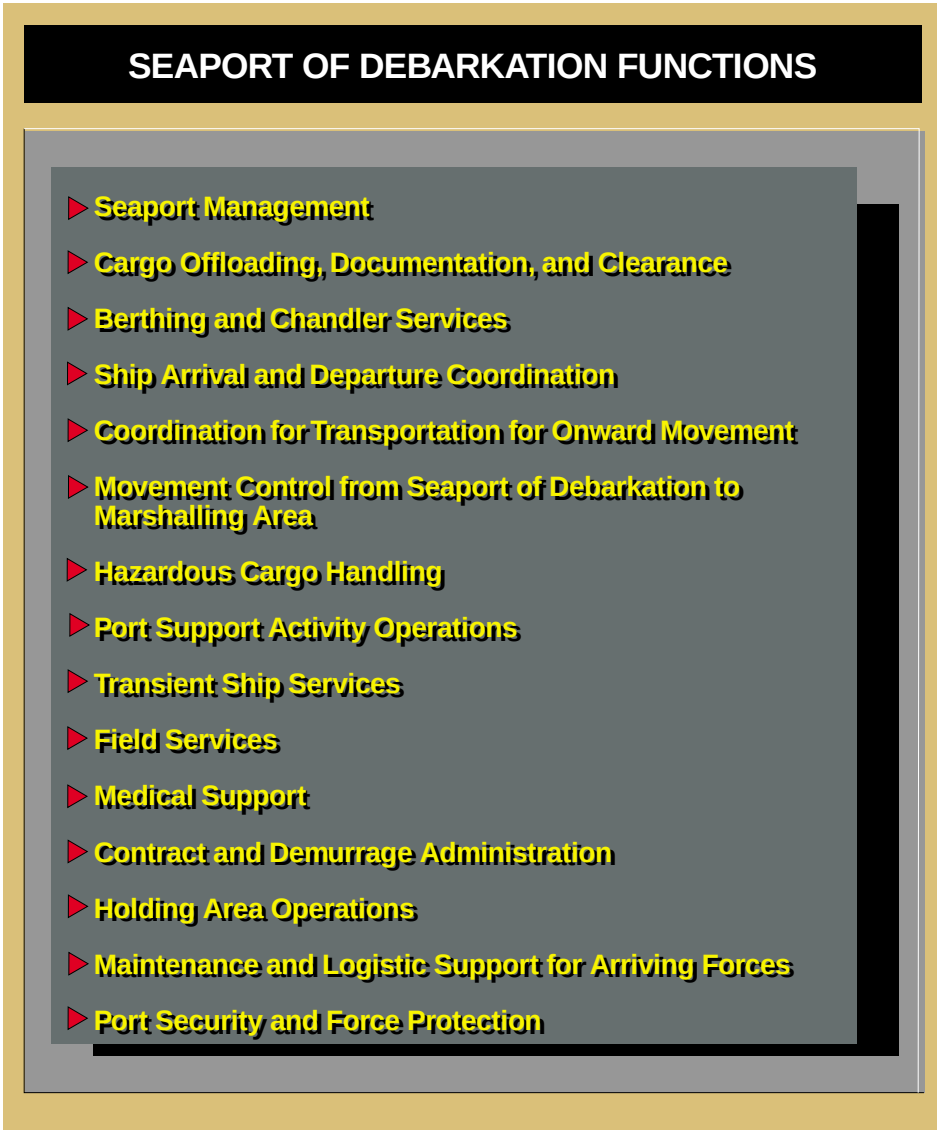

Figure IV-8. Seaport of Debarkation Functions

established terminals will have a transportation infrastructure in place such as railways, highways, inland waterways, and adjacent airfields. Although terminal facilities will vary, many will already be equipped to handle roll-on/roll-off vessels, containers, general and bulk cargo, and lighterage. Figure IV-10 depicts a notional joint waterport complex.

- **JLOTS** is an option available to receive the force when debarkation at an established port is impractical or not available. JLOTS operations are operations in which Navy and Army logistics over-the-shore (LOTS) forces conduct LOTS operations together under a JFC. JLOTS operations are conducted over unimproved shorelines, through fixed ports not accessible to deep draft

ORGANIZATIONS AND FUNCTIONS AT SEAPORTS OF DEBARKATION		
Organization or Activity	**Parent Organizations**	**Major Functions**
Military Sealift Command (MSC) Office	USTRANSCOM (MSC)	Coordinate husbanding services of ships in port
Military Traffice Management Command (MTMC)	USTRANSCOM (MTMC)	Coordinate loading and unloading of ships, administer contracts, and document cargo; report movement to Global Transportation Network within one hour of arrival and departure of forces or equipment
Ocean Cargo Clearance Authority	USTRANSCOM (MTMC)	Coordinate movement of outbound cargo from seaport
Logistic Support Element	Army Materiel Command	Provide support to Army pre-positioned afloat operations
Naval Control of Shipping Organization	Navy Component Command	Coordinate deployment of merchant ship convoys
Port Support Activity and/or Port Operations Group	Combat Service Support Element and Landing Force Support Party	Loading and unloading of personnel, supplies, and equipment from shipping
Port Movement Control Team	Movement Control Agency (MCA)	Assist deploying units with onward movement from port
Area Support Group (ASG)	Theater Support Command	Coordinate ASG support at port
Noncombatant Evacuation Operation Liaison Element	Army Component Command	Coordinate all movements of noncombatants
Aircraft Maintenance	Army Component Command	Provide technical assistance to Army aviation units and unmanned reconnaissance aircraft deploying through the joint water port complex
Driver Holding Area (DHA) Control Group	Combatant Commander	Provide necessary services for accommodating personnel at DHA
Transportation Group (Composite) and Transportation Battalion (Terminal Service)	Army Component Command	Provide common user port operations to include heavy lift crane operations, stevedores, and C2 personnel capable of loading and discharging all classes of cargo including ammunitions; control of port support activity; cargo documentation
Tanker Airlift Control Element	USTRANSCOM Air Mobility Command (AMC)	Control, coordinate, and monitor US airlift operations at sea-to-air interface site (SAIS)
Aerial Port Squadron and Mobility Flight	USTRANSCOM (AMC)	Provide cargo and passenger service at SAIS

Figure IV-9. Organizations and Functions at Seaports of Debarkation

ORGANIZATIONS AND FUNCTIONS AT SEAPORTS OF DEBARKATION (cont'd)		
Organization or Activity	**Parent Organizations**	**Major Functions**
Airlift Clearance Authority	Air Force Component Command	Provide clearance for theater airlift of cargo from SAIS
ASG SAIS Liaison Element	TSC	Coordinate ASG support at SAIS
Port Movement Control Team	MCA	Assist deploying units with onward movement from SAIS
Port Security	US Coast Guard, Army Component Command, and/or Host Nation	Provide physical security of the port complex
Facilities Management	Combatant Commander Designated Executive Agent and/or Host Nation	Plan and manage facilities maintenance, repair, and construction requirements
Host-Nation Support Elements	Host Nation	Operate port, load and unload vessels, operate SAIS airfield, load aircraft, provide local transportation, provide security, provide air defense
Navy Cargo Handling Battalion	Naval Expeditionary Logistics Support Force	Provide maritime pre-positioning ships and AFOE cargo handling, heavy lift marine crane operations; provide stevedores and command and control personnel capable of loading and discharging all classes of cargo including munitions
Harbor Defense Command Unit	Navy Component Command	Provides seaward defense of harbor
Mobile Inshore Undersea Warfare Unit	Navy Component Command	Provides underwater defense in harbor
Landing Force Support Party	US Marine Corps Component	Reception and staging for Marine Corps forces

Figure IV-9. Organizations and Functions at Seaports of Debarkation (cont'd)

shipping, and through fixed ports that are inadequate without the use of JLOTS capabilities. JLOTS operations should be considered when port throughput capacity or reception capability is inadequate to support planned joint force operations, or to augment port reception capability to handle the surge of major combat forces during the early stages of large force deployments. The magnitude of JLOTS operations extends from the reception of ships for offload through the onward movement of equipment and materiel to inland marshalling and staging areas.

See JP 4-01.6, Joint Tactics, Techniques, and Procedures for Joint Logistics Over-the-Shore (JLOTS).

e. The SPOD will contain facilities and organizations, both military and civilian, to perform many of the APOD functions described earlier. **One of the key**

SEAPORT MANAGEMENT

As outlined in the Unified Command Plan and USTRANSCOM Command Arrangements Agreement, USTRANSCOM is the DOD-designated single port manager for all common-user seaports worldwide. When necessary, in areas where MTMC does not maintain a manned presence, a port management cell may be established to direct water terminal (i.e., fixed, unimproved facility, and/or bare beach) operations, including the work loading of the port operator based on the combatant commander's priorities and guidance. Depending on the situation, the geographic combatant commander may also request, in their command arrangement agreement with USTRANSCOM, MTMC to operate some or all water terminals in the theater.

organizations for SPOD operations is the port support activity (PSA) and/or port operations group (POG). It is a temporary military augmentation organization that aids the port commander in receiving, processing, and clearing cargo. The PSA is under the OPCON of the single port manager at common-user seaports. For seaports not designated as common-user seaport, the geographic CINC will designate the port manager, whereas the POG remains under the OPCON of the CSSE and/or landing force support party. PSA and POG functions are shown in Figure IV-11.

- Transportation systems are crucial to the timely and efficient reception of deploying forces at the SPOD. The supported commander should consider all available resources, geography, transportation capabilities, climate and seasonal changes, and distance between LOC nodes as well as projected requirements for movement of the forces from the SPOD. **When selecting an SPOD, the supported commander should consider the transportation infrastructure as well as the capacity of the port to handle potential throughput and surges of deploying forces.** A robust rail, road, airport, and inland waterway system will be vital in efficiently receiving and moving the force to staging areas.

Joint logistics over-the-shore operations

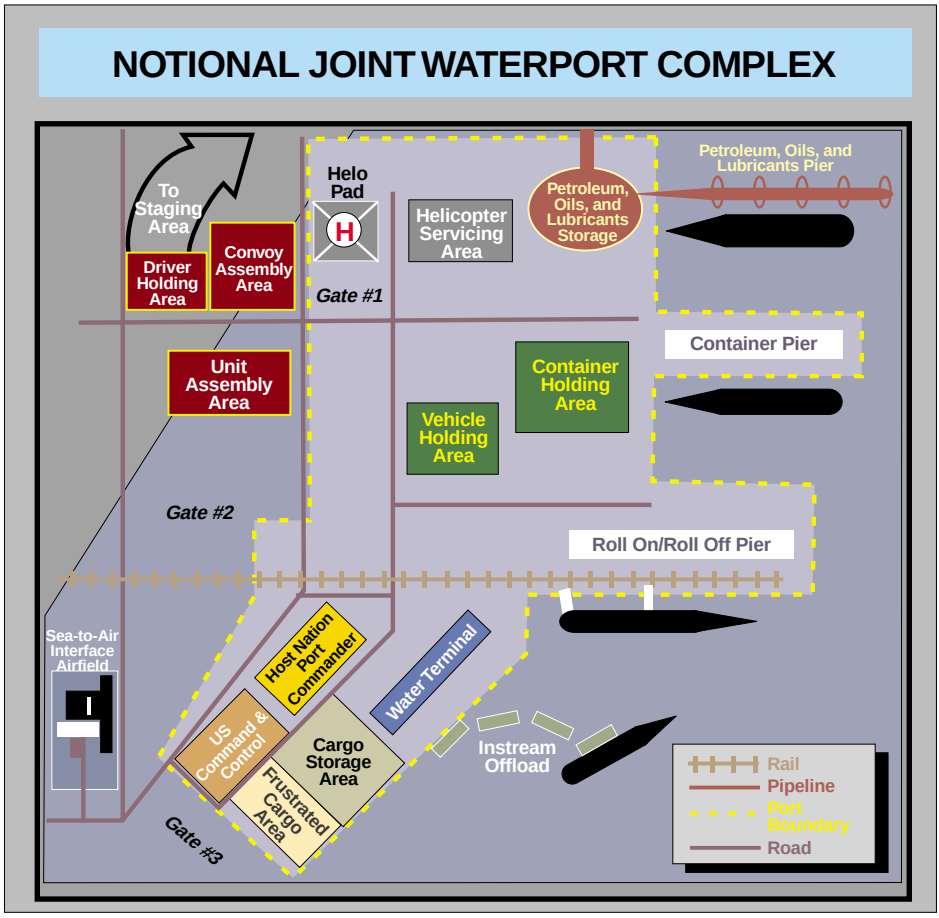

Figure IV-10. Notional Joint Warterport Complex

4. Reception Considerations

In order to support operations at the APOD and SPOD, there are conditions that support the JRSOI process that should be considered. The combatant commander should determine the type of support units and the composition and/or method of logistic support necessary to carry out reception. The combatant commander may consider **most capable Service** or **dominant user** options when configuring the support structure. Figure IV-12 illustrates some reception planning considerations.

a. **Economy of Resources.** Combatant commanders should tailor their reception operations to provide efficiency and economy as well as eliminating duplication of limited resources among the Services. The decision by the JFC to establish a JRC maximizes use of scarce resources. **Efficient resource management of limited transportation assets and reception facilities assists in optimizing reception throughput.** Discharge workload should not exceed POD throughput capacity. Time-phased build-up of reception capabilities is an option that may accomplish this. At the same time, however, reception forces must be configured in such a way that they are capable of handling potential surge capacities of strategic deployment and provide intermodal services for transshipment of arriving cargo and supplies.

Figure IV-11. Port Support Activity and Port Operations Group Functions

b. **Command and Control.** Command and control functions are essential to the successful reception of forces into a developing theater, and are the responsibility of the supported combatant commander. **Prior to commencement of deployment and reception operations, the JFC should develop an in-theater structure for executing C2 of JRSOI operations.** This structure must address the integration of USTRANSCOM assets into the overall C2 for JRSOI to be an efficient operation. Some C2 assets may be pre-positioned in theater, geographically in close proximity to the region, or afloat on MSC or maritime pre-positioning force vessels. Successful execution of a reception operation involves a **centralized** C2 structure (unity of command), a **decentralized** execution strategy, and **disciplined** (synchronized and balanced) movement control. The following C2 functions (mission and situation dependent) are examples of what may be required to successfully execute reception functions at APODs and SPODs.

- Maintain unity of effort for all primary and secondary LOC nodes.
- Coordinate, control, and monitor US airlift and sealift operations into APODs and SPODs.

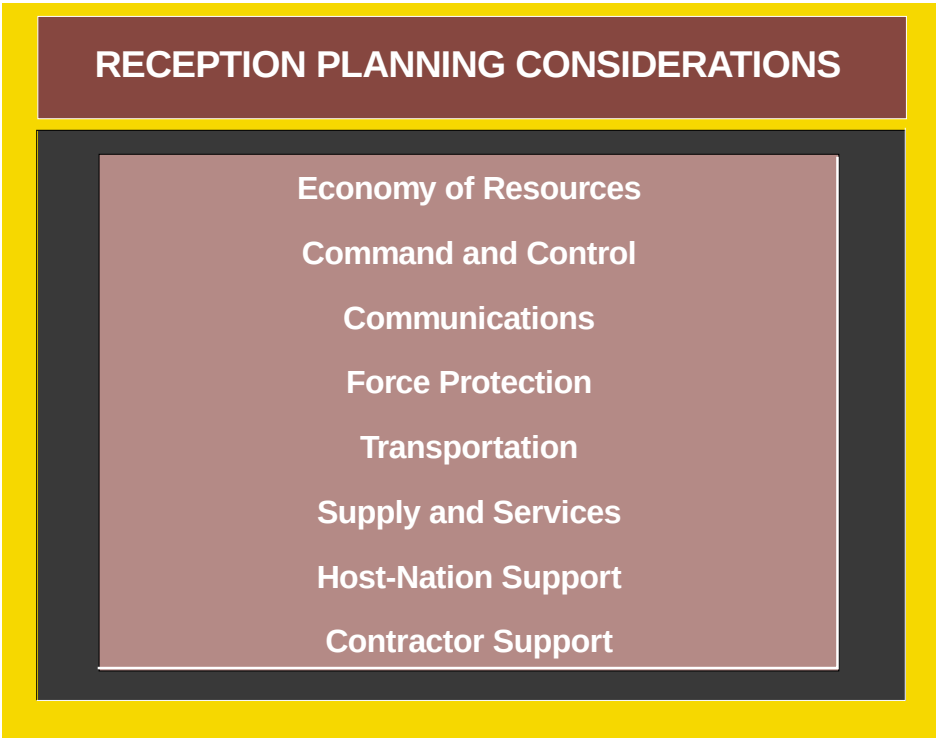

Figure IV-12. Reception Planning Considerations

- Designate marshalling area.
- Provide personnel and cargo clearance of arriving forces.
- Provide for personnel, equipment, and materiel accountability.
- Determine whether an SRC is to be designated as a JRC.
- Provide movement control of arriving personnel, equipment, and materiel.
- Provide visibility over arriving and departing personnel and cargo by input of JTAV source data into appropriate AIS.
- Perform liaison with HN military and civilian officials for coordinating required clearances and support.
- Coordinate and control loading and offloading from aircraft and ships.
- Coordinate and control personnel and cargo movements from PODs via surface and air to planned holding areas.
- Monitor and manage the TPFDD.
- Coordinate and control movement of noncombatants.
- Provide clearance for intratheater airlift cargo movements.
- Provide distribution management for the theater and arriving unit command structures of all arriving personnel, equipment, and materiel.

- Provide intermodal services for transshipment of arriving cargo and supplies.

- Provide, coordinate, and control construction in support of personnel and cargo movement.

- Provide life support facilities.

c. **Communications. Effective communications, vertically and horizontally, is essential for JRSOI due to the complexity of the operation.** Timely and reliable communications should be continuous among all JRSOI participants, both supporting and supported. The following communications functions may be required to successfully execute JRSOI operations.

- Establish links between LOC nodes.

- Use automation technology. Communications should utilize advanced technologies that will be both an enabler and force multiplier of the reception process. The entire JRSOI process, especially reception, should leverage the power of automation. Through GCSS programs, JTAV can track as well as manage the flow of forces in-theater and through the numerous PODs. Establishing a reliable network to disseminate this valuable information to all Services involved in the reception phase must be a priority for those units with GCSS and GTN capabilities.

- Provide liaison officers (LNOs). Effective liaison among the Service components and with HN agencies is paramount in order for effective communication to occur during the entire reception operation.

- Monitor GTN and JOPES to provide real time force tracking information of deploying forces and non-unit replacement personnel. Monitor JTAV and GTN to provide real-time tracking of non-unit sustainment items for all organizations and activities.

- Provide for reliable and compatible two-way communications between joint forces.

d. **Force Protection.** Deploying forces as well as strategic airlift and sealift assets may be the most vulnerable during loading or discharge. **The threat must be considered in light of the concentration of forces within the limited confines of a POD.** As units move forward to secondary LOC nodes, they remain vulnerable until fully integrated into a mission-capable force. Force protection capabilities and/or measures should be integrated into the reception plan. The combatant commander is responsible for providing the assets needed to protect the force throughout the entire reception process. Force protection functions should include but are not limited to:

- Providing theater air defense;

- Maintaining coastal, harbor, and inland waterway defense;

- Providing APOD and SPOD facility defense;

- Providing military police support;

- Establishing rear area operations center for security oversight;

- Preparing for the effects of NEO on JRSOI operations; and

- Providing protection against weapons of mass destruction threats.

See JP 3-10, Doctrine for Joint Rear Area Operations.

e. **Transportation.** All three elements of a transportation system (**mode operations**, **terminal operations**, and **movement control)** should be integrated early into the TPFDD flow to provide adequate reception capabilities for the deploying forces. These elements may be Reserve Components (RC) assets that must be mobilized and flow early in the TPFDD. **Essential to any JRSOI mission is an executable plan that facilitates intratheater transportation between nodes.** The primary transportation nodes and the extended LOCs should be mutually supportive of the principle of unit integrity. To transition from strategic intertheater deployment to in-theater reception, the following transportation functions may be required.

- Place port opening force packages at PODs providing hand-off of deploying personnel, equipment, and materiel.
- Employ movement control principles. Movement control coordinates all aspects of transportation; modes, nodes, and terminals. It includes Service-unique capabilities, HNS, and supporting commands.
- Have a support element for offloading of arriving forces.
- Provide intratheater air and surface transportation assets.
- Manage and monitor the TPFDD.
- Establish theater LOC nodes and links required to meet the anticipated transportation and throughput capacities. Allow for sufficient coordination to ensure timely movement of cargo and equipment through the port to minimize port congestion.
- Identify, assess, and provide for required physical transportation capacities and capabilities (ports, airfields, rail and road networks, littoral and inland waterways, and communications infrastructure).

f. **Supply and Services.** Supply and services compete for limited strategic lift resources as the priority is on receiving and moving the force forward into the theater. However, sustainment of the force while transitioning into the theater cannot be forgotten, and neither can the resources that

Life support services provide in-theater shelter, food, water, lodging.

will be required to sustain reception. The combatant commander must provide arriving personnel, equipment, and materiel with required life support and field services until unit personnel are reunited with their supplies and equipment and become self-sufficient. These services may be RC assets that must be mobilized and flow early in the TPFDD. The following are typical categories of support that may be provided to sustain newly arriving forces in-theater:

- Field and life services such as food, water, lodging, and sanitation.
- Maintenance and operator support for deploying equipment, vehicles, helicopters, and aircraft.
- Munitions storing and handling.
- Petroleum products storing and handling.
- Medical support and evacuation.
- Mortuary affairs services.
- Frustrated cargo storing, handling, and processing.

g. **Host-Nation Support** as a potential force multiplier should be planned and coordinated well in advance of an actual deployment. This can best be accomplished through coordination with the US country team (ambassador and staff), if one exists within country. **The effect of a well planned HNS agreement should be a reduction of the US military logistic footprint in-theater and a concurrent reduction in the need for early deployment of supporting units.** Some HNS considerations include:

- Augmenting reception capabilities early in the deployment cycle with dedicated units if civilian or military HNS are not available at APODs and/or SPODs to quickly throughput combat forces;
- Analyzing the PODs and in-theater transportation infrastructure capacity; and
- Anticipating limited materiel, key services, and HNS in-country.

h. **Contractor Support** for materiel requirements is another force multiplier and, like HNS, should be planned and coordinated in advance of an actual deployment. Normally HNS will be considered first before a decision is made to contract for required support. The supported combatant commanders should ensure early deployment of contracting, finance, resource management, and legal personnel to accomplish the contracting actions. Contracts will not be without cost, nor should deploying forces expect to have unlimited access to local facilities and resources. **In most cases, military forces will have to share and compete with HN military, civil, and commercial operations for scarce resources and facilities.**

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CHAPTER V
STAGING

"As we have learned many times, the US can ship supplies and materiel to an objective area much more effectively and efficiently than the objective area can unload and distribute those supplies."

LTG (Ret.) Joseph M. Heiser
***A Soldier Supporting Soldiers*, 1992**

1. General

This chapter describes the staging process and the activities performed in theater staging areas (SAs). **Staging includes the assembling, temporary holding, and organizing of arriving personnel, equipment, and materiel into units and forces, and preparing them for onward movement and employment.** During staging, deploying forces have limited mission capability and are not self-sustainable. The combatant commander must provide facilities, sustainment, life support, and protection until deploying units regain their combat or mission capability. Three essential force-related activities that occur during staging are described in Figure V-1.

a. A major focus during JRSOI and specifically during **staging** is building planned capability, an example of which is combat power. Success in building combat power requires:

- Defining combat capability;
- Defining logistic capability and sustainability;
- Defining how to track and visualize combat power;
- Establishing an incremental building of combat power;

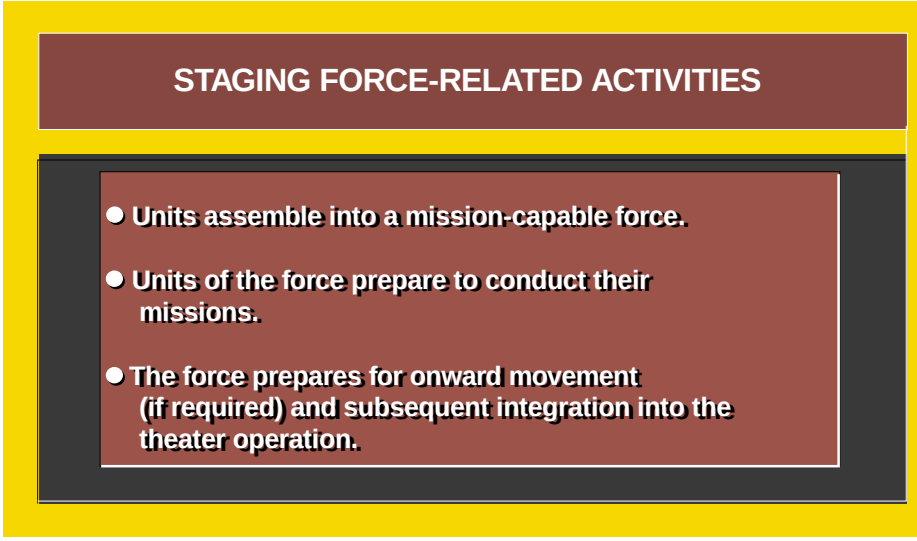

Figure V-1. Staging Force-Related Activities

- Prioritizing and adjusting the flow as needed;
- Managing and supervising the unit's progress; and
- Developing a complementary tracking system that applies for combat operations as well as JRSOI.

COMBAT POWER

Combat power is the total means of destructive and/or disruptive force which a military unit or formation can apply against the opponent at a given time.

b. An important matter in predicting combat power is **force tracking**. **Force tracking is the process of gathering and maintaining information on the location, status, and predicted movement of each element of a unit (including the unit's command element, personnel, and unit-related supplies and equipment) while in transit to the specified operational area. The unit's Status of Resources and Training System status is used to gather and maintain information on equipment, personnel, and location during deployment and before integration.** Force tracking aids in predicting the unit's arrival time in theater and incremental build of mission capability. The supported combatant commander's logisticians support the operational commander in force tracking by providing visibility of deploying forces and materiel through the evolving capability of JTAV. JTAV is possible through the integration of the capabilities provided by AIT and AIS as well as decision support tools comprising the GTN and GCSS. Control of the deployment process is exercised through the C2 capabilities of GTN and GCSS. Force tracking includes the following steps.

- Elements are monitored until they are reassembled
- Unit commander reestablishes control of the unit
- Unit becomes capable of sustaining itself
- Unit can perform assigned missions
- Unit completes onward movement and integration.

These systems are further discussed in Chapter VIII, "Enablers.".

2. Staging Process

While unit personnel, equipment, and materiel are deploying, commanders retain C2 of unit personnel and equipment when they embark on common-user lift assets at POEs. Command relationships are maintained through plane team commanders for airlift and commanding officer of troops for sealift. Over time, the unit commander regains control as elements of the unit are reunited with their equipment at marshalling and SAs. **During staging, commanders continue the process of regaining integrity of their units as personnel, equipment, and materiel are assembled and prepared for operations.** Combat power is built incrementally throughout JRSOI as personnel, equipment, and materiel pass through the LOC to the final destination. This often involves consecutive iterations of staging and onward movement. The staging process begins in marshalling areas in the vicinity of PODs when personnel link up with their equipment and is completed in the SAs. Multiple actions, events, and activities must be accomplished to get the force assembled and prepared for movement to the final destination for integration. Staging requirements must be planned and communicated to supporting units that take actions to prepare and organize the people, supplies, and equipment to support staging operations. **The major objective of staging is to assemble and prepare the force to**

perform their mission. The staging process consists of distinct steps, (see Figure V-2; see Figure I-3 for the master JRSOI process map).

a. **Prepare the Force (Personnel, Equipment, and Supplies).** Units arrive at the SA and begin preparations for movement to the TAA or OA. **Support activities in the SA provide life support until units become self-sustaining.** In the SA, C2 organizations should be in place to monitor statuses, receive reports, prioritize movement, provide local security, monitor throughput of subordinate units, and forward statuses to higher headquarters. The force is prepared for movement to the TAA or OA. Equipment and cargo, including WRM, are received, accounted for, and distributed. Units prepare for onward movement by assembling, processing and accounting for personnel; performing maintenance and operations checks on equipment; and checking load plans for movement from the SA to the OA or TAA. When the unit has received its movement mission, adequate intelligence, and is task-organized in accordance with command guidance, it makes final movement preparations and departs the SA.

- **Establish C2, Security, and Unit Area.** C2 and command post (CP) operations are established and liaison elements are sent to higher, adjacent, external, and subordinate organizations, as the mission requires. C2 is established with higher headquarters, and units maintain close coordination with higher headquarters as they make final preparations. Units ensure that security operations are established in accordance with the security plan.

- **Establish Command and Control.** C2 functions are vital to the overall success of staging forces. Staging requires operational command and staff

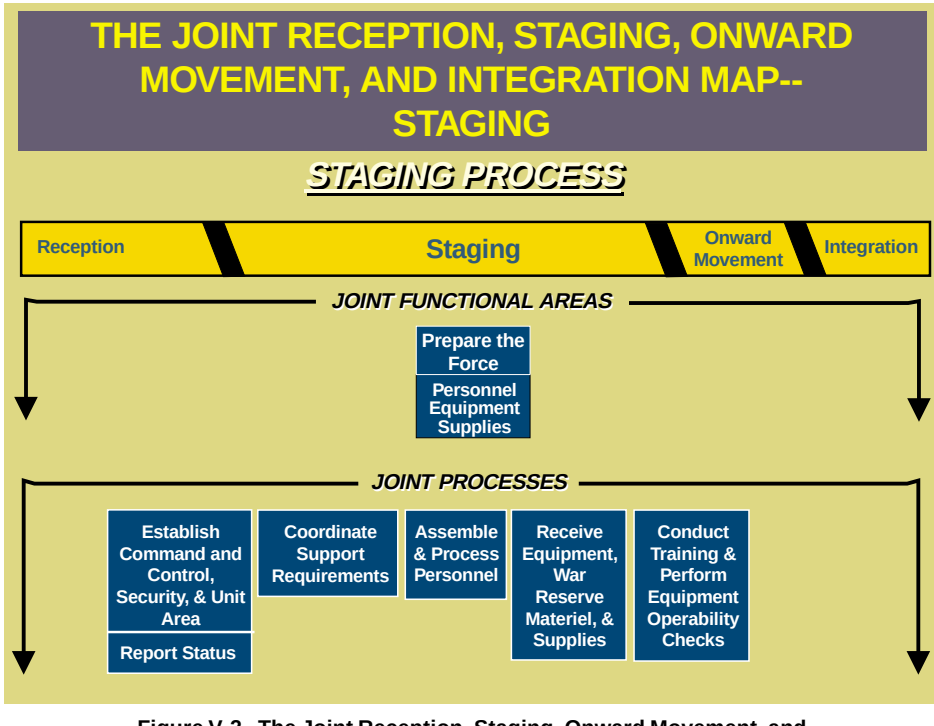

Figure V-2. The Joint Reception, Staging, Onward Movement, and Integration Map — Staging

Total asset visibility is maintained while building combat power in staging areas.

organizations, information management, and reliable communication systems. Depending on the size and scope of the operation, the combatant commander can assign responsibility for operating the SAs to a joint headquarters or to a Service component.

•• In an immature theater, the SAs may initially be under the command of one Service component commander and later transition to another Service component commander as the theater matures. Staging command structure, responsibilities, and mission roles must be clearly identified in the plan. It is essential that everyone understands the command relationships of the supporting and supported units. The SA C2 headquarters responsibilities may include: (1) providing C2 for SA operations; (2) establishing standing operating procedures (SOPs); (3) providing interface and coordination among the deploying units, task force headquarters, supporting commander, and rear area security operations; (4) allocating resources to support staging operations based on established priorities; and (5) serving as land manager.

•• Real-time or near-real-time communications and information processing are essential to operating the SAs and in providing integrated management information for force tracking, movement control, and materiel distribution. Communication systems and information processing systems should be established to provide effective communication among all JRSOI LOC nodes and SAs, higher headquarters, and internal communications within the SA.

- **Establish Security.** Force protection is an important aspect during marshalling and staging. Concentrations of personnel, equipment, and materiel at the SAs may make these forces a potential high value target vulnerable to enemy actions. Ensuring that personnel and equipment pass smoothly and expeditiously through the staging process can reduce force vulnerability. In addition, the HQ responsible for

operating the SAs should implement active and passive security measures such as the following.

•• Developing and executing a force protection plan for units in the SA. Staging operations must be protected from the full range of threats (espionage, local unrest, terrorist activities, weapons of mass destruction).

•• Coordinating and integrating SA security operations into the joint rear operations center force protection plan.

•• Providing continuous intelligence on rear and forward area enemy situation.

- **Report Status.** Units continuously monitor the status of preparation in key operational and logistic areas as they prepare for the mission and report status to higher headquarters. Movements and the status of units and forces should be reported from all nodes where JRSOI operations are being conducted.

•• Commanders determine their level of readiness against the readiness standards established by the combatant commander. When commanders assess their units as mission-capable, they are scheduled for onward movement to a TAA or final destination for integration.

•• Force tracking provides situational awareness of combat-ready units within the AOR and can be used as a tool to determine when specific unit capabilities will be available to the combatant commander. This process begins in the SA where personnel, equipment, and materiel reassemble into combat-ready units. Efficient movement control is one means of force tracking.

•• In addition, the command responsible for operating the SAs must have and maintain visibility of what and when units are arriving as well as when units are prepared for onward movement in order to plan and coordinate support and integration efforts. Staging operations should include the communications, automation, and personnel assets to provide and receive force-tracking information.

b. **Coordinate Support Requirements.** While in a deploying status, forces are not self-sustainable, and may require life support as well as other logistic support. Joint forces'

Security of staging areas can require rapid response.

Providing life support at a staging area.

support requirements are integral to the planning process. **Units arriving in the SA should coordinate with the supporting logistic activities to receive logistic support and services as described below.**

- **The amount and type of support required at staging locations to assist deploying units are both unit- and situation-dependent.** The combatant commander should consider the composition of logistic support units that will carry out these vital functions. A deploying unit's need for assistance in an SA can be influenced by the operating environment, the length of time units spend at the SA, and the ability of the unit to use their own resources to provide for some of their requirements.

- Supply and services provide necessary sustainment and support to enable the force to achieve readiness. To support staging operations, the following functions should be accomplished.

  •• Life support and essential services set up to support staging units that include, but are not limited to: food, water, shelter, sanitation, health service support, local transportation, maintenance, supplies, personnel services, and financial services.

  •• Petroleum, oils, and lubricants (POL) delivery systems should be capable of supporting joint forces.

  •• Ammunition holding area(s) and ammunition handling established for staging units.

  •• MHE and container handling equipment (CHE) provided.

- Transportation and movement control are important support services as forces move to and from SAs. The supporting headquarters responsible for operating the SAs should consider the following transportation-related functions.

  •• Maintain visibility of movement schedules and ITV of units that are moving from the marshalling areas to the SAs.

  •• Coordinate staging unit movement requirements with the appropriate MCC.

•• Provide local transportation services to support equipment staging and personnel billeting activities.

c. **Assemble and Process Personnel.** Units prepare for onward movement by assembling, processing, and accounting for personnel. Personnel are accounted for and processed in accordance with command guidance, JRSOI directives, and unit SOPs. Units are task-organized to execute the mission based on combatant commander guidance and the operational environment.

d. **Receive Equipment, WRM, and Supplies.** Units receive their equipment, equipment augmentation, WRM, and supplies as required. **Equipment, cargo, and supplies are received, accounted for, and distributed in accordance with the logistic guidance.** Units perform maintenance and operational checks on their equipment such as:

- Preparing equipment for onward movement;
- Uploading combat loads; and
- Ensuring receipt of unit cargo and equipment.

e. **Conduct Training and Perform Equipment Operability Checks.** Training is conducted in key mission-essential tasks. Equipment is checked to ensure that it is ready and mission-capable. Units conduct individual and unit training as required. Mission requirements may require training sites in the vicinity of staging and marshalling areas. **Combatant commanders may determine there is a need to train selected individual, crew, unit, leader, and staff tasks prior to departure from marshalling or SAs.** The operation of a training facility is not a logistic function, but will require resources that compete with the JRSOI mission. Support training site coordination and resources needed for operation will have to be determined, and a plan to meet mission requirements developed. Training considerations may include:

- Weapons test firing and calibration ranges;
- Weapons qualification and familiarization range; and

War reserve materiel, pre-positioned worldwide, is available for issue and staging.

- Simulator and/or simulations site.

3. Staging Areas

SAs are specific locations along the LOC. The combatant commander usually designates specific locations for staging in order to provide space and focus resources to support staging operations. **SAs provide the necessary facilities, sustainment, and other support to enable units to become mission-capable.** The size of the deployment and location of the PODs and marshalling areas may necessitate multiple SAs. Shown in Figure V-3 is a notional staging area.

a. **In selecting the location of the SAs,** the combatant commander visualizes where to strategically concentrate forces and logistics to enter into the operational area. The combatant commander evaluates the location of TAAs or OAs, geographic constraints, availability of organic and HN assets, transportation infrastructure, distance to the ports, and force protection considerations. These factors, along with the physical dimensions of the theater, ultimately determine the location of the theater SAs.

b. **The size of the SA** is influenced by numerous variables, including the anticipated

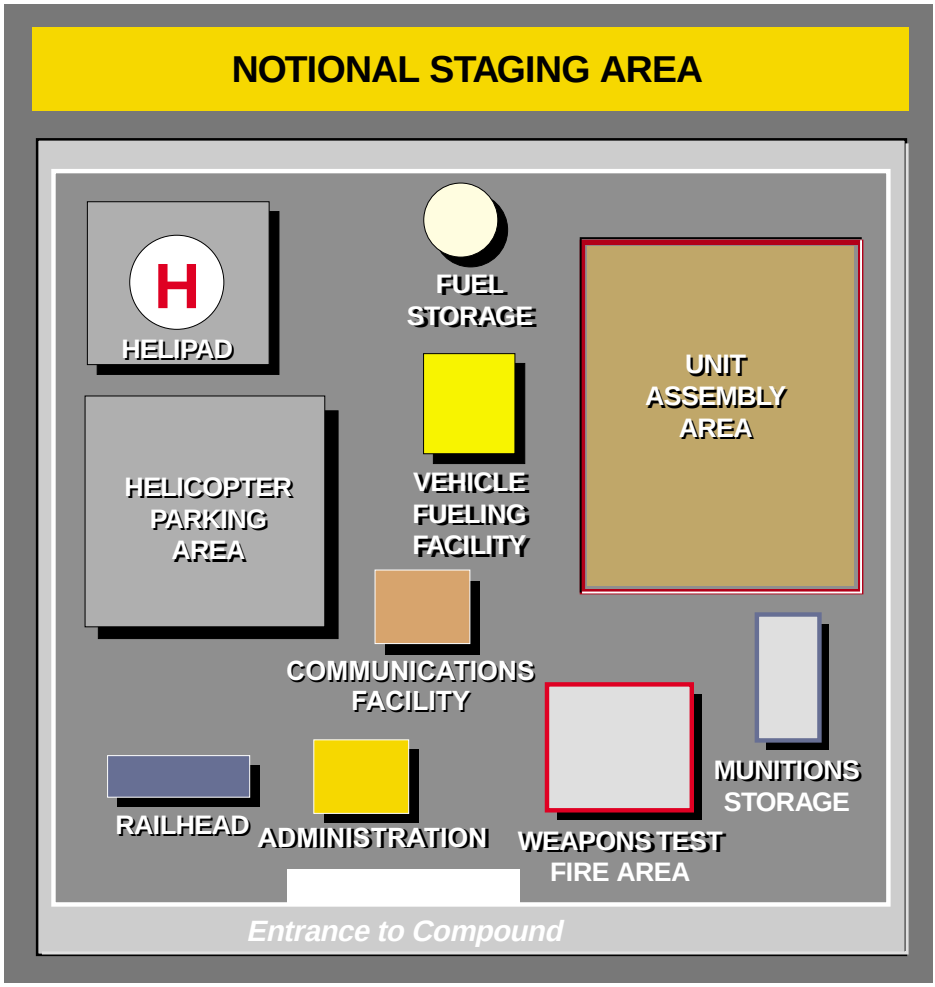

Figure V-3. Notional Staging Area

flow of forces in-theater, space available, and threat. The TPFDD is an important tool for the combatant commander to use in understanding the requirements for SAs.

c. **Intermediate Staging Base (ISB).** The theater operational situation may necessitate the establishment of an ISB outside of the combat zone or OA prior to inserting the forces. **If established, the ISB is an initial theater staging facility.** Deploying forces debark from strategic lift, reassemble, and prepare to accomplish assigned missions. The ISB may serve either as a principal staging base for entry operations in order to secure a lodgment to project the force into the theater, or as a secure facility for split-based operations. In other cases, the theater may not have the physical infrastructure to support JRSOI and will require the use of superior air and sea bases outside the region.

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CHAPTER VI
ONWARD MOVEMENT

"Movement is the essence of strategy. This is true even though strategy is not confined to the military art: the implementation of every political decision requires movement. It may be messages that move, or men, …or munitions."

Stephen B. Jones
"Global Strategic Views" in *The Impact of Air Power*, 1959

1. General

This chapter describes systems and processes for accomplishing the onward movement of deploying forces. **Onward movement is the process of moving units and accompanying materiel from reception facilities and marshalling or SAs to TAAs or other operating areas.** Rail, road, inland or coastal waterway, and/or air can accomplish this movement.

Some challenges to onward movement are illustrated in Figure VI-1.

Efficient onward movement of personnel, equipment, and materiel requires a balanced, integrated system of node operations, movement control, mode operations, and cargo transfer operations. The onward movement process encompasses support to all Service components of a joint operation, and often includes HNS. As in all JRSOI activities, onward movement of personnel, equipment, and materiel is prioritized according to the combatant commander's needs. Onward movement is complete when force elements are delivered to the designated location at the designated time.

2. Onward Movement Process

Onward movement consists of several distinct steps (see Figure VI-2; see Figure I-3 for the master JRSOI process map).

a. **Assemble and Marshal Forces.** Assembly and marshalling of forces involves **bringing together personnel, supplies, and**

The onward movement process encompasses support to all Service components of a joint operation, and often includes HNS.

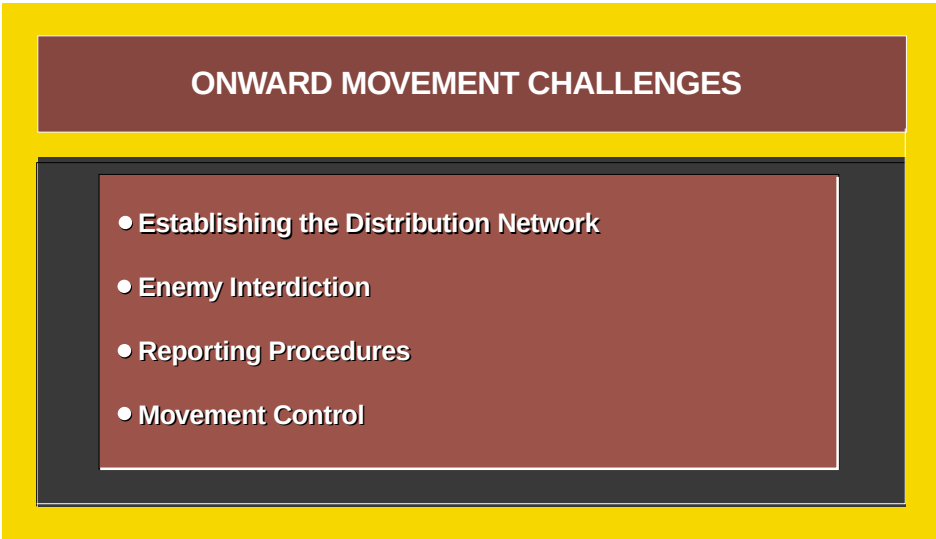

Figure VI-1. Onward Movement Challenges

equipment in preparation for movement. Support functions are established and positioned in-theater to expedite and control the onward movement of the force to the objective area.

- **Process Personnel and Cargo for Movement and Prepare Documentation.** Load plans are developed and checked to ensure that essential equipment and supplies can be transported. External movement requirements are identified and movement requests are submitted.

- **Sequence Loads.** Loads are sequenced to ensure the most efficient use of available transportation assets while meeting the combatant commander's requirements. Safety and security of the force are also considered when making decisions during sequence planning.

- **Coordinate Movement Security Requirements.** Units ensure that security operations are established in accordance with the security plan and monitor the movement.

b. **Onward movement** follows the "assemble" and "marshal forces" portion of the overall onward movement. The subsections of onward movement are:

- **Move to Operational Area.** Units depart the SA en route to the OA in accordance with movement and security instructions.

- **Conduct Movement Control Operations.** Movement control elements coordinate movement requirements with the security force and confirm that movement clearances have been approved. Departure, en route, and arrival statuses are monitored and reported.

3. Onward Movement Functions

Key elements of the onward movement process are **speed of movement and information flow**. Speed of movement is vital for force protection and mission accomplishment. Information flow

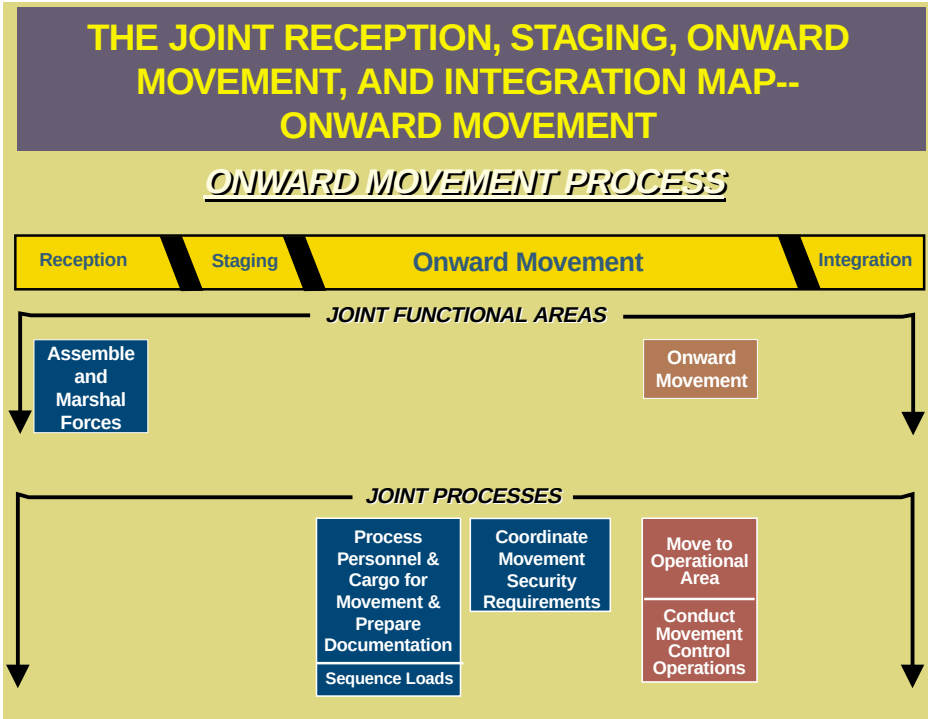

Figure VI-2. The Joint Reception, Staging, Onward Movement, and Integration Map — Onward Movement

encompasses locations and capabilities of forces, projected and actual arrival times at en route and final destinations, and component commands' ability to effect the movement. Successful onward movement of deploying forces can be viewed in the context of six critical functions as depicted in Figure VI-3 and explained below.

a. **Movement Control. Movement control is the planning, routing, scheduling, and control of personnel and cargo movements over LOCs.** JP 4-0, *Doctrine for Logistic Support of Joint Operations*, authorizes a combatant commander to establish a joint movement control organization. To ensure a fully integrated and responsive transportation system, the combatant commander should consider assigning responsibility for theater transportation movement control to a single joint office, the JMC. This JMC must be equipped with sufficient communication and automation capability to ensure adequate interface between strategic and theater transportation systems and the combatant commander's staff. The combatant commander may also choose to use one of the existing movement control centers of the Service components. The Army has a corps movement control battalion, a theater transportation battalion (movement control), and a theater movement control agency. The Marine Corps has MCCs planned for all deploying units from the Service component level down to the battalion and squadron level. They are the force movement control center, the logistic and movement control center, and the unit movement control centers.

If a joint movement control organization is established using assets from multiple Services, it must conduct joint training to ensure that personnel understand and can operate movement control equipment and C2

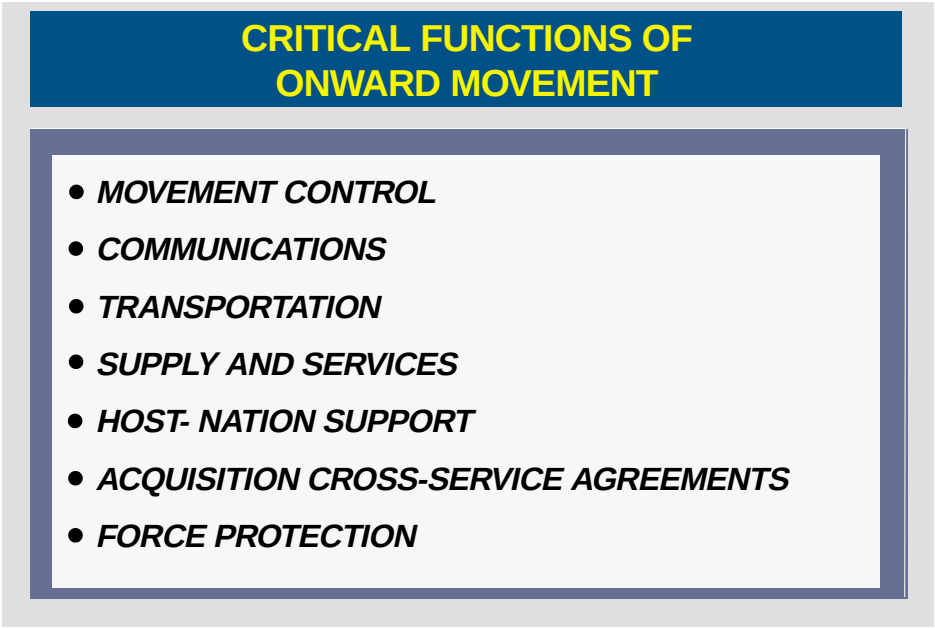

Figure VI-3. Critical Functions of Onward Movement

processes. The geographic combatant commander should task-organize the movement control functions commensurate with the mission, size, and geography of the OA.

> *"The geographic combatant commander has a wide range of options for performing movement control. These options include directing subordinate JFC and Service components to perform their own movement control or creating a fully integrated joint organization."*
>
> **JP 4-01.3, *Joint Tactics, Techniques, and Procedures for Movement Control***

The ITV systems provide a capability vital to coordinated onward movement. They provide a means to track units, personnel, equipment, and materiel en route from reception areas to SAs and forward to the assembly areas. The physical capabilities and limitations of the distribution network, along with the effects of combat, can limit the ability to execute onward movement as planned. Thus, ITV information is critical to successful execution of onward movement to include location, characteristics, and capacities of roads, aerial ports, and rail lines, combined with current status of highway regulation, traffic circulation and surface distribution plans, and movement programs.

For more information about movement control see Appendix A, "Movement Control," or JP 4-01.3, Joint Tactics, Techniques, and Procedures for Movement Control.

> *"Inadequate control of movement, whether into or out of a theater, results in waste, reduced logistic efficiency and consequently, a loss of potential combat power."*
>
> **JP 4-0, *Doctrine for Logistic Support of Joint Operations***

b. **Communications.** Movement control elements must be equipped with sufficient

OPERATION JOINT ENDEAVOR

At the time of execution, the rail deployment plan was based on an invalidated deployment rate (20 trains per day). At the planned rate of movement, the division could deploy the bridge opening package, open the ground lines of communications, accomplish the transfer of authority, and begin enforcement of the ZOS [zone of separation] by D+30. As the deployment began, it rapidly became apparent that the rail LOC [line of communications] would only throughput about half of the planned deployment rate. As a result, ad hoc force tailoring decisions had to be made to compensate for the reduced rail lift capacity.

SOURCE: Initial Impressions Report Operation JOINT ENDEAVOR (1995-)

communication and systems to ensure adequate interface between strategic and theater transportation systems and the combatant command's staff. They should be skilled in coordinating and directing theater transportation operations in support of unit movements and/or logistic resupply operations.

c. **Transportation**. Nodes, routes, and HN assistance should be coordinated to maximize the speed of movement. **Close coordination is essential for minimizing congestion because in most cases the Services, allied units, and the HN populace will be using the same networks.** It is essential that capacities and capabilities of the transportation network are balanced against the movement requirements so that nodes and routes are neither saturated or underutilized. As previously explained, the designated movement control element is responsible for coordinating the use of all theater transportation resources with USTRANSCOM and its TCCs, other combatant commands, and the HN.

d. **Supply and Services.** En route support nodes along the theater LOC provide security, life support, refueling, limited vehicle maintenance, and vehicle recovery. The size of the support centers will be based upon the available facilities, length of route, and volume of equipment and personnel transiting the sites. Various types of en route facilities that support onward movement include:

- Aircraft en route support sites;
- Convoy support sites;
- Trailer transfer points;
- POL transfer points;
- Pre-positioned equipment sites;
- Pre-stock supply points; and
- Railheads

Of the above listed facilities, convoy support sites are among the most critical. **Convoy support sites provide the bulk of en route support during onward movement. Services provided by convoy support sites may be tailored based upon such factors as distance between LOC nodes; number and location of support bases; and main supply routes' (MSRs') congestion, condition, and force protection.**

- Convoy support sites usually provide support in the following areas.

Convoy support sites provide the bulk of en route support during onward movement.

- Administration and communications
- Refueling
- Dining and billeting
- Latrines
- Laundry and showers
- Vehicle recovery and maintenance
- Medical
- MHE and CHE

CONVOY SUPPORT SITES

The distances traveled were considerable. The long haul from the port of Ad-Dammam to the logistic bases at King Khalid Military City (KKMC) was over 334 miles along the northern route. With the staggering number of support vehicles using the northern MSR [main supply route], it was not uncommon for multiple convoys to jam the two-lane MSRs. Along the northern route, it was a common site to see large trucks breaking off from the two-lane road and carving additional passing lanes through the sands of the desert.

With a long LOC [line of communications] over generally poor roads, Colonel Whaley was faced with the task of creating a transportation network capable of supporting Desert Shield objectives. As the Deputy Commanding General (DCG), Transportation, 22d Support Command, Colonel Whaley began by establishing a series of convoy support centers to increase the road network efficiency. According to the Army Chief of Staff's official history, "These centers resembled huge truck stops in the desert, and like all truck stops, operated 24 hours a day, providing fuel, latrines, food, sleeping tents, and limited vehicle repair facilities. The convoy support centers quickly became welcomed oases for overworked and exhausted long haul truck drivers."

SOURCE: BG Robert H. Scales
***Certain Victory: United States Army in the Gulf War*, 1993**

•• Security (force protection)

Figure VI-4 depicts a notional convoy support site.

Descriptions of the other en route support facilities are in Appendix B, "JRSOI Support Structure."

e. **Host-Nation Support** resources and facilities are essential to the successful employment and deployment of forces. **HNs can often provide a variety of services through their national agencies and can support onward movement in a wide range of categories.** Some of these categories are shown in Figure VI-5.

f. **Acquisition and Cross-Service agreements** provide US pre-negotiated support for potential war scenarios. ACSAs provide the legal authority for the US military and armed forces of other nations to exchange logistic goods and services. Transactions under this program must either be reimbursed, replaced in kind, or exchanged for equal value, which may not always be the case with HNS agreements.

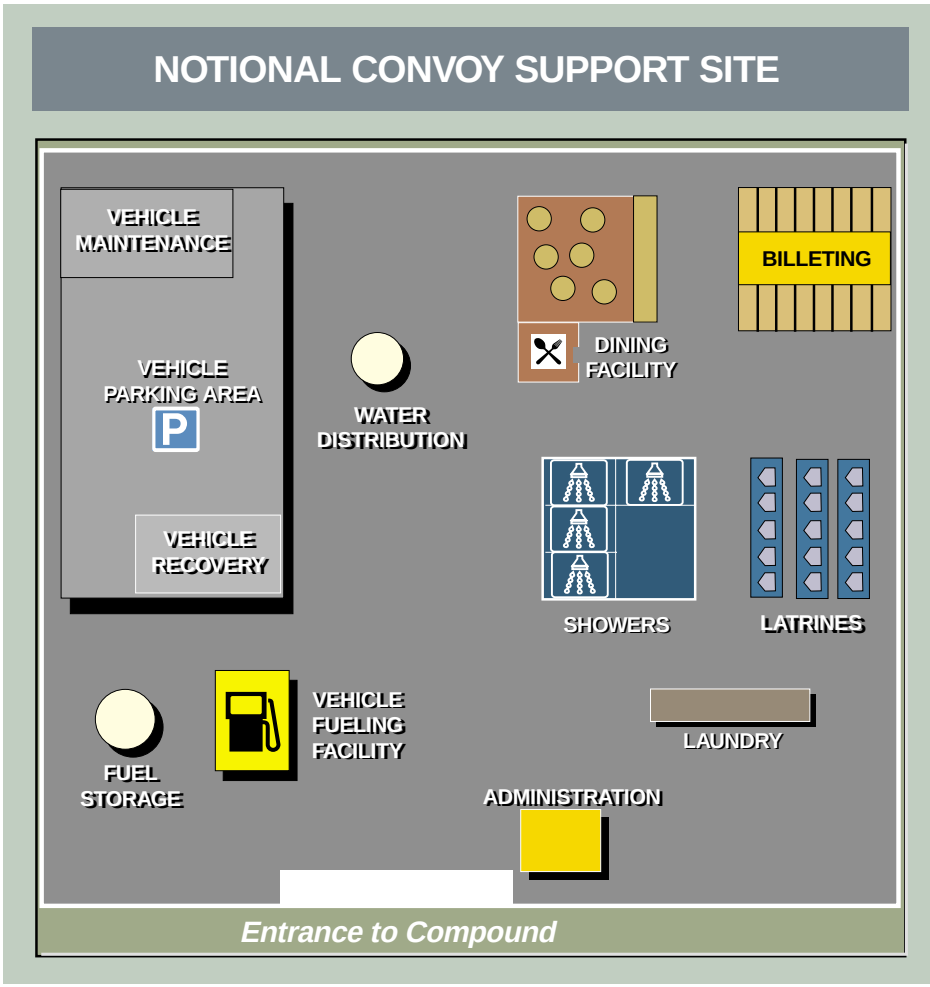

Figure VI-4. Notional Convoy Support Site

HOST- NATION SUPPORT TO ONWARD MOVEMENT

- Combat service support (food, water, lighting, billeting, showers, and latrines)
- Medical
- Security
- Communications
- Materiels and Cargo Handling Equipment
- Ground transportation (buses, line haul, and heavy lift)
- Convoy, road, rail, and diplomatic clearances

Figure VI-5. Host-Nation Support to Onward Movement

g. **Force Protection.** Force protection is critical to onward movement because it minimizes enemy opportunities to inflict serious losses and delays. **The threat of enemy interdiction to onward movement of forces presents a special challenge to the commander.** The combatant commander must assume that interdiction of the LOCs will form an integral part of enemy strategy and must plan operations to preclude them from impacting onward movement.

- **Protecting the LOCs** should require minimum cost to committed combat units through the use of geography and HN civil and military forces, as well as

Lines of communications are often targets of enemy interdiction, requiring additional active prevention measures.

ARAB-ISRAELI WAR

During the 1973 Arab-Israeli War, an Israeli commando team of 12 men and a jeep-mounted recoilless (RCL) rifle were inserted at 2400 hours along the Baghdad-Damascus Highway about 100 km north of Damascus, near a bridge crossing a deep ravine. The bridge was rigged for demolition, ambush positions were laid out covering the bridge approaches, with hasty minefields covering the ambush positions. At dawn, an Iraqi tank brigade, moving on transporters, began crossing the bridge. After several vehicles had crossed, the bridge was destroyed, and the exits from the bridge approaches interdicted by the RCL, thus isolating the convoy on the road. The immobilized vehicles were then destroyed by aircraft on-call, and by commandos using satchel charges. In this manner, approximately 50 Iraqi tanks were destroyed, and the road remained closed for several days (during a critical part of the war), due to fear of additional ambushes.

SOURCE: 1973 War Lessons Learned

assets of other US Services. It may be necessary to conduct a major operation to secure LOCs over which onward movement would be conducted to ensure that the incremental build of combat power is not interrupted. In addition, alternatives such as rerouting or mode substitution should be considered, i.e., air and sea LOCs to replace or supplement ground LOCs, if preventive and preemptive measures fall short.

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CHAPTER VII
INTEGRATION

"When the enemy assesses our forces, he values only those forces which the logistics community has ready for combat, or can get ready in time, and then sustain for a requisite period of time."

General Felix M. Rogers, USAF
In *Military Air Power, The CADRE Digest of Air Power Opinions and Thoughts*, 1990

1. General

This chapter describes the integration process and key integration requirements to successfully unite deploying forces into the theater command structure. **Integration is the synchronized transfer of mission-ready units into the combatant commander's force.** Integration may take hours or days. The complexity and time required for integration depends on the size, contingency conditions, and coordination and planning. C2, communications, and security are the priority of effort during the integration phase. **Integration is complete when the receiving commander establishes command and control over the arriving unit and the unit is capable of performing its assigned mission.** Force tracking, which occurs as the force builds combat power, culminates in force closure as reported by the commander of the unit. Force closure is defined as "the point in time when a supported joint force commander determines that sufficient personnel and equipment resources are in the assigned operational area to carry out assigned tasks."

a. During execution, the deploying force commander reports that the levels of readiness prescribed by the supported combatant commander have been achieved and that integration into the higher headquarters is imminent. The supported combatant commander is concerned with the following.

Integration is the synchronized transfer of mission-ready units into the combatant commander's force.

- Location of the forces.
- Capability of the forces.
- Projected and actual arrival time at destination.
- Commander's capability to effect the movement.
- Additional transportation needed (modes, quantities).

b. By definition, integration is the final element of JRSOI and is normally accomplished concurrently with other force projection and JRSOI tasks. It can occur anywhere along the JRSOI continuum and is normally the last JRSOI element to be completed. **There are two major prerequisites to integration; the unit must be mission-capable and must be integrated into the C2 processes of its higher HQ.**

c. Tracking the components of building mission capability as a precursor to integration is essential for overall mission success. In order to track mission capabilities, the components of mission capabilities must be known and are listed below.

MISSION CAPABILITY COMPONENTS

Operational Capability
Mobility and Survivability
Logistic Capability
C4I

Monitoring mission capability, early and continuous coordination, and planning can help reduce integration time. Units can establish predeployment liaisons to exchange information, SOPs, and communication networks, as well as plan for and prioritize an in-theater incremental buildup of combat power. Once established, the liaison is maintained to update information (intelligence, situation, mission, deployment timeline) to expedite the in-theater integration.

INTEGRATION CHALLENGE

The integration challenge is to seamlessly integrate cohesive, mission-capable units into the gaining command.

2. The Integration Process

The goal of integration is to provide the operational commander with a mission-capable force. Figure VII-1 depicts steps necessary to complete integration (see Figure I-3 for the master JRSOI process map).

a. **Conduct Integration Operations**. The integration area is a location designated by the combatant commander where units will be transferred to their gaining commands, integrated into the force, and be prepared for tactical employment. **Units arrive at the integration area and continuously monitor the status of preparation in key operational and logistic areas as they prepare for the mission.** Coordination is also made for integration area security operations. When JRSOI operations are completed, units report to higher headquarters ready for operations. Integration operations are as follows.

- **Establish C2, Security, and Unit Area.** C2 and CP operations are established and liaison elements are sent to higher, adjacent, external, and subordinate organizations as the mission requires. Units improve their unit areas, establish and maintain security, and prepare for future operations.
- **Report Status.** Units continuously monitor the status of preparation in key operational and logistic areas as they prepare for the mission and report status to higher headquarters. Movements and

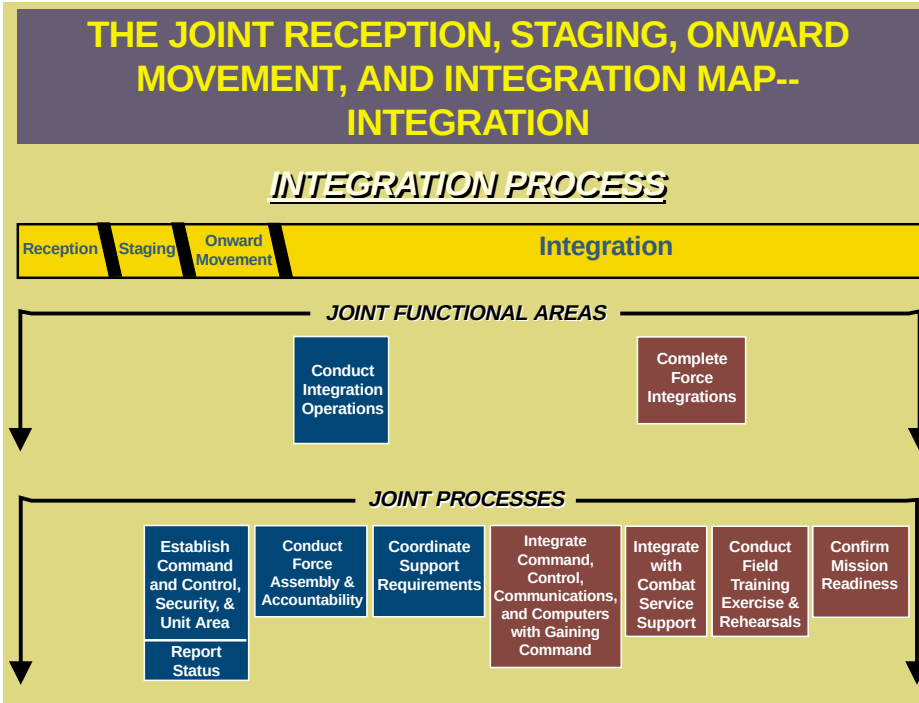

Figure VII-1. The Joint Reception, Staging, Onward Movement, and Integration Map — Integration

the status of units and forces should be reported from all nodes where JRSOI operations are being conducted.

- **Conduct Force Assembly and Accountability.** Units perform a final unit assembly; account for equipment, supplies, and personnel; and report status to the gaining command.

- **Coordinate Support Requirements.** Coordination is established with the TAA or OA support activities to provide logistic support and services.

b. **Complete Force Integration.** The unit is integrated with logistics and operational components of the gaining command and completes any final command-directed training and activities before being committed to missions. **The JRSOI process ends when the unit commander reports the unit is ready for operations and the unit is integrated with its higher headquarters.** Force integration steps are as follows.

- **Integrate Command, Control, Communications, and Computers (C4) with Gaining Command.** C4 is completely integrated with the gaining command, supporting commands, units, JRSOI organizations, and commanders at all levels to facilitate the timely and accurate exchange of critical information. The receiving commander must establish C2 over arriving units in the OA.

- **Integrate with CSS.** The unit establishes direct support relationships with various support elements in the support structure to include supply, services, maintenance, and medical.

- **Conduct Field Training Exercises (FTXs) and Rehearsals.** Units conduct

FTXs and rehearsals as part of final training preparation.

- **Confirm Mission Readiness.** Commanders report their units status in accordance with the readiness criteria established by the combatant commander and confirm when ready to execute their assigned missions.

3. Integration Functions

Unlike the functions described in reception, staging, and onward movement, **the emphasis during integration is on C2 and communications of personnel, equipment, and materiel as they enter the theater and prepare for integration**. Force tracking of mission capability components helps predict when in-country integration can begin and how long it will take to complete. Force protection is still critical but may be easier as security forces reestablish their military capability during staging and onward movement. However, to accomplish integration of the force, **the logistic support must be transferred from JRSOI supporting organizations to the gaining command**.

a. Upon notification of deployment, a liaison between the deploying unit and receiving HQ should be established to enhance integration. This liaison is conducted through formal liaison teams attached to the arriving and receiving HQ (the preferred method) or remotely through communication channels. The size and make-up of the liaison teams are based on the mission and contingency conditions.

b. Effective liaison enhances the commander's confidence in planning, coordinating, and executing integration. Subordinate commanders may use an LNO to obtain necessary information such as common coordination measures; tactics, techniques, and procedures; SOPs; rules of engagement; terms; symbology; and exercises.

CHAPTER VIII
ENABLERS

"The key to success is a seamless communications architecture that allows commanders to see the battlefield in every dimension, and with capabilities such as Video Teleconferencing, Global Transportation Network, Radio Frequency Tags, and the Defense Tracking System that increases the commander's visibility and units' command and control."

Lieutenant General Robert Gray, USA
DCINC, USAREUR

1. General

Force projection operations require enablers that improve JRSOI planning and execution and possess the necessary flexibility to adapt to changing situations. This chapter describes existing and maturing systems and some of the processes that enable and enhance JRSOI execution. The combatant commander uses a variety of enablers including processes, systems, and equipment to manage movement flow, obtain total asset visibility (TAV), and achieve balance and synchronization. Some of these enablers are described in Figure VIII-1 and the following sections.

2. Automated Information Systems

The goal of automated systems is to provide the combatant commander with dominant battlefield knowledge. **Automated C2 systems implement the exchange of information among the combatant commanders, the Service headquarters, and Service and functional component commands.** The exchange, processing, and analysis of data and information are continuous throughout mission execution. **Necessary to this are systems and equipment that are interoperable.**

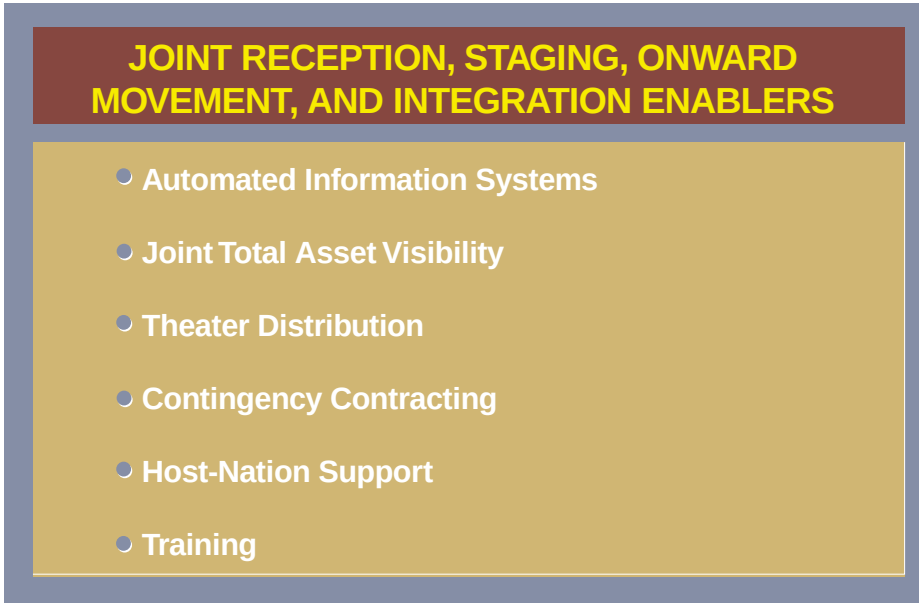

Figure VIII-1. Joint Reception, Staging, Onward Movement, and Integration Enablers

Interoperability is the condition achieved when information or services can be exchanged directly and satisfactorily between user systems and equipment. It is a function of commonality, compatibility, and standardization of equipment and systems and standardization of procedures.

See JP 6-0, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, *for additional information on interoperability.*

Shown in Figure VIII-2 and described below are five key systems that are available to monitor and control the JRSOI process. As with any automated system, the quality of the output is directly related to the accuracy of the data input.

Appendix C, "Deployment Planning Tools," describes other automated information tools that facilitate the JRSOI process.

a. **Global Command and Control System.** GCCS is a comprehensive C4I system. It provides a means for integrating Service and agency C4I systems into a global network of military and commercial communications systems. GCCS supports the exchange of information from subordinate units and agencies to combatant commanders and their components. Specific capabilities include:

- Incorporating the procedures, reporting structures, automated information processing systems, and communications connectivity to provide the information necessary to effectively plan, deploy, sustain, employ, and redeploy forces; and

- Providing JFCs with the ability to rapidly provide military information to the NCA as well as to other supporting commands. The system's common operational picture is a key tool for commanders in planning and conducting joint operations.

b. **Global Combat Support System.** The goal of GCSS is to provide a means for achieving universal access to information and interoperability of that information across combat support and C2 functions. The end state also expands the availability of information to provide the combatant commander with more options. Similar to GCCS, GCSS interfaces and integrates corporate-wide with Service- and agency-sponsored combat support systems. The logistic information systems that are critical to GCSS include successful AIT, ITV, joint decision support tools, and the emergence of a flourishing JTAV capability.

c. **Global Transportation Network.** GTN is the designated DOD system for

Figure VIII-2. Key Automated Systems

visibility of assets in-transit from origin to destination, including all military and government shipments. It will support the family of transportation users and providers (both DOD and commercial) by providing an integrated system of ITV information and C2 capabilities. In its current form, GTN collects and integrates transportation information from selected transportation systems. The GTN is not simply another database; it is a network of systems that continues to evolve. It gives the means to access C4 systems that support global transportation management. As GTN matures, it will contain shipment status information, booking information, passenger reservation information, aircraft and ship manifests, personal property data, medical patient information, and vessel and aircraft scheduling data, providing near real time data to commanders. Figure VIII-3 depicts elements of the GTN system.

d. **Transportation Coordinator's Automated Information for Movement System II (TC-AIMS II).** TC-AIMS II is a joint automated information system and selected DOD migration system intended for unit move and installation transportation officer and transportation management office functionality when fully developed. TC-AIMS II will integrate fielded Service-unique systems and select functions from systems to provide day-to-day traffic management

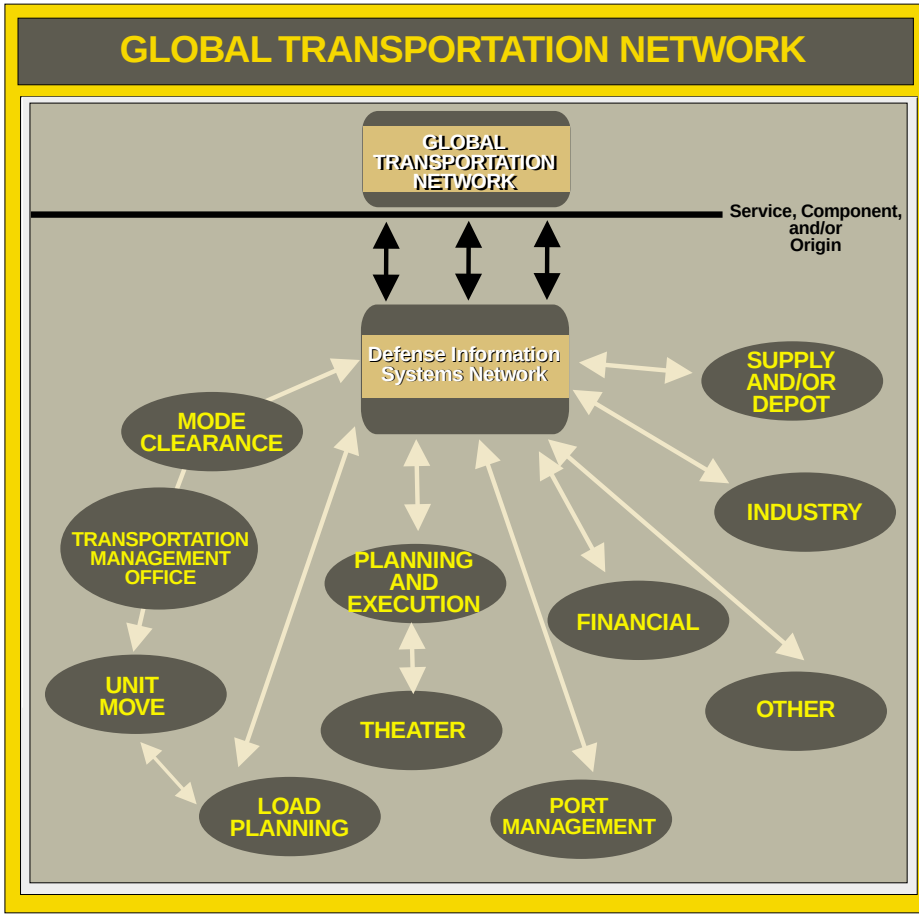

Figure VIII-3. Global Transportation Network

capabilities and to support deployment, redeployment, and sustainment of US forces from within (and to) CONUS installations and overseas theaters of operations. Functionality from various systems will be combined to produce the target TC-AIMS II system. Integration of systems for TC-AIMS II include: the Marine Corps MAGTF Deployment Support System II and Transportation Coordinator's Automated Information for Movement System; the Air Force Cargo Movement Operations System; and the Army Transportation Coordinator-Automated Command and Control Information System, Management System-Redesign, and Department of the Army Movements Management System-Redesign System. The Global Decision Support System (GDSS) provides the capability to view mission information and, if required, to update or modify the information.

e. **Integrated Command, Control, and Communications (IC3) System.** Sealift transportation management consists of effectively providing SPOE to SPOD transportation. IC3 is the MSC C2 system to efficiently manage this mission and to provide the Commander in Chief, USTRANSCOM, the Chief of Naval Operations, and other customers with reliable, comprehensive, and timely information. IC3 supports MSC's requirements for C2 and tracking of sealift assets, cargo, and POL. Additionally, it interfaces with other key information systems, such as GTN, GDSS, and GCCS, to support the overall Defense Transportation System and USTRANSCOM mission during deployment operations.

3. Joint Total Asset Visibility

JTAV provides enhanced visibility of materiel and personnel assets in storage, in transit, or in process. **JTAV is made possible through the integration of the capabilities provided by AIT and AIS as well as decision support tools comprising GTN and GCSS.** Control of the deployment process is exercised through the C2 capabilities of GTN and GCSS. When functionally complete, the emerging capabilities of JTAV will enable the combatant commander's operational and logistic managers to determine and act on accurate and timely information about the location, quantity, condition, movement, and status of defense materiel. It will include assets that are in storage, in process, and in-transit. Utilizing JTAV, commanders can determine what items of supply are available in the logistic system or must be deployed with the unit.

> *"Transportation systems are joint . . . they ought to be managed in a joint fashion,' General Armstrong reminded his boss, Air Force Lieutenant General Michael P.C. Carns, Director of the Joint Staff. But, he added, unless USTRANSCOM has peacetime authorities to enforce system compatibility, data standardization, training, and document and data entry discipline, transportation systems — like GTN and JOPES — would likely be unable to meet warfighter needs and expectations."*
>
> **James K. Matthews & Cora J. Holt**
> ***So Many, So Much, So Far, So Fast*, 1992**
> **USTRANSCOM and Strategic Deployment for Operations DESERT SHIELD and DESERT STORM**

JTAV requirements are broken down into five areas: requisition tracking, visibility of assets in-storage or in process, visibility of assets in-transit, assets in-theater, and personnel asset visibility (see Figure VIII-4). GTN (in development), AIS, and the logistic information processing system currently help meet these requirements. In each case, a specified "data repository" serves as a central hub for asset visibility.

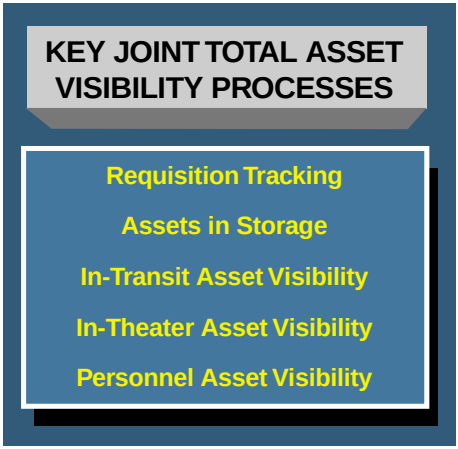

Figure VIII-4. Key Joint Total Asset Visibility Processes

a. **Requisition Tracking.** Services and DOD agencies use a variety of stovepipe automated systems that provide visibility over the status of requisitions. The JTAV system gathers information from these stovepipe systems and makes it available to the JFC.

b. **Assets In Storage or In-Process.** The AIS of each inventory control point (ICP) provides visibility of assets that are in storage or in-process, with the latter defined as assets being procured or repaired at both government and commercial maintenance facilities. ICP AIS provides TAV source data to the JTAV system as described in DOD Regulation 4140.1-R, *DoD Materiel Management Regulation*, and specified below.

- Army — direct support authorized stockage lists.
- Navy — shipboard and major shore stations.
- Air Force — base supply.
- Marine Corps — installation supply and MEF support activities.

c. **In-Transit Asset Visibility.** ITV is the ability to track the identity, status, and location of DOD unit and non-unit cargo (except bulk POL), passengers, medical patients, and personal property from source of origin to the consignee or destination. Combatant commanders, military Services, or DOD agencies during peace, contingencies, or war designate these destinations. Figure VIII-5 summarizes the four critical functions of ITV.

d. **In-Transit Visibility.** Joint total asset visibility in-theater (JTAV-IT), when fully operational, will provide to combatant commanders and deploying forces the information concerning materiel and personnel asset visibility. JTAV-IT will interface with Service and agency logistic data bases to capture visibility of assets held by theater forces, and then plug into GTN to provide the full visibility of shipments. This

Figure VIII-5. In-Transit Visibility Critical Functions

THE PERSIAN GULF WAR

The (asset visibility) problem can appear at any point in the distribution system. In the United States, vendor shipments — especially containerized and palletized cargo — made directly to the port of embarkation quite often were inadequately marked or documented. Shipments arrived at ports of debarkation with the destination classified or marked as Operation DESERT SHIELD. Even if adequately documented, pallets that contained materiel for several units were frequently broken down on arrival in theater and reconsolidated into shipments by destination unit. This almost always destroyed any visibility that may have existed pertaining to the pallet's contents. As a result, in-transit visibility was virtually nonexistent for some munitions, chemical warfare defense equipment, repair parts, and food shipments once they arrived in Southwest Asia.

First, the materiel distribution system involved thousands of people around the globe in many different organizations, inventory control points, depots, vendors, and transportation agencies. The distribution system was confronted with units spread across great distances, constantly changing unit locations, often with marginal communications, and with early saturation of the ground transportation system. Second, there was a lack of discipline in the use of the military's standard supply and transportation systems. In the case of Operation DESERT SHIELD, there were inadequate communication and automation capabilities in theater to receive and process status and transportation manifest information. Another reason contributing to the asset visibility problem was that manifest data received at water terminals was not shared quickly with materiel management centers because of the backlog that accumulated. Finally, RC port units and their MHE, including heavy forklifts, were not among the early-deploying elements for reasons discussed elsewhere. This led to large materiel accumulations at the ports, adding to the visibility problems and delaying delivery to already anxious users.

Though not without its problems, the logistic efforts of the United States and its allies were among the more successful in history. Moving a combat force halfway around the world, linking supply lines that spanned the entire globe, and maintaining unprecedented readiness rates, are a tribute to the people who make the logistic system work. Logisticians from all Services supported more than half a million US Service members with supplies, services, facilities, equipment, maintenance, and transportation.

SOURCE: *Conduct of the Persian Gulf War*
DOD Final Report to Congress, April 1992

application will utilize the Defense Automatic Addressing System to exchange information with Logistic On-line Tracking System and ICP on assets in-bound to the theater and available in CONUS. It will also be able to obtain in-transit data directly from GTN. JTAV-IT will provide essential logistic planning and analysis capabilities to include:

- Supporting deliberate and crisis action planning;
- Allocating critical assets;
- Identifying and resolving in-theater logistic bottlenecks;

Unit visibility provides the data to assess current status and mission capability.

- Monitoring the status and capability of strategic mobility assets;
- Projecting force closure times;
- Determining requirements for additional asset and lift capability; and
- Supporting theater doctrine, budget, and procurement decisions.

When available to the JMC and its subordinate agencies, TAV of the unit will enable a comprehensive knowledge of location and status of required repair parts, inbound forces and personnel, sustainment, and equipment. This will provide planners and operators with the data necessary to control the logistic pipeline during the buildup of combat power. The combatant commander makes the final decision (subject to combatant commander's directive authority for logistics) concerning redirecting an inbound asset to another component should the Service components not reach agreement, achieving balance and synchronization through the unity of command. To effectively operate a theater distribution system, a fully integrated data base and communications network needs to exist both externally and internally to the theater. The robust intertheater system must:

- Project distribution pipeline volume, flow rates, contents, and associated node and port handling requirements;
- Balance and synchronize the flow volume, contents, and routing in response to operational requirements;
- Establish and maintain TAV and ITV for sustainment materiel;
- Break-bulk, re-consolidate, divert, and control the flow of multi-consignee shipments;
- Retrograde, redeploy, and/or further deploy materiel; and
- Reconstitute forces for follow-on missions.

During deployment, unit readiness and mission capabilities are critical elements of information. The combatant commander will rely heavily on the individual Service readiness reporting systems to determine the status of the assigned forces while in-transit.

JTAV, when fielded, will offer the potential capability for planners to determine the actual and projected readiness status of units as they arrive in theater. Visibility of the composition and status of WRM and pre-positioned materiel can also assist planners in the development of COA analysis. Unit visibility, as it moves through the process, provides the data to assess current status and mission capability against the requirements of the execution plan.

e. **Personnel Asset Visibility.** The JPAV system provides cross-Service integration of the various Service databases and allows the combatant commander's staff to have data visibility on personnel deployed, employed in, or leaving the OA. The database contains basic information on individuals such as rank and qualification skills needed to support personnel and readiness assessments. Primary sources such as the TPFDD, Service component personnel systems, the transportation manifesting systems, and casualty reporting and tracking systems update the integrated JPAV database.

4. Theater Distribution

a. Joint TD is the system that enables the combatant commander to deploy, employ, sustain, and redeploy assigned forces, non-unit materiel, and personnel to carry out assigned missions. **Theater distribution synchronizes the complementary activities of movement control, mode operations, materiel management, supply and service support, and associated technology.** The TD system provides the means to accomplish JRSOI. The system is a network of nodes and links tailored to meet the supported combatant commander's requirements. The network is overlaid upon existing HN infrastructure. The nodes and modes of transport that distribute the forces and sustainment are operated by a combination of US military, HN, allied, or contractor organizations. These organizations collect and process data into information and issuing instructions to ensure that the commander's authoritative direction in the theater is properly executed.

b. TD is the act of receiving supplies and equipment in a theater and subsequently forwarding that cargo to a designated point-of-need flow of personnel, equipment, and materiel within theater to meet the geographic combatant commander's missions. **Effective TD calls for a comprehensive in-theater distribution system for deployment that is seamlessly integrated with strategic, operational, and tactical logistic systems.** The intent of TD is to deliver critical supplies under positive control and through a highly visible distribution pipeline, from source to combatant (unity of command, synchronization, and balance). The principles of theater distribution are shown in Figure VIII-6.

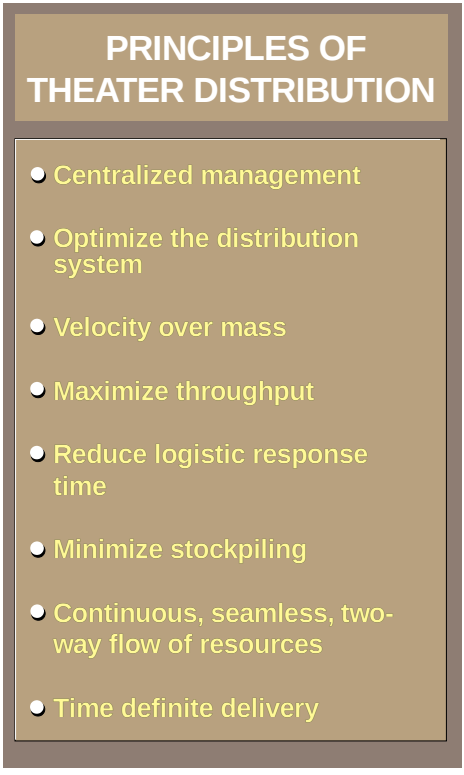

Figure VIII-6. Principles of Theater Distribution

See JP 4-01.4, Joint Tactics, Techniques, and Procedures for Joint Theater Distribution, *for more information.*

5. Contingency Contracting

Contingency contracting is the process of contracting for locally available supplies, services, and construction in immediate support of deploying units, either at staging locations or a TAA, during a contingency. Contracting and outsourcing can be highly effective force multipliers. Contracting can extend existing capabilities and provide augmentation support for CSS and CS functions on the battlefield, such as maintenance, transportation, supply and services, signal, engineer, and others. **Contingency contracts may be used to satisfy the requirements for supplies and services to improve response time, free transportation assets for other important missions, and serve to reduce dependence on the CONUS-based logistic system.** Several principles govern contracted support:

- Contingency contracting should not replace HNS or the existing supply systems where these systems are available or operational. However, deployed forces may augment their existing logistic support capability through contingency contracting to provide an additional source for critically required supplies and services.
- Contractors do not replace force structure.
- Contractors are employed subject to METT-T.
- Deployments most suitable for employment of contingency contracting support are those likely to occur in areas of the world where there are few, if any, HNS agreements.
- Contracted support must be integrated into the overall plan.

> *"The contracting office coordinates contracting support requirements to preclude inter-Service competition for supplies or services in order to obtain effective utilization and advantageous prices through the consolidation of [joint task force] requirements."*
>
> **JP 5-00.2, *Joint Task Force Planning Guidance and Procedures***

6. Host-Nation Support

Host nations own the infrastructure that US forces require to conduct JRSOI operations. They have access to the national transportation resources that can assist and support US and allied forces. **The size and composition of the support force needed to conduct JRSOI operations depends upon the type, quality, and extent of HN infrastructure and access granted for US use.** Other HN infrastructure considerations are as follows.

- It will often be necessary to share the infrastructure and facilities with HN and allied forces and organizations.
- Operators at airports, seaports, and other facilities usually will be local nationals. Therefore, the combatant commander should appoint a single point of contact for all US operations at the node to resolve priority and real estate issues among US units transiting the facility.
- Capacities of infrastructure and facilities allocated for US use may be less than planned for. HN military and commercial operations may compete for available assets, thereby impeding the flow of forces and materiel.
- Host nations may not honor previously negotiated contracts due to competing

demands, political considerations, or for a variety of other reasons.

- United Nations agencies, international organizations, and nongovernmental organizations may already be deployed to the theater. Their capabilities may augment support provided by the HN.

- While HNS agreements provides US pre-negotiated support for potential war scenarios, ACSAs provide the legal authority for the US military and other armed forces to exchange logistic goods and services during contingencies — the unpredictable side of business. Transactions under this program must be reimbursed, replaced in kind, exchanged at equal value.

7. Training

Training and rehearsal are key elements to the success of JRSOI. Elements engaged in JRSOI do not always come from the units who regularly conduct joint training operations. Additionally, JRSOI elements may come from various Services or from Service components. This "ad hoc" nature of elements engaged in JRSOI operations require detailed training and rehearsal plans in order to synchronize these complex operations.

The Government of Saudi Arabia's decision not to allow the United States to launch possible air strikes from Saudi airbases against Iraq during Operation DESERT THUNDER in early l998 is an example of how political considerations can affect access to or from host-nation facilities.

APPENDIX A
MOVEMENT CONTROL

1. General

This appendix generally describes the movement control support structure (organizations, processes, systems, and infrastructure) needed to execute JRSOI operations. The JRSOI support structure must be responsive to the combatant commander's priorities. METT-T-influenced changes may cause certain units to be in high demand or necessary for immediate employment. Critical resources such as heavy equipment transporters, fuel support, and ground transportation to move personnel may require diversion. JRSOI support organizations must be able to locate these units and coordinate their onward movement via a movement control architecture. Communications is a key to managing this type of complex, ever-changing support environment. Operationally, JRSOI impacts on the forces available to the combatant commander, rate of operational build-up (planned capabilities), rate of onward movement, and size of force.

Movement control architecture is a geographically dispersed, integrated network of movement control units with reporting capabilities. This architecture is an essential foundation that must be established if movement control, ITV, and force tracking are to be successful. Movements and statuses of units and forces should be reported from all nodes where JRSOI operations are conducted. Key locations include arrival air and water terminals, marshalling areas, staging areas, TAA or OAs, in-transit support points, and locations where forces and sustainment cross international borders.

2. Managing the Flow (Balance)

The functions of movement control include the planning, apportioning, allocating, deconflicting, validating, and coordinating of common-user assets as well as maintaining ITV to assist commanders and operations staff in force tracking. This requires analyzing movement requirements, capability shortfalls, alternatives, and enhancements to satisfy the operational commander's requirements. One of the biggest challenges of movement control is rapidly adjusting to changes in battlefield conditions and commander's priorities. Efficient movement control enables the commander to redirect forces and rapidly overcome disruptions in the LOC.

JP 4-01.3, *Joint Tactics, Techniques, and Procedures for Movement Control*, states that the combatant commander has a wide range of options for performing movement control. The combatant commander may direct subordinate JFCs and Service components to perform their own movement control, or may establish a theater JTB, a JMC, or both. To ensure a fully integrated and responsive transportation system, the commander may consider assigning responsibility for coordinating theater transportation movement to a single joint office.

JOINT MOVEMENT CENTER

"An effective theater movement control option recommended to geographic combatant commanders is the establishment of a JMC. The JMC is responsible for coordinating all modes of theater transportation to support the theater concept of operations."

JP 4-01, *Joint Doctrine for the Defense Transportation System*

The JMC or other established organizations within combatant commander staffs handle the development of the combatant command's theater movement plan (which supports priorities) and the

concept of operations. The theater movement plan is of great use in the planning process, but it must be continually updated. Primary responsibilities include transportation planning, apportioning, allocating, deconflicting and validating priorities, coordinating movements, and ITV.

3. Organization for Movement Control

a. The combatant commander's logistic staff usually forms the nucleus of a movement control organization. The JMC, augmented by Service movement control elements, assumes directive action for theater movements and for execution of the theater movement plan. The JMC relays the priorities to the Service movement control agencies. They then execute the priorities using the mode tasking authority delegated by the combatant commander. The Services establish a movement control architecture to:

- exercise control of the movement of units;
- provide ITV; and
- provide force tracking information to the JMC.

Figure A-1 depicts the joint movement directive and coordination control architecture.

b. Theater airlift forces are assigned to the combatant commander who will normally transfer OPCON to the theater AFCC or to a subordinate JFC. The mission of theater airlift forces is to provide airlift support to the entire joint force. When theater airlift forces are assigned or attached to a

DIRECTOR OF MOBILITY FORCES

Director of Mobility Forces participation in air mobility operations is essential for successful mission accomplishment. The DIRMOBFOR may act as the theater's contingency airflow master for inter- and intratheater air mobility operations. The DIRMOBFOR is normally a senior Air Force officer who is familiar with the area of responsibility (AOR) or joint operations area (JOA) and possesses an extensive background in air mobility operations. The Commander, Air Force forces (COMAFFOR) and/or joint force air component commander (JFACC) should request a DIRMOBFOR to function as coordinating authority for air mobility with all commands and agencies, both internal and external to the joint task force. When established, the DIRMOBFOR serves as the designated agent for all air mobility issues in the AOR or JOA, and for other duties as directed. The DIRMOBFOR exercises coordinating authority between the air operations center (or appropriate theater command and control node), the tanker/airlift control center, the air mobility operations control center (when established and when supporting subordinate command objectives), and the joint movement center, in order to expedite the resolution of air mobility issues. The DIRMOBFOR may be sourced from the theater's organizations or US Transportation Command. Additionally, the DIRMOBFOR, when designated, will ensure the effective integration of inter- and intratheater air mobility operations, and facilitate the conduct of intratheater air mobility operations. Operationally, the DIRMOBFOR normally works directly for the COMAFFOR and/or JFACC while remaining under the administrative control of COMAFFOR or the theater Air Force component commander.

SOURCE: JP 4-01, *Joint Doctrine for the Defense Transportation System*

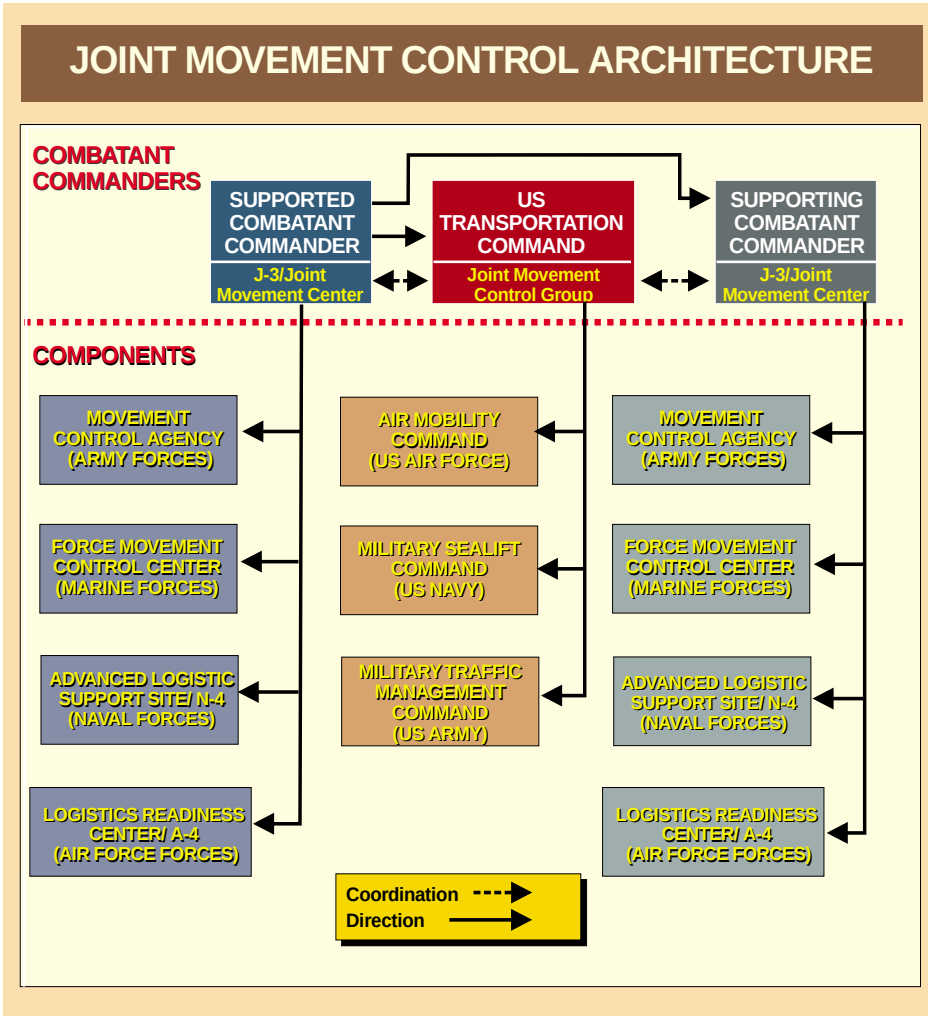

Figure A-1. Joint Movement Control Architecture

subordinate JFC, OPCON will normally be assigned to the JFC's COMAFFOR or joint force air component commander (JFACC). OPCON of theater airlift forces are exercised through the Air Mobility Division within the AOC or Joint Air Operations Center (JAOC) if a JFACC is established. When the JFACC is from a Service other than the Air Force, the COMAFFOR will assist the JFACC in employing theater airlift forces. As stated above, the COMAFFOR or JFACC should request a DIRMOBFOR to function as coordinating authority for air mobility with all commands and agencies, both internal and external to the JTF. Within the JAOC, theater airlift is controlled by the air mobility division (AMD), which is a component of the AOC and responds to DIRMOBFOR direction. The DIRMOBFOR is responsible for integrating the total air mobility effort for the COMAFFOR (who may also be designated as the JFACC), and serves as the designated coordinating authority for air mobility with all commands and agencies both internal and external to the JTF. The DIRMOBFOR provides direction to the AMD, which plans, coordinates, tasks, and executes the air mobility mission. Within the JAOC, an airlift

control team (ALCT) plans, coordinates, manages, and executes theater airlift operations.

c. The ALCT coordinates with the following organizations and elements to conduct theater airlift operations:

- The joint movement control group (JMCG), formed by elements of USTRANSCOM and its TCCs, serves as the focal point to orchestrate and optimize Defense Transportation System operations in support of combatant commanders and other customers. The JMCG is linked to an array of C4 systems to manage total movement requirements and exercise C2 of assigned forces.

- The JMC receives component theater airlift requests and priorities.

- The air mobility element deploys to the theater as an extension of AMC's tanker/airlift control center (TACC). The TACC provides the coordination and interface between the strategic air mobility system and the theater air logistic system.

Figure A-2 provides a sample command relationship for air mobility forces.

d. A TALCE or an element performing TALCE functions conducts arrival and departure airfield operations. TALCEs are mobile C2 units deployed to support strategic and theater air mobility operations. These elements are tailored to provide C2 and manage aerial ports, weather monitoring and reporting, communications, maintenance, security, transportation, and intelligence. These teams interface with the airlift customer and are responsible for marshalling deploying units and associated equipment for airlift.

e. The TALCE works with an Army or Marine Corps A/DACG and/or a NOACT as well as deploying units to ensure that they are ready for air movement. Typical airlift requirements include:

- Passengers;

- Pallets;

- Rolling stock; and

- Containers

Each flow requires different transportation, MHE, and CHE. If arriving aircraft are different than anticipated, delays can occur. Failure in communicating ITV data and sending closure reports hampers node clearance and mismanages logistic assets.

f. The integration of strategic and theater movement control systems is the joint responsibility of USTRANSCOM and the supported combatant command. To control the tempo of the operation, the commander must know the location of the force and its capability. ITV is the combatant commander's source of information on future force availability, and force tracking arrays the present force available in its preparation and onward movement. Reporting, collecting, and processing systems and procedures must be established well before onward movement begins. Movement control organizations provide the combatant commander with an information network capable of providing early ITV information to the operators and to assist in force tracking.

4. Theater Infrastructure for Movement Control

a. Theater LOCs are established to connect the deploying forces with the points of entry into the AOR. LOCs are comprised of route segments and nodes within the theater. The combatant commander designates them in coordination with the HN and USTRANSCOM to support the deployment,

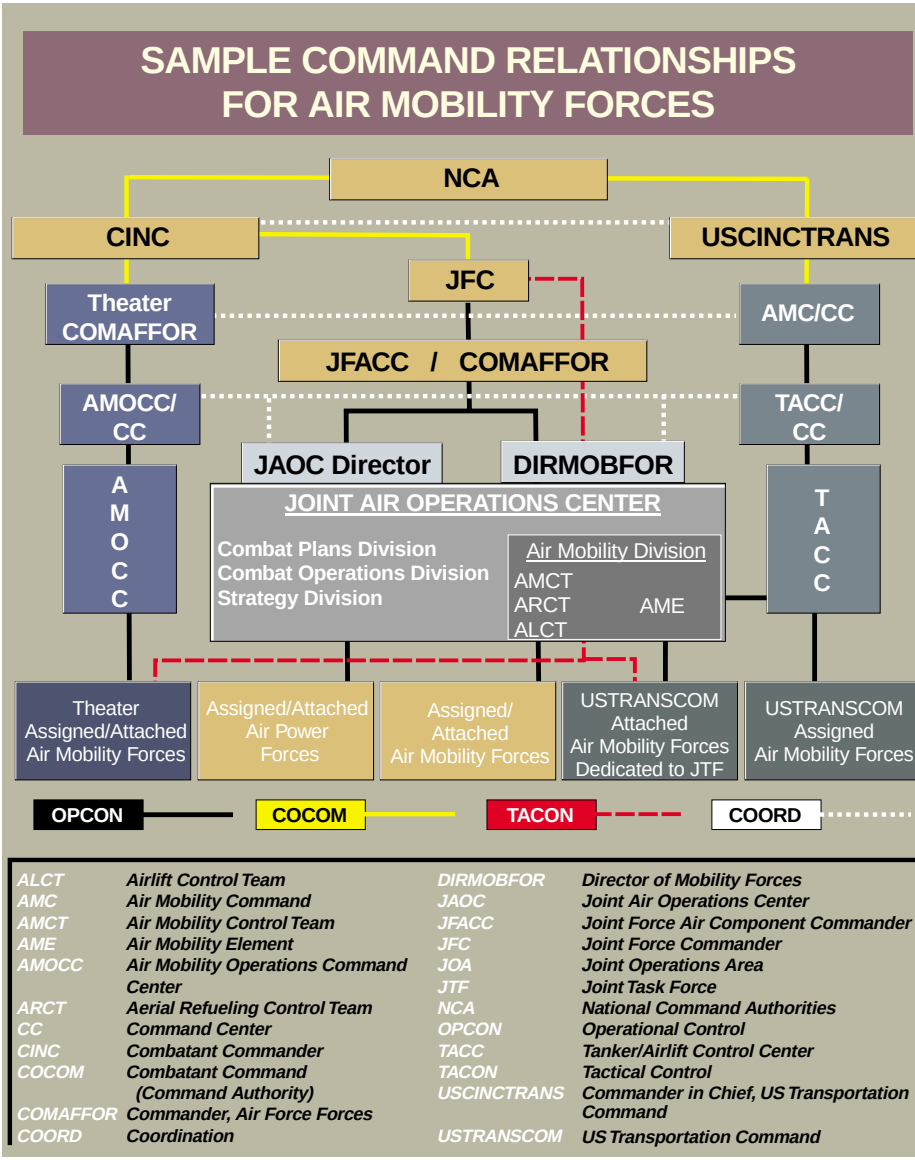

Figure A-2. Sample Command Relationships for Air Mobility Forces

employment, and sustainment of forces. LOCs must be evaluated in terms of length, efficiency, and security. LOC operations depend upon existing infrastructure and facilities, and must be coordinated with HN, local authorities, the supporting combatant commands, and allied or civilian organizations that participate in the deployment operation. Listed below are a few control considerations for onward movement.

- The theater LOC begins at the locations where personnel, equipment, and materiel arrive in theater — the reception complexes. Operation of theater LOCs is the responsibility of the supported combatant command.

- Movement control detachments deploy early to coordinate and synchronize the onward movement of units, materiel, and sustainment.

- Regulating teams, or equivalent military police teams, facilitate the onward movement of assets in the theater. They can coordinate with and are normally collocated with HN traffic control authorities.

Transportation mode operating units with sufficient lift are necessary to move units, materiel, and sustainment from the SA forward to the assembly area.

b. Within the AOR, certain nodes and links form primary routes identified as MSR. Nodes are locations where a movement requirement is originated, processed for onward movement, or terminated. There are three organizational elements needed to operate the LOC: node operators, mode operators, and movement controllers.

c. The overall coordination of movements between the nodes in the LOC using available lift resources is normally exercised by the JMC. The JMC is established by and coordinates movements based on priorities set by the supported combatant commander. The movement control system must balance the capabilities of the nodes and modes with the commander's priorities. To accomplish this, the system must exchange information and give direction. The generic information flow among these organizations is depicted in Figure A-3.

d. Theater LOC organizations that operate the nodes and modes include the following.

- Assigned joint and Service component command elements.

- Elements of USTRANSCOM that will operate the joint and Service air and water terminals in the AOR.

- HN civilian or military organizations.

- Contractors.

- Allied military or civilian organizations.

ORGANIZATIONAL ELEMENTS OF THE LOC

Node Operators operate the nodes of LOCs, performing the tasks necessary to facilitate the flow of supplies and military forces, and may be composed of military and/or civilian personnel.

Mode Operators operate common-user lift resources (highway, rail, airlift, sealift, inland waterway, and intracoastal transportation) to transport military requirements between nodes, and may be comprised of military and/or civilian personnel.

Movement Controllers plan, route, schedule, procure transportation services, and control movements through the LOC. Controlling the flow of supplies and military forces between nodes in accordance with priorities established by the supported combatant commander.

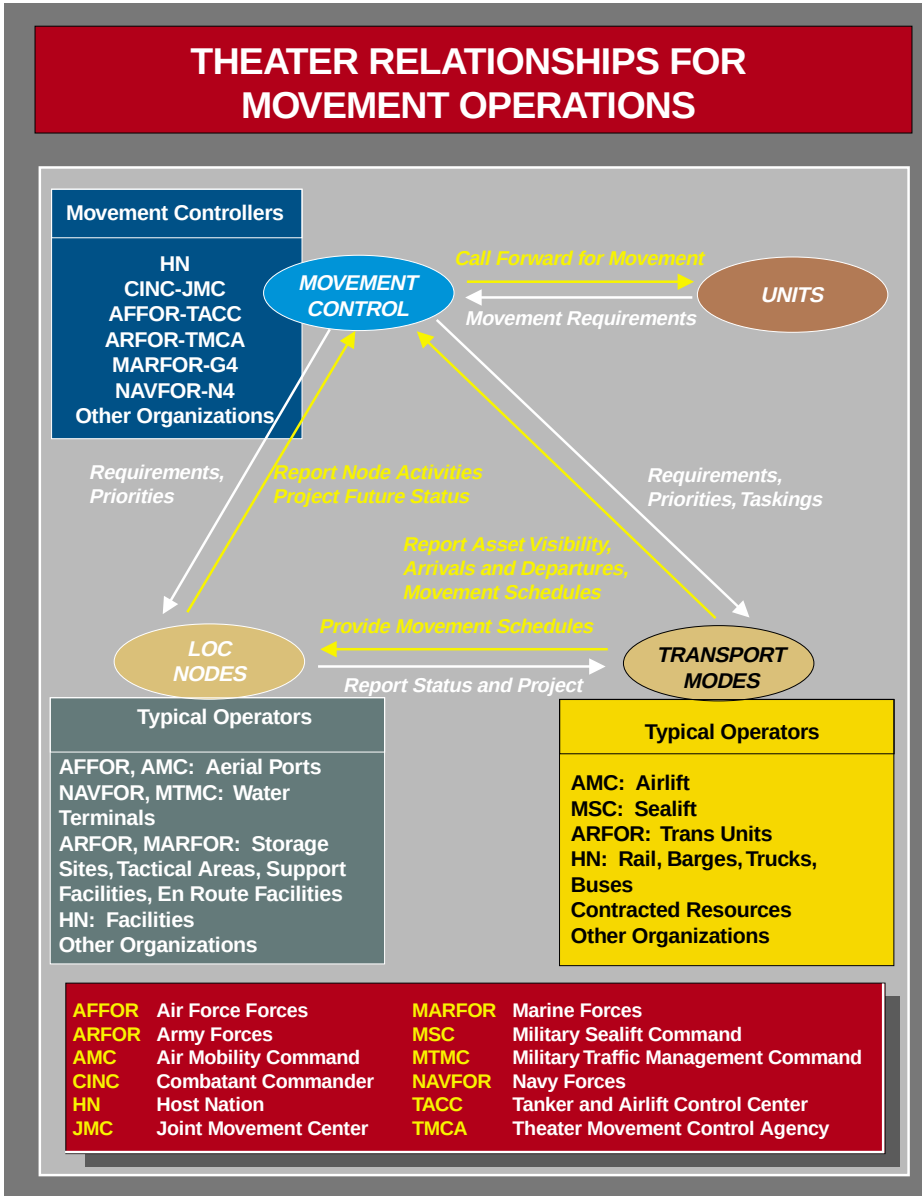

Figure A-3. Theater Relationships for Movement Operations

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APPENDIX B
JRSOI SUPPORT STRUCTURE

This appendix describes select elements of the physical structure, facilities, and areas necessary to support JRSOI.

1. Reception Facilities

a. **APOD and/or APOE.** A US or HN military or civilian facility designated by a combatant command to unload or load elements of a force and its sustainment to support a military operation. The complex contains the facilities and organizations needed to perform the following functions as required:

- operate a joint air terminal;
- coordinate movement, parking, servicing, and maintaining strategic airlift;
- load and unload personnel, equipment and materiel;
- provide life support and assistance to drivers and other personnel while awaiting transportation, when delivering equipment to the joint air terminal, or when awaiting arrival of equipment;
- provide technical assistance to aviation units deploying through the complex;
- assist deploying units and non-unit personnel, equipment, and materiel with onward movement from the complex;
- provide movement control into, within, and out of the complex; and
- conduct air-to-air interface (AAI) operations. Prior coordination for use of AAI site is the responsibility of the designating command.

b. **Air-to-Air Interface Site.** The location at an air terminal where personnel, equipment, and/or materiel arriving by either strategic or theater airlift are transferred to theater or strategic airlift for onward movement to an intermediate or final destination. The combatant commander, in coordination with the HN and USTRANSCOM, will designate the AAI site.

c. **Contingency Operating Location.** An airfield or seaport, generally located within the OA of a contingency, used to support operations without establishing full support facilities. The combatant commander designates the location in coordination with HN, Service components, or allied forces operating in the area. It may be used for temporary or extended operations, but will require support from a main operating base during extended operations.

d. **Main Operating Base.** An airfield or seaport located within the theater that has a mature support organization, stores of WRM, and is capable of receiving and operating augmentation equipment, supporting organizations, and non-unit materiel during contingency or wartime operations. The base will have a Service air and/or sea terminal and be designated for US use by the combatant command in coordination with the HN, appropriate Service components, and USTRANSCOM. The base may be required to provide support to designated contingency operating locations during military operations.

e. **SPOD and SPOE.** A US or HN military or civilian facility designated by a combatant commander to be used to unload or load elements of a force and its sustainment to support a military organization. The complex contains the facilities and

organizations needed to perform the following functions as required:

- operate a water terminal;
- coordinate movement, berthing, chandlering, and husbanding for strategic sealift;
- load and unload personnel, equipment, and materiel;
- provide life support and assistance to drivers delivering equipment to the joint water terminal or awaiting arrival of equipment;
- provide technical assistance to aviation units deploying through the complex;
- assist deploying units with onward movement from the complex;
- provide movement control into, within, and out of the complex; and
- conduct sea-to-air interface (SAI) operations. Prior coordination for use of the site is the responsibility of the designating command.

f. **Sea-to-Air Interface Site.** The location of an air terminal, in close proximity to an SPOD, where unit personnel, equipment, and equipment and/or non-unit related cargo is transferred from strategic sealift to theater airlift for onward movement to destinations along theater LOCs. The supported combatant command designates the SAI site in coordination with the HN and USTRANSCOM.

g. **Inland Waterway Port.** An established or existing location with facilities for mooring, cargo loading and unloading, dispatch and control, and repair and service of all craft capable of navigating the waterway.

2. Holding and Assembly Areas

a. **APOD Holding Area.** A site in the vicinity of the APOD, designated by the aerial port commander in conjunction with the HN, where life support is provided to arriving military personnel of deploying units or non-unit related personnel and civilian personnel while awaiting onward movement to final destination.

b. **POD Marshalling Area.** A location in the vicinity of a reception terminal where unit personnel, equipment, materiel, and accompanying supplies are reassembled, returned to the control of the unit commander, and prepared for onward movement. The joint complex commander designating the location will coordinate the use of the facilities with other allied commands and the HN, and will provide life support to the units while in the marshalling area.

c. **Cargo Holding and Handling Area.** A designated location for temporarily holding:

- arriving cargo until movement to the consignee can be arranged;
- departing cargo until strategic transportation can be arranged; or
- cargo pallets to be built or broken down.

d. **Vehicle Assembly Area.** An area in the vicinity of a reception facility where unit drivers and vehicles are assembled for movement by convoy, rail, or theater airlift.

e. **Convoy Assembly Area.** An area in the vicinity of a reception terminal where arriving unit equipment and personnel are assembled in convoys for movement to intermediate or final destinations.

f. **Container Holding and Handling Area.** A designated location, normally located near a seaport, for holding:

- arriving containers until onward movement to consignees can be arranged;
- departing containers until strategic transportation can be arranged; or
- container transshipment or intermodal operations.

g. **Frustrated Cargo Holding Area.** A designated location for temporarily holding frustrated cargo until onward movement instructions can be clarified. Frustrated cargo consists of any shipment of supplies and/or equipment that, while en route to destination, is stopped prior to receipt and for which further disposition instructions must be obtained. Frustrated cargo areas are normally located at each LOC node.

h. **Helicopter Assembly Area.** An area in the vicinity of a reception facility where helicopters are assembled and prepared for flight, test flown, and flown with crews to the helicopter marshalling area.

i. **Staging Area.** A location designated by the geographic combatant command, in coordination with the HN and Service component, where units are staged. The SA will provide necessary facilities and support to enable the major combat formation to achieve readiness for combat operations.

j. **Tactical Assembly Area.** An area generally out of the reach of light artillery, where units make final preparations (pre-combat checks and inspections) and rest prior to moving to the line of departure to engage the enemy or enter into operations other than war. This is the last phase of intratheater deployment.

3. En Route Facilities

a. **Aircraft En Route Support Sites.** Sites that provide security, life support to transient air crews, services for aircraft and helicopters, and limited specialized maintenance for aircraft or helicopters.

b. **Convoy Support Sites.** Sites along the main supply routes that provide security, life support for drivers, fuel, limited maintenance support, and vehicle recovery.

c. **Trailer Transfer Points.** Locations established along the LOCs by the joint (or combined) movement center to support line-haul operations. Loaded or unloaded trailers are received, segregated, assembled, and dispatched at the point in accordance with priorities established by the JMC. The site usually provides emergency refueling and maintenance support.

d. **POL Transfer Point.** A location where POL can be transferred between two modes.

e. **Pre-positioned Equipment Sites**. Sites where WRM is stored and maintained for use during a contingency or exercise. This materiel may be maintained by US military, US civilian, contractors, or HN personnel.

f. **Pre-stock Supply Points.** Sites designated by a combatant command where stocks of essential materiel needed to replenish accompanying supplies or to sustain units during deployment and military operations are stored.

g. **Railheads.** Points on a railway where loads are transferred between trains and other means of transport, and the point where tactical control of the personnel, equipment, and materiel or units passes to or from the node commander to the movement control system.

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APPENDIX C
DEPLOYMENT PLANNING TOOLS

1. High-Level Planning Tools

The NCA, the Joint Staff, and the Services must have the ability to monitor, plan, and execute the mobilization, deployment, redeployment, and demobilization of US military forces. These organizations accomplish these missions through the use of the JOPES and other applications resident on GCCS. These tools are the keystone systems by which the NCA retains control over US military operations. The JOPES is the primary US system for deployment planning and execution. It is a comprehensive, integrated system of people, policies, procedures, and reporting systems supported by automated systems and applications. The JOPES (see Figure C-1) provides the capability to develop a TPFDD and to monitor its execution. The JOPES was specifically designed to provide strategic deployment information useful to the NCA, the Joint Staff, and the Service headquarters.

The GCCS is an integrated architecture of telecommunications, software, and computer equipment designed to support information sharing among various echelons of command, including the NCA, the CINCs, the Services and DOD agencies, the Service elements, and JTFs. GCCS will provide worldwide user-to-user information exchange for command and control, communications, intelligence, functional, and administrative management including logistics, transportation, personnel, and medical support. Figure C-2 depicts GCCS applications.

2. Theater TPFDD Development

Once the high-level planning tools are used to select the major forces that will participate in contingency operations, other tools are used both to help plan which specific units will deploy and to help schedule how these forces are going to be moved to the theater. These tools are part of analysis of mobility platform (AMP) that is an end-to-end transportation modeling planning system. The Joint Flow and Analysis System for

CURRENT HIGH-LEVEL AUTOMATED INFORMATION SYSTEMS APPLICATIONS

Acronym	Name	Proponent	Users	Use	Remarks
JOPES	Joint Operation Planning and Execution System	Joint Staff	Service HQs, combatant commanders, combatant command components, and sub-components	Provides guidance for planning, monitoring, and executing mobilization, deployment, employment, and sustainment activities in peacetime, crisis, and war. Permits scheduling of transportation and monitoring of strategic deployments. Database contains reference files and time-phased force and deployment data of approved plans.	JOPES currently runs on the Global Command and Control System.

Figure C-1. Current High-Level Automated Information Systems Applications

GLOBAL COMMAND AND CONTROL SYSTEM APPLICATIONS		
Application	**Function**	**Application Suite**
Operation Plans (OPLANs) and Operation Orders (OPORDs)	The Joint Operation Planning and Execution System (JOPES) automated data processing applications facilitate rapid building and updating of OPLANs and concept summaries in deliberate planning, and rapid development of effective options and OPORDs in crisis action planning. In Global Command and Control System (GCCS) Version 3.0, the JOPES requirements are developed using the requirements development and analysis, rapid query Tool, JOPES Editing Tool (JET), Force Validation Tool, and scheduling and movement applications.	JOPES
Requirements Development and Analysis	Allows planners and operators to develop, edit, and manipulate the time-phased force and deployment data (TPFDD). JET is a prototype that provides a rapid, user friendly approach to develop and maintain the JOPES TPFDD. JET will provide a faster, easier approach to TPFDD detail maintenance than is currently provided in Requirements Development and Analysis (RDA). Note: JET is being fielding and will replace RDA. Force Module Edit provides the user with the ability to manipulate TPFDD force modules and generates force capability sets for initial deployment analysis and force management capability. Joint Force Requirements Generator II provides a Windows PC based remote TPFDD editing tool that will support all services in generating Type Unit Character data and allow transaction to update OPLANs.	JOPES
Rapid Query Tool	Allows planners and operators to define, design, and print reports for information and analysis.	JOPES
Scheduling & Movement	Global Transportation Network is the application interface with US Transportation Command that provides in-transit movement information through planning allocations, manifested passenger and cargo information, and carrier schedules.	JOPES
Transportation Planning	The Joint Flow and Analysis System for Transportation application provides quick response capability to determine the transportation feasibility of an OPLAN or course of action (COA). Force Validation Tool is a JOPES application that identifies source requirements for validatiion and scheduling of movement assets. Enhanced Theater Analysis and Re-planning Graphical Execution Toolkit provides collaborative planning tools to aid the planner in all phases of crisis action planning. It facilitates simultaneous access to a distributed network of graphic planning cells sharing a common reasoning infrastructure. This enables current assessment of plan generation, scheduling, and analysis process. Common Operational Modeling, Planning, and Simulation System enables interoperability and connectivity between disparate and Service-unique mission planning systems. It will significantly enhance Distributive Collaborative Planning between ground, sea, and air forces. In addition, it will provide a means for exploiting modeling and simulation services for the warfighter during the planning and execution of operational missions.	JOPES

Figure C-2. Global Command and Control System Applications

GLOBAL COMMAND AND CONTROL SYSTEM APPLICATIONS (cont d)		
Application	**Function**	**Application Suite**
Logistic Planning	The Logistics Sustainment Analysis and Feasibility Estimator application provides the capability to both estimate logistic sustainment requirements and evaluate material supportability.	JOPES
Medical Planning	The medical analysis tool provides combatant command medical planners with the capability to perform gross medical feasibility and supportability assessments of operation plans.	JOPES
Civil Engineering Support Planning	The Joint Engineering Planning and Execution System application is a tool used to support the combatant command engineer and staff in development of the quantitative aspects of civil engineering support planning and provides the general requirements for the civil engineer support plan appendix to an OPLAN.	JOPES
Unit Status	The Global Status of Resources and Training Systems (GSORTS) application provides both map-based query and display of joint information on the status of units with respect to personnel, equipment, materiel, and training.	GSORTS
National Reconnaissance	The Global Reconnaissance Information System application provides automated support for the Joint Staff, unified commands, National Security Agency, and Defense Intelligence Agency. This system provides near real time mission status to the Joint Chiefs of Staff; generates worldwide airborne sensitive reconnaissance operations (SRO) schedule requests; maintains the historical library of all SRO tracks and operations conducted; and provides daily schedules of all intended airborne SRO.	JMASS
Noncombatant Evacuation	The Evacuation File Maintenance and Retrieval System application supports noncombatant evacuation planning and operations. It responds to queries concerning the number of noncombatant personnel to be evacuated in a country or area.	JMASS
Fuel Planning	The Fuel Resources Analysis System application provides an automated capability for determining the fuel supportability of an OPLAN or COA.	JOPES
Utility Software	Utility services are provided as part of GCCS through integration of existing government-off-the-shelf or commercial-off-the-shelf applications, including message handling software, E-mail, office automation, teleconferencing, Telnet, and file transfer.	Common Operating Environment (COE)
Fused Operational Battlespace Picture	The Joint Maritime Command Information System application is the foundation for the GCCS-fused operational battlespace picture. Incorporated as part of the COE, it provides near real time sea and air tracks, geographic display, contact correlation, and track data base management.	COE

Figure C-2. Global Command and Control System Applications (cont'd)

Transportation (JFAST) is a tool that assists planners in estimating force closure dates in the theater of operations, provides the theater TPFDD developer with the capability to rapidly create a TPFDD, and estimates when strategic transportation will deliver TPFDD elements into the theater port complexes. Figures C-3 and C-4 summarize these tools.

GLOBAL COMMAND AND CONTROL SYSTEM APPLICATIONS (cont d)		
Application	**Function**	**Application Suite**
Intelligence	The Integrated Imagery and Intelligence segment of GCCS will include the Modern Intelligence Database, Imagery Production Library, Integrated Broadcast System and Coliseum. These applications within GCCS provide intelligence capabilities that include an authoritative and fused common tactical picture with integrated intelligence services and databases; access to theater, service, and national intelligence databases; transmittal and receipt of specific intelligence requests; and the fusion of intelligence with operations data for a common operating picture of the battlespace.	JMASS
Collaborative Planning	Theater Analysis and Replanning Graphical Execution Toolkit is a suite of distributed collaborative planning tools.	JOPES COE

Figure C-2. Global Command and Control System Applications (cont'd)

ANALYSIS OF MOBILITY PLATFORM					
Acronym	**Name**	**Proponent**	**Users**	**Use**	**Remarks**
AMP	Analysis of Mobility Platform	USTRANSCOM	USTRANSCOM HQ, USTRANSCOM TCCs, CINCs, CINC components and sub-components	Set of transportation analysis tools aimed at improving joint transportation planning and execution. Provides planners with a rapid analysis of the transportation feasibility of a specific deployment plan against a planner defined transportation environment. AMP enables USTRANSCOM to determine, within hours, whether a deliberate or crisis deployment plan is supportable by the Defense Transportation System.	AMP currently includes the model for intertheater deployment by air and sea and ELIST transportation models and directly interfaces with the JFAST transportation model; as well as the logistics generator sustainment estimating tools. Other transportation and scheduling tools will be added to the AMP suite as they are developed. *Classified*.

Figure C-3. Analysis of Mobility Platform

JOINT FLOW AND ANALYSIS SYSTEM FOR TRANSPORTATION MODEL					
Acronym	**Name**	**Proponent**	**Users**	**Use**	**Remarks**
JFAST	Joint Flow and Analysis System for Transportation	USTRANSCOM	CINCs and subordinate commands, JCS, USTRANSCOM, Services, analytical agencies, and Service schools	High-speed analytical tool used to perform transportation feasibility estimates on requirements to transport military forces (including cargo, personnel, and their sustainment) during various scenarios. Estimates when forces will arrive in theater.	Interfaces with the AMP suite of transportation models. *Classified.*

Figure C-4. Joint Flow and Analysis System for Transportation Model

3. Analysis of Mobility Platform

AMP integrates such systems as the Model for Intertheater Deployment by Air and Sea and the ELIST while directly interfacing with JFAST.

4. Joint Flow and Analysis System for Transportation

JFAST provides transportation feasibility estimates on the requirements to transport military forces, including cargo, personnel, and their sustainment, during various scenarios. The primary output of JFAST is an estimation of when forces will arrive at the theater port complexes. In addition, JFAST presents a wealth of graphic and tabular output showing the impact of the theater deployment upon the strategic transportation resources, vehicles, and ports used during the simulation. JFAST input primarily comes from JOPES in the form of OPLAN TPFDDs and reference files. JFAST can also export plans to other transportation models such as ELIST.

A useful feature of JFAST is its capability for creating notional movement requirements for instances in which no plan exists. In this situation, an OPLAN or exercise TPFDD may identify where and when the military forces are to be deployed. The JFAST Notional Requirements Generator takes division or brigade echelon ground units and squadron echelon air units, as well as expected levels of activity, climate, and desired days of supply, and generates detailed company and detachment level TPFDD deployments. This information can then be used by the JFAST model to estimate closure dates of the generated forces, as well as by the planner for further analysis.

5. Theater Lines of Communications Development

Two tools that help plan the overall theater LOCs are ELIST and scenario unrestricted mobility model of intratheater simulation (SUMMITS) as described in Figure C-5.

6. Enhanced Logistics Intratheater Support Tool

ELIST is an analytical tool that simulates, from a transportation perspective, the deployment of forces within CONUS (origin-to-port) or theater (POD-to-destination). It

CURRENT THEATER LINES OF COMMUNICATIONS DEVELOPMENT APPLICATIONS					
Acronym	**Name**	**Proponent**	**Users**	**Use**	**Remarks**
ELIST	Enhanced Logistics Intratheater Support Tool	Army Military Traffic Management Command Transportation Engineering Agency (MTMCTEA)	Office of the Secretary of Defense (OSD), Joint Chiefs of Staff, US Transportation Command HQ, MTMC combatant commanders, combatant command components and sub-components	Discrete event, simulation-based system that evaluates the logistic feasibility of the continental US and theater transportation portion of a course of action (COA). Models theater air, ground, and rail transport assets and transportation infrastructure with object-oriented data base. Compares the planned theater arrival schedule against a theater s transportation assets, cargo handling equipment, facilities, and routes.	Part of the current analysis of mobility platform suite. Army is currently funding improvements to the model. Classified. ELIST networks needed to conduct analysis are available via the MTMCTEA classified website.
SUMMITS	Scenario Unrestricted Mobility Model for Intratheater Simulation	OSD (Program Analysis and Evaluation) (PA&E)	OSD (PA&E) and JS Logistics Directorate	Evaluates the logistic feasibility of a proposed theater transportation COA. Quantifies the total requirement for common-user theater transportation to deliver the specified force to its destination.	Very detailed model that requires considerable programming support to use effectively. *Secret*.

Figure C-5. Current Theater Lines of Communications Development Applications

helps planners analyze and develop COAs that ensure forces arrive at particular in-theater destinations on specific dates.

ELIST uses an object-oriented database to model unit and HN transportation assets and theater infrastructure. The theater transportation network moves personnel and cargo from a mobilization installation to a POE or from the theater entry points such as air- and seaports of debarkation to final theater destinations.

Planners can generate movement scenarios for ELIST from TPFDD data, as well as from models such as JFAST, TPFDD Editor, and model for intertheater deployment by air and sea. Movements are constrained by available theater transportation assets and the capacities of the theater infrastructure.

ELIST can be used to play out a master scenario events list. The user can add or subtract transportation resources, further constrain link capacities to simulate enemy action, or close down specific ports to determine the effects of these actions on the overall simulated movement of forces and cargo within the theater transportation network. The user interface is a graphic windowing system that integrates maps, data, and a variety of charts, reports, and graphs to show the results of the simulation. ELIST does not plan a CONUS or theater LOC; rather, it assesses the LOC's ability to handle the flow of forces and equipment as

determined by deliberate or crises action planners.

7. Scenario Unrestricted Mobility Model for Intratheater Simulation

SUMMITS executes an intratheater deployment simulation based on inputs provided by the user. The simulation moves personnel, unit equipment, materiel, and supplies in accordance with defined requirements. Requirements for transportation are processed in priority order, with each requirement being provided an assigned delivery path through established air, road, rail, water, and pipeline networks. Available transport resources are diminished as each requirement is applied to its assigned delivery path.

SUMMITS measures the total requirement for common-user transportation to deliver the specified force and the required logistic support using the established transportation resource assets. The SUMMITS model validates the performance of the established transportation network and the resource mix by modeling the delivery of the force to its final destination.

The model produces reports that detail the transportation requirement for each transportable commodity represented, which usually includes personnel, unit equipment, sustainment cargo, ammunition, bulk fuel, and water. For example, the trips required per day for a particular vehicle type can be examined as a day-by-day requirement, a static average daily requirement over a fixed number of days per 5 day period, or a rolling average daily requirement over a fixed rolling average period. As with ELIST, SUMMITS cannot plan a theater LOC; rather it assesses the feasibility of a proposed LOC concept.

8. Using ELIST and SUMMITS to Plan the Theater LOC

Neither ELIST nor SUMMITS can independently develop a proposed theater LOC concept. Detailed inputs are required:

- A completely planned theater LOC;
- Lift resources available;
- Storage and throughput capacities for each mode and node in the theater;
- Node and link capacities;
- Other theater LOC constraints; and
- A planned, detailed TPFDD flow into and within the theater.

SUMMITS also require the theater campaign results entered to determine the locations where the unit personnel, equipment, and materiel must be delivered as a function of time, intensity of combat, and friendly combat success. The combat consumption of all classes of supplies and a detailed theater logistic support plan play in the model.

9. Node Planning Tools

There are also tools available to assist in the planning of specific nodes in the theater LOC. The base resource and capability estimator (BRACE) can model military aerial port operations to estimate airfield throughput capability. The integrated computerized deployment system (ICODES) can help develop ship stow plans, while the port simulation (PORTSIM) model simulates seaport operations during a force deployment.

10. Aerial Port Planning Tools

The planning tool to model military air terminal operations is BRACE. BRACE simulates airfield onloading, offloading, en route, and recovery base operations, including ground activities such as cargo handling, refueling, maintenance, and aircraft parking. The model can be used to:

- Estimate airfield throughput capability;
- Estimate air, ground, and other resources required to support a given level of throughput at an airfield; and
- Validate MOG values used in existing air transportation models such as joint modeling and simulation systems and JFAST.

11. Seaport Planning Tools

Joint water ports in the theater of operation are critical to the success of the operation because most of the Army and Marine Corps unit equipment and sustainment cargo will be received through them. Two of the most useful tools for assisting in planning SPOE and SPOD operations are ICODES and PORTSIM.

a. **Integrated Computerized Deployment System.** ICODES is a decision support system for developing stow plans for ships. It assists the user in developing stow plans by matching vessel characteristics against the cargo being offered for shipment. ICODES develops the stow plans for up to four specific ships concurrently while continuously checking for access and hazard violations. At the user's request, ICODES can automatically attempt to maintain unit integrity in the stow plans it develops.

Once the stow plans are completed, ICODES automatically generates ship manifests and templates cargo items onto ship drawings in a matter of minutes. ICODES includes video clips of ship decks and cargo items and a wealth of customized reports. These reports detail both the process of constructing the stow plans and results of the process, and builds a database that provides details on the availability of external ship ramps and the facilities for many ports around the world.

b. **Port Simulation Model.** PORTSIM is a time-stepped, discrete event simulation of SPOE and SPOD during a force deployment. PORTSIM provides scenario-specific, force clearance profiles and reports on the utilization of port assets. The model has a port reference capability via a geographic information system database.

- PORTSIM determines a port's reception, staging, clearance, and throughput capabilities. The model identifies systems or infrastructure constraints and provides port-specific, time-phased force clearance profiles. The cargo (unit equipment) is flowed at the line item level of detail.
- PORTSIM will interface with ICODES via a load sequencing agent, calculate the impact of JLOTS, incorporate 2- and 3-dimensional visualization for training, and interface with ELIST to better facilitate theater analysis.

APPENDIX D
REFERENCES

The development of JP 4-01.8 is based upon the following primary references.

1. US Government Publications

Title 10, United States Code, and as specifically amended by: Department of Defense Reorganization Act of 1986 and the Cohen-Nunn Amendment to the Department of Defense Reorganization Act of 1986, as attached to the Defense Authorization Act, FY 1986.

2. DOD Publications

a. DOD Directive 4500.9-R, *Defense Transportation Regulation Part III, Mobility*.

b. DOD Regulation 4140.1-R, *DoD Materiel Management Regulation.*

3. Joint Publications

a. JP 0-2, *Unified Action Armed Forces (UNAAF)*.

b. JP 1-0, *Doctrine for Personnel Support to Joint Operations*.

c. JP 1-01, *Joint Publication System, Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program*.

d. JP 1-02, *DOD Dictionary of Military and Associated Terms*.

e. JP 3-0, *Doctrine for Joint Operations*.

f. JP 3-02, *Joint Doctrine for Amphibious Operations.*

g. JP 3-07, *Joint Doctrine for Military Operations Other Than War.*

h. JP 3-10, *Doctrine for Joint Rear Area Operations*.

i. JP 3-17, *Joint Tactics, Techniques, and Procedures for Theater Airlift Operations.*

j. JP 3-33, *Joint Force Capabilities.*

k. JP 3-35, *Joint Deployment and Redeployment Operations.*

l. JP 3-54, *Joint Doctrine for Operations Security.*

m. JP 4-0, *Doctrine for Logistic Support of Joint Operations*.

n. JP 4-01, *Joint Doctrine for the Defense Transportation System*.

o. JP 4-01.1, *Joint Tactics, Techniques, and Procedures for Airlift Support to Joint Operations*.

p. JP 4-01.2, *Joint Tactics, Techniques, and Procedures for Sealift Support to Joint Operations*.

q. JP 4-01.3, *Joint Tactics, Techniques, and Procedures for Movement Control*.

r. JP 4-01.4, *Joint Tactics, Techniques, and Procedures for Joint Theater Distribution.*

s. JP 4-01.5, *Joint Tactics, Techniques, and Procedures for Water Terminal Operations*.

t. JP 4-01.6, *Joint Tactics, Techniques, and Procedures for Joint Logistics Over-the-Shore (JLOTS)*.

u. JP 4-01.7, *Joint Tactics, Techniques, and Procedures for Use of Intermodal Containers in Joint Operations*.

v. JP 4-04, *Joint Doctrine for Civil Engineering Support.*

w. JP 5-0, *Doctrine for Planning Joint Operations*.

x. JP 6-0, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations*.

y. JP 6-02, *Joint Doctrine for Employment of Operational/Tactical Command, Control, Communications, and Computer Systems*.

z. CJCSM 3122.01, *Joint Operation Planning and Execution System Vol I: (Planning Policies and Procedures).*

aa. CJCSM 3122.02, *Manual for Time-Phased Force and Deployment Data (TPFDD) Development and Deployment Execution.*

bb. CJCSM 3122.03A, *Joint Operation and Execution System Vol II: (Planning Formats and Guidance)*.

4. Air Force Publications

a. AFDD 2, *Organization and Employment of Aerospace Power*.

b. AFDD 2-4, *Combat Support.*

c. AFDD 2-6, *Air Mobility Operations*.

d. AFDD 2-6.1, *Airlift Operations*.

5. Army Publications

a. FM 55-1, *Army Transportation Services in a Theater of Operations*.

b. FM 55-10, *Movement Control in a Theater of Operations.*

c. FM 55-60, *Army Terminal Operations*.

d. FM 55-65, *Strategic Deployment*.

e. FM 63-4, *CSS Operations, Theater Army Area Command*.

f. FM 63-11, *TTP for Logistics Support Elements*.

g. FM 100-5, *Operations*.

h. FM 100-10, *CSS Operations*.

i. FM 100-17, *Mobilization, Deployment, Redeployment, Demobilization.*

j. FM 100-17-1, *Army Prepositioned Afloat Operations.*

k. FM 100-17-2, *Army Prepositioned Land*.

l. FM 100-17-3, *Reception, Staging, Onward Movement, and Integration*. (Draft)

m. FM 100-17-4, *Deployment: Fort to Port*.

6. Marine Corps Publications

a. MCDP 1-2, *Campaigning*.

b. MCDP 4, *Logistics*.

c. MCRP 5-12D, *Organization of Marine Corps Forces*.

d. MCWP 0-1.1, *Componency*.

e. MCWP 3-32, *Maritime Prepositioning Force (MPF) Operations*.

f. MCWP 4-1, *Logistics Operations*.

g. MCWP 4-11, *Tactical Level Logistics*.

h. MCWP 4-11.3, *Transportation Operations*.

7. Navy Publications

a. NWP 3-2.3, *Maritime Prepositioning Force (MPF) Operations*.

b. NDP 4, *Naval Logistics.*

c. NWP 4-01, *Logistics Task Force.*

d. NWP 4-01.1, *Naval Expeditionary Shore-based Logistics Support and RSOI Operation.*

e. NWP 4-08, *Naval Supply Operations*.

8. Other

a. Institute for Defense Analyses (IDA), *US Army Transportation School Force Deployment Rock Drill - Read Ahead*, Nov 1996.

b. Joint Warfighting Center (JWFC), *Joint Task Force Commander's Handbook for Peace Operations*, 28 Feb 95.

c. Lidy, A. Martin, Institute for Defense Analyses (IDA), *Recommendations for Improving Joint Reception, Staging, Onward Movement, and Integration (RSOI)*.

d. Powell, General Colin L., *A Doctrinal Statement of Selected Joint Operational Concepts*, 10 November 1992.

e. 3d TMCA RSO&I Briefing, Sept 1996.

APPENDIX E
ADMINISTRATIVE INSTRUCTIONS

1. User Comments

Users in the field are highly encouraged to submit comments on this publication to: Commander, United States Joint Forces Command, Joint Warfighting Center Code JW100, 116 Lake View Parkway, Suffolk, VA 23435-2697. These comments should address content (accuracy, usefulness, consistency, and organization), writing, and appearance.

2. Authorship

The lead agent for this publication is the Department of Army (DAMO-FDQ). The Joint Staff doctrine sponsor for this publication is the Director for Logistics (J-4).

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Air Force:	Air Force Publications Distribution Center 2800 Eastern Boulevard Baltimore, MD 21220-2896
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GLOSSARY

PART I — ABBREVIATIONS AND ACRONYMS

A/DACG	arrival/departure airfield control group
AAI	air-to-air interface
ABFC	advanced base functional component
ACSA	acquisition cross-Service agreement
AFCC	Air Force Component Commander
AIS	automated information systems
AIT	automatic identification technology
ALCT	airlift control team
ALSS	naval advanced logistic support site
AMC	Air Mobility Command
AMD	air mobility division
AMP	analysis of mobility platform
AOC	air operations center (USAF)
AOR	area of responsibility
APOD	aerial port of debarkation
APOE	aerial port of embarkation
ASB	naval advanced support base
BRACE	base resource and capability estimator
C2	command and control
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
CCA	central contracting authority
CESP	civil engineering support plan
CHE	container handling equipment
CINC	commander in chief
CJCS	Chairman of the Joint Chiefs of Staff
CJCSM	Chairman of the Joint Chiefs of Staff Manual
CJTF	commander, joint task force
COA	course of action
COCOM	combatant command (command authority)
COMAFFOR	Commander, Air Forces forces
COMMARFOR	Commander, Marine Forces
CONPLAN	operation plan in concept format
CONUS	continental United States
COSCOM	corps support command
CP	command post
CS	combat support
CSS	combat service support
CSSE	combat service support element
CTC	cargo transfer company (USA)

DIRMOBFOR	Director of Mobility Forces
DOD	Department of Defense
EAC	echelon above corps
ELIST	enhanced logistics intratheater support tool
FLS	naval forward logistic site
FM	field manual
FSSG	force service support group
FTX	field training exercise
GCCS	Global Command and Control System
GCSS	global combat support system
GDSS	Global Decision Support System
GTN	Global Transportation Network
HN	host nation
HNS	host-nation support
HQ	headquarters
IC3	integrated command, control, and communications
ICODES	integrated computerized deployment system
ICP	inventory control point
ISB	intermediate staging base
ITV	in-transit visibility
J-4	Logistics Directorate of a joint staff
JAOC	joint air operations center
JFACC	joint force air component commander
JFAST	Joint Flow and Analysis System for Transportation
JFC	joint force commander
JIPB	joint intelligence preparation of the battlespace
JLOTS	joint logistics over-the-shore
JMC	joint movement center
JMCG	joint movement control group
JOPES	Joint Operation Planning and Execution System
JP	joint publication
JPAV	joint personnel asset visibility
JRAC	joint rear area coordinator
JRC	joint reception center
JRSOI	joint reception, staging, onward movement, and integration
JSCP	Joint Strategic Capabilities Plan
JTAV	joint total asset visibility
JTAV-IT	joint total asset visibility - in theater
JTB	Joint Transportation Board
JTF	joint task force
JTLM	joint theater logistics management

LNO	liaison officer
LOC	line of communications
LOTS	logistics over-the-shore
LRC	logistics readiness center
MAGTF	Marine air-ground task force
MARFOR	Marine Corps forces
MCC	movement control center
MCDP	Marine Corps Doctrinal Publication
MCWP	Marine Corps Warfare Publication
MEF	Marine expeditionary force
METT-T	mission, enemy, terrain and weather, troops and support available, time available
MEU	Marine expeditionary unit
MHE	materials handling equipment
MLC	Marine Corps Logistics Command
MMC	materiel management center
MOG	maximum (aircraft) on the ground
MSC	Military Sealift Command
MSR	main supply route
MTMC	Military Traffic Management Command
MTMCTEA	Military Traffic Management Command Transportation Engineering Agency
NCA	National Command Authorities
NEO	noncombatant evacuation operation
NOACT	Navy overseas air cargo terminal
OA	operational area
OPCON	operational control
OPLAN	operation plan
POD	port of debarkation
POE	port of embarkation
POG	port operations group
POL	petroleum, oils, and lubricants
PORTSIM	port simulation
PSA	port support activity
RC	Reserve Components
RSOI	reception, staging, onward movement, and integration
SA	staging area
SAI	sea-to-air interface
SOP	standing operating procedure
SPOD	seaport of debarkation
SPOE	seaport of embarkation

SRC	service reception center
SUMMITS	scenario unrestricted mobility model of intratheater simulation
TAA	tactical assembly area
TACC	tanker/airlift control center (USAF)
TACON	tactical control
TALCE	tanker airlift control element
TAV	total asset visibility
TC-AIMS II	Transportation Coordinator's Automated Information for Movement System II
TCC	transportation component command
TD	theater distribution
T-JMC	theater-joint movement center
T-JTB	theater-joint transportation board
TPFDD	time-phased force and deployment data
TSC	Theater Support Command
USC	United States Code
USCINCTRANS	Commander in Chief, United States Transportation Command
USSPACECOM	United States Space Command
USTRANSCOM	United States Transportation Command
WRM	war reserve materiel

administrative control. Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. Also called ADCON. (JP 1-02)

Air Mobility Command. The Air Force Component Command of the US Transportation Command. Also called AMC. (JP 1-02)

air mobility division. The division within the air operations center responsible for planning, coordinating, tasking, and management of air mobility missions. Also called AMD. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

air operations center. The principal air operations installation from which aircraft and air warning functions of combat air operations are directed, controlled, and executed. It is the senior agency of the Air Force Component Commander from which command and control of air operations are coordinated with other components and Services. Also called AOC. (JP 1-02)

air support operations center. An agency of a tactical air control system collocated with a corps headquarters or an appropriate land force headquarters, which coordinates and directs close air support and other tactical air support. Also called ASOC. (JP 1-02)

air terminal. A facility on an airfield that functions as an air transportation hub and accommodates the loading and unloading of airlift aircraft and the intransit processing of traffic. The airfield may or may not be designated an aerial port. (JP 1-02)

arrival/departure airfield control group. A user provided group to perform aerial port functions during unit deployment, employment, and/or redeployment. The arrival/departure airfield control group is a provisional organization. Also called A/DACG. (This term and its definition are applicable only in the context of this publication and cannot be referenced outside this publication.)

assembly area. 1. An area in which a command is assembled preparatory to further action. 2. In a supply installation, the gross area used for collecting and combining components into complete units, kits, or assemblies. (JP 1-02)

automated identification technology. A suite of tools for facilitating total asset visibility (TAV) source data capture and transfer. Automated identification technology (AIT) includes a variety of devices, such as bar codes, magnetic strips, optical memory cards, and radio frequency tags for marking or "tagging" individual items, multi-packs, equipment, air pallets, or containers, along with the hardware and software required to create the devices, read the information on them, and integrate that information with other logistic information. AIT integration with logistic information systems is key to the Department of Defense's TAV efforts. Also called AIT. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

automation network. The automation network combines all of the information collection devices, automatic identification technologies, and the automated information systems that either support or facilitate the joint reception, staging, onward movement, and integration process. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

bare base. A base having minimum essential facilities to house, sustain, and support operations to include, if required, a stabilized runway, taxiways, and aircraft parking areas. A bare base must have a source of water that can be made potable. Other requirements to operate under bare base conditions form a necessary part of the force package deployed to the bare base. (JP 1-02)

closure. In transportation, the process of a unit arriving at a specified location. It begins when the first element arrives at a designated location, e.g., port of entry/port of departure, intermediate stops, or final destination, and ends when the last element does likewise. For the purposes of studies and command post exercises, a unit is considered essentially closed after 95 percent of its movement requirements for personnel and equipment are completed. (JP 1-02)

combatant command. A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (JP 1-02)

combatant commander. A commander in chief of one of the unified or specified combatant commands established by the President. (JP 1-02)

common-user transportation. Transportation and transportation services provided on a common basis for two or more Department of Defense agencies and, as authorized, non-DOD agencies. Common-user assets are under the combatant command (command authority) of USCINCTRANS, excluding Service-unique or theater-assigned transportation assets. (JP 1-02)

component. 1. One of the subordinate organizations that constitute a joint force. Normally a joint force is organized with a combination of Service and functional components. 2. In logistics, a part or combination of parts having a specific function, which can be installed or replaced only as an entity. (JP 1-02)

Defense Transportation System. That portion of the Nation's transportation infrastructure which supports Department of Defense common-user transportation needs across the range of military operations. It consists of those common-user military and commercial assets, services and systems organic to, contracted for, or controlled by the Department of Defense. Also called DTS. (JP 1-02)

deployment. 1. In naval usage, the change from a cruising approach or contact disposition to a disposition for battle. 2. The movement of forces within operational areas. 3. The positioning of forces into a formation for battle. 4. The relocation of forces and materiel to desired operational areas. Deployment encompasses all activities from origin or home station through destination, specifically including intra-continental United States, intertheater, and intratheater movement legs, staging, and holding areas. (JP 1-02)

director of mobility forces. Normally a senior officer who is familiar with the area of responsibility or joint operations area and possesses an extensive background in airlift operations. When established, the director of mobility forces serves as the designated agent for all airlift issues in the area of responsibility or joint operations area, and for other duties as directed. The director of mobility forces exercises coordinating authority between the airlift coordination cell, the air mobility element, the Tanker Airlift Control Center, the joint movement center, and the air operations center in order to expedite the resolution of airlift problems. The director of mobility forces may be sourced from the theater's organizations, United States Transportation Command, or United States Atlantic Command. Also called DIRMOBFOR. (JP 1-02)

fixed port. Water terminals with an improved network of cargo-handling facilities designed for the transfer of oceangoing freight. (JP 1-02)

force closure. The point in time when a supported joint force commander determines that sufficient personnel and equipment resources are in the assigned operational area to carry out assigned tasks. (JP 1-02)

force movement control center. A temporary organization activated by the Marine air-ground task force to control and coordinate all deployment support activities. Also called FMCC. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

force planning. Planning associated with the creation and maintenance of military capabilities. It is primarily the responsibility of the Military Departments and Services and is conducted under the administrative control that runs from the Secretary of Defense to the Military Departments and Services. (JP 1-02)

force projection. The ability to project the military element of national power from the continental United States (CONUS) or another theater, in response to requirements for military operations. Force projection operations extend from mobilization and deployment of forces to redeployment to CONUS or home theater. (JP 1-02)

force protection. Security program designed to protect Service members, civilian employees, family members, facilities, and equipment, in all locations and situations, accomplished through planned and integrated application of combating terrorism, physical security, operations security, personal protective services, and supported by intelligence, counterintelligence, and other security programs. (JP 1-02)

force tracking. The identification of units and their specific modes of transport during movement to an objective area. (JP 1-02)

frustrated cargo. Any shipment of supplies and/or equipment which, while en route to destination, is stopped prior to receipt and for which further disposition instructions must be obtained. (JP 1-02)

host nation. A nation which receives the forces and/or supplies of allied nations and/or NATO organizations to be located on, to operate in, or to transit through its territory. Also called HN. (JP 1-02)

host-nation support. Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crisis or emergencies, or war based upon agreements mutually concluded between nations. Also called HNS. (JP 1-02)

host-nation support agreement. Basic agreement normally concluded at government-to-government or government-to-combatant commander level. These agreements may include general agreements, umbrella agreements, and memoranda of understanding. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

information resources. Information and related resources, such as personnel, equipment, and information technology. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

infrastructure. All building and permanent installations necessary for the support, redeployment, and military forces operations (e.g., barracks, headquarters, airfields, communications, facilities, stores, port installations, and maintenance stations). (This term and its definition modify the existing term and its definition and are approved for inclusion in the next edition of JP 1-02.)

integration. 1. In photography, a process by which the average radar picture seen on several scans of the time base may be obtained on a print, or the process by which several photographic images are combined into a single image. 2. In force projection, the synchronized transfer of units into an operational commander's force prior to mission execution. (This term and its definition modify the existing term and its definition and are approved for inclusion in the next edition of JP 1-02.)

in-transit visibility. The ability to track the identity, status, and location of Department of Defense units, and non-unit cargo (excluding bulk petroleum, oils, and lubricants) and passengers; medical patients; and personal property from origin to consignee or destination across the range of military operations. Also called ITV. (JP 1-02)

joint air operations. Air operations performed with air capabilities/forces made available by components in support of the joint force commander's operation or campaign objectives, or in support of other components of the joint force. (JP 1-02)

joint air operations center. A jointly staffed facility established for planning, directing, and executing joint air operations in support of the joint force commander's operation or campaign objectives. Also called JOAC. (JP 1-02)

joint flow and analysis system for transportation. System that determines the transportation feasibility of a course of action or operation plan; provides daily lift assets needed to move forces and resupply; advises logistic planners of channel and port inefficiencies; and interprets shortfalls from various flow possibilities. Also called JFAST. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

joint force. A general term applied to a force composed of significant elements assigned or attached, of two or more Military Departments operating under a single commander. See also joint force commander. (JP 1-02)

joint force air component commander. The joint force air component commander derives authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The joint force commander will normally designate a joint force air component

commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other Service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas. Also called JFACC. (JP 1-02)

joint force commander. A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called JFC. (JP 1-02)

joint movement center. The center established to coordinate the employment of all means of transportation (including that provided by allies or host nations) to support the concept of operations. This coordination is accomplished through establishment of transportation policies within the assigned operational area, consistent with relative urgency of need, port and terminal capabilities, transportation asset availability, and priorities set by a joint force commander. Also called JMC. (JP 1-02)

joint operations. A general term to describe military actions conducted by joint forces, or by Service forces in relationships (e.g., support, coordinating authority), which, of themselves, do not create joint forces. (JP 1-02)

joint operations area. An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. Joint operations areas are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters. Also called JOA. (JP 1-02)

Joint Operation Planning and Execution System. A continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems: Joint Operation Planning System and Joint Deployment System. It provides the foundation for conventional command and control by national- and theater-level commanders and their staffs. It is designed to satisfy their information needs in the conduct of joint planning and operations. Joint Operation Planning and Execution System (JOPES) includes joint operation planning policies, procedures, and reporting structures supported by communications and automated data processing systems. JOPES is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations. Also called JOPES. (JP 1-02)

joint reception center. The center established in the operational area (per direction of the joint force commander), with responsibility for the reception, accountability, training, processing, of military and civilian individual augmentees upon their arrival in the operational area. Also the center where augmentees will normally be outprocessed through upon departure from the

operational area. Also called JRC. (JP 1-02)

joint reception complex. The group of nodes (air and/or sea) designated by the supported combatant command, in coordination with the host nation and United States Transportation Command, that receives, processes, services, supports, and facilitates onward movement of personnel, equipment, materiel, and units deploying into, out of, or within a theater line of communications. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

joint reception, staging, onward movement, and integration. A phase of joint force projection occurring in the operational area. This phase comprises the essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting operational requirements. Also called JRSOI. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

joint task force. A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. Also called JTF. (JP 1-02)

joint total asset visibility. A capability designed to consolidate source data from a variety of joint and Service automated information systems to provide joint force commanders with visibility over assets in-storage, in-process, and in-transit. Also called JTAV. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

line of communications. A route, either land, water, and/or air, which connects an operating military force with a base of operations and along which supplies and military forces move. Also called LOC. (JP 1-02)

logistic and movement control center. A center organized from service support elements (or the supporting establishment) in the geographic proximity of the marshaling units. It is tasked by the force movement control center to provide organic and commercial transportation, transportation scheduling, materials handling equipment, and all other logistic support required by parent commands during marshaling and embarkation. Also called LMCC. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

logistics over-the-shore operations. The loading and unloading of ships without the benefit of deep draft-capable, fixed port facilities in friendly or nondefended territory and, in time of war, during phases of theater development in which there is no opposition by the enemy; or as a means of moving forces closer to tactical assembly areas dependent on threat force capabilities. Also called LOTS operations. (This term and its definition modify the existing term and its definition and are approved for inclusion in the next edition of JP 1-02.)

logistic support. Logistic support encompasses the logistic services, materiel, and transportation required to support the continental United States-based and worldwide deployed forces. (JP 1-02)

Marine Logistics Command. The US Marines may employ the concept of the Marine Logistics Command (MLC) in major regional contingencies to provide operational logistic support, which will include arrival and assembly operations.

The combat service support operations center will be the MLC's primary combat service support coordination center for units undergoing arrival and assembly. Also called MLC. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

marshalling. 1. The process by which units participating in an amphibious or airborne operation group together or assemble when feasible or move to temporary camps in the vicinity of embarkation points, complete preparations for combat, or prepare for loading. 2. The process of assembling, holding, and organizing supplies and/or equipment, especially vehicles of transportation, for onward movement. See also staging. (JP 1-02)

marshalling area. A location in the vicinity of a reception terminal or pre-positioned equipment storage site where arriving unit personnel, equipment, materiel, and accompanying supplies are reassembled, returned to the control of the unit commander, and prepared for onward movement. The joint complex commander designating the location will coordinate the use of the facilities with other allied commands and the host nation, and will provide life support to the units while in the marshalling area. (This term and its definition modify the existing term and its definition and are approved for inclusion in the next edition of JP 1-02.)

materials-handling equipment. Mechanical devices for handling of supplies with greater ease and economy. (JP 1-02)

Military Sealift Command. The US Transportation Command's component command responsible for designated sealift service. Also called MSC. (JP 1-02)

Military Traffic Management Command. The US Transportation Command's component command responsible for military traffic, continental United States air and land transportation, and common-user water terminals. Also called MTMC. See also transportation component command. (JP 1-02)

mode of transport. The various modes used for a movement. For each mode, there are several means of transport. They are: a. inland surface transportation (rail, road, and inland waterway); b. sea transport (coastal and ocean); c. air transportation; and d. pipelines. (JP 1-02)

movement control. 1. The planning, routing, scheduling, and control of personnel and cargo movements over lines of communications. 2. An organization responsible for the planning, routing, scheduling, and control of personnel and cargo movements over lines of communications. Also called movement control center or MCC. See also non-unit related cargo; non-unit related personnel. (JP 1-02)

naval advanced logistic support site. An overseas location used as the primary transshipment point in the theater of operations for logistic support. A naval advanced logistic support site possesses full capabilities for storage, consolidation, and transfer of supplies and for support of forward-deployed units (including replacements units) during major contingency and wartime periods. Naval advanced logistic support sites, with port and airfield facilities in close proximity, are located within the theater of operations but not near the main battle areas, and must possess the throughput capacity required to accommodate incoming and outgoing intertheater airlift and sealift. When fully activated, the naval advanced logistic

support site should consist of facilities and services provided by the host nation, augmented by support personnel located in the theater of operations, or both. Also called NALSS. (JP 1-02)

naval forward logistic site. An overseas location, with port and airfield facilities nearby, which provides logistic support to naval forces within the theater of operations during major contingency and wartime periods. Naval forward logistic sites may be located in close proximity to main battle areas to permit forward staging of services, throughput of high priority cargo, advanced maintenance, and battle damage repair. Naval forward logistic sites are linked to in-theater naval advanced logistic support sites (ALSSs) by intratheater airlift and sealift, but may also serve as transshipment points for intertheater movement of high-priority cargo into areas of direct combat. In providing fleet logistic support, naval forward logistic site capabilities may range from very austere to near those of a naval advanced logistic support site. Also called NFLS. (JP 1-02)

naval port control office. The authority established at a port or port complex to coordinate arrangements for logistic support and harbor services to ships under naval control and to otherwise support the naval control of shipping organization. (JP 1-02)

Navy cargo handling battalion. A mobile logistics support unit capable of worldwide deployment in its entirety or in specialized detachments. It is organized, trained, and equipped to: a. load and off-load Navy and Marine Corps cargo carried in maritime prepositioning ships and merchant breakbulk or container ships in all environments; b. to operate an associated temporary ocean cargo terminal; c. load and offload Navy and Marine Corps cargo carried in military-controlled aircraft; d. to operate an associated expeditionary air cargo terminal. Also called CHB. Three sources of Navy Cargo Handling Battalions are; a. Navy Cargo Handling and Port Group—The active duty, cargo handling, battalion-sized unit composed solely of active duty personnel. Also called NAVCHAPGRU. b. Naval Reserve Cargo Handling Training Battalion—The active duty, cargo handling training battalion composed of both active duty and reserve personnel. Also called NRCHTB. c. Naval Reserve Cargo Handling Battalion—A reserve cargo handling battalion composed solely of selected reserve personnel. Also called NRCHB. (JP 1-02)

Navy Cargo Handling Force. The combined cargo handling units of the Navy, including primarily the Navy Cargo Handling and Port Group, the Naval Reserve Cargo Handling Training Battalion, and the Naval Reserve Cargo Handling Battalion. These units are part of the operating forces and represent the Navy's capability for open ocean cargo handling. (JP 1-02)

Navy support element. The Maritime Prepositioning Force element that is composed of naval beach group staff and subordinate unit personnel, a detachment of Navy cargo handling force personnel, and other Navy components, as required. It is tasked with conducting the off-load and ship-to-shore movement of maritime prepositioned equipment/supplies. (JP 1-02)

node. A location in a mobility system where a movement requirement is originated, processed for onward movement, or terminated. (JP 1-02)

non-unit-related cargo. All equipment and supplies requiring transportation to an area of operations, other than those identified

as the equipment or accompanying supplies of a specific unit (e.g., resupply, military support for allies, and support for nonmilitary programs, such as civil relief). (JP 1-02)

non-unit-related personnel. All personnel requiring transportation to or from an area of operations, other than those assigned to a specific unit (e.g., filler personnel; replacements; temporary duty/temporary additional duty personnel; civilians; medical evacuees; and retrograde personnel). (JP 1-02)

off-load preparation party. A temporary task organization of Navy and Marine maintenance, embarkation, equipment operators, and cargo-handling personnel deployed to the maritime pre-positioning ship before or during its transit to the objective area to prepare the ship's off-load systems and embarked equipment for off-load. Also called OPP. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

onward movement. The relocation of forces capable of meeting the commander's operational requirements to the initial point of their mission execution. This includes the movement of associated sustainment, equipment, and personnel. (JP 1-02)

operational area. An overarching term encompassing more descriptive terms for geographic areas in which military operations are conducted. Operational areas include, but are not limited to, such descriptors as area of responsibility, theater of war, theater of operations, joint operations area, amphibious objective area, joint special operations area, and area of operations. (This term and its definition are provided for information and are proposed for inclusion in the next edition of JP 1-02 by JP 3-0.)

operational control. Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called OPCON. (JP 1-02)

operation plan. Any plan, except for the Single Integrated Operation Plan, for the conduct of military operations. Plans are prepared by combatant commanders in response to requirements established by the Chairman of the Joint Chiefs of Staff and by commanders of subordinate commands in response to requirements tasked by the establishing unified commander. Operation plans are prepared in either a complete format (OPLAN) or as a concept plan (CONPLAN). The CONPLAN can

be published with or without a time-phased force and deployment data (TPFDD) file. a. OPLAN—An operation plan for the conduct of joint operations that can be used as a basis for development of an operation order (OPORD). An OPLAN identifies the forces and supplies required to execute the CINC's Strategic Concept and a movement schedule of these resources to the theater of operations. The forces and supplies are identified in TPFDD files. OPLANs will include all phases of the tasked operation. The plan is prepared with the appropriate annexes, appendixes, and TPFDD files as described in the Joint Operation Planning and Execution System manuals containing planning policies, procedures, and formats. Also called OPLAN. b. CONPLAN—An operation plan in an abbreviated format that would require considerable expansion or alteration to convert it into an OPLAN or OPORD. A CONPLAN contains the CINC's Strategic Concept and those annexes and appendixes deemed necessary by the combatant commander to complete planning. Generally, detailed support requirements are not calculated and TPFDD files are not prepared. Also called CONPLAN. c. CONPLAN with TPFDD—A CONPLAN with TPFDD is the same as a CONPLAN except that it requires more detailed planning for phased deployment of forces. (JP 1-02)

port capacity. The estimated capacity of a port or an anchorage to clear cargo in 24 hours usually expressed in tons. (JP 1-02)

port complex. A port complex comprises one or more port areas of varying importance whose activities are geographically linked either because these areas are dependent on a common inland transport system or because they constitute a common initial destination for convoys. (JP 1-02)

port of debarkation. The geographic point at which cargo or personnel are discharged. May be a seaport or aerial port of debarkation. For unit requirements, it may or may not coincide with the destination. Also called POD. (JP 1-02)

port of embarkation. The geographic point in a routing scheme from which cargo or personnel depart. May be a seaport or aerial port from which personnel and equipment flow to port of debarkation. For unit and non-unit requirements, it may or may not coincide with the origin. Also called POE. (JP 1-02)

port operations group. A task-organized unit, located at the seaport of embarkation and/or debarkation under the control of the landing force support party and/or combat service support element, that assists and provides support in the loading and/or unloading and staging of personnel, supplies, and equipment from shipping. Also called POG. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

port support activity. A tailorable support organization composed of mobilization station assets that ensures the equipment of the deploying units is ready to load. The port support activity (PSA) operates unique equipment in conjunction with ship loading operations. The PSA is operationally controlled by the military port commander or terminal transfer unit commander. Also called PSA. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

power projection. The ability of a nation to apply all or some of its elements of national power — political, economic, informational, or military — to rapidly and effectively deploy and sustain forces in and from multiple dispersed locations to

respond to crises, to contribute to deterrence, and to enhance regional stability. (JP 1-02)

reception. 1. All ground arrangements connected with the delivery and disposition of air or sea drops. Includes selection and preparation of site, signals for warning and approach, facilitation of secure departure of agents, speedy collection of delivered articles, and their prompt removal to storage places having maximum security. When a group is involved, it may be called a reception committee. 2. Arrangements to welcome and provide secure quarters or transportation for defectors, escapees, evaders, or incoming agents. 3. The process of receiving, offloading, marshalling, and transporting of personnel, equipment, and materiel from the strategic and/or intratheater deployment phase to a sea, air, or surface transportation point of debarkation to the marshalling area. (This term and its definition modify the existing term and its definition and are approved for inclusion in the next edition of JP 1-02.)

seaport of debarkation. The geographic point in theater at which strategic sealift is offloaded. Also called SPOD. See port of debarkation. (This term and its definition are applicable only in the context of this publication and cannot be referenced outside this publication.)

seaport of embarkation. The geographic point at which strategic sealift is onloaded for transit to theater. Also called SPOE. See port of embarkation. (This term and its definition are applicable only in the context of this publication and cannot be referenced outside this publication.)

single port manager. Through its transportation component commands, US Transportation Command is the DOD designated single port manager for all common-user aerial and sea ports worldwide. The single port manager performs those functions necessary to support the strategic flow of the deploying forces' equipment and sustainment from the aerial and sea port of embarkation and hand-off to the combatant commander in the aerial and sea port of debarkation (APOD and SPOD). The single port manager is responsible for providing strategic deployment status information to the combatant commander and to manage workload of the APOD/SPOD operator based on the commander's priorities and guidance. The single port manager is responsible through all phases of the theater aerial and sea port operations continuum, from a unimproved airfield and bare beach deployment to a commercial contract supported deployment. Also called SPM. (JP 1-02)

staging. Assembling, holding, and organizing arriving personnel, equipment, and sustaining materiel in preparation for onward movement. The organizing and preparation for movement of personnel, equipment, and materiel at designated areas to incrementally build forces capable of meeting the operational commander's requirements. See also staging area. (JP 1-02)

staging area. 1. Amphibious or airborne — A general locality between the mounting area and the objective of an amphibious or airborne expedition, through which the expedition or parts thereof pass after mounting for refueling, regrouping of ships, and/or exercise, inspection, and redistribution of troops. 2. Other movements — A general locality established for the concentration of troop units and transient personnel between movements over the lines of communications. Also called SA. (JP 1-02)

support. 1. The action of a force which aids, protects, complements, or sustains another force in accordance with a directive requiring such action. 2. A unit which helps another unit in battle. Aviation, artillery, or naval gunfire may be used as a support for infantry. 3. A part of any unit held back at the beginning of an attack as a reserve. 4. An element of a command which assists, protects, or supplies other forces in combat. (JP 1-02)

supported commander. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. (JP 1-02)

supporting commander. A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies as appropriate. (JP 1-02)

sustainment. The provision of personnel, logistic, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the national objective. (JP 1-02)

tactical assembly area. An area that is generally out of the reach of light artillery and the location where units make final preparation (pre-combat checks and inspections) and rest, prior to moving to the line of departure. (JP 1-02)

tactical control. Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Also called TACON. See also combatant command; operational control. (JP 1-02)

Tanker Airlift Control Center. The Air Mobility Command direct reporting unit responsible for tasking and controlling operational missions for all activities involving forces supporting US Transportation Command's global air mobility mission. The Tanker Airlift Control Center is comprised of the following functions: current operations, command and control, logistics operations, aerial port operations, aeromedical evacuation, flight planning, diplomatic clearances, weather, and intelligence. Also called TACC. (JP 1-02)

Tanker Airlift Control Element. A mobile command and control organization deployed to support strategic and theater air mobility operations at fixed, en route, and deployed locations where air mobility operational support is nonexistent or insufficient. The Tanker Airlift Control Element provides on-site management of air mobility airfield operations to include command and control, communications, aerial port services, maintenance, security, transportation, weather, intelligence, and other support functions, as necessary. The Tanker Airlift Control Element is composed of mission support elements from various units and deploys in support of peacetime, contingency, and emergency relief operations on both planned and "no notice" basis. Also called TALCE. (JP 1-02)

task force. 1. A temporary grouping of units, under one commander, formed for the purpose of carrying out a specific operation or mission. 2. Semi-permanent organization of units, under one commander, formed for the purpose of carrying out a continuing specific task. 3. A component of a fleet organized by the commander of a task fleet or higher authority for the accomplishment of a specific task or tasks. (JP 1-02)

theater airlift. That airlift assigned or attached to a combatant commander other than the Commander in Chief, US Transportation Command, which provides air movement and delivery of personnel and equipment directly into objective areas through air landing, airdrop, extraction, or other delivery techniques; and the air logistics support of all theater forces, including those engaged in combat operations, to meet specific theater objectives and requirements. Also called intratheater airlift. (JP 1-02)

throughput. The average quantity of cargo and passengers that can pass through a port on a daily basis from arrival at the port to loading onto a ship or plane, or from the discharge from a ship or plane to the exit (clearance) from the port complex. Throughput is usually expressed in measurement tons, short tons, or passengers. Reception and storage limitation may affect final throughput. (JP 1-02)

time-phased force and deployment data. The Joint Operation Planning and Execution System data base portion of an operation plan; it contains time-phased force data, non-unit-related cargo and personnel data, and movement data for the operation plan, including: a. In-place units. b. Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation. c. Routing of forces to be deployed. d. Movement data associated with deploying forces. e. Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces. f. Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources. Also called TPFDD. (JP 1-02)

total asset visibility. The capability to provide users with timely and accurate information on the location, movement, status, and identity of units, personnel, equipment, materiel, and supplies. It also includes the capability to act upon that information to improve overall performance of the Department of Defense's logistic practices. Also called TAV. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

transportation component command. The three component commands of USTRANSCOM: Air Force Air Mobility Command; Navy Military Sealift Command; and Army Military Traffic Management Command. Each transportation component command remains a major command of its parent Service and continues to organize, train, and equip its forces as specified by law. Each transportation component command also continues to perform Service-unique missions. Also called TCC. (JP 1-02)

transportation feasibility. Operation plans and operation plans in concept format are considered transportation feasible when the capability to move forces, equipment, and supplies exists from the point of origin to the

final destination according to the plan. Transportation feasibility determination will require concurrent analysis and assessment of available strategic and theater lift assets, transportation infrastructure, and competing demands and restrictions. a. The supported commander of a combatant command (CINC) will analyze deployment, joint reception, staging, onward movement, and integration (JRSOI), and theater distribution of forces, equipment, and supplies to final destination. b. Supporting CINCs will provide an assessment on movement of forces from point of origin to aerial port of embarkation and/or seaport of embarkation. c. The Commander in Chief, United States Transportation Command will assess the strategic leg of the time-phased force and deployment data for transportation feasibility, indicating to the Chairman of the Joint Chiefs of Staff and supported CINC that movements arrive at the port of debarkation consistent with the supported CINC's assessment of JRSOI and theater distribution. d. Following analysis of all inputs, the supported CINC is responsible for declaring a plan end-to-end executable. (JP 1-02)

unified command. A command with a broad continuing mission under a single commander and composed of significant assigned components of two or more Military Departments, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Also called unified combatant command. (JP 1-02)

unit movement control center. A temporary organization activated by major subordinate commands and subordinate units during deployment to control and manage marshalling and movement. Also called UMCC. (This term and its definition are approved for inclusion in the next edition of JP 1-02.)

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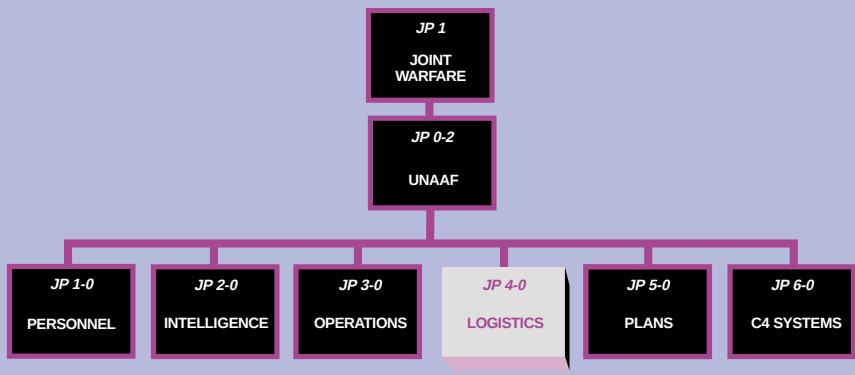
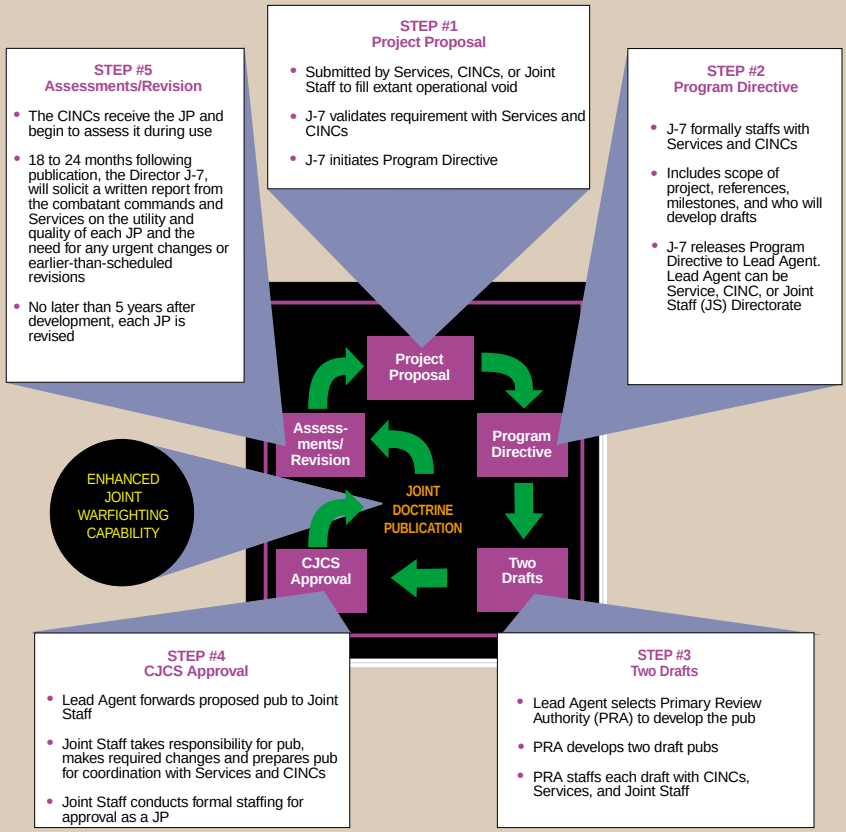


All joint doctrine and tactics, techniques, and procedures are organized into a comprehensive hierarchy as shown in the chart above. **Joint Publication (JP) 4-01.8** is in the **Logistics** series of joint doctrine publications. The diagram below illustrates an overview of the development process:

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