

CHAPTER 5 PLANNING

MPF planning is unique in that an MPF operation depends on extensive support from the AMC of USTRANSCOM. Deployment planning requires the use of the JOPES, which also supports contingency and CAP.

Planning references include the following:

- JP 5-0, *Doctrine for Planning Joint Operations*.
- Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3122.01, JOPES Volume I, *Planning Policies and Procedures*.
- CJCSM 3122.03A, JOPES Volume II, *Planning Formats and Guidance*.
- CJCSM 3122.02B, JOPES Volume III, *Crisis Action Time-Phased Force and Deployment Data Development and Deployment Execution*.
- Naval Doctrine Publication (NDP) 5, *Naval Planning*.

- Naval Warfare Publication (NWP) 5-01, *Naval Operational Planning*.
- Marine Corps Doctrinal Publication 5, *Planning*.

Concurrent and Continuous Planning

While the thrust of MPF JOPES-related planning concerns deployment, planners must understand that quality deployment plans are the result of detailed employment, arrival and assembly, reconstitution, redeployment, and logistic plans. MPF commanders must plan concurrently for the five phases of MPF operations. (Fig. 5-1 illustrates the many planning and execution actions involved across the continuum of an MPF operation. App. D through M are checklists to assist the commander and his staff in planning and preparing MPF operations.)

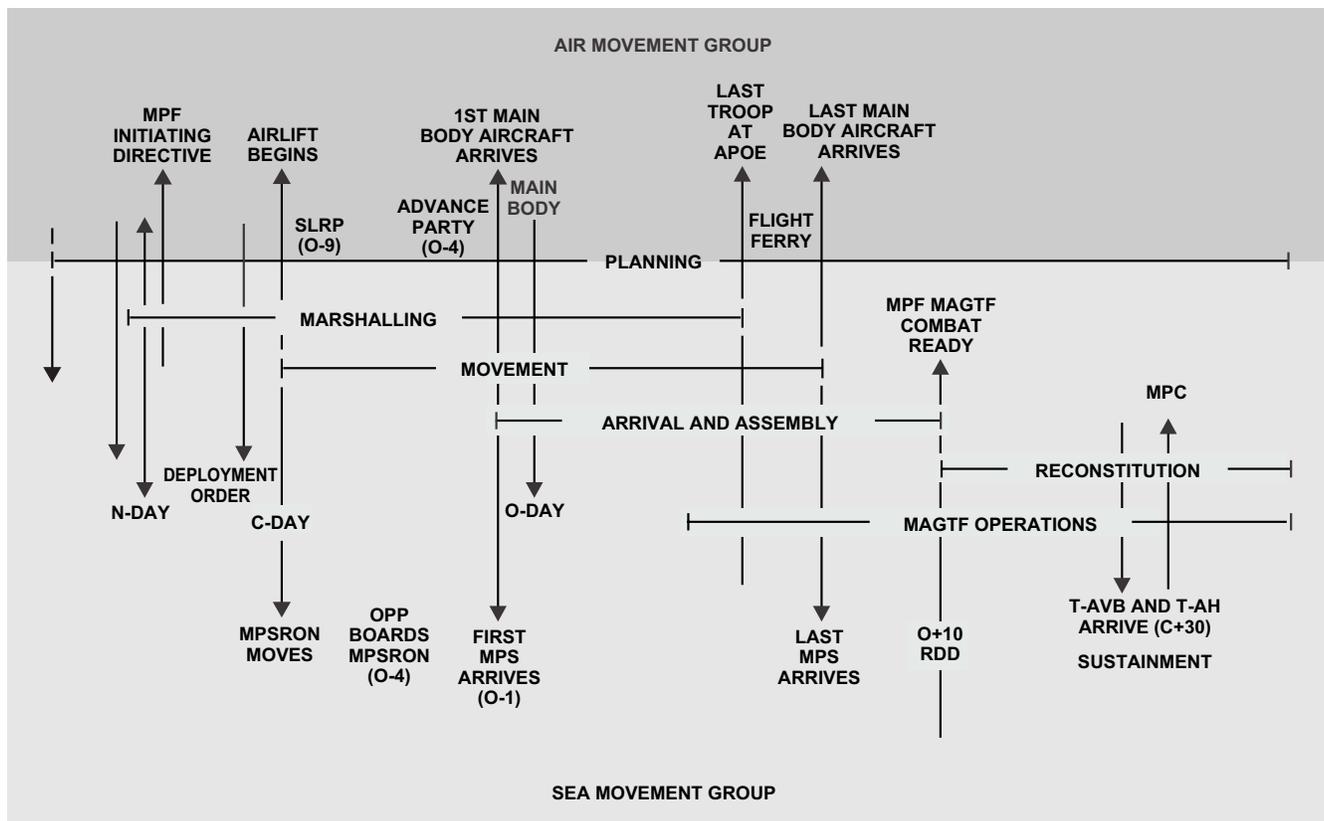


Figure 5-1. Phases of MPF Operations.

Contingency Planning

A CONPLAN is a combatant commanders estimate of how to deploy and employ forces for a hypothetical operation. CONPLANS are the basis for execution planning as crises develop.

Each combatant commander uses JOPES procedures to develop CONPLANS in accordance with tasks and priorities established in the JSCP.

Service participation in JOPES processes ensures Service requirements for common-user strategic mobility and theater logistics support assets are identified. Initial Service deployment data is based on force requirements developed during deliberate planning or the COA development phase of time-sensitive planning. Movement requirements are registered in the TPFDD. This data is the basis for forming actual ship and strategic airlift loading plans in execution planning.

All Service components develop plans to support a combatant commander's CONPLAN. The two categories for these plans are plans for operations in a specific geographic region (OPLAN) or general deployment plans regardless of mission or objective area (CONPLAN). MPF capabilities are included in most of these deliberate plans.

In a specific geographic region, commanders must provide coordination and control over the MPF FIE, MPSRON, logistics pipeline, and, if required, follow-up shipping and T-AVB. Proper time-phasing for the movement of forces is essential to avoid throughput congestion at available ports, beaches, and airfields. Specific area-oriented CONPLANS permit collecting detailed information regarding the objective area, airfields, ports, beaches, and facilities useful for MPF deployment. Each MARFOR and MEF should be able to identify their warfighting materiel and equipment priorities for each OPLAN or CONPLAN, and translate these priorities into embarkation requirements for the MMC per Marine Corps Bulletin (MCBul) 3501/Navy/Marine Corps

Departmental Publication (NAVMC) 2907, *MPF Prepositioning Objective (PO)*. The MAGTF employment mission ultimately dictates what to deploy and how to phase it into the AO.

Developing TPFDD

CJCSM 3122.03A, JOPES Volume II, contains the general formats and content requirements of OPLANS and CONPLANS. The MAGTF commander develops a TPFDD per JOPES Volume III that reflects MAGTF movement requirements.

The CMPF provides a TPFDD for the Navy FIE to the appropriate fleet commander. The MAGTF commander integrates the CMPF TPFDD with the MAGTF TPFDD to ensure coordinated arrival and assembly operations. Notional TPFDDs are based on notional delivery time lines. Notional destinations are included pending execution planning. Execution planning completes the process through updates of the notional TPFDD using standard JOPES procedures. The updated TPFDD then is a means to register the MPF overland, airlift (to include FIE), and follow-up shipping requirements with the Commander, USTRANSCOM. The updated TPFDD also provides the MPF's task organization to military commanders at all levels.

Planning requires the participation of the primary MPF subordinate commanders. Based on the MAGTF commander's requirement for establishing operational capabilities in the objective area, the various element commanders recommend TPFDD updates during deliberate and CAP. Build-up of CSS (including NSE) and C2 must precede the introduction of combat elements to conduct the offload. MPE/S should be issued before the MAGTF prepares for subsequent operations ashore.

A deployment plan is developed as a flexible, easily modified plan that introduces the MPF into the

AAA. The completed plan is incorporated into an OPOD during execution planning. Execution planning features reverse planning based on how the MAGTF will be employed. A specific mission and the force required to achieve objectives may require modifications to the TPFDD. Those modifications and the available port, beach, airfield facilities in the AAA, will, in turn, influence the deployment and arrival and assembly plans.

Assessment of Prospective AAAs

Combatant commanders—with Service commanders providing forces—should develop information on the following for prospective AAAs:

- Port, beach, and airfield facilities.
- Availability of hardstand and warehousing for assembly, staging and storage areas.
- Water, power, and local communications.
- Prospective HN support.

This is a long-term collection effort with continuous file maintenance requirements.

Refinement of Load Plans

Load plans must be periodically assessed by MEF/MEB commanders with results provided to the coordinating authorities. Adjusting load plans and TPFDDs will change as new equipment is introduced. Adjustments can be made during MMCs or following MPF exercises, and should principally be based on the MEF/MPF MAGTF commander’s warfighting priorities.

Plan Transition

Once a CONPLAN is prepared and approved, it is the basis for developing real-world execution plans as assessment of a situation occurs. Intelligence planning and collection efforts focus on priority intelligence requirements (PIRs) to verify or refute assumptions. Major changes in a situation require review of the mission and reexamination of the

commander’s concepts of organization, employment, and deployment. As appropriate, the plan is revised or worst case, dismissed and a new planning sequence initiated.

Execution Planning

Execution planning prepares for the commitment of forces. At the national and combatant command levels, this includes CAP procedures established in JOPES. At theater and task force levels, it includes preparing for deployment and initial employment. Execution planning provides the transition from peacetime posture to the conduct of military operations. Time available for execution planning is generally very compressed, and may require abbreviation of steps and procedures throughout the planning process. Availability of current CONPLANS and unit SOPs is essential. A supported combatant commander or designated representative will make and promulgate basic decisions to begin the planning process (see next para. and fig. 5-2).

Basic Decisions

Basic Decision	MAGTF Commander	CMPF
Mission	P	S
Command Relationships	C	C
Concept of MAGTF Operations Ashore	P	
Concept of Arrival and Assembly Operations	P	S
Concept of Deployment	P	S
Special Considerations and Control Measures	C	C
Force Protection	C	C
C = Co-Equal P = Primary S = Secondary		

Figure 5-2. Sample Basic Decisions Matrix for MPF Operations.

Refinement of Basic Decisions

Operational considerations such as force protection in the AOs, throughput constraints at the arrival airfield or port/beach area, and possible strategic lift shortfalls may require refinement and modification of basic decisions. Ultimate responsibility and authority to modify basic decisions rests with the supported combatant commander or establishing authority.

Mission

In initiating an MPF operation, the establishing authority determines the MAGTF mission and FH mission if employed. The mission ashore is the basis for all further planning of the MPF operation as a whole. The MPF mission focuses on the expeditious deployment and assembly of forces to meet the requirements of the MAGTF commander and FH commander. The initiating directive usually delineates the following:

- General AO.
- Required tasks of the MAGTF.
- General time period for the deployment.
- Time constraints on deployment operations; e.g., availability of aircraft.
- Required time to achieve operational capability.
- Estimated duration of tactical operations.

Command Relationships

Command relationships should be established that minimize disruption of C2 of MPF operations during the transition from planning through deployment and execution phases. Supported and supporting combatant commanders normally include command relationships in their operations directives.

Concept of MAGTF Operations Ashore

Derived from the MAGTF mission, the concept of MAGTF operations ashore determines the

conduct of the MPF operation. When the MAGTF commander receives a mission, he coordinates with the CMPF to conduct a mission analysis and establish a basic CONOPS. The concept of MAGTF operations ashore provides the following:

- Objectives.
- The scheme of maneuver ashore.
- The general fire support plan.
- The concept for logistics support.
- The concept for aviation operations.
- Warfighting priorities.
- The F/L and preferred arrival sequence.

Concept of Arrival and Assembly Operations

This concept consists of the basic sequence for arrival and assembly, selecting offload sites, procedures for C2, and a proposal for offload of supplies and equipment including bulk liquids. Developing this concept is dictated by the mission, geography, topography, available facilities, and the concept of MAGTF operations ashore. The MAGTF commander develops the arrival and assembly plan in coordination with the CMPF and submits it to the establishing authority for approval. The AAA is established in the initiating directive and must be supportable by CMPF and Commander, USTRANSCOM. AAA components follow.

Offload Location

The CMPF, in coordination with the MAGTF commander, determines beaches and ports for offload. Primary consideration of the CMPF in selecting beaches and ports will be the MAGTF commander's CONOPS ashore.

Arrival Airfield

The establishing authority, based on the recommendation of the MAGTF commander, selects the arrival airfield. This choice will be approved by USTRANSCOM based on supportability. Identifying the arrival airfield must be considered when selecting ports and beaches.

MAGTF Element UAAs

UAAs are identified by the MAGTF commander to support the rapid assembly of forces. It is here that MAGTF elements receive and prepare their designated MPE/S for the employment mission.

Anchorage

Explosive safety quantity distance (ESQD) arcs; anchorage depth; bottom type (sand, rocky); currents; and distance to shore must be considered when anchorages for MPSs are assigned.

Concept of Deployment

After the basic plans for operations and arrival and assembly are formulated, a deployment plan is developed that includes the following:

- Marshalling concept.
- Overland movement concept.
- Air movement.
- Sea movement.
- FF.
- SLRP and OPP considerations.

Special Considerations and Control Measures

Special considerations and control measures are required for expeditious arrival and assembly of deploying forces. They consist of assigning AOs ashore and designating coordinating authorities, main supply routes (MSRs) or intermediate staging areas. The MAGTF commander normally determines these measures once basic decisions are made to establish the AAA. The AAA must be approved by the establishing authority with the HN. The AAA is administrative in nature and does not denote command of a geographic land area, although it may be inside an AO or a joint operations area (JOA). Within the AAA, the MAGTF commander is responsible for the following:

- Prioritizing and using airfields, port and beach facilities, and transportation networks.
- Air traffic control (ATC).
- Logistics/HN activities.

Special considerations and control measures also include establishing responsibilities for emergency defense of the MPF during movement and within the AAA and ROE. Both are ultimately the responsibility of the combatant commander—in coordination with the joint/HN team—who is responsible for the AO. Security measures range from establishing various security or exclusion zones under international law—as in the case of an independent MPF operation—to a more traditional AO for an augmentation operation. These result in clearly defined mission responsibilities for the following:

- Air space control.
- Area air defense.
- Ground security.
- Sea security areas.
- Fire support coordination.

Force Protection

Force protection responsibilities vary according to the phases of an operation. They are passed down from the establishing authority to the MPF MAGTF/CMFPF as applicable and often shared by the HN in the AAA (see ch. 10 for detailed information). Initial planning considerations follow:

- Ships en route and in the AAA area.
- En route support bases/facilities.
- Arrival airfields.
- MAGTF UAAs.
- Port and beach facilities.

CAP Phases

CJCSM 3122.01, enclosure E, shows the detailed responsibilities and actions that take place across the six phases of the CAP process. The phases follow:

- Phase I, Situation Development.
- Phase II, Crisis Assessment.
- Phase III, COA Development.

- Phase IV, COA Selection.
- Phase V, Execution Planning.
- Phase VI, Execution.

The following planning responsibilities and actions, many unique to MPF operations, begin in Phase III, and range across all levels of command from the CJCS through MPF elements. This “warning phase” is the period of time between Phases I and II and a Presidential/Sec-Def decision to begin Phase V for military action. It typically begins with promulgation of a CJCS warning order that sets a deadline for submitting COAs by the supported combatant commander and Commander, USTRANSCOM.

Combatant Commander, Establishing Authority, and Service Component Commanders Planning

The CJCS warning order generates initial appraisals of military options and capabilities. The supported combatant commander provides supplementary details for the MAGTF’s mission refinement and ID of alternative COAs, either through modification of an existing CONPLAN or development of new options. Service components and other supporting commands are tasked to provide advice—focusing on alternative COAs, constraints and restraints, and ID of major combat forces and transportation requirements. Numbered fleet commanders report capabilities and limitations to combatant commanders and assist in development of Navy COAs. Based on the available information, the supported combatant commander constructs a commander’s estimate to submit to the CJCS. USTRANSCOM examines preliminary movement data, assesses requirements, and prepares preliminary force closure estimates. As a separate action, a combatant commander in the MPSRON OPCON chain of command may direct the NCC to commence the transit of that MPSRON toward the objective area. Specific actions follow:

- Review and update the F/L. Deploying forces must be identified as early as possible during Phase III. Throughout Phase III, Service components review and update the F/L. Major influencing factors include the current notional force lists, the extent to which operational requirements of the potential mission can be identified, and the availability of sufficient NSE assets to support the operation. Provisions should be made for liaison between the supported and supporting combatant commander to ascertain the current status of MPF forces; e.g., MPSs may not be available because of their maintenance cycles or an exercise.
- Reposition the MPSRON. Repositioning of the MPSRON may be directed by CJCS between Phases III and IV. Early repositioning of the MPSRON will reduce force closure times. Under normal operating conditions, MPSRONs can get underway within 24 hours of notification.
- Mobilize Selected Reserves. Certain USMC, USN, and USCG organizations that support the MPF require mobilization of reserve personnel for offload operations. *It will then be necessary to request activation of selected units as early as upon receipt of the warning order.* Specific reserve requirements will vary with the type of offload, offload time requirements, and other ongoing commitments. Other reserve requirements must be addressed by the cognizant Service. For further information see JP 4-05, *Joint Doctrine for Mobilization Planning and Joint Tactics, Techniques, and Procedures (JTTP) for Manpower Mobilization and Demobilization Operations: Reserve Component Callup.*
- Activate T-AVBs. Although T-AVBs are not part of the MPF, they can be employed to support MPF operations. Their use should be considered during Phases III and IV due to their reduced operational status (ROS) and the long lines of communications (LOCs) from SPOEs to seaports of debarkation (SPODs).

Liaison with Commander, USTRANSCOM and Supporting Agencies

The supported combatant commander and supporting commander should establish early liaison with Commander, USTRANSCOM and other supporting agencies involved in force deployment. This liaison is necessary to ensure that relevant and timely information exchange occurs. A refined TPFDD must be made available to Commander, USTRANSCOM along with coordination to arrange to move forces.

Execution Planning

Phase V begins when a CJCS alert or planning order is issued. Although preliminary planning begins during Phase III and deliberate planning is an ongoing process under JOPES, issuing a CJCS alert order with the initiating directive starts formal execution planning.

Upon receipt of the initiating directive, the CMPF and MAGTF commander report to the establishing authority. Together, they conduct formal coordinated planning based on a detailed analysis of the MAGTF's and/or FH's mission and CONOPS. In augmentation operations, responsibility for developing the OPORD depends on the command relationship of the MPF to the augmented force. The establishing authority prepares an OPORD incorporating this analysis. The MAGTF commander's planning will include as a minimum: CONOPS, concept for deployment, concept for arrival and assembly, and concept for logistics support.

The CONOPS states the intent for execution of the mission and clearly defines the type of MPF operation (augmentation or independent). The MAGTF commander's CONOPS will determine the warfighting priorities (see fig. 5-3), which in turn determine the offload priorities that will be promulgated in the arrival and assembly plan (see fig. 5-4).

The overall concept for deployment states the concept for deployment of the MAGTF and NSE

- FW attack.
- Heavy armor (tanks, amphibious assault vehicles [AAVs]).
- Combat engineers.
- Armored reconnaissance (light armored vehicles [LAVs]).
- CSSE.

Figure 5-3. Sample Warfighting Priorities.

FW	Tanks	LAV	MCM
Refueler	Refueler	Refueler	
Refueler			
AGSE	M1A1	LAV	Dozer
Bombs	120mm	25mm	Mines
Fuzes	Smoke	7.62mm	ACE
25mm	M2 MG	M240 MG	M2 MG
Runway	7T Trucks	7T Trucks	Dump Trucks
Sweeper			7T Trucks

Figure 5-4. Sample Offload Priorities.

to the theater. Content includes desired arrival and closure dates and specifics on early repositioning of the MPSRON, with or without movement of the OPP, SLRP, and advance parties.

The concept for arrival and assembly is the general concept for the offload pier side, instream or a combination of the two. Intentions for fuel and water discharge must also be promulgated.

The concept for logistics support includes a sustainment pipeline and an AO/theater support system. Specific support requirements for the MAGTF ACE must be mentioned.

Commander, USTRANSCOM coordinates and monitors MPF deployment activities through JOPES, which also enables CJCS and the supported combatant commanders and supporting

commanders to monitor the MPF deployment status. To effectively coordinate its responsibilities, USTRANSCOM (after coordination with supporting and supported combatant commanders) will establish and promulgate a deadline to submit MPF movement requirements in the TPFDD.

Execution

Phase VI begins with the issuance of a CJCS execute order. On receipt of this order, the supported combatant commander coordinates with supporting commanders and agencies regarding final preparations for deployment of the MPF. Strategic deployment of the MPF commences while concurrent planning continues.

OPORDs are promulgated as directed by the establishing authority. Supporting commanders and agencies will publish OPORDs as required. MPF elements will publish OPORDs that reflect the current mission. These OPORDs usually reflect reliance on use of previously prepared unit SOPs.

MPF Plans Developmental Hierarchy

There are seven primary plans associated with the five phases of an MPF operation:

- Employment plan.
- Arrival and assembly plan.
- Deployment plan.
- MPE/S distribution plan.
- Sustainment plan.
- Reconstitution plan.
- Redeployment plan.

MPF OPLANs are developed in *reverse order* to the sequence that the MPF operation is conducted. The MAGTF employment plan drives the arrival and assembly plan, which drives the deployment plan, and so on.

Planning and deployment sequencing for an MPF operation requires an understanding of the general time lines involved as an MPF opera-

tion unfolds. (Fig. 5-5 is a sample exercise time line template; fig. 5-6 is a sample reserve exercise time line in C-days.)

The MAGTF's Employment Plan

The key element in developing the MAGTF's employment plan is the MAGTF mission as assigned by the establishing authority. Beyond the mission, understanding the commander's intent and most importantly his priorities and time line for establishing MAGTF capabilities, is critical to the development of the arrival and assembly plan and subsets of it like the MPF off-load plan or the movement plan and the AAA overlay. The MAGTF commander must be able to articulate what combat capabilities must be ready and when. Information for planners working AAA operations must include the following:

- The mission.
- Commander's intent.
- Priorities of MAGTF capabilities; i.e., in a foreign humanitarian assistance or support to domestic authorities mission, priority of initial asset distribution may go to the initial security forces, the CSSE, then to other MAGTF elements.
- A general understanding of the MAGTF commander's AO to include depth and breadth.

Arrival and Assembly Plan

This plan delineates the MAGTF commander's concept for arrival and assembly, sets forth the task organization, and assigns tasks to subordinate elements for beach, port, airfield, MPE/S issue, and initial CSS operations. The plan is coordinated with the CMPF and submitted by the MAGTF commander to the establishing authority for approval. The decision to deploy an MPF is based on certain conditions existing in the AAA.

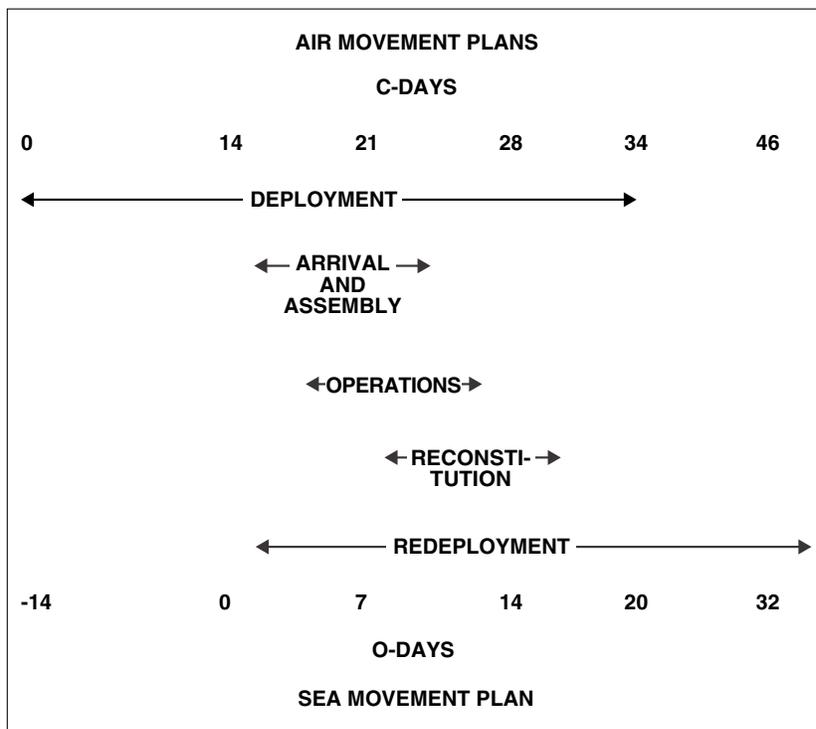


Figure 5-5. Sample Exercise Time Line Template.

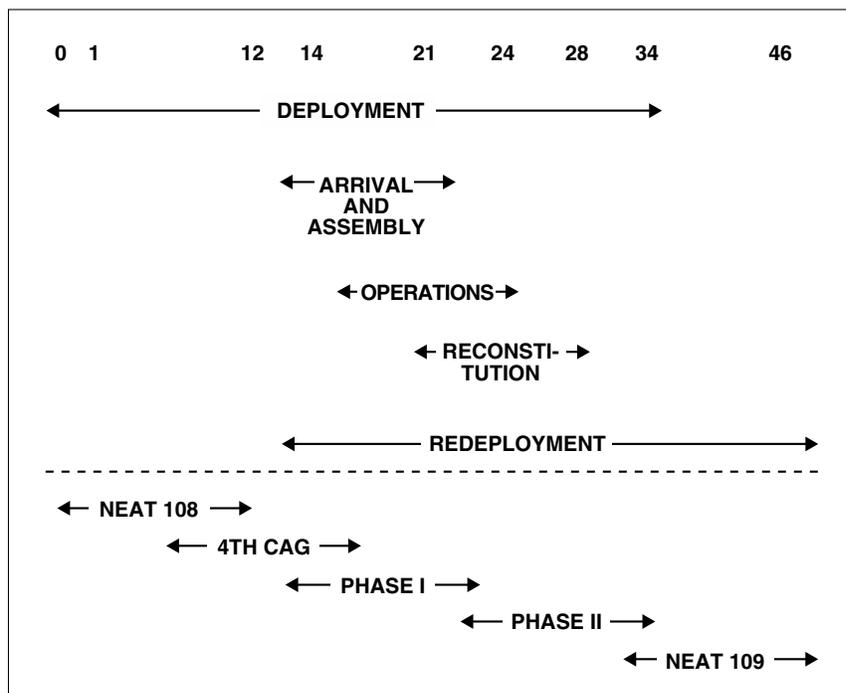


Figure 5-6. Sample Reserve Exercise Time Line in C-Days.

One or more airfields exists within the AAA with the capability to do the following:

- Recover and launch AMC strategic aircraft.
- Recover 20-25 AMC transport and/or CRAF aircraft during 24-hour operations.
- Offload aircraft safely using available apron space.
- Provide an overflow area for passengers and cargo to include a helicopter buildup area.
- Provide a minimum ATC capability.
- Operate FW and RW tactical aircraft.

A usable port exists within the AAA with the capability to do the following:

- Berth ships with drafts up to 37 feet (ft) to offload pier side.
- Accommodate the ship's stern ramp and vehicle weight on the pier (see app. N for ship data).
- Provide a surge offload capability to stage vehicles, perform initial corrective maintenance, and to stage containers (preferably hard stand).
- Provide for the offload of fuel, water, ammunition, and possible storage of the same.

If no usable port is available, then a suitable beach must exist within the AAA with the following capabilities:

- Offload MPE/S with access to improved road networks.
- Provide sufficient staging/maintenance areas suitable for the offload of MPE/S.
- Discharge fuel, water, bulk liquids, and possible storage of the same.

Transportation, all types of petroleum, oils, and lubricants (POL), potable water, and security may be provided by HNS agencies or through specific early self-support arrangements that should be

incorporated into MPF deployment planning to ensure such commodities are available.

Enclosures

There is no set format for the arrival and assembly plan. An LOI or the JOPES format is acceptable. The arrival and assembly plan encompasses the early establishment of sufficient unloading and throughput forces (LFSP and NSE). These forces are in the AAA through the movement to the TAAs. The arrival and assembly plan may include the following enclosures:

- AAA Overlay. MPF terrain management, associated control measures, and force protection units must be graphically represented to provide a comprehensive display of units and activities. Overlays (AAA, beach, port, and airfield as seen in figs. 5-7 thru 5-10) are essential for integrating MPF activities with force protection responsibilities. Accordingly, terrain management is an essential function of MPF staff planning.

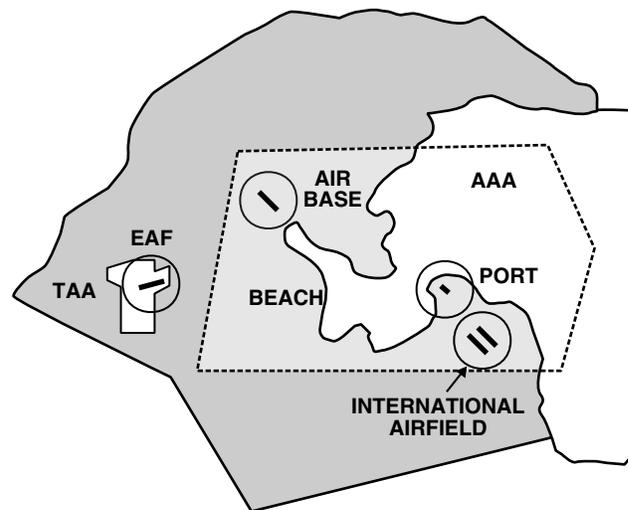


Figure 5-7. AAA Overlay.

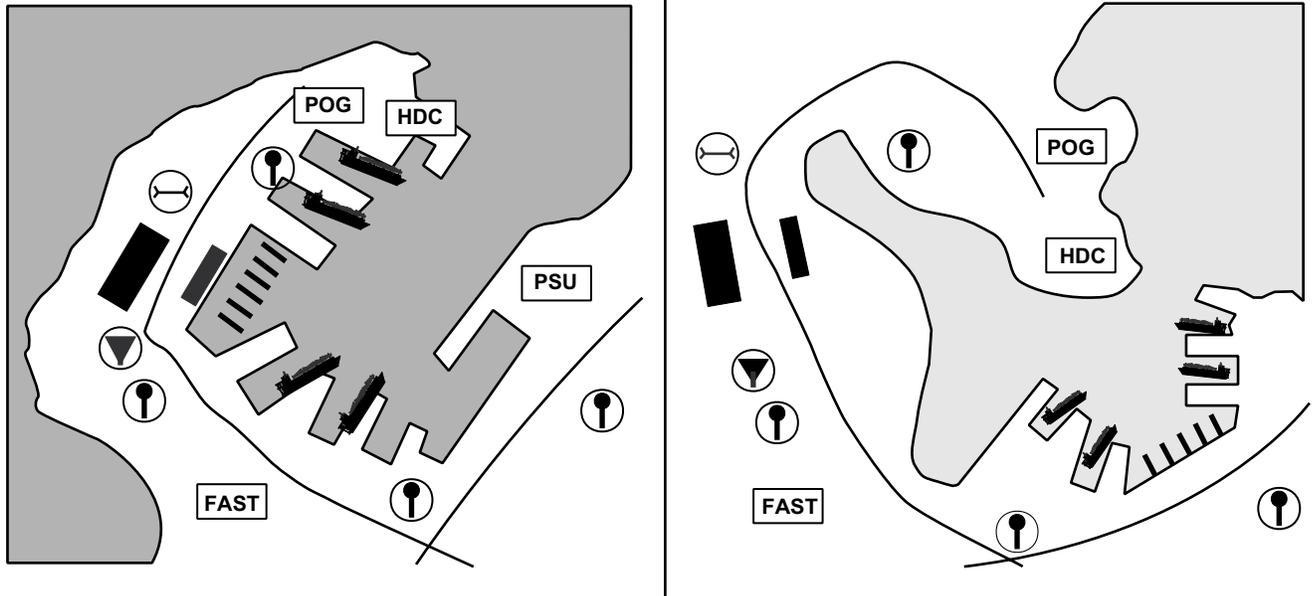


Figure 5-8. Port Overlay.

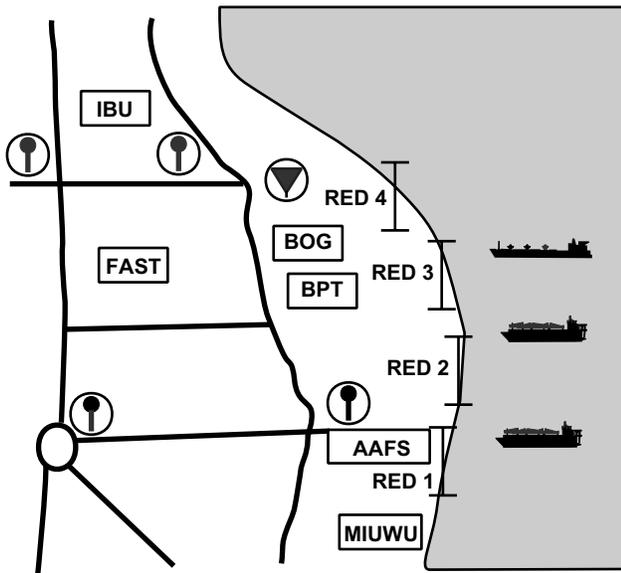


Figure 5-9. Beach Overlay.

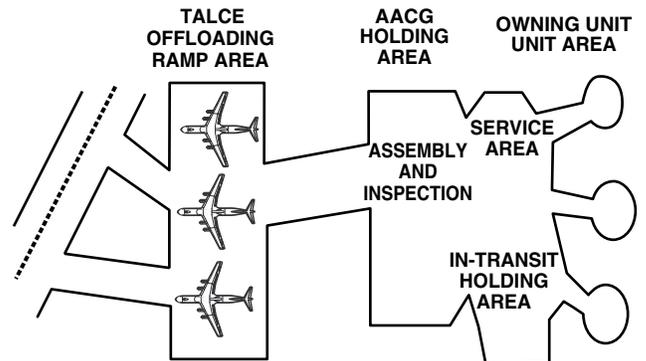


Figure 5-10. Airfield Overlay.

Legend for figures 5-8 and 5-9:

-  Maintenance
-  Fuel
-  Military Police Traffic Control

- Arrival schedule for the FIE.
- Throughput plan. The use of a throughput matrix by the major and subordinate elements provides visibility for MPE/S (see fig. 5-11).
- Preliminary T/E/ready for issue (RFI) lists.
- Communications plan.
- Reports. The arrival and assembly plan establishes the following:
 - ♦ Time-phased distribution of materials handling equipment (MHE).
 - ♦ Mobile electric power (MEP).
 - ♦ Stockage levels.
 - ♦ Distribution means (unit or point) for consumables.
 - ♦ Provisions for health services, maintenance, engineer, and military police support.

The plan composition and reports format are normally determined by the MAGTF commander in coordination with the CMPF.

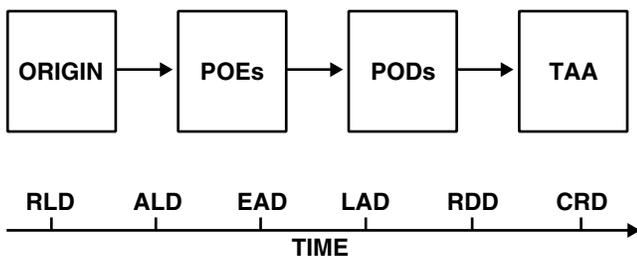


Figure 5-11. Sample Throughput Matrix.

Offload Planning

Offload of an MPSRON or a portion of an MPSRON can be conducted pierside, instream or by a combination of both. The establishing authority will determine the offload method based on recommendations by the CMPF and MAGTF commander.

A pier side offload is the quickest and most efficient method. During a pier side offload, all vehicles are driven off the ship via the stern ramp and containers are lifted using ships' cranes and/or

HN cranes. An important consideration for pier side offload is the tidal variance. Ports with drastic changes in water depth between high and low tide may limit available offload time due to the angle the stern ramp rests against the pier; e.g., some vehicles cannot negotiate the stern ramp if the angle is too steep.

MPS have the capability to execute an instream offload using organic cranes and embarked lighterage. Prime factors that affect any decision on instream offload methods are environmental factors and the sea state before the offload starts. The two methods of instream offload are lift-on/lift-off (LO/LO) and roll-on/roll-off (RO/RO) discharge facility (RRDF).

LO/LO

LO/LO operations are slow and cumbersome. All embarked equipment and containers are lifted off via a ship's crane from ship to lighterage and moved to the beach landing sites.

RRDF

The RRDF is generally the preferred instream offload method. It is basically a floating pier made up of embarked lighterage. The NSE constructs the RRDF. Lighterage to construct an RRDF is two powered causeway sections, six nonpowered intermediate causeway sections, and two warping tugs. After the RRDF is assembled, a single warping tug is required to keep it on station. The six nonpowered intermediate causeway sections and one warping tug are located on each maritime prepositioning force (enchanced) (MPF[E]) ship.

Note: The MPF(E) ship of MPSRON 2 does not have a warping tug.

Once the RRDF is constructed, the ship lowers its stern ramp onto the RRDF. Rolling stock is driven down the ramp, across the RRDF onto a barge ferry, and then transported to the beach-landing site. This requires a significant portion of the embarked lighterage. Due to spreadloading of

lighterage required for the RRDF, the entire MPSRON is required to assemble the platform without degrading STS capability.

This method of offloading rolling stock onto barge ferries is significantly faster than offloading via the LO/LO method. The three MPSRONs have different RRDF ramp certifications:

- American Overseas Marine (AMSEA): 88,000 pounds (lbs).
- Maersk: 29,000 lbs.
- Waterman: 135,520 lbs.
- United States Ship (USS) Martin: 400 measurement ton (MT).
- USS Stockham: 160 long ton, side ramp 71.43 long ton.
- USS Wheat: 147 long ton.

Due to the unique design of the Maersk class ship, all principal end items (PEIs) and containers loaded on the weather deck must be offloaded before unloading the containers in the decks below. In the AMSEA and Waterman classes, vehicles and containers can be offloaded at the same time.

Once the SLRP has evaluated the AAA, a decision on offload method will be made and the time lines adjusted accordingly. The time lines of the MAGTF's ability to be combat-ready will be affected by the offload method, the limited capability of the MPSRON to move containers, and the time required to marry ammunition with weapons systems.

Bulk Liquids

Each MPSRON carries equipment and supplies in containers that enable fuel and water facilities to be established ashore in a short amount of time. Bulk liquids can be transferred from ship to shore via the buoyant hose line system. The NSE, operating under favorable sea state and weather conditions, can set up a 15,000 ft hose in 10 hours. If the beach gradient requires a

longer hose line, MAGTF (CSSE) pumps may be required to establish intermediate pumping stations. Maximum effective pumping distance is 10,000 ft for each product.

Transition to Employment

Upon the MAGTF commander's determination that the MAGTF is ready to undertake the assigned mission, the MAGTF commander, in coordination with CMPF, will request termination of the MPF operation. A smooth transition from deployment through arrival and assembly and to employment requires detailed planning and coordination, focusing on MAGTF readiness. MAGTF plans for transition to employment should include the following:

- Clear delineation of responsibility for force protection and local security.
- Notification to higher headquarters that all units/detachment—as they become operationally ready—are not required to assist further in arrival and assembly tasks.
- Use of TAAs for subsequent or concurrent tactical operations.
- Plans for response to hostile action during arrival and assembly.
- Allocating staff planning efforts among arrival and assembly, deployment activities, and activities in preparing for subsequent employment.

Disposition of MPF Components

Upon termination of the MPF operation, various MPF components are assigned new duties or released to their parent commands or other agencies. Timing and disposition of the MPF must be planned in as much detail as possible.

MAGTF

- Assigned mission and expected duration of employment.

- Expected command relationship changes; e.g., independent JTF operations or augmenting another MAGTF.
- Support requirements.
- Recommend, in coordination with CMPF, disposition of MPF shipping.

CMPF

- Follow-on or other assigned missions as directed.
- Recommend, in coordination with the MAGTF commander, disposition of MPF shipping.

MPSRON

- Status of offload; e.g., fuel and water ashore vis-a-vis HN support capability, MAGTF storage capacity, MAGTF usage rates.
- Shortfalls in storage areas/facilities ashore may necessitate use of one or more MPS as a station/warehouse facility until sufficient facilities are developed ashore. Shortfalls may require MPS to function as mobile CSS facilities for inshore operations positioning and repositioning as necessary along the coast parallel to the MAGTF movements. (This is an example of a withhold shipping requirement.)
- Upon release of MPS from MPF operations and with the concurrence of the supported combatant commander, MPS will shift OPCON to Commander, USTRANSCOM for use as common user sealift.
- The level of force protection that can be provided will be a key consideration as to the amount of time the MPSRON remains in the offload area.
- Lighterage may be needed for offload of assault follow-on echelon follow-up shipping after MPSRON departure. Lighterage operators are part of the NSE. Other considerations for retaining lighterage include fueling, repair and maintenance, sheltering or harbor facilities, and maintenance of instream water and fuel hoses deployed.

NSE

The NSE may remain in place if backload, reconstitution, and redeployment are imminent. For anticipated long-term MAGTF employment in the vicinity of the AAA, the NSE or designated elements may remain as lead elements of semipermanent or long-term naval support. The port and/or beach would remain open for resupply, reinforcing or joint logistics over-the-shore operations. The NSE will perform these tasks until the operation terminates or is relieved by Army terminal units.

FH

If needed ashore, the FH will be offloaded, staged, and signed over to the NCC for transport to the assembly site.

Deployment Plan

The deployment plan prescribes the MAGTF commander's concept for deployment. It organizes the movement groups and assigns tasks and responsibilities. It entails force deployment planning and execution (FDP&E), marshalling priorities, the air and sea movement plans, and identifying the FIE.

FDP&E provides definition of available and required movement dates in JOPES. FDP&E examines deployment options to identify the assets required to move planned forces to the required destinations via airlift and sealift. FDP&E uses backward (reverse) planning.

FDP&E is based on the commander's requirement for the force to arrive as reflected in JOPES/TPFDD. It begins with the required delivery date (RDD) and requires the war planner to determine transit times and possible en route delays during each movement leg.

FDP&E works backwards from the RDD to determine movement dates (time line) from the

origin to the POE, continuing through the POD to the ultimate destination. FDP&E is highly interactive with JOPES and requires constant plan coordination and TPFDD refinement.

Specific Planning Days and Deployment Dates

N-day

The unnamed day an active duty unit is notified for deployment or redeployment. (JP 1-02)

C-day

An unnamed day when a deployment operation commences or is to commence. (JP 1-02)

O-day

An unnamed day when the MPF offload commences.

Ready-to-Load-Date (RLD)

The date when a unit will be ready to move from the origin; i.e., mobilization station. (JP 1-02)

Available-to-Load-Date (ALD)

The date specified for each unit in a TPFDD indicating when that unit will be ready to load at the POE. (JP 1-02)

Earliest Arrival Date (EAD)

A day relative to C-day that is specified by a planner as the earliest date when a unit, a resupply shipment, or replacement personnel can be accepted at a POD during a deployment. Used with the LAD it defines a delivery window for transportation planning. (JP 1-02)

Latest Arrival Date (LAD)

A day relative to C-day that is specified by the supported combatant commander as the latest day when a unit, resupply shipment, or replacement personnel can arrive at the POD and support the concept of operations. Used with the EAD, it defines a delivery window for transportation planning. (JP 1-02)

RDD

The date that a force arrives at the destination and completes unloading. (JP 1-02)

Combatant Commander's Required Date (CRD)

The date a unit/force is ready to be employed.

Initial Planning

- Analyze the mission objectives of the force.
- Identify force requirements.
- Develop COAs.
- Analyze existing deployment plans/TPFDD.
- Analyze lift requirements.
- Prepare the MAGTF and CMPF for deployment.

Plan Development

- Refine and establish mission warfighting priorities and objectives.
- Develop a CONOPS.
- Refine the force and E/L.
- Refine the deployment plan/TPFDD.
- Provide a refined deployment plan/TPFDD to the supported combatant commander for a transportation feasibility estimator (TFE) and throughput analysis.
- Schedule the movement of MPF units.

Marshalling Plan

At a minimum, the marshalling plan must do the following:

- Designate marshalling areas.
- Identify transportation requirements and allocate transportation assets for movement to marshalling areas.
- List agencies responsible to control movement to marshalling areas and the APOE.
- Establish staging areas at departure airfields.
- List inspection areas and procedures for the flow of deploying personnel, equipment, and supplies through the marshalling areas.
- Prescribe procedures for assembling aircraft loads.
- Disseminate procedures for coordinating with other Services and external support agencies.

Air Movement Plan

Movement of MPF elements by air involves the strategic airlift of personnel, equipment, and helicopters, and the FF of the MAGTF's FW self-deploying aircraft. Air movement is planned by the MAGTF commander in coordination with the establishing authority, MPF element commanders, the MEF/MARFOR strategic mobility office, and AMC planners. A general air movement plan is developed that prescribes the organization and movement of units that is later refined with validated TPFDD information and compiled in the air movement sequence table (see fig. 5-12).

Unit	APOE	Aircraft	C-Day	O-Day
NEAT 108	Miami, FL	Commercial	C+0	O-14
SLRP	Cherry Point, NC	1 C-17	C+6	O-8
OPP	Cherry Point, NC	L-1011	C+10	O-4
TAAT	Jacksonville, FL	Commercial	C+10	O-4
NSE/NCW	Norfolk, VA	B-747	C+10	O-4
USMC Advance Party	Cherry Point, NC	C-17	C+10	O-4
FAST Platoon	Norfolk, VA	C-17	C+11	O-3
USMC FIE 1	Norfolk, VA	2 C-17s	C+12	O-2
USNR	Norfolk, VA	Commercial	C+12	O-2

Figure 5-12. Sample General Air Movement Plan.

The Air Movement Sequence Table

This table reflects MAGTF and Navy TPFDD movement priorities and group organization for deployment. It lists TPFDD unit line numbers (ULNs) based on estimated time of arrival in the AAA, nominally the LAD.

The air movement sequence table, coupled with the air movement requirements listed in the TPFDD, enables movement control agencies to track, identify, and account for deploying elements. Airlift

requirements documented in the TPFDD and AIS deployment databases are the basis for developing specific aircraft load plans once the exact aircraft allocation is known. The MAGTF commander uses JOPES procedures to update the TPFDD with planned aircraft loads for submission to higher, adjacent, and supporting commanders. To assist in updating the TPFDD, the MAGTF commander may use the following air planning information submitted by deploying elements:

- Amount of cargo and passengers to move.
- Availability of cargo and passengers at APOE.
- Distance to deploy the force.
- Diplomatic clearances. APOE/aerial port of debarkation (APOD)/en route support base capabilities.
- APOD/AAA air space security.
- Airflow C3.
- Deployment sequence.
- Aircraft loading factors.
- Airlift tempo and throughput coordination.
- EAD/LAD at the APOD. Normally, there is a 3 to 4 day difference between the EAD and LAD to facilitate Commander, USTRANSCOM and AMC scheduling and reduce service costs.
- Priority and use of airfields.
- ATC requirements.

To provide in-transit visibility (ITV) of capability, upon commencement of airlift, the MAGTF ALE, in coordination with the supporting MEF, will coordinate with the major subordinate commands providing forces to ensure actual cargo and passenger data for each aircraft mission is entered into the TPFDD.

Air Space Management

The supported combatant commander must coordinate early with the HN to establish appropriate air control measures. In an augmentation operation, standard expeditionary air control measures will apply. However, independent operations may require establishment of coordination methods to allow for unhindered air operations (carrier- or

land-based) in and around the AAA. Control zones; approach, holding, and arrival/departure patterns; checkpoints; and ordnance procedures will be established as necessary. Integration of air C2 procedures with the HN is necessary to ensure safety and security of all forces involved. The Marine air command and control system must interface with joint and multinational air C2 systems.

Arrival Airfield

The arrival airfield must meet the requirements set forth in chapter 7. If the arrival airfield and FW base of operations are separate airfields, no conflict will exist and the ACE aircraft may deploy to the base of operations prior to completion of the airlift. However, should one airfield serve both, and security or operational considerations require early employment of FW aircraft during FIE arrivals, the impact on throughput will be significant and probably adverse. The following must be considered when selecting the arrival airfield:

- HN airfield facilities may require expansion and/or duplication.
- Capacity of approaches and traffic pattern; e.g., ramp space; capacity of visual and instrument approach; and departure procedures for the airfield will affect throughput. To enhance airfield capability, expeditionary visual and instrument approach assets will embark early in the FIE.
- Base loading. Adequate space and facilities may not be available. Typically, the better a facility is the more likely its full use by HN organizations.

Additional Airfields

The desire to separate FW and RW operations and parking space limitations may indicate a need for an additional airfield to accept immediate deployment of helicopters. An additional airfield increases arrival airfield throughput, and reduces the problems associated with simultaneous operation of FW and RW aircraft.

Sea Movement Plan

Sea movement includes the MPSRON and other assigned ships (T-AVB and escorts). The numbered fleet commander prepares the sea movement plan that identifies those forces for replenishment and security purposes en route and in the AAA. The initiating directive will specify the command relationships and responsibilities for sea movement (see fig. 5-13).

Location	Activity	C-Day	O-Day
Crete	Underway	C+10	O-14
Suez Canal	Transit	C+1	O-13
Port Suez	Embark NEAT	C+2	O-12
Bab El Mandeb	Pick Up Escort	C+4	O-10
Masirah	Pick Up OPP	C+10	O-4
Hormuz	Pick Up Escort	C+11	O-3
Al Jubail	Arrive AAA	C+13	O-1

Figure 5-13. Sample Sea Movement Plan.

Ship movement is planned by the numbered fleet commander, in coordination with the establishing authority, MAGTF commander and the CMPF, to embark the OPP and ensure the coordinated arrival of the MPSRON in the objective area with associated airlifted forces. Ship movements are normally timed to arrive not earlier than 24 hours before the initial airlifted elements arrive. Normally, SLRP deployment is timed to arrive in the operating area 8 to 9 days before ship arrival.

FF Plan

This plan addresses the self-deployment of MAGTF aircraft. It specifies flight routes and schedules, assigns movement increment designations, and provides details for air search and rescue, en route support, aerial refueling, and divert airfields. The MAGTF commander develops this plan with his ACE commander. Direction for and approval of the plan is obtained

from the combatant commander via the establishing authority. Both the MARFOR and AMC may provide aerial refueling. The MAGTF must coordinate strategic refueling support with those organizations' planners.

The FF and airlift plans, while similar, have different requirements that must be coordinated by the supported and supporting combatant commanders. Movement of AMC aircraft and FW MAGTF elements must be coordinated to avoid saturation of staging bases, weather divert alternates, and ATC facilities. En route support bases must possess sufficient ATC, navigational aids (NAVAIDS), C2, billeting and messing, POL, maintenance, and service facilities. Overflight rights may impact on in-flight refueling and staging base requirements. Supporting and supported combatant commanders will provide flight route clearance and security for staging bases and flight routes within their AORs. The use of JOPES ensures coordination of the FF operations.

Deployment C2 Measures

Certain control measures must be decided early. Generally, these measures and their associated tasks and functions are grouped into those required for marshalling and movement.

Marshalling Control

- Marshalling areas.
- OPSEC.
- Inspections.
- Briefings.
- Ground movement to APOEs.
- Load procedures.
- Organization of APOEs.
- Deployment support.
- Execute ULN sequence in accordance with TPFDD.
- Provisions for RBE, supplies, and personal effects.

Movement Control

- Sea movement concept (CMPF and COMPSRON).
- Closure estimate.
- Track.
- En route stops.
- Escort requirements.
- Replenishment.
- OPP embarkation.
- Air movement concept (MAGTF commander).
- General staging and overflight coordination.
- Sequence of deployment.
- FF routes.
- Aircraft load factors.
- Aerial refueling areas.
- En route support concept.
- En route support base.
- Airlift tempo and throughput coordination.
- EADs, LADs, and RDDs.

SLRP and OPP Deployment

Two unique requirements of an MPF operation are preparing MPS and MPE/S before arrival in the operating area, and assessing the port/beach and arrival airfield before the FIE arrives. Planners should request authority from the supported combatant commander for the earliest possible deployment of the OPP and SLRP. MPSRON repositioning may dictate early OPP deployment. Early SLRP deployment is required to validate geodetic, hydrographic, and facilities data, and coordinate HN support.

TPFDD Update and Closure Estimates

The TPFDD will require updates and maintenance throughout strategic movement of the MPF. Updated closure estimates may require TPFDD modifications. The Commander, USTRANSCOM and the supported and supporting combatant commanders and their Service components will coordinate and validate all TPFDD changes.

MPE/S Distribution Plan

The success or failure of the MPF operation may be determined by the effectiveness of methods established to distribute, account for, and control the issuance of MPE/S. *Methods and controls should be described to all MPE/S users in the distribution plan as part of the arrival and assembly plan. An effective distribution plan will contribute to throughput and ensure strict accountability and security.* Technical assistance from the MARCORLOGCOM (BICmd) TAAT facilitates MPE/S distribution. All MPE/S should be designated to specific battalions, ACE squadrons, and separate companies in MDSS II after the MMC. Designation will ensure that MPE/S goes to the correct unit which will, in-turn, reduce the amount of equipment in the FIE. Consideration must be given to the below requirements to execute the distribution plan.

Personnel

Adequate numbers of trained personnel must be provided to plan and manage the distribution of equipment and supplies. Personnel are sourced from the MAGTF, NMCB, FH, and NSE, and serve in the SLRP, AAOG, arrival and assembly operations elements (AAOEs), and LFSP. Key personnel familiar with the distribution plan should deploy with the SLRP to perform reconnaissance of the proposed staging areas; identify HNS to assist the distribution; and liaison with the officer in charge (OIC) OPP to reconcile disparities between physical inventories on MPS and load plan E/Ls.

Equipment

Adequate quantities of AIS equipment are essential for the distribution system to work properly. The AAOG, AACG, LFSP, AAOEs, and NSE should possess automated data processing equipment (ADPE) necessary to fulfill their control

and accountability requirements. Local equipment checklists should be developed to reflect the type and quantities of assets to establish connectivity with the MPF.

Container Operations Terminal Lot

The CSSE will establish a container operations terminal (COT) lot in the combat service support area (CSSA). Each MPSRON may offload over 2,000 containers, many containing the sustainment of the MAGTF. UAAs may not be initially set-up to receive containers. These unit-specific containers may go into the overflow area of the COT lot until the UAA is prepared to receive them. Grading roads and leveling the ground of the COT lot is critical to the timely distribution of materials in containers. After containers are unloaded, empty containers will be returned to the CSSA COT lot for temporary storage until the reconstitution phase. Commands that desire to use empty containers for other purposes; e.g., bunkers, armories or office spaces, must obtain permission from MARCORLOGCOM (BICmd) through the MAGTF commander. Containers are critical to reconstitution and are expensive to procure. Damage done to the container structure will preclude it from being certified to be embarked aboard MPS.

MPE/S Accountability

Once all MPE/S are offloaded, accountability for them will transfer from MARCORLOGCOM (BICmd) to the MAGTF commander, who will sub-sign them to MSEs. Upon completion of the MAGTF's mission, MPE/S accountability transfers back to MARCORLOGCOM (BICmd) through the SPMAGTF/CSSD executing the reconstitution.

Sustainment Plan

The Services are responsible for sustainment of their forces, so they must be prepared to establish

their own resupply pipelines. As such, the MAGTF and MARFOR will identify requirements in JOPES for follow-up and sustainment shipping to include the following:

- Supplies and equipment needed that were not part of the PO or the FIE.
- Items for sustainment beyond the 30 days available on MPSRONS. See MCWP 4-12, *Operational Level Logistics*; JP 4-01.4, *JTTP for Joint Theater Distribution*; and JP 4-09, *Joint Doctrine for Global Distribution*.
- Personal demand items (Class VI) and food supplements (Class I) typically required by 0+10. These are listed as nonunit records in the TPFDD.

The initiating directive will designate responsibility for embarkation and movement of the follow-up shipping from the port of origin to the objective area. See also JP 4-01.2, *JTTP for Sealift Support to Joint Operations*; JP 4-01.5, *JTTP for Transportation Terminal Operations*; and JP 4-01.6, *JTTP for Joint Logistics Over-the-Shore*.

Reconstitution Plan

The goal of reconstitution is to reestablish the full function of MPF assets with the desired expeditionary capabilities to support an MPF MAGTF as rapidly as possible.

The decision to reconstitute MPE/S aboard MPS employed in an operation is made at the CJCS level based on recommendations of the combatant commander. A combatant commander, the Services (Navy and Marine Corps), and the Commander, USTRANSCOM will be directed by CJCS to execute the reconstitution. In small operations or exercises, such as one ship being offloaded, the responsible combatant commander will initiate actions to reconstitute. Once initiated, the MPF reconstitution process must be coordinated with the geographic combatant commander and included in redeployment planning (see ch. 8 for reconstitution planning and execution).

Location Factors

Options for the location of reconstitution sites include the area of the MPF operation or an alternate geographic location. Factors that may contribute to this decision follow:

- If the MPS will be reconstituted in the same form or will be altered to accommodate changes in operational requirements and capabilities.
- Possibility of nuclear, biological, and chemical (NBC) attack or decontamination requirements.
- The availability of maintenance and port facilities.
- The anticipated condition of MPE/S and availability of replacements.
- Time considerations and allowances to accomplish reconstitution.
- A ship certification schedule.
- Retrograde plans.
- Future operational commitments.

Advance Planning

Advance planning will facilitate the success of the MPF reconstitution and should focus on three functional elements: ground equipment and supplies, NSE, and AGSE.

Redeployment Plan

Redeployment is the transfer of forces and material to support another JFC's operational requirements or to return personnel, equipment, and material to the home and/or demobilization stations for reintegration and/or out-processing. (JP 1-02). Redeployment of the MAGTF and MPF elements from one operating area to another involves the backload of MPE/S previously placed ashore from the ship. How redeployment is conducted depends on the MAGTF's assigned mission and the distance from the POE to the new objective area. During redeployment, JOPES procedures are used.

CHAPTER 13

LOGISTICS PLANNING

Logistics planning must be comprehensive, provide maximum flexibility, and address the multifaceted character of the operation, including the following:

- Marshalling and movement to POEs.
- Interrelated air and sea movements.
- Arrival and reception in the AAA.
- Preparing and distributing MPE/S.
- Supporting tactical operations.
- Reconstitution operations.

The Objective and the Planning Continuum

While the MAGTF employment mission is not part of the overall MPF operation, the commander's CONOPS for that mission drives logistics planning. The objective of logistics planning is to anticipate requirements and incorporate them within and across the planning continuum as follows:

- CSS requirements based on the mission, CONOPS, troop lists and E/Ls, operational environment, and enemy capabilities.
- Time-phasing CSS capabilities into the AO.
- Task-organizing the CSSE.
- Developing the CSS concept of the broad functional areas of supply, maintenance, transportation, general engineering, health services, and services. See MCWP 4-11, *Tactical Level Logistics*.
- Sustainment based on the length of the operation.
- Offload planning.
- Integrate with existing logistics systems. To reduce deployment and unique support requirements, one goal in MPF logistics planning is to use existing logistics systems and infrastructure as much as possible.
- Maximize use of HN and inter-Service support.

Planning must focus on providing continuous support for the duration of the MPF operation, subsequent employment operations, and establishment of a logistics/sustainment pipeline through normal channels. Plans to support an MPF operation must be consistent with plans to support subsequent operations.

Using Existing Facilities

Since constraints affect logistics planning, the logistics plan must use existing facilities to meet those requirements. How the MPF uses available facilities is key. The planner develops the concept of logistics support to maximize their use. Key factors for the use of those facilities follow.

Beaches

- Egress and transportation networks to inland destinations.
- Availability of staging areas near offload points.
- Availability of bulk fuel storage facilities.
- Suitable near-shore and offshore hydrographic conditions.
- Landing points and safe havens for lighterage.
- Availability of ammunition storage sites.

Ports

- Berthing to accommodate ships of the MPSRON; e.g., water depth, length, overhead clearance, and maneuver room.
- Port services; e.g., NAVAIDS, pilots, tug boats, oily water discharge or hotel services.
- Offload capability; e.g., pier space, staging areas, covered storage, pier width, capacity or MHE availability.

- Proximity to the arrival airfield, UAAs, and beach.
- MSRs availability.

Arrival Airfields

- Runways and taxiways that can support AMC/CRAF aircraft.
- Providing sufficient capacity to support the arrival and assembly plan.
- Aircraft staging areas for maximum (aircraft) on ground sufficient for AMC/CRAF and MAGTF air operations.
- Instruments and NAVAIDS. An ATC capability with radar-assisted landings and takeoffs and effective radar surveillance and communications sufficient to achieve positive airspace control is desired.
- Availability of staging areas for temporary staging of airlifted elements (personnel and cargo).
- All-weather transportation networks linking the airfield with the beach/port UAAs and TAAs.
- Sufficient MHE and dunnage to offload transport aircraft.
- Airfield lighting to support 24-hour operations.

Tactical Airfields

Fuel Requirements

Fuel requirements involve the type, quantity, and quality of POL the HN is willing to provide, and the compatibility of systems (HN to US aircraft/HN to TAFDSs). Maximum use of existing storage and transportation facilities is critical as the initial POL offload will saturate tactical systems. The number of TAFDS sites is based on the location of aircraft and the requirement for separate fueling areas. Installation space—with safety buffer zones—and room for expansion of systems must be considered in addition to interference with other airfield facilities. See MCWP 4-11.5, *Bulk Liquids*, and JP 4-03, *Joint Bulk Petroleum and Water Doctrine*.

Class V(A) Issue, Loading, Arming/Dearming, and Storage

Procedures must be established before tactical aircraft arrive. The Class V(A) ordnance storage area should be as close as possible to the aircraft loading area, but far away enough to comply with existing explosive safety regulations.

Aircraft Maintenance and Supply Support

MAGTF aircraft will initially receive organizational maintenance using support equipment offloaded from the MPSRON and supplies from the fly-in support package (FISP) that accompanies the FIE. If the T-AVB is deployed, intermediate maintenance activity (IMA) mobile maintenance facilities can be configured into administrative or working modules during the transit to the AAA. If a portion of the IMA remains afloat, space for maintenance and supply facilities at the airfield may be reduced.

ARFF

Tactics, geography, dispersal of aircraft, availability of HN assets, bulk water source for operations, training, and readiness must be considered.

Weather

Weather services may be provided by the establishing authority, MAGTF commander, CMPF, AMC commander or the HN.

ATC

HN ATC facilities and available services may require augmentation. ATC should include a flight clearance capability to process flight plans and integration of the HN ATC facility with the Marine air control squadron. Requirements for engineer support will vary with airfields, and may include the following:

- Clearing obstructions from aircraft operating areas and apron overrun.
- TAFDS installation.
- Utilities (including an airfield power supply).

- Horizontal and vertical construction.
- Water production.
- Arresting gear installation.
- Heavy equipment and MHE.
- Installing an EAF.

Intratheater Transportation Network

The intratheater transportation network encompasses roads, bridges, canals, pipelines, railroads, barges or aircraft. The MAGTF should not rely solely on the road network to conduct arrival and assembly operations. All aspects of the theater's transportation grid should be employed if they are usable and economical. Normally, the MAGTF can adequately transport itself approximately 50 miles from the beach and port facilities. If HNS cannot provide sufficient line haul capabilities past 50 miles, the MAGTF commander may consider requesting Army transportation assets to augment the CSSE's capabilities.

Sequencing the FIE

The sequence and flow of airlifted and FF elements are key. They include selected supplies and equipment not prepositioned but required during the first 30 days of operations. There may be latitude to adjust the flow depending on logistics requirements. Sequencing the FIE should give the planner flexibility to deploy critical supplies or equipment to the AO.

T-AVB

The T-AVB is an asset for deployment of a portion of the Marine aviation logistics squadron (MALS). Ships are configured to provide MALS services for FW and RW aircraft. T-AVBs provide dedicated sealift for movement of the tailored MALS (see app. N for T-AVB characteristics). The two T-AVBs (one on each coast) are under MSC ADCON in a five-day reduced operational status

(ROS-5); i.e., ready for transit to the SPOE not later than 5 days after direction to activate. MAGTF operations over 30 days should activate a T-AVB. The MALS would require approximately 160 additional strategic airlift sorties for movement to the AAA or objective area if the T-AVB is not employed. Use of the T-AVB requires the logistics planner to address the following:

- Timely T-AVB activation to allow sea trials and transit to the desired SPOE.
- Provisions for MALS shutdown, preparation for embarkation, and provisions of interim support for aircraft at home bases.
- Operating procedures for the MALS en route and within the objective area (must include the method for transporting materiel to and from the T-AVB).
- Capability to offload and establish the MALS intheater.

HNS

Although logistics support is considered a national (Service) responsibility, participation in multinational, joint, and combined operations requires an examination of logistics support provided by HNs in view of transportation and other constraints. Greater use of HNS during training and exercises ensures developing support procedures that will help in the following:

- Request assistance from multinational, joint, and combined forces logistics agencies.
- Develop HNS facilities and plans.
- Reimburse the HN for any property or materiel damages.
- Better understanding of interoperability capabilities.
- Use HNS contractor support.

Standardization

Standardization enhances the ability of forces to use HNS. Current editions of USN and USMC

directives provide standardization policy and establish procedures to review and implement international standardization agreements. HNS may be used to provide a service or function not available through Service channels. It may also be used to provide equipment that is unique to a country; e.g., hose couplings or railcar tie-down devices or provide support that is available via Service channels, but because of lift or other constraints, is not readily deployable.

HNS Developed by Service Teams

The combatant commander represents the US in HNS negotiations, but may delegate authority to develop and negotiate HNS agreements through joint or Service teams; i.e., SLRP members. These teams represent the forces in need of HNS. HNS is usually developed by Service teams in the following sequence:

- ID of needs in a statement of requirements by the requesting agency; e.g., the HN, unified combatant commander or force.
- Statement of supportability by HN.
- Negotiation of support agreement.
- Finalization of HNS.

Advance LNOs

Early in planning, requirements must be identified with special attention to those peculiar to the nature of the operation and the AO. *LNOs aware of total force requirements for HNS should conduct advance liaison and negotiation of support agreements with the HN representatives.*

ISSAs

MAGTF commanders, through the judicious use of ISSAs, can reduce logistics personnel, materiel, and facilities needed to support the MAGTF without sacrificing the quality and responsiveness of logistics support. Such agreements should do the following:

- Eliminate duplication.
- Provide for expansion for peak loads.
- Respond to the operational and technical requirement of the major subordinate commands.
- Not impose an appreciable risk on combat forces by reducing operational mobility and effectiveness through over-consolidation.
- Provide for an appropriate liaison to meet the needs of support units.

Specific functions that are especially amenable to the ISSAs include line haul; port operations; use of salvage assets; use and management of real estate; base development and general support engineering tasks; and food and water support. Planning should be done before arranging maintenance and supply ISSAs. Specific guidance for ISSAs can be found in the 7000 series of USMC directives. Thorough planning is required when arranging maintenance and supply ISSAs.

Acquisition Cross-Service Agreements and Implementing Agreements

Acquisition cross-Service agreements and implementing agreements are agreements with specific nations that allow for the exchange of goods and services (nonmunitions) among military forces. This allows some flexibility in logistics planning and diminishes delays in operational readiness due to logistics shortfalls if the HN can provide some logistics support.

Contingency Contracting

Contingency contracting is the process of contracting for locally available supplies and services for immediate support of a deployed MAGTF. It fills needs not satisfied by MPE/S, the logistics civilian augmentation program, HNS or military sources. Short of a declaration of war or relief through statutory/regulatory waivers, normal contracting procedures (although complicated) must be followed. When

statutory relief is unattainable, the contracting officer/COR may pursue nonstatutory waivers where feasible. The SLRP contracting officer/COR should deploy with sufficient cash to initiate key HNS contracts.

Supply

Supply planning, specifically for marshalling and movement, is similar to that for amphibious operations with the exception of providing rations, fuel, and repair parts at intermediate airfields for the airlifted and FF elements. Planning must ensure that materiel/material not prepositioned is included in the FIE; e.g., specialized ordnance or critical-low density/high demand (CLD/HD) equipment. The MAGTF commander and CMPF must prescribe loads for the FIE to support operations before offload of prepositioned stocks. Planning should consider inter-Service and HNS agreements, particularly for the SLRP, advance party, and AOG. The MAGTF commander must prescribe stockage levels and distribution means (unit or supply point) in the AAA pending establishment of a permanent CSSA. The MAGTF commander may be responsible for providing logistics support to Navy elements ashore. See MCWP 4-11.7, *Supply Operations*.

Based on offload time lines and experience, commanders should anticipate that only minimal MPE/S will be available for initial distribution before O+6. Adequate supply distribution before O+6 can be enhanced by the use of capability sets and specified offload priorities. By O+6, the AOG should enable throughput of sufficient Class III, IV, VIII, and IX to sustain arriving forces through O+10 to allow for support from the CSSA to begin. Therefore, commanders should plan for and deploy forces with appropriate quantities of supplies and equipment until O+6.

Class I, Subsistence

MREs are prepositioned in sufficient quantity to feed the notional MPF MEB identified in the current MCBul 3501, *MPF MEB Force List*, and the accompanying NSE detachment for 30 days (1 day of supply [DOS] = 3 meals/1 ration). The intent is to feed at least one hot meal per day starting on O+21. Rations to support these “hots” must come from the follow-up shipping or HNS. Figure 13-1 may be used in accordance with the notional force arrival plan to develop the support needed to meet force closure and standup time lines:

Movement Group	Mobile Load/Palletized	Prescribed Load
SLRP	7 DOS MREs/Water	2 DOS MREs/2 canteens
Advance party	2 DOS/1 ROWPU	2 DOS/2 canteens
Main body	Water containers on unit equipment reports	2 DOS MREs/2 canteens

Figure 13-1. Class I, Subsistence, Planning Factors.

Class II, Clothing, Individual Equipment, Tools, and Administrative Supplies

Commanders will deploy administrative supplies in the advance party to support operations through O+10. Unit publications and directives required for 30 days of operations will deploy with the main body as palletized or mobile loaded cargo. Each MPSRON has a publications library that provides sufficient administrative publications and TMs for use by the MCMC. Units should deploy their maintenance and supply publications. However, should the requirement arise, the publications aboard the MPS could be transferred to the MAGTF. Sufficient individual NBC PPE must be included in the FIE for the required capability to conduct an NBC defense. One NBC set per Marine is currently in the PO. Commanders will include

NBC detection devices/kits in the main body. The MEF is provided a list of SL-3 deficiencies for Class II items at the end of each ship's MMC.

Class III, POL

There is a standardized core block of Class III (packaged POL) for aviation and ground items. This core block can be modified to meet mission requirements within funding and storage constraints. Sufficient aviation-packaged POL should be included in the main body and FF to support arriving aircraft buildup and servicing in the AAA. Aviation-packaged POL is prepositioned in sufficient quantities to support assigned AGSE from O+10 through O+30. The SLRP will deploy with 7 DOS of packaged POL to support its equipment as determined by the MEF Assistant Chief of Staff (AC/S), G-4. The advance party will deploy with 3 DOS to support its equipment.

Class IV, Construction Material

Limited quantities of Class IV material are prepositioned for barrier, bunker, and shelter construction. Prepositioned core block stocks will be retained by the CSSE in the CSSA and issued on an as-required basis.

Class V, Ammunition

Commanders will provide prescribed loads for TO&E weapons being deployed with personnel on the OPP, SLRP, advance party, and main body. Prescribed loads will be established in the deployment order and issued before moving to the APOE.

Class VI, Personal Demand Items

No personal support items are included in prepositioned stocks. Personnel should include personal supplies in their packs for 10 days. A resupply block of items such as soap, toothpaste, deodorant, shaving cream, toothbrushes, towels, razor blades, sewing kits or lip balm will deploy in the

follow-up shipping for distribution by the CSSE. Sustainment should be planned for and initiated upon deployment.

Class VII, Major End Items

Only those PEIs authorized by the MEF and identified on the unit equipment reports will be deployed in the FIE. When using unit responsibility items and/or supply support responsibility items are not attained, the MEF G-3 MPF cell and/or the MEF G-4 will request sourcing from COMMARFORPAC/LANT before deployment. The CSSE is responsible for deploying all such shortfalls sourced by COMMARFORPAC/LANT. The MEF G-3 MPF cell and/or the MEF G-4 will provide a list of shortfall items not attained by the MAGTF CE. The MEF is provided a list of SL-3 deficiencies for Class VII items at the end of each ship's MMC.

Class VIII, Medical Materials

The AMAL and ADAL consist of equipment and/or consumable supplies required by the deploying force. AMALs and ADALs are prepositioned to support 15 days of combat operations. The CSSE is responsible for deploying short shelf life items, controlled medicines, and precious metals for the prepositioned AMALs and ADALs. Initial acute care capabilities and surgical capabilities are prepositioned for easy access on each ship to provide rapid emergency medical capabilities during the initial stages of the offload. Commanders will deploy unit sick call chests and one individual surgical instrument and supply set (Unit-One) per corpsman.

With respect to NBC medicine, 15 DOS of nerve agent antidote injectors are prepositioned in AMALs. The requirement for antidotes and pre-treatments to address a specific theater threat must be included in the FIE. Examples could include ciprofloxacin for biological warfare agents, pyrodostigmine bromide for nerve agent

pre-treatment, and topical skin protectant (TSP) to protect exposed skin from blister agents. Planning for FIE NBC medicine is a joint responsibility of medical and NBC staff officers, as guided by the supported combatant commander's deployment requirements. The CSSE medical detachment is responsible for acquiring, embarking, distributing, and tracking antidotes.

Class IX, Repair Parts

All three MPSRONS have a standardized set of Class IX parts referred to as the Class IX core block that include a standard battery block. MSEs authorized CLD/HD repair parts will include them in their FIE, as there are none in the core block. Commanders will approve specific CLD/HD items for deployment. Eight DOS of batteries should be embarked for equipment deploying with the SLRP, 4 DOS for MSE advance parties, and 1 DOS for MSE main body equipment.

Class X, Materials for Nonmilitary Programs

Class X supplies are not prepositioned aboard MPS; they are embarked in the FIE or provided from alternative sources.

Maintenance

Maintenance planning for marshalling and movement focuses on efforts to ensure that equipment programmed in the FIE is serviceable. Special attention is necessary for FIE AGSE and FISP since combined they must be fully capable of supporting ACE arrival and assembly operations until ships are offloaded. Planning must also include maintenance of FF aircraft at intermediate airfields. Maintenance planning for arrival and assembly focuses on depreservation and preparation of equipment for issue. First priority must be placed on equipment for deployment support elements; then it shifts to equipment for subsequent operations. Personnel must segregate damaged equipment in addition to equipment that requires urgent modification or cor-

rective maintenance. Repairs are made only as the depreservation workload permits.

The MAGTF commander must develop maintenance capabilities at the beach/port and arrival airfields. Maintenance skills must match the equipment that is scheduled to arrive at those locations. Planners must consider facilities and shelters for maintenance during inclement or extreme weather conditions and for unique aircraft support requirements that can include reassembly of helicopters.

Transportation

The marshalling and movement phases of an MPF operation are transportation-intensive. Planners must designate marshalling areas; identify transportation requirements; establish control agencies; designate staging and inspection areas; and establish procedures for C3 and coordination. The movement plan for MPF operations is considerably more complex than that for amphibious operations. At a minimum, it must address airlift of the FIE, FISP, FF, sea movement of the MPSRON, and C2 of the movement, including coordination and monitoring of departures from all POEs and arrivals at all PODs. Transportation efforts during the arrival and assembly phase will focus on support of the offload. Plans for movement of personnel and equipment from the arrival airfield to UAAs must be detailed and address the use of MHE and landing support assets. The MAGTF commander will establish MCCs and procedures to efficiently manage this effort.

General Engineering

For marshalling and movement, engineers may have to construct additional facilities at marshalling and staging areas or improve facilities or roads to accommodate increased use. The *primary concern* is in the AAA. Engineer tasks will

focus on improving beach, port, and airfield facilities including refrigeration container hookups and providing MEP to enhance throughput capabilities. Construction of fuel, ammunition, and water storage facilities, and road maintenance/improvements occur simultaneously. Control of engineer assets should be centralized throughout the arrival and assembly phase. An MPF MEB will most likely have an NMCB or SEABEE battalion attached. Joint engineer assets may also be available. See JP 4-04, *Joint Doctrine for Civil Engineering Support*.

Health Services

For the marshalling and movement phases, MPF elements will rely primarily on organic capabilities and use local facilities as necessary. During the arrival and assembly phase, plans should emphasize the use of HN or other Service capabilities as much as possible. Health services such as the FH require combatant commander and Service coordination and reserve activation. The MAGTF will coordinate with the establishing authority and adjacent commands for aeromedical evacuations. For more information see MCWP 4-11.1, *Health Service Support Operations*; Navy Tactics, Techniques, and Procedures (NTTP) 4-02.2, *Patient Movement*; JP 4-02, *Doctrine for Health Service Support in Joint Operations*; and JP 4-02.2, *JTTP for Patient Movement in Joint Operations*.

Services

Water, electric power, law enforcement, and traffic control are the primary concerns during marshalling and movement. Planning for arrival and assembly will focus on AIS support, utilities support, civil affairs, contracting, and disbursing services. Civil affairs personnel will provide the interface with the HN. Disbursing must be prepared to pay for functional area services and HNS. See MCWP 4-11.8, *Services in an Expeditionary Environment*.

Washdown and Agricultural Inspection

Commanders must plan for the washdown of equipment with the agricultural inspection. This entails a substantial amount of prior planning and coordination; e.g., 250,000 gallons of fresh water are required to clean the equipment and containers for an MPF MEU slice. Equipment and supplies for washdown must be administratively retrograded to the port area. Early liaison with regional agricultural inspectors will provide specific inspection criteria for all MPE/S to be backloaded aboard the MPS or returned to CONUS. For MPF exercises, the MAGTF G-4/S-4 coordinates the washdown while the CSSE (augmented by other MSEs) is normally tasked with execution.

PP&P

For exercises, the officer conducting the exercise plans the embarkation of sufficient PP&P-trained personnel and materials to represerve all equipment. For reconstitution, the PP&P function would be task-organized into the SPMAGTF/CSSD.

Trash and HAZMAT

Generally, disposing trash, human waste, and HAZMAT are functions that can be contracted using sources within the exercise area. Normally, these arrangements are made during the exercise planning conferences. Specific attention must be given to disposing medical waste, POL, and lithium batteries.

Commercial Line Haul Support

Substantial line haul support is required, especially when UAAs and TAAs are more than 50 miles from beach and port areas. Consideration should be given to this area during planning conferences. HNS, ISSAs, and contracting for transportation reduces the amount of lift required to support exercises.

Equipment Issue and Return

The AAOG coordinates with the OPP Marine representative (assistant OIC); MARCORLOGCOM (BICmd) TAAT OIC or COR; and the LFSP to determine and track MPE/S offloaded. Frequently, and especially during exercises, MPE/S are offloaded that were not previously planned to be offloaded because of vehicle breakdowns and blockages of critical offload paths. MDSS II will be the primary AIS used to coordinate throughput and accountability for offloaded MPE/S.

Issue Procedures

Procedures can vary depending on the type of offload (pier side or instream) and other variables. Generally, responsibility for accountability transfers from the MCMC to a MEF/MAGTF representative; e.g., the MOLT as MPE/S are offloaded through a consolidated asset list generated by the MCMC. Accountability transfers from the MOLT to the major subordinate command or MSEs at the various UAAs as MPE/S are delivered. Scan data reports are used for interim receipts until a CMR is generated. At a point designated by the AAOG commander, a JLTI will be performed by the receiving unit and MCMC before responsibility of the MPE/S is passed to the using unit.

“Frustrated” MPE/S

Those MPE/S that cannot be properly identified because of missing logistics applications of automated marking and reading symbols (LOGMARS) labels or ID plates will be kept and accounted for by the LFSP in a “frustrated lot” until it is determined where those items are to be sent. Using MDSS II, the AAOG will reconfirm the MPE/S assignment and coordinate distribution with the LFSP and AAOEs. The AAOG will serve as distribution authority for all “frustrated” MPE/S.

Excess MPE/S Lots

Excess lots are areas designated by the LFSP to hold MPE/S not required by the MAGTF but were offloaded because they blocked critical paths, were offloaded in error or were deemed unneeded by the MAGTF commander because of changing requirements. The AAOG will direct MPE/S to excess MPE/S lots. Excess MPE/S lots can be established at sites determined by the LFSP. Accountability and security of MPE/S at excess MPE/S lots will initially be with the LFSP. As the MPF operation continues, requests for MPE/S held in the excess lot will be submitted from the AAOE to the AAOG. Only the AAOG acting for the MAGTF commander can authorize removing MPE/S from the excess lot. During exercises, MPE/S in excess lots will normally remain in place until prepared and staged for backload.

Return Procedures

During *an exercise*, the return of MPE/S will be coordinated between the TAAT OIC, MAGTF commander, MCMC, and the *exercising unit*. (As stated in ch. 8, for a *real-world* reconstitution operation, an *SPMAGTF/CSSD* will be the interface between the using unit and the TAAT.)

A JLTI will be conducted between the MCMC and exercising unit on all offloaded equipment. Upon completing the JLTI, the unit will use the original packing material and dunnage to the maximum extent possible to represerve equipment. When an item of equipment requiring repair is returned to the MPS, the condition of the equipment and the required repairs will be annotated on the JLTI form. Units, *whether during an exercise or operation*, will turn over all equipment repair orders, equipment repair order shopping lists, and other documents relating to maintenance performed. The MCMC will sign the consolidated asset list indicating receipt of

equipment and update the applicable maintenance AIS for MARCORLOGCOM (BICmd). Repair costs to equipment and replacing supplies will be drawn against a previously prepared Navy Comptroller Form 2275, *Order for Work and Services*, for the estimated cost of supplies and maintenance as designated by BICmd.

All equipment will be represerved before backload. Equipment will be returned in the same state as it was issued or as directed by a reconstitution LOI. This involves cleaning, reapplying protective materials and dunnage, and recrating all collateral/ancillary materiel originally stored in crates. Equipment will be cleaned, taking special care to remove all mud and dirt from engine compartments, undercarriages, and suspension. PP&P supplies are the responsibility of the exercising unit. The exercising unit must include personnel experienced in PP&P operations.

Medical Credentials

Before deployment, the MAGTF Surgeon and one other medical officer holding operational medicine privileges will perform a credentials review of all medical officers assigned to the MAGTF, in accordance with Bureau of Medicine and Surgery Instruction (BUMEDINST) 6320.66D, *Credentials Review and Privileging Program*.

Responsibilities of Higher Authority

The JCS provides broad logistics guidance to the Services and unified commands. A designated combatant commander coordinates basic logistics functions within an AOR and may establish logistics policies relative to cross servicing, cross leveling, and common item support in their OPLANs and CONPLANs. These policies specify the supporting component, type of support, and the expected time the support is to be pro-

vided; e.g., an Army Service component may provide line haul transportation on C+45; an Air Force Service component may provide bulk JP-5 on C+60.

Service components provide logistics support to their subordinates. Fleet commanders establish logistics support through TYCOMs, who ensure that forces are trained and equipped to conduct MPF operations. TYCOMs also support deploying forces directly or through procedures arranged with home stations. See JP 4-0, *Doctrine for Logistics Support of Joint Operations*; JP 4-07, *JTTP for Common User Logistics During Joint Operations*; and JP 4-08, *Joint Doctrine for Logistic Support of Multinational Operations*.

MAGTF Commander Responsibilities

The MAGTF commander is the focal point for deliberate logistics planning designed to support MPF operations. Responsibilities follow:

- Determine, in coordination with the CMPF, the FIE composition including specifications of prescribed loads for air movement.
- Develop the deployment plan; arrival and assembly plan; and the supporting logistics plans.
- Make decisions for redistributing assigned MPE/S based on the employment mission.
- Coordinate with higher headquarters for the use of externally controlled logistics assets.
- Recommend the withdrawal of prepositioned war reserve material (PWRM).

CMPF Responsibilities

- Coordinate logistics activities among the Navy MPF elements and prioritize and allocate logistics resources.
- Review logistics plans for subordinate elements to ensure an integrated plan.

- Coordinate with higher headquarters for the use of externally controlled logistics assets.

COMPSRON Responsibilities

The COMPSRON plans logistics support for movement of the MPSRON and for support of embarked personnel.

MPS Billeting Responsibilities

MPS billeting for MAGTF and NSE personnel assigned to the OPP and debarkation teams is coordinated between the MAGTF and USN planners contributing forces.

MPF MAGTF CSSA Siting

Once the ship discharge method is determined, the next task is to survey and select the CSSA site. Desirable distances between beach, port, airfield, assembly areas, and objective area are normally less than 50 miles. This shortens LOCs and reduces the MAGTF's local area security requirements.

The CSSE needs access to a hard-surface road network and sufficient flat, firm ground for containers, ammunition, and bulk liquid storage dumps.

Working space requirements for each functional area detachment of a MEB-sized CSSE follow (total of 1,800 acres/7.3 square kilometers (km²) overall):

- General storage: 30 acres/.13 km²; ammunition storage: 1,000 acres/4.05 km².
- Health services: 33 acres/.14 km².
- Maintenance administration: 25 acres/.11 km².
- Bulk fuel: 100 acres/.41 km².
- Bulk water: 25 acres/.11 km².
- Ingress/egress routes, landing zones, dispersion areas and associated safety zones: 600 acres/2.43 km².

Aviation Support and Maintenance

Prepositioned

Aviation support equipment and AGSE prepositioned aboard each MPSRON provides tailored organizational-level common support equipment (CSE) and peculiar support equipment (PSE) for the ACE. The FIE and FF will include aviation support and AGSE supplies required for initial aircraft servicing operations; i.e., debarkation, recovery, staging, reassembly, and servicing required for initial buildup and support. An FF supply support package will be provided by the parent Marine aircraft group (MAG) for the respective type/model/series (T/M/S) aircraft to support deployment and arrival in the AAA. A 30-day FISP of spare and repair parts will be deployed by the ACE in the main body to provide support to the organizational maintenance activity through D1+D30. The MALS will deploy via T-AVB or by AMC strategic airlift to arrive in the AAA on D+30. A daily aviation logistic support flight from a USN supply entry point or CONUS depot will be established.

Each MPS contains tailored organizational-level CSE, PSE, and minimal intermediate-level CSE to support each ACE's preassigned mix of T/M/S aircraft. When deployed, each ACE can provide tactical air support for an MPF MEB. Each MAGTF will be able to independently deploy or if the situation dictates, join up and be composited to form a larger AF.

FF

ACE FW aircraft will be flight-ferried directly to the theater of operations supported by Marine organic or AMC aerial tankers aircraft. The remainder of the RW aircraft/FIE will be flown into the theater of operations via Marine organic or AMC/CRAF cargo/passenger aircraft and will include the following:

- ACE squadron personnel; e.g., maintenance and support crews.

- A representative T/M/S FISP contained in mobile facilities.
- Organizational-level individual material readiness list (IMRL) items; e.g., noncustody coded items.
- Minimal custody-coded intermediate-level IMRL items (AGSE) required for initial aircraft servicing operations; e.g., tow tractors, MEP carts or hydraulic servicing carts.

Upon Arrival and Offload of MPS

Each tactical aircraft squadron assigned to the ACE will link-up with and take custody of the remainder of the CSE/PSE required to operate and maintain their respective T/M/S aircraft. Each MPSRON contains a tailored IMRL for each T/M/S aircraft assigned for an MPF MEB ACE, which is comprised of IMRL custody-coded items P, L, and M. When the IMRL loaded aboard MPS is linked-up with the aviation support and AGSE transported into the theater of operations via the FIE, it comprises all CSE/PSE required to operate each T/M/S aircraft during the first 30 days of combat. Normally, 30 percent of this equipment is prepositioned due to funding constraints.

Maintenance Facilities

Each MPSRON also includes minimal FW and RW mobile maintenance facilities and associated equipment. This facility equipment or intermediate-level CSE supports intermediate-level maintenance functions common to FW and RW aircraft; e.g., tire/wheel build-up, battery maintenance or cryogenics.

The facility equipment loaded aboard MPS is operated by designated advance party MALS personnel and is designed to support ACE aircraft

until the host MALS arrives via a T-AVB. Each host MALS will deploy with tailored intermediate-level CSE common contingency support package and IMRL custody-coded E PSE items peculiar contingency support package required by each T/M/S aircraft the MALS is designated to support. After the host MALS is established intheater, each MEB ACE will be capable of sustained combat operations.

EAF Equipment

EAF equipment is included in each MPSRON to support FW and RW aircraft. The concept of employment is to load EAF equipment on one of the nonflag ships in each MPSRON, giving each MPSRON a core capability of airfield lighting, expeditionary arresting gear, and airfield landing matting. EAF assets give the ACE commander a 4,000-ft EAF runway; parking for 75 to 105 combat aircraft; airfield lighting; arresting gear; and optical landing systems. EAF equipment aboard a MPS is installed, operated, and maintained by designated Marine wing support squadron (MWSS) personnel. MWSS is configured to support ACE aircraft until the host MALS arrives. Establishing the host MALS intheater gives the ACE a sustained EAF capability.

Fully Operational Ready Status

Subsequent to attaining a fully operational ready status, FW and RW sortie rates will be based on aircraft mission capability in accordance with the weapons system planning document. During the period between aircraft arrival in the AAA and attainment of fully operational ready status, sortie rates should be minimized to conserve FISP assets.