UNITED STATES MARINE CORPS
15TH MARINE EXPEDITIONARY UNIT
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MEUO 4600.1J
S-4/EMB
0 8 JUL 2011

MARINE EXPEDITIONARY UNIT ORDER 4600.1J

From: Commanding Officer
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR EMBARKATION (SHORT TITLE: SOP FOR EMBARKATION)

Ref: (a) COMNAVSURFPACINST 5400.1G
(b) JP 3-02.2
(c) MCO 4030.19
(d) MARFORPACO 4621.1A
(e) MARFORPACO 4035.1
(f) MARFORPACO 4080.2D
(g) MARFORPACO 7320.1C
(h) MEFO 5440.5B
(i) CFR 49

Encl: (1) SOP for Embarkation

Reports Required: List, page 2

1. Situation. To promulgate standing operating procedures for embarkation of the 15th Marine Expeditionary Unit (MEU), per the references.

2. Cancellation. MEUO P4600.1H

3. Mission. This Order prescribes procedures for embarkation of the 15th MEU. Information is provided herein for the movement of troops, supplies and equipment via surface shipping, aircraft, and overland transportation, embarkation training, planning, tactical marking of supplies and equipment and related embarkation matters.

4. Execution. This revision updates information to conform to the latest doctrine and automated deployment support systems.

5. Administration and Logistics. Recommendations concerning the contents of this Order are invited and should be submitted to the Commanding Officer (S-4/EMB) via the appropriate chain of command.

6. Command and Signal. This Order is applicable to all personnel permanently assigned or temporarily attached to the 15th MEU. This Order is effective the date signed.

S. D. CAMPBELL

DISTRIBUTION: B

Copy to: CG, I MEF
COMPHIBRON 3, 5, and 7

Reports Required

REPORT TITLE	REPORT CONTROL SYMBOL	PARAGRAPH
I. Quarterly Embarkation Personnel Report	EXEMPT	3a, Chapter 4, Encl 1
II. Personnel, Vehicle, Cargo and Time (PVCT)	EXEMPT	3b, Chapter 4, Encl 1
III. LFORM/MLA Status Shortfall Report	EXEMPT	3d(1), Chapter 4 Encl 1
IV. LFORM/MLA Visual Inspection Report	EXEMPT	3d(2), Chapter 4, Encl 1
V. Pre Embarkation Planning Report (PEPR)	EXEMPT	3d(3), Chapter 4, Encl 1)
IV. Embarked Personnel/ Material Report (EPMR)	EXEMPT	3a(4), Chapter 4, Encl 1

LOCATOR SHEET

Subj: SOP FOR EMBARKATION

Location: _____
(Indicate location(s) of copy(ies) of this Order.)

Enclosure (1)

RECORD OF CHANGES

Log completed change action as indicated.

CHANGE NUMBER	DATE OF CHANGE	DATE RECEIVED	SIGNATURE OF PERSON ENTERING CHANGE

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Chapter 1

General

1. Policy

a. Knowledge of embarkation techniques and procedures is an essential element of the combat readiness posture for rapid deployment and dictates that competent embarkation personnel be assigned to all units of this command at all times.

b. In accordance with reference (g), it is imperative that during embarkation planning and execution, unit embarkation officers and their assistants be relieved of all other duties until completion of the embarkation phase of an operation/ exercise.

c. Units of the 15th MEU must constantly plan and be prepared to embark on various modes of transportation for movement to forward operating areas. Every unit will know its lift requirements for all means of air and surface transportation.

2. Personnel

a. Units that do not have an authorized Table of Organization (T/O) billet for an Embarkation Officer and/or Embarkation Assistant, will establish these billets as an additional duty.

b. Embarkation Officers and Embarkation Assistants will be appointed in writing either as a primary or an additional duty billet. Within the CE, Embarkation Representatives for the staff sections will be assigned in writing by the MEU Commander.

c. A sufficient number of additional personnel who have formal embarkation training should be resident in each command and section to ensure rapid replacement of assigned embarkation personnel in the event of untimely transfers. These additional personnel will also be able to assist the assigned embarkation representatives prior to and during deployment. This requirement includes personnel who are qualified to sign the Shipper's Declaration for Dangerous Goods.

d. The MEU Commander will nominate, in writing, a Commanding Officer of Troops (COT) for each ship in the Amphibious Ready Group (ARG) with embarked Marines aboard. These nominations will be forwarded to the Commanding General, I Marine Expeditionary Force (MEF CG). Once approved by the MEF CG, the MEU Commander will appoint each COT in writing.

e. The MEU Embarkation Officer will function as the Group Embarkation Officer and as such will have cognizance over Unit Embarkation Officers and Team Embarkation Officers (TEOs). In many cases, the Unit Embarkation Officer will also function as the TEO.

3. Duties and Responsibilities. Embarkation readiness is not solely the responsibility of those personnel assigned embarkation duties. All members of this command and the Major Subordinate Elements (MSEs) are responsible for the maintenance of accurate and current embarkation data, proper preparation

and marking of supplies and equipment, and accomplishment of required individual embarkation matters.

a. Commanding Officers. Commanding Officers are directly responsible for the embarkation readiness of their units. The following requirements are essential for proper management of a unit's embarkation program:

(1) Assignment and training of personnel in embarkation duties.

(2) Knowledge of embarkation techniques and procedures, to include the handling and stowage of various type of cargo.

(3) Knowledge of procedures in the surface movement of cargo from unit areas to the Ports of Embarkation (POE).

(4) Familiarity with facilities available at Sea Ports of Embarkation (SPOEs) and Aerial Ports of Embarkation (APOEs).

(5) Familiarity with the general characteristics and capabilities of aircraft and amphibious ships.

b. Commanding Officers of Troops. COTs are directly responsible for proper embarkation of all personnel, vehicles, equipment, supplies, and containers on their ship. They will:

(1) Assign, in writing, a Billeting Officer, Messing Officer, Laundry Officer, and other billets required by the troop regulations of their respective ship.

(2) Be guided in the performance of their duties by the MEU Commander, references (a) through (g) and the current troop regulations for their respective ship.

c. Team Embarkation Officers. TEOs are the direct representatives of the MEU Commander for the proper embarkation of personnel, vehicles and equipment assigned to their ship. A close continuous relationship with the ship, either through the Combat Cargo Officer (CCO) or the ship's First Lieutenant is essential. TEOs will:

(1) Submit embarkation data in a timely manner when requested by this command or higher headquarters.

(2) Ensure that personnel, supplies, and equipment for their ship are properly prepared for embarkation.

(3) Advise the MEU Embarkation Officer on embarkation readiness.

(4) Ensure that requirements for MHE, transportation, and services to support embarkation and debarkation operations are provided to the MEU Embarkation Officer within the prescribed time frames.

(5) Act as the direct representative of the MEU Commander for the embarkation and debarkation of Landing Force personnel, supplies and equipment.

(6) Ensure the proper loading of their ship in conjunction with the Berthing and Loading Schedule, and in doing so, they will prevent excess cargo and/or vehicles from being loaded.

(7) Ensure timely and accurate completion and delivery of final load plans to this command.

(8) Ensure that all personnel involved in the embarkation evolution are properly informed of their duties and properly trained to accomplish those duties.

(9) Be further guided in the performance of their duties by the MEU Embarkation Officer, references (a) through (d), and the current troop regulation and Ship's Loading Characteristics Pamphlet (SLCP) for their respective ships.

d. MEU Embarkation Officer. The MEU Embarkation Officer maintains cognizance over all Unit Embarkation Officers and TEOs. He supervises all loading and unloading activities of the MEU. He also advises and assists in the planning and execution of embarkation operations. The MEU Embarkation Officer will:

(1) Keep the MEU Commander informed of the state of embarkation readiness within the MEU.

(2) Maintain the statistical data necessary to facilitate embarkation planning.

(3) Effect and maintain liaison with higher headquarters.

(4) Arrange for staging areas.

(5) Consolidate requirements for Material Handling Equipment (MHE) or other equipment required at the POE.

(6) Consolidate transportation requirements for cargo, equipment, and personnel to the POE.

(7) Supervise all Unit Embarkation Officers and TEOs in the accomplishment of their duties by hosting coordination meetings and making proper liaison visits to each unit and ship.

(8) Assist subordinate units in embarkation matters.

(9) Function as the Unit Embarkation Officer for the MEU Command Element (CE), conduct periodic inspections, and ensure that all equipment is properly prepared for embarkation.

e. MEU Embarkation Chief. The MEU Embarkation Chief is directly responsible to the MEU Embarkation Officer for all embarkation matters specified below. He will:

(1) Assist the MEU Embarkation Officer in the scheduling and conduct of cargo/vehicle inspections for all MSEs and the CE prior to deployment.

(2) Provide assistance to the MEU CE and MSEs in all matters pertaining to embarkation.

(3) Assist the MEU Embarkation Officer in the consolidation of all requirements for transportation, MHE, or other equipment required for embarkation or debarkation.

(4) Provide other assistance as necessary to the MEU Embarkation Officer in the performance of his duties.

f. MEU Embarkation NCO. The MEU Embarkation NCO is directly responsible to the MEU Embarkation Officer for all embarkation matters specified below. He will:

(1) Maintain the Marine Air Ground Task Force (MAGTF) Deployment Support System II (MDSSII) database for the MEU CE and merge all team MDSSII data.

(2) Assist the MEU Embarkation Officer in the preparation of all embarkation reports.

(3) Ensure that the garrison MDSSII database is validated on a monthly basis and that any corrections are made accurately and promptly.

(4) Assist the CE staff sections regarding tactical marking of vehicles and equipment and ensure that all markings are correct.

(5) Ensure that all embarkation reference material is complete and up to date.

(6) Ensure that the proper material (e.g. banding material and tools, paint, stencils, etc.) are on hand at all times in order to maintain a high state of embarkation readiness.

g. Section Embarkation Representatives. Each section within the MEU CE will appoint primary and alternate Embarkation Representatives. They are directly responsible to the Section OIC for the embarkation readiness of their respective section. They will:

(1) Maintain an accurate list of all embarkable items.

(2) Ensure serviceability of all embark boxes.

(3) Ensure that all cargo and equipment is properly prepared for embarkation.

(4) Maintain accurate garrison Unit Deployment Lists (UDLs).

(5) Be responsible for the proper packing and packaging of all section cargo and equipment.

h. Amphibious Squadron Combat Cargo Officer (PHIBRON CCO). The PHIBRON CCO functions as a special staff officer to the PHIBRON Commander, under the cognizance of the Chief Staff Officer (CSO), as the point of contact in all matters concerning embarkation. As the PHIBRON represents the link in the chain of command between the MEU and the ships of the Amphious Ready Group

(ARG), it is essential that the MEU Embarkation Officer maintain close liaison with him. The CCO also represents the ships when embarkation matters arise concerning the entire ARG.

i. Ship's Combat Cargo Officer (CCO). On the LHD, LHA, LPD and LSD-CV type ships, the CCO functions as a special staff officer to the Commanding Officer under the direct cognizance of the Executive Officer. Aboard LSD 36 and 41 class ships, the ship's First Lieutenant accomplishes the function of the CCO.

(1) The CCO is responsible for coordination with embarked troop units and appropriate ship department heads on the following items:

(a) Preparation and execution of plans for the embarkation or debarkation of troops.

(b) Loading, stowage, and unloading of troop cargo.

(c) Billeting and messing of embarked troops.

(d) The CCO is not responsible for handling cargo, operating cargo handling equipment or cargo safety and security.

j. Ship's First Lieutenant/Combat Systems Officer. Depending on the class of amphibious ship, either the First Lieutenant or Combat Systems Officer is responsible for ensuring that:

(1) All authorized cargo and vehicle loading devices are on hand and serviceable.

(2) All vehicle and cargo spaces are ready to accept landing force supplies and equipment

(3) All MHE, elevators, and conveyors are in working order.

(4) All cargo is handled properly with cargo handling equipment.

(5) All cargo is stored in a safe and secure manner.

4. Training

a. Formal resident embarkation courses are conducted at the Marine Corps Combat Service Support School (MCCSSS) at Camp Johnson, NC. In addition to formal resident courses, the Expeditionary Warfare Training Group, Pacific (EWTGPAC) offers a variety of Mobile Training Team (MTT) courses. It is essential for embarkation success that, at a minimum, Unit Embarkation Officers and TEOs be trained in a formal school.

b. All Commanders should ensure that subordinate units of their command conduct periods of instruction to supplement formal schooling. This instruction should be designed to present the basic principles of embarkation responsibilities, and also introduce them to automated embarkation systems.

5. Desktop Procedures and Turnover Folders. The frequent turnover of personnel assigned to embarkation billets at the unit level dictates that

desktop procedures and turnover folders be maintained to provide continuity. At a minimum, desktop procedures will contain the following:

a. Instructions pertaining to the duties of the billet.

b. Required reports.

c. Points of contact.

d. Lift requirements for surface and air movement.

e. Internal procedures for periodic updating of the MDSS II database.

f. An outline of any other information that would allow a relieving embarkation officer to rapidly assume his duties.

Chapter 2

Planning

1. General

a. All planning for embarkation is a joint undertaking by the onloading organization and the movement organization.

b. The embarkation of troops, supplies and equipment, aboard ships and/or aircraft, presents problems. We can only be successful through proper planning and preparation prior to embarkation. Careful execution of plans during the embarkation phase of an exercise/operation is a must.

c. Embarkation planning involves all those measures necessary to ensure timely and effective offloading of any organization. It is essential that all units know their lift requirements for surface and air transportation. All planning for embarkation must begin early and proceed concurrently with all other planning. It requires constant coordination between all levels of command as well as all forces involved to include a mutual understanding of all the problems of each. It requires detailed knowledge of the characteristics, capabilities, and limitations of ship/aircraft and their relationship.

2. Liaison

a. The 15th MEU Embarkation Officer is the only authorized representative of the command to affect liaison with units/organizations outside of 15th MEU in matters pertaining to embarkation.

b. Subordinate units may be granted authority, by this CE (15th MEU S-4/EMB), to affect liaison with outside movement agencies. However, if authority is granted, units will keep this CE (15th MEU S-4/EMB) informed of all transactions.

c. All requests for assistance and supporting requirements in embarkation matters will be made via the chain of command to the 15th MEU CE (S-4/EMB).

3. Ship's Loading Characteristics Pamphlet (SLCP)

a. The SLCP is a ready reference of the Ship's Book of General Plans. It is a written document that describes the ship's actual loading characteristics. It contains information on the ship's general characteristics, loading stowage and offloading information, embarkation and debarkation procedures, berthing and organizational workspaces, and other useful information such as planning figures, diagrams and stowage limitations. The SLCP will be used extensively by the COT and TEO during embarkation planning.

b. Procurement of SLCPs is the responsibility of the MEU Embarkation Officer. The necessary copies will be obtained early in the planning phase from the PHIBRON or other agencies.

4. Encroachment. Reference (a) states that any troop space occupied temporarily by the ship will be vacated if so requested by the Landing Force.

The modification of troop spaces for ship's use that requires restoration efforts exceeding 48 hours or with outside assistance, is not authorized.

5. Organization For Embarkation And Assignment To Shipping (OEAS)

a. The OEAS provides the Commander of the Amphibious Task Force (CATF), ships, and units concerned with the basic plan for distribution of personnel, cargo and equipment among the ships of the task force.

b. Initial assignment to shipping should be determined early so embarkation planning can begin. By E-50, the MEU will submit an OEAS message to the PHIBRON. The format for this message is contained in reference (c).

6. Embarkation Plans And Orders. Embarkation plans and orders will be prepared in accordance with reference (b).

7. MAGTF Deployment Support System II (MDSSII)

a. The requirement for all Fleet Marine Force units to maintain current and accurate embarkation information is essential for establishing a satisfactory state of readiness. MDSSII is an automated system that provides convenience, accuracy and speed for the maintenance and reporting of all embarkation data.

b. The MDSSII Online help function and tutorial provides detailed instructions on the implementation and maintenance of MDSSII. The unit's master MDSSII database and courier diskettes are maintained by the unit embarkation NCO. Changes to the database will be forwarded to the unit embarkation NCO in a timely manner in order to maintain an accurate database for embarkation readiness.

c. TEOs will merge unit courier CD-ROM onto a team embarkation CD-ROM. This should account for all cargo, vehicles and equipment to be loaded onto their ship. The MEU CE will frequently require updated MDSSII data. TEOs will be prepared to submit the data required at all times.

d. The Logistics Automated Information System (LOGAIS) uses relational databases populated by reference data. A common mistake made in developing and maintaining MDSSII is reliance on the accuracy of the technical data provided. It is incumbent upon all embarkation personnel to validate the MDSSII data against actual dimensions, weight, TAM Control Number (TAMCN), NSN, and Joint Chiefs of Staff Cargo Category Codes (JCSCCC). Appendix A provides assistance for determining the proper JCSCCCs for cargo and equipment.

8. Integrated Computerized Deployment System (ICODES). ICODES is an automated ship loading tool that assists embarkation personnel in loading ships. ICODES provides convenience; accuracy and speed in embarkation planning. Improvements in the program allow for direct interface with current versions of LOGAIS. ICODES is the Marine Corps standard for amphibious embarkation and will be used by TEOs for all load planning.

9. Final Load Plans

a. Prior to deployment, the MEU CE will provide final load plans to appropriate agencies per reference (a). A final load plan package consists of the following:

(1) Cover page prepared by the TEO listing his ship and embarkation team. Signatures of the Embarkation Team Commander and Commanding Officer of the ship signify approval of the plan and formalize the document. A sample format is contained in reference (b).

(2) MDSSII data

(3) ICODES load plans

b. TEOs will retain one copy of the final load plan. Additional copies will be mailed or hand delivered as directed in reference (b).

c. Once signed, no changes to the final load plan are authorized without the approval of the MEU Embarkation Officer, the ship's Commanding Officer and the Embarkation Team Commander.

10. Transportation, MHE, And Convoy Requirements. Requirements for transportation and MHE will be submitted to this command no later than 35 days prior to the required movement date. The MEU S-4 will consolidate all requirements and provide I MEF G-3/MDDOC with the movement forecast 30 days prior to the movement. Initial (21 days prior), mid (14 days prior), and final (7 days prior) Transportation Planning Conferences will be held to validate requirements. Upon completion of the Final Transportation Planning Conference, MDDOC will publish the final movement plan to be executed by the MEU.

11. Movement Control

a. Movement control is the planning, routing, scheduling and control of personnel, vehicle and cargo movements over Lines of Communication (LOCs). It also consists of validating movement requirements, allocating resources, coordinating movements and force tracking during movement.

(1) Planning. Planning for movement will occur at the unit level based on the embarkation plan published by the MEU.

(2) Validation. Unit logisticians must ensure that movement requirements are valid and in accordance with published embarkation plans. Validation continues through the movement planning conferences held by the MDDOC and the MEU.

(3) Allocation. Upon completion of the Final Transportation Planning Conference, MDDOC allocates assets to support the movement plan.

(4) Routing. MDDOC determines routing based on local laws and restrictions' governing the LOCs in SOCAL. Based on approved routes, units will ensure that all convoy commanders are briefed and provided strip maps for drivers.

(5) Managing Priorities. MDDOC will deconflict assets to ensure the most efficient movement based on availability. In the event there are competing efforts for assets, I MEF MDDOC will manage priorities. If conflicts exist within the MEU, the MEU S-4, based on Commander's guidance, will manage priorities.

(6) Coordination. Coordination of transportation will occur early and often between the MEU and MDDOC. The ONLY agency authorized to coordinate or deconflict issues with the MDDOC is the MEU S-4.

(7) Force Tracking. Unfortunately little or no capability exists to provide In Transit Visibility (ITV) to the commanders during movement. Force tracking will be based on reporting departure times from Unit Movement Areas (UMAs) and arrival times at Ports of Embarkation (POEs).

b. Movement Control Agencies

(1) MEF Deployment Distrisbution Operation Center (MDDOC). The MDDOC operates under the cognizance of the I MEF Chief of Staff G-3. It is responsible for assessing the impact for transportation requirements and highway regulation within the MEF area. The MDDOC reports directly to the I MEF Chief of Staff G-3 for matters pertaining to movement control. The MDDOC coordinates all transportation requirements to include Transportation of Things (TOT), Transportation of People (TOP) and convoy schedules and movement. MDDOC publishes a movement schedule to establish coordination.

(2) Unit Movement Control Center (UMCC). The MEU S-4 will establish and activate the MEU UMCC as outlined in MEU LOG Order MCO P4000.2B. The MEU UMCC is the senior UMCC organization responsible for coordinating with the MMCC and will monitor and control all movement within the MEU. MSEs will establish and activate UMCCs to monitor and report unit movement in accordance with the movement plan. UMCCs will report directly to the MEU UMCC.

c. Reporting

(1) UMCCs. UMCCs will make all reports to the MEU UMCC.

(a) Activation. UMCCs will report activation as directed.

(b) Movement. UMCCs will report departure information for Unit Marshalling Areas (UMAs) using mission numbers from the LMCC movement plan.

(2) MEU UMCC. MEU UMCC will make reports to the MDDOC.

(a) Activation. MEU UMCC will report to the MDDOC upon confirmation of UMCC activations.

(b) Movement. MEU UMCC will report departure information from UMAs using mission numbers from the MDDOC movement plan.

(c) Arrival. MEU UMCC will solicit arrival information from the LMCC.

12. Stowage Of Training Ammunition. The stowage of Class V LFORM is monitored and coordinated by I MEF, PHIBRON and the individual LFORM carrying ships. However, the MEU must be aware of available space to store training ammunition. The MEU S-4 and TEOs will obtain LFORM Supplements from the appropriate ships for this process. Once this information is obtained, the MEU will work closely with the ship's CCO/First Lieutenant/ Weapons Officer to determine available stowage space. Compatibility of ammunition by hazard

class will play a major role in the amount and type of ammunition that may be stowed in a particular area.

13. Embarkation Milestone Checklist

a. Reference (g) contains a milestones checklist with the majority of significant events that apply to elements of the MEU. It is not intended to be all inclusive. Milestone dates are considered to be target dates for orderly preparation for deployment. Since completion of many events is dependent upon completion of previous events, each milestone that is not completed on time must be reported to the MEU CE, with the reason for non-completion and a new target day for completion. This checklist does not allow for operational requirements as identified by the Training Exercise Employment Plan (TEEP) and pre-deployment training plan.

b. Appendix B contains embarkation milestone extracted from reference (g). Deployment embarkation milestones will be published via message to elaborate on those contained in Appendix B. These milestones will be based on actual E-Days and TEEP'd events.

Chapter 3

Preparation of Supplies and Equipment

1. General. Adequate preparation of supplies and equipment is essential to the maintenance of embarkation readiness.

2. Responsibility. Unit Commanders are responsible for the preparation of all supplies and equipment for embarkation to ensure that they will withstand the rigors of handling while loading and unloading. In addition, Unit Commanders must ensure the proper markings and identification of all supplies for proper stowage.

3. Maintenance Of Boxes and Pallets. Sufficient boxes, containers, and pallets (4 way entry) must be maintained on hand to mount-out an entire unit to include boxes for manuals, office supplies, etc. It is possible that the unit will have empty boxes because supplies or equipment are not available or being held by another organization. These boxes/containers and pallet boards will be marked, manifested and ready for embarkation.

4. Preparation Of Supplies and Equipment. There are several principles to be considered in packing and crating for embarkation. Adherence to the following rules will save space and lessen damage to cargo:

a. To the maximum extent possible, maintain uniformity in box, crate, and other container sizes to facilitate stowage, handling and preparation of load plans.

b. Pad and strengthen containers to ensure protection of fragile items and prevent damage to the container or contents.

c. Waterproofing, as far as practical, should be accomplished for all containers that contain items subject to deterioration by moisture.

d. Apply corrosion preventative materials or other appropriate preservatives to items requiring such protection.

e. Separate packing and crating should be used for various types of supplies, such as ordnance, electronic/communication, engines, and general supplies.

f. Vehicles

(1) Overall vehicle weight with mobile load will not exceed the vehicle's maximum cross country weight.

(2) Vehicles will be equipped with the proper and serviceable lifting shackles, pintle hooks and cotter pins.

(3) Proper shoring/dunnage will accompany all tracked vehicles and bulk liquid haulers. Shoring and dunnage is a unit responsibility to include purchasing, construction and transportation.

(4) Pioneer equipment and fire extinguishers will be secured only in authorized vehicle stowage racks.

(5) Wet cell batteries will be properly secured in authorized vehicle/equipment battery compartments. MTVRs will be equipped with battery and alternator modifications. Owning units of MTVRs without the modifications will be prepared to disconnect and reconnect the batteries during the staging and loading process.

(6) Vehicles will be embarked clean and free of all foreign matter to include soil, plant life and pests. Particular attention should be paid to the engine compartment, undercarriage, wheel wells, battery compartment and passenger and cargo compartments.

(7) Fuel tanks will be no more than ¾ full but not less than one half full upon arrival at the POE. Trailer and/or skid mounted generator fuel tanks will be no more than ½ full.

g. Cargo

(1) Containers. Containers must be inspected to ensure they are in serviceable condition. Containers must have a current safety certificate (CSC) inspection decal affixed with competent authority validation/verification. Packing lists will be affixed to the outside and inside of the doors.

(2) Mobile Loads. Mobile loads must not exceed the maximum cross-country weight of the vehicle and must be secured using 5K cargo straps or ½" hemp (non-nylon) rope. ISO type containers that are mobile loaded will use ISO locks to secure them to the bed of the vehicle.

(3) Expeditionary Fuel Cans. Expeditionary fuel cans will be embarked with fuel not to exceed 4" from the spout or empty and certified vapor free. All cans will have serviceable seals and closures. Each ship has specific instructions for stowage of expeditionary cans and requires coordination with the CCO or First Lieutenant. In addition, fuel cans may require hazardous material certification.

5. Markings. Marking of cargo and equipment will be in accordance with reference (d). Deviation in location, size, and/or colors is not authorized. Garrison property or other types of containers that will not be used for embarkation will not be marked.

a. Definitions

(1) Unit Identification Code Markings. These markings indicate to whom the supplies and equipment belong. UIC markings will be placed per reference (d) and as depicted in figures 3-1 through 3-5.

(2) Box/Pallet Numbers. The box/pallet number enables each embarking unit to have some means of identifying and accounting for it's boxes and pallets. The box/pallet number will be placed in the upper left hand corner of the top and two adjacent sides of the box or pallet board, just to the right of the stowage designator refer to figures 3-1 through 3-3 for proper placement. Appendix C contains a listing of MEU CE box/pallet numbers.

(3) Stowage Designator. A three inch circle painted in the upper left hand corner of the top and two adjacent sides of the box or pallet

board. The stowage designator will be yellow or white indicating where the box or pallet is to be stowed during transit.

(a) Yellow. Indicates "troop stow" cargo that must be accessible to the unit during the transit. Normally stowed in berthing or organization workspaces. Troop stow cargo must be small and light enough to be carried by two Marines.

(b) White. Indicates "hold stow" cargo that need not be readily accessible during the transit. Normally stowed in cargo holds or vehicle stowage areas.

(4) Unit Personnel and Tonnage Table (UP&TT). This number categorizes the contents, stowage or handling requirements of the item marked. The UP&TT number will be placed in the center of the Stowage Designator. UP&TT numbers are listed in Appendix D.

(5) Cubic Feet and Weight. The volume in cubic feet and weight in pounds are placed in the upper right hand corner of the top and two adjacent sides of the box or pallet board.

(6) International Standards Organization (ISO) Markings. ISO markings are required for all containers or frames that use ISO fittings. ISO markings consist of the following.

(a) Manufacturer Data Plate. The manufacturer's data plate provides, among other things, the nomenclature, model, NSN and serial number.

(b) Convention for Safe Containers (CSC) Safety Approval Data Plate. The CSC data plate provides, among other things, the date of manufacture and ID number (ISO Registry Number).

(c) ISO Registry Number. The ISO Registry Number consists of 11 characters that will not be less than 4" in height. Marine Corps T/E ISO type containers will have an ISO Registry Number consisting of USMU/USMC followed by six numerals (serial number), followed by a hyphen and a check digit (example: USMU123456-7). The ISO Registry Number will be placed on the upper right hand corner of the right door on each end and the upper right hand corner of each side.

b. Applicability

(1) Rolling Stock. Rolling stock is defined as any wheeled or tracked vehicle, trailer, or motorcycle. All rolling stock will be marked with the following:

(a) UIC

(b) USMC Serial Number

(2) General Cargo. General cargo is defined as any box, crate or skid-mounted piece of equipment (i.e. generator). All general cargo will be marked with the following:

(a) UIC

(b) Box Number

(c) Stowage Designator

(d) UP&TT

(e) Cube and Weight

(3) Palletized Cargo. Palletized cargo is defined as any cargo that will be embarked and stowed aboard ship on a pallet as hold stow. All palletized cargo will have pallet boards affixed in accordance with this chapter and will be marked with the following:

(a) UIC

(b) Pallet Number

(c) Stowage Designator

(d) UP&TT

(e) Cube and Weight

(4) ISO Type Containers/Frames. ISO type containers/frames are defined as any container or frame that comes equipped with ISO fittings or locks. Examples include: 20' ISO containers, quadcons and sixcon frames. All ISO containers/frames will be marked with the following:

(a) UIC

(b) ISO Markings

(4) Aviation Specific Equipment. Aviation specific equipment is defined as aircraft and Aviation Ground Support Equipment (AGSE). All aviation specific equipment will be marked in accordance with applicable NAVAIR publications and/or unit SOPs.

(5) Expeditionary Cans. Expeditionary cans will be marked with UIC in contrasting color, centered on both sides. Additional markings will be placed as follows:

(a) Fuel Cans. Fuel cans will be marked with the fuel type in yellow letters on the spout end of the can.

(b) Water Cans. Water cans need no additional markings as the word water is imprinted on the can.

(6) Size and Color of Markings

(a) Rolling Stock. UICs will be black, two inch numbers. When designated locations coincide with black paint, the marking may be moved to allow for painting on a contrasting color or the marking may be painted green.

(b) General Cargo and Pallet Boards. UICs, box/pallet numbers, UP&TT numbers, cubic feet and weight markings will be black and one inch in height.

(c) ISO Type Containers/Frames. UICs will be black two inch numbers.

(d) Aviation Specific Equipment. Marked in accordance with applicable NAVAIR publications and/or unit SOPs.

(e) Expeditionary Cans. UICs will be black one inch numbers. Fuel type markings will be yellow two inch letters.

6. Placards. Placards will be affixed to all single moving items or items requiring square/cubic foot stowage aboard ship or aircraft. Placards will be protected from the weather and affixed in such a manner as to prevent them from inadvertently coming off. Detailed placard policies, based on MEF guidance and competing embarkation evolutions, will be published in embarkation LOIs. Placards will be placed as follows:

(1) Rolling Stock

(a) Vehicles. Placards will be placed interior on the passenger side windshield. Rolling stock without windshields will have placards placed on a flat surface facing forward on the driver side.

(b) Trailers. Placards will be placed on both fenders; left side (driver side) facing forward and right side facing aft.

(2) General Cargo. Placards will be placed on three adjacent sides under the UIC marking.

(3) Palletized Cargo. Placards will be placed on the same sides as the pallet boards.

(4) ISO Type Containers/Frames. Placards will be placed on all four sides near UIC markings.

(5) Aviation Specific Equipment. Due to the variance in size and configuration of aviation specific equipment, placards will be placed in such a way that they will be easily seen.

(6) 463L Pallets. Placards will be placed on all four sides of the pallets.

7. Palletization

a. Hold Stow Cargo. Loose cargo that will be embarked and stowed aboard the ship in a cargo hold or vehicle stowage area will be palletized. When palletizing loose cargo, every effort should be made to "square off" the pallet to allow for stacking.

b. Troop Stow Cargo. Although troop stow cargo will be stowed in berthing spaces or organization workspaces, it is recommended that the cargo be palletized to assist in transportation and movement aboard ship.

c. Pallets

(1) Two standard sizes of warehouse pallets are available for use: 32"x40" and 40"x48". Both will be 4 way entry with overhanging edges for lifting by forklift, cargo net or spreader bars.

(2) All pallets used must be in serviceable condition with banding eyelets in the underside.

(3) A sufficient quantity of pallets should be kept on hand for embarkation and debarkation operations. Load planners should make accommodations for deck stowage of the empty pallets in the load plan.

d. Banding Procedures

(1) Although there are various sizes and types of banding material, only 1 ¼" steel banding is authorized for use when banding palletized material. Care should be taken to ensure that the banding material passes through the eyelets on the pallet to prevent damage by MHE.

(2) It is the responsibility of the unit embarkation NCO to ensure that proper banding material (i.e. banding wire, clips and stretchers) and on hand in sufficient quantity at all times.

8. Hazardous Materials (HAZMAT). HAZMAT is defined in CFR 49 and further in MCO 4030.19_ as any "substance or material that is capable of posing an unreasonable risk to health, safety, and property when transported". Items that are flammable, combustible, toxic, corrosive, compressed or oxidizing are examples of HAZMAT. The handling and stowing of these materials requires the utmost attention by all personnel involved.

a. Identification. All HAZMAT must be identified early and often during planning and execution. HAZMAT identification is required not only for safety aboard ship/aircraft but also during the marshalling, transportation and staging process. Units will ensure that HAZMAT is identified in MDSSII utilizing the proper JCSCCC.

b. Documentation. Most types of HAZMAT will require documentation prior to transportation and embarkation. The following minimum standards will be used to document HAZMAT.

(1) Transportation. Most types of HAZMAT will be prepared for transportation in accordance with reference (h) with all applicable markings, labels, and Shipper's Declarations for Dangerous Goods.

(2) Embarkation. Prior to embarkation, each TEO will build a Ship's Hazardous Cargo Manifest for presentation to the Damage Control Assistant (DCA) and Hazardous Materials Control Officer aboard ship. The Ship's Hazardous Cargo Manifest will include: a spreadsheet of all HAZMAT with proper shipping name, manufacturer's name, NSN, shipper's declarations, Material Safety Data Sheets (MSDS) and ICODES load diagrams depicting locations of stowage.

c. Special Considerations. Each ship has specific policies for the embarkation and stowage of HAZMAT. The following information is provided as general guidance. TEOs are responsible for marking early liaison with ship's company HAZMAT personnel to ensure compliance with ship's specific policies.

(1) Dry Cell Batteries. Batteries may be stowed as general cargo when properly identified and documented.

(2) Lithium Batteries

(a) New Lithium Batteries. New lithium batteries that are in original packaging may be stowed as general cargo when properly identified and documented.

(b) Used/Depleted Lithium Batteries. Used/depleted lithium battery stowage is accomplished by utilizing ship's HAZMAT storage, if available. If no designated stowage is available, used/depleted lithium batteries must be stowed using approved drums with vermiculite in a location that is easily jettisonable.

(3) Petroleum, Oil and Lubricants (POL)

(a) POL Stowage (Packaged). Preventative measures should be taken during packaging to ensure that friction between metal containers does not occur.

(b) MOGAS. Highly flammable POL such as MOGAS must be stowed in authorized containers on jettisonable racks. At no time will MOGAS be transferred without prior coordination with the TEO and approval from ship's company. Any MOGAS bladder or other container, unless purged and certified gas free, will always be stowed in a jettisonable rack. TEOs must be prepared to prioritize and limit the number of items that require jettisonable rack stowage due to space limitations.

(c) POL Stowage (Bulk). Ship's tanks are utilized for stowage of bulk LFORM fuel products.

(d) Stowage of JP-5/Diesel Refuelers or Tankers. Refuelers/tankers will embark full (95%) or empty, purged and certified gas free. The preferred method of stowage is empty as this lessens the strain on gripes, reduces the possibility of a fuel spill and will lighten the overall load as it relates to available load displacement tonnage. Bulk fuel carrying vehicles may be filled with JP-5 from ship's tanks just prior to debarkation. Currently bulk JP-8 is not authorized for stowage aboard amphibious ships.

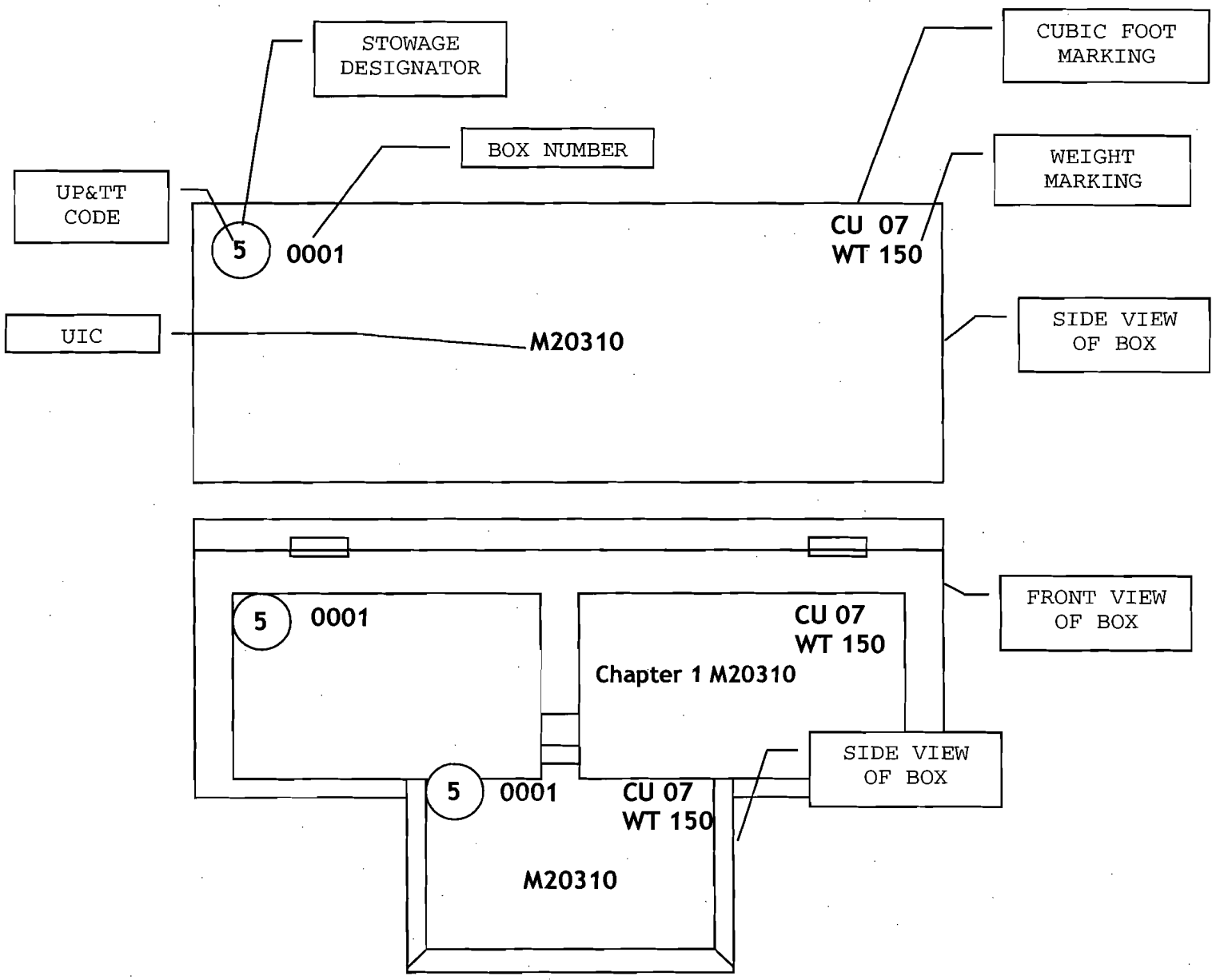
(e) Expeditionary Fuel Cans. Expeditionary fuel cans will only be embarked aboard ship in a serviceable condition with rubber seals.

1. MOGAS. Fuel cans containing MOGAS or MOGAS vapors must be stowed on jettisonable racks. Certified gas free MOGAS fuel cans can normally be stowed in vehicles. In accordance with reference (a), MOGAS shall not be transferred to or from expeditionary cans while aboard ship without approval from the ship's Commanding Officer via the Combat Cargo

Officer. Due to the high flammability of MOGAS, certain fire fighting protection measures must be taken prior to handling.

2. Diesel/JP-5. Fuel cans containing diesel or JP-5 may only be stowed on vehicles in certified racks designed for fuel cans or on a jettisonable rack. Fuel cans stowed in authorized stowage racks on vehicles must be affixed with a seal. Currently, JP-8 is not authorized for stowage in fuel cans aboard amphibious ships.

(4) Ammunition Stowage. All ammunition to be embarked aboard amphibious ships must be coordinated through the MEU S-4 Officer.



Enclosure (1)

Figure 3-1.--Sample Standard Embark Box

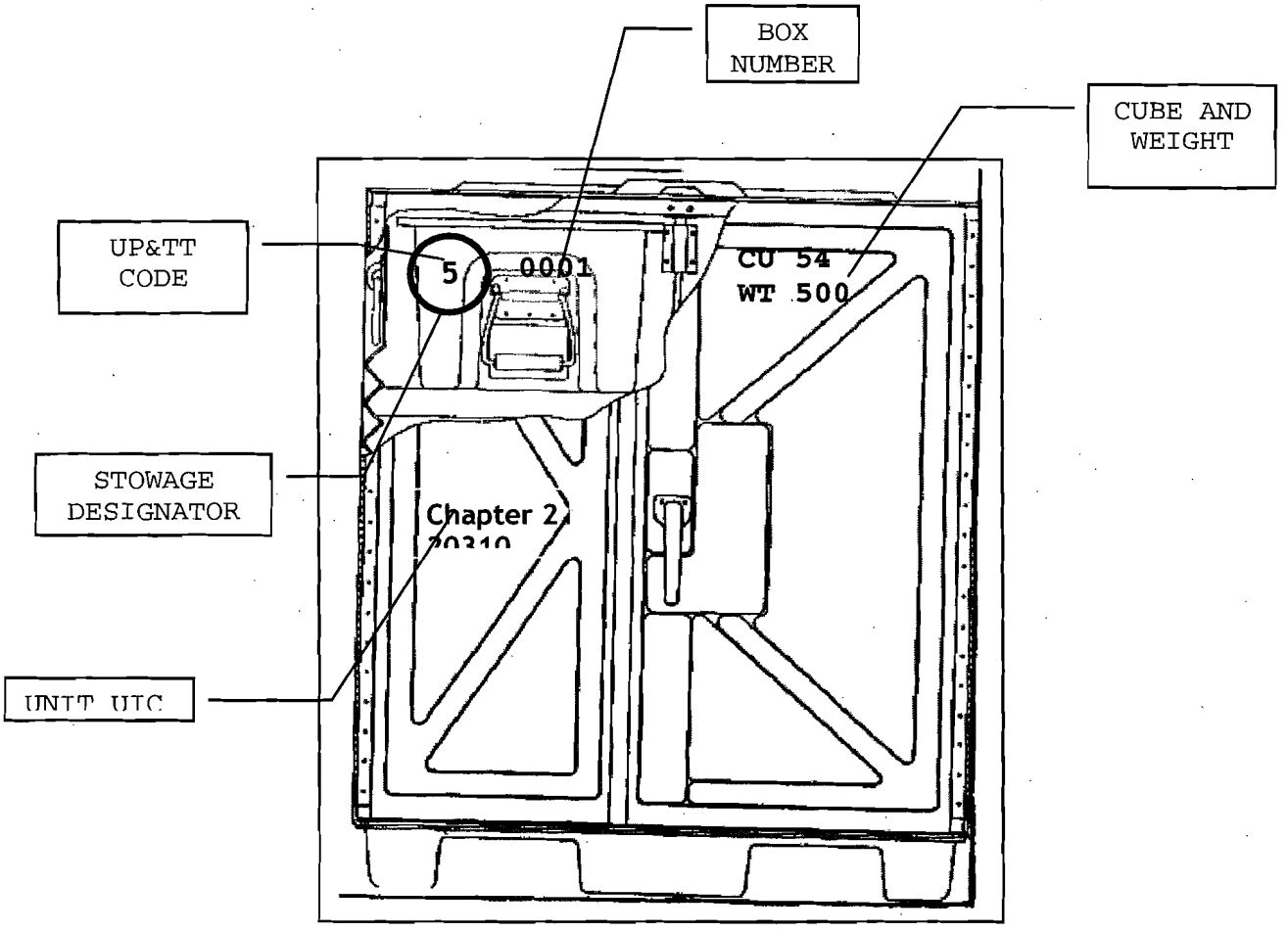


Figure 3-2.--Sample Pallet Container (Palcon)

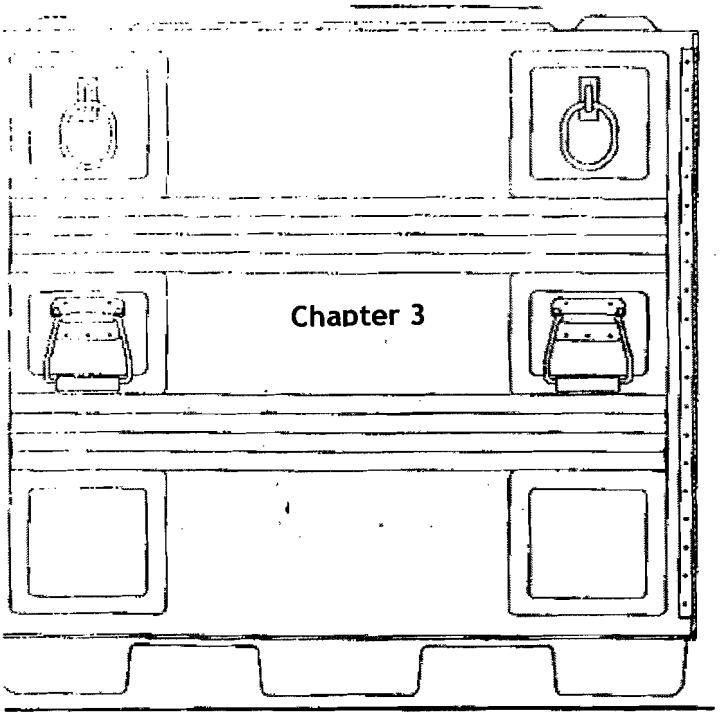


Figure 3-3.--Sample Palcon Side View

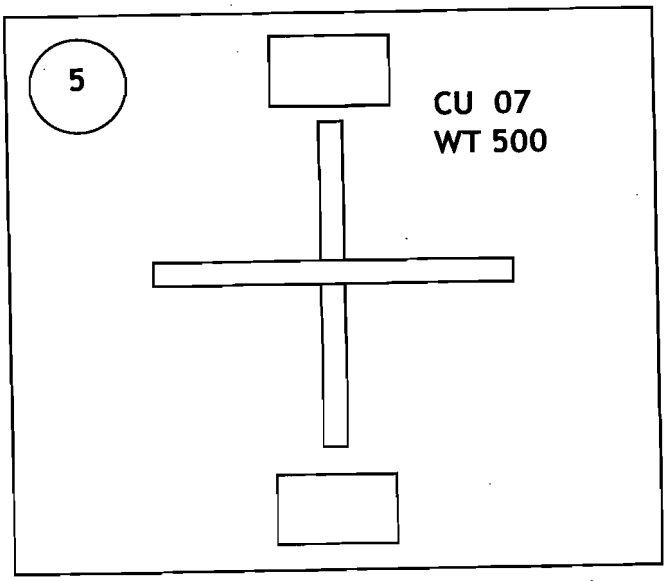


Figure 3-4.--Sample Palcon Top View

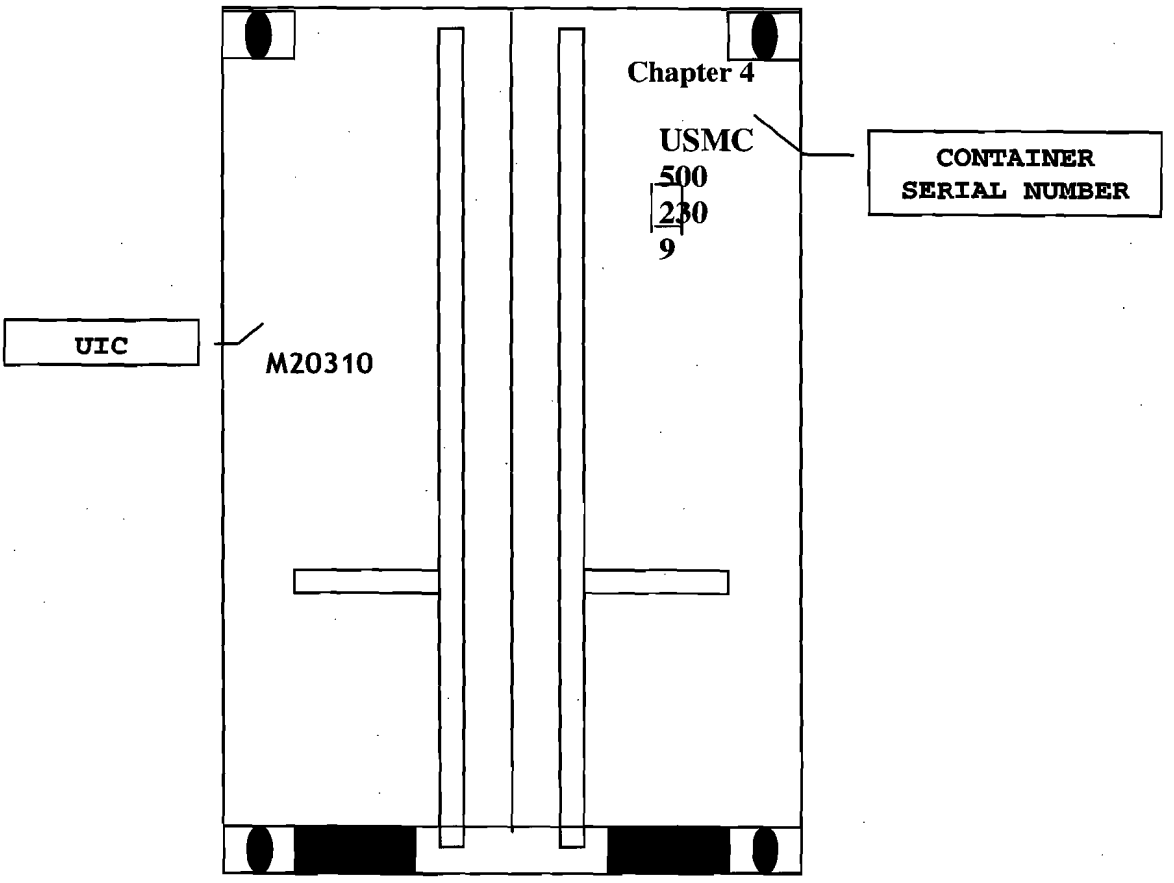


Figure 3-5.--Sample Quadruple Container (Quadcon)- Front/Rear View

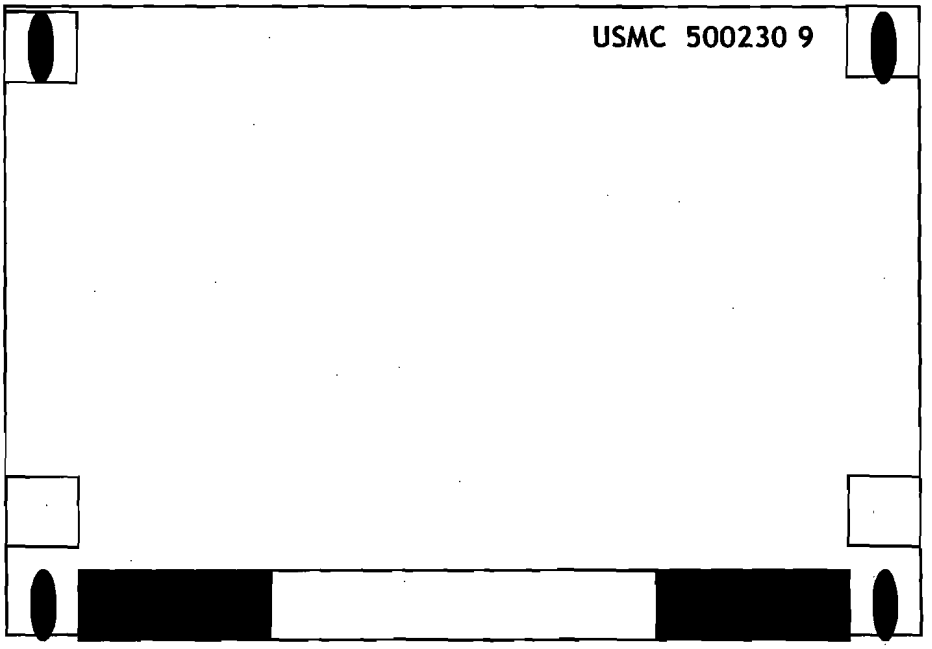


Figure 3-6.--Sample Quadcon Side View

Enclosure (1)

Chapter 4

Inspections and Required Reports

1. Embarkation Inspections

a. Unit Embarkation Officers. Unit Embarkation Officers should conduct regular embarkation inspection of their units and attachments. MSEs should chop to the MEU with all required MDSSII data and ready for embarkation. Appendix E provides a sample Embarkation Inspection Checklist.

b. Team Embarkation Officers. TEOs will inspect for embarkation readiness in the marshalling/unit movement areas to ensure the team's embarkation readiness.

c. MEU Embarkation Officer

(1). MEU CE. The MEU Embarkation Officer is responsible to the MEU Commander for the embarkation readiness of the CE and will therefore conduct regular inspections of all MEU staff sections.

(2). MSEs. The MEU Embarkation Officer will conduct an inspection of all MSEs prior to embarkation. This inspection will ensure readiness for embarkation.

d. Combat Cargo Officer/First Lieutenant. CCOs or First Lieutenants will conduct embarkation inspections prior to loading. Inspections will normally be conducted in the final staging area. These inspections will concentrate on condition of vehicles, securing of mobile loads, hazardous materials and documentation.

2. COT Inspections

a. Habitability Inspection. The COT for each ship will conduct a habitability inspection of all troop spaces. This inspection should emphasize cleanliness of living spaces with particular emphasis on fixtures and serviceability of equipment within
these spaces. The format for inspecting troop berthing areas, organizational workspaces and officer staterooms is provided in reference (f). The ship inspection will be mutually scheduled between the COT and the ship and should be performed with enough
time in advance of an exercise or deployment to allow the ship to correct discrepancies. Inspection results will be forwarded to the MEU Commander. The MEU Commander will forward these
results to the PHIBRON for further action as necessary. It must be emphasized that receiving a space in less than satisfactory conditions will not be justification for returning the space in the same condition.

b. Troop Space Inventory/Inspection. This is a joint inspection between the COT representative and a ship representative and will be performed prior to embarkation. The inventory will include all items that are removable or susceptible to damage and will indicate the status/condition of each item as well as overall condition of each compartment. The format for the troop space inventory is found in reference (f). Any damage/loss resulting from

avoidable circumstances will result in a reimbursement claim sent to the embarked unit. Reimbursement procedures are detailed in reference (f).

b. LFORM/MLA Visual Inspections. The COT will conduct a visual inspection of LFORM/MLA within 48 hours of embarkation as required by reference (e).

3. Reports

a. Quarterly Embarkation Personnel Report. A Quarterly Embarkation Personnel Report will be submitted no later than the 15th day of each quarter (March, June, September and December) by each MSE. This report will list all school trained embarkation personnel within each MSE. Due to frequent changes in the report format, an example format will be provided prior to each submission.

b. Unit Deployment Lists. The MEU Embarkation Officer requires frequent updates to UDLs in the form of MDSSII data. MSE Embarkation Officers and TEOs will be prepared to submit accurate and timely data when requested.

c. Personnel, Vehicle, Cargo and Time (PVCT) Reports. During all embarkation and debarkation operations, whether pier side or underway, the MEU Commander requires visibility of the status of the evolution. PVCT reports provide an aggregate percentage based status of all ships in the ARG.

(1) Pier Side. While conducting embarkation or debarkation pier side, TEOs will provide the status of the evolution to the MEU Embarkation Officer. The MEU Embarkation Officer will provide the PVCT to the MEU Commander as required.

(2) Underway. While conducting embarkation or debarkation underway, Combat Cargo organizations provide the PVCT to the PHIBRON CCO. TACLOG afloat provides the PVCT report to the MEU Commander as required.

(3) Submission Requirements. Normally PVCT reports are provided hourly while underway and daily while pier side. Additional clarification will be provided in supplemental Letters of Instruction (LOIs) published prior to the evolution.

d. The following reports are submitted as directed by MARFORPAC/COMNAVSURFPAC. Formats and more detailed submission requirements are provided in references (c) and (e).

(1) LFORM/MLA Status Shortfall Report. Submitted no later than the 10th day of each month, regardless of status, by each LFORM carrying ship. This report provides the status/shortfalls of all LFORM and other contingency material embarked.

(2) LFORM/MLA Visual Inspection Report. Submitted within 48 hours of embarkation by the COTs for each LFORM carrying ship. This report provides visibility of the condition of the LFORM and other contingency materials embarked.

(3) Pre-Embarkation Planning Report (PEPR). Submitted 45 days prior to embarkation by each ship. The PEPR identifies any space or capability outlined in the SLCP that is not available for use by the Landing Force.

(4) Embarked Personnel/Material Report (EPMR). Submitted within 36 hours of completion of embarkation by the ship's CCO/First Lieutenant with assistance from the TEO. The EPMR reflects the personnel, cargo, equipment and supplies actually embarked.

e. Shipboard Inspection Summary (SIS). Submitted by the COT with comments provided by the ship's Captain. The SIS provides visibility of the material condition of Landing Force spaces and services upon both embarkation and debarkation.

Chapter 5

Commanding Officer Of Troops

1. Purpose. The purpose of this chapter is to provide information and describe responsibilities relative to the duties of the COT during preparation for embarkation and while deployed. Control and supervision of embarkation, life aboard ship, and debarkation of troops is dependent upon constant liaison and close coordination.

2. Policy. The COT is responsible for the discipline and efficiency of embarked troops. He will make necessary arrangements with the CO of the ship relative to embarkation including assignment of troop berthing spaces, organizational workspaces, messing and other administrative matters.

3. Assignment of COTs. Once approved the MEF CG, the MEU Commander will usually assign, in writing, the senior troop commander of the organizations embarked on each amphibious ship as the COT.

4. Command Relationships

a. Relationship to the ship's Commanding Officer. The COT is responsible to the ship's Commanding Officer for execution of the ship's orders, instructions and regulations by all embarked Landing Force personnel.

b. Relationship to the MEU Commanding Officer. From time to time, the MEU Commander will disseminate information or policy for all COTs. These policies will be carried out as prescribed.

5. Augmentation/Collateral Duties. Each ship publishes troop regulations for embarked units. These regulations will contain, among other things, the liaison billets or collateral duties that must be assigned by the COT. Some of these include: Messing Officer, Billeting Officer, Guard Officer, Laundry Officer, OIC of Ship's Platoon and Sanitation Officer. Troop regulations vary, and additional collateral duties may be required. Only the COT or COT staff will coordinate with ship's company on quality of life, messing, billeting or administrative issues.

a. Messing. The COT is responsible for the proper messing of all embarked units. The COT assigns a Troop Messing Officer to ensure all messing functions run smoothly for the Wardroom, Chief Petty Officer's (CPO) mess and the enlisted mess. Specific duties may include:

(1) Ensure that embarked units provide the proper number of cooks and messmen to augment ship's force. The appropriate ratios are specified in the troop regulations.

(2) Coordinate with ship's Messing Officer for the scheduling of meal hours, control procedures, late meals and meal passes.

(3) Act as the Landing Force Wardroom Treasurer, if necessary, to collect mess bill payments for embarked troop officers.

b. Berthing. The COT must assign a Troop Billeting Officer to coordinate with the ship's CCO or Billeting Officer for the billeting of Landing Force personnel. Specific duties may include:

(1) Publish a billeting plan for all Landing Force personnel. This includes all officers, senior enlisted and enlisted personnel. Approval of the plan rests with the MEU Commander on the Flag Ship and the COTs of all other ships.

(2) Assign a berthing compartment NCOIC for each compartment.

(3) Ensure linen is properly issued for each berthing compartment and stateroom.

(4) Be prepared to billet the Naval Support Element Augments (NSEA) or other personnel in troop spaces if directed by higher authority.

(5) Develop a Non Combatant Evacuation (NEO) berthing plan in which units are consolidated in order to maximize the available rack space. The plan should anticipate VIPs, families, males and females.

c. Laundry. The COT will appoint a Laundry Officer to ensure proper laundry service to the Landing Force. Additional personnel will also be assigned as prescribed in the troop regulations. Specific duties may include:

(1) Ensure that embarked units provide the proper number of personnel to augment ship's force. The appropriate ratios are specified in the troop regulations.

(2) Coordinate with the ship for training of personnel, proper operation of laundry and dry cleaning equipment and laundry scheduling.

d. Ship's Platoon. The ship's platoon works directly for the CCO/First Lieutenant under the cognizance of an assigned Platoon Commander or Platoon Sergeant. The platoon's primary function is to facilitate the smooth and efficient embarkation and debarkation of the Landing Force. The size of the platoon and report date varies upon the type of ship and different training requirements. The ship's troop regulations will state the required number and composition of the ship's platoon. Normally, the Marines that comprise the ship's platoon will not be rotated. Occasionally, there are Marines that must maintain currency on MOS qualifications. In those limited instances, early coordination with the CCO is important so the flexibility is built into the plan to ensure those Marines can maintain proficiency and currency.

e. Working Parties. Frequently the ship will call for the mustering of various sized working parties. The COT is responsible for mustering the required personnel.

f. Troop Guard. Most ships will require the Landing Force to establish a guard force for maintaining good order and discipline and guarding Landing Force property, both in port and at sea. This guard force should contain at a minimum:

(1) Landing Force Officer of the Day;

(2) Sergeant of the Guard;

(3) Sentries (as required);

(4) Supernumeraries (as required).

g. Health and Sanitation. The COT will appoint either a Medical Officer or senior Corpsman from the Landing Force to be the Sanitation Officer. Specific duties may include:

(1) Inspect all troop berthing compartments, heads, galleys, and sculleries with the ship's Medical Officer prior to embarkation.

(2) Conduct routine sanitation inspections of all troop spaces.

6. Preparation for Loading

a. MDSSII Data. The COT will ensure that the TEO prepares and constantly updates MDSSII data and that it is submitted to the proper agencies in a timely manner.

b. Final Load Plans. Final load plans will be signed by the TEO, COT and ship's Commanding Officer prior to being submitted to the MEU Embarkation Officer as a final document.

c. Embarkation Roster. COTs will prepare an alpha roster of all Landing Force personnel to be embarked. This roster must be submitted to the ship's CCO/First Lieutenant prior to embarkation. A corrected copy will be submitted within 24 hours of embarkation, if required.

7. Landing Force Organization Workspaces

a. Assignment of workspaces. Allocation of these spaces is the responsibility of the COT for his ship. There are numerous considerations that must be taken into account during the assignment of workspaces. Amphibious ships have limited space with regard to organizational workspaces. Proper allocation of space is paramount to ensure smooth administrative processes while embarked. Units must limit amounts of office equipment and supplies to that which is absolutely essential for the conduct of assigned tasks. There will generally not be sufficient space for "nice to have" items. Assignment of office spaces must be based on actual need vice the compartment designation label. COTs may deviate from compartment designation labels and SLCP to ensure space assignment is carried out in the most efficient manner. The COT will publish organizational workspace assignments. The MEU Commander should approve the organizational workspace assignments prior to the pre-habitability inspection.

b. Reconfiguration of Troop Spaces. Due to the limited workspace aboard ship, it may be necessary to use troop berthing space to conduct office/administrative functions. Early and close liaison between the COT and the ship's Commanding Officer is essential. Although a compartment may be designated as troop space on the SLCP, the Landing Force is only a temporary custodian of the space while embarked, therefore, the ship's Commanding Officer must approve conversion of the space from other than its intended purpose. In such instances where spaces have been authorized for conversion, the capability must exist to return that space to its original configuration with 48 hours and without outside assistance.

c. Ship's Furniture. Refer to ships' regulations for movement of office furniture from one compartment to another aboard ship.

8. Cleanliness of Spaces

a. The COT is responsible for the cleanliness and preservation of workspaces, berthing compartments, ladders allotted to, or occupied by embarked troops and vehicle/cargo decks. The ship is responsible for providing all required cleaning gear.

b. Sufficient cleaning details should remain on board during the final debarkation to clean assigned areas. A final inspection by the COT and the ship's Executive Officer, or their representatives, will be conducted before cleaning details are secured.

c. Troop compartments should be inspected daily by the COT or a designated representative. This inspection may be held in conjunction with the daily ship XO's inspection or messing and berthing. The inspecting officer should inspect each compartment, at a minimum, for the following:

(1) All rack are made and secured.

(2) Decks and bulkheads are properly policed.

(3) Ventilation systems are operating properly.

(4) All equipment is secured for sea to prevent damage to the ship or personnel.

(5) Heads and showers are in proper police and functioning properly.

(6) No defacing of bulkheads or fixtures has occurred.

(7) Malfunctioning equipment has been properly reported to ship's personnel.

9. Emergency Procedures/Drills

a. General. In spite of best efforts and intentions, emergencies to happen at sea. It is imperative that embarked forces learn and practice the procedures that must be accomplished in the event of an emergency. Attention to detail and a focused effort during a drill will save lives in an actual emergency.

b. Indoctrination. As soon as possible after embarking, the COT will ensure that all embarked personnel are instructed in the procedures to be followed during all emergencies and emergency drills. Drills should include blindfolded egress practice from berthing compartments and workspaces.

c. Standard Procedures During an Emergency

(1) Smoking. The smoking lamp is automatically out.

(2) Movement. Ship's company has the priority of movement. Embarked forces will make way on ladders and in passageways. After the ship's crew

has passed, all embarked personnel will proceed to designated emergency stations. Move quickly but do not run. Move up and forward on the starboard side and down and aft on the port side.

(3) Stations. Refer to individual ship's troop regulations for details concerning emergency stations.

(4) Watertight Doors. Once a watertight door or fitting is secured it will not be opened unless directed by higher authority or a member of ship's company in the performance of their duties. If embarked personnel are unable to reach assigned areas due to the closure of doors, the will contact the Landing Force Operations Center (LFOC) by phone to report their location.

(5) Dress. In an emergency, the proper dress is boots and full utilities with sleeves down. This protects embarked personnel and allows them to assist in fire fighting efforts, if required, or to be prepared for ABANDON SHIP.

d. Emergency Definitions and Signals. Although actions performed by the Landing Force differs from ship to ship, definitions and signals are standard throughout. The following definitions and signals are provided to assist COTs in preparing the Landing Force for life at sea. Alarms are passed over the ship's General Announcing System (1MC), by word of mouth or by bells, whistles or gongs.

(1) General Quarters

(a) Definition. This alarm signifies severe damage to the ship or is called in preparation for combat.

(b) Signal. The alarm is a series of gongs. The word is passed "General Quarters, General Quarters. All hands man your battle stations".

(2) Man Overboard

(a) Definition. This alarm signifies that a man has been spotted in the water or has been observed to fall off the ship.

(b) Signal. The alarm consists of six, short blasts of the ship's whistle followed by the announcement "Man Overboard, Man Overboard port/starboard side".

(3) Fire

(a) Definition. This alarm is sounded to signify a fire on board, off the ship, or a rescue.

(b) Signal. The alarm is a rapid ringing of the ship's bell for a period of five seconds, followed by one bell for fire forward, two bells for fire amidships, three bells for fire aft and four bells to signify a fire off ship or a rescue. The alarm will be followed by an announcement of the exact location of the fire and call away of the emergency teams.

(4) Collision

(a) Definition. This alarm is sounded to signify an imminent collision.

(b) Signal. The alarm consists of a rapid beeping tone (dots and dashes), followed by announcement stating the estimated point of impact, followed by the general alarm.

(5) Chemical, Biological, Radiological and Nuclear (CBRN) Defense

(a) Definition. Commonly known as NBC.

(b) Signal. This alarm will consist of a constant tone followed by an announcement indicating the type of attack.

e. Material Conditions of Readiness. Material conditions of readiness refers to the degree of access and system closure to maintain the maximum degree of watertight integrity, consistent with working requirements, health and comfort of the crew and embarked forces and to maintain readiness for battle action consistent with the demands of the tactical situation. There are three basic material conditions of readiness.

(1) Condition X-RAY. Provides the least protection. It is set when the ship is in no danger from attack such as when it is at anchor in a well-protected harbor or in port during regular working hours. All doors, hatches, scuttles, etc. marked with an "X" are closed.

(2) Condition YOKE. The next higher degree of watertight integrity provides more protection than condition X-RAY. This is used in protected ports, when entering of leaving port in peacetime and during normal cruising when not at General Quarters. All doors, hatches, scuttles, etc. marked with an "X" or "Y" are closed.

(3) Condition ZEBRA. The maximum degree of watertight integrity, used in battle, emergencies and set immediately without further orders when manning General Quarter's stations. Condition ZEBRA is also set to localize and control fire and flooding when not a General Quarter's stations. Condition ZEBRA includes the closing of all doors, hatches, scuttles, etc. marked with an "X", "Y" and/or "Z".

10. Equipment Maintenance While Embarked

a. Vehicles must be wiped down periodically and first echelon maintenance accomplished at regular intervals. Vehicles should be started regularly regardless of stowage location. Vehicle start-ups should be scheduled via the TEO and ship's XO during the ship's Planning Board for Training (PB4T).

b. Guns, mortars and other weapons must be kept clean and lubricated. Crated weapons must be stowed to allow for frequent inspections.

11. Debarkation Planning. Debarkation from the ship is the responsibility of the COT. Each COT will produce a debarkation plan, complete with a schedule for turnover of all troop spaces, to include troop space inventory and COT/ship's XO's final inspection. It should also include his plan for

pre-palletization of cargo, if required. A representative from by COT must be present until debarkation is complete.

APPENDIX A

MEU PREDEPLOYMENT MILESTONE CHECKLIST

A. The following Milestones Checklist is derived from reference (g). They are generic in nature and do not incorporate TEEP'd events. Detailed Embarkation Milestones will be published as a supplement to this SOP prior to E-180.

TARGET DATE	MILESTONE
Ongoing	MEU establishes early liaison with MSEs prior to OPCON date
Ongoing	MSEs conduct early liaison with planned attachments and produce equipment density list and MDSSII data
E-330	MEP request amphibious ship mix for pre-deployment training
E-230	Submit RadBn AMC Channel flight request to I MEF IAW FMFPACO 4600.6
E-210	Navy Support Elements (NSEs) submit force/troop lists and specific equipment lists to CG, I MEF, info MEU
E-180	Identify schools required and request necessary quotas
E-180	MEF request list of assigned shipping and authorization for deployment planning with CPG-3/PHIBRON from COMMARFORPAC
E-180	Designate COTs and TEOs
E-170	Logistics conference w/MSEs
E-150	Determine initial MEU lift requirements
E-150	Identify Class V(A) and (W) training ammunition requirements
E-120	Provide initial MDSSII data to MEU S-4
E-120	Order mount-out, palcon and quadcon boxes as required
E-120	MEU Logistics Conference with MSEs
E-120	Identify embarkation material deficiencies to MEU S-4
E-120	Request SLCPs/Troop Regulations from PHIBRON for assigned shipping
E-120	MEU COTs conduct pre-habitability inspection aboard PHIBRON ships to include communication inspection
E-100	Determine lift requirements and match against lift available. Provide initial assignment to shipping
E-90	Initial pre-load conference with PHIBRON

E-80	Submit message to PHIBRON requesting staging area at San Diego; info NavBase and CPG-3
E-80	Request NSEA message
E-60	Request LFORM data from 1st FSSG
E-60	Submit refined MDSSII data to MEU S-4 for consolidation
E-60	Review lift requirements
E-60	Publish MEU Landing Plan
E-50	Submit Organization for Embarkation and Assignment to Shipping message to PHIBRON
E-45	Request Pre-Embarkation Planning Reports from PHIBRON
E-40	Initial pre-load conference with PHIBRON
E-30	Ship TEOs report discrepancies of SLCPs (preliminary habitability inspection)
E-30	Publish embarkation plan. Publish annexes, as appropriate in accordance with FMFM 4-2
E-30	Submit initial transportation requirements to MEU S-4
E-30	Logistics Support Conference to discuss transportation arrangements for vehicles and cargo at POE
E-15	Submit final transportation requests to MEU S-4
E-15	Final habitability inspection of ships' spaces
E-15	Submit listing of T/E left behind for all MEU elements to AC/S G-4, I MEF
E-7	Consolidated list of commercial U-drive vehicle support for embarkation submitted to I MEF
E-5	Pack unit correspondence files, JTJMPS/MMS records, service records and personal financial records for embarkation
E-5	Advance Party and ships' platoon personnel to ship
E-Day	Embarkation operations
E+1	COT, in conjunction with CCO/1stLt, prepare EPMR and Troop Space Inventory
E+2	COT submit LFORM Discrepancy Report to COMMARFORPAC info I MEF
E+2	TEOs submit two copies of corrected load plans to MEU Embarkation Officer

E+4	MEU Embarkation Officer compiles and distributes load plans to appropriate agencies
R-120	Submit Advance Party AMC channel flight requirements to CG I MEF
R-60	Submit offload support requirements to CG I MEF
R-30	MEU Advance Party arrives to coordinate all aspects of MEU debarkation
R-3	COT and ships' CCOs/reps conduct formal, joint debarkation inspections

APPENDIX B

SECTION BOX NUMBER ASSIGNMENTS AND SECTION DESIGNATORS

15TH MEU SECTION	SECT CODE	UNIT IDENTIFICATION CODE	BOX NUMBERS
S-1	S1	M20310	1000-1999
S-2	S2	M20310	2000-2999
S-3	S3	M20310	3000-3499
CBRN	CBRN	M20310	3500-3999
S-4	S4	M20310	4000-4999
HQCMDT	HQC	M20310	5000-5999
S-6	S6	M20310	6000-6249
Data	S6	M20310	6250-6499
Radio	S6	M20310	6500-6999
SUPPLY	SUP	M20310	7000-7999
MEDICAL	MED	M20310	8000-8999
ARMORY	ARM	M20310	9000-9999
All MSE	Per Parent Command SOP		

APPENDIX C

EMBARKATION INSPECTION CHECKLIST

UNIT:_____ DATE:

INSPECTOR(S):
UNIT EMBARKATION OFFICER:
GRADE ASSIGNED:
REPORT OF CORRECTIVE ACTION TAKEN DUE BY:_____(30 DAYS)

PHASE I

EMBARKATION TRAINING

ASSIGNMENT (3 POINTS)	YES	NO	N/A
1. Were embarkation personnel available for training, including those assigned as collateral duty embark clerks?	___	___	___

PERSONNEL ASSIGNMENTS (4 Points)

1. Does the unit T/O have an Embarkation Officer billet with an MOS of 0402/0430.	___	___	___
2. Has the unit properly assigned an embarkation Officer per the T/O and MEUO 4600.2?	___	___	___
3. Does the unit T/O call for a(n) Embarkation Chief/NCO billet with an MOS of 0491/0431.	___	___	___
4. Has the unit properly assigned an Embarkation Chief/NCO per the T/O and MEUO 4600.2?	___	___	___
5. Does the unit T/O call for an(y) Embarkation Assistant(s) billet(s) with an MOS of 0431?	___	___	___
6. Has the unit properly assigned Embarkation Assistants per the T/O and MEUO 4600.2?	___	___	___
7. Has the unit improperly assigned any personnel with primary MOS's 0402/0430/0491/0481/0431?	___	___	___
8. Do all assigned embarkation personnel possess appropriate access to classified material?	___	___	___

TRAINING (4 Points)

1. Has the unit actively pursued MOS training for embarkation personnel?	___	___	___
2. Is quarterly embarkation training being conducted?	___	___	___

3. Are lesson plans and class rosters being maintained for a period of two (2) years? ___ ___ ___

4. Have section embarkation representatives completed or enrolled in the following MCI's? ___ ___ ___

a. Basic Logistics/Embarkation Marine 04.5

b. Introduction to Amphibious Embarkation 04.7

ADMINISTRATIVE TOOLS (17 Points)

1. Does the embarkation section maintain an updated turnover folder IAW MEUO 4600.2? ___ ___ ___

2. Does the unit maintain (or have access to) the following publications/directives?

JP Pub 3-02	JP Doctrine for Amph Operations	921008	___ ___ ___
JP Pub 3-02.2	JP Doctrine for Amph Embark	930416	___ ___ ___
FMFM 3-1	Cmd and Staff Action (change 2)	790529	___ ___ ___
FMFM 4-6	Movements of Units	921228	___ ___ ___
MCO 4030.19G	Prep of HazMat for Military Air Shipment	941124	___ ___ ___
MCO 4610.35D	Marine Corps Equip Characteristics File	930331	___ ___ ___
MarForPacO 4600.1H	SOP for Embark	NO DATE	___ ___ ___
MarForPacO 4630.6E	Procedures for forecasting and requesting SAAM	940216	___ ___ ___
MarForPacO 4635.1	Tactical marking procedures for equipment and embarkation containers	960524	___ ___ ___
T/O	Unit Table of Organization		___ ___ ___
T/E	Unit Table of Equipment		___ ___ ___

3. Has the unit published an SOP for Embarkation? ___ ___ ___

4. Does the unit SOP for Embarkation conform to higher headquarters publications and directives? ___ ___ ___

5. Are quarterly in-house embarkation inspections being conducted? ___ ___ ___

6. Does the unit maintain copies of past inspection results for at least two (2) years? ___ ___ ___

7. Have reports of corrective action been submitted when required? ___ ___ ___

8. Does the unit maintain the most current authorized version of MDSS II? ___ ___ ___

9. Does the unit maintain the most current authorized version of ICODES? ___ ___ ___

10. Does the unit maintain the most current authorized version of AALPS? ___ ___ ___

REPORTS (3 Points)

1. Has the unit submitted the quarterly personnel report on time? ___ ___ ___

2. Has the unit submitted the quarterly pallet/ net report as required? ___ ___ ___

3. Has the unit submitted the quarterly MDSS II UDL/ROSTER? ___ ___ ___

MDSSII UDL/ROSTER MAINTENANCE (16 Points)

1. Is the unit maintaining the garrison UDL/ Roster IAW MEUO 4600.2? ___ ___ ___

2. Are all T/E supplies and equipment accounted for in the garrison UDL? ___ ___ ___

3. Is the level of detail and description of the cargo/equipment sufficient in detail to identify it? ___ ___ ___

4. Does the unit maintain standing OPLAN UDL's? ___ ___ ___

5. Does the unit maintain ACM or MEU UDL's as appropriate? ___ ___ ___

6. Does the unit maintain RBE UDL's associated with ACM or MEU? ___ ___ ___

7. Are actual, vice estimated, cubes and weights being assigned in the garrison UDL? ___ ___ ___

8. Does the unit maintain LOGMARS label for standing OPLANS? ___ ___ ___

INSPECTION CHECK LIST
PHASE II

SUPPLIES AND EQUIPMENT	YES	NO	N/A
BOX/CONTAINER PREPARATION (20 Points)			
1. Are standard size boxes being used to the maximum extent possible?	___	___	___
2. Are PALCONS and QUADCONS being used to the maximum extent possible?	___	___	___
3. Are embarkation containers/pallet boards correctly marked?	___	___	___
4. Are five gallon expeditionary cans properly marked and packaged?	___	___	___
5. Are inspected boxes/containers serviceable?	___	___	___
6. Are there sufficient wooden pallets for unbanded/used supplies and equipment?	___	___	___
7. Does the unit maintain an adequate quantity of pallet boards and are they at least 12"x12"?	___	___	___
8. Are there sufficient banding tools, clips, and1 1/4 inch banding wire on hand?	___	___	___
9. Does the box/container markings agree when making a physical comparison between the box/container and the garrison UDL?	___	___	___
VEHICLE/EQUIPMENT PREPARATION (10 Points)			
1. Does the unit have plans to acquire the appropriate amount of dunnage/shoring to support planned contingencies?	___	___	___
2. Does the unit have 1/2" rope or 5,0001b cargo straps on-hand?	___	___	___
3. Does the unit have pallet/vehicle placards for movement by both surface and air transportation?	___	___	___
4. Are 463L pallets properly stored and maintained?	___	___	___
5. Does the unit have pallet bags on hand to protect cargo from inclement weather during air movement?	___	___	___
6. Does the unit maintain portable wheels scales on-hand?	___	___	___
7. Do the markings and description agree when making a physical comparison between the vehicle and the garrison UDL?	___	___	___

8. Are lifting devices installed or available for installation and are they serviceable? ___ ___ ___

9. Are there any modifications made to vehicles which might make the equipment ineligible for crane lifting or shipment? ___ ___ ___

PERFORMANCE EVALUATION

UDL/ROSTER (7 Points)

1. Can the unit representative complete the following tasks? (MCO 1510.61)

   a. Create a UDL. ___ ___ ___

   b. Pull the records of the equipment which the unit will be providing from the UESL to the UDL (one item must be hazardous material). ___ ___ ___

   c. Pull approx. 25 personnel from the ROSTER to the MROSTER. ___ ___ ___

   d. Associate cargo to embarkation boxes. ___ ___ ___

   e. Associate embarkation boxes to 463L pallets. ___ ___ ___

   f. Associate vehicles and trailers. ___ ___ ___

   g. Mobile load cargo to vehicles. ___ ___ ___

LOGMARS (4 Points)

1. Can the unit representative complete the following tasks? (MCO 1510.61)

   a. Set up the LOGMARS equipment. ___ ___ ___

   b. Print out designated labels from UDL. ___ ___ ___

   c. Using the labels made above using the scanner and data collection device associate designated children to their parents. ___ ___ ___

   d. Download the data collection device to the UDL. ___ ___ ___

LOAD PLANNING (2 Points)

1. Can the unit representative complete the following tasks: (MCO 1510.61)

   a. Build a load plan using CALMS for a _____. (Inspector list aircraft) ___ ___ ___

   b. Export the UDL/MROSTER created above to a CAEMS diskette. ___ ___ ___

REPORTING (3 Points)

1. Can the unit representatives complete the following tasks: (MCO 1510.61)

a. Query the UDL which was created above and create the following reports

(1) SqFt Report with total STons ___ ___ ___

(2) CuFt Report with a total MTon and Ston ___ ___ ___

(3) Personnel Roster with appropriate columns ___ ___ ___

STAGING/MARSHALING PLANS (3 Points)

1. Can the unit representative complete the following tasks: (MCO 1510.61)

a. Create a Marshaling plan for the items contained in the UDL. ___ ___ ___

b. Create a Staging plan for movement by Sea. ___ ___ ___

c. Draft a Strip map to a designated APOE/SPOE. ___ ___ ___

PALLET BUIDING/VEHICLE PREP FOR MOVEMENT BY AIRCRAFT (4 Points)

1. Can the unit representative complete the following tasks:

a. Physically stage the equipment listed in the UDL at the unit Marshaling Area. ___ ___ ___

b. The unit representative will perform following tasks:

(1) Build a 463L pallet load with boxes provided. ___ ___ ___

(2) Prepare the vehicle(s) for movement by aircraft. ___ ___ ___

(3) Conduct a Joint Inspection on the 463L pallet and vehicle(s). ___ ___ ___

GRADING

1. Mission Capable: Yes on 80% or better of inspection questions.

2. Non Mission Capable: Yes on 79% or less of the inspection questions.

APPENDIX D

UNIT PERSONNEL AND TONNAGE TABLE (UP&TT)

UP&TT LINE#	DESCRIPTION
1	Rations
2	Water
3	Personal Baggage (Troop Stow)
4	Organizational Cargo (Troop Stow)
5	Organizational Cargo (Hold Stow)
6	Construction/Field Fortification Material
7	Non-Military Support
8	Medical and Dental
9	Personal Demand Items
10	Bulk Fuel
11	Packaged Fuel
12	Chemicals (Non Flammable)
13	Chemicals (Flammable)
14	Compressed Gas
15	Other POL (Special Lubes and Greases)
16	Small Arms
17	High Explosives
18	Pyrotechnics
19	Nuclear
20	Missiles
21	Inert
22	Vehicles, Equipment and Heavy Lift
23	Total Square
24	Aircraft
25	Operational Aircraft

APPENDIX E

JOINT CHIEFS OF STAFF CARGO CATEGORY CODES

The following table provides guidance on the proper use of JCSCCC. The JOPES manual provides additional information as required.

1st Char	Description	2nd Char	Description	3rd Char	Description
A	Vehicle Non-Self Deploy	0	Unit Equipment Not Air-Trans	A	Loaded on Organic Vehicle
B	Aircraft Non-Self Deploy	1	Unit Equipment Outsized	B	Containerizable 20′ Container
C	Floating Craft	2	Unit Equipment Oversized	C	Containerizable 40′ Container
D	Hazardous Non-Vehicular	3	Unit Equipment Bulk	D	Not Containerizable
E	Security Non-Vehicular	4	Acc Supplies Not Air Trans		
G	Bulk POL	5	Acc Supplies Outsized		
J	Other Non-Vehicular	6	Acc Supplies Oversized		
K	Security Vehicle	7	Acc Supplies Bulk		
L	Hazardous Vehicular				
M	Ammunition				
R	Vehicle Self-Deployable				

Definitions: Outsized - Item exceeds L 1090″ x W 117″ x H 105″
(Too large for C-141; Fits on C-5)

Oversized - Item exceeds L 108″ x W 88″
(Fits on C-141)

Examples:

ITEM DESCRIPTION	LENGTH	WIDTH	HEIGHT	JCSCCC
M998 HMMWV	185	85	83	R2D
MTVR	387	98	144	R1D
MTVR w/Fuel Sixcon (full)	387	98	144	L1D
Quadcon	96	58	82	J3D
Quadcon w/Lithium Batteries	96	58	82	D3D
20′ Container	240	96	96	J2D
Palcon	40	48	41	J3B
Palcon w/Secret Maps	40	48	41	E3B
7 cu box mobile loaded	18	18	40	J3A