

APPENDIX B

MARITIME PREPOSITIONING SHIPS SQUADRON CAPABILITIES AND CHARACTERISTICS

B.1 General

This appendix addresses the staff organization, characteristics, and capabilities of the maritime prepositioning ships squadron (MPSRON), including embarkation procedures, communications assets, and general ship characteristics. Information and ship characteristics are also provided for the TAVB and T-AH.

B.2 MPSRON Staff

The MPSRON staff is commanded by a U.S. Navy Captain who is responsible for exercising tactical control and providing logistic support to the MPS. The commander ensures that both ships and staff are maintained in an optimum state of operational readiness and are fully capable of responding to worldwide contingencies.

B.3 MPSRON Staff Composition

The nominal compositions of the three MPSRON staffs are listed below:

a. MPS Squadron One

The MPS Squadron One staff consists of 5 officers, 15 enlisted, and 2 civilians:

<u>Officers</u>	<u>Qty</u>
Squadron Commander (06)	1
Chief Staff Officer (04)	1
Engineering Officer (03)	1
Operations Officer (03)	1
Supply Officer (03)	1

<u>Enlisted</u>	<u>Qty</u>
Storekeeper (SK2)	1
Yeoman (YNC)	1
Radioman (RMC)	1
Radioman (RM1)	1
Radioman (RM2)	4
Radioman (RM3)	3
Electronics Technician (ET2)	2
Electronics Technician (ET3)	1
Gunner's Mate (GMC)	1

<u>Civilians</u>	<u>Qty</u>
Medical Services Officer	1
Purser	1

b. MPS Squadron Two

The MPS Squadron Two staff consists of 6 officers, 23 enlisted , and 3 civilians:

<u>Officers</u>	<u>Qty</u>
Squadron Commander (06)	1
Chief Staff Officer (04)	1
Engineering Officer (03)	1
Operations Officer (03)	1
Supply Officer (03)	1
Readiness Officer (03)	1

<u>Enlisted</u>	<u>Qty</u>
Machinist Mate (MMC)	1
Storekeeper (SKCS)	1
Yeoman (YNC)	1
Gunner's Mate (GMC)	1
Electrician's Mate (EM2)	1
Operations Specialist (OS1)	1
Personnelman (PN2)	1
Radioman (RMC)	1
Radioman (RM1)	1
Radioman (RM2)	3
Radioman (RM3)	8
Electronics Technician (ET2)	2
Electronics Technician (ET3)	1

<u>Civilians</u>	<u>Qty</u>
Medical Services Officer	2
Purser	1

c. MPS Squadron Three

The MPS Squadron Three staff consists of 5 officers, 14 enlisted , and 2 civilians:

<u>Officers</u>	<u>Qty</u>
Squadron Commander (06)	1
Chief Staff Officer (04)	1
Engineering Officer (03)	1
Operations Officer (03)	1
Supply Officer (03)	1

<u>Enlisted</u>	<u>Qty</u>
StoreKeeper (SK2)	1
Yeoman (YNC)	1
Radioman (RMC)	1
Radioman (RM2)	4
Radioman (RM3)	4
Electronics Technician (ET1)	1
Electronics Technician (ET2)	1
Electronics Technician (ET3)	1

<u>Civilians</u>	<u>Qty</u>
Medical Services Officer	1
Purser	1

B.4 Maritime Positioning Ship Communications Capabilities

a. Flagship Navy Systems

(NOTE 1)

<u>Nomenclature</u>	<u>Qty</u>
UHF SATCOM Transceiver (OE-82/WSC-3)	1
UHF SATCOM Multichannel Fleet Broadcast Receiver (SRR-1)	1
UHF Transceivers (LOS) (GRC-171)	2
VHF-FM Transceivers (URC-94)	2
HF Transmitters (URT-23)	2
HF Receivers (R-1051)	5
Navy Standard Teletype (NST)	7
VHF Bridge-to-Bridge Transceiver	1
MDU	1
HF SITOR	1

b. Non-Flagship Navy Systems

(NOTE 2)

<u>Nomenclature</u>	<u>Qty</u>
UHF Transceivers (LOS) (GRC-171)	2

c. Associated Crypto

<u>Nomenclature</u>	<u>Qty</u>
ANDVT SATCOM	1
ANDVT HF	1
KG-84	2
KWR-46	4
KY-58	4
KY-58 (NONFLAG) (NOTE 2)	2

d. All MPS Systems

<u>Nomenclature</u>	<u>Qty</u>
UHF INMARSAT (Satellite TTY/Voice)	1
VHF-FM Bridge-to-Bridge Transceivers	2
HF SITOR (TTY w/auto error correction)	1
HF Transmitter and Receiver (CW/SSB/TTY)	1
HF Radio Telephone Transceiver	1
MF Transmitter and Receiver (1 ea/battery-powered reserve)	2
Auto Alarm Keyer and Receiver	1

NOTE 1: Each MPSRON has an alternate flagship that is equipped with the same communication suite as the initial flagship, except for the crypto which is transferred when COMPSRON and staff shift ships.

NOTE 2: Each ship has the capability to operate Navy secure voice. Crypto is transferred as directed by COMPSRON.

NOTE 3: Communication capabilities are subject to change, as required.

B.5 Maritime Prepositioning Ship Squadron

a. General

Each of the 13 MPS have their own separate time charter. These charters are all very similar in the terms and conditions with the exception of differences with the MPS ship classes (e.g., contract speed, fuel consumption, deadweight carrying capacity). The three MPS operating companies are Maersk Line Ltd. (Maersk), Waterman Steamship Corp. (Waterman), and American Overseas Marine Corporation (AMSEA). The MPS operating companies each operate their respective class of MPS for MSC.

(1) MPSRON Ship Mix

The 13 MPS are divided into three MPSRONs that report to their respective COMPSRONs as follows: ("*" denotes flagship/alternate flagship with COMPSRON staff embarked and secure communication capabilities.)

- MPS-1/MPSRON ONE: Three Waterman Class (SS *Obregon**, *Pless*, and *Kocak*) and one Amsea Class (MV *Bobo**)
- MPS-2/MPSRON TWO: Five Maersk Class (MV *Hauge**, *Baugh*, *Bonnyman*, *Anderson*, and *Phillips**)
- MPS-3/MPSRON THREE: Four Amsea Class (MV *Lummus**, *Lopez*, *Williams*, and *Button**)

(2) MPS Maintenance

The MPS operating companies maintain the ships' systems, cargo, hull, propulsion, and navigation to U.S. Coast Guard and American Bureau of Shipping standards. Each operating company follows a preventative maintenance program of its own design, periodically testing cranes, ramps, hatches, elevators, etc., to ensure operability. This is monitored by the COMPSRON staff.

(3) U.S. Government Access

The whole reach of the ships' holds, decks and usual places of loading are at the Government's disposal. This is not the entire ship. The Government may request the ships' crews, to the extent permitted by their other duties and safety of each ship, to operate each ship's equipment in loading or discharging operations. These requests require pre-approval of the squadron commander as MSC's on-scene contracting officer's representative.

(a) Cargo Stowage

The Government has the right to use the ship's winches and other appropriate loading and discharging gear. Cargo is loaded, stowed, secured, and discharged by Government personnel under the master's supervision. The amount of cargo is at the discretion of the master (ship's stability, draft, and hull stress being prime considerations).

(b) Titles 10, 33, 46, and 49, U.S. Code

The MPS operating companies will operate the ships as directed by the Government in written or telegraphic order, including all voyage and cargo matters. Neither the Government nor an operating company may operate a ship in violation of any law of the United States. As commercial vessels, MPS are built and operated under Titles 10, 33, 46, and 49 of the U.S. Code. The USCG implements provisions of the law under those titles in the Code of Federal Regulations.

b. Naval Embarked Advisory Team Capabilities

The naval embarked advisory team (NEAT) will serve aboard civilian-manned ships. Using their portable equipment, they will provide tactical, maneuvering, amphibious, and other naval advice to ships' masters to permit a proper communications interface between merchant ships and the naval vessels with which they will serve. NEATs are envisioned to transit from CONUS or other locations with naval vessels providing protection. In essence, they serve as the operations department aboard a merchant ship, but they exercise no command or control aboard a civilian-manned ship. NEATs serve as advisors and facilitators for the master. NEATs were formed for three reasons: first, merchant ships would be essential to meet sealift capacity objectives because of the lack of active force assets; second, merchant ships (for the most part) had little or no familiarity with Navy tactics, doctrine, or plans; third, merchant ships were rarely able to communicate satisfactorily either electronically or visually with Navy ships.

(1) NEAT Organization

<u>Rate</u>	<u>Unit</u>	<u>Detachment</u>
Officer-In-Charge	1	0
Detachment OIC	4	1
Watch Officer	8	2
Radioman	12	3
Signalman	12	3
Electronics Technician	4	1
Total	41	10

(2) NEAT Detachment Radio Communication Equipment

<u>Nomenclature</u>	<u>Qty</u>
AN/URC-94 (V) HF/VHF	1
AN/ARC-184 (V)	1
HYX-58	1
Audio/Interface Switch Box	1
Standard tool box with technical manuals	1

(3) NEAT Detachment Visual Communication Equipment

<u>Nomenclature</u>	<u>Qty</u>
Sets of size 4 flags and pennants (65 per set)	2
12-inch Signal Lights	2
Sets of 7x50 power binoculars	2
Semaphore flags	4
Stadimeter	1
600 feet Halyard line, spool	1
Halyard blocks	8
Halyard snaps	24
Cruise box	1
Set "Big-eye" binoculars	1

B.6 MPSRON Embarkation Procedures

Personnel normally embarked on MPS consist of a ship's company, squadron staff, Marine Corps maintenance contractors (MCMC) personnel, and the USMC contracting officer's representative (COR). Additionally, personnel embarked on occasion include a USMC/USN surge and off-load preparation party (OPP) for exercises, contingency support, and/or training. In order for the MPF concept to be viable militarily, these organizations must work together in close coordination to ensure that the readiness of the ships and embarked cargo (equipment) is maintained at the highest levels and the readiness status is accurately reported to the CINC responsible for deployment of the squadron.

a. Ship Master's Authority

All government personnel onboard are subject to the authority of the ship's master and officers.

b. Surge Team Accommodation

The government has the right to assign a surge team of personnel for the purposes of discharging cargo. This team is in addition to the permanent military personnel assigned (squadron staff and MCMC personnel). To the extent that accommodations (berths) and life-saving equipment aboard ship permit, the Government has the right to assign additional personnel for training, observing operations, security, or other functions related to the performance of the charter/mission (see paragraph B.9 for specific berthing numbers).

(1) Additional Steward Support

The government assumes the responsibility for additional steward department services to support the surge team. The MPS operating companies assist by making kitchen, ship's steward's department services, and other facilities available at mutually convenient times. The OPP and debarkation team will provide personnel augmentation (e.g., cooks, messmen) to the steward department.

(2) Life-Saving Gear

The operating company is responsible for supplying sufficient life-saving gear for the surge team per all U.S. Coast Guard Regulations. The government must ensure that the number of personnel permanently embarked does not exceed the amount of life-saving equipment.

c. Request for Embarkation

In order for COMPSRON and the respective ship to fully support the embarked activity/command, advance notification of the desired dates and nature of the visit are required. All activities desiring to embark personnel on a squadron ship will request permission from the cognizant COMPSRON via message at least five working days in advance of the requested embarkation date. The embarkation message request must contain the following information:

- Embarking activity/command
- Requested ship(s)
- Embarkation date
- Debarkation date
- Purpose/nature of visit
- Number of officers (M/F)/Enlisted (M/F)
- Name of OIC/senior member

- Meal requirements (e.g., in excess of normal provisions such as box lunches, Midsrats)
- Security clearance data
- Quantity and type of lighterage to be splashed
- Miscellaneous/amplifying information (e.g., crew involvement, gear to be unloaded, alternate dates)

d. Commander, MPS Squadron Response

The commander, MPS squadron (COMPSRON) will reply to an embarkation message and either grant or deny the request. If the request cannot be supported, alternate dates will be provided. Advanced notification will allow ship and COMPSRON staff sufficient time to plan and prepare for the visit. If embarkation is ordered by higher authority or emergent operational commitments preclude advance notification, the embarking activity or command will provide the information requested by any means and as soon as possible.

B.7 Aviation Logistics Support Ship

The primary aviation logistics support ship (TAVB) mission is to provide dedicated sealift for movement of a Marine aviation logistics squadron (MALS) to support the rapid deployment of fixed- and rotary-wing aircraft units. Both TAVBs (SS *Curtiss* TAVB 4 and SS *Wright* TAVB 3) are in ROS-5 status in CONUS layberths (*Curtiss*/Baltimore, MD and *Wright*/Port Hueneme, CA) on the east and west Coasts (respectively). When TAVBs are activated, they are under the operational control of MSC. TAVBs are crewed under an operating contract by the Maritime Administration (MARAD). TAVBs are activated to participate in annual exercises and deployments as required.

Specifically, the MALS supports a designated mix of aircraft included in a specific MAGTF ACE. The majority of facilities used by the MALS when ashore are packaged in 8'X8'X20'-foot containers designated as mobile maintenance facilities (MMFs) which are placed aboard the TAVB. The MMFs containing operational work centers and ready access supply stores are installed on the main and second decks in tiers of one or two. Access ladders and scaffolding provide routine access to the MMFs by MALS personnel. Other MMFs containing spare parts are stowed below the second deck. The TAVB administrative loadout is approximately 684 MMFs, while the working loadout is approximately 352 MMFs.

During transit to the objective area and until moved ashore, MALS personnel operate in the MMFs. An example of a MALS function is the repair of weapons repairable assemblies that are received onboard, repaired, and returned while the TAVB is within helicopter operating range. The secondary TAVB mission is to provide for resupply in a conventional container or RO/RO configuration. TAVB modifications have been configured to retain maximum cargo capacity in the resupply mode. For further details regarding TAVB operations and load planning, the *Aviation Logistics Support Ship (TAVB) Logistics Planning Manual* must be consulted.

Characteristics

Length:	601 Feet, 6 Inches	LBP:	560 Feet
Beam:	90 Feet	Potable Water Cap.	250,000 Gal
Draft:	29 Feet, 9 Inches	Displacement loaded:	23,800 Long Tons
Speed (max warranted):	22.0 Knots	Crew:	41
Propulsion/Fuel:	Steam/Bunker	Container Capacity:	300 MFS plus 52 Access
Helicopter Certification:	Level III Class 3	Aircraft (mast to plimsoll):	118 Feet

Airdraft (mast to keel):	152 Feet	Breakbulk:	1,146,000 Cubic Feet
Crane Lifting Capacity:	(2) 30 Ton Fwd (2) 30 Ton Cent (2) 30 Ton Aft (1) 70 Ton Aft	Sides Ports:	1 P/S
		Bunker Capacity:	3,200 Long Tons
Berthing:	25 Off/SNCO	300 Enlisted	
RO/RO Capacity:	33,300 Square Feet	Stern Ramp:	32 Feet W/62 Ton Capacity

B.8 Mercy Class Hospital Ship

A mercy class hospital ship (T-AH) is a floating surgical hospital with a mobile, flexible, rapid response capability to provide acute medical care during contingencies or operations. There are two T-AH ships, the USNS *Mercy* T-AH 19 (San Diego, CA) and the USNS *Comfort* T-AH 20 (Philadelphia, PA). The hospital ship will accomplish the following:

- Receive patients suffering from wounds, disease, or non-battle injury
- Provide on-site emergency and recuperative care to patients until they can be returned to duty or evacuated
- Provide all necessary personnel, services, and facilities required for support of the medical facility
- Operate a complete medical facility while at sea, day and night, with minimal maintenance and refueling

Characteristics

Length:	894	Beam:	105 Feet, 9 Inches
Draft:	32 Feet, 9 Inches	Displacement loaded:	69,360 Long Tons
Speed (Max warranted):	17.5 Knots	Endurance:	13,420 NM
Capacity:	50 bed casualty reception area 12 Medical operating rooms 280 bed intermediate care 20 bed recovery room 80 bed intensive care 120 berth light care 500 berth limited care	Helicopter Certification:	

The ships are maintained by a crew of 13 MSC mariners and 40 military personnel. The Bureau of Medicine and Surgery controls medical staffing. They are operated by 68 civil service mariners, 820 active and reserve medical personnel, 372 naval support personnel, and 15 military communicators.

B.9 Maritime Prepositioning Ship Characteristics

a. Maersk Class

Length:	755 Feet, 5 Inches	LBP:	705 Feet, 5 Inches
Beam:	90 Feet	Draft (max aft):	32 Feet, 10 Inches

Draft(Air/freeboard to highest point):	136 Feet at 23 Foot Draft	Displacement loaded:	46,086 Long Tons
Speed (max warranted):	16.4 Knots	Endurance (at max speed):	10,802 Nautical miles
Propulsion/Fuel:	(1) Slow speed/Diesel or DFM	Crew:	27 (NOTE 1)
Helicopter Certification:	Level II, Class 3	Container Capacity:	384 (33 refrigerated)
Breakbulk:	78,680 Cubic feet	JP-5 (98%):	17,128 Barrels
Mogas (98%):	3,865 Barrels (NOTE 2)	DF-2 (98%):	10,642 Barrels
Potable Water:	2,022 Barrels	Crane Lifting Capacity:	1 Twin 30 ton fwd 1 Twin 30 ton aft 1 Twin 30 ton Cntr
Stern Ramp Side Ports:	66/35 to Starboard 1 P/S	Lighterage:	2 LCM-8, 1 SLWT, 3CSP 5 CSNP, 2 Fuel hose reels 1 Water hose reel
Bunker Capacity:	14,257 Barrels		
Debark NSE/USMC Berthing:	88 Bunks (flagship) 94 Bunks (non-flagship)		

RO/RO Capacity: 121,595 square feet

NOTE 1: 27 flagship only, 25 in others.

NOTE 2: Flagship and alternate only.

b. Waterman Class

Length:	821 Feet	LBP:	766 Feet
Beam:	105 Feet, 6 Inches	Draft (max aft):	36 Feet, 6 Inches
Draft (Air/freeboard to highest point)	149 Feet at 21 Foot Draft	Displacement (loaded):	51,612 Long Tons
Engine Horsepower:	30,000 Brake Horsepower	Speed (Max warranted):	20 Knots
Endurance at max speed:	11,176 Nautical Miles	Propulsion/Fuel:	Steam Turbine/DFM
Crew:	29	Helicopter Certification:	Level II, Class 3 Level II, Class 4 Type I
Container Capacity:	532 (41 Refrigerated)	Breakbulk:	N/A
JP-5 (98%):	20,290 Barrels	Mogas (98%):	3,717 Barrels

Potable Water:	2,189 Barrels	DF-2 (98%):	12,355 Barrels
Crane Lifting Capacity:	1 Twin Fwd 50 ton 1 Twin Aft 35 Ton 1 Gantry Fwd 30 Ton	Bow Thruster:	12,500 Horsepower
		Stern Ramp Side Ports:	100/30 to P/S 1 P/S for Bunkers/Piers Not for RO/RO Operations
Lighterage:	2 LCM-8, 1 SLWT 4 CSP, 6 CSNP 2 CSNP (RRDF) 2 Fuel Hose Reels 1 Water Hose Reel	Bunker Capacity:	27, 445 Barrels
		Debark NSE/USMC Berthing:	2 Officers 1 CPO 99 Enlisted
Roll on/Roll off capacity:	152,236 square feet		

c. AMSEA Ship Class

Length Overall:	673 Feet, 2 Inches	LBP:	614 Feet, 7 Inches
Beam:	105 Feet, 6 Inches	Draft (max aft)	34 Feet, 6 Inches
Draft (Air/freeboard to highest point):	172 Feet, 4 Inches @25 Foot	Draft Displacement (loaded):	46,111 Long tons
Engine Horsepower:	26,400 Brake Horsepower	Speed (max warranted):	17.7 Knots
Endurance (at max speed):	11,107 nautical miles	Propulsion/Fuel:	(2) Med speed Diesel /DFM
Crew:	30	Helicopter Certification:	Level II, Class 3; Level II, Class 4, Type 1
Container Capacity:	578 (41 Refrigerated)	Breakbulk:	N/A
JP-5 (98%):	20,776 Barrels	Mogas (98%):	4,880 Barrels
Potable Water (100%):	2,357 Barrels	DF-2 (98%)	13,334 Barrels
Crane Lifting Capacity:	1 Single FWD 39 ton 1 Twin Cntr 39 ton 1 twin Aft 39 ton	Bow Thruster:	1,000 Horsepower
		Stern Ramp:	60/39 to P/S
Side Port:	N/A	Lighterage:	2 LCM-8 1 SLWT 4 CSP 6 CSNP 2 Fuel Hose Reels 1 Water Hose Reel
Bunker Capacity:	23,206 Barrels		
Debark NSE/USMC Berthing:	2 Officer 1 CPO 97 Enlisted		
Roll on/Roll off capacity:	152,185 square feet		

d. MPF(E) Ship Class

MPF Enhanced (E) Ship Characteristics:

Roll-On/Roll-Off (RORO) Storage Area:	125,000 Square Feet
Containers:	1000
OPP Berthing:	100
Helicopter Deck:	Yes
Lighterage Space:	8