

## Vessel Information

# S.S. CAPE GIRARDEAU

**EX S.S. PRESIDENT ADAMS**

EX S.S. ALASKA MAIL

MARAD DESIGN C5-S-75A

MARAD HULL NUMBER 215

NEWPORT NEWS SHIPBUILDING AND DRYDOCK

BUILT 10/28/68

OFFICIAL NUMBER 517120

# S.S. CAPE GIBSON

**EX S.S. PRESIDENT JACKSON**

EX S.S. INDIA MAIL

MARAD DESIGN C5-S-75A

MARAD HULL NUMBER 216

NEWPORT NEWS SHIPBUILDING AND DRYDOCK

BUILT 2/68

OFFICIAL NUMBER 517717

<b>L.O.A.</b>	<b>605'-00"</b>
<b>BREADTH</b>	<b>82'-00"</b>
<b>DEPTH</b>	<b>46'-00"</b>
<b>ENGINES</b>	<b>STM. TURB.</b>
<b>SHP</b>	<b>24,000</b>
<b>FUEL CAP</b>	<b>3,668 TONS</b>
<b>DWT</b>	<b>22,216</b>
<b>GROSS</b>	<b>15,949</b>
<b>NET</b>	<b>10,002</b>

## INTRODUCTION

The Cape Gibson and Cape Girardeau (Cape "G" Ships) are owned by the United States of America acting through the Maritime Administration, Department of Transportation (hereinafter called MARAD). Patriot Contract Services, LLC (PCS) of Walnut Creek, CA is the contracted Ship Manager. The primary mission of these ships is to support Navy strategic sealift requirements in support of the Department of Defense (DOD). To provide rapid response to contingency sealift requirements, the DOD has determined a need for fully inspected and certified ocean-going ships of various types and classes, each capable of full operational status within a short time frame. Upon activation, these ships are tendered to the Military Sealift Command (MSC) for operational control and husbanded by the assigned Ship Manager.

All work will commence at the outport berth immediately upon Notice to Proceed (NTP). This work will be diligently prosecuted under competent supervision by the Ship Manager's on-site technical representative - Port Engineer (BAT leader) and completed by the activation contractor in the most expeditious manner possible and on a "no delay" basis to meet the activation time schedule.

Attending the vessel for MARAD will be the Contracting Officer's Technical Representative (COTR). The term "COTR" may also be defined as the MARAD Surveyor.

## **PREAMBLE TO SPECIFICATION**

### **INTENT**

The most important ingredient to a successful activation is an orderly and proper lay-up by a Contractor under the supervision of competent, knowledgeable Port Captains and Port Engineers. If a ship has a series of deficiencies (835's or otherwise) to be accomplished before light-off and startup, or major system failure(s), then problems can be in the offing for future activation. Proper lay-up, i.e., system draining, equipment greasing, proper dehumidification (D/H), equipment installation, etc., along with repair of known deficiencies and conduct of regulatory inspections during the lay-up process, is directly responsible for increasing the ship's readiness posture for subsequent activation.

Therefore, it is the intent of these Specifications to accomplish the work items in the following orderly sequence.

1. Inspection and Repair Items
2. Testing/Dock Trial/Sea Trial Items

It should be noted that the scheduling of these repairs and tests before, during, and after dock trials is critical to ensuring the successful lay-up of the ship.

## **PREAMBLE TO SPECIFICATION**

### **GENERAL**

The subject vessel is owned by the United States of America acting through the Maritime Administration, Department of Transportation (hereinafter called MARAD). Patriot Contract Services, LLC, Walnut Creek, CA (hereinafter called PCS) is the contracted Ship Manager. It shall be clearly understood that all below specified work and services as well as additional work and services ordered through this solicitation shall be for and on behalf of MARAD.

Attending the vessel for MARAD is the Contracting Officer's Technical Representative (COTR). Whenever the term "Owner's Representative" is used it shall mean the COTR, as defined by the Master Lump Sum Repair Agreement (MLSRA) and will be designated by the Contracting Officer.

The work outlined in this specification is for the general support requirements of the vessel, it's hull, machinery and fittings. Any additional repairs or other work resulting from recommendations of regulatory authorities, manufacturer's representatives or service engineers are to be brought to the attention of the Owner's Representative immediately. Any such additional work which results in added costs may be carried out **ONLY WHEN AUTHORIZED IN WRITING** in accordance with the MLSRA.

The recommendations and advice of the Owner's Representative with regard to the proper sequence of work shall be strictly adhered to.

All work to be done at Vessel's current berth.

#### **A. HAZARDOUS MATERIAL**

All hazardous material furnished to vessel during contract period as product by Contractor or sub-Contractor is to have its MSDS supplied to COTR.

#### **B. ACCESSING OF REPAIR/RENEWALS/ADDITIONS**

All removals and replacements required to gain access shall be accomplished, as necessary, in order to effect the repairs, renewals, and additions enumerated herein.

**PREAMBLE TO SPECIFICATION****GENERAL****C. ASBESTOS ABATEMENT**

All insulation of the vessel shall be considered asbestos-based. If it is necessary to disturb any insulation during repairs, Contractor shall furnish qualified/certified facility and chemist to ascertain and define the material through laboratory analysis.

If laboratory analysis is positive, Contractor shall furnish a qualified/certified facility for containment and disposal of material according to OSHA Regulations, Volume One, Article 1910.1001 and/or MIL/STD-769F.

**D. CARE OF EQUIPMENT/COMPONENTS**

Contractor shall maintain good housekeeping affecting all contract items, i.e. all parts removed in way of machinery, equipment, and structural components shall be put aside in an orderly manner, in proper and safe locations and/or containers, and identified for correct and speedy reuse and reinstallation. Proper care is to be exercised to protect all exposed machinery, equipment, and structural parts of vessel covered under repair items which might be subject to weather and/or mechanical damage.

**E. CLEANING**

All new, disturbed, or soiled surfaces affected by the work shall be properly cleaned and/or lagged. Tanks, cargo holds, and other spaces affected shall be left clean and ready to receive their contents.

**F. CONTRACTOR REPLACEMENT PARTS**

If the Owner's Representative agrees to the use of vessel spare parts for expediency, Contractor will place an order to replace the parts via a signed purchase order.

**G. CONTRACTOR, PARTS/MATERIALS/TOOLS/EQUIP.**

Where shipboard equipment is specified for removal and scrapping, provision Article 9A of the MLSRA shall apply.

## **PREAMBLE TO SPECIFICATION**

### **GENERAL**

#### **H. DEBRIS/TRASH REMOVAL**

No debris shall be allowed to accumulate on the vessel during repairs. Trash shall be removed daily, and decks left in a clean and safe condition. This shall also include the proper removal and disposal of water, oily water/waste, and hazardous waste generated by the contracted work items.

#### **I. ELECTRICITY/FIREMAIN**

Electrical power at Hunters Point is limited. There is only 250 amps shore power available to vessel. Firemain water is available at head of pier and is to be connected immediately upon commencement of work.

#### **J. ENVIRONMENTAL STATUTES**

All work to be in accordance with applicable federal, state and local environmental regulations. Contractor and sub-Contractors to initiate all required hazardous material and waste reports, manifests, etc. and insure they are completed with file copies provided to Owner's Representative. Prime Contractor shall be responsible for compliance of sub-Contractors. Any discrepancies or violations of such regulations shall immediately be brought to the attention of the Owner's Representative.

#### **K. FINAL INSPECTION**

Upon completion of all repairs and removal of all Contractor equipment, the Owner's Representative and a representative of the Contractor are to inspect all areas of the vessel to ensure that the vessel is clean (free of trash, dust, sand, grease, debris, or residue), dry, and ready for lay-up. Any cleaning required to achieve this standard will be accomplished before the vessel leaves the Contractor's facility.

#### **L. GASKET FABRICATION**

Contractor shall not allow employees, Sub-Contractor, or others to manufacture gaskets as required in various items in this specification by using the ball-pein-hammer method. All gaskets are to be cut by using proper gasket-forming tools, such as arch punches.

**PREAMBLE TO SPECIFICATION****GENERAL****M. INSPECTION/APPROVAL OF WORK**

All repairs and/or renewals are to be completed in accordance with MLSRA Article 4 paragraph (e). Whenever the term "approved", "required", "satisfactory", or "as directed" is used, the decision of the COTR is intended. Contractor shall give COTR timely, written prior notice of anticipated inspections for efficient coordination of same, as specified in Item 101 Sec. F.

**N. LABOR/MATERIAL/EQUIP/TRANS**

Contractor shall furnish all labor, material, equipment, (except where material and equipment is specifically referred to as government or owner furnished or supplied), towing, dockside support, transportation, preservation, and regulatory tests and inspections to accomplish the repairs, tests, maintenance and activation/deactivation, outlined and detailed, in accordance with this specification. All work is to be diligently carried out under competent supervision, and completed in an expeditious manner. All work detailed within these specifications shall be accomplished in accordance with all provisions of the MARAD Master Lump Sum Repair Agreement.

Any and all equipment, apparatus, etc., as noted in this specification or initiated by separate delivery order under this specification, which is opened for examination and/or repairs, shall immediately, upon completion of the repairs or examinations, be closed and tested to the satisfaction of the concerned parties and thus be left ready for the intended service.

The government does not warrant operability or condition of any vessel equipment.

NOTE: Whenever the expression "furnish", "install", "fit", or "provide" is used with respect to any item to be supplied as indicated, it is understood to mean, "furnish", "install", and "connect up in good order", unless otherwise defined.

**O. LAGGING/COVERING**

All new and/or disturbed equipment, gaskets, joints, etc., covered by these specifications are to be checked and hardened up before being covered or lagged.

**PREAMBLE TO SPECIFICATION****GENERAL****P. "LEAK" TESTING**

Contractor shall apply a hose test, head test, or pressure test to prove all work accomplished, tight, and otherwise satisfactory to all concerned parties.

**Q. MEASUREMENT/QUANTITY VERIFICATION**

Any dimensions for work involved in these specifications are given for the guidance of the Contractor who is, however, responsible for taking his own measurements. Refer to MLSRA Article 4(g).

**R. MOORING LINES**

The vessel's mooring lines shall not be used for towing purposes.

**S. OWNER DESIGNATED CONTRACTORS**

Access to vessel will be required by other Contractors designated by owner.

**T. PRINTS**

Contractor shall prepare working drawings or sketches necessary for performance of the work and submit the documents to the Owner's Representative for review before submittal to the Regulatory Body and Classification Society for approval, if required, before the work is put in hand. All drawings and reports prepared by the Contractor in conjunction with these specifications shall become the sole property of the United States Government including all design and engineering pertaining thereto. Reports are to include, Test Reports, Inspection Reports and additional work requirements.

**U. "RENEW"**

Whenever the term "renew" is used, it is understood to mean "remove the old or defective material and replace with new material of the same design, specification, or standard", unless otherwise stated.

**PREAMBLE TO SPECIFICATION****GENERAL****V. STEEL SURFACE PREP/COATING**

Unless otherwise specified, all steel renewals and/or repairs, and disturbed areas adjacent thereto, at completion of repairs will be blasted and/or wire brushed, or mechanically cleaned with compatible prime and finish-coating system built up to level of surrounding area.

**W. TEST ENGINEER**

Contractor shall furnish a competent and qualified person(s) capable of operating marine equipment for any tasks and/or operational inspection required to successfully complete items in this specification. The Contractor shall furnish adequate supervision of all evolutions/items of work. All evolutions/items of work are to be inspected by either the Contractor's Ship Superintendent assigned to the vessel or the Contractor's Quality Control Department prior to presenting work to the COTR or the Regulatory Bodies for acceptance.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****A. ADMINISTRATIVE SERVICES**

Contractor shall provide the Owner's Representative with following administrative services prior to arrival of the vessel at the Contractor's facility through acceptance of the vessel by the Government.

**1. OFFICES**

- a. At Contractor's facility, Contractor shall provide suitable office space near the ship with work areas for the Owner's Representative (600 sq.-ft minimum), including air conditioning, heating, and sufficient desks, chairs, lockers, and filing cabinets.
- b. Two (2) voice telephone lines, two (2) two-line telephones, each telephone connected to both voice lines, and one (1) facsimile machine with separate FAX line in the Owner's Representatives' office with unlimited local and long distance service. Paper for facsimile machine.
- c. Coffee maker, stand-up refrigerator, and drinking fountain or bottled, refrigerated water cooler.
- d. Toilet and washroom facilities including hot and cold water, shower and towels.

**2. COMPUTER EQUIPMENT.**

Contractor shall furnish the following leased (unless otherwise specified), office equipment.

- a. Two (2) Pentium IBM compatible personal computers each with 16 Mb RAM, double speed CD-ROM drive, 3-1/2" floppy (1.4 Mb) disk drive, 850 Mb (minimum) hard drive, 15" SVGA monitor, SVGA graphics card and mouse. Both computers to have a 14.4 V.32bis Hayes-compatible send/receive fax/modem. Each fax/modem to have a dedicated phone line separate from lines specified above.
- b. One (1) Post Script Laser printer with dual sheet feed trays and a 4 Mb buffer, and sufficient 8.5" x 11" sub 20, xerographic bond paper and toner.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES**

c. The following program software with all documentation, registration cards and printed manuals, which will become the property of the Government:

- |                               |  |
|-------------------------------|--|
| 1. MS DOS 6.2.2               | 2. Microsoft Windows for Workgroups 3.11 |
| 3. MS Office 4.3 Professional | 4. Visio Technical 3.0                   |
| 5. Quarterdeck Cleansweep     | 6. Quarterdeck Qemm 7.05                 |
| 7. PhoneDisc Powerfinder CD   | 8. HiJaak Graphics Suite 3.0             |
| 9. Adobe Acrobat 2.0          |  |

Note: Above software to be newest versions available at commencement of contract. Software shall be on 3-1/2" disks or CD-ROM.

d. One (1) copy machine capable of copying legal size and letter-size paper, with reduction and enlargement modes sufficient letter-size and legal size paper.

e. One (1) locking file cabinet with two (2) keys. Three (3) desks with three (3) swivel-roller armchairs and one (1) Secretary chair.

f. One (1) electric correcting typewriter and stand.

g. One (1) 36" x 60" dry-erase board with sufficient markers suitably mounted on wall.

h. The following items shall become the property of the vessel. One (1) Coactive Connector Starter kit for Windows-DOS (will handle 2 computers), one (1) Coactive Connector for Windows-DOS and enough RJ11 telephone cable to connect three computers. One (1) Ice Parallel printer extender with a 50 ft. RJ11 cable. Three (3) surge protectors and all associated connectors and cables.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****B. VESSEL SERVICES**

Contractor shall provide all general services for the vessel while it is in Contractor's facility for the performance period of this contract. Contractor shall provide necessary/required services, machinery, and equipment for work specified in Items of these Specifications. Contractor will not be allowed to use any ship equipment unless stated in this Specification.

General services to be provided by Contractor shall include the following.

**1. AIR-DRIVEN PUMPS/BILGES**

Contractor to furnish air-driven pumps, hoses, and labor to pump bilges ashore as required to maintain a dry condition aboard ship. Slops to be properly disposed in accordance with all applicable regulations.

**2. BERTH**

A suitable berth with adequate fendering where ship may lie safely afloat at all times, and ship placed at same upon arrival at Contractor's plant by Contractor personnel for all work specified in Items of these Specifications or additional work found necessary which can be accomplished during ship's Contract availability. Contractor to supply mooring lines; ship's mooring lines are not to be used.

**3. BALLAST OF VESSEL**

Contractor to maintain the trim and stability of the vessel at all times. Vessel's pumps and piping systems are not to be utilized for movement of ballast. Contractor to supply all labor, pumps, and hoses necessary to empty/fill tanks. Any ballast tanks to be left full at the culmination of the contract period, shall be filled with clean fresh water treated with sodium silicate in the ratio of 6 pounds per ton of water. Some work items in these specifications may require shifting and isolation of the ballast in order to accomplish work. The Contractor shall be cognizant at all times of the draft requirements at the repair berth and adjust work sequence and ballasting accordingly.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****4. CHEMIST CERTIFICATE**

Contractor shall provide gas-free certificates, "Safe for Men, Safe for Hot Work," daily for any areas requiring burning or welding. Certificates shall be issued only by a certified "Marine Chemist" or "Competent Person" as defined by USCG Regulations. Portable fire fighting equipment (CO2 bottles, water cans, and dry chemical extinguishers) shall be provided while burning and welding. Ship's extinguishers shall not be used.

**5. COMPRESSED AIR**

Contractor shall provide oil-free, filtered, compressed air (minimum 125 psig, 800 CFM) and shall connect and disconnect hoses as necessary upon arrival and departure, and for all vessel movements.

**6. CRANE SERVICE**

Contractor to furnish necessary crane service and or manlifts to accomplish all work and including all inspections by Owner's Representatives or regulatory personal as specified on a timely as needed basis.

**7. DEBRIS REMOVAL**

All debris and trash generated during period of contract to be removed from vessel and properly disposed.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****8. ELECTRICAL & LIGHTING SERVICE**

Contractor shall provide electrical source of power for adequate lighting, blowers, hoists, welding machines, etc., for all compartments and spaces as necessary to accomplish work specified herein.

Contractor shall ensure that all compartments and areas being worked have sufficient Contractor-supplied lighting and ventilation at all times. Compartments and areas being worked may have ship-supplied lighting and ventilation; however, some work will require isolation of ship's power systems. Temporary services shall be provided by Contractor as needed.

Contractor shall be responsible to survey and prove safe all power source cable before starting any work.

**9. ELECTRICIAN SERVICE**

Contractor shall furnish services of certified, competent electricians with all tools and equipment required to energize necessary electrical circuits as required to test, repair, and/or operate equipment as required at any time.

**10. FIRE PROTECTION**

Contractor shall have qualified fire watch person(s) and supply portable fire extinguishers at all times in each area/compartments, properly equipped, where burning and/or welding is being done.

Contractor shall install a minimum of two (2) fire protection stations (temporary, portable "CHRISTMAS TREE" type) on the main deck and/or at work sites. Each fire station shall have a 400-GPM capacity and 450' of 2-1/2" fire hoses with fire nozzles activated for the entire contract period. Vessel's hoses are not to be used.

NOTE: Vessel's firemain system is not to be used after dock trial.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****11. GANGWAY**

A sturdy gangway of adequate length for safe access to/from vessel during Contract period whether vessel is afloat or on drydock. Gangway shall have adequate safety railings, safety net, and suitable night lighting.

**12. PORTABLE TOILETS**

Contractor to furnish two (2) portable toilets on vessel. Toilets to be serviced weekly or sooner as required.

**13. POTABLE WATER**

Contractor to furnish drinking fountain or bottled, refrigerated water cooler aboard vessel in Chief Engineer's Office. Water to be supplied as necessary.

**14. SHORE POWER**

Contractor shall provide heavy-duty shore power cable in good condition, connect and disconnect as necessary, and supply shore power to the vessel (600 amp, 450v, 3 phase, 60 Hz) while the vessel is in Contractor's facility, with phase protection. The A/C electrical power shall be maintained continuously at a maximum of 460v, with minimum 440v at ship's shore power connection.

**15. SHORE STEAM**

Contractor to furnish necessary 125 PSIG shore steam to vessel to accomplish work as specified on a timely as needed basis.

**16. STAGING**

Contractor to furnish and erect staging necessary to access work as specified, and remove upon completion.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SERVICES****17. TELEPHONE**

Contractor to furnish one (1) telephone in Chief Engineer's office with unlimited local and long-distance calling and one (1) cellular telephone.

**18. TUGS, PILOTS, LINEHANDLERS**

Contractor shall provide tugs and pilots for arrival, departure, and as required to shift the vessel for performance of work during the contract period, and shall provide labor to handle lines and gangway for all moves.

**19. VENTILATION**

Contractor shall provide all portable blowers and ducting for ventilation as necessary for safety of Contractor's and ship's assigned working personnel during the contract period, and as needed for inspection of tanks by Regulatory Inspectors.

**20. WATCHMEN**

Contractor shall furnish 24-hour services of bonded, uniformed security guards onboard the vessel in three (3) shifts of eight (8) hours each from vessel's arrival at Contractor's facility through complete activation period.

Guards to be instructed that Contractor's personnel are forbidden access to any part of vessel unnecessary to complete Items, except under emergency conditions such as fire, storm, etc.

Security guards are to keep a log book and record conditions found while checking the vessel at hourly intervals (minimum), and all visitors with their respective affiliations and time on and off vessel.

**ACTIVATION SPECIFICATIONS  
UTILITIES****SERVICES AND****SHAFT & RUDDER LOCK REMOVALS****A. SHAFT LOCK**

Provide labor, material and equipment to reinstall shaft lock for shift from lay berth to Contractor yard and return shift back to lay berth. If required, upon arrival Contractor yard, remove shaft lock-stow in shaft alley in secure position. Reinstall coupling guard. The thwart ship bracket does not have to be removed unless the tailshaft is to be drawn. Reinstall shaft lock for shift to lay berth. Upon arrival at lay berth, remove shaft lock-stow in shaft alley in secure position. Reinstall coupling guard.

**B. RUDDER LOCK**

Provide labor, material and equipment to reinstall flanged split pipe locks on rudder. (There are 4 pieces to make up 2 flanges). Do not mix or you will have trouble reassembling. Upon arrival in Contractors yard, remove flanges, label and secure in a safe position in S/G room. Check out steering system electrically and mechanically. Lubricate and add oil if needed. Perform operational test in presence of chief engineer, owners representative and Regulatory Bodies. At completion of deactivation and prior to shift back to lay berth, reinstall rudder locks.

**SHIFTING AND TOWING**

Provide necessary tugs, tow preparation, pilots, riding crew and line handlers plus all required equipment and permits to pick up the vessel at Hunter's Point Naval Base, Berth 15, San Francisco, California and deliver to Contractors facility as a "Dead Ship.

For all tows to/from Contractor's repair facility, Contractor to provide services of Abstech or independent marine consultant recognized by Contractor's insurance carrier and comply with recommendations for suitability or arrangement for a trip in tow. Provide portable sanitation facilities on the stern of the vessel for use of riding crew during tow.

Contractor to install shaft lock and rudder locks prior to tow. Securing for ocean tow shall be by lashing and shoring. No taping will be allowed. Any alterations to D/H system or weather closures required for tow to be restored to original configuration upon vessels return to lay berth.

All vessel moves are for the Contractors Account. All disconnections and re-connections of services to vessel are for the Contractors Account. Riding crew shall be equipped with three (3) portable radio transceivers of same frequency, one at vessel's bow, one at stern, and one with attendant alongside Pilot on bridge.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****D/H SEALING REMOVAL**

Furnish labor, material and equipment to remove or open all D/H envelope sealing, excluding the MCDS equipment which is covered under a separate item. Undog and open all weather deck ventilation covers and secure in open position. The below listed sheet metal covers are to be carefully marked as to location, unbolted and carefully removed in a undamaged, reusable condition and stowed in locations as identified below. Contractor is to take care to package, label and save all wing nuts and washers for reuse. All disturbed coatings to be repaired and touched up to match surrounding coatings.

**FLYING BRIDGE**

Stack cover (stow in stack)

Whistle cover (stow in stack)

Stack louvered vents, eight (8) on fwd side, seven (7) on aft side, all approx. 118" high x 23" wide. (Stow in #5 cargo hold, 2nd deck level, stbd aft corner. Contractor to fabricate and install securing eyes in appropriate locations on bulkheads for securing covers using Contractor furnished 1/4" manila rope.)

Escape piping, vents, covers at top of stack (stow in stack).

**NAVIGATION BRIDGE**

Galley louvered vent, stbd side on wheelhouse aft 30" x 60".

Natural Exhaust vents P/S, 3" x 6", over fan room.

Supply vent on port side of wheelhouse aft 30" x 60.

Two (2) cover on wheelhouse A/C units located on aft end of wheelhouse-stbd.

Remove twenty nine (29) window covers.

Above covers to be stowed in A/C fan room 'thwartship area.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****D/H SEALING REMOVAL****BRIDGE DECK**

Port louvered vent 46" wide 28" high (wing nuts) - (stow on existing mounting studs adjacent to cover).

Stbd louvered vent 46" wide 28" high (wing nuts) - (stow on existing mounting studs adjacent to cover).

After Port bulkhead outbd 29" x 30"- (stow on existing mounting studs adjacent to cover).

After bulkhead Port/Stbd inbd 8" x 11" Nat Supply covers (screwed) - (stow on existing mounting studs adjacent to covers).

After end of house louvered vent 48" high 168" wide (wing nuts) - stow in A/C fan rooms 'thwartship area.

**BOAT DECK**

After end of house Emergency Diesel louvered vents, two (2), 48" X 48" - (stow on existing mounting studs adjacent to cover).

Natural vents P/S over side doors, two (2) 14" x 18". Stow in A/C fan rooms 'thwartship area.

**UPPER DECK**

Nat. Exh. cover 15" x 30" over the port, aft single door. - (stow on existing mounting studs adjacent to cover).

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****D/H SEALING REMOVAL****WINCH HOUSE VENTS, MAIN DECK.**

The following covers are at deck level on aft bulkheads of the respective Winch Machinery Houses.

Winch Mach House #1, frm 50, foscle aft P/S.  
Winch Mach House #2, frm 78, aft S/side.  
Winch Mach House #3, frm 105, aft P/side.  
Winch Mach House #4, frm 185, aft P/S sides.  
Winch Mach House #5, frm 210, aft S/side

At each winch machinery house location listed above, - stow covers on existing mounting studs adjacent to each cover.

**AFT GARAGE DECK HOUSE.**

Remove soft seal covering from 10" vent, port side fwd bulkhead. - (stow on existing mounting studs adjacent to cover)..

**WEATHER DECK DOORS**

Furnish labor, material and equipment to remove and stow in bridge deck gear locker port side Fr. 151 the internal wooden door securements on the following doors.

**BRIDGE DECK**

Port and stbd doors 72" X 31"

**BOAT DECK**

Port and stbd side fwd-single doors, two (2), 72" X 31"  
Port and stbd side aft house doors, two (2), 72" X 31"

**UPPER DECK**

Port and stbd side fwd single doors, two (2), 74" X 32"  
Port and stbd side aft single doors, two (2), 74" X 32"

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****OWS SYSTEM**

Furnish services of Heli-Sep Technician/Authorized representative to service and place into operation the Heli-Sep Oily Water Separator. Reinstall cover on tank. Test system and prove operational to ABS, USCG, Chief Engineer and COTR.

**POTABLE WATER SYSTEM**

Contractor to close manholes on vessel's port & stbd potable water tanks and fill tanks from shore water connection. Capacity is 168 tons total.

Potable tanks are to be topped off as required during the activation period and filled just prior to sea trial. Tank Drains are to be closed prior to filling.

Remove spacers and close up access plates on cold water pressure tank and potable water head tank

Close all faucets throughout potable system and put potable system in service. Purge air from system.

Electricians to energize sewage plant and insure proper float switch operation prior to flushing potable system piping.

Test operation of each faucet and flushometers. Run each faucet to flush any debris, scale, and impurities from piping. Leave system ready for service.

**DISTILLED TANKS**

Furnish water demineralizer to vessel and fill ship's distilled tank using de-mineralized water. Capacity is 48 tons. Close up manhole covers on Distilled water, Engine Room Double Bottom Feedwater tanks, Port, Starboard and Centerline. Fill Feedwater tanks using demineralized water. Total Feedwater D.B. tank capacity is approx. 390 tons. Assist ship's crew in filling condensate and feedwater systems. Maintain distilled tank full throughout activation.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****LIFEBOATS AND SAFETY GEAR**

Provide assistance to inventory and restow all lifeboat equipment and supplies under supervision of owner's representative. Supplies are presently stowed in a container located in #4 Cargo Hold 2nd Deck.

Drain and dispose of engine fuel in one Westebeke diesel powered lifeboat. Refill fuel tank with new #2 diesel oil fuel. Change out lube oil in engine. Renew oil and fuel filters. Connect cooling water supply to engine and test run engine.

Distribute fire fighting equipment, safety gear, and lifesaving survival suits under supervision of owner's representative. Equipment and gear is presently stowed in the above container.

**D/H CIRCULATION FANS**

Remove D/H air circulation fans and hardware from the following locations and reinstall components as noted. All Engine Room D/H fans, equipment and hardware to be tagged as to location and stowed in machine shop on existing racks as directed. D/H fans and equipment external to Engine Room are to be stowed as noted in AC fan rooms port and stbd. All presently removed components that are to be reinstalled under this item, are bagged and attached adjacent to the associated equipment or are stowed in an activation parts box on the 21' 6" flat as noted.

Main Throttle Strainer - Remove fan and mount. Reinstall strainer and cover using a **Contractor furnished gasket**. Remove sleeves on Ahead and Astern Throttle valve stems that are holding valves open (tag and stow for reinstallation). Reinstall throttle drain piping using Owner furnished gaskets from parts box 21' 6" flat and adjacent stowage.

Auxiliary Condenser Hotwells (2) - Remove fans and mountings. Reinstall blanks using owner furnished gaskets stowed at locations. Close up water box access plates (four (4) per condenser). Remove screens from turbine casing inspection openings #1 & #2 SSTG's. Screen is to be tagged and stowed at stowage location in machine shop. Close inspection cover with owner furnish gasket at location.

HP turbine 2nd stage bleed - Remove D/H circ fan and reinstall check valve components hung at location using new contractor furnished gasket. Remove screen from LP turbine inspection opening, tag and stow as directed. Close up manhole with gasket stowed in activation box.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****D/H CIRCULATION FANS**

Bridge Deck Fan Rooms P/S - Unplug and remove two (2) fans and mounting plates in each fan room plenum that are installed in place of plenum doors. Reinstall doors. Remove screwed in sheet metal blank between upper and lower plenum chambers at aft end of each plenums. Stow the 4 fans units and blanks removed from P/S AC air handlers on existing mounting studs and standoff in fan rooms. Prepare and coat new and damaged areas in accordance with MARAD Standard Coating guidelines. Mount fans and blanks for stowage using wing nuts for securing in place.

**HULL BLANK REMOVAL**

Furnish diving services, and all labor , material, and equipment to remove and stow onboard the vessel, all underwater hull blanks. All blanks, excepted as noted, are bolted using 3/4" cap bolts and are connected to stPCSe above the waterline by vinyl coated wire. Furnish and install short 3/4" S.S. cap screws with flat and lock washers into shell ring for protection of threads after blanks have been removed.

The following blank list is supplied for reference purposes only. Contractor is to determine exact location and actual number of blanks installed by reference to records and drawings located aboard the vessel.

**NOTES:**

A: During removal of the blanks there shall be close liaison with engine room to assure no accidental flooding occurs. All blanks have 3/16" vinyl coated S.S. wire attached to stPCSe in blank and attached to stPCSe above the waterline.

B: The order in which the blanks are removed will be established by the vessel Chief Engineer.

For guidance the following blanks are listed but are not expressly limited to the following:

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****HULL BLANK REMOVAL**

<b>Number</b>	<b>Function</b>	<b>Weight</b>	<b>Size</b>	<b>Frame</b>
#1 Stbd	Main Cond. High Suction	573#	60" x 67"	132
#2 Port	Main Condenser Overboard	246#	47" OD	138
#3 Stbd	Main Cond. Low Suction	1076#	59" x 128"	136-138
#4 Port	S.W. Service Overboard	25#	15" OD	146
#5 Stbd	#1 Aux. Cond. Overboard	30#	17" OD	145
#6 Port	S.W. Suction	283#	32" x 63"	144
#7 Stbd	Aux. Cond. Sea Suction	132#	29" x 32"	148
#8 Port	Evaporator Brine Overboard	22#	14" OD	150
#9 Stbd	S.W. Service Trunk Suction	125#	27" x 35"	150
#10 Port	Bilge, Ball. & Fire Overboard	45#	20" OD	156
#11 Stbd	#2 Aux. Cond. Overboard	32#	17" OD	147
#12 Port	Contam. Evap Bottom Blow	5#	6 3/4" OD	156
#13 Stbd	Main L.O. Cooler Overboard	22#	14" OD	153
#15 Stbd	Boiler Bottom Blow Overboard	5#	6 3/4" OD	154
#17 Stbd	Bilge Overboard	9#	9" OD	154
#19 Stbd	S.A. Fire Pump Suction	85#	22 1/2" x 27"	157

After blanks removed Contractor to high pressure water wash to remove any marine growth and stow blanks in #1 Cargo Hold, Main Deck, P/S on existing stand-offs and mounting studs as designated.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****OPEN DECK EQUIPMENT**

Furnish a plywood box of sufficient size to hold all the Herculite covers removed under this item and place in #1 cargo hold main deck level forward, secured for sea. Remove the Herculite covers on all speakers, amplifiers; and navigation equipment and stow in plywood box. All equipment to remain in place.

**NAVIGATION EQUIPMENT**

Furnish services of qualified service representative to remove from bonded stores locker, remount as necessary, test, activate, service and adjust the following navigation & radio equipment:

If required, carry out any inspections or testing for the Regulatory Bodies.

1. Bow Thruster Mfg. KAMEWA.
2. IT- Mackay RDF. Type 400 XN.
3. Loran, Northstar 6000.(remount)
4. Magnavox Sat Navigation, Model MX-1112.
5. Magnetic Compass:
  - a. Have compass adjuster board vessel & prepare and adjust compass by swinging vessel in USCG approved area. Provide deviation card.
  - b. When checking out compass, check binnacle lights and put in good working order. All work to be done to satisfaction of owners rep. and reg. bodies as required.
6. Masters Clock - Simplex - Type 93-25.
7. Raytheon 10 CM Radar True Motion 1660-12SR.
8. Raytheon 3 CM Radar - Model 1650-6SR.
9. Raytheon C.O.S. Raycas-V.
10. Raytheon Fathometer, Model DE-714/715.
11. Raytheon Shallow Draft alarm, Model 724.
12. IMO ECHO SOUNDER Fathometer Recorder Model RD-500.
13. Sperry Course Recorder.
14. Sperry Gyro -14 Model 2A.& MK-37 two (2)e
15. Sperry Steering.
16. VHF Marine Transceiver IC-M120 (remount)
17. Mariner 15 Remote Watch Reciever, INTECH (remount)
18. Intech model 108 Transmitter Reciever.(remount)
19. Ken wood R-5000 Communications Reciever(remount)
20. FRG-7 Communications Receiver (remount)

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****NAVIGATION EQUIPMENT**

21. Trimble Navigation NAVTRAC GPS (remount)
22. Loran C LC-90 Navigator (remount)
23. MR-20 UHF-FM system
24. Mackay Automatic Direction Finder
25. Vessel Speed Computer, Bastin Model -BCC56440.

**FCC INSPECTION/RADIO EQUIPMENT**

Furnish services of a qualified contractor for radio station licensing and a qualified service representative to remount equipment stowed in bonded stores, storeroom, check out, activate, test and adjust the following radio equipment including EPIRP and life boat radios:

Facsimile Recorder:  
Alden 9244 MD

Radio Transmitters:  
H.F. Trans.: Mackay 2013 APF  
Main Trans.: Mackay 2012 AP  
Emerg. Trans.: Mackay 2010 A  
Auto Alarm: Mackay 5003a  
Auto Alarm Keyer: Mackay 5120 A

Radio Receivers:  
Main Receiver: Mackay 3010 C  
SSB: Mackay MRU-27A CAI-125

Furnish service of radio operator technician to assist updating required radio telegraph certificates.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****REFRIGERATION EQUIPMENT AND SPACES**

Furnish qualified refrigeration technician accomplish the following. Reconnect couplings between motors and compressors on the three (3) Cargo/AC compressor units and the one (1) Ships Service compressor unit. Close up condenser water box inspection plates on all units with new gaskets. Drain excess oil from crank cases. Pump down both system compressors and open, clean, and inspect sumps of all (4) system compressors. After examination by Owner's Representative, close up in good order, fill sumps with oil, and re-charge system (freon 12). All systems have been layed up with minimum freon charge or may be flat. Contractor will be expected to provide full operational charge in all systems.

Line up cooling water and place each compressor unit in operation, (1) ships service, (2) Cargo and (1) air conditioning refrigeration. Service and make adjustments to system controls, alarms, shut downs, expansion valves, etc., including secondary cooling systems (brine and/or glycol) for proper operation. Cargo system is comprised of (2) dedicated compressor units, three (3) cargo system brine coolers/evaporators and associated controls all to be proven full functional. (1) AC/cargo compressor unit and one (1) AC chiller/evaporator and associated controls to be proven full functional. Contractor to submit condition report listing discrepancies noted during operational testing of each unit with recommendations. Parts will be subject of separate delivery order. Contractor to check levels/concentrations of secondary brine systems and bring systems to operational levels. Additional material will be subject of a separate delivery order.

Remove door blocking from ships service reefer box doors to thaw room, frozen food, meat, fish, dairy , vegetable and special cargo box frozen foods. Place in operation Evaporator air handlers located in fruit & vegetable box and dairy box. Prove drip tray drains clear. Test lock in alarms.

Remove door blocking from the four (4) ships cargo refer boxes #5 cargo hold 2nd deck reinstall threshold and close doors. Close each cargo reefer box air handler equipment space door and place space evaporator/air handler units in operation. Test diffuser fans alarm system.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****BOILERS**

## Port and Stbd Boilers

Secure power and disconnect electrically the two (2) blower heaters for the water side located on deck at operating level, outboard of each boiler. Remove flexible ducting from blower to handhole openings on front, side and rear lower waterwall headers. Tag and stow heaters and ducting in racks located in Machine Shop as directed by COTR.

Secure power and disconnect electrically the two (2) blower heaters for the fire side located in the bottom burner register on each boiler. Secure Humidity chart recorder and remove sensor probes from furnaces and economizers. Reinstall two (2) burners register and hook up all controls, piping, etc., ready for use. Tag and stow heaters in racks as above. Tag and stow humidity probes in activation box.

Remove R/H probes from burners/furnace of both boilers. Label as to location, neatly coil wiring and secure on top of monitor which is under the Combustion Control VDU.

Remove insulation blankets as required and open all drum manholes, total four (4) per boiler. Clean up mating surfaces and close up in good order using new contractor furnished gaskets. Reinstall insulation blankets.

Remove remaining waterwall header casing covers from lower rear, lower front and side wall headers on each boiler. Remove header casing covers from upper rear wall, upper front wall, water screen, economizer and both superheater headers. Remove all hand hole plates on all headers, clean hand hole plug and header mating surfaces and reinstall in good order using new contractor furnished gaskets. NOTE: presently all handholes (except those connected to ducting) are installed without gaskets! Reinstall casing covers.

Install bonnets on Main Steam Stop valve and Economizer Inlet valve P/S Boilers (4 valves total). Parts and gaskets are stowed in wooden boxes located adjacent to the valves.

Provide services of safety valve technician to adjust and set valves as necessary after light off in presence of USCG, ABS and Owner's Representative.

Open and inspect economizer uptake and inspect for debris, reinstall uptake casing access doors in good order.

Reinstall four (4) smoke detector lights in uptakes of boilers located at Bridge deck level.

After boiler watersides are closed, fill boilers with boiler quality water and conduct working pressure hydro to prove boiler tight to the satisfaction of Owner Representative and regulatory bodies.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****SEWAGE SYSTEM**

Furnish services of manufacturer's representative to service as required and activate the Omnipure MSD system.

**TURBINES**

Furnish labor, material and equipment to close up the following covers/equipment using owner furnished gaskets.

Main Reduction Gears - Remove screens with integral spacers from the four (4) open inspection plates and close up plates. Stow screens in Machine Shop racks as directed. NOTE: All work on reduction gear casing to be performed in presence of COTR.

SSTG's - Remove spacers and reinstall oil cooler covers.

Main L.O. Cooler - Remove spacers and reinstall s.w. side covers.

**MISC. MACHINERY CLOSURES**

Furnish labor, material and equipment to close up the following covers/equipment using owner furnished gaskets.

ADT - Remove spacers under inspection cover and close up using new owner furnished gasket.

S. W. Service Pump Strainers - Remove spacers under top plates on three (3) strainers and close up plates using owner furnished gaskets.

Oily Drain Tank - Remove spacers under inspection plate and close up using new gaskets. Reconnect pipe coupling.

Contaminated Inspection Tank - Remove spacers under inspection plate and close up using new contractor furnished gaskets.

Main Condenser. Close up access plate on hotwell, install drain plug.

Aqua-Chem Distiller - Remove spacers and screen under 1st and 2nd stage access plate. Reinstall plate using owner furnished gaskets. Stow screen as directed. Install access plate 2nd stage bottom with new gasket.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****REGULATORY BODY INSPECTIONS**

Furnish technicians and labor to work under the direction of Owner's Representative and accomplish the following listed annual/biennial inspection requirements to the satisfaction of representatives of regulatory bodies. Contractor to determine requirements of each inspection, provide schedules of same and arrange attendance of inspectors. Work requiring the repair or replacement of components to be covered under additional items.

1. USCG Certificate of Inspection
2. Adjust, set and seal boiler safety valves.
3. Test and adjust as found necessary, relief valves on pressure vessels and pumps.
4. Test and set as found necessary, safety devices on turbo generators, two (2).
5. Test and set as found necessary, safety devices on feed water pumps.
6. Test and set as found necessary, the remote emergency shut down switches and controls.

**MACHINERY TESTING****A. MISCELLANEOUS AUXILIARY SYSTEMS**

Under the direction of the vessels engineering staff the auxiliary systems listed below are to be given a service demonstration and checked off as a satisfactory operation is observed.

Auxiliary Steam Systems  
 Condensate Systems  
 Saltwater Service and Sanitary Systems  
 Ventilation And Heating System  
 Boiler Water Treatment System  
 Ballasting And Deballasting Systems  
 Saltwater Service System  
 Freshwater Service System  
 Marine Sanitation Device  
 Machinery Vibration On All Overhauled Pumps  
 Fuel Oil Handling  
     Bunkering (4500 Bbls for Dock Trials)  
     Fuel Oil Transfer  
     Fuel Oil Service Heaters  
 Electrical Generating System  
     Ship Service Turbogenerators (2)  
         Overspeed Trip  
         Reverse Power  
         Parallel Operation  
         Low Lube Oil

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****MACHINERY TESTING****A. MISCELLANEOUS AUXILIARY SYSTEMS- Continued**

Emergency Diesel Generator  
 Automatic start  
 Overspeed Trip  
 High water temp trip  
 Low Lube Oil  
 Switchboards  
 Main  
 Emergency  
 Wiring  
 Main  
 Emergency  
 Oil Water Separator  
 Boilers  
 Oil Fired  
 Piping  
 Safety Valves  
 Fuel Oil System  
 Feedwater System  
 Lube Oil Purifiers  
 Lube Oil Transfer System  
 Stern Tubes Cooling And Packing  
 Machinery Space Ventilation

**B. DISTILLING PLANTS**

Distilling plants two (2) (NIREX & AQUA CHEM) to be operated for a period of six (6) hours duration each to provide the rated capacity in gallons/day.

Time Of Test (Start):  
 Time Of Test (Completion):  
 Distilling Plant Meter (Start):  
 Distilling Plant Meter (Completion):  
 Gallons Per Day:  
 Salinity Reading:

The contractor is to check treatment level of water in the hot water circulation system NIREX evap and treat system as found necessary. System treatment is Liquidewt cooling water treatment.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****WEATHER DECK DRAIN COVERS**

Location: mid ship house, all deck levels.

Furnish labor, equipment and materials to remove sheet metal weather deck drain covers silicone sealed to drain scuppers and clean any silicone material from deck and scupper screen. Locations are as follows

**UPPER DECK LEVEL**

fwd port, Fr. 135,  
fwd stbd, Fr. 135,  
aft port, Fr. 153,  
aft stbd, Fr. 153

**BOAT DECK LEVEL**

fwd port, Fr. 135,  
fwd stbd, Fr. 135

**BRIDGE DECK LEVEL**

fwd port, Fr. 140,  
aft port, Fr. 150-155, 2 ea.,  
fwd stbd, Fr. 140,  
aft stbd, Fr. 150-155, 2 ea.,  
aft center, Fr. 158

**NAVIGATION BRIDGE DECK**

fwd port, Fr. 133,  
fwd stbd, Fr. 133,  
port, Fr. 140,  
stbd, Fr. 140,  
aft port, Fr. 154  
aft stbd, Fr. 154

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****WEATHER DECK DRAIN COVERS****TOP OF HOUSE**

fwd port, Fr. 130,  
fwd stbd, Fr. 130,  
port, Fr. 137,  
stbd, Fr. 137,  
aft port, Fr. 144  
aft stbd, Fr. 144

**GENERAL SERVICE PUMP**

Location: lower engine room stbd side Fr. 145

Furnish labor, equipment and materials necessary to remove air connection and reinstall steam supply line on inlet of General service pump. Furnish new gaskets and make up all joints tight, and reinstall insulation blankets.

**CARGO WINCH CONTROL STATIONS**

Location: Main deck winch houses, weather deck winch controls all vessel

Furnish labor equipment and materials necessary to remove and stow all Mooring winch/Cargo winch control station Herculite covers. Covers are to be tagged identifying removal location and stowed in box fabricated under Activation ITEM OPEN DECK EQUIPMENT.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****HOTEL SERVICES**

Provide labor, material and necessary equipment to accomplish the following to the satisfaction of Owner's Representative:

A. Enter all compartments throughout vessel to reinstall and service as needed all components including but not limited to valves, drains and traps. Prove all valves tight, drains clear and traps operational and in good order after reinstallation.

B. Ships Service Boxes, (6)ea.

Location: Frame 135, 2d Deck, CL.

Reinstall gratings, check all electrical components, fans and coolers of the following:

1. Fruit & veg box (2).
2. Frozen food.
3. Frozen food or meat.
4. Dairy-meat-fish & thaw room (2).

C. Ice Cube maker, Scotsman mod HC400-SWE-IA.

Location: Frame 145, 2d Deck, Stbd.

Clean out and put in good working order, insure the drain is clear and cut off switch working.

D. Reach in Boxes, (10)ea.

Locations:

- |                                 |                    |
|---------------------------------|--------------------|
| 1. Chart Room                   | Navigation Bridge. |
| 2. Masters Office               | Bridge & Deck.     |
| 3. Passengers Lounge Pantry     | Boat Deck.         |
| 4. Chief Engineers Office       | Upper Deck.        |
| 5. Officers/Passenger Pantry    | Upper Deck         |
| 6. Officer's Lounge             | Upper Deck         |
| 7. Crew's Lounge                | Main Deck          |
| 8. Crew Mess Room, fwd/aft, (2) | 2nd Deck           |
| 9. Galley                       | 2nd Deck           |

Clean out and put in good working order, insure the drains are clear and cut off switch working.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****HOTEL SERVICES**

E. Pantry, Officers/Passengers.

Location: Frame 135, Upper deck, CL.

Survey and service the following:

1. Toaster,(1)ea. G.E. (4) slot, Model ET 24.
2. Coffee Maker,(1)ea., Bunn Omatic, F 15.
3. Automatic Egg Timer/Cooker,(1)ea., Rudman and Scofield.
4. Dumb waiter & Voice call box Hose-McCann.
5. Remove (1)ea. Garbage Grinder - Philadelphia Gear Co.
6. Dishwasher,(1)ea., Hobart, Model UM-4d.
7. Steam Hot Table and sink, (1)ea.
8. Sink, (1)ea.
9. Wall Fan, (1)ea.

F. Pantry, Crews

Location: Frame 145, 2d Deck, Port

Survey and service the following:

1. Steam Table and sink, (1)ea.
2. Sink, (1)ea.
3. Wall Fan, (1)ea.
4. Coffee Maker,(2)ea., Bunn Omatic, F 15.
5. Instant Hot Water Heater dispenser:  
Silex model IHW.#1-120 located next to coffee maker.

G. Ships Galley

Location: Frame 135, 2d Deck, Port.

Survey all equipment (motors, fans, heaters) and put in good working order of the following:

1. Fans (3)ea. Rotating type fixed and/or bulkhead mounted.
2. Electric Mixer,(1)ea., Hobart A-200 D.
3. Meat Tenderizer,(1)ea., Hobart A-401.
4. Meat Slicer,(1)ea., Hobart 1512.
5. Broiler,(1)ea., G.E. MB 67 A.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****HOTEL SERVICES****G. Ships Galley**

6. Deep Fat Fryer,(1)ea., G.E. MK 20 A
7. Griddle, G.E. MG 55 A.
8. Ovens, (2)ea., G.E. NM 40 A.
9. Range/ovens, (2)ea., G.E. MRO 7 A
10. Pressure cooker,(1)ea., Market Forge, "Steam-it", Lt 30:
11. Dumb Waiter - Call system Hose-McCann.
12. Gaylord Ventilation, Rudman and Scofield N 66:
  - a. Drain lines to be clear from unit through ovbd clapper.
  - b. Louvers to be free acting.
  - c. Filters to be clear of dirt and grease.
  - d. Ventilation shut down to function properly.
  - c. Water supply lines, valves, strainers, solenoids, soap injectors, clear and functioning properly.

**H. Mess Rooms**

1. Fwd Crew Mess. Location: Frames 138, 2d Deck, Port
  - a. Bread Box
  - b. Coffee warmer, (1)ea., Valculator
  - c. Radios (1)ea. Hammarlund, HQ-I00A
  - d. Scuttlebutt, (1)ea., wall mounted
  - e. Toaster, (1)ea., G.E. ET 24 (4 slot type)
  - f. Wall Fans, (2)ea.
2. Aft Crews Mess. Location: Frames 150, 2d Deck, Port
  - a. Bread Box
  - b. Coffee warmer, (1)ea., Valculator
  - c. Radios (1)ea. Hammarlund, HQ-I00A
  - d. Scuttlebutt, (1)ea., wall mounted
  - e. Toaster, (1)ea., G.E. ET 24 (4 slot type)
  - f. Wall Fans, (2)ea.

I. All scuttlebutt's to be checked for operation, and drains cleared.

J. All work and testing of equipment to be proven to the satisfaction of the COTR.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****DOCK TRAIL****A. DOCK TRIAL AGENDA**

The purpose of the dock and seatrial is to demonstrate the readiness of the vessel's engineering plant and auxiliary systems. During the dock trial, operating tests will be performed on all major vessel components and systems to ensure the vessels' seaworthy operating condition.

During the dock trial, operating tests for machinery and systems, not previously tested, shall be given their operating tests. This is to include all additional tests and inspections to obtain a USCG COI (Certificate of Inspection), and meet all ABS requirements.

**B. PREREQUISITES**

Mooring stations and adequacy of mooring lines are to be checked to ensure proper securing of the ship to the dock while under power (10 RPM maximum).

Before turning over the main engines, verify that there are no obstructions in way of propellers. Ensure a watch is stationed aft to report any floating or other object that may foul the propeller, or otherwise cause ship damage. Both main engines are to be rolled over and warmed up in accordance with manufacturers instruction book and good marine engineering practices.

Communication systems between machinery spaces, bridge and stern stations to be satisfactorily checked out. All instrumentation used for the collection of data shall be in service condition. The installation and testing of safety devices used for the protection of equipment and personnel shall be completed.

The following to be satisfactorily tested prior to trial:

1. Low lube oil alarm/trips (both main engines).
2. Standby lube oil pumps operation.

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****DOCK TRAIL****C. TEST PROCEDURE**

Contracto to furnish two mechanics, two electricians and two pipefitters to assist vessels crew during Dock Trial.

Additionally, the following items are to be satisfactorily demonstrated.

1. STEERING GEAR TEST--All modes of operation, including emergency steering, rudder angle indicators to be tested and checked. Rudder movement to be tested and monitored.
2. ENGINE ROOM REMOTE SHUTDOWNS--Tested (i.e., Fuel Oil Pumps, Lube Oil Pumps, Ventilation Fans, Forced Draft Fans, F.O. Transfer Pump).
3. EMERGENCY DIESEL GENERATOR--Tested and proven in good operating condition.
4. ENGINE ORDER TELEGRAPH--Tested and proven properly functioning.
5. HOUSE COMMUNICATIONS SYSTEM--Tested and proven in good order at all locations.

Boiler D/H circulating heater/fans with their respective transition ducting (4 ea. Chromolox), auxiliary condenser D/H circulating fans (2), throttle circulating fan (1), hp turbine circulating fan and ducting (1 ea.), all screens from the Main Reduction gears (4), SSTG turbine casings (2), tank manholes (6), and Aqua Chem Evap (1).

**ACTIVATION SPECIFICATIONS****VESSEL ACTIVATION****SEA TRIAL**

Owner will furnish operating personnel to accomplish a sea trial of no less than 24 hour duration. Contractor will furnish line men to let loose vessel and tie up vessel upon return. Contractor will furnish qualified craft assistance for adjustments and minor repairs. Contractor personnel will consist of two (2) machinists, two (2) pipe fitters, two (2) electricians and one (1) work supervisor.

At completion of work, clean up and dispose of all dirt and debris occasioned by work, reinstall all covers, guards, shields, etc., removed to gain access to work areas, and redistribute any equipment assembled in order to accomplish testing or inspection. All equipment to be left, in all aspects, ready for the service intended.

**INFLATABLE LIFE RAFTS**

Remove the three (3) 25-man Elliot inflatable life rafts from their respective stowages, including any hydrostatic release devices, and transport to USCG approved servicing facility. Conduct annual servicing to rafts with USCG in attendance. Return rafts to vessel and stow as directed by the COTR. Provide COTR with servicing certificates.

**MCDS ACTIVATION****MCDS ACTIVATION: GENERAL REQUIREMENTS****GENERAL**

The Contractor shall provide all engineering, labor, materials, and equipment to activate and depreserve the MCDS units installed on the S.S. CAPE GIBSON.

Items 301 through 312 will address activation of each unique component of the MCDS units. Each Modular Cargo Delivery Station, including the Control Module and Hauling winch is presently protected from the environment using dehumidification (D/H) equipment.

**REFERENCES**

NAVFAC P-434, Construction Equipment Department Management and Operations Manual, dtd Apr 1982

NAVSEA Dwg. No. 6166313, Modular Delivery Station - Painting Procedures

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

All material required to accomplish the work specified in Part 6 of this Item, and all other Items of this series shall be Contractor furnished.

New electrical cable shall be MIL-C-24643. In no case shall new cable contain any asbestos or lead.

**LOCATION AND QUANTITY**

Location

All work to be accomplished aboard the Ship shall be performed at the Contractor's facility.

Quantity

All quantities of equipment, fittings, miscellaneous hardware, filters, batteries and all other material as necessary to accomplish a complete activation and depreservation of two MCDS units and support systems.

## MCDS ACTIVATION

### MCDS ACTIVATION: GENERAL REQUIREMENTS (Cont.)

#### WORK REQUIREMENTS

Workmanship shall be of the highest quality commercial marine standard and shall be subject to the approval of the Ship Manager upon completion. Welding shall meet ABS rules and USCG regulations and conform to American Welding Society (AWS) standards. All welds shall be cleaned prior to painting. All surfaces which have been cut, drilled, welded, or otherwise modified shall be cleaned free of grease, slag, or foreign matter.

The Contractor shall be responsible for depreservation of the equipment in accordance with the work requirements of Items 751 through 769.

All P-type preservative call-outs in this Specification refer to Table F6 of Appendix F of Reference 2.1.

The Contractor shall ensure that, upon completion of all work, all spaces shall be cleaned and left free of debris.

A low megger reading, as referred to in this Specification, is defined as being less than 5 megohms.

The Contractor shall prepare and paint all corroded areas and areas disturbed by work in accordance with Reference 2.2.

**MCDS ACTIVATION****MCDS ACTIVATION: POWER MODULE DIESEL GENERATOR ROOM****GENERAL**

The Contractor shall reactivate the equipment in the Diesel Generator (DG) Room of each MCDS Power Module,

**REFERENCES**

NAVSEA Technical Manual No. T9570-AG-MMA-010, MCDS System Technical Manual

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

Diesel fuel to flush and fill the engine fuel system

Fuel filters and fuel strainers

Oil filters

The Contractor shall furnish all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY**

Location

DG Room in the Power Module of the forward MCDS, located between frames 88 and 97,  
Main Deck

DG Room in the Power Module of the aft MCDS, located between frames 170 and 178,  
Main Deck

Quantity

Total of two 500 KW diesel generators

Total of two radiators, cooling fans, and radiator electric motors

Total of two vent fan motors

Total of two load banks

Total of two fuel service tanks

Total of four cooling air intake louvers

Total of two cooling air exhaust louvers

Total of two radiator/load banks

## MCDS ACTIVATION

### MCDS ACTIVATION: POWER MODULE DIESEL GENERATOR ROOM (Cont.)

#### LOCATION AND QUANTITY (Cont.)

##### Quantity (Cont.)

Total of two sets of starting batteries (consisting of 20 cells each)

Total of two cooling system expansion tanks

Total of two DG exhausts

Total of four DG air intakes

#### WORK REQUIREMENTS

The Contractor shall remove the protective sheet metal covers from the engine exhaust openings, located on aft bhd, port side of each module, and tag and store as directed by the COTR to permit reuse at deactivation.

The Contractor shall clean all dirt from the cooling air intake louver assemblies and remove the gasketed and bolted 16-gauge galvanized sheet metal blanks from the intake louver openings to weather. The blanks and associated fasteners must be tagged and stored as directed by the COTR to permit reuse at deactivation. Test operate the intake/exhaust louvers to ensure proper operation. To operate the louvers low pressure air will need to be available.

The Contractor shall clean all dirt and debris from the radiator fins, load bank, and cooling fan blades. The Contractor shall remove the gasketed and bolted 16-gauge galvanized sheet metal blanks from the radiator louver discharge opening to weather. The blanks and associated fasteners shall be tagged and stored as directed by the COTR to permit reuse in the deactivation.

The Contractor shall restore the diesel engine fuel system in accordance with Reference 2.1. The Contractor shall provide diesel fuel and flush the preservative fluid from the diesel engine fuel system by using the priming pump on the outboard bulkhead side of the diesel generator. The Contractor shall provide and replace the fuel strainer and fuel filter elements and flush and clean the fuel/water separator.

The Contractor shall inspect the engine air filter elements and replace with new elements of a type approved by the engine manufacturer. If the existing air filter element is not soiled, store the new air filter element as directed by the COTR as a spare. The Contractor shall clean all combustion air intake conduits located upstream of the filters, and remove the bolted sheet metal blanks from the DG air intakes locate on top of module. Install caps. The blanks and associated fasteners shall be tagged and stored as directed by the COTR to permit reuse in the deactivation. Unseal all engine combustion air openings sealed with tape.

## MCDS ACTIVATION

### MCDS ACTIVATION: POWER MODULE DIESEL GENERATOR ROOM (Cont.)

#### WORK REQUIREMENTS (Cont.)

The Contractor shall clean the generator insulation using clean, dry compressed air. The air pressure shall be 30 psi or less.

The Contractor shall megger-test the generator in accordance with reference 2.1. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

The Contractor shall recharge and reinstall the starting batteries to their proper in-service location in the DO Room. They are located in a steel, lead-lined battery storage box on the ship. The Contractor shall verify that the portable battery charger is in working order.

The Contractor shall inspect the fuel service tanks and remove all foreign material that may have collected. The Contractor shall flush clean and ensure that the tank is clean and water free. The Contractor shall provide and completely fill the fuel service tanks with diesel fuel (approximately 500 gallons each).

The Contractor shall test the coolant in the diesel generator cooling system. The coolant should provide protection between 34 degrees F and 128 degrees F. The diesel engine cooling systems, expansion tanks, and radiators shall be filled at the fill connection on the top of the module, if necessary, with clean demineralized water, treated with a corrosion inhibitor NALCOOL 2000, or equal, and ethylene glycol antifreeze. The Contractor shall operate the engines to ensure proper coolant mixing and proper operation of the thermostats. The Contractor shall check for proper level of coolant. If the level is low, add a mixture of ethylene glycol antifreeze and demineralized water to bring the coolant to the proper level and maintain the required level of protection. The protection provided by the antifreeze shall be measured and certified in the presence of the COTR. Tag the radiators indicating the level of protection.

The Contractor shall start the diesel engines and bring them to operating temperature. The engines shall then be stopped and the lube oil drained while still hot. The lube oil filters and fuel/water separator shall be replaced in accordance with Reference 2.1. The Contractor shall fill the diesel engine with new lube oil in accordance with Reference 2.1.

The Contractor shall identify and inspect all electrical equipment in the Power Module DG Room, including receptacles, lights, switches, motors, terminal boxes, junction boxes, sound-powered phones, emergency lanterns, etc., and shall clean and repair as necessary.

**MCDS ACTIVATION****MCDS ACTIVATION: POWER MODULE DIESEL GENERATOR ROOM (Cont.)****WORK REQUIREMENTS (Cont.)**

The radiator fan motor shall be megger-tested. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

The Contractor shall provide a new battery for each emergency lantern (2).

The Contractor shall remove the wooden plug from the deck drain and prove drain clear. Tag and stow plug as directed by COTR.

## MCDS ACTIVATION

### **MCDS ACTIVATION: POWER MODULE ELECTRICAL EQUIPMENT AREA**

#### **GENERAL**

The Contractor shall reactivate the equipment in the Electrical Equipment Area of each Power Module.

#### **REFERENCES**

NAVSEA Drawing No. 6166305, Common Power Module: Electrical Equipment Area installation and Arrangement

NAVSEA Drawing No. 6166364, Common Power Module: Electrical Equipment Area installation and Arrangement.

NAVSEA Drawing No. 6166365, Cargo Delivery - Power Module: Cable Running Sheets

#### **GOVERNMENT FURNISHED MATERIAL**

1 None

#### **MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

#### **LOCATION AND QUANTITY**

##### Location

Electrical Equipment Area in Power Module of forward. MCDS, located between frames 88 and 97, Main Deck

Electrical Equipment Area in Power Module of aft MCDS, located between frames 170 and 178, Main Deck

##### Quantity

Total of two hauling winch motor controllers and reduced voltage starters

Total of two highline winch motor controllers and reduced voltage starters

Total of two hauling winch outhaul antislack device motor controllers

Total of two highline winch antislack device motor controllers

Total of two gypsy winch motor controllers

Total of two manual bus transfers (MET's)

## **MCDS ACTIVATION**

Total of two automatic bus transfers (ABT's)

**MCDS ACTIVATION****MCDS ACTIVATION: POWER MODULE ELECTRICAL EQUIPMENT AREA**  
**(Cont.)****LOCATION AND QUANTITY (Cont.)**

## Quantity (Cont.)

- Power panels 1, 2, and 3 (Total of 6)
- Total of two louver control panels
- Total of two highline winch replenishment pump motor controllers
- Total of two hauling winch replenishment pump motor controllers
- Total of four sliding block drive motor controllers
- Total of two ground detection units
- Total of two alarm panels

**WORK REQUIREMENTS**

The Contractor shall identify and clean all electrical equipment in the Power Module Electrical Equipment Area, including receptacles, lights, light switches, controllers, terminal boxes, connection boxes, etc., of all foreign material.

The Contractor shall inspect and clean dirt, dust, and foreign material from the controllers. The Contractor shall clean, lubricate, and inspect all switches to ensure free mechanical movement and corrosion-free magnetic armature surfaces.

All equipment shall be cleaned and restored to operating condition. Any broken or corroded parts shall be repaired or replaced.

The Contractor shall megger-test each motor controller shown in references 2.1, 2.2 and 2.3. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

The Contractor shall provide a new battery for each emergency lantern (2).

The Contractor shall remove the wooden plug from the deck drain and prove drain clear. Tag and stow plug as directed by COTR.

**MCDS ACTIVATION****MCDS ACTIVATION: MCDS VENTILATION SYSTEMS****GENERAL**

The Contractor shall activate each ventilation system located in the MCDS Modules.

**REFERENCES**

NAVSEA Drawing No. 6166301, Common Power Module: Ventilation System

NAVSEA Drawing No. 6166328, Common Equipment Module: Ventilation System

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY****Location**

The forward MCDS Module located between frames 88 and 97, Main Deck

The aft MCDS Module located between frames 170 and 178, Main Deck

**Quantity**

Total of four intakes

Total of four vane axial fans

Total of four motor controllers

Total of four fan motors

**MCDS ACTIVATION****MCDS ACTIVATION: MCDS VENTILATION SYSTEMS (Cont.)****WORK REQUIREMENTS**

The Contractor shall remove the PVC pipe D/H air ducting running from the aft ventilation intake cover to the Hauling winch cover. Tag and stow pipe as directed by COTR.

The Contractor shall remove all sealing material over the ventilation intake cover and remove the cover and store as directed by the Ship Manager for reuse at deactivation.

The Contractor shall clean the ventilation system and associated motors in place.

The Contractor shall megger test each fan motor and its associated motor controller. All readings shall be recorded and four copies provided to the COTR. Low megger readings shall be reported to the COTR within 24 hours and the cause for the readings investigated and repaired.

The Contractor shall rotate the vane axial fans by hand to ensure free rotation prior to energizing the system.

**MCDS ACTIVATION****MCDS ACTIVATION: FIRE EXTINGUISHING SYSTEMS****GENERAL**

The Contractor shall activate the Halon (1301) fire extinguishing system and fill the foam fire extinguisher in each MCDS unit.

**REFERENCES**

NAVSEA Drawing No. 6166304, Common Power Module: Compressed Air/Halon System  
ANSUL System Technical Manual

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY**

## Location

Equipment Module and Power Module of the forward MCDS, located between frames 88 and 97, Main Deck

Equipment Module and Power Module of the aft MODS, located between frames 170 and 178, Main Deck

## Quantity

Total of eight HALON portable fire extinguishers

Total of two HALON tank assemblies

Total of two remote HALON stations with N<sub>2</sub> cylinders

Total of two 50-pound carbon dioxide cylinders

Total of two foam (AFFF) fire extinguishers with hose reels

## MCDS ACTIVATION

### MCDS ACTIVATION: FIRE EXTINGUISHING SYSTEMS (Cont.)

#### WORK REQUIREMENTS

The Contractor shall identify and inspect all electrical components associated with the Fire Extinguishing System, including lights, pressure switches, alarms, terminal boxes, connection boxes, etc., and repair as necessary.

The Contractor shall reconnect the nitrogen cartridge to the HALON 1301 system and open stop valves.

The Contractor shall reconnect the 50-pound carbon dioxide and 46-pound HALON cylinders to the HALON 1301 system and open stop valves in accordance with Reference 2.1.

The Contractor shall fill each foam fire extinguisher with 5 gallons foam solution and 28 gallons of tap water in accordance with Reference 2.2.

The Contractor shall inspect the portable HALON extinguishers and ensure that they are fully charged and in working order.

The Contractor shall open the louver control air supply valve located in the Power module overhead adjacent to the diesel-generator room door.

**MCDS ACTIVATION****MCDS ACTIVATION: MODULE UPPER LEVEL****GENERAL**

The Contractor shall reactivate and depreserve each hauling winch assembly and the outhaul antislack device located on the upper level of the MCDS.

**REFERENCES**

NAVSEA Drawing No. 6197468, MCDS Station Assembly; UNREP Equipment

NAVSEA Technical Manual No. SG813-AD-MMA-010, Winch, Electric Hydraulic, Double-Drum, Hauling, Inhaul-Outhaul, MK4, Mods 1 and 2

NAVSEA Technical Manual No. S9571-AD-MMA-010, Anti-slack Device, Electric, 1/2-inch wire, MK12, Mod 0

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY****Location**

Forward MCDS upper level, located between frames 88 and 97, Main Deck

Aft MCDS upper level. located between frames 170 and 178, Main Deck

**Quantity**

Total of two hauling winches

Total of two outhaul anti-slack devices

Total of two hauling winch enclosures

## MCDS ACTIVATION

### MCDS ACTIVATION: EQUIPMENT MODULE TOP (Cont.)

#### WORK REQUIREMENTS

The Contractor shall remove the airtight enclosure for each hauling winch assembly. The enclosures are connected to the MCDS upper level plating. Remove the PVC pipe D/H air ducting between enclosure and Ram Tensioner cover. The enclosures shall be carefully removed from the upper level plating, but shall otherwise be left intact, and tagged and stowed as directed by the COTR to allow reuse at deactivation.

The Contractor shall depreserve the hauling winches. The couplings shall be cleaned and filled with DOD-G-24508 grease. Grease all fittings in accordance with Reference 2.2. Clean and grease all components such as the brake and ratchet mechanism. Check the oil level in the gear reducer, and if low, fill to operating level with MIL-L-2105 Go 90 Lubricant. Close inspection plates which were wired adjacent to openings. Clean all exposed machined surfaces and lightly coat with P-2 preservative. Clean P-11 preservation from the Lebus spooling device.

The Contractor shall ensure that the hauling winch Navy Standard transmission is full of oil. Fill as required with new, clean-filtered 2110T-H using the portable filter buggy.

The Contractor shall depreserve the outhaul anti-slack device. Grease all fittings in accordance with Reference 2.3, check the oil level in the anti-slack device gear reducer, and if low, fill the reducer to operating level with Mobil SHC 634, or equal lubricant.

The Contractor shall identify and inspect all electrical equipment associated with the hauling winch, and other electrical equipment on the Equipment Module Top, including receptacles, lights, light switches, motors, terminal boxes, connection boxes, etc., and repair as necessary.

The Contractor shall megger-test the hauling winch replenishment, main, and blower electric motors. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

## MCDS ACTIVATION

### MCDS ACTIVATION: EQUIPMENT MODULE UNREP EQUIPMENT AREA

#### GENERAL

The Contractor shall reactivate the equipment in the UNREP Equipment Area of each Equipment Module.

#### REFERENCES

- NAVSEA Technical Manual No. S9571-AR-MMO/16603, Maintenance Manual for Ram Tensioner
- NAVSEA Technical Manual No. SG813-AW-MMA-010, Winch, Electric Hydraulic, Single Drum, MK2, Mods 1-4, 6, 7, and 9
- NAVSEA Drawing No. 6166330, Common Equipment Module: UNREP Equipment Area installations and Arrangements
- NAVSEA Drawing No. 6166324, Common Equipment Module: Structure
- NAVSEA Drawing No. 6166326, Common Equipment Module: Miscellaneous Fabrication Details

#### GOVERNMENT FURNISHED MATERIAL

1 None

#### MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

#### LOCATION AND QUANTITY

Location

UNREP Equipment Area in the Equipment Module of forward MCDS, located between frames 88 and 97, Main Deck

UNREP Equipment Area in the Equipment Module of aft MCDS, located between frames 170 and 178, Main Deck

Quantity

Total of two highline winches

Total of two fixed fairlead sheaves

**MCDS ACTIVATION****MCDS ACTIVATION: EQUIPMENT MODULE UNREP EQUIPMENT AREA**  
**(Cont.)****LOCATION AND QUANTITY (Cont.)**

## Quantity (Cont.)

Total of two ram tensioners

Total of two ARC sending units

Total of two highline antislack devices

Total of two ventilation fans and controllers

Total of two highline Navy standard transmissions

**WORK REQUIREMENTS**

The Contractor shall depreserve the ram tensioner. Remove grease-proof paper wrap from ram piston and unplug all openings. Remove and unplug all rags, tape, and sealants from the sump breathers, ram cover, ram hood, etc., and release any securing materials to allow the ram tensioner piston to extend when charged.

The Contractor shall drain the ram tensioner and sump in accordance with reference 2.1 and clean the sump of all foreign material.

The Contractor shall provide new MIL-H-19457 MLT hydraulic fluid and fill ram tensioner in accordance with reference 2.1.

The Contractor shall ensure all valves are aligned in accordance with reference 2.3 and charge the high pressure air flasks to 500 psi. The highline winch must be operational, wire rope must be properly reeled, and highline end fittings must be properly secured to ram securing padeye prior to the ram charging operation.

The Contractor shall thoroughly grease the fairlead sheaves of each MCDS using the grease fittings.

The Contractor shall depreserve the highline winches. Remove the grease-proof paper wrap and tape from the couplings and shafts. The couplings shall be cleaned and filled with DOD-G24508 grease, in accordance with reference 2.2. Grease all fittings in accordance with reference 2.2. Clean, grease, and operate all components such as the dog clutch, brake, and ratchet mechanism. Check the oil level in the gear reducer, and if low, fill to operating level with MIL-L-2105 Go 90 lubricant in accordance with reference 2.2. Close inspection plates which were wired adjacent to openings. Clean P-I preservation from clutch jaws. Ensure all vent breathers are properly installed.

**MCDS ACTIVATION****MCDS ACTIVATION: EQUIPMENT MODULE UNREP EQUIPMENT AREA**  
**(Cont.)****WORK REQUIREMENTS (Cont.)**

The Contractor shall ensure that the Navy Standard Transmission is full of oil. Provide and fill as required with new, clean-filtered MIL-L-17672 symbol 2135 T-H using filter buggy.

The Contractor shall ensure that the low pressure air supply to the highline anti-slack devices is open.

The Contractor shall ensure that all openings shown in References 2.4 and 2.5 are open as required for proper operation of the MCDS.

The ventilation fan motors and controllers shall be cleaned, the fan motors shall be megger-tested, and put in proper operating condition. Any broken or corroded parts shall be repaired or replaced. The contractor shall rotate fans by hand to ensure free rotation prior to energizing the system.

The Contractor shall identify and inspect all electrical equipment in the Equipment Module UNREP Equipment Area, including receptacles, lights, light switches, motors, terminal boxes, connection boxes, etc., and shall repair as necessary.

The Contractor shall remove the DH system flexible ducting, tag and store as directed by the COTR. Plug the holes, for activation air and to permit DH of the hauling winch enclosure, in the module upper level with provided plugs hanging adjacent to openings.

The Contractor shall provide a new battery for each emergency lantern (2)

**MCDS ACTIVATION****MCDS ACTIVATION: EQUIPMENT MODULE COMPRESSOR AREA****GENERAL**

The Contractor shall reactivate the equipment in the compressor area of each Equipment Module.

**REFERENCES**

NAVSEA Technical Manual No. T9570-AG-MMA-010, MCDS System Technical Manual

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY**

## Location

Compressor area in Equipment Module of forward MCDS, located between frames 88 and 97, Main Deck

Compressor area in Equipment Module of aft MCDS, located between frames 170 and 178, Main Deck

## Quantity

Total of two low pressure air receivers

Total of eight high pressure air flasks

Total of two high pressure and two low pressure air compressors

Total of two air dryers

Total of two prefilters

Total of two after-filters

Total of two anti-slack device (ASD) air modules

Total of two high pressure air filters

**MCDS ACTIVATION****MCDS ACTIVATION: EQUIPMENT MODULE COMPRESSOR AREA (Cont.)****WORK REQUIREMENTS**

The Contractor shall remove any tape barrier wrap, reinstall breather retention belts, and turn compressors over by hand to make sure compressor is free.

The ASD air module covers are currently stowed adjacent to their openings. The Contractor shall reinstall the ASD air module cover to the opening.

The Contractor shall clean the high pressure and low pressure air compressor and megger-test each motor and associated motor controller. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

The Contractor shall drain the high pressure and low pressure air compressor crankcases of preservative oil and refill them to the operating levels in accordance with the High Pressure Air Compressor Technical Manual, and the Low Pressure Air Compressor Technical Manual in Volume II of reference 2.1.

The Contractor shall purge the high pressure air flasks of nitrogen. The inlet and outlet connections shall be unsealed and reconnected.

The Contractor shall ensure that all low points on the low pressure and high pressure systems are drained free of moisture and oil, and ensure that all drain valves on the low pressure and high pressure systems are closed.

The Contractor shall identify and inspect all electrical equipment in the Equipment Module Compressor Area, including receptacles, lights, light switches, controllers, motors, terminal boxes, connection boxes, etc., and shall repair as necessary.

The Contractor shall test the operation of the air compressors and correct any malfunctions.

The Contractor shall provide a new battery for each emergency lantern (2).

**MCDS ACTIVATION****MCDS ACTIVATION: KINGPOST MODULE****GENERAL**

The Contractor shall reactivate the equipment comprising the Kingpost Module.

**REFERENCES**

NAVSEA Drawing No. 6166379, Cargo Delivery - Kingpost Module: Equipment Installation

NAVSEA Technical Manual No. S9570-AC-MMA-010, Navy Standard Sliding Block Drive

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY****Location**

Forward MCDS, located between frames 96 and 97, Main Deck

Aft MCDS, located between frames 170 and 178, Main Deck

**Quantity**

Total of two sliding block drives

Total of two sliding blocks/STREAM transfer heads

Total of four highline fairleads

Total of six inhaul fairleads

Total of two outhaul fairlead blocks

**MCDS ACTIVATION****MCDS ACTIVATION: KINGPOST MODULE (Cont.)****WORK REQUIREMENTS**

The Contractor shall depreserve the sliding block drive. Remove the grease-proof paper and tape. Grease all fittings thoroughly in accordance with Reference 2.2. Work in grease where possible by moving parts. Coat chain and chain sprockets with P-I preservative. Check oil level in gear reducer, and fill to operating level with lubricant if required. Inspect the entire drive (brake, electric motor, and gear reducer) and repair as necessary.

The electric motor shall be megger-tested. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired.

Contractor shall identify and inspect all electrical equipment on and around the Kingpost Module, including receptacles, lights, limit switches, terminal boxes, connection boxes, RAS and night lights, etc., and shall repair as necessary.

**MCDS ACTIVATION****MCDS ACTIVATION: GYPSY WINCH****GENERAL**

The Contractor shall prepare the gypsy winches for reactivation.

**REFERENCES**

NAVSEA Technical Manual No. T9570-AL-MMA-010/6A795, Gypsy Winch

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY**

## Location

Main Deck aft of Hold No. 3, frame 107, Port Side

Main Deck aft of Hold No. 5, frame 166, Port Side

## Quantity

Total of two gypsy winches

Total of two gypsy winch master controllers

**WORK REQUIREMENTS**

The Contractor shall inspect and clean all exterior surfaces of the gypsy winches.

The Contractor shall megger-test the gypsy winch motors. All readings shall be recorded and four copies provided to the Ship Manager. Low megger readings shall be reported to the Ship Manager within 24 hours and the cause for the readings investigated and repaired. The Contractor shall inspect all electrical connections to ensure they are clean of dirt and corrosion. Repair as necessary.

The Contractor shall drain and refill the gear reducer in accordance with Reference 2.1.

The Contractor shall lubricate the electric motor bearings in accordance with Reference 2.1.

The Contractor shall clean and inspect the electric brake in accordance with Reference 2.1.

**MCDS ACTIVATION****MCDS ACTIVATION: CONTROL MODULE****GENERAL**

The Contractor shall activate the MCDS Control Module and remove the dehumidification system.

**REFERENCES**

1 None

**GOVERNMENT FURNISHED MATERIAL**

1 None

**MATERIAL REQUIREMENTS - CONTRACTOR FURNISHED**

The Contractor shall provide all material as required to accomplish the work specified in Part 6 of this Item.

**LOCATION AND QUANTITY**

Location

Control Station for the forward MCDS, located on a platform at frame 79, Port Side.

Control Station for the aft MCDS, located at frame 165, Port Side Upper Deck.

Quantity

Total of two Winch Control Module installations

**WORK REQUIREMENTS**

The Contractor shall remove the dehumidified air system from the Control Modules and store as directed by the COTR. The DH system foundation is presently tack welded to the Control Module floor and must be removed and stored.

The Contractor shall remove the plywood covers on the windows and the station marker box of each Control Module. The Contractor shall clean the windows of all tape and foreign materials.

The Contractor shall identify and inspect all electrical equipment inside and outside of the Winch Control Module, including receptacles, lights, light switches, terminal boxes, bells, buzzers, connection boxes, etc., and shall repair as necessary.

**MCDS ACTIVATION****MODULAR CARGO DELIVERY STATION (MCDS) TESTS****GENERAL**

The Contractor shall furnish all equipment and labor to test the activated MCDS units.

**REFERENCES**

NAVSEA T9005-AC-SOT-020/MCDS 1 CL. Modular Cargo Delivery Station System Operability Test Manual, Production Class 1

**GOVERNMENT FURNISHED MATERIAL**

None

**CONTRACTOR FURNISHED MATERIAL**

All material required to accomplish part 6 of this Item.

Wire rope used for pull tests shall have a safety factor of at least five.

**LOCATION AND QUANTITY**

Location

Tests as specified In Part 6 of this item shall be conducted on each of the two MCDS.

**WORK REQUIREMENTS**

The Contractor shall perform all tests identified in Reference 2.1 to the satisfaction of the Ship Manager.

The Contractor shall record all data from each test and document all problems encountered during testing.

Three copies of the test data records, including documentation of problems, are to be provided to the Ship Manager.

## **REPAIRS**

### **FIRST REPAIR ITEM**

Furnish labor, material and equipment to complete the following.