Into Drydock Beth Steel GF 1532 23 Oct. 1967
Out of RB 1717 26 Oct. 1967

MILITARY SEA TRANSPORTATION SERVICE, PACIFIC
NAVAL SUPPLY CENTER
OAKLAND, CALIFORNIA 94625

SPECIFICATION NUMBER: MSTSP 68-36

17 October 1968

S P E C I F I C A T I O N S

For

DRYDOCKING

USNS GEN. JOHN POPE (T-AP 110)
(Principal Dimensions)

Length	573'
Breadth	75' 6"
Depth	51' 6"
Gross Tonnage	17948
U.S. Maritime Commission Design	P2-S2-R2

The General Conditions dated 15 July 1955 and Amendment No. 1 dated 23 November 1962 to the General Conditions for work under Department of Defense, Department of the Navy, Master Contract for Repair and Alteration of Vessels are a part of these specifications and any conflict between these specifications and the Master Contract for Repair and Alteration of Vessels shall be governed by the provisions of the Master Contract.

These specifications consist of 14 pages and General Conditions, referenced above.

SUPT PORT ENGINEER:

Approved: Director, Transport/Tanker Engr. Division G. Cates

Approved: Supt. Port Engineer Geo. N. Nalan

I N D E X

CATEGORY "A" ITEMS

INFORMATION REGARDING THE INVITATION FOR BIDS INCLUDING THESE SPECIFICATIONS

Prior to the time of bid opening and after award of job order, inquiries should be directed to one of the following:

Procurement and Contractual Matters (Maintenance and Repair Office)

Title	Telephone
Director, Procurement & Control Division	466-5185
Head, Contract Branch	466-5185

Legal Matters (Office of Counsel)

Title	Telephone
Assistant Counsel	466-6481
Counsel	466-6481

Engineering and Technical Matters (Maintenance and Repair Office)

Title	Telephone
Deputy M & R Officer	466-6955

Statement of Manufacturer's Representative

On any specification item which calls for supervision by the manufacturer's representative the following shall be strictly complied with:

Submit a statement of supervision exercised by the representative, prepared and signed by the representative. The statement shall include certification of work actually performed and certification either that work was performed to the satisfaction of the representative, or that work deficiencies, explicitly identified by the manufacturer's representative, exist. The original plus four copies of each statement shall be delivered to the MSTSP Inspector.

Overtime Policy

The Contracting Officer may require of the Contractor a statement in writing regarding the need for overtime in the performance of the contract in the event of the issuance of a Change Order or a Supplemental Agreement for extra work. No overtime premium pay shall be considered in the price or equitable adjustment to be paid by the Government on account of the Change Order or a Supplemental Agreement unless authorized by the Contracting Officer.

ITEM 1 - SERVICES:(TC)

Upon arrival of the ship in the Contractor's yard, the Contractor shall provide the following services for four (4) continuous calendar days.

Electric power - 1200 amps, 120/240 volts DC and 100 amps, 3 phase 400 volts AC.

Steam	5000 lbs. per hr. at	100 PSI
Fresh water		60 PSI
Flushing water		60 PSI
Fire main		100 PSI
Air	1500 CFM at	100 PSI

Any additional services required, either in quantity or in excess of time required by the applicable specifications, shall be furnished only upon the issuance of a Specification Change Order. Cost of any additional services required for Contractor's convenience shall be borne by the Contractor.

ITEM 2 - TELEPHONES AND GARBAGE: (TC)

Garbage and Debris Removal:

Remove daily all garbage and debris generated by the ship. (Note: Cleanliness of the ship shall be the Contractor's responsibility in accordance with the master contract for repair and alteration of vessels. Clause 5, Sub. Para. (i)).

Telephones:

One (1) twenty-four hour telephone for official use only at quarter deck.

One (1) pay telephone at quarter deck providing such telephone is not available on the dock in immediate vicinity of the ship.

Three (3) telephones through switchboard during regular work day hours as follows:

One (1) in Chief Engineer's Office.
One (1) on quarterdeck for official use.
One (1) in MSTSPAC Representative's Office.

ITEM 3 - DELIVERY AND DRYDOCKING: (MJM)

A suitable drydock shall be furnished by the contractor and the ship placed in same upon arrival at the contractor's yard for the accomplishment of all work specified in individual items of this specification or any additional work found necessary which can be accomplished during the drydock availability.

The ship will proceed to and from the contractor's yard under its own power or with the assistance of tug boats without expense to the contractor.

Ballast conditions, trim weights, draft, etc., shall be carefully checked by the contractor prior to drydocking of the ship.

The contractor shall remove material as necessary to bring the ship's displacement and trim to within the capacity of the drydock and shall replace same upon the completion of the drydocking.

Obtain the ship's keel block record for its last drydocking from ship. DO NOT duplicate the previous drydocking position.

Furnish a record sketch in quadruplicate, showing the new locations and widths of the keel blocks to the MSTS inspector.

ITEM 4 - PAINTING UNDERWATER BODY: (LTD)

Prepare surfaces and paint the underwater body from the keel to the upper limits of the boottop area as specified below:

1. Surface Preparation

(A) All surfaces of the boottop area and surfaces of the flat keel between the keel block settings shall be sandblasted to a "Commercial Blast Surface" as defined by the Steel Structures Painting Council in "Surface Preparation Specification Commercial Blast Cleaning."

(B) All other surfaces of the underwater body shall be cleaned free of all marine growth, scale, rust, loose paint, grease and other extraneous substances, by sweep blast.

(C) Suitable means shall be provided and used for removing blasting material and residual dust from surfaces after blasting and prior to coating.

(D) Clean and grease fathometer plates prior to painting. Wipe fathometer plates clean of grease prior to floating of ship.

2. Pretreatment and Paint Application

(A) Apply one (1) coat of pretreatment wash primer, spec. MIL-C-15328B, to all bare metal surfaces.

(B) Apply one (1) coat of anti-corrosive paint, spec. 52-MA-401B, to all pretreated surfaces, except in the stern areas specified in the following paragraph:

(C) Apply two (2) coats of anti-corrosive paint, Maritime Specification 52-MC-401B, to the entire hull from keel to 12" above the average maximum load line, except in way of rudder post, submerged portion of rudder, propeller hub and the stern portion of the hull, from stern frame to approximately 20-feet forward and from the keel up to a point 6-inches below the light load line.

(D) On stern area as specified above, apply two (2) coats of electrical insulating paint equal to Apexior No. 3.

(continued)

ITEM 4 - PAINTING UNDERWATER BODY: (LTD) (cont'd)

(E) Apply one (1) coat of anti-fouling paint to the entire hull from keel to six (6) inches below light lead line. This includes the stern areas painted with electrical insulating paint. Anti-fouling paint shall be equal to Maritime Specification 52-MC-403A.

(F) Apply two (2) coats of commercial black boottopping paint to hull from six (6) inches below light lead line to 12" above the average maximum lead line. First coat of boottopping shall dry a dull finish, the second coat shall have a high gloss finish. Boottopping paint shall be compatible with anti-corrosive paint.

(G) Paint in all ship's markings prior to floating of ship.

3. Prior to application of anti-fouling paint and boottop paint, the contractor shall obtain the actual light draft of the vessel from the USCG stability letter posted in the chart room, compartment 03-86-2-C. The lower limits of the boottop area shall be re-established and cut-in fair and smooth fore and aft six (6) inches below the actual light draft of the vessel.

4. Install spouts in way of overboard discharge to keep water and debris clear of ship's shell plating during the aforementioned work.

ITEM 5 - PROPELLER SHAFTS BEARING WEARDOWN: (LJF)

Immediately after dock is dry remove the port and starboard propeller shaft fair-waters and rope guards, measure weardown of the stern tube bearings and strut bearings using trammels or dial gauge. Readings shall be taken in the presence of the MSTS Inspector and the ship's Engineering Officer. Submit a report in quadruplicate of all readings to the MSTS Inspector.

Clean and paint fair-waters as per underwater body painting.

Furnish new rope guards free of mill scale and paint out as per underwater body.

Install rope guards and fair-waters upon completion of shaft work, renewing all fastenings.

ITEM 6 - SCATTERED WELDING ON EXTERIOR SHELL PLATING: (MJM)

Chip out all deteriorated welds to good metal and reweld scattered welds on seams, butts of shell plating, flat keel and bilge keels. Build up designated areas that are pitted by welding.

Quote on 100 feet of seams and butts, not feet of bead. Pitted areas not in seams or butts will be evaluated at one (1) foot of seam or butt for six (6) square inches of welding. Cost to be indirect proportion to computed length actually welded.

ITEM 7 - RUDDER (LJF)

Remove access cover plate to rudder stock nut.

Remove keeper and in the presence of MSTS Inspector and the ship's Chief Engineer harden up on the rudder stock nut.

Reinstall the nut keeper and access cover plate.

Remove the rudder stock packing gland and flax packing, clean glands, studs and nuts, renewing defective studs and nuts with material equal to original when new.

Take and record upper and lower rudder stock bearing clearances in the athwartship and fore and aft positions.

Pressure lubricate the rudder carrier bearing and prove grease lines clear.

Repack rudder stock gland with square flax packing, Fed. Spec. HH-P-00106.

Remove drain plug to prove rudder free of water, reinstall plug and air test rudder to five (5) pounds air pressure. Repair leaks, as found, and prove rudder tight.

Fill and drain rudder upon completion of repairs (if any), using U.S. Government furnished rust preventive compound.

Submit clearances, report as found to MSTS Inspector immediately.

ITEM 8 - SEA CHESTS AND STRAINER PLATES: (LJF)

Remove all sea chest strainer plates, clean and paint as specified for underwater body. Thoroughly clean the interiors of the chest to clean metal. Examine the strainer securing lugs on the chests and furnish and install new lugs and studs as directed by the MSTS Inspector to replace defective units as found. An estimated amount of twenty (20) lugs and twenty (20) studs.

Install seal welded inserts in an estimated ten (10) deteriorated sections (4" X 4" X 3/4") of stud securing areas of the strainer plates as designated by the MSTS Inspector.

Paint the interior of the sea chests with two (2) coats of Apexior No. 3 or equal as approved, and reinstall the strainer plates, replacing the holding nuts. Individually thread a wire through cotter keyhole and around each lug to prevent loosening of nuts and lugs.

ITEM 9 - ANCHOR CHAINS: (MJM)

While ship is in drydock, roust out the port and starboard anchor chains; disconnect at bitter end and range chains on dock for examination. Examine carefully all chain links, detachable links, shackles and swivels. End for end both anchor chains.

Sandblast chain and anchors to remove all scale and rust. Upon completion of cleaning, inspection and repairs, if any, paint chain with one (1) coat of Federal Specification TT-V-51C, "Anchor Chain Black: paint, Formula 45. This shall be applied with air spray equipment. Apply to anchors two (2) coats of red lead primer and two (2) coats of Haze Gray, Formula 5H.

After paint has thoroughly dried, mark all shots of chain with paint and seizing wire in conformity with Merchant Marine practice. Remove all anchor chain black paint in way of shot markings prior to application of marking paint.

While anchor chains are removed, sand blast port and starboard hawse pipes to bare metal and prime and finish paint in accordance with COMSTS Instructions 4750.1B.

Free up bitter end release devices for each chain. Reassemble each chain and properly stow ready for sea.

ITEM 10- CHAIN LOCKERS: (MJM)

Chain lockers, including sumps, shall be thoroughly cleaned of all rust, scale, mud and dirt, by scraping, scaling and wire-brushing. All drains shall be thoroughly cleaned free of all foreign matter and proved clear. Open up suction line valves, free-up, clean and grind in. Free-up and lubricate valve reachrod.

After cleaning has been accomplished and locker inspected by MSTS Inspector, all interior surfaces of locker shall be given one (1) coat of Bituminous Emulsion, Spec. MIL-C-15203-C.

ITEM 11- OVERHAUL SEA VALVES AND OVERBOARD DISCHARGE VALVES: (BK)

All sea valves, overboard discharge valves, sea chest blowing-out valves, boiler blow-down shell valves and main circulator bilge injection valves, shall be opened up, cleaned, inspected and overhauled and shall be placed in first-class seaworthy and serviceable condition. All broken, missing or otherwise defective minor parts shall be repaired and/or renewed, using material similar to original when new.

All valve seats and disc shall be reseated and ground into a tight seat. All valve stems shall be freed up, cleaned and repacked.

All shell fastenings securing the various valves and their appurtenances, such as pads, nipples, spuds, spool pieces, studs, flanges, et., shall be hammer-tested and examined. Paint interior surfaces of valves with one (1) coat of Apexior No. 3, or equal as approved.

Unbolt and remove the 20 inch low sea suction gate valve located lower engine room, frame 136, port side.

The lower half of the valve is now encased in cement.

Off load and install with new gaskets, securements and bonding straps a new government furnished replacement valve.

Renew one (1) 1½" boiler blow valve and its respective sea spool connection which is approximately 5" long, location to be designated by MSTS representative.

Open for inspection the submersible bilge pump overboard remote air controlled valve, located sixth deck, frame 122, portside, renew piston leather cups and accomplish all other work as outlined in basic item.

Upon completion of all stipulated repairs, inspection and acceptance of all the above work, close up all valves ready for service, using all new bolting and jointing materials as required.

All work shall be performed to the complete satisfaction of the MSTS Representative and Chief Engineer.

ITEM 12- REPACKING STERN GLAND STUFFING BOXES: (BK)

Remove all packing from port and starboard stern gland stuffing boxes. Thoroughly clean each box and gland. Prove water service lines to stern tubes clean and free.

Install all new packing in each gland. New packing shall be square flax packing. Fed. Spec. HH-P-00106-C in single turns with butt joints; each turn shall be pulled individually into the stern tube stuffing boxes. All joints shall be staggered. The ends of each piece of packing shall be properly served to prevent unravelling.

Fair-up and remove burrs on ring gear and pinion gear and run die nut on studs prior to repacking stern glands.

ITEM 13 - PROPELLERS: (BK)

Clean and buff the port and starboard propellers to bright metal, examine for cracks, breaks and eroded areas. Repair minor nicks and burrs, cracks less than 1" in length, and blade edges.

Remove the propeller cap fairwater and propeller nut keepers.

Port propeller cap fairwater is missing.

Receive and off load government furnished new propeller cap fairwater and inspect for applicability.

Using new cap as a template drill out eight (8) broken 3/4 inch studs and tap new threads. Reinstall new cap with new monel shoulder studs and nuts.

Harden up on the propeller nuts in the presence of the MSTS representative and ship's Chief Engineer and install witness marks.

Reinstall the propeller nut keepers and cap fairwaters and insert safety wire around nuts.

Fill cup fairwaters with tallow.

Recement the cap fairwaters bolt heads and leave propellers ready for use.

ITEM 14- HULL ZINCS: (MJM)

Remove the existing cast-in strap zincs and install new 1¼" thick cast-in strap zinc anodes, spec. MIL-A-18001E, type AHS.

Zincs shall be left unpainted.

A total of eighty eight (88) zincs.

ITEM 15- FATHOMETER COFFERDAM AND PROJECTOR INSPECTION (MJM)

Open up cofferdam for inspection. Open up junction box and dry out. Clean entire interior area of cofferdam. Remove all loose and scaling Paint. Clean corroded area to bare steel and prime with two (2) coats of red lead Formula 116. Apply one (1) overall coat of white enamel, Formula 30.

When notified by the MSTS Representative, close up cofferdam, renewing gaskets, missing and/or defective bolting.

Test to insure tightness to the satisfaction of the MSTS Representative upon completion of work.

ITEM 16 - SCUPPER VALVES: (BK)

Accomplish the following repairs to a total of eleven (11) scupper valves in the below listed sizes and locations.

Size	Location	Quantity
6" inlet, 7½" outlet	4-35-3	1
6" inlet, 7½" outlet	4-45-2	1
6" inlet, 7½" outlet	4-29-1	1
6" inlet, 7½" outlet	4-30-1	1
4" inlet, 6 " outlet	4-50-1	1
3" inlet, 3 " outlet	4-95-1	1
3" inlet, 6 " outlet	4-147-2	1
3" inlet, 6 " outlet	4-187-1 & 2 one extra on stbd.	2
3" inlet, 6 " outlet	4-35-1	1
8" inlet, 9½" outlet	4-21-2	1

Open valves for inspection. Clean interior of valves to bare metal and paint with two (2) coats of Apexior No. 3 paint, or equal as approved.

Renew clappers and hinge pads and install clappers with new stainless steel hinge pins.

Reseat new clappers and seats.

On completion of inspection and acceptance of work, reassemble all removals utilizing new gaskets and securements.

ITEM 17 - MISCELLANEOUS PIPING: (BK)

Remove the deteriorated and leaking sections of below listed piping and replace with material equal to existing when new, complete with flanged, fittings.

Length and sizes specified are approximate and contractor shall take exact dimemsions from installed locations on ship. Exact locations of piping to be designated by Chief Engineer.

Provide the ship with sufficient temporary fire protection and sanitary flushing water in designated areas during accomplishment of repairs.

Apply shop hydro test at one and one half (1½) times working pressure to new fabrication.

Install aboard ship using new gaskets, packing, bolting and pipe hangers.

(Continued)

ITEM 17 - MISCELLANEOUS PIPING: (BK) (CONT'D)

Prove all work tight under ship's load to the satisfaction of the MSTS Inspectors.

Install new insulation to newly installed piping, equal to original when new, lagged and painted with two (2) coats of fire retardant paint to match existing area.

(A) NO. 2 EVAPORATOR PIPING

One (1) 6 ft. section of 2 inch IPS, flanged, formed, galvanized steel piping, complete with two (2) 90 degree ells.

One (1) 3 ft. section of 6 inch IPS, flanged, formed, galvanized steel piping, including two (2) 45 degree ells, one (1) 5 inch IPS, 3 ft. long off-sticker, and one (1) 3 inch IPS, 2 ft. long off-sticker, located evaporator flat, 6th deck, frame 125, port side.

(B) COMMODE PIPING

One (1) 3 ft. section of 5 inch IPS, shaped and welded commode drain piping, including 2 inch welded off-sticker and drain trap. Located: After lower troop head, 3rd deck, frame 217, port side.