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MARINE DEPARTMENT

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OPERATIONS MANAGER

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FLEET & BRANCH MANAGER

L. H. EARLE
MARINE ADVISOR

H. J. BORGES
MAINTENANCE & SERVICES MANAGER

April 28, 1978

Newport News Shipbuilding
4101 Washington Avenue
Newport News, Virginia 23607

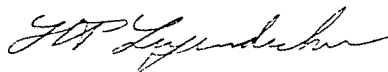
Attention: Mr. G. Guy Via, Jr.
Vice President

Dear Mr. Via,

In further reference to the EXXON GETTYSBURG shipyard specifications, item 65, forwarded earlier, enclosed are drawings describing the excitation and voltage regulation modification that is to be installed under General Electric supervision.

Please forward the appropriate drawings with a description of the modification to the Coast Guard for approval prior to the arrival of the EXXON GETTYSBURG which will be on or about June 1, 1978.

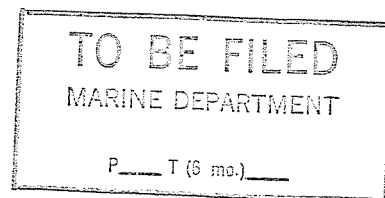
Very truly yours,



H. P. Leyendecker
Repair Superintendent

HPL: bt
Enclosure

c: Mr. E. J. Worrel, Jr.



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MAINTENANCE & SERVICES MANAGER

May 10, 1978

Newport News Shipbuilding Co.
4101 Washington Avenue
Newport News, Virginia 23607

Attention: Mr. G. Guy Via, Jr.
Vice President

Dear Mr. Via,

Enclosed are two additional items that are to be attached to the shipyard specifications of the EXXON GETTYSBURG. These are betterment items, and the Project Engineer, Gary Cousins, can be contacted concerning these items at 713-656-5989.

Very truly yours,

E. J. Worrel, Jr.
Asst. Repair Superintendent

EJW: bt
Enclosure

c: Mr. H. J. Borgen
Mr. L. A. Hanft
Mr. W. A. Ingham, Jr.
Mr. J. A. Tompkins
Mr. E. J. Worrel, Jr.

259. Cyclo-hexane System Installation - 407B

The purpose of this item is to add a segregated system to the vessel to handle cyclo-hexane. It consists of a deepwell pump in No. 10 port wing tank, suction and discharge piping and heating coils.

The following plans form a part of this specification to the extent cited:

Reference (1)	Modification to Upper Deck Piping	NNSDD No. 256336 Rev C
Reference (2)	Modification to Cargo Piping in Tks	NNSDD No. 256337 Rev B
Reference (3)	Arrg't of Heating Coils in Deep Tks 1&2, P&S and No. 8 Cargo Tk Across	NNSDD NO. 256338 Rev A
Reference (4)	Arrg't of Cargo Oil Piping in Tks	NNSDD No. 260-489 and 260-490

General

Material dimension and pressure requirements for piping and fittings shall follow that specified in the referenced drawings for similar items in similar service unless otherwise specified.

Bellmouths shall be similar to those used in the p-xylene system.

Installations under this item shall not interfere with the proper operation of mooring winches, bunkering manifold, ullage gauges and the like and shall be arranged to present the least imposition to traffic flow.

Valve remote operators shall be fabricated from solid steel bar stock with deck placement to suit single man operations. The relative placement of valve wheels in a group shall mimic the actual valve relative location as nearly as practicable. Indicators confirming valve status shall be supplied and installed. All valve wheels on deck shall be clearly labeled with brass stamped plates.

All welding shall be continuous.

All materials shall be Contractor furnished unless specifically designated as owner furnished material (OFM).

All piping shall be hydrostatically tested to 1 1/2 times the working pressure unless otherwise specified on the reference plans. All pipe runs shall be adequately supported by hangers or brackets.

All cargo and tank washing piping (inside and out) and valves (outside only), fittings, reach rods, hangers, brackets and the like shall be abrasive blasted to white metal and coated with Rust Ban 191 or equal to 3-4 mils DFT. All steam and condensate return lines on the upper deck shall be abrasive blasted to white metal and coated with METCO 120 or equal.

All plans affected by the work of this item and their references where applicable, shall be corrected to show the "as installed" work. Four copies shall be furnished to the owner's representative.

All deck valves in steam or water service shall be fitted with drains or arranged to be self draining to prevent freezing.

Cyclo-hexane System Installation (Continued)

Dresser couplings shall be installed in accordance with reference (2), note 3 where necessary. All nuts and bolts shall be cadmium plated.

All installation shall conform to applicable ABS and USCG regulations. The Contractor shall be responsible for obtaining all necessary approvals.

The Contractor shall be responsible for installing a complete and operable system, capable of delivering the rated pump capacity at 100 psi at the rail. The dimensions for piping given in this item are for guidance only. The Contractor is responsible for a system design using minimum nominal pipe diameters meeting the performance requirements. The discharge manifold shall terminate in an 8" flange, regardless of piping size, to be compatible with other specialty cargo manifolds.

The system design shall be approved by the owners' representative prior to any expenditure for material or non-engineering labor on this item.

Modification to Upper Deck Cargo Piping

Install fill/discharge line from amidships manifold to deepwell pump.

Install an 8" gate valve and flanged spud at the port forward end of the amidships manifold at FR91 (Reference (1)). Another item of the shipyard specifications addresses a modification to the existing manifold and drip pan. This item should be checked for compatibility with other manifold modifications. The fill/discharge piping shall lead aft of the No. 5 port Shand-Jurs gauge to the aft side of the manifold cluster to FR 88 1/2, center and generally follow the 8" port stripper discharge aft to the new deepwell pump discharge connection. The pump discharge shall be fitted with an 8" gate valve and an 8" non-return valve with a 3" bypass and gate valve. See SK 12-C of reference (1). An 8" tee shall be fitted on the upstream side of the pump discharge valve to connect an 8" fill drop into No. 10 port. The drop shall be fitted with an 8" gate valve and shall be installed in accordance with applicable details on reference (2).

Deepwell Pump

Fabricate and install a well for a deepwell pump at FR70, just outboard of 10 P long bulkhead approximately 17' off centerline to port. The installation shall be patterned after that in No. 8 port shown on reference (2). Install a deepwell pump and electric motor driver. A 750 gpm pump shall be installed unless a 1500 gpm can be installed without increasing the vessel's repair period. The motor shall be explosion proof and fitted with remote shut-downs compatible with the vessel's cargo system. All electric cable, controllers, circuit breakers, etc., necessary for a complete operable system shall be provided and installed. Regardless of the size of the installed pump, the well and electrical power system shall be sized to accommodate a possible retrofit of a 1500 gpm pump. A list of manufacturers recommended spare parts shall be provided to the owners' representative for purchase selection.

Tank Piping Modifications

Fabricate and install 8" suction piping from the pump well to the aft bulkhead of No. 10P. The pipe shall terminate in an 8" gate valve, elbow and bellmouth as far aft and inboard in the tank as existing lines and structure allows. See

Cyclo-hexane System Installation (Continued)

reference (4). A 3" stripping line shall Tee off the suction line and be fitted with a 3" gate valve, elbow, and bellmouth. An 8" gate valve shall be installed between the 3" Tee and the pump well to provide double valve segregation. The piping and valves shall be arranged for the possible later addition of No. 10S to the system. The suction, stripping and segregation valves shall be remotely operable from the upper deck.

Heating Coils

Heating coils shall be installed in No. 10P wing tank. The installation shall be patterned after the installation in No. 7 wing tanks and shall be installed in accordance with reference (3) except that a single pass shall be installed between each longitudinal and frame in the tank bottom rather than the loop shown in reference (3). The bottom piping shall be installed 6" off the tank bottom and be centered between longitudinals. The arrangement of supply and return lines (see DET 1-C of reference (3)) shall not impede traffic flow in so far as practicable and shall enter the tanks as far inboard as possible. A 1" steam trace line shall be installed for the discharge line from the pump to the forwardmost midship run of discharge piping.

Vents

Remove existing vents and vent valve and blank header. Install vent valve in accordance with reference (1) section 12-D and 12-D1, making a class B system. Install a flame screen in the vent valve outlet in accordance with applicable regulations.

Tank Washing Machines

Furnish and install two tank washing systems in No. 10P wing tank. All material shall be contractor furnished. The Butterworth machines shall be flange mounted. The machine location and piping location shall follow the installation in No. 8 wing tanks as closely as existing structure and fittings will allow. The supply manifold arrangement shall follow the existing installations except the fittings sequence in line shall be 3" gate valve, 3" Hamer blind, marine strainer, with drain valve then the manifold. The manifold shall be sized for the future installation of two additional washing machine lines. Supply piping to the machines from the manifold shall be 2" nom. ex HVY galvanized. The Butterworth machines shall be owner furnished material.

Brackets or hangers supporting piping shall be welded to stiffeners only and not to bulkhead or bottom plating. Supply piping shall not contain any sharp bends and shall be drilled with 3/16" holes for drainage at low points.

Stripping Pump

An air driven 50 gpm stripping pump shall be installed in the No. 10 wing tank to take suction on the deepwell pump well and discharge through a 3" stripping line running from the stripping pump to the midships manifold following the 8" discharge/fill line routing. The installation shall be patterned after the installation in No. 8P. See reference (1) and (2).

260. Cargo Tank Valves - No. 10 Port- 405B

Disconnect and sent to the shop the 12" main suction gate and angle valves and the 8" stripping suction valves (a total of 4 valves) in the No. 10 port cargo tank. Open, clean, machine, grind and repack as necessary. Shop test and prove tight. Reassemble and reinstall.