

July 8, 1963

Mr. S. M. English
Attn: Mr. F. F. Newton

R-416 02-416-9 P

John B. Ireland, Jr.

ESSO GETTYSBURG

The S/S ESSO GETTYSBURG, docked at Newport News Shipbuilding and Dry Dock Company Newport News, Virginia, on May 3, 1963 at 0730, and repairs were started immediately.

All repairs as specified in specifications dated April 5, 1963, except cancellations, also including additional items were carried out.

Repairs consisted mainly of the following:

Provisional International Loadline Certificate issued June 3, 1963.

Provisional Coastwise Loadline Certificate issued June 3, 1963.

The incorrect International Loadline markings were removed and correct markings installed on sides of vessel.

Coastwise loadline markings were installed.

U. S. Coast Guard mid-period inspection was completed June 5, 1963.

Vessel was in drydock from 1239, May 23, 1963 to 0837, June 1, 1963.

Sea valves were overhauled, anchor chains ranged.

Waukesha bearings and simplex stern tube seals were installed.

The following sea chests were cleaned of old rubber coating, wire brushed, and coated with Poxitar, (2 coats); sea chests for cargo pumps, auxiliary circulator, high and low for main circulators.

The copper pipe from high and low sea chests to main circulator was also coated with Poxitar.

Four (4) welded type zinc plates were installed on bottom of rudder; also cropped and renewed 18" x 12" x 40.8# plate section in bottom of rudder plate forward end.

Caulked approximately 115 ft. of outboard riveted lap in way of #3, #4, #5, port and starboard tanks.

Anode Shields, the white spots of six (6) copastic and two (2) rubber shields were sandblasted. Eight gallons of copastic was used - the rest of the bare areas were painted with vinyl coatings (Humble).

Propeller - the cavitation areas in each blade were repaired. Missing section was replaced in one blade and the edges of the propeller were faired.

No. 1 and 2 port and starboard, No. 4, No. 5 port, center and starboard cargo tanks were coated with Humble Rust Ban 191.

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The hull was sand swept and coated with Humble modified epoxy paints.

Area between the light load line and the end of the turn of the ledge from Frame 99 to the bow, port and starboard sides was sandblasted to white metal and coated with Humble Vinyl Primer Red 520, Vinyl Mastic 9512 and Vinyl Finished Red 501.

Cargo System:

The following Owner furnished gate valves were installed in the following locations:

- Aft Pumproom - port line one (1) 16" valve at bulkhead.
 - port inboard line one (1) 16" valve at bulkhead
 - Starboard inboard line one (1) 16" valve at bulkhead
 - Starboard line one (1) 16" valve at bulkhead.
- #1 Center - one (1) 8" valve stripper connection to 16" main line
- #4 Center - One (1) 8" valve master starboard stripper line.
- #7 Center - One (1) 8" valve forward of tee located in 8" port stripper line.
- Aft Pumproom - One (1) 8" valve stripper suction to 16" port line.
 - One (1) 8" valve stripper suction to 16" port inboard line.
 - Two (2) 8" valves stripper suction crossover (port to starboard lines)
 - One (1) 8" valve stripper suction to 16" starboard inboard line (reused valve from stripper suction crossover)
 - One (1) 8" valve stripper suction to 16" starboard line.
 - One (1) 8" valve starboard line located aft of bulkhead valve.
- Deck Crossover - Two (2) 8" valves starboard stripper line crossover (midship).
- Installed 8" discharge line from port steam stripper pump discharge line to the amidships risers terminating in a new crossover line.
- Installed 8" drop line from the new 8" port stripper discharge line ondeck to the port stripper line in #7 center tank.
- Installed 4" drain line from deck 16" starboard inboard line to starboard inboard drop.
- Installed 4" drain line from deck 16" starboard outboard line to starboard outboard drop.
- Installed 4" drain line from deck 16" starboard inboard line to port inboard drop.

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Installed 8" stripper suction to 16" port line

Installed 8" stripper suction to 16" starboard line.

No. 1 and No. 2 port and starboard tanks were segregated for carrying alcohol or solvent cargoes.

The port and starboard ballast pumps in forward pumproom were overhauled and made suitable for pumping cargoes.

The Fire and Bilge pump was disconnected from fire line and connected to the Ballast and Fuel pipe to #1 and #2 deep tanks. The pump is now a Bilge and F.O. and Ballast Pump.

All reported cargo pipe and also found during test, also valve leaks were repaired and proved tight.

The cargo tank ballast piping in #4 center and to the wing tanks, #5 Center, #6 Center and to the wing tanks, #7, 8, 9, and 10 Center tanks were renewed, coated inside and outside with Humble Rust Ban 191. The bulkhead spools inside in the way of the above tanks was sandblasted and and coated with Humble Rust Ban 191.

Machinery:

The 750 KW Starboard Generator Turbine was rebuilt using parts from a loaned turbine. (List of parts used sent to Helman Thompson).

The 8" turbine atmospheric relief valve was repaired. The expansion joint was renewed for above turbine.

The Main Circulator - renewed motor shaft, and installed circulator pump spare rotating element complete. Removed element sent to U. S. Metallic for reconditioning and to be returned to vessel as a spare.

#1 Feed Pump turbine was repaired and installed.

#2 and #3 feed pump turbines were overhauled.

Ballast pump turbine was overhauled. Turbine casing found bulged. Exhaust valve for turbine overhauled.

#3 Cargo Pump turbine and gears were examined and repaired as found necessary.

Governor control valves of #1, 2, 3, and 4 cargo pump turbines were overhauled.

The starboard 750 KW Generator and 7.5 KW Exciter was repaired by the General Electric Shop, Richmond, Virginia.

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A fixed tank washing system was installed in the following cargo tanks:

- #3 port and starboard, two (2) machines each tank.
- #3 center, one (1) machine.
- #4 Port, center and starboard tanks - one (1) machine each tank.
- #5 port and starboard, two (2) machines each tank and #5 center - one (1) machine.

A total of 13 machines installed.

The boat deck aft, boat deck house top, fidley deck, top of galley, deck locker, battery locker, top of emergency diesel generator room, fan rooms, were sandblasted and coated with Humble Epoxy - Mastic Red #9664.

A molded plastic propeller fairwater cap was installed.

Enclosed please find copies of Inspection dates and repair requirements, drydocking and painting report, inspectors record, bilge and repair specification reports, also miscellaneous papers.

Repairs were completed 0800 and vessel sailed from yard 0818, June 6, 1963.

Recommendations for future repairs:

The following bottom shell plating welded seams and butts are worn below plating and should be veed out to good metal and rewelded:

Port side forward - Fr. 110 in way of deep tanks, seam between A & B plates - 45 ft.

Port Cofferdam butt in FK, A & B plates - 20 ft.

- Port side - #1 cargo tanks FK, A, B, C, D, - plates - 35 ft.
- #2 cargo tanks seams A & B, B & C, D & E plates - 120 ft.
- #2 cargo tanks butts FK, A, B, C, D, E, plates - 43 ft.
- #3 cargo tanks butts FK, A, B, C, D, E, F, plates - 49 ft.
- #3 cargo tanks seams, A & B, B & C, D & E plates - 120 ft.
- #4 cargo tanks - seams A & B, B & C, D & E plates - 120 ft.
- #4 cargo tanks - butt FK, A, B, C, D, E, F, also butt in F strachen in center of wing tank - 53 ft.
- #5 cargo tanks - butt FK, A, B, C, D, E, F, plates - 53 ft.
- #5 cargo tanks - seam - A & B, B & C, D & E plates - 100 ft.
- #6 cargo tanks seam - A & B, B & C, D & E plates - 100 ft.
- #6 cargo tanks - butt FK, A, B, C, D, E, F, plates 48 ft.
- #7 cargo tanks butt - FK, A, B, C, D, E, F, also butt in F strake in center of wing tank plates - 53 ft.

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Port Side - #7 Cargo Tanks - seam A & V, B & C, D & E plates - 120 ft.
#8 cargo tanks seam - A & B, D & E plates - 80 ft.
#9 cargo tanks butt, forward end of tanks FK, A, B, C, D,
E Plate - 40 ft.

Starboard side - Forward Cofferdam butt - A, B, plate - 13 ft.
#1 cargo tanks, aft end, butt - A, B, C, D, plate - 30 ft.
#1 cargo tanks, aft end, seam - B & C plate - 40 ft.
#2 cargo tanks seam - A & B, B & C plate - 60 ft.
#2 cargo tanks, aft end, butt, A, B, C, D, E, plate - 38 ft
#3 cargo tanks, aft end, butt - A, B, C, D, E, plate - 37½ ft.
#3 cargo tanks - seam - B & C, plate - 20 ft.
#4 cargo tanks seam - A & B, B & C, D & E, plate - 100 ft.
#4 cargo tanks, aft end, butt - A, B, C, D, E, also butt in
F strake center of wing tank, plate - 42 ft
#5 cargo tank aft end, butt A, B, C, D, E, plate - 37½ ft.
#6 cargo tank, aft end, butt - A, B, C, D, E, also butt in
F strake center of wing tank plate - 42 ft.
#6 cargo tank seam, D & E plate - 15 ft.
#7 cargo tank aft end butt - A, B, C, D, E, also butt in F.
strake center of wing tank plate - 42 ft.
#8 cargo tank aft end, butt - A, B, C, D, E, plate - 35 ft.
#9 cargo tank fw'd end, butt - A, B, C, plate - 22 ft.

Renew pintle bushing. Will require removing and replacing rudder nut fairwater,
pintle nut, and pintle bolt.

Remove cargo heating coil piping on deck or repair. Two (2) 3-1/16" Baldt patent
links PA 20244, size 3-1/8" x 18-1/2" x 12". Ordered by telephone.

Five (5) 10" type E 21B Flame Arrestor. Bank Assembly (with extensible bank).
Thirty (30) 3/4" brass wing nuts - ordered by telephone.

For Feed Pump Turbines

General Electric Serial No. 112185, 112186, 112187
GEI 56062
575 HP - 4700 RPM - Model 7TDPY 125 MR 22
Steam press 710-825 PSIG Steam Temp. 580°, Exhaust 45# PSIG

Require 3 sets Item #	Carbon packing
Require 3 sets Item #	governor valve stems and springs
Require 1 set	Over speed trip assembly.

For Ballast Pump Turbine - G.E.

Serial 112193	340 HP	1775 RPM	Type DP 120
Steam Press 775-825	530°-600°		

Require one (1) exhaust casing part #
Require one (1) nozzle 1st stage with bolts Part #

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Require one (1) Intermediate with bolts & spacers - Part #
Require One (1) Paching Box - Part #
Require one (1) Governor cup valve
Require one (1) Governor valve stem
Require one (1) Trip Throttle cup valve
Require one (1) trip throttle valve stem

For Cargo Pump Turbines - G. E.

Serial 112195 to 112199
700 H.P. 6002/1885 RPM Steam 775-825 lbs.
Steam temp 530° to 600° Model 7 TDPY 125 MR 24.

Require four (4) Nozzles, 1st stage with bolts - Part #
Require four (4) Intermediate with bolts and spacers - Part #
Require four (4) valve seats - new material nitrated 12% chrome drawing
101C - 181CR. #3 & 4 units valve seats leaks.
Require four (4) Governor Cup Valves, Cat. No. 101B119CA-P 2
Require four (4) Governor Valve Sterms with nuts - #101A152AD-P1
Require four (4) Trip Throttle Cup Valve #
Require four (4) trip Throttle Valve Stem with nuts #101B114BA-P1
Require one (1) Over speed trip assembly #
Require eight (8) Governor Springs #

Note: Part numbers for parts for above turbines will have to be taken from instruction book.

JOHN B. IRELAND, JR.

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