

INTER-OFFICE CORRESPONDENCE

DATE APRIL 15, 1966

TO	REFERENCE
MR. FRED F. NEWTON	02-438-9 (P)
FROM	SUBJECT
E. J. PORUS	REPAIRS SS "ESSO HOUSTON"

THE SS "ESSO HOUSTON" ARRIVED AT N.N.D.D. ON MARCH 31, 1966 AT 17:00, FOR EMERGENCY BULKHEAD REPAIRS, ADDITIONAL BULKHEAD STIFFENING AND BIENNIAL U.S.C.G. INSPECTION.

VESSEL COMPLETED REQUIREMENTS OF THE U.S.C.G. FOR A NEW TWO (2) YEAR CERTIFICATE, SAME TO BE DATED APRIL 8, 1968.

VARIOUS DATES OF OTHER REQUIREMENTS OF THE SOCIETIES FOR THIS VESSEL ARE AS LISTED ON ATTACHED FORM.

BULKHEAD NO. 60, IN WAY OF #5 AND #6 STBD. SIDE TANKS WAS FOUND TO BE BUCKLED TO A DEGREE OF APPROXIMATELY SIX TO EIGHT INCHES. UPPER TWO (2) STRINGERS WERE BADLY DISTORTED. LOWER (BOTTOM) STRINGER WAS PARTIALLY DISTORTED. VERTICAL BULKHEAD STIFFENERS WERE KNUCKLED APPROX. ONE (1) FT. FROM WELDED CONNECTION TO LONGITUDINAL UNDERDECK STIFFENERS.

VERTICAL STIFFENERS WERE RELEASED TOP AND BOTTOM, UPPER TWO (2) STRINGERS WERE REMOVED, AND BULKHEAD JACKED AND STRONG BACKED INTO ORIGINAL POSITION. NEW COATED STRINGERS WERE INSTALLED IN WAY OF DAMAGED AREAS. IN ADDITION, SIX (6) TRI-ANGULAR BRACKETS WERE INSTALLED ON THE BULKHEAD, TWO (2) TO STRINGER ALL AS PER SKETCH NO. N.N. 104-2470 & NO. 104-2471.

NEW 8" X 4" ANGLES (COATED) WERE INSTALLED, TWO (2) TO A STRINGER AS PER APPROVED PLAN.

IDENTICAL VERTICAL TRIANGULAR (COATED) BRACKETS WERE INSTALLED IN ALL TANKS WHICH HAVE HORIZONTAL STRINGERS. NEW 8" X 4" ANGLES WERE INSTALLED, ONE ON EACH STRINGER. EXISTING ANGLE ON THESE STRINGERS WAS BEEFED UP TO AN EQUIVALENT 8" X 4" BY WELDING A 2" X 4" ANGLE TO EXISTING 8" X 4" ANGLE.

AFTER DEEP TANKS FWD OF #1 TANK FWD BULKHEAD HAD AN ADDITIONAL DOUBLER RING STIFFENER INSTALLED ON HORIZONTAL STRINGERS IN WAY OF DEEP WELL PUMP CASING, THREE TO A TANK, TWO (2) DEEP TANKS INVOLVED.

#6 BALLAST TANKS WERE HEADED UP TO THE EXISTING HEIGHT OF VENT PIPE CONNECTION. BULKHEAD WAS EXAMINED AND PROVEN IN GOOD ORDER AT THIS TIME.

ALL DECK STEAM LINE AND CARGO PUMP STEAM LINE AND EXHAUST LINE EXPANSION JOINTS WERE FOUND TO BE BADLY FROZEN UP. IT WAS NECESSARY TO REPAIR THESE EXPANSIONS AT THIS TIME FOR SAFE CONTINUED OPERATION OF THE VESSEL. ALL REPAIRS MADE TO THESE EXPANSIONS WERE HELD TO A MINIMUM, WITH THE INTENT THAT IN FUTURE CONSIDERED REQUIREMENTS FOR PERMANENT REPAIRS NEW SLEEVES OF A MORE LASTING AND NON-CORROSIVE METAL BE MACHINED AND INSTALLED.

ALL DECK LINE EXPANSIONS AS PRESENTLY INSTALLED WILL BE A CONTINUAL SOURCE OF EXPENSE TO MAINTAIN

EIGHT OWNER SUPPLIED 12" GATE VALVES WERE INSTALLED AT CARGO DISCHARGE MANIFOLD IN PLACE OF BUTTERFLY VALVES USED AS ORIGINAL EQUIPMENT.

FOUR (4) VALVES WERE INSTALLED ON THE PORTSIDE AND FOUR (4) VALVES ON THE STBD. SIDE.

NEW BEARINGS WERE INSTALLED IN GEAR CASE OF "D" PUMP. IN ADDITION, PUMP CASING BUSHING IMMEDIATELY BELOW MECHANICAL SEAL PACKING BOX, WAS RENEWED AT THIS TIME. NEW BUSHING WAS MACHINED TO AN .003" SHAFT CLEARANCE.

THERE WERE NO CHANGES MADE TO ANY CARGO LINE IN ANY TANK, AT THIS TIME.

OPEN UP INBOARD SEAL OF WAUKESHA STERN TUBE BEARING FOR EXAMINATION DUE TO REPORTED OIL LEAKAGE. LINER SHOWED EVIDENCE OF DEEP GROOVING IN WAY OF THE FWD. SEAL IN SEAL BOX. POSITION OF LINER IN RELATION TO SEAL STRIPS WAS RELOCATED BY MOVING LINER OUTBOARD APPROX. 7/16".

THIS NEW LOCATION WILL NOT FORM A COMPLETELY NEW LANDING FOR SEALING STRIPS, BUT THIS WAS CONSIDERED THE MAXIMUM MOVEMENT PERMITTED AND STILL MAINTAIN SUFFICIENT TOLERANCES BETWEEN LINER EDGE AND FWD. BEARING EDGE IN STERN TUBE. THIS CLEARANCE IS NOW APPROX. 1/4".

A NEW ROTATING ASSEMBLY (OWNER SUPPLIED) WAS INSTALLED IN WAY OF INBOARD WARREN MAIN FEED PUMP. REMOVED DEFECTIVE ASSEMBLY WAS SHIPPED TO THE MANUFACTURER FOR EXAMINATION, REPAIRS AND CREDIT.

THERE WAS NO WORK DONE IN ANY WAY, NOR HAS THERE BEEN ANY WORK DONE IN THE PAST REPAIR PERIOD ON THE NEW GOULD GENERAL SERVICE PUMP INSTALLATION.

A NEW UNDERFREQUENCY RELAY (G.E.) WAS INSTALLED ON MAIN GENERATOR.

REPEATERS ON BRIDGE WINGS WERE MOVED INBOARD AT THE REQUEST OF THE MASTER AND THE CONSENT OF MANAGEMENT.

BRIDGE TELEGRAPH WAS ALTERED TO ELIMINATE EVERY SECOND STOP AS REQUESTED, BUT ALTERATIONS OF A SIMILAR NATURE TO ENGINE ROOM TELEGRAPH WERE NOT COMPLETED AT THIS TIME. ENGINE ROOM TELEGRAPH REMAINS, AT THE MOMENT, AS PER ORIGINAL INSTALLATION.

ALL REPAIRS, ALTERATIONS, RENEWALS ETC. WERE COMPLETED AT 02:00 ON APRIL 9, 1966 AND VESSEL SALLED FROM CONTRACTORS YARD AT 05:00 ON THAT DAY BOUND FOR BAYTOWN, TEXAS.


E. J. PORUS

EJP/sb