

AMERICAN BUREAU OF SHIPPING
45 BROAD STREET, NEW YORK 4, N. Y.

Report No. 13,416

San Francisco, Calif., October 20, 1952

USNS "GENERAL JOHN POPE"

THIS IS TO CERTIFY that the undersigned Surveyor to this Bureau did, at the request of the owner's representative, attend the steel, twin screw steamer, USNS "GENERAL JOHN POPE" on the 15th day of October, 1952, and subsequent dates, as the vessel lay afloat at the In Transit Depot No. 3, Alameda, California, in order to examine and report upon miscellaneous repairs being made to vessel's auxiliary machinery boilers and temporary repairs to the forward engine room boiler blow skin valve spool piece. For further particulars, see report as follows:

1. The aft engine room astern thrette valve was reported to have been sticking in the open positions during manuevering activities. The valve was opened at this time, examined and found the valve rings to be frozed in their grooves, and one ring to be broken. The rings were removed, grooves cleaned, and replaced with new rings of proper fit. The valve, cylinder, plus the rod were polished, new packing installed, and the valve was closed in good order.
2. The No. 2 triplex variable stroke feed pump was opened, examined together with reduction gears, all bearings and shafting and flexible coupling, and was placed in satisfactory condition as follows:
 - (a) The following bearings were removed and replaced with new bearings:
 1. The main crankshaft bearings.
 2. Stroke changer shaft bearings.
 3. Pinion and idler gear shaft bearings.
 4. Swing link bearings.
 5. Lube oil pump gear shaft bearings.
 6. Stroke changing linkage bearings.
 7. Connecting rod link end bearings.
 8. Crosshead pin and swing link bearings.
 9. Stroke control cylinder link bearings.
 - (b) The bearing caps from the connecting rod crank end bearings were removed, the crank shaft journals gauged, examined, found satisfactory, the bearings restored to proper clearance and re-fitted in proper order.
 - (c) All suctien and discharge valve seats, discs, and springs were removed and replaced with new members.

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- (d) The plungers, together with throat bushings and packing were removed and replaced with new members.
- (e) The side rods, and guide rod bearing were removed, and replaced with new members.
- (f) The control cylinder link crank end pins, control cylinder link piston, pins, and piston cups were removed and replaced with new members.
- (g) The reduction gears were examined and found the pinion gear to have a slight pitting on the forward 2" on the ahead face of the teeth. This condition is not considered serious and is noted for record purposes only.
- (h) Upon completion of repairs, the pump was tested under operating conditions and found satisfactory.

3. The No. 1 auxiliary generator turbine flexible coupling was reported to effect considerable noise during operational periods. The flexible coupling, together with pinion gear, and bearings were removed and examined and found the flexible coupling to be excessively dirty and worn moderately. A new flexible coupling was installed, the pinion gear bearings cleaned and restored to proper clearance, examined, and found satisfactory. The rotor journal bearings and shaft journals were also opened and examined at this time and found the bearing journals to be scored moderately. This condition is not considered serious at this time and is noted for record purposes only.

The new flexible coupling was found to be marked as follows:

Hub: AB 204 WDV 9-15-52 HT 6H770 PC 2 GRA 441LG
Head: AB 204 WDV 9-19-52 HT 7449 PC 1988L GRA 440LX1

Upon completion of repairs the vessel was tested under operating conditions and found satisfactory.

4. The following repairs were carried out to the No. 1, 2, 3 and 4 boiler casings:

- (a) The No. 1 boiler drum forward circumferential seal plate was found deteriorated and was removed for replacement measures. Upon removal of the seal plate it was found that the circumferential drum bar weld connection to the steam drum was fractured, starting at the upper outboard edge and extending circumferentially for one half the length of the seam. The fractured weld metal was chipped out, re-welded, stress relieved in accordance with approved practice, a new circumferential seal plate installed by welding, all examined and found satisfactory.
- (b) The No. 2 boiler forward drum seal plate seal weld connection to the casing at the outboard upper corner was found to be fractured for a space of three inches and was chipped out and re-welded as original.

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- (c) The No. 3 boiler, forward and aft drum seal plates and approximately 4 square feet of casing outboard of the steam drum seal plate was found to be deteriorated and was removed and renewed at this time. The inboard and outboard horizontal steam drum casing bars were found to be deteriorated, and were removed and renewed with welded angle bars for their full length.
- (d) The No. 4 boiler lower section of roof paneling was found to be deteriorated and was removed and renewed with new paneling at this time.
- (e) All welding and repairs effected on the above mentioned boilers were done in accordance with approved practice, all disturbed insulation, lagging and coating was replaced as original, examined and all found satisfactory.

5. The forward engine room boiler blow skin valve spool piece was found to be deteriorated and leaking. Temporary repairs were effected, as recommended, by fitting the spool piece flanges with welded rolled wrapper plates of suitable thickness. Upon conclusion of repairs, the installation was examined and found satisfactory. It is recommended that the spool piece be renewed at the vessel's next dry docking period.

It is the opinion of the undersigned that this vessel is in a seaworthy condition with respect to the repairs contained in this report and fit to retain present class with this Bureau, subject to completion of repairs recommended in Item (5) above.

AMERICAN BUREAU OF SHIPPING

ROBERT H. CONNELL, JR., SURVEYOR