

REPORT of SURVEY for REPAIRS, &c.

Date of writing Report 15th Aug 1932 When handed in at Local Office 19 Port of **MELBOURNE**

No. in Reg. Book 57592 Survey held at Yarraville & Melbourne Date, First Survey 5th Aug Last Survey 13th Aug 1932

on the Woods & Sons Steel M/S "ASTORIA" (No. of Visits) 15

TONNAGE Built at Nal's Kov. By whom Att. Nal's Kov. F.Kh. YEAR. MONTH. When 1920 - 4

GROSS 4454 Owners A/S D/S orient Owners' Address (if not already recorded in Appendix to Register Book)

UNDER DEK. 4277 Managers do. Port belonging to Copenhagen

NET 2694 Surveyed Afloat or in Dry Dock? Both Name of Dock Duke Old's dry dock Destined Voyage Hauru

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements)

Capacity Cell D B or D Ba feet; uE&B feet; f feet
tons. FPT tons; APT tons; MT feet tons.

U.B. - All alterations in the existing records should be underlined.
If the Vessel has Water Ballast Tanks, state whether the manhole covers have been removed, and the insides tanks examined. Also state the amount of deterioration (if any) found in the thicknesses of the floors, framing, and of the inner bottom plating, especially in the boiler space.

Report, No. 2472 Port N.S.W
Local Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the nature of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent repairs. Repairs due to Damage (the cause of which must be stated) should be separated from Repairs due to other causes; besides being detailed in the body of the report, should be summarised in the form shown below. Whenever the condition of Anchors or Chains is reported, the particulars should be clearly stated in the space provided on back of this form. State also the dates and initials of any letters respecting this case.

CHARACTER for Special Survey Date of last Survey and of Periodical Surveys.	Years Assigned (now approved).	Machinery and Boiler Survey (including date of U.B. if any).
100 A1 With freeboard Edn. 12.31 S.S. Mel. No. 1-31		<u>L.M.C. 10.30</u> <u>2.13.5. 4.25</u> <u>T.S. (C.L.)</u> <u>P. 10.29</u> <u>SA 12.31</u>

Where cases where the Surveyor has not made a special damage report he is required to state whether he has used his services for this purpose and to whom and why they were declined. Copies attached.

Was a damage report made by anyone else? If so, by whom?

REPAIRS, OR EXAMINATION AS PER RULE, FOR Damage - stated to have been caused by stress of weather on the voyage from Port Chambers N.Z. to Ocean Isl., in ballast, 22/12/31 to 24/12/31 & again on the voyage from Geraldton W.A. to Hauru, in ballast, 26/6/32 to 4/7/32.

Damage (A), stated to be due to "sea thrashing" or "slamming" ^{on the above dates} as slack & leaky rivets & nuts, etc., at the forward end of Nos 1 & 2 d.b. tanks. Damage B :- Rivets slack working in the port & starboard engine seatings - stated to be due to engines racing, between the two latter dates. Damage "C" :- Small damage to shell plating by striking the dock entrance when dry docking on 7th inst.

Damage (A) :- An examination made of the Vessel, as far as possible afloat at Yarraville 1st inst, whilst discharging. No 1 d.b. tank was full at the time & as it was known to be leaking, it was recommended that it be left full, in order to ascertain the extent of the leakage.

DESCRIPTION OF DAMAGE REPAIRS :-	Shell Plates.	Frames.	R. Frames.	Floors.	Beams.	Str. Plates.	Dk. Plates.	Other Items :-
Examined								
Examined and Fair'd or Repaired								
Examined or Repaired in place								

CONDITION OF THE	State if Tanks have been examined inside Nos 1 & 2	Dblg. Plates under Sounding Pipes	Copper, or Y.M. of Wood Vessels (State if on Felt). When put on, Month Year
Decks <u>good</u>	State if Tanks now tested <u>Yes</u>	Engine Room Skylights <u>good</u>	Boats <u>good</u>
Bulkheads <u>good</u>	Bulkheads <u>good</u>	Coal Bunkers, Open'gs, Lids, &c.	Masts, Yards, &c.
Ceilings <u>good</u>	Ceiling <u>good</u>	Scuppers	Condition, how ascertained <u>from deck</u> (State if wedges removed)
Cement or Asphalt (State which.)	Cement or Asphalt <u>good</u>	Cargo Hatchways	Sails
Rudder <u>good</u>	Rudder <u>good</u>	Hatches	Equipment letter
Steering gear and its connections	Steering gear and its connections	Planking of Wood Vessels	Anchors, No. of <u>3B-15-</u>
Windlass	Windlass	Gaulking ditto	Cables (State if none ranged)
Have Pumps now been examined and found efficient?	Have Pumps now been examined and found efficient?	Treenails ditto	length <u>stated complete</u> (on board)
Have Sluice Valves now been examined and found efficient?	Have Sluice Valves now been examined and found efficient?	Breasthooks & Stems ditto	Rule length size
Have Watertight Doors now been examined and found efficient?	Have Watertight Doors now been examined and found efficient?	Transoms, Pointers, & Crutches ditto	Hawser & Warps <u>good</u>
Have Ventilators and their Coamings been examined and found efficient?	Have Ventilators and their Coamings been examined and found efficient? <u>Yes</u>	Timbers of Frame at openings ditto	Standing and Running Rigging
		Ditto ditto at other places ditto	
		Stringers, Clamps & Shelves ditto	
		Salting (State if examined) ditto	

Observations, Opinion as to Class, Recommendation, &c. :-
State clearly whether any and, if so, what alteration is suggested to be made in the existing classification and notification of the vessel in the Register Book consequent upon survey, thus, for example: "to remain as now classed in the Register Book without fresh record of Survey," "to remain as classed and to have record of survey, 1,24, and the notations of ss No. 1-24 and ptND24, &c."

This vessel, as far as seen, is now in good & efficient condition - eligible to remain as classed with fresh record of survey till 8, 32. Subject to examination of double bottom ballast tanks at vessel's Home Port or within 12 months.

Survey Fee (per Section 20)	Special Damage or Repair Fee (if any) (per Sec. 20)	Travelling Expenses (if chargeable)	Sunday & Late attendances	Second Surveyor's Fee (if any)	Fees applied for	Received by me
26	10	3	5	5	19	19

Committee's Minute FRI. 7 OCT 1932
Character Assigned 100 A1 With fb. Subed
W.D. 1/10/32 S.P. 1/8/32 Large tanks not fitted
Surveyor to Lloyd's Register of Shipping.
FRI. 11 AUG 1932
FRI. 14 NOV 1932
TUE. 29 NOV 1932
Lloyd's Register Foundation

003824-003831-0095 1/2

in dry dock. An internal examination made of No 2 d.b. tank - the leakage, if any was slight, as the tank did not appear to be making water, but a number of internal rivets were found slack in the intercostal angles & brackets & 6 rivets had been replaced by bolts in the centre keelson top angle also 4 through tank top. As there was a considerable amount of gas fumes from the oil fuel residue in this tank, it was recommended that it be steamed out in readiness for repairs in dry dock.

Dry docking: - The Vessel was placed in dry dock on 7th inst, when an examination was made of the bottom & rudder etc. Leakage was found at the forward end of No 1 d.b. tank, a considerable number of shell rivets being slack in keel plate also A & B strakes port & starboard for the first 10 frame spaces from collision bulkhead, about a dozen rivets at the forefoot had been replaced by bolts (by the ship's crew when at Ocean Island, Jan 1932). Internal examination of No 1 d.b. tank revealed a number of rivets slack & working in floors, intercostals intermediate floors & brackets at the forward end of the tank.

Internal examination made of No 2 d.b. tank, p & s. In addition to the slack rivets found in intercostals etc, a number of defective shell rivets were found in intercostal lugs & frame angles between intercostals & centre keelson. These shell rivets had the heads practically eaten off by "pitting" & the frame & intercostal angles were working over them. Although they appeared tight in the shell several, when given a light tap with a hammer, dropped into the dock. On account of this "pitting" in No 2 tank, which is affecting

When Anchors or Cables are supplied, the particulars are to be reported in the following form:-

ANCHORS.

Number of Certificate.	Anchors.*	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY RULE.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons	Cwts.	qrs.	lbs.	Cwts.	qrs.			
	1st Bower															
	2nd "															
	3rd "															
	Collective Weight.															
	Stream															
	Kedge															

* When a bower anchor is supplied it must be clearly stated whether it is a 1st, 2nd, or 3rd bower.

CHAIN CABLES.

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.			Length and size per Rule.		Description.	Makers of Cables.	When and where tested and Superintendent.
	Length.	Diam.	Statutory.	Breaking.	Supplied.	Per Rule.	Length.	Diam.				
	Fathoms.	Ins.	Tons.	Tons.	Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Fathoms.	Ins.

Iron Stream Chain or Steel Wire...

the shell plating, in addition to the rivet-heads, a critical examination was made of Nos 1 & 2 d.b. tanks. The parts most affected being found in No 2 tank port & starboard at the intercostals & between the intercostals & centre keelson. All rivets in this vicinity were hammer tested, after removal of scale formed by pitting, & any which appeared inefficient were marked for renewal. Four angle lugs to shell from intercostal at the after end of No 2 tank, port side, marked for renewal, on account of rivet holes in same being eaten away by pitting to a diameter too large for the rivets.

Damage A cont. - **M/S "ASTORIA"**

Repairs, as recommended, have now been carried out:-

All slack & leaky rivets at forward end of No 1 d.b. tank now renewed. Approx 850 shell rivets & approx 230 internal rivets. 34 rivet holes which were much enlarged at the counter-sinks were built up with E.W. before reaming & re-counter-sinking the holes for riveting.

About 2 1/2 ft of shell plate landings were built up with E.W. where pitted too deeply for caulking & about 70 ft of shell landings caulked. In No 2 tanks - Approx 125 rivets were renewed internally (in addition to 6 through centre keelson & 2 through tank top). Approx 235 shell rivets renewed in frames & intercostal lugs & 4 lugs renewed - due to internal pitting in this tank.

On completion of repairs No 1 & 2 tanks were tested with a head of water & found tight.

On account of this internal "pitting" of shell in way of d.b. tanks, used intermittently with fuel oil & sea water, & the pitting being still active, especially in way of No 2 tank, it is recommended that the ballast tanks of the vessel be examined on arrival at a Home Port or within 12 months. (The Master expects the vessel to return to the Continent early next year.)

Damage B: - The riveting of the top angles of port & starboard engine seatings found slack & working, both in longitudinal girders & thwartship brackets - about the middle of both engine beds.

As recommended & now done:- Rivets removed, where practicable, holes reamed & new rivets fitted. i.e. 96 in the double angles attaching base plate to thwartship brackets, 60 rivets renewed in these double angles where attached to the brackets. The fore & aft angles, forming the top member of longitudinal girders under engine beds, electrically welded at their bottom edges, & ^{three} four of the eight rivets in each space replaced by fitted bolts - all as shown on the attached sketch.

Damage C: - Shell plating indented about 1/4" from normal in one frame space of "F" strake, No 4 plate from stem, starboard side, rivets & caulking in vicinity not disturbed.

As recommended & now done:- This indent in shell plating fairied in place & an inside doubling approx 2ft square fitted between the frames & efficiently riveted to shell plating.

When in dry dock, the bottom & rudder, now in good condition, was cleaned & recoated. Examination made of decks, hatches, coamings, covers & supports, ventilators, casings, windlass, steering gear & general equipment. The vessel also examined & measured for International Load Line requirements & Rpt. C. 11. Forwarded herewith.

(No 5103)

N.B. - If this Report is copied by Copying Press, special care must be taken that the copying paper is not so much damped as to spread the ink, or to cause it to show through to the other side.

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