

# REPORT ON OIL ENGINE MACHINERY.

No. 9751

28 OCT 1935

18<sup>th</sup> Oct 1935 When handed in at Local Office

Port of Copenhagen

in Survey held at

Copenhagen & Skarshov

Date, First Survey 11<sup>th</sup> February

Last Survey 9<sup>th</sup> October 1935

260 on the Tonn

Screw vessel "TASMANIA"

Number of Visits 71.

Tons Gross 4460.30  
Net 2683.98

built at Skarshov

By whom built O Skarshov Skibsværft

Yard No. 67 When built 1935

engines made at Copenhagen

By whom made O Skarshov Skibsværft

Engine No. 2389 When made 1935

Boilers made at Skarshov

By whom made O Skarshov Skibsværft

Boiler No. 21 When made 1935

Net Horse Power 2 x 1500

Owners A/S "Orient"

Port belonging to Copenhagen

Net Horse Power as per Rule 676

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

Use for which vessel is intended General cargo

ENGINES, &c. Type of Engines Vertical Diesel engine Solid injection 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 500 mm Length of stroke 900 mm No. of cylinders 2 x 5 No. of cranks 2 x 5

Indicated Pressure 6.9 kg/cm<sup>2</sup> of bearings, adjacent to the Crank, measured from inner edge to inner edge 776 mm Is there a bearing between each crank yes

Revolutions per minute 140 Flywheel dia. 1652 mm Weight 2200 kg Means of ignition compression Kind of fuel used crude oil

Crank Shaft, dia. of journals as per Rule 324 mm Crank pin dia. 340 mm Crank Webs Mid. length breadth 800 mm Thickness parallel to axis 208 mm

Intermediate Shafts, diameter as per Rule 243 mm Thrust Shaft, diameter at collars as per Rule 255 mm

Screw Shaft, diameter as per Rule 268 mm Is the shaft fitted with a continuous liner yes

Size Liners, thickness in way of bushes as per Rule 15.7 mm Thickness between bushes as per rule 11.8 mm Is the after end of the liner made watertight in the

seller boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes

two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube

If so, state type Length of Bearing in Stern Bush next to and supporting propeller 1378 mm

Propeller, dia. 3840 mm Pitch 3020 mm No. of blades 3 Material bronze whether Moveable no Total Developed Surface 3,366 sq. ft.

Method of reversing Engines direct reversal a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

forced Thickness of cylinder liners 36 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine to funnel

oling Water Pumps, No. 2 of Saltwater, centrif. 135 h.p. each Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

ge Pumps worked from the Main Engines, No. 2 of Diameter 150 mm Stroke 175 mm Can one be overhauled while the other is at work yes

pumps connected to the Main Bilge Line No. and Size One Ballast pump 150 h.p., One bilge pump 20 h.p. The two engine bilge pumps

How driven electrically the cooling water led to the bilges overboard If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements Fast Pumps, No. and size 1 off 150 h.p. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 of 90 h.p. each

two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

pumps, No. and size:—In Machinery Spaces 6 of 3" In the tunnel 1 off 2 1/2" (From Cofferdam 2 off 1 1/2" on fuel oil line)

Holds, &c. Hold No. 1: 2 off 3", Hold No. 2: 2 off 3 1/2", Hold No. 3: 3 off 3", Hold No. 4: 3 off 3" From peak spaces 1 1/2" hand pump suction

dependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 off 5", 1 off 3", 2 off 2 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes

What pipes pass through the bunkers none How are they protected

What pipes pass through the deep tanks none Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

compartment to another yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top of water room

Is a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

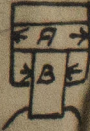
Main Air Compressors, No. 1 No. of stages 2 Diameters 280 - 250 mm Stroke 190 mm Driven by air engines

Auxiliary Air Compressors, No. 3 No. of stages 2 Diameters 106 - 34 mm Stroke 80 mm Driven by steam

Small Auxiliary Air Compressors, No. one No. of stages 2 Diameters 144 mm Stroke each Driven by chain engines

Scavenging Air Pumps, No. one on each engine Diameter 130 mm Stroke 150 mm Position engine room.

Auxiliary Engines crank shafts, diameter as per Rule 130 mm as fitted 150 mm No. 3






Dates of Examination of principal parts—Cylinders		7/6-1/6	Covers	2/8-2/9-3/6	Pistons	7/8-8/8-9/24	Rods	7/8-12	Connecting rods	7/8-9/4-4/8
Crank shaft	2/3-3/4-1/8-2/8	Flywheel shaft		Thrust shaft	2/3-6/4-10/5-2/5	Intermediate shafts	14/6-2/4-3/5-4/6	Tube shaft	7/5-4/5-1/7	
Screw shaft	14/7-5/15-1/8-1/9	Propeller	10/7-1/9/4	Stern tube	10/7-1/5/8	Engine seatings	15/8-23/8	Engines holding down bolts	4/9-3/4-1/9	
Completion of fitting sea connections		1/9	Completion of pumping arrangements		4/10-9/10	Engines tried under working conditions		29/4-7/10-3/6-3/6		
Crank shaft, Material	Soft. P. Steel	Identification Mark	APR. LLOYD'S No 2627-28	STARBUCK. LLOYD'S No	2607-2633	Intermediate shaft, Material	BN 10-5-35	Identification Mark		
Thrust shaft, Material	Soft. P. Steel	Identification Mark	LLOYD'S No 2608 & LLOYD'S No 2629	Identification Mark	BN 10-5-36	Intermediate shafts, Material	Soft. P. Steel	Identification Mark	LLOYD'S No 2699-98-99-2600-01-02	
Tube shaft, Material	✓	Identification Mark	✓	Screw shaft, Material	Soft. P. Steel	Identification Mark	4/10-7-35	Identification Mark	LLOYD'S No 2620	

General Remarks (State quality of workmanship, opinions as to class, etc. The above machinery has been constructed and fitted outboard under special survey in accordance with the Rules the approved plans and the requirements contained in the Secretary's letters E dated 14/1-14/2-22/2-15/3-22/3-29/3-28/4-26/6 1935.

On completion the whole machinery was tested under full power working conditions and the manoeuvring of the main engines were tested & found satisfactory. A speed of 14.7 knots was arrived at a total IHP of 4400

The amount of Entry Fee	£. 13.4.40	When applied for,	25.10.1935	1 inch	 Engineer Surveyor to Lloyd's Register of Shipping.
Special	£. 243.7.12				
One Starting and one Clean Billings	70.56				
Donkey Boiler Fee	50.00	When received,	25.11.22.05 and 11.11.35 and 22.7.28 and 16.12.35		
Travelling Expenses (if any)	£. 457.75				

Twini Seven Motor Vessel TASMANIA  
List of the Auxiliary Machinery.  
 2 centrifugal salt water cooling pumps, 135 to/hour each.  
 1 " " fresh water " " " " 80 to/hour  
 2 cog wheel lubricating oil pumps, 90 to/hour each  
 1 " " " daily service oil feed pump 15 to/hour  
 1 bilge & sanitary pump (2 plungers) 20 to/hour each  
 1 rotary "Iron" ballast pump 150 to/hour

} Electrically  
 } driven

Three 2 cylinder 2 S.C.S.F. Diesel engines with solid injection  
220<sup>mm</sup> cylinder diameter x 370<sup>mm</sup> stroke x 320 R.P.M. each direct coupled  
to 66 K.W. compound wound dynamo supplying current at  
220 volts pressure for the following purposes:-

2	off	45HP	shunt wound electromotors for comb. lube. oil & cooling w. pumps
1	"	15"	- - - " fresh water cooling pumps
1	"	10"	- - - " daily service oil fuel pumps.
1	"	9"	- - - " bilge & sanitary pumps.
1	"	15"	- - - " ballast pump.
2	"	8"	series - - - " turning engines
1	"	52"	compound - - - " windlass
11	"	33"	- - - " cargo & warping winches
1	"	13"	series - - - " steering engine
1	"	3"	shunt - - - " Refrigerating compressor
1	"	175"	- - - " cooling water pump for same
1	"	2"	- - - " oil fuel circulating pumps.
2	"	15KW	oil heaters

Further for the electric light and a number of smaller elec.  
 trimmings for the wireless, fans, purifiers etc.

A 4 KW compound wound emergency light generator, rated 220 volts x 18.2 amps x 100 R.P.M. driven by a 2 cylinder 4 S.O.S.A. "Pump" motor engine has been placed on a platform in the top of the engine room and connected to the switch board for light and wire less by a change over switch.

The above is a correct description.

AKTIESELSKABET  
NAKSKOV SKIBSVÆRFT

