

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 13 AUG 1932

Date of writing Report 19 When handed in at Local Office 12.8.1932 Port of **HULL**

No. in Survey held at **Hull** Date, First Survey 22.7.32 Last Survey 5.8.1932
 Reg. Book. 81594 on the **Steam Trawler 'SIR MARK SYKES (EX 'CYMREA')** (Number of Visits 5)

Built at **Ayr** By whom built **Ailsa S.S. Co. Ltd** Yard No. When built 1918

Engines made at **Liverpool** By whom made **Fawcett & Briston & Co** Engine No. When made 1918

Boilers made at **Liverpool** By whom made **Fawcett & Briston & Co** Boiler No. When made 1918

Registered Horse Power 61 Owners **Jarnal Steam Fishing Co Ltd** Port belonging to **Hull**

Nom. Horse Power as per Rule 87 Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**

Trade for which Vessel is intended **Fishing**

ENGINES, &c.—Description of Engines **Triple Expansion** Revs. per minute

Dia. of Cylinders 12 1/2 - 21 - 35 Length of Stroke 26 No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 6 3/4 Crank pin dia. 4 1/8 Crank webs Mid. length breadth shrunk Thickness parallel to axis

Intermediate Shafts, diameter as per Rule 6 1/2 Thrust shaft, diameter at collars as per Rule 6 3/4

Tube Shafts diameter as per Rule NOT YET Is the tube shaft fitted with a continuous liner **No**

Screw Shaft, diameter as per Rule 7 1/8 Thickness between bushes as per Rule Is the after end of the liner made watertight in the propeller boss **Yes**

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

If 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

If 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

Propeller, dia. 9 1/2 Pitch 11 1/2 No. of Blades 4 Material **Cast Iron** whether Moveable **No** Total Developed Surface 25.5 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2 Stroke 12 Can one be overhauled while the other is at work **Yes**

Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2 Stroke 12 Can one be overhauled while the other is at work **Yes**

Feed Pumps No. and size **One 6 x 4 x 6** Pumps connected to the Main Bilge Line No. and size **One 6 x 4 x 6** How driven **Steam**

Ballast Pumps, No. and size **One 6 x 4 x 6** Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room **2 @ 2"**

In Pump Room **1 @ 2" to Feed tank** In Holds, &c. **1 @ 2" to store room, & to slush well**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **One 2"** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **One 2"**

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes **Yes**

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges **Yes**

Are all Sea Connections fitted direct on the skin of the ship **Yes** Are they fitted with Valves or Cocks **Both**

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold 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 **For wood cuttings** How are they protected **Strong wood casing**

What pipes pass through the deep tanks **Yes** Have they been tested as per Rule **Yes**

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

Is 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 **Yes**

MAIN BOILERS, &c.—(Letter for record **(S)**) Total Heating Surface of Boilers **1616**

Is Forced Draft fitted **No** No. and Description of Boilers **One single ended** Working Pressure **160 lbs sq. in.**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**

IS A DONKEY BOILER FITTED? **No** If so, is a report now forwarded? **Yes**

Is the donkey boiler intended to be used for domestic purposes only **Yes**

PLANS. Are approved plans forwarded herewith for Shafting **Yes** Main Boilers **Yes** Auxiliary Boilers **Yes** Donkey Boilers **Yes**

Superheaters **Yes** General Pumping Arrangements **Yes** Oil fuel Burning Piping Arrangements **Yes**

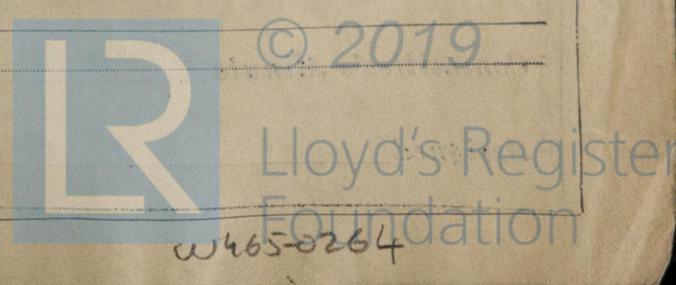
SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes**

State the principal additional spare gear supplied **Two bolts for top ends, bottom ends & main bearings. Set of coupling bolts. Main & donkey check valves. Safety valve spring. Spare valves for feed, bilge & air pumps. Impeller shaft for circulating pump. Assorted bolts & nuts, & iron of various sizes.**

The foregoing is a correct description,

Manufacturer.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

During progress of work in shops -- }
 Dates of Survey while building }
 During erection on board vessel -- } *1932 July 22. 26. 28. 29 Aug 5*
 Total No. of visits *5*

Dates of Examination of principal parts—Cylinders _____ Slides _____ Covers _____
 Pistons _____ Piston Rods _____ Connecting rods _____
 Crank shaft _____ Thrust shaft _____ Intermediate shafts _____
 Tube shaft _____ Screw shaft _____ Propeller _____
 Stern tube _____ Engine and boiler seatings _____ Engines holding down bolts _____
 Completion of fitting sea connections _____
 Completion of pumping arrangements _____ Boilers fixed _____ Engines tried under steam _____
 Main boiler safety valves adjusted _____ Thickness of adjusting washers _____
 Crank shaft material _____ Identification Mark _____ Thrust shaft material _____ Identification Mark _____
 Intermediate shafts, material _____ Identification Marks _____ Tube shaft, material _____ Identification Mark _____
 Screw shaft, material _____ Identification Mark _____ Steam Pipes, material _____ Test pressure _____ Date of Test _____
 Is an installation fitted for burning oil fuel _____ Is the flash point of the oil to be used over 150°F. _____
 Have the requirements of the Rules for the use of oil as fuel been complied with _____
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo _____ If so, have the requirements of the Rules been complied with _____
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with _____
 Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *Li Phukotham*

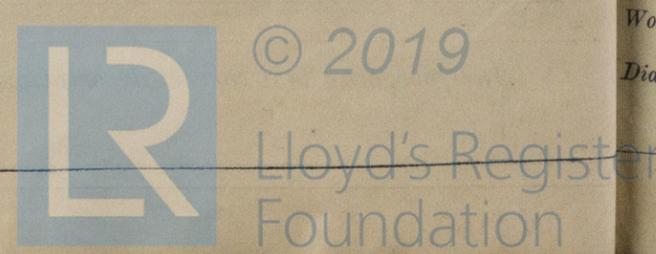
General Remarks (State quality of workmanship, opinions as to class, &c. *Li Phukotham*)
The machinery of this vessel examined as per Report 9 sent herewith. The particulars are sent for the information of the Committee, and with a view to the machinery being classed 100A1 with date.

Note:—The propeller shaft was not drawn for examination at this time, but it will be submitted to survey towards the end of this year. It is stated that this was examined by the B.C. Surveyors in November 1931, at Slutwood, and this has been confirmed by the Liverpool Surveyors. Builders plans of Stern gear, thrust shaft & propeller are enclosed.

The amount of Entry Fee ... £	:	:	When applied for,
Special ...	£	<i>2.5 (H)</i>	19.
Donkey Boiler Fee ... £	:	<i>1/4</i>	When received,
Travelling Expenses (if any) £	:	:	19.

John Shacknidy & G. E. F. L. S.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 26 AUG 1932*
 Assigned *L.M.C. 8.32*



The Surveyors are requested not to write on or below the space for Committee's Minute.