

4 NOV 1959

Rpt. 13

No. 5660

REPORT ON ELECTRICAL EQUIPMENT

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 27th Oct. 59 When handed in at Local Office 30 Oct. 19 59 Port of DJAKARTA

No. in Survey held at TANDJONG PRIOK Date, First Survey 23 April Last Survey 6th Oct. 59
Reg. Book (No. of Visits 6)

32517 on the m.v. "TANDJUNG TORAWITAN", (Ex. "IVAN BONTCHAROS") Tons ^{Gross} 1712 _{Net} 1008

Built at TAMISE, BELGIUM By whom built JOB BOEL & CONS., Ltd Yard No. 1229 When built 1951

Owners REPUBLIK INDONESIA Port belonging to DJAKARTA

Installation fitted by JO S., BOEL & SONS, LTD When fitted 1951

Is vessel equipped for carrying Petroleum in bulk No Is vessel equipped with D.F. YES E.S.D. YES Gy.C. YES Sub.Sig. NO Radar yes

Plans, have they been submitted and approved YES System of Distribution TWO WIRE Voltage of Lighting 220

Heating 220 Power 220 D.C. or A.C. Lighting DC Power DC If A.C. state frequency ----

Prime Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fitted with a trip switch --- Generators, are they compound wound YES, and level compounded under working conditions YES

Are the generators arranged to run in parallel YES Is the compound winding connected to the negative or positive pole ----

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing +++ Have certificates of test for machines under 100 kw. been supplied and the results found as per Rule ----- Position of Generators ALL ON BOTTOM

PLATFORM PORT SIDE.

is the ventilation in way of generators satisfactory yes are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil YES Switchboards, where are main switchboards placed BOTTOM PLATFORM

FORWD. 24 V SWITCHBOARD AT TOP OF ENG. ROOM FORWD.

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil YES, what insulation is used for the panels STEEL PANELS, if of synthetic insulating material is it an Approved Type -----, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule YES Is the construction as per Rule, including locking of screws and nuts YES Description of Main Switchgear for each generator and arrangement of equaliser switches ROTARY OPERATED KNIFE SWITCHES

and the switch and fuse gear (or circuit breakers) for each outgoing circuit D.P. QUICK BREAK SWITCHES AND FUSES

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 5

ammeters 5 voltmeters ---- synchronising devices. For compound machines in parallel are the ammeters and reverse current protection devices connected on the pole opposite to the equaliser connection YES Earth Testing, state means provided 2 LAMPS

IN SERIES, SWITCHES & FUSES Preference Tripping, state if provided NONE, and tested ----

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES

make of fuses ARTIC & CEHESS, are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate 320 LAMPS, and at what current do the reverse current protective devices operate 300 LAMPS

Cables, are they insulated and protected as per Rule YES

if otherwise than as per Rule are they of an Approved Type -----, state maximum fall of pressure between bus bars and any point under maximum load 4 V volts. Are all paper insulated and varnished cambric insulated cables sealed at the ends YES

Are all the cable runs in accessible positions not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage YES, are any cables laid under machines or floorplates YES, if so, are they adequately protected YES State type of cables (if in conduit this should also be stated) in machinery spaces VC, HR (PT. CONDUIT), galleys HR

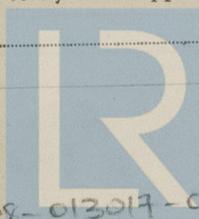
and laundries --- State how the cables are supported or protected CLIPPED ON PEFORATED CABLE

TRAY, AND PROTECTED WITH STEEL PLATE WHERE NECESSARY

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES, where unarmoured cables pass through beams, etc., are the holes effectually bushed YES Refrigerated chambers, are the cables and fittings as per Rule YES

Have refrigeration fan motors been constructed under survey ----- and test certificates supplied -----

Are the motors accessible for maintenance at all times YES



© 2021

Lloyd's Register Foundation

013008-013017-0050 1/2

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule **YES** Emergency Supply, state position **BATTERY COMPT. TW. DK(S.S., AMIDS) MOTOR/GENR. & EMERGENCY SWITCHBD, E.R. TOP (FORD)**

Navigation Lamps, are they separately wired **YES** controlled by separate double pole switches and fuses **YES** Are the switches and fuses in a position accessible only to the officers on watch **YES**, is an automatic indicator fitted **YES** Is an alternative supply provided **YES**

Secondary Batteries, are they constructed, fitted and adequately ventilated as per Rule **YES**, state battery capacity in ampere hours **12 V. 250 A.H.** Where required to do so does it comply with 1948 International Convention **YES**

Lighting, is fluorescent lighting fitted **NO** If so, state nominal lamp voltage **-----** and compartments where lamps are fitted **-----**

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof **YES**

Searchlights, No. of **3**, whether fixed or portable **1F, 2P**, are they of the carbon arc or of the filament type **FILAMENT**

Heating and Cooking, is the general construction as per Rule **-----**, are the frames effectually earthed **-----**, are heaters in the accommodation of the convection type **NONE** Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil **YES**

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment **YES** Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing **-----**

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule **-----**

Lightning Conductors, where required are they fitted as per Rule **-----**

Ships carrying Oil having a Flash Point of less than 150° F. Have all the special requirements of the Rules for such ships been complied with **-----**, are all fuses of an Approved Cartridge Type **-----**, make of fuse **-----** Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships **-----** Are all cables lead covered as per Rule **-----**

E.S.D., if fitted state maker **MC 11** location of transmitter and receiver **No. 2 DB TK., BRIDGE**

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations **YES**

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory **YES**

PARTICULARS OF GENERATING PLANT

DESCRIPTION OF GENERATOR	No. of	MAKER	RATED AT				PRIME MOVER	
			Kw. per Generator	Volts	Ampères	Revs. per Min.	TYPE	MAKER
MAIN	3		65	220	296	850	DIESEL	LA MEUSE
	1		18	220	84	750	DIESEL	LA MEUSE
EMERGENCY ROTARY TRANSFORMER		MARELLI, ITALY	1.5	12/1883.3	2.200	E.MTR	MARELLI, ITALY	

GENERATOR CABLES

DESCRIPTION	No. of	Kw.	CONDUCTORS		MAXIMUM CURRENT IN AMPERES		APPROX. LENGTH (lead plus return feet)	INSULATION	PROTECTIVE COVERING
			No. in Parallel per Pole	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	In the Circuit	Rule			
MAIN GENERATOR	3	65	2	37/.072	296	520	300	VC	(BRAIDING & LEAD)
" " EQUALISER	1	18	2	19/.052	84	128	150	VC	BRAIDING
EMERGENCY GENERATOR									
ROTARY TRANSFORMER: MOTOR	1	2.5	1	17/.036	12	24	50	HR	BRAIDING
" " GENERATOR	1	1.5	1	19/.064	12-18	83	40	HR	BRAIDING

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.)

DESCRIPTION	No. of	Kw.	No. in Parallel per Pole	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	In the Circuit	Rule	APPROX. LENGTH (lead plus return feet)	INSULATION	PROTECTIVE COVERING
LOW VOLTAGE EMERGENCY BOARD	1			19/.064	83	83	20	HR	BRAIDING

DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.)

DESCRIPTION	No. in Parallel per Pole	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES		APPROX. LENGTH (lead plus return feet)	INSULATION	PROTECTIVE COVERING
			In the Circuit	Rule			
1. WHEELHOUSE NAV. LIGHTS	1	3/.029	0.9	5	100	HR	
2. WHEELHOUSE EMERGENCY NAV.	1	7/.064	32	46	150	HR	
3. BRIDGE HSE HOLD LIGHTS	1	3/.036	10	10	100	HR	
4. STBD. ALLEYWAY DK. LIGHTS	1	7/.064	35	46	100	HR	
5. BRIDGE HSE (P) BOAT DK. LIGHTS	1	7/.029	13	15	100	MR	
6. FOC'SLE FOC'SLE LIGHTS	1	3/.036	9	10	140	HR	
7. AMIDS. HSE (P) SHELTER DECK	1	7/.029	15	15	100	HR	
8. AMIDS. HSE (S) SHELTER DECK	1	7/.029	14	15	100	HR	
113. POOP DK. HSE AFT. LIGHTS	1	7/.029	12	15	100	HR	

MOTOR CABLES

ALL IMPORTANT MOTORS TO BE ENUMERATED	No.	B.H.P.	No. in Parallel per Pole	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	In the Circuit	Rule	APPROX. LENGTH (lead plus return feet)	INSULATION	PROTECTIVE COVERING
WINDLASS	1		2	19/.083	138	236	400	HR	BRAIDING
STEERING GEAR	1		2	7/.064	32.2	92	200	HR	-do-
INBD. LUB. OIL PUMP	1	15	1	19/.044	52	92	80	VC	-do-
BALLST. PP & OUTBD. L.O. PP 1+1	24+15		1	19/.083	130	202	150	VC	-do-
M.E.S.W. PP & BILGE PP	1+1	20+12	1	19/.083	123	202	150	VC	-do-
FIRE/DK WATER PUMP	1	24	1	19/.052	80	110	150	VC	-do-
FIRE/PW PUMP	1	25	1	19/.064	94	143	150	VC	-do-
AFT. DK. WINCHES (TOT. 4)	1	29	2	19/.064	100	166	150	HR	-do-
FOR. DK. WINCHES (TOT. 2)	1	36	2	19/.083	125	236	200	HR	-do-
FOR. DK. WINCHES (TOT. 4)	1	29	2	19/.064	100	166	300	HR	-do-

[Handwritten signature]
27/11/52

NOTE.—Use Rpt. 13 Continuation Sheet if the above space is insufficient

The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.
 All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.
 The foregoing is a correct description.

Electrical Contractors. Date

COMPASSES

Have the compasses been adjusted under working conditions

Builder's Signature. Date

Have the foregoing descriptions and schedules been verified and found correct. **YES**

Is this installation a duplicate of a previous case. **YES** If so, state name of vessel. **TANDJUNG DATU --- RAYA**

Plans. Are approved plans forwarded herewith. **----** If not, state date of approval. **SETP.1958**

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith. **-----**

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

Please see London letter 22nd Sept. 1958 Eng. Etc;
The Electrical installation of this vessel has been examined and found in good condition.
An insulation test has been carried out, and the installation examined under working condition and found satisfactory.
The Electrical Equipment of this vessel is eligible in my opinion to be Classed with the Machinery + LMC 10,59

5m. 3.58 - Transfer. (MADE AND PRINTED IN ENGLAND) (The Surveyors are requested not to write on or below the space for Committee Minute.)

16.11.59

Total Capacity of Generators **213** Kilowatts.

The amount of Fee ... **Rps. 10.000.** = When applied for,

19
 When received,
 19

Travelling Expenses (if any) £ : :

J.A. Boater
 Surveyor to Lloyd's Register of Shipping
 (J.A. Boater).

Committee's Minute **FRIDAY 11 DEC 1959**

Assigned **See Rpt. 1**



© 2021

Lloyd's Register Foundation