

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 28-1 1961 When handed in at Local Office 19 Port of ROSENNo. in Survey held at DUNKIRK Date, First Survey 11-1-60 Last Survey 6-11-1960  
Reg. Book. (No. of Visits 16)91062 on the SINGLE SCREW STEAM TANKER J. PAUL GETTY Tons { Gross 10,906  
Net 2,521.4Built at DUNKIRK By whom built AT. & CH. DE FRANCE Yard No. 228 When built 1960-11Owners HEMISPHERE TRANSPORT CO. LTD. Port belonging to MONROVIAInstallation fitted by AT. & CH. DE FRANCE When fitted 1960-11Is vessel equipped for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES Gy.C. YES Sub.Sig. — Radar YESPlans, have they been submitted and approved YES System of Distribution 3 PHASE 3 WIRE Voltage of Lighting —Heating — Power — D.C. or A.C., Lighting 115 Power 440 If A.C. state frequency 60 CPSPrime Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fittedwith a trip switch YES Generators, are they compound wound —, and level compounded under working conditions —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 YES Have certificates of test for machinesunder 100 kw. been supplied and the results found as per Rule YES Position of Generators 1. FORWARD 1. AFT ON FLATSTOVED SIDE PART RM. EMERGENCY IN HOUSE ON BAPT DECKis the ventilation in way of generators satisfactory YES are they clear of inflammable material and protected from mechanical injury anddamage from water, steam and oil YES Switchboards, where are main switchboards placed ON FLAT FORWARDPART OF RM. RM

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 DEAD FRONT, if of synthetic insulatingmaterial is it an Approved Type —, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom asper Rule — Is the construction as per Rule, including locking of screws and nuts YES Description of Main Switchgearfor each generator and arrangement of equaliser switches TRIPLE POLE LINKED CIRCUIT BREAKER WITH OVERCURRENTTRIPS AND REVERSE POWER RELAYSand the switch and fuse gear (or circuit breakers) for each outgoing circuit TRIPLE POLE LINKED CIRCUIT BREAKERWITH OVERCURRENT TRIPSAre compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 1 EACHammeters 24 DIFFERENTIAL voltmeters 1 synchronising devices. For compound machines in parallel are the ammeters and reverse currentprotection devices connected on the pole opposite to the equaliser connection YES Earth Testing, state means provided LAMPSKLAXON & RELAY Preference Tripping, state if provided NO, and tested —Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YESmake of fuses SIEMENS, are all fuses labelled YES If circuit breakers are provided for the generators, at whatoverload do they operate 150%, and at what current do the reverse current protectivedevices operate 3% IN 15 SECONDS Cables, are they insulated and protected as per Rule YESif otherwise than as per Rule are they of an Approved Type —, state maximum fall of pressure between bus bars and any pointunder maximum load LESS THAN 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 Statetype of cables (if in conduit this should also be stated) in machinery spaces VARIOUS CAMBRIC LEADS, galleys PURIFIED COPPER SHEATHand laundries — State how the cables are supported or protected FORG 2 AFT GALLEY IN CHANNELSFORWARD IN CONDUIT ATTACHED TO DECK BRACKETS BUSHINGS IN TRAYS CLIPPEDAre all lead sheaths, armouring and conduits effectually bonded and earthed YES Are all cables passing through decks and watertightbulkheads provided with deck tubes or watertight glands YES, where unarmoured cables pass through beams, etc., are the holeseffectively bushed YES Refrigerated chambers, are the cables and fittings as per Rule YESHave refrigeration fan motors been constructed under survey — and test certificates supplied —Are the motors accessible for maintenance at all times —

Rpt. 13 (cont).

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes Emergency Supply, state position House on Boat Deck

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 300 Where required to do so does it comply with 1948 International Convention —

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 1, whether fixed or portable Fixed, are they of the carbon arc or of the filament type Filament

Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type — 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 Yes

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

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 Yes, are all fuses of an Approved Cartridge Type Yes, make of fuse Siemens Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships Yes Are all cables lead covered as per Rule Yes

E.S.D., if fitted state maker Kelvin Hughes location of transmitter and receiver Eng. Rm. Double Bottom

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				TYPE.	PRIME MOVER.
			Kw. per Generator.	Volts.	Amps.	Revs. per Min.		
MAIN	2	MAISON BECHET	900	450	1445	1200	STEAM TURBINE	MAISON BECHET
EMERGENCY ROTARY TRANSFORMER	2	ATOMIC D'ORLANS	200	450	380	900	DIESEL	ATOMIC D'ORLANS

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	2	900	8	3x200	1445	2200	2200	V.C.	L.C. 2MB
" EQUALISER									
EMERGENCY GENERATOR	2	200	2	3x200	380	550	550	V.C.	L.C. 2MB
ROTARY TRANSFORMER: MOTOR									
" GENERATOR									

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

DESCRIPTION.	No. of	Kw.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
FROM MAIN S.B.	6		1x50	300	225	PX	COPPER SHEATH
FROM 2 AIR COND. PLANT PANEL	3		1x3	25	30		
WORKSHOP PANEL	3		1x8	30	80		
FROM AIR COND. 2 POWER PANEL	3		1x40	115	202		
ENGINE RM POWER PANEL PORT SIDE	3		1x40	90	202		
BOILER RM	3		1x40	160	295		
ENG. RM POWER PANEL STARBOARD SIDE	3		1x80	26	80		
440/117-10KVA TRANS. ENG. RM LIGHTS	6		1x50	250	225		
STEAMING GEAR FEEDER PORT SIDE	12		1x100	820	335		
FEEDER TO EMERGENCY S.B.	12		1x100	820	335		
" " " " " " " "	3		1x5	20	58		
TO WHEELHOUSE S.B.	3		1x100	235	335		
ENG. RM POWER PANEL BOILER RM STARBOARD SIDE	3		1x8	315	80		
440/117-10KVA TRANS. ENG. LIGHTS STARBOARD SIDE	6		1x50	250	225		
STEAMING GEAR FEEDER STARBOARD SIDE	3		1x13	60	100		
BOILER RM POWER PANEL STARBOARD SIDE	3		1x40	130	202		
ENG. RM POWER PANEL " " " "	3		1x20	85	132		
AFT AIR COND. 2 POWER PANEL " " " "	3		1x40	100	202		
440/230-25KVA TRANS. CULKY APPLIANCE	3		1x40	100	202		

DESCRIPTION.	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.			
115V. S.P.							
FROM MAIN S.B. TRANS.	1	2x3.5	5.0	27	V.C.		L.C. 2MB
STEAMING GEAR FEEDER LOWER PORT SIDE	1	"	5.3	"			
" " " " " " " "	1	"	5.3	"			
" " " " " " " "	1	"	2.8	"			
UPPER	1	"	7.0	"			
" " " " " " " "	1	"	8.7	"			
MIDDLE	1	"	5.3	"			
" " " " " " " "	1	"	8.9	"			
ENG. CASING	1	"	6.1	"			
INDICATORS	1	"	3.2	"			
BOILER RM	1	"	2.6	"			
" " " " " " " "	1	"	3.5	"			
" " " " " " " "	1	"	3.5	"			
" " " " " " " "	1	"	5.2	"			
" " " " " " " "	1	"	2.6	"			
" " " " " " " "	1	"	2.6	"			
" " " " " " " "	1	"	0.7	"			
" " " " " " " "	1	"	1.	"			
" " " " " " " "	1	"	2.	"			
FROM AFT APPL. PANEL	1	3x5.5	16.5	24			
AFT EXT. LIGHTING	1	3x22	27	64			
PORT SIDE AFT ACCUM. LIGHTING	1	3x40	53	92.5			
STAR " " " " " " " "	1	3x3.5	5.7	16			
PORT SIDE AFT AUXILIARY " " " "	1	3x3.5	6.9	16			
STAR " " " " " " " "	1	3x8	17.3	38			
ENGINE ROOM ACCUM.							
FROM FORWARD APPL. PANEL	1	3x22	36.6	64			
PORT SIDE BRIDGE LIGHTING	1	3x22	36	64			
STAR " " " " " " " "	1	3x14	22.7	44			
WHEELHOUSE EXT. " " " "	3	1x8	21	80	PX		COPPER SHEATH
" " " " " " " "	3	1x5	12.7	58	PX		"
FORECASTLE " " " "							
FROM WHEELHOUSE S.B.							
SUEZ CANAL LIGHT	2	1x2	2	15	PX		
STEAM LIGHT	4	1x2	2	15	"		
PORT LIGHT AFT (1)	4	1x2	2	15	"		
" " " " (2)	4	1x2	2	15	"		
PORT NAV. LIGHT (1)	4	1x2	2	15	"		
" " " " (2)	4	1x2	2	15	"		
STAR " " " " (1)	4	1x2	2	15	"		
" " " " (2)	4	1x2	2	15	"		
FORECASTLE " " (1)	4	1x2	2	15	"		
" " " " (2)	4	1x2	2	15	"		
FORWARD ANCHOR " " " "	2	1x2	2	15	"		
AFT " " " " " "	1	3x8	25	38	V.C.		L.C. 2MB
RADIO	2	3x2	5	15	"		
WINDOW WIPER	2	2x2	5	19	"		
SIGNALING LIGHTS	1	2x3.5	5	27	"		
BEAM SEARCHER	1	2x2	5	19	"		
DIRECTION FINDER	1	2x3.5	25	27	"		
RADAR	1	2x3.5	10	"	"		
NAV. BRIDGE LIGHTS	1	2x3.5	10	"	"		
WHEELHOUSE & CHART ROOM LIGHTS	1	2x3.5	10	"	"		
NAVIGATOR'S APPARATUS LIGHTING	1	2x3.5	10	"	"		
NAVIGATION BRIDGE " " " "	1	2x3.5	10	36-36	"		
FORECASTLE LIGHTING	1	2x3.5	10	"	"		
BRIDGE FRONT " " " "	1	2x3.5	10	"	"		
" " " " " " " "	1	2x3.5	10	"	"		
MAINMATE " " " "	1	2x3.5	10	"	"		
PORT FRONT " " " "	1	2x3.5	10	"	"		
REAR MAST " " " "	1	2x3.5	10	"	"		
FORWARD PUMP RM LIGHTING	1	2x3.5	10	"	"		
" " " " " " " "	1	2x3.5	10	"	"		
PORT DECK PROTECTOR	1	2x3.5	10	27	"		
BRIDGE EXT. LIGHTING	1	2x3.5	10	"	"		
" " " " " " " "	1	2x3.5	10	"	"		
MAIN DECK " " " "	1	2x3.5	10	"	"		
" " " " " " " "	1	2x3.5	10	"	"		
SUEZ PROTECTOR	1	1x20	20	132	PX		

[illegible]

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DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (load plus return feet).	INSULA- TION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.					
			In the Circuit.	Rule.			
220V. S.P.							
FROM GULF APPL. PANEL							
COOKING RANGE.	2	1x10	33.6	34		PX	COPPER SHEATH
	2	1x3	7.3	30			
	2	1x3	8.2	30			
	2	1x3	20.	30			
	2	1x10	33.6	34			
	2	1x3	7.3	30			
	2	1x3	8.2	30			
	2	1x3	18.2	30			
CWEN.	2	1x3	13.6	30			
	2	1x3	13.6	30			
	2	1x3	13.6	30			
	2	1x3	13.6	30			
440V 3P.							
FROM WHEELHOUSE S.B.							
GYEN COMPASS	1	3x2	10	15-15		V.C	L.C & M.B.
" PILOT	1	3x2	10	15-		"	"
RADIO.	1	3x2	25	38			

MAIN.		DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.).					
DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Core.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
FROM EMERGENCY S.B.							
440/117-15kva TRUCKS SUBS. CONTROL SEPARATEMENT	2	1x5	65	58		PX.	Copper Sulfate
440/117-15kva - FORWARD LIGHTS & WASH-HOUSE PANEL	3	1x30	65	132			
SHORE CIRCUIT	12	1x100	800	335			
STABILIZER POWER PANEL	6	1x40	200	212			
ENG. ROOM LIGHTING PANEL	3	1x8	30	80			
440/117-10kva TRUCKS AFT. APPR. PANEL	3	1x8	40	80			
DISTRIBUTION CABLES (TO SECTION-BOARDS ETC.)							
115V S.P.							
FROM MAIN S.B. TRUCKS							
PORT SIDE E.R. LIGHTING. LOWER PLATFORM	1	2x3.5	3.5	27-24		V.C.	L.C. & M.B.
	1	"	5.3	" -			
	1	"	5.3	" -			
	1	"	2.1	" -			
UPPER PLATFORM	1	"	5.3	" -			
	1	"	8.9	" -			
MIDDLE PLATFORM	1	"	2.7	" -			
	1	"	7.0	" -			
ENG. CASINGS	1	"	8.0	" -			
INDICATORS	1	"	2.6	" -			
BOILER ROOM	1	"	3.5	" -			
	1	"	3.5	" -			
	1	"	3.5	" -			
	1	"	5.2	" -			
	1	"	2.6	" -			
	1	"	4.3	" -			
	1	"	4.3	" -			
	1	"	0.7	" -			
	1	"	2.5	" -			

ALL IMPORTANT MOTORS TO BE ENUMERATED.		No.	B.H.P.	MOTOR CABLES.				
FORCED DRAUGHT FAN	2	60/195	3	1x100	83/245	335	PX.	CHESSE SURGEON
MAIN CIRC PUMPS	2	128	3	1x80	171	235	"	
MAIN EXT <sup>N</sup> PUMPS.	2	50	3	1x13	69	100	"	
GEN <sup>L</sup> SERV. & FINE PUMP.	1	56	3	1x13	77	100	"	
AUX GEN <sup>L</sup> LUB OIL PUMPS	2	3	1	3x3.5	4.8	16.	V.C	L.C & M.B
MAIN LUB OIL PUMPS	2	45	1	3x22	62	64		
AUX. CIRC PUMP	1	62.5	1	3x40	86	93.5		
BOILER STROKE FAN	1	3.	1	3x3.5	4.8	16.		
AIR COMP <sup>R</sup> REGULATOR	1	11.	1	3x5.5	15.5	34		
DIST <sup>R</sup> OIL TRANS PUMP	2	8.	1	3x3.5	12.1	16.		
AUX. EXT <sup>N</sup> PUMP	1	24	1	3x14	33.6	44		
OIL FUEL BURNING PRESS PUMPS	2	18	1	3x5.5	24.	24.		
BOILER STROKE FUEL PUMP.	1	6	1	3x3.5	9.3	16.		
F.R. VENT DISCH FAN	2	15	1	3x5.5	21.	24.		
" " SUCT "	2	16	1	3x5.5	22.4	24.		
FUEL OIL TRANS PUMP.	1	16	1	3x5.5	22.4	24.		
EVAPOR <sup>R</sup> FEED MAKE UP PUMP.	1	2.5	1	3x3.5	4.1	16.		
" DISTILLER WATER "	2	2	1	3x3.5	3.4	16.		
" SEA WATER "	2	2	1	3x3.5	3.4	16		
" CIRCUL <sup>R</sup> "	1	3	1	3x3.5	4.8	16		
BLR RM VENT. DISCH FAN	1	28	1	3x14	38	44		
GEN <sup>L</sup> SERV. AIR COMP <sup>R</sup>	1	22	1	3x14	31	44		
STEAM CIRC <sup>R</sup> MOTOR	2	30	2	3x40	124.	92		
SEA WATER GEN <sup>L</sup> SERV PUMP.	1	30	1	3x14	41	44		
BILGE PUMP.	1	14	1	3x5.5	19	24		

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

47671

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. Yes

Builder's Signature. Date 23-10-60

Have the foregoing descriptions and schedules been verified and found correct. Yes  
Is this installation a duplicate of a previous case. No If so, state name of vessel -  
Plans. Are approved plans forwarded herewith. - If not, state date of approval. 17-8-60, 19-7-60  
Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith. Yes  
General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

THE ELECTRICAL EQUIPMENT OF THE VESSEL HAS BEEN INSTALLED UNDER SPECIAL SURVEY  
IN ACCORDANCE WITH THE RULES, APPROVED PLANS AND SECRETARY'S LETTERS  
THE MATERIALS AND WORKMANSHIP ARE GOOD  
ON COMPLETION THE EQUIPMENT WAS TESTED UNDER WORKING CONDITIONS  
IN ACCORDANCE WITH RULE REQUIREMENTS AND SPARE GEAR CHECKED  
THE ELECTRICAL EQUIPMENT IS IN OUR OPINION SUITABLE FOR A CLASSED VESSEL

Total Capacity of Generators. 2200 Kilowatts.

The amount of Fee ... H.F. £ 51.70 : When applied for, 3.2 1961  
Travelling Expenses (if any) £ : : 3 19

[Signature] for C. Bolund  
Surveyor to Lloyd's Register of Shipping.  
[Signature] & Self

Committee's Minute. FRIDAY - 3 MAR 1961  
Assigned. See Apx. 1.

Im. 7.5d. - Transfer. (MADE AND PRINTED IN ENGLAND)  
(The Surveyors are requested not to write on or below the space for Committee Minute.)

10.5.61