

Rpt. 13.

No. 50041

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

16 JUN 1939

Received at London Office

JUN 20 1939

Date of writing Report.....19..... When handed in at Local Office.....19..... Port of.....

No. in Survey held at..... Date, First Survey..... Last Survey.....  
Reg. Book. (Number of Visits.....)66443 on the S/S. "AKITA" Tons {Gross 344.11  
Net 112.90Built at Sing By whom built Cushman & Sons Ltd Yard No. 1201 When built 1929-6Owners Messrs. Cushman & Sons Ltd Port belonging to CantonElectrical Installation fitted by W. Brady & Sons Ltd Contract No. 1 When fitted 1929Is vessel fitted for carrying Petroleum in bulk no Is vessel equipped with D.F. yes E.S.D. yes Gy.C. yes Sub.Sig. yesHave plans been submitted and approved yes System of Distribution Two Main Voltage of supply for Lighting 110 VHeating yes Power yes Direct or Alternating Current, Lighting DC Power yes If Alternating Current state frequency yes Prime Movers,has the governing been tested and found efficient when the whole load is suddenly thrown on and off yes Are turbine emergency governors fitted with atrip switch as per Rule yes Generators, are they compound wound yes, are they level compounded under working conditions yes,if not compound wound state distance between generators yes and from switchboard yes Where more than one generator is fitted are theyarranged to run in parallel yes, are shunt field regulators provided yes Is the compound winding connected to the negative or positive polepositive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing yes Have certificates oftest for machines under 100 kw. been supplied yes and the results found as per rule yes Are the lubricating arrangements and the constructionof the generators as per rule yes Position of Generators Starboard side of engine roomyes, is the ventilation in way of generators satisfactory yes are they clear of inflammable material yes, if situatednear unprotected combustible material state distance from same horizontally yes and vertically yes, are the generators protected from mechanicalinjury and damage from water, steam and oil yes, are the bedplates and frames earthed yes and the prime movers and generators in metalliccontact yes Switchboards, where are main switchboards placed Starboard side of engine roomare they in accessible positions, free from inflammable gases and acid fumes yes, are they protected from mechanical injury and damage from water, steamand oil yes, if situated near unprotected combustible material state distance from same horizontally yes and vertically yes, what insulationmaterial is used for the panels Slate, if of synthetic insulating material is it an Approved Type yes, if ofsemi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule yes Is the frame effectually earthed yesIs the construction as per Rule yes, including accessibility of parts yes, absence of fuses on the back of the board yes, individual fusesto pilot and earth lamps, voltmeters, etc. yes locking of screws and nuts yes, labelling of apparatus and fuses yes, fuses on the "dead"side of switches yes Description of Main Switchgear for each generator and arrangement of equaliser switches Two 100 AmpD.P. Switch & Two 100 Amp single pole fuses

For each of the following outgoing circuits:-

and for each outgoing circuit Two 20 Amp D.P. Switch, Two 20 Amp 100 AmpNavigation, Blower, engine room, after accommodation & forward & Union.Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard yesammeter yes voltmeter yes synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to theequaliser connection yes Earth Testing, state means provided Two earth lampsLloyd's Register  
Foundation

002923-002928-0121 1/2



and where are the controlling switches fitted....., are all fittings suitably ventilated.....

are all fittings and accessories constructed and installed as per Rule..... Searchlight Lamps, No. of....., whether fixed or portable.....

....., are their fittings as per Rule..... Heating and Cooking, is the general construction as per Rule.....

are the frames effectually earthed....., 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 free from damage from water,

steam and oil....., if situated near unprotected combustible material state minimum distance from same horizontally..... and vertically.....

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 services been supplied and the results found as per Rule..... Control Gear and Resistances, are they constructed and

fitted as per Rule..... Lightning Conductors, where required are they fitted as per Rule..... Ships carrying Oil having a Flash Point

less than 150° F. Have all the special requirements of the Rules for such ships been complied with....., are all fuses of the cartridge type.....

are they of an approved type..... If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof

type..... Spare Gear, if the vessel is for open sea service have spares been provided as per Rule....., are they suitably stored in dry

situations..... Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory.....

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	<i>One</i>	<i>7</i>	<i>110</i>	<i>70</i>	<i>450</i>	<i>Steam</i>	<i>✓</i>	<i>✓</i>
EMERGENCY ...	<i>✓</i>							
ROTARY TRANSFORMER	<i>✓</i>							

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel For Fols.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR ... ..	7	1	19/244	70	83	14	W.R.	L.C.C.A.
" " EQUALISER ... ..								
EMERGENCY GENERATOR ... ..								
ROTARY TRANSFORMER: MOTOR ... ..								
GENERATOR ... ..								

[illegible]

WIRELESS		1	7/1-086	12	94	180	VIR.	L.C.A.
NAVIGATION LIGHTS		1	7/1-029	4	18.2	180	"	"
LIGHTING AND HEATING	<u>DECK.</u>	1	7/1-036	15	94	180	"	"
	<u>FORECASTLE</u>	1	7/1-029	10	18.2	240	"	"
	<u>FIRST DECK</u>	1	7/1-029	7	18.2	30	"	"

[illegible]



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.

*J. Bushan*  
ROADY & SON LTD.  
111 STREET,  
HULL.

Electrical Engineers.

Date *13<sup>th</sup> June 1939.*

#### COMPASSES.

Minimum distance between electric generators or motors and standard compass *29 ft.*

Minimum distance between electric generators or motors and steering compass *25 ft.*

The nearest cables to the compasses are as follows:—

A cable carrying *5* Ampères *7* feet from standard compass *7* feet from steering compass.

A cable carrying *✓* Ampères *✓* feet from standard compass *✓* feet from steering compass.

A cable carrying *✓* Ampères *✓* feet from standard compass *✓* feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *Yes*.

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *Yes*.

The maximum deviation due to electric currents was found to be *1 1/2* degrees on *N. by E.* course in the case of the standard compass, and *1 1/2* degrees on *N. by E.* course in the case of the steering compass.

FOR DOCHANE & SONS. LTD.

Builder's Signature.

Date

*15 JUN 1939*

*D. J. Fisher*  
DIRECTOR

Is this installation a duplicate of a previous case *No* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

*The electric installation of this vessel has been  
inspected under special licence, tested & examined  
under full working load & found satisfactory*

*Notes*

*J.R.*

*22/6/39*

Total Capacity of Generators *7* Kilowatts.

The amount of Fee ... £ *3 : 10* : *16.6* 19*39*

Travelling Expenses (if any) £ : : *19.6* 19*39*

*J. R. Fisher*  
Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

*See Hull 76.50041*