

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office. MAR 2

Date of writing Report.....19..... When handed in at Local Office... 26/3/41... Port of NEWCASTLE-on-TYNE

No. in Survey held at Walker-on-Tyne Date, First Survey 27-6-40 Last Survey 17-3-41
Reg. Book. Suppl. (Number of Visits... 27...)

87013 on the T.S. ARONDA Tons { Gross 9031 Net 4463

Built at Newcastle (Walker) By whom built Swan Hunter & Wigham Richardson Ltd No. 1640 When built 1941

Owners British India Steam Nav. Co. Ltd Port belonging to LONDON

Electrical Installation fitted by Sunderland Forge & Eng'g Co. Ltd. Contract No. 1640 When fitted 1941

Is vessel fitted for carrying Petroleum in bulk No Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. - Sub.Sig. -

Have plans been submitted and approved Yes System of Distribution Two wire Voltage of supply for Lighting 220

Heating 220 Power 220 Direct or Alternating Current, Lighting Direct Power Direct If Alternating Current state frequency - 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 a

trip 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 - and from switchboard - Where more than one generator is fitted are they

arranged to run in parallel Yes, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive pole

Negative Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing Yes Have certificates of

test for machines under 100 kw. been supplied Yes and the results found as per rule Yes Are the lubricating arrangements and the construction

of the generators as per rule Yes Position of Generators Engine room starboard side

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material Yes, if situated

near unprotected combustible material state distance from same horizontally - and vertically - are the generators protected from mechanical

injury and damage from water, steam and oil Yes, are the bedplates and frames earthed Yes and the prime movers and generators in metallic

contact Yes Switchboards, where are main switchboards placed After end of engine room

are they in accessible positions, free from inflammable gases and acid fumes Yes, are they protected from mechanical injury and damage from water, steam

and oil Yes, if situated near unprotected combustible material state distance from same horizontally - and vertically - what insulation

material is used for the panels Ebony Sindanyo, if of synthetic insulating material is it an Approved Type Yes, if of

semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule - Is the frame effectually earthed Yes

Is the construction as per Rule Yes, including accessibility of parts Yes, absence of fuses on the back of the board Yes, individual fuses

to 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 pole circuit.

breakers with coupled equalizer breaker, with overload & reverse current trips &

time delays.

and for each outgoing circuit D.P circuit breakers or D.P switches and fuses

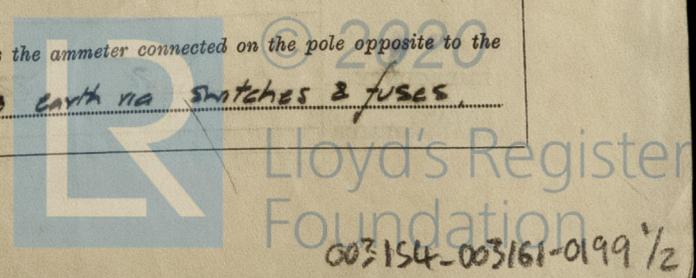
Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 3

ammeters 3 voltmeters - synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection Yes Earth Testing, state means provided Earth lamps coupled to earth via switches & fuses

See sheets 9 & 3 Rpt 76

ENCLOSURE



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.

Howe Sunderland Forge & Coy Ltd. Electrical Engineers. Date *19-3-1941*
At Survey.

COMPASSES.

Minimum distance between electric generators or motors and standard compass..... *150'*
 Minimum distance between electric generators or motors and steering compass..... *140'*

The nearest cables to the compasses are as follows:—

A cable carrying *16* Ampères ^{inside} feet from standard compass feet from steering compass.
 A cable carrying *16* Ampères feet from standard compass ^{inside} feet from steering compass.
 A cable carrying *10* Ampères *12* feet from standard compass *7* 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 *Nil* degrees on *every* course in the case of the standard compass, and *Nil* degrees on *every* course in the case of the steering compass.

W. S. Bowen Builder's Signature. Date *25th March 1941*
 SWAN, HUNTER, & WIGHAM RICHARDSON, LTD. DIRECTOR

Is this installation a duplicate of a previous case..... *Yes* If so, state name of vessel *ASKA*

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

The electrical equipment of the vessel was installed under special survey. The workmanship and materials used are good. The governing compassing and parallel operation of the generator sets were tested under working conditions, the operation of the protective devices of the circuit breakers, and the insulation resistance of each circuit measured, and found satisfactory. In my opinion the installation is suitable for a class vessel.

Noted
W. S. Bowen
2/4/41

Total Capacity of Generators..... *845* Kilowatts.

Sunderland £ *152.15.0*
 London £ *13.4.6*
 The amount of Fee £ *66 : 2 : 6* When applied for, *27 MAR 1941*
 Travelling Expenses (if any) £ When received,
 also London £ *4 : 7 : 6*

W. S. Bowen
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 4 APR 1941*
 Assigned *See NWC J.C. 99305*

2m.10.33.—Transfer. (MADE IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

