

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

13 JUN 1949

Received at London Office

Writing Report 2nd March 1949 When handed in at Local Office 25th March 1949 Port of Baltimore, Maryland

Survey held at Baltimore, Maryland Date, First Survey 13th May Last Survey 21st Dec. 1948
(No. of Visits 6)

on the M.V. "ANNA SALEN" (Ex "ARCHER" ex. "MORMACLAND") Tons { Gross 7840
Net 4635

at Chester, Pa. By whom built Sun S.B. & Drydock Co. Yard No. 184 When built 1940
Proprietors Rederi A/B Pulp Port belonging to Stockholm

Installation fitted by Sun Shipbuilding & Drydocking Co. When fitted 1940

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

Have they been submitted and approved submitted System of Distribution 120/240 V. 3 Wire Voltage of Lighting 120 V.

Power 240 V D.C. or A.C., Lighting - Power - If A.C. state frequency D.C.

Movers, has the governing been found as per Rule when full load is thrown on and off - Are turbine emergency governors fitted

trip switch - Generators, are they compound wound Yes, and level compounded under working conditions Yes

compound wound state distance between generators - and from switchboard - Are the generators arranged to run

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

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

or machines under 100 kw. been supplied - and the results found as per Rule -

Location of Generators Lower Level - Engine Room S.S.

ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and

ge from water, steam and oil Yes Switchboards, where are main switchboards placed Upper level Engine Room SS

key in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,

and oil Yes, what insulation is used for the panels Dead Front Type, 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 - Is the construction as per Rule, including locking of screws and nuts A.I.E.E. #45 Description of Main Switchgear

each generator and arrangement of equaliser switches 5 pole Circuit Breaker & 5 pole Disconnect Switch with positive

negative Equalizer Busses per A.I.E.E. #45

the switch and fuse gear (or circuit breakers) for each outgoing circuit Air Circuit Breakers For Circuits over 600A &

and Circuit Breakers for Circuits 600A & Under.

compartments containing switchboards composed of fire-resisting material or lined as per Rule - Instruments on main switchboard 2

eters 5 voltmeters - synchronising devices For compound machines in parallel are the ammeters and reversed current

rection devices connected on the pole opposite to the equaliser connection Yes Earth Testing, state means provided -

indicator Lamps & voltmeter with voltmeter switch

ches, Circuit Breakers and Fuses, are they as per Rule A.I.E.E. #45, are the fuses an Approved Type A.I.E.E. #45

of fuses Buss & Shewmutt, are all fuses labelled Yes If circuit breakers are provided for the generators, at what

and do they operate 125%, and at what current do the reversed current protective devices operate 15%

Boxes, Section Boards and Distribution Boards, is the construction as per Rule A.I.E.E. #45

s, are they insulated and protected as per Rule A.I.E.E. #45 if otherwise than as per Rule are they of an Approved Type -

maximum fall of pressure between bus bars and any point under maximum load 5% are the ends of all cables having a sectional

of 0.01 square inch and above provided with soldering sockets Mech. Ings Are all paper insulated and varnished cambric insulated

s sealed at the ends Yes Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil,

temperatures or risk of mechanical damage Yes, are any cables laid under machines or floorplates No, if so, are they

ately protected - Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit No

the "HR" type - State how the cables are supported or protected A.I.E.E. #45 - Supported on Metal Hangers -

Spacing 18"

all lead sheaths, armouring and conduits effectually bonded and earthed Yes Are all cables passing through decks and watertight

heads provided with deck tubes or watertight glands Yes, where unarmoured cables pass through beams, etc., are the holes

ively bushed Yes Refrigerated chambers, are the cables and fittings as per Rule A.I.E.E. #45

MY. " A

cooling

starti

feed w

repair

found

after

all p

elect

nava

trie

aux

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. Yes Emergency Supply, Yes

Navigation Lamps, are they separately wired. Yes controlled by separate double pole switches and fuses. Yes Are the switches

a position accessible only to the officers on watch. Yes is an automatic indicator fitted. Yes Is an alternative supply provided

Secondary Batteries, are they constructed and fitted as per Rule. Yes are they adequately ventilated. Yes

Emergency generator state battery capacity in ampere hours 100 KW. Emergency Diesel Driven Gen. with Auto Start

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

Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present.

if so, how are they protected. Lights in Battery Rooms & Paint Lockers are Explosion Proof

and where are the controlling switches fitted. outside of Compartments Are all fittings suitably ventilated. Yes

Searchlight Lamps, No. of 2 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. A.I.E.S. #45 are the frames effectually earthed. Yes are the

accommodation of the convection type. Yes Motors, are all motors constructed and installed as per Rule and placed in well

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

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.

Control Gear and Resistances, are they constructed and fitted as per Rule. A.I.E.S. #45 Lightning Conductors, where required are they fitted

Rule. Yes Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such

complied with. Yes are all fuses of an Approved Cartridge Type. Yes make of fuse. Yes Are the fittings

rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships. Yes Are the cables lead covered as per Rule

E.S.D., if fitted state maker. Yes location of transmitter. Yes and receiver. Yes

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.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN ...	3		275	120/240	1145		Diesel	
EMERGENCY ...	1		100 KW	120/240	417		Diesel	Buda
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area of No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR ...	275	2	0.7854	1150	1728	48	Varn. Cambric	Lead & Armor
" " EQUALISER ...		2	0.7854	1150	1728	48	"	"
" " Neutral ...		1	0.7854	283	864	24	"	"
" " Shunt Fld. ...		1	0.0206	-	55.5	48	"	"
EMERGENCY GENERATOR ...	100	1	0.5173	417	636	40	"	"
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

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

DESCRIPTION.								
Main Subd. to Laundry Pwr. Panel	1	0.0130	9.8	41	50	Varn. Cambric	Lead & Armor	
" " " Cargo Winches #3-4-5-6	2	0.3535	736	986	500	"	"	"
" " " " #7-8-9-10	2	0.3535	736	986	400	"	"	"
" " " " #11 & 12	1	0.3535	368	493	380	"	"	"
" " " " #13 & 14	1	0.3535	368	493	330	"	"	"
" " " " #15-16-17-18	2	0.3535	736	986	350	"	"	"
" " " Machine Shop P.P.	1	0.0329	69.9	134	36	"	"	"
" " " P. Aft. Group Contr. Bd.	2	0.0329	1013.2	1474	200	"	"	"
" " " P. Fwd. " " "	2	0.0329	1369.2	1474	80	"	"	"
" " " Shd. " " "	2	0.0329	1030	1474	90	"	"	"
" " " Galley Pwr. Panel	1	0.1562	239.4	286	230	Asbestos	Syn. Resin	"
" " " Officer's Pantry P.P.	1	0.0329	49.1	75	90	Varn. Cambric	Lead & Armor	

CONTINUED ON ADDITIONAL SHEET # 1

Continuation of Report No.

dated

on the

ADVA SALEN"		Additional Sheet #1		MAIN DISTRICT, CABLES CONTINUED				
DESCRIPTION		# in per- fect coils	Sect. Area Sq. in.	In The Circuit	Rule Lead *	Length Return	Insulation	Protective Covering
Subd. to Pass. Pantry P.P.		1	0.0414	43.1	88	160	Varn. Cambric	Lead & Armor
" Aft. Cargo Blower P.P.		1	0.0329	11.8	75	320	" "	" "
" Fwd. " " P.P.		1	0.1562	44.7	299	350	Asbestos	Syn. Resin
" Eng. Rm. Blower P.P.		1	0.0658	42.2	117	50	Varn. Cambric	Sheath & Armor
" Quartermaster Blower P.P.		1	0.0414	51.4	88	110	" "	Lead & Armor
" Test Panel		1	0.0521	70	99	196	" "	" "
" P. Aft. Group Contr. Bd.		1	0.0414	56.4	88	200	" "	" "
" Cargo Winches # 19 & 20		1	0.3535	368	493	500	" "	" "
" " " # 1 & 2		1	0.3535	368	493	420	" "	" "
" Cargo Refrig. Group Contr. Bd.		1	0.3535	335	493	180	" "	" "
" " " Temp. Contr. P.P.		1	0.0082	7.0	30	60	" "	" "
" Ships. Serv. Refrig. P.P.		1	0.0658	66	117	170	" "	" "
" Life Boat Winches		1	0.1559	184	292	190	" "	" "
" Evaporator P.P.		1	0.0329	41.5	75	176	" "	" "
" Emergency Subd.		1	0.6513	497	762	180	Asbestos	Syn. Resin
" Shore Conn. Boxes		1	0.6513	600	762	22	" "	Sheath & Armor

M.V. "ANNA ALLEN"

Additional Sheet #2

MOTOR CABLES CONTINUED

DESCRIPTION	NO.	B.H.P.	# in parallel	Section Area Sq. In.	In. Cir.	Amps. Rule	Length	Insulation	Protective Covering
Blower	1	2.3	1	0.0051	10.5	22	350	Varn. Cambric	Lead & Armor
"	2	2 1/2	1	0.0051	9.25	22	300	"	"
"	2	2 3/4	1	0.0130	10.5	41	80	"	"
"	2	4.0	1	0.0206	16.8	47	200	"	"
" Eng. Rm. Supply	2	25	1	0.0658	92	117	180	"	"
Drill Press - Elec. Shop	1	1/2	1	0.0032	2.3	11.5	24	Rubber	"
Grinder	1	1	1	0.0032	4.3	11.5	24	"	"
Red. Gear Turning Motor	1	5	1	0.0130	20	41	80	Varn. Cambric	"
Engine	4	1 1/2	1	0.0032	6.6	13	180	"	"
Waste Heat Burner & Pump Blower	1	5	1	0.0130	20	41	100	"	"
Waste Heat Burner Motor	1	1/4	1	0.0032	1.3	13	20	"	"
Cargo Refrig. Compressor	3	25	1	0.0329	94	134	50	"	"
" " "	1	15	1	0.0414	58	88	50	"	"
" " Cond. Circ. Pump	2	5	1	0.0310	20	41	220	"	"
" " Diff. Fan.	2	5	1	0.0310	20	41	110	"	"
Ship's Serv. Refrig. Compressor	2	7 1/2	1	0.0658	66	117	50	"	"
" " " Cond. Circ. Pump	1	1 1/2	1	0.0051	6.3	22	220	"	"
Life Boat Winch	2	25	1	0.0829	92	299	60	"	"
Dist. Feed P.	2	2	1	0.0051	8.3	22	72	"	"
St Water Pump	2	2	1	0.0051	8.3	22	56	"	"
Oil Disch. Pump	1	2	1	0.0051	8.3	22	48	"	"
Grinder	1	15	1	0.0658	56	117	196	"	"
Gyro Pilot Pwr. Unit	1	1	1	0.0130	2.3	41	550	"	"



© 2020

Lloyd's Register
Foundation

0047 344

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

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.			
Main Swbd. to Radio Unit	1	0.0329	15.7 ✓	75	160	Varn. Cambric	Lead & Armor
" " " Fwd. Heater Dist. P.	1	0.0329	28.8 ✓	75	350	"	" "
" " " Aft. " " P.	1	0.0329	15.6 ✓	75	320	"	" "
" " " Aft. Pks " " P.	1	0.0329	22.7 ✓	75	500	"	" "
" " " Focals " " P.	1	0.0329	17.3 ✓	75	700	"	" "
" " " Eng. Rm. Ltg. Panel	1	0.1045	111.7 ✓	158		"	" "
" " " Fwd. Cargo Ltg. Panel	1	0.0521	103.9 ✓	99		"	" "
" " " Aft. " " "	1	0.0521	64.7 ✓	99		"	" "
" " " Cabin Dk. Ltg. Panel	1	0.0629	48.5 ✓	134		"	" "
" " " Shel. & 2nd Dks. Ltg. P.	1	0.1238	69.2 ✓	177		Asbestos Varn. Cambric	Syn. Resin Sheath and Armor
" " " Boat Dk. Ltg. Panel	1	0.0521	30.3 ✓	99		Asbestos Varn. Cambric	Lead & Armor
" " " Cargo Refrig. Ltg. P.	1	0.0595	24.3 ✓	109		Asbestos Varn. Cambric	Syn. Resin Sheath & Armor
Emerg. Swbd. to Radio Unit	1	0.0329	15.7 ✓	75		Varn. Cambric	Lead & Armor
" " " Eng. Rm. Em. Ltg. P.	1	0.0082	18.9 ✓	30		"	" "
" " " Cabin Dk. Em. Ltg. P.	1	0.0206	32.7 ✓	55.5		"	" "
" " " Wheel Hse. Em. Ltg. P.	1	0.0130	24.3 ✓	41		"	" "
" " " Navigation Ltg. Panel	1	0.0082	3.0 ✓	30		"	" "
Note:- All Branch Ltg. Circuits are Loaded to Max. of 880 Watts							
Except in Mach. Spaces Which are -	1	0.0032	8.0 ✓	11.5	?	Rubber Varn. Cambric	" "
	1	0.0051	8.0 ✓	22	?	"	" "

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Emerg. Air Compressor	1	10	1	0.0658	78. ✓	117	200	Varn. Cambric	Lead & Armor
Steering Gear	2	50	1	0.3148	203 ✓	456	560	"	" "
After Capstan	1	50	1	0.1659	184 ✓	299	500	"	" "
Anchor Windlass	1	70	1	0.2745	257 ✓	417	700	"	" "
Cargo Winches	20	50	1	0.1659	184 ✓	299	60	"	" "
Slipper	1	7 1/2	1	0.0130	28.7 ✓	41	28	"	" "
Lathe	1	7 1/2	1	0.0130	28.7 ✓	41	16	"	" "
Drill Press	1	1	1	0.0051	4.2 ✓	22	46	"	" "
Grinder	1	2	1	0.0051	8.3 ✓	22	20	"	" "
M.D. Separator	2	3	1	0.0082	12.3 ✓	30	80	"	" "
" " Pump	2	2	1	0.0082	8.3 ✓	30	80	"	" "
F.O. Transfer	1	40	1	0.1318	147 ✓	185	110	"	" "
Lub. Oil Pump	3	75	1	0.1969	275 ✓	333	140	"	" "
Main Air Compressor	2	90	1	0.2745	330 ✓	417	100	"	" "
Salt Water Circ. Pump	3	50	1	0.1318	184 ✓	256	140	"	" "
Bilge Pump	1	15	1	0.0414	58 ✓	88	130	"	" "
Ballast Pump	1	15	1	0.0414	58 ✓	88	120	"	" "
Air Priming Pump	1	5	1	0.0130	20 ✓	41	30	"	" "
Lub. Oil Separator	2	3	1	0.0082	12.3 ✓	30	150	"	" "
" " " Pump	2	2	1	0.0082	8.3 ✓	30	150	"	" "
F.W. Circ. Pump	3	50	1	0.1318	184 ✓	256	130	"	" "
Fire Pump	1	50	1	0.1318	184 ✓	256	60	"	" "
Fire & Sanitary Pump	1	50	1	0.1318	184 ✓	256	40	"	" "
P. D. Booster Pump	2	2	1	0.0032	8.6 ✓	13	120	"	" "
Wash Water Pump	2	7 1/2	1	0.0130	30 ✓	41	150	"	" "
Drinking Water Pump	2	1 1/2	1	0.0032	2.4 ✓	13	140	"	" "
Sanitary Pump	1	7 1/2	1	0.0130	30 ✓	41	50	"	" "
Blower	11	1/20	1	0.0032	0.36 ✓	13	150	R.C.	" "
"	1	1/10	1	0.0032	0.50 ✓	13	130	R.C.	" "
"	1	1/7	1	0.0032	0.70 ✓	13	100	R.C.	" "
"	3	1/4	1	0.0032	1.4 ✓	13	120	R.C.	" "
"	2	1/3	1	0.0032	1.65 ✓	13	150	R.C.	" "
"	4	1/2	1	0.0032	2.3 ✓	13	158	R.C.	" "
"	8	3/4	1	0.0032	3.5 ✓	13	180	R.C.	" "
"	2	1	1	0.0061	4.3 ✓	22	136	V.C.	" "
"	1	1.4	1	0.0051	6.3 ✓	22	84	"	" "

The foregoing is a correct description.

Electrical Contractors.

Date _____

COMPASSES.

Have the compasses been adjusted under working conditions..... Yes

Yes.

...Builder's Signature.

Date _____

Have the foregoing descriptions and schedules been verified and found correct.....Yes

Yes

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

If so, state name of vessel.

Plans. Are approved plans forwarded herewith.....Yes.....If not, state date of approval.

Yes

If not, state date of approval

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

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

The electrical equipment of this vessel was installed to the requirements of the War Shipping Administration when built as a freighter. During the war the vessel was converted to a naval escort and operated as such until the end of the war. During the present reconversion the original electrical installation has been restored and is now in accordance with the original plans. The result is that the vessel has been examined throughout all generators, switchboards and wiring throughout the vessel and the electrical installation is found to be satisfactory and in the opinion of the undersigned all in accordance with this society.

Noted ent 20/7/49

Total Capacity of Generators..... Kilowatts.

The amount of Fee ~~X~~ \$350.00

When applied for,

31st Mar. 1949

Travelling Expenses (if any) £

19

Surveyor to Lloyd's Register of Shipping.

Committee's Minute..... NEW YORK MAY 25 1949

Assigned

Elec. light