

Rpt. 18

DISCLOSED SECTION

WRECK SECTION

DISCLOSED SECTION

Date of writing Report

Received London

Port

No.

Survey held at

No. of Visits

First Date

Last Date

# REPORT ON REFRIGERATED CARGO INSTALLATION SURVEYS

No. in R.B.

53993

Name of Ship

M.S. BERLIN (18600)

Class notation as shown in Register Book or as amended in Supplement

LLOYD'S RMC RS 1.60

SRMC 1.58 (with notation)

Total capacity of refrigerated cargo space

cu.ft.

Total No. of independently refrigerated chambers

Last Report No. (to be filled in at Head Office)

4609

Port

BMN.

A (state whether Intermediate, Biennial, Running and/or Special Survey)

Survey has now been

held in accordance with the Requirements of the Rules. The items examined are detailed on the back of the Report; all were found or placed in good order unless otherwise stated.

PARTICULARS OF DEFECTS AND REPAIRS, ALTERATIONS ETC. (The reason for repairs must be stated)

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done

Has an Interim Certificate been placed on board and a copy forwarded herewith?

R.S. cases. Has the Survey Book on board been filled in and signed by the Surveyor?

RECOMMENDATION AS TO CLASS. Where special conditions of class are imposed, amended or deleted, they must be stated here and on the Interim certificate. State clearly what alterations to the particulars in the Register Book are necessary consequent upon this Survey

Recommend this installation remain as classed with fresh record of

Date of Committee

FRIDAY 10 MAR 1967

Minute

Write down

Some class withdrawn

Surveyor to Lloyd's Register of Shipping.



If certificate is required state where to be sent

**DETAILS OF SURVEY NOW HELD**

The surveys are to be carried out in accordance with the relevant requirements of Chapter N of the Rules. The items enumerated below do not quote the Rules in full. The chambers examined are to be clearly identified by position. The different components (machines, condensers, cooling pumps, etc.) of the plant are to be identified by the relative position of the other similar components, and not solely by numbers. The items examined and found or placed in good condition are to be described as "good"; where repairs are considered necessary but have not been carried out the item is to be marked thus "†" and the defect and action recommended described under "Particulars of defects and repairs."

- 1 Machinery under working conditions
- 2 Log book
- 3 Cargo chambers; including (where applicable) tank and tunnel top insulation tested, air ducts, air cooler casings, insulation linings etc., test holes, where made, effectively closed, floor coverings, insulated hatch covers or hatch plugs and supports, doors and their frames, air refreshing closing appliances, bilge and manhole plugs, thermometers, thermometer tubes, their connections and fastenings, bilges, suction pipes, suction roses, sounding pipes, scuppers and scupper non-return valves, cooling grids, air cooler coils, cooler trays and fans. (State which chambers. See notes above.)
- 4 Brine or water cooling grids and/or coils tested (state pressure)
- 5 Insulation of brine or other refrigerant piping outside chambers
- 6 Electric motors control gear and cables and their insulation resistance measured
- 7 Generating plant supplying electric power (generally examined)
- 8 Primary refrigerant gas and liquid pipes, separators, receivers, driers, filters, condenser and evaporator coil terminals or pressure shells and other pressure parts externally
- 9 Refrigerating plant spare gear
- 10 Thermometers tested for accuracy
- 11 Tubes and tubeplates of "shell-and-tube" type gas condensers. (State which ones. See notes above.)
- 12 Refrigerating machines opened up. (State which ones. See note above.)
- 13 Steam or I.C. engines driving refrigerating machinery opened up. (State which ones. See notes above.)
- 14 Steam condensers (exclusive to refrigerating plant). (State which ones, and if tested.)
- 15 Gas condenser cooling pumps opened up. (State which ones. See notes above.)
- 16 Brine circulating pumps opened up. (State which ones. See notes above.)
- 17 Steam jet vacuum refrigerating plants providing chamber cooling medium (state which ones) including flash chambers and water spray arrangements, thermo compressor steam chambers and nozzles, condensers (state if tested), cooled water circulating pumps, condenser cooling water pumps, condensate extraction pumps, and air pumps or ejectors
- 18 Air compressors (exclusive to machinery driving refrigerating plant) opened up, and air receivers for same. (If tested state pressure)
- 19 Pressure relief devices throughout refrigerating plant
- 20 Steam jet vacuum refrigerating plant for sub-cooling primary refrigerant liquid (state which ones), including flash chambers and water spray arrangements, thermo compressor steam chambers and nozzles, condensers (state if tested), cooled water circulating pumps (where applicable), condenser cooling water pumps, condensate extraction pumps, and air pumps or ejectors
- 21 Insulation stripped from pipes carrying refrigerating medium (state at which point). (Where the pipes are exposed to atmospheric conditions state whether the seal has been made good.)
- 22 Insulation, insulation linings, grounds, hangers and fixtures supporting insulation, grids, meat rails, etc., on overhead and vertical surfaces with sufficient air trunking and insulation and lining stripped. (State in which chambers, where, and also whether the seal of the air trunks and insulation lining has been made good.)
- 23 Insulation, grounds and inner insulation lining of tank tops, with sufficient insulation and lining stripped. (State in which holds and where.)
- 24 Coils of "coil-in-casing" type gas condensers (state whether coils drawn or examined through openings in casings) tested. (State which ones and pressure.)
- 25 Coils of "coil-in-casing" type evaporators (brine coolers), (state whether coils drawn or examined through openings in casings) tested. (State which ones and pressure.)
- 26 Gas condensers "shell-and-tube" or "double pipe" type with end covers removed tested. (State which ones and pressure.)
- 27 Gas evaporators (brine coolers) of "shell-and-tube" type with end covers removed tested. (State which ones and pressure.)
- 28 Primary refrigerant liquid sub-cooling heat exchangers of "shell-and-tube" or "double pipe" type tested. (State pressure.)
- 29 Other types of heat exchangers for sub-cooling liquid refrigerant using brine or water tested. (Give particulars and pressure.)
- 30 Primary refrigerant liquid sub-cooling coils tested. (State which ones and pressure.)
- 31 Primary refrigerant chamber grids or air cooler coils tested. (State pressure. If not all state which.)
- 32 Sea connections opened up
- 33 Steam pipes over 3 inches bore tested. (Six-year intervals.)

LEAVE THIS SPACE BLANK

Items 1 to 17 Biennial, Intermediate and R.S. Surveys  
Items 18 to 32 Special Surveys

BERLIN (18600 tons)	
Gross Tonnage K. BREMEN	
No. of Units	
COMPRESSORS	INST
th 3.52	6
rd. 10.52	1
ft. 4.53	
nd 10.53	1
F. 3/54	
A. 3/54	
both 10/54	
A. 12/54	
F. 12/55	
A. 12/56	
F. 1/58	
A. 1/59	
F. 1/60	
No. and Position	
No. and position	
Port Inner	
" Outer	
Centre	
Stbd. Inner	
" Outer	

Survey Fee — £ s. d.  
 Travelling expenses (if chargeable) £ s. d.  
 Date when Account rendered

LR-FAF-TR10-47 1/2

N. N. BERLIN

BERLIN (18600 tons)	Lloyd's RMC to maintain temp. 21° F. with sea temp. 85° F. max. 11/25	2 J. & E. Hall Ltd. 2-2 Cyl. DA SS Compressors 2 1/2" x 7" x 126 rpm 2-C in C Condensers 2-C in C Evaporators	58 Carbon Dioxide 1924	2 Brine Slab cork	12,008	2 Cement
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Gross Tonnage 18600 19106 Norddeutscher Lloyd Next S.S. of Hull and Machinery due 1.62  
 SRM. BERGEMEN OWN: Deutscher - Amerika Linie GmbH. SRMC 1.54

NO. OF UNITS		DATES OF EXAMINATION OF PARTS							REMARKS
COMPRESSORS	INSULATION	ELECTRICAL	GENERATORS	BRINE PUMP	CIRC. PUMP	BRINE PIPES TEST	EVAPORATORS AND CONDENSERS		
Both 3.52	6.52	6.52	Leaning 7.52 P. Inner 6.52 Stbd. Inner 7.52	3.52	3.52	6.52	Both Evaps. & Cond. 6.52	All rev. of SRMC for re-clas. 6.52. <u>SRMC = SRMC 6.52</u>	
Outd. 10.52	10.52	10.52	P. Outd. 10.52	July 10.52	A. In. 10.52			R.S. 10.52.	
Aft. 4.53	4.53	4.53		Out 4.53	Stbd. 4.53	4.53		R.S. 4.53	
Ind. 10.53	10.53	10.53	8th outd. 10.53	Intermediate 10.53	Outd. 10.53			R.S. 10.53	
F. 3/54	3/54	3/54		C. 3/54	A. In. 3/54	3/54		R.S. 3/54	
Both 10/54	10/54	10/54		In. C. 10/54	PTA In. 10/54	10/54	Both com. tested 10/54 F. evap. test 10/54	Sea com. 10/54 R.S. 10/54 <u>SRMC 10/54</u>	
A. 12/54							Aft. Cond. & evap. tested Thermos Brine leads		
F. 12/55	12/55	12/55		C. 12/55	P. 12/55	12/55	Thermos. 12/55	R.S. 12/55	
A. 12/56	12/56	12/56		C. 12/56	F. 12/56	12/56		R.S. 12/56	
F. 1/58	1/58	1/58		In. out. 3/57 " " 1/58	PT 1/58 SO) 1/58	1/58	Cond. re-ported, Insulated pipes Thermos	Sea com. 1/58 R.S. 1/58 SRMC 1/58	
A. 1/59	1/59	1/59		C. 1/59	PTI (11) 1/59	1/59		R.S. 1/59	
F. 1/60	1/60	1/60		In. C. 1/60	P. 1/60	1/60	Thermos 1/59 Aft. Cond. coming removed 3/59 Thermos 1/60	R.S. 1/60	

No. and Position of Compressors

No. and position of Electric Generators  
 3 - 3 cyl Oil eng.  
 2 - 6 cyl. Oil "  
 Port Inner (3 cyl)  
 " Outer (6 cyl)  
 Centre (3 cyl)  
 Stbd. Inner (3 cyl)  
 " Outer (6 cyl)  
 (also 3-4 cyl. compressor engines.)

~~A/B Svenska Amerika Linien, Gøteborg~~

~~Spanen Amerika linie~~

D Norddeutscher Lloyd, Bremen.