

B.C.

(Received at London Office 10 NOV 1949)

No. 44651

REPORT OF SURVEY FOR REPAIRS, &c.

Date of writing Report 26.9.1949 When handed in at Local Office 1949 Port of Glasgow
No. in Reg. Book 23430 Survey held at Grangemouth Date, First Survey 23.9.48 Last Survey 19.9.1949
on the Wood, Iron or Steel covered Steamship "RHINELAND" ex "SCHWAN" (No. of Visits 62)

TONNAGE: Built at Hamburg By whom Howaldtswerke A.G. YEAR 1938 MONTH
GROSS 1223 Owners Currie Line Ltd. Owners' Address
UNDER DK. 860 Managers
NET 532 Port belonging to Leith

Surveyed Afloat or in Dry Dock? Both Name of Dock Canon Dry Dock. Destined Voyage

Cell DBor DBa feet; uE & B. feet; f feet
Total capacity tons. FPT tons; APT tons; MT feet tons.
Only alterations in the existing records of tanks should be inserted. See First Entry.

N.B.—All alterations in the existing records should be underlined.

Last Report, No. Port

Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules and items remaining to complete the Surveys should be summarised. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be summarised in the form shown below. Whenever the replacement of Anchors or Chains is reported the particulars should be clearly stated in the space provided on the back of this form. State also the dates and initials of any letters respecting this case.

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose and to whom and why they were declined

Society's Freeboard (if assigned) as painted on Ship and now verified ft. 2 ins.

Was a damage report made by anyone else? if so, by whom?

REPAIRS, OR EXAMINATION AS PER RULE, FOR Classification and Damage.

New Done for Classification: Ship placed in dry dock. 23.9.48 - 4.10.48. Preliminary survey, Rudder removed for repairs. Demolition work afloat. 10.48 - 11.48. Redocked. 16.11.48.

Bottom and side Shell cleaned examined, re-coated and in good condition after repairs. All Double bottom tanks, Peaks, Peak spaces, Holds, bilges, Bunkers,

Engine and Boiler Spaces, Tween Decks, Steft Tunnel, cleaned, sealed and examined throughout; all timbers and pipe casings removed. Mine detecting equipment, Storerooms,

accommodations etc in lower holds removed and Tank top examined and in good condition after minor repairs. Decks, casings, coamings ventilators air and sounding pipes

hatches, hatchways and closing appliances examined and placed in good condition.

Steering gear (Electric) overhauled and placed in good condition. Aux. Steering Gear (Hand)

SUMMARY OF DAMAGE REPAIRS :-	Shell Plates.	Frames.	R. Frames.	Floors and Bracket Floors	Beams.	Inner Bottom Plates.	Dk. Plates.	Other Items :-
Renewed ...	17.	-	-	2	-	-	-	
Removed and Fair'd or Repaired	13.	17.	-	5	-	1	2	Shelter Deck Partially re-plated aft of No 3 Hatch.
Fair'd or Repaired in place ...	9.	6	-	16	2	-	-	

PRESENT CONDITION OF THE	Bulkheads	Engine Room Skylights	Copper, or Y.M.
Plating	Good.	Good.	(State if on Felt.)
Planking of Decks	Good.	Coal Bunkers, Openings, Covers, &c.	When fitted, Month Year
Coamings	Good.	Oil Bunkers	
Stems & Fastenings	Good.	Scuppers	Boats Good - New.
Side Plating	Good.	Cargo Hatchways	Masts, Yards, &c. Good - New.
" in way of sidelights	Good.	Hatches	Condition, how ascertained At. Construction
Frames	Good.	Planking	(State if wedges removed.)
Longitudinals	-	Caulking	Equipment letter
Transverses	-	Treenails	Anchors, No. of 3 Bower 1 Stream.
Stems	Good.	Breasthooks & Stemson	Cables (State if now ranged) Yes.
Stems	Good.	Transoms, Pointers & Crutches	" length 242 mean diamr. 1 1/2"
Stems	Good.	Timbers of Frame at openings	" Rule length 240 size 1 1/2"
Bottom Plating	Good.	" " at other places	Chain Locker Good.
the Tanks been examined internally?	Yes.	Stringers, Clamps & Shelves	Hawsers & Warps Good - New.
the Tanks been tested?	Yes.	Salting	Standing and Running Rigging Good - New.
		State if examined.	Sails

General Observations, Opinion as to Class, Recommendation, &c.:-

State clearly whether any and, if so, what alteration is suggested to be made in the existing classification and notification of the vessel in the Register Book consequent upon this survey, thus, for example:— "to remain as classed in the Register Book without fresh record of Survey," "to remain as classed and to have record of survey, 1,38," or "to remain as classed and to have record of survey, 1,38, and the notations of ss No. 1-38."

Ship, having complied with the requirements of the Periodical Special Survey Type 3 and with requirements of the letters and approved plans for conversion, is in a satisfactory condition, and eligible in my opinion to be submitted for class "B.S." (Stiffened for navigation among ice), the notation S.S. Gmk. 9.49. and record of dry docking 8.49 and A.S. 9.49.

Fee (per Section 29) £ 96 : - : - Fees applied for, 9 NOV 1949
Damage or Repair Fee (if any) £ 73 : 10 : -
Conversion Repair etc. £ 66 : 10 : -
Selling & other charges £ 44 : - : -
Surveyor's Fee (if any) 3 : 3 : -
Committee's Minute 9 NOV 1949

Class:- BS 8.49 MBS 9.49
(See strengthening) S.S. Gmk. 9.49
A.S. 9.49 S. 1.49

re-aligned, operated and in good and efficient condition. Windlass examined overhauled and in good condition. Hand pumps renewed operated in good condition. Pumping arrangements operated & satisfactory. Chain locker cleaned and examined and in satisfactory condition. Masts and rigging renewed this time: see approved plan. Anchors and cables ranged in dock, three lengths cable supplied. For full equipment see 1st entry report. One stream anchor supplied. - Detailed examination of ship as follows:-

No 1 B. Tank examined internally. For repairs see Damage and in good condition. P.S.

No 2 B. Tank. Ditto. P.S. Good.

No 2A B. (Fresh Water) P.S. Good.

No 3 B. (Dry Tank) P.S. Good.

No 4 B. (Feed Water) P.S. Good.

No 5 B. P.S. Good. For repairs see Damage.

Fore Peak examined internally - Good.

Aft Peak do. Good.

Chain Locker do. Good.

Lapport do. Good.

Peaks and double bottom tanks tested satisfactorily under water pressure.

No 1 Hold and bilges examined and in

good condition.

No 2 Hold. Ditto.

No 3 Hold. Ditto (Reconstructed this time, temporary. In Repair see Damage. Bulkhead Removed - see app. Plan).

When Anchors or Cables are supplied, the particulars are to be reported in the following form:-

ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX STOCK.			WEIGHT OF STOCK.			TEST PER CERTIFICATE.			WEIGHT REQUIRED BY RULE.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.		
	1st Bower															
	2nd "															
	3rd "															
	Collective Weight															
22876.	Stream.....	10	1	14	1	3	16	12	6	2	7	8	2	Admiralty Plan Jaw Stocked	Best & Son	Cardiff, S. BOLTON.
	Kedge															

* When a bower anchor is supplied it must be clearly stated whether it is a 1st, 2nd, or 3rd bower.

CHAIN CABLES.

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and size per rule.		Description.	Makers of Cables.	Where and when tested and Superintendent.
	Length.	Diam.	Statio- nary.	Breaking.	Supplied.	Per Rule.	Length.	Diam.			
	Fathoms.	Ins.	Tons.	Tons.	Cwts. qrs. lbs.	Cwts. qrs. lbs.	Fathoms.	Ins.			
18369	15 1/2	1 1/2	51.25	71.5	22.3.18	-	-	1 1/2	S.L.	-	Charter. S. BOLTON.
18370	15 1/2	1 1/2	51.25	71.5	22.3.6	-	-	1 1/2	S.L.	-	Charter. S. BOLTON.
18371	15 1/2	1 1/2	51.25	71.5	22.3.10	-	-	1 1/2	S.L.	-	Charter. S. BOLTON.
	75	3 1/2					75	3 1/2	6/24.	BRITISH ROPE.	

No 4 Hold (Reconstructed this time from Refrig. For repairs see Damage. Ditto. Compartment. See approved Plan).

Shaft, well and Tunnel in good condition.

Engine Room. - In good condition.

Boiler Room. - In good condition.

Port and Starboard Wing Bunkers (Coal). Good.

Engine Room & Boiler Room & Bunker Bilges. Good.

Tween Deck Bunkers P.S. - Good.

See Wear and Tear.

Tween Deck Cross Bunker. re-constructed, forward bulkhead moved 5 spaces forward.

S.S. Rhineland.

Tween deck cross bunker (contd). Strong beam and web frame P.S. fitted in lieu. and coal plate re-constructed in accordance with plan. see 1st entry.

Saddle Back Coal Shute to Tween deck bunkers. Good. See Wear and Tear.

Nos 1 & 2. 13 Shelter Tween Decks. Good. (Including Tween Decks P.S.).

Tween Deck Casings. - Good (ex Bunkers).

No 3 Hatchway to Shelter & Upper Deck re-constructed - see app. Plan.

Shelter Deck (Weather Deck) Good.

See Wear and Tear.

Shelter Deck Casings. - Good.

Superimposed Forecastle. - Good.

Air and Sounding Pipes. - Good.

Windlass. Steering Gear, Pumping, all in good condition and operated satisfactorily. Anchors and Cables as per 1st entry. Equipment of hawsers, warps and towing satisfactory. Hawse Pipes Satisfactory.

Renewal load line survey carried out concurrently with the foregoing, and all plates, fastenings, cleets, battens, wedges, locking bars, beamings, Dead Pugs & Canvas Covers, Scuppers and Discharge Valves etc, etc, renewed or replaced in good condition.

Tot Sheet for Shell Drillings enclosed.

Wear and Tear Repairs:

Tween Deck Bunkers. (Sloped Casing in way of Boiler Room) wasted part and started.

and defective plating and stiffeners cropped out and renewed (approx. 50%).

Saddle Back Coal Shute to Tween Deck Bunkers. aft. wasted - reduction average 15-20 - & doubled throughout from top to bottom 32 plates and welded.

Shelter Deck Plating forward of Bridge House, fractured locally. Starboard side, and part cropped out and renewed (Stringer plate).

Port side Stringer fractured at welded butt. - Released and re-welded.

This stringer plate P.S. thereafter fitted with a welded doubler extending from the bridge front for one third the length of No 2 Hatch. 36" wide x 40"

Shell Plating. Port side aft. Bunkers from aft.

No 5 Shelter Deck Shute. set in. - Cropped.

No 6 " " " " " - Renewed, and extended aft.

No 4 " " " " " locally. - Fitted in place.

1st strake below in way of above.

Shell Frames. Nos 15 & 16 joined in place. Beams and knees ditto.

Shell Plating Starboard. aft.

Nos 4 & 5. Shelter Deck Shute. set in locally. All joined in place.

Conversion Items. Strong beam at frame 60 in Tween Decks (Bd moved fwd 5 spaces) original had cropped 9' below deck 79' 3 1/2" 40 BA fitted. Stiffeners & logs to

from tripping brackets viz.

Web Frame P.S. in way of above. viz.

Original Bd. 60 moved to fr. 65. riveted to existing beam, new coaming plate fitted, new wing plates fitted and welded brackets from stiffeners to deck.

S.S. Rhineland.

Conversion items (contd). Nos. 3 Hatches Shelter and upper decks together with tonnage opening and tonnage spare bulkheads in tween decks removed at this time and No 3 Hatch on the Shelter Deck and Nos 3 & 4 in the 'tween decks re-constructed in accordance with approved plan


New Tonnage opening on Shelter Deck and tonnage bulkhead in 'tween decks.

Gun Platforms, Aux. Machinery Settings, Ballast in Holds, Deck Erections, De-gaussing, all all items in connection with ship's war service, - removed at this time.

Permanent Repair now done for Damage: Causes unknown but stated to have been sustained while on war service with the German Government.

Shell Damage Starboard Side.

Plates etc. numbered as per plan.

Kel Plate	No 1.	Buckled.	Renewed as a fabricated plate.	
" "	No 2.	Buckled slightly.	Faired in place.	
" "	No 5	" "	" " "	
" "	No 8.	Buckled.	Renewed.	
"A" Strake	No 1	Buckled.	Cropped and part renewed.	
" "	No 2.	"	Renewed.	
" "	No 10	Buckled slightly.	Faired in place. E.S.D. opening fitted insert & doubles inside.	
" "	No 11	Buckled.	Removed faired and refitted.	
" "	No 14	Buckled slightly.	Faired in place.	
" "	No 15	" "	" " "	
"B" Strake	No 6	Buckled.	Removed faired and refitted.	
" "	No 7	"	Renewed.	
" "	No 8	"	Renewed.	
"C" Strake	No 4	"	Removed faired and refitted	
" "	No 5	"	" " "	
" "	No 6	"	" " "	
"E" Strake	No 1	"	Renewed.	
" "	No 3	"	Removed faired and refitted	
" "	No 5	"	" " "	
" "	No 12	"	" " "	
"F" Strake	No 1	Buckled	Renewed.	
" "	No 2	"	"	
" "	No 3	"	Removed faired and refitted.	
" "	No 4	"	" " "	
" "	No 5	Indented slightly.	Released and faired.	
" "	No 6	" "	" " "	

Shell Plating. Port Side.

"A" Strake	No 1	Buckled.	Cropped and part renewed.	
	No 2.	"	Renewed.	
	No 9	Buckled slightly.	Faired in place	
	No 11	" "	" " "	
"B" Strake	No 6	Buckled	Renewed	insert at base and double outside.
	No 7	"	Renewed and extended into "B" No 8	
	No 8.	" at end.	Cropped.	
"C" Strake	No 5	Set in	Removed faired & refitted	
	No 6.	"	"	
	Nos 9 & 10	Buckled	Renewed.	

S.S. Rhineland:

Shell Plating Port Side (contd).

"E" Strake No 2. Buckled.

Renewed.

"F" Strake No 2

Removed fairer and refitted.

No 3

" " "

Internal:Centre Girders in way of Keel nos
set up over 4 frames.Girders cropped and
part renewed. (welded).

One floor buckled Port

Cropped and part renewed.

" " " Port

Fairer in place.

Three floors " Starboard

Fairer in place.

Floors Aft. Nos 7 & 8. (Side to Side) Buckled.

Renewed.

No 9 " " "

Fairer in place

No 10 " " "

Renewed.

No 12 " " "

Fairer in place.

No 13 " " "

Cropped and part renewed.

Nos 15, 16, 17 Starboard. Buckled slightly

Fairer in place.

Nos 23 & 29 " " "

" " " and stiffened.

Nos. 14, 15, 16, 17. Port " " "

" " " " "

Treason Floor. A & B. Port. Buckled.

Cropped & part renewed

A. Starboard "

Fairer in place.

B " "

Cropped and part renewed.

Shell Frames Starboard. Numbered as plan.

No 7. Buckled.

Cropped and part renewed.

Nos 8 & 9 "

" fairer and refitted.

Nos 10, 11, 12, 13. "

" and part renewed.

Nos 17 & 18, 19, 21 "

Fairer in place.

Nos 25, 26, 27. "

Cropped and part renewed.

Shell Frames Port.

Nos 7, 8, 9, 10. Buckled

Cropped and part renewed.

Nos 11, 12, 13. Buckled.

Cropped fairer and refitted.

Nos 18, 21. Buckled slightly.

Fairer in place.

All minor indents in shell plating fairer in place. Sundry minor fractures caused by shrapnel, cut out, welded insert fitted and doubled at back.

All shell and deck alterations and/or repairs satisfactorily have tested on completion.

Holds, bulkheads, sealed, cleaned & painted out. Double bottom Tanks cleaned and re-coated. Tank Tops sealed, cleaned, and coated with composition.

2 1/2" White Pine Ceiling on Tank Tops throughout on 1 1/2" wood beams.

Ship's Side Sparring fitted in Holds & Tween Decks. 6" x 2"

Shell plating "F & G" Strakes thoroughly chipped, sealed and re-coated.

New hand pump fitted forward for cable locker and peak space.

Hand pumps operated satisfactorily. Main Pumping satisfactory.

Anchors & Cables and Steering arrangements carried out during sea trials.

satisfactorily. Complete outfit of Hatch Covers, Tarpsaulins, battens,

wedges, wood plugs and canvas covers for Ventilators and air pipes, & Air

pipes and Ventilator coamings all renewed at this time.

Masts and Rigging all fitted new at this time.

S.S. Rhineland.

Bulwarks fitted this time in forward and after wells in line with Bridge plating (1st landing above Shelter Deck Sheer Strake) and adequately stiffened and stayed.

All Double Bottom Tanks, Fore and Aft Peaks, and Fresh Water Tanks in Tween Decks, satisfactorily water pressure tested.

Shell plating drilled for thickness amidships only. See 1st Entry. Rudder removed ashore at initial docking. Upper stock skimmed and brass liners shrunk on. Lower bearing skimmed and brass liners shrunk on. - Heel of Stern Frame found set slightly to port and aft of centre of Rudder stock between the upper and heel bearings.

Bottom bearing centre extended to port side, and starboard side of bearing made up with liners. Sufficient metal being available on the port side of the heel bearing to allow this. New brass bearing bush fitted at heel bearing. Eccentric Brass bearing bush fitted at upper (steady bearing).

Rudder re-fitted alignment checked and found satisfactory and Steering trials at sea satisfactory. (Rudder re-fitted at final docking 3-8-49
10-8-49.)

Register Book. Column 9. to delete port of "Kiel" and substitute, "HAMBURG."

R. A. Hunter