

## STEEL STEAMER or MOTORSHIP WRECK

14 DEC 1936

State if Report has been sent on the Freeboard of the Vessel NO

SECTION

State if Report is sent on the Machinery of the Vessel YESNo. 818Date of completion of report 8th DECEMBER 1936 Port of BREMENNo. 1854Survey held at WEIERMÜNDE Date First Survey 23rd JANUARY 36 Last Survey 24th NOVEMBER 1936On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) STEEL SC. STEAM TRAWLER "NORTHERN DUKE" (LO 169) MACHINERY FITTED AFT.State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) FULL SCANTLING State Type of Erections FORECASTLETONNAGE under Tonnage Deck... 530.57CLASS \* 100 A1  
STEAM TRAWLERState if with freeboard as condition of Class NOBuilt at WEIERMÜNDEDo. of space or spaces between Tonnage Dk. and Upper Dk. ✓Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (4u) L 184.4Launched 31st AUG. 1936 Yard No. 559Breadth (greatest moulded) B 28.0Builders DESCHIMAG WERK CEEBECKTotal ✓Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 16.5Owners MAC LINE LTD.Gross Tonnage 654.291st Longitudinal Number (L x D) = 3043Managers E.D.W. LAWFORD.Register Tonnage 243.022nd Numeral L x (B + D) = 8164

(Where necessary to be entered in Reg. Book.)

Residence FLEETWOOD.

## REGISTERED DIMENSIONS.

Length 188.1Framing Depth "d," at middle of length. See Sec. 3 (1d) 26.3Breadth 28.15Proportions—Depth to Length—Uppermost continuous deck to top of keel 2:1Depth 15.5Do. Long Bridge to top of keel ✓Draught Moulded ✓Port of Registry LONDON.

If surveyed while building, afloat, or in dry dock

WHILE BUILDING AND AFLOAT.

## FRAMES, DOUBLE BOTTOM AND BEAMS.

	IN SHIP.	Any Departure from Approved Plans to be Noted.		IN SHIP.	Any Departure from Approved Plans to be Noted.
<b>FRAMES, Spacing amidships</b> <u>570</u>			<b>Bracket Floors, Frame</b> <u>130 75 8</u>		
" " from $\frac{3}{8}$ length to Collision bulkhead <u>545</u>			" " Reversed Frame <u>115 65 8</u>		
" " in peaks <u>FORWARD 5 L 470</u>			" " Vertical Struts <u>160 65 9</u>		
<b>SIDE FRAMING.</b> <u>IN BUNKERS, E. &amp; B. ROOM 150 75 9</u>			<b>Centre Girder, depth and thickness amidships</b> <u>910 * 8</u>		
<u>IN FISH ROOM 150 75 9</u>			" " top Angles <u>NONE FLANGED 70</u>		
<b>Frame Amidships, Angle,</b> <u>IN PEAKS AND TANKS 130 75 10-9</u>			" " bottom Angles <u>NONE WELDED ON KEEL</u>		
" " Extends up to <u>UPPER DECK</u>			" " <u>ANGLES TO FLOORS 75 75 7.5</u>		
<b>Reversed Frame Amidships, Angle</b> <u>✓</u>			<b>Side Girders, No. each side and thickness</b> <u>NONE</u>		
" " Extends up to <u>✓</u>			<b>Margin Plate depth (excl. of flange) and thickness</b> <u>650 * 7.5</u>		
<b>Depth of Framing Girder</b> <u>150 ~ 130</u>			" " Vertical Angle to Tank side Bracket abaft $\frac{1}{4}$ len. from stem <u>75 75 7.5</u>		
<b>Frames in Uppermost Continuous 'tween Decks, Angle, [ or ]</b> <u>✓</u>			" " Vertical Angle to Tank side Bracket forward $\frac{1}{4}$ len. from stem <u>75 75 7.5</u>		
" " <b>Second 'tween Decks, Angle, [ or ]</b> <u>✓</u>			" " Gussets, spacing and scantling abaft $\frac{1}{4}$ len. from stem <u>NONE</u>		
" " <b>Third " " " "</b> <u>✓</u>			" " Gussets, spacing and scantling forward $\frac{1}{4}$ len. from stem <u>NONE</u>		
<b>Framing in Peaks, Angle</b> <u>130 75 10-9</u>			<b>Tank Side Brackets, height above base line at toe of Frame and thickness</b> <u>1200</u>		
<b>Diameter and Spacing of Rivets through Frame and Shell Plating amidships</b> <u>19φ - 7d</u>			<b>INNER BOTTOM PLATING.</b>		
<b>State if Frame Joggled</b> <u>NO</u>			Breadth and thickness of Middle Line Strake <u>1450 * 7.5</u>		
<b>PANTING ARRANGEMENTS (Sec. 7), state system and particulars</b> <u>✓</u>			Thickness of remainder in Holds <u>7.5</u>		
<b>STRENGTHENING OF BOTTOM FORWARD.</b> State Particulars <u>FRAME SPACING 4" LESS THAN AMIDSHIPS. 3 BOTTOM STRAKES OF 13.5" THICKNESS. SOLID FLOORS ON 14L AND FRAME RIVETS SPACED 5.5" APART.</u>			Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. room and framing in Bunkers and Boiler Room? <u>YES</u>		
<b>SINGLE BOTTOM.</b>			<b>BEAMS.</b> <u>IN BUNKER 130 75 10</u>		
<b>Floors, Depth and thickness at mid-line in</b> <u>IN BUNKER &amp; BOILER ROOM 520 * 10</u>			<u>IN FISH ROOM 165 75 9.5</u>		
Height of Brackets at side above base line at toe of frame <u>520</u>			<u>IN ENGINE &amp; BOILER ROOM 130 65 10</u>		
<b>Middle Line Keelson, on Floors, Angle, [ or ]</b> <u>320 * 100 * 14 * 16.5</u>			<b>Uppermost Continuous Deck, amidships</b> <u>IN ACCOMMODATIONS 140 65 9</u>		
" " Through Plate or Intercoastal Plate <u>✓</u>			" " in way of Bridge, Angle, [ or ] <u>130 65 8</u>		
" " Foundation Plate on Floors <u>✓</u>			Spacing <u>2 FRAME SPACED</u>		
" " Flat Plate Keel Angles <u>✓</u>			<b>Second Deck, amidships, Angle, [ or ]</b> <u>✓</u>		
<b>Side Keelsons, No. each side</b> <u>ONE</u>			Spacing <u>✓</u>		
" " thickness of Intercoastal Plate <u>✓</u>			<b>Third Deck, amidships, Angle, [ or ]</b> <u>✓</u>		
" " Angles <u>SINGLE 130 90 13</u>			Spacing <u>✓</u>		
<b>DOUBLE BOTTOM.</b>			<b>Fourth Deck, amidships, Angle, [ or ]</b> <u>✓</u>		
<b>Solid Floors, thickness and spacing</b> <u>7.5 * 1635</u>			Spacing <u>✓</u>		
" " Are Frame and Reversed Frame joggled? <u>NO</u>			<b>Poop Deck, Angle, [ or ]</b> <u>✓</u>		
<b>Bracket Floors, breadth and thickness at middle line</b> <u>400 * 7.5</u>			Spacing <u>✓</u>		
" " breadth and thickness at margin plate <u>400 * 7.5</u>			<b>Bridge Deck, Angle, [ or ]</b> <u>✓</u>		
			Spacing <u>✓</u>		
			<b>Forecastle Deck, Angle, [ or ]</b> <u>130 65 8</u>		
			Spacing <u>940</u>		



## PILLARS AND DECKS.

		m/m IN SHIP.	Any Departure from Approved Plans to be Noted.			m/m IN SHIP.	Any Departure from Approved Plans to be Noted.
<b>PILLARS, No. of Rows.</b>				Stringer Plate, breadth and thickness in way of Bridge		✓	
Centre Line Bulkhead in Bunker, Ballast & Liver Oil Tanks.				Thickness of Plating abreast Deck openings in way of Bridge		6.5	
" in 'tween Decks, Size and Spacing		60" 70" 7.5" SPACED 1880 AND 2280		Thickness of Plating abreast Deck openings in way of Bridge		✓	
" " " " " "				Thickness of Plating within line of openings		✓	
" " " " " "				If Sheathed, material and thickness		PARTLY WOOD 50"m	
<b>Centre Line Bulkhead. IN BUNKER</b>				<b>Third Deck.</b>			
Stiffeners and Spacing		5" 150 7.5 9 SPACED 1140 APART		Stringer Plate, breadth and thickness		✓	
Plating, thickness of		7.5 - 6.5		If Plated, state thickness		✓	
<b>STRINGERS AND DECKS.</b>				<b>Fourth Deck.</b>			
<b>Uppermost Continuous Deck.</b>				Stringer Plate, breadth and thickness		✓	
Stringer Plate, breadth and thickness		980 x 10		If Plated, state thickness		✓	
" " " " in way of Bridge		✓		<b>Poop Deck.</b>			
" Angle in Wall		7.5 7.5 10		Stringer Plate, breadth and thickness		✓	
Thickness of Plating abreast Deck openings in way of Bridge		7.5		Plating, Sheathing, material and thickness		✓	
Thickness of Plating abreast Deck openings in way of Bridge		✓		<b>Bridge Deck.</b>			
Thickness of Plating within line of openings		7.5 - 6		Stringer Plate, breadth and thickness		✓	
If Sheathed, material and thickness		PITCH PINE 7.5		Plating, Sheathing, material and thickness		✓	
<b>Second Deck.</b>				<b>Forecastle Deck.</b>			
Stringer Plate, breadth and thickness		600 x 7.5		Stringer Plate, breadth and thickness		700 x 7.5	
				Plating, Sheathing, material and thickness		PLATING 8-7 WITHOUT SHEATHING.	

## SHELL PLATING.

SCANTLINGS.					RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?		RIVETS.		RIVETS.	
	Breadth.	Thickness.	Thickness.	Thickness.		SINGLE OR DOUBLE.	RIVETS.	No. of Rows of Rivets.	Diam.	Spacing cr. to cr.	STRAPPED OR LAPPED.
KEEL STRAKE	1010	12.5	13.5	11.5		DOUBLE	19 81-90	THREE	19	66	LAPPED
" DBLG. (if any)	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
BOTTOM PLATING, No. of Strakes T.W.R.	1600	11	13.5	11		DOUBLE	19 81-90	TWO	19	66	LAPPED
BILGE PLATING, No. of Strakes P.W.E.	1630	11	13.5	10		DOUBLE	19 81-90	TWO	19	66	LAPPED
SIDE PLATING, No. of Strakes P.W.E.	1640	11	13.5	10		DOUBLE	19 81-90	TWO	19	66	LAPPED
UPPER DECK, Sheer-strake in Wells P.W.E.	1630	15	10	10		DOUBLE	22 95	THREE	22	77	STRAPPED.
UPPER DECK, Sheer-strake in Bridge	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
STRAKE BELOW Sheer-strake in Wells	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
STRAKE BELOW Sheer-strake in Bridge	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
POOP SIDE PLATING	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
BRIDGE SIDE PLATING	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
FORECASTLE SIDE PLATING	1200	✓	8-7.5	✓		SINGLE	16 75	ONE	16	68	LAPPED

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel	FIVE
Extending to Upper Deck (Sec. 3 c)	THREE
" Deck next below	TWO
As per Rule	YES, AS APPROVED

## STIFFENERS.

	Plating Thickness.	VERTICAL.				HORIZONTAL.			
		Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks	✓	✓	✓	✓	✓	✓	✓	✓	✓
" " Second "	✓	✓	✓	✓	✓	✓	✓	✓	✓
" " Third " IN WAY OF DOUBLE BOTTOM Holds	11 7	5 130x65x9	715	NONE	✓	✓	✓	✓	✓
COLLISION " (in Hold)	8.5-6.5	5 150x75x9	610	TWEENDECK	✓	✓	✓	✓	✓
AFTER PEAK " TOP AND BOTTOM	8-6.5 12	5 100x65x7 5 130x65x9	720 610	TWEENDECK	✓	✓	✓	✓	✓

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar	FORG.	200x40	DORTMUND HOERDER HUTTENVEREIN	
STEM	FORG.	200x40	WERK HÖRDE.	
STERN FRAME { Propeller Post Rudder	CASTG.	AS PER APPROVED PLAN	OTTO SCHNAP & CO. MAGDEBURG-BUCKAU.	
Speed of Vessel		12 KNOTS		
RUDDER—Type		"SEEBECK" STREAMLINE RUDDER		
" A x D		164.3	KLOCKNER WERKE	
" Diam. of head	FORG.	180 φ	A.G. DINABRUCK.	
" Mainpiece at top pintle	✓	✓	✓	
" " heel	✓	✓	✓	
" how constructed		AS PER APPROVED PLAN BY DEICHMAG WERK SEEBECK.		
" double or single plate coupling, vertical or horizontal		DOUBLE PLATES 10"m COUPLING HORIZONTAL		

## STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) OPEN HEARTH PROCESS  
DORTMUND HOERDER HUTTENVEREIN A.G. WERK HÖRDE & WERK DORTMUND; DEUTISCHE ROHRENWERKE A.G. WERK THUNEN  
MÜLHEIM-RAHR; KLOCKNER WERKE A.G. GEORGSMARIENHÜTTE; DILLINGER HUTTENWERKE DILLINGEN-SABE.  
Has the Steel been tested as required by the Rules? YES, BY THE SOCIETY'S SURVEYORS.







GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

the requirements of the Rules by the Society's Surveyors. The materials and workmanship of wood decks and fish room insulation have been surveyed while building and were found to be satisfactory. The anchors & Chain cables, placed on board, have been compared with the Certificate and found in order. The general equipment has been examined and found satisfactory. The windlass, steering gear and watertight bulkhead door have been examined under working condition and found in order.

Attached: 1 Interims Certificate  
5 Forging & Casting Certificates.  
1 Plan of Midship Section as built.

Note: The approved plans of the vessel are retained for the use in connection with sister vessels.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book "CRUISER STERN"

"LLOYD'S A & C.P."

VESSEL IS FITTED WITH "WIRELESS"; "DIRECTION FINDING APPARATUS" & "ECHO SOUNDING APPARATUS."

Particulars of Drop Test of Cast Steel Anchors, viz.:—  
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower HEAD = 8:1:4 - NS 1407 - 11.9.36; SHANK = 3:2:3 - NS 1414 - 11.9.36; ANNEALED  
2nd " " = 9:0:6 - NS 1410 - 11.9.36; " " = 3:2:3 - NS 1412 - 11.9.36. CAST STEEL  
3rd " " ✓ ✓ ✓

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. ✓ ft., Bridge - ft., Forecastle 30.8 ft.  
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

No. and Material of Decks ADK, STL, COMPL. SHEATHED, 3" PITCH PINE.

Official No. ; Signal Letters Is bottom of vessel coated with cement YES if not give particulars of composition ✓

#### PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	✓	✓	Fore peak tank, TWO COMPARTMENTS, TOGETHER	16.35	43.5
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	9.35	8.0
Double bottom, if under Engines only,	✓	✓	Deep tank, aft,	✓	✓
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward,	✓	✓
Double bottom, forward, FEEDWATER & FRESHWATER (3 DOUBLE BOTTOM TANKS)	52.2	66.0	Other tanks, if fitted, 4 LIVER OIL TANKS AFT	11.2	20.0
Total capacity of double bottom		66.0	(If necessary, furnish further information by sketch.)	✓	✓

\* The wells are not to be included in the lengths of the tanks (See Circular No. 1284).

Order for Special Survey No. 60

Date 4<sup>th</sup> DECEMBER 35

Dates of Surveys held while building

JAN. 23, 24, 31; FEBR. 3, 17; JULY 1, 3, 17, 23, 27; AUG. 1, 4, 7, 12, 14, 18, 25, 27, 31; SEPT. 4, 7, 15, 17, 22, 28; OCT. 2, 13, 16, 20; NOV. 10, 14, 17, 20, 24

Total No. of Visits 34