No. 2658

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

Report No. 2959 1022 No. in Register Book 24591

Ship M.V. "ERNA"

Builder ZAANLANDSCHE SCHEEPSB. MJ.

Yard No. 423

134' - 6"

HULL AND EQUIPMENT

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

Report No. 1022 No. in Register Book .....

Received at Head Office 18/4/40

Surveyor's Report on the Construction of the

Single [redacted] Screw M.V. "ERNA"

Surveyor's District Rotterdam.

Builders Zaanlandsche Scheepsb. Mij.

Yard No. 423. Where Built Zaandam.

Owners J. J. Janssen and L. J. Hendriks.

Port of Registry Haarlem Flag Dutch.

Managers —

Manager's Address —

Official No. —

Rig One mast Code Letters P.D.Y.Q.

Scantling Sections approved by Committee 8th May 1939.

To be classed B.5.* Unrestricted Service.

With a Freeboard of 1.05 M.

Date of First Visit 22-6-'39

Date of Last Visit 29-3-'40

Total number of Visits 24

Keel Laid 7-7-'39 Launched 7-3-'40

Date of Build 1940 Date of this Report 2-4-'40.

PARTICULARS.

Registered Dimensions 41.49 x 7.33 x 2.52 M.

Tonnages—

Tons.

Under Tonnage Deck

In ..... 'Tween Decks

In ..... 'Tween Decks

In ..... 'Tween Decks

In Turret

Under Deck Tonnage 206.00.

Suez Canal Tonnage—

Tonnage in Poop

„ R.Q.D.

„ Bridge

„ Forecastle

„ Hatchways

„ Deck Houses

„ Chart Houses

„ Light and Air Spaces

Gross Tonnage 361.18

Deductions—

Crew Space

Engine Room %

Light and Air

Navigation Spaces and Stores

Peak Tanks

Deep Tanks

Net Registered Tonnage 167.01

Date of Expiry of Vessel's B.O.T. Passenger Certificate

13ft 6in

PARTICULARS—*Continued.*

Moulded Dimensions 41.00 x 7.30 x 2.97 M.

Height of Superstructure 1.00 M.

Proportions $\frac{L}{B}$ = 5.62 $\frac{L}{D}$ = 13.8

$\frac{D}{B}$ 0.407 $\frac{L}{D \text{ (to top of Superstructure)}}$ = 10.32

Camber 200 m.m. Rise of Floor 50 m.m.

Number and Description of **Decks** for Register Book Forecastle deck, Main deck Raised Q. Deck, Poop deck.

Number of Decks under Freeboard Deck —

„ „ above „ „ —

Heights of 'Tween Decks —

Particulars of Superstructures See LL 4 to form.

Distance between Bulkheads of Superstructures

Freeboard Ratios of Superstructures

Watertight Bulkheads.—State Number of Frame and Deck to which each Bulkhead extends—See page 5.

Bulkhead,	Frame No.	extends to	Deck.	Bulkhead,	Frame No.	extends to	Deck.
Fore Peak	„ 65/68	„ Forecastle	„	No. 8	„	„	„
No. 1	„ 19	„ Poop	„	„ 9	„	„	„
„ 2	„	„	„	„ 10	„	„	„
„ 3	„	„	„	„ 11	„	„	„
„ 4	„	„	„	„ 12	„	„	„
„ 5	„	„	„	„ 13	„	„	„
„ 6	„	„	„	„ 14	„	„	„
„ 7	„	„	„	After Peak	„ 5	„ Platform	„

PARTICULARS—*Continued.*

State which Bulkheads enclose Machinery Space

Frame 5 - frame 19.

State Number of Bulkheads to be recorded as effective **2.**

Number and Length of effective Watertight Compartments beginning Forward

Forepeak	5.00 M
Hold	25.30 M
Eng. Room	7.70 M
Afterpeak + Fresh W.T.	3.00 M.

Number of Non-Watertight Bulkheads

Double Bottom Extends from Frame 19 to Frame 56.

Length and Capacity of Tanks

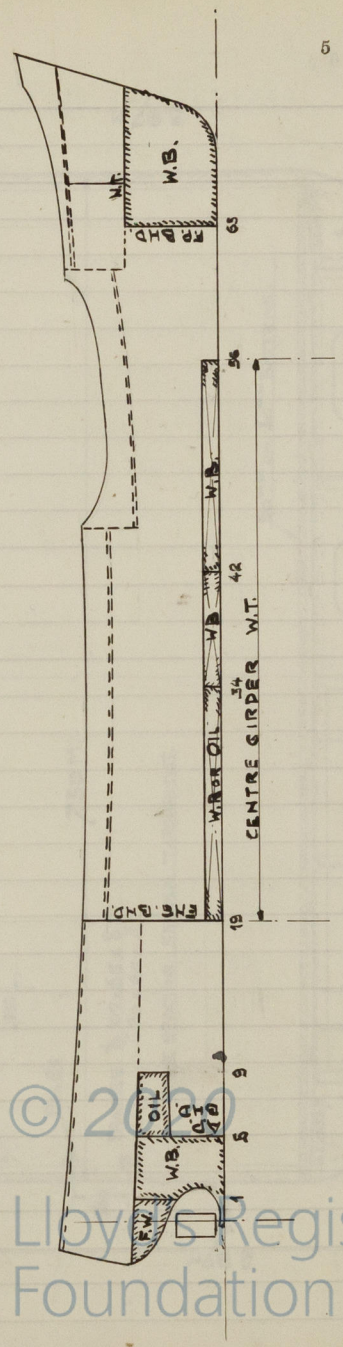
No. 1	7.70	~~Feet~~ M	2 x 12.25	Tons.	Fore Peak	5 ~~Feet~~ M	29 Tons.
„ 2	4.40	„	2 x 7.375	„	Aft Peak	2.20 „	9 „
„ 3	8.25	„	2 x 12.25	„	Deep Tanks	„	„
„ 4		„		„			
„ 5		„		„			
„ 6		„		„	Oil Bunkers	„	„
„ 7		„		„			
„ 8		„		„			
„ 9		„		„			
„ 10		„		„			

State where Centre Girder Watertight

Frame 19 - 56.

Particulars of Oil Fuel Tanks in Double Bottom.

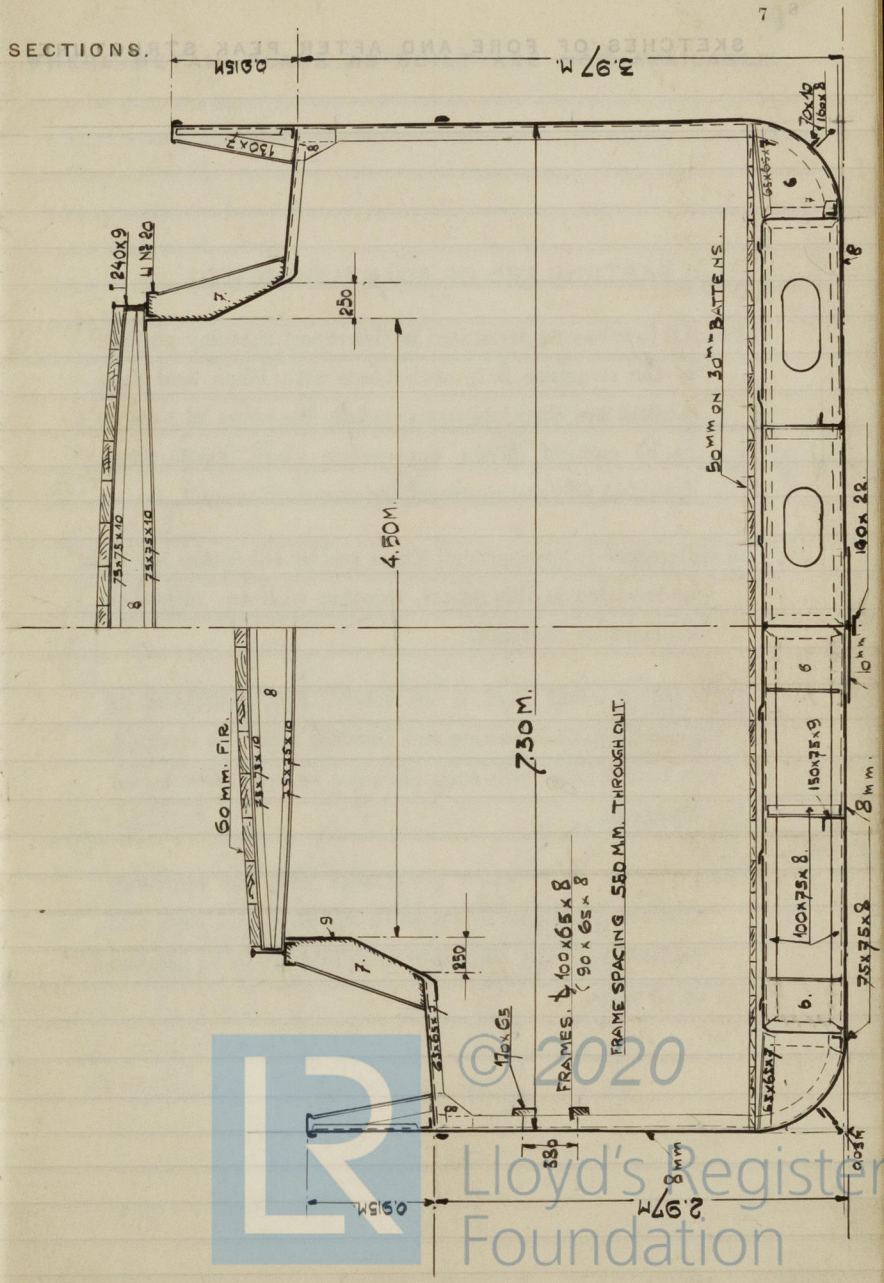
Tank No 3 S Band PS can be used as oil tank.



Sketch showing Arrangement of Bulkheads, Tanks, &c.

SCANTLING

SECTIONS.



SKETCHES OF FORE AND AFTER PEAK STRUCTURE

WHERE DETAIL PLANS AS BUILT ARE NOT AVAILABLE.

PARTICULARS OF SCANTLINGS, ETC.

Where it is subsequently stated in this report that any portion of the structure is in accordance with Plans, and particulars are therefore not detailed, the name of plan is to be entered in the appropriate place. Such plans should in all cases represent the structure as built.

All differences from approved Plans and/or the Rules are to be recorded in this report, together with any necessary explanatory Sketches.

Where no detailed Plan is on record, full particulars of Scantlings, Construction and Riveting are to be reported, in conjunction with such Sketches as are necessary for clearness.

Where riveting is in exact accordance with the approved Plans and/or Rules this is to be stated in each case, and particulars of any departure therefrom are to be detailed in all cases.

GENERAL.

MATERIAL.

In the case of **Steel Ships** state particulars of Parts where Iron is used

In the case of **Wood Ships** state particulars of Wood used in different parts

In the case of **Reinforced Concrete Ships** state particulars of Concrete used in different parts and also Nature and Quality of Reinforcement

State, to the best of your knowledge, whether the Materials used have been tested, and are in accordance with the Rule requirements

Give particulars of all Tests carried out under your supervision or date of your Report thereon

Part of anglebars and plates remaining from Neubeulding No 420, have been used for this ship, all with B.C. certificates.
Keelplates made of stock material have been used, see our letters 27th and 29th July 1939.
Remaining part as per certificate:
plates: delivered by S.A. d'Angleur-Athus, Belgique and tested by S. Reynolds 4-9-39.
anglebars: delivered by Gutehoffnungshütte Oberhausen A.G.
please see G.L.-B.C. certificates.
No 137467 a/D 15 Sept 1939
No 137035 D 8 Sept 1939
No 136724 D 25 Aug. 1939
No 136723 D 25 Aug 1939
No 136236 D 15 Aug. 1939.

GENERAL—*Continued.*

KEELS, STEMS, STERN FRAMES, AND RUDDERS.

State particulars, which do not appear on reference Plans, of Dimensions; Scarphs of Bar Keels; Stems; Stern Frames; Butts of Flat Plate Keels; Connections at Heel of Stems and Stern Frames to Hull; Rudder Stocks, Couplings, Pintles, Gudgeons, Rudder Arms, Riveting; and whether forged or cast; Arrangement and Scantlings of Spectacle Bossing or Propeller Brackets and state material.

State whether particulars not given are in accordance with approved Plans

State name of approved Plans and date of approval.

Keel, according appr. plan 8th May 1939.
docking keel 160 x 22 mm. fitted, see our letters of 27th and 29th July 1939.

Stem. according approved plan of 8th May 1939

Sternframe, according approved plan 29th July 1939
amendments carried out. See forging report No 221.
Stamped B.C. Test
No 4655
MD
1-9-39.

Rudder, according approved plan 29th July '39
amendments carried out.
See forging report No 221.
Stamped: B.C. Test.
No 4675
MD
24-10-39.

CENTRE KEELSONS (SINGLE BOTTOM).

State particulars, which do not appear on reference Plans, of Scantlings and Riveting, illustrated by Sketches of Construction, amidship, at ends, and under Boilers and Engines; of Connections to Keel; Horizontal Top Plates; Rider Keelson; Floor Connections and End Connections.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Centre Keelson Height and thickness as per approved plan 8th May 1939. Connected to Keelstrake and Tanktop by electric welding.
Stiffened between the floors from frame 19 to forward. (see our letter 29th July 1939.

SINGLE BOTTOMS.

State particulars, which do not appear on reference Plans, of Floors, Frames, Reverse Frames, Side Girders, Engine and Thrust Seats, Boiler Bearers, End Floors, Bossing, and Transom Floors.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Single bottom from frame 56-65, as per approved plan 8th May 1939.
Knees from frame to centre Girder fitted.

SINGLE BOTTOMS—*Continued.*

DOUBLE BOTTOM.

State particulars, which do not appear on reference Plans, of Scantlings and Riveting, illustrated by Sketches of Construction, of Centre Girders Amidships, at Ends, and under Boilers and Engines; End Connections; Manholes in Centre Girder and Compensation where fitted; Centre Girder where watertight; Scantlings, &c., of Solid Floors; Frames and Reverse Frames on Solid Floors; Stiffeners on Tank End Floors; Open Floors, extent and spacing; Open Floor Frames, Reverses, Strutts, and Brackets; Tank Top Plating, Butts, and Seams; Sheathing; Margin Plates; Margin Brackets to hold Frames; Connection to Tank Margin and Frames; Gussets; Intercostal Girders, amidships, under Engines, Thrust, Boilers, and Boiler Bearers; Arrangement and Spacing at Ends; Engine and Thrust Seatings; Stiffening under Wide Spaced Pillars and Air Pipes in each Compartment of Double Bottom.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

		Date.	Surveyor's Initial.
No. 1 Compartment (forward) tested and found satisfactory	SB	28-2-40	D
	PS	26-2-'40	A
" 2 " "	"		
	SB	29-2-'40	A
	PS	29-2-40	A
" 3 " "	"		
	SB	26-2-'40	A
	PS	28-2-'40	D
" 4 " "	"		
" 5 " "	"		
" 6 " "	"		

Double bottom carried out according approved plan 8th May 1940.
Centre girder welded electrically to Keel and Middle line strake.
W.T. floor on frame No. 23 omitted and carried out as full floor.
Open floors: frames and reverse frames ∠ 100 x 75 x 8, strutts for side girder

DOUBLE BOTTOM—*Continued.*

∡ 100 x 75 x 8.

HOLD FRAMES AND REVERSE FRAMES

State particulars, which do not appear on reference Plans, of all Framing in Holds; Bunkers; Boiler Space Engine Space; Deep Tanks; at Tunnel Flats; also Connections at Head and Heel.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Hold frames: Frame 20 - 56 ∡ 100 x 65 x 8
Frame 57 - 64 ∡ 90 x 65 x 8

Reverse frames Frames No 22, 25, 28, 31, 34.
No 37, 40. 41, 42, 43
No 45, 47, 50, 53, 56
No 59. ∡ 65 x 65 x 8.

Intermediate Frames in way of hold
∡ 90 x 65 x 8.

HOLD FRAMES AND REVERSE FRAMES—*Continued.*

'TWEEN DECK FRAMING.

State particulars, which do not appear on reference Plans, of Framing in various 'Tween Decks.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

WEB FRAMES AND SIDE STRINGERS.

State particulars, which do not appear on reference Plans, of Scantlings; Spacing; Attachments at Head and Heel; Reverse Frames; Ends of Side Stringers; Beams at Heads of Web Frames.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

WEB FRAMES AND SIDE STRINGERS—*Continued.*

HOLD KEELSONS AND STRINGERS.

State particulars, which do not appear on reference Plans, of Side Keelsons, Scantlings and Spacing Amidships, E. & B. Space, and Forward, and Connections to Floor Plates; Side Stringers, Scantlings, Extent, Spacing; Butts of Continuous Side Keelsons and Side Stringers; Connections to Bulkheads; Hold Stringers, Scantlings, and End Connections

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

HOLD KEELSONS AND STRINGERS—*Continued,*

BEAMS.

State particulars, which do not appear on reference Plans, of Spacing and Scantlings of Beams, Half Beams, Beam Knees and Lug Connections to Girders and Hatch Coamings on all Decks; Beams of Deep Tank Tops, Tunnel Tops, Bulkhead Recesses, Open Decks, Transom Beams, Wide Spaced Hold Beams, and Strong Beams in Machinery Space.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Beams. according approved plan
8th May 1939.

BEAMS—*Continued.*

STANCHIONS, PILLARS, AND GIRDERS.

State particulars, which do not appear on reference Plans, of number of Rows of Stanchions and where fitted; distance out from Centre Line of Girders or Runners; Spacing, Type, and General Scantlings of Stanchions, Pillars and Girders; Attachment at Heads and Heels of Stanchions and Pillars; Pillars in Engine Room; Attachment of Girders to Bulkheads and at Hatch Corners, Supports under Bulkhead Recesses and Deep Tanks; Supports at ends and corners of Deckhouses and Erections; extent and details of Longitudinal Cargo Divisions.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Girders, as per approved plan
8th May 1939.
Pillars fitted:
In Engineroom SB frame 15
∡ 90 x 90 x 10
In footspace frame No 3 2" ϕ

STANCHIONS, PILLARS, AND GIRDERS—*Continued.*

WATERTIGHT BULKHEADS.

State particulars, which do not appear on reference Plans, of Watertight Bulkheads as given on page 3;

Webs in 'Tween Decks above Bulkheads; Attachments; Sluice Valves and Cocks.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

(See also page 5)

W.T. Bulkheads according approved plan 8th May 1939.
All stiffeners welded to bulkheads.

WATERTIGHT DOORS.

State particulars, which do not appear on reference Plans, of Watertight Doors, where situated, Type, where controlled from, Makers, Buttresses at Sides of Doors; particulars of Testing.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

WATERTIGHT BULKHEADS—TESTING.

State particulars and dates of tests of Watertight Bulkheads.

Forepeak bulkhead tested, when testing forepeak 26-2-40 A.
Engineroom bulkhead hose tested 4-3-40 ND and 29-3-40 S
Afterpeak bulkhead tested, when testing afterpeak 22-12-39 ND.

WATERTIGHT BULKHEADS—TESTING—*Continued.*

PANTING ARRANGEMENTS (OUTSIDE PEAKS).

State Particulars, which do not appear on reference Plans, illustrated by Sketches of Construction, of Scantling Arrangements, Heights of End Floors; Panting Beams and Stringers; Pillars; Shell Lugs on Stringers and Flats; Attachments of Stiffeners and Framing to Stringers.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

PANTING ARRANGEMENTS—*Continued.*

SHELL PLATING.

State particulars, which do not appear on reference Plans, of number of Strakes of Plating, average Length and Width Amidships; Thickness of Side Plating Amidships and at Ends; Bottom Plating Amidships, Ends, and Flat of Floor Forward; End Connections; Seam Connections; Construction at Breaks of Erections; Compensation in way of Cargo Doors, Sidelights and other Openings; Doublings where fitted; Forefoot Plate, After Hood Plating, Boss Plating; Sheerstrakes, Topside Plating, Garboard Strakes with Bar Keels; Gunwale Angles and Mouldings.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Shellplating according approved plan 8th May 1939

SHELL PLATING—*Continued.*

DECKS.

State particulars, which do not appear on reference Plans, of which Decks are Weather Decks, Freeboard Decks, Second, Third, &c., and Platform Decks; Scantlings of Plating and Areas in square inches of Plating abreast Machinery Openings, Hatches Amidships and at Ends; Stringer Plates Amidships and at Ends; End Connections and Seam Riveting in each case; Doublings at Hatch Corners; Size of Corner Angles; Wood Sheathing and Deck Compositions; Watertight Cement Chocks on Freeboard Deck, whether Chocks are fitted in other Decks, and particulars of all Chocks fitted in each Deck and Flat; Rusted Iron Chocks, W.T. Collars, Coaming Angles and Mast Collars; Riveting of Coaming Angles, Gutter Angles, Chock Angles, and particulars of Water Testing of Decks.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Decks, according approved plan
8th May 1939.
Posteeled 4-3-40 MD

DECKS—*Continued.*

CEILING AND SPARRING.

State particulars, which do not appear on reference Plans, of Close Ceiling and how fastened in Holds and Bunkers; if Tank Top Ceiled where Double Bottom is used for Oil Fuel; Sparring and how fastened in Holds, 'Tween Decks; Manhole Covers, and Protection.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Ceiling in hold, fir 50 m/m on battens 30 m.m. thick.
Sparring in hold, fir 170 x 65 m.m. ± 400 m/m apart, fitted with hooks to the frames.
Manhole covers, steel plates and protected by wooden covers.

SUPERSTRUCTURES.

State particulars, which do not appear on reference Plans or L.L. 4 D. Form:— 1st Superstructure, Length and Height ; 2nd Superstructure, Length and Height ; illustrate by Sketches of Cross Section through Superstructures; Coaming and Top Angles; Plating Amidships, at Ends; Riveting of Seams; Doublings at Windows and Doorways; Top Plating; Stiffening; Beams; Web Plates and Partial Bulkheads; Breaks in continuity; and Bulkheads at End of Erections on Freeboard Deck.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

See LL 4 C/D form.

SUPERSTRUCTURES—*Continued.*

HATCHWAYS AND OTHER DECK OPENINGS.

State particulars, which do not appear on reference Plans or L.L. 4 D. Form, of Dimensions of Openings in different Decks; Scantlings of Coamings; Coaming Angles; Side Stiffeners; Stays; Spacing and Scantlings of Hatch Webs; Hatch Covers; Details of Hatch Corner Construction; Mast Openings; Engine and Boiler Openings, and Casings and Companion Ways.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Hatchways. as per approved plan 8th May 1940.

DECK OPENINGS—*Continued.*

MACHINERY SPACE AND TUNNEL.

State particulars, which do not appear on reference Plans, of Through Beams and Stanchions in Machinery Space; Engine Seating; Thrust Seating; Boiler Stools; Thrust Stools; Bossing Arrangements; Scantlings of Stiffeners; Plating and Coaming Angles of Tunnels and Tunnel Recesses; Escape Hatches; Stiffening of Tunnels under Stanchions; and particulars and dates of Water Testing Tunnels.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Machinery space, as per approved plan 8th May 1939.
as per approved plan
Engine seating. 27. 7. 39.

RIVETING AND CAULKING.

All riveting and caulking according to rule requirements. All rivets delivered with B.C. certificates.

ELECTRIC WELDING.

State particulars of Electrodes, Manufacturers, sizes of Electrodes, Voltage, Amperage, Rates of Deposit, &c., arrangements for skilled supervision of work in the Yard; Particulars of Tests, including Samples of work in Yard.

Portions of Structure where Electric Welding used, Thickness of Material Welded, Size and Types of Welds, Angles of Edges and Clearance of Base in Butt Welds, Depth and Width of Lap Welds, and Connections of Plates and Bars.

Electrodes used: Philips 48-50 in various diameters as required.

Centre Girder to keelplate and to Innerbottomplating.
Sidegirder to bottomplating.
Stiffeners to bulkheadplating.
Straps to Centre Girder, to marginplate
Stanchions to hatchcoamings.

All welding with required amperage and diameter of electrodes.

ELECTRIC WELDING—*Continued.*

BULWARKS, PORTS, SCUPPERS, ETC.

State particulars, which do not appear on reference Plans or L.L. 4 D. Form, of Length and Height of Bulwarks; Freeing Port Area; Construction of Freeing Ports; Details of Gangway Doors, Scuppers from Watertight Decks; Soil Pipe Elbows below Freeboard Deck.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

See LL 4 D form.

BULWARKS, PORTS, SCUPPERS, ETC.—*Continued*

VENTILATORS AND SIDE SCUTTLES.

State particulars, which do not appear on reference Plans or L.L. 4 D. Form, of Coaming Heights; Thicknesses; Deck Connections of Hold Ventilators on Weather Portions of Freeboard Decks; Bridge Decks; Forecastle and Poop Decks; Ventilators to Holds and Tunnels and Side Scuttles in 'Tween Decks; means of Closing.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

See L.L. 4 D form.

VENTILATORS AND SIDE SCUTTLES—*Continued.*

PUMPING ARRANGEMENTS.

State particulars, which do not appear on reference Plans, of Hand Pumps or Power Pumps and from which Deck they are operated; Hand Pump to Fore Peak, Drain Boxes and Tank Tops; Sounding Pipes, Testing of Pumps.

Are the Chambers of the Plunger Pipes Copper? Semi rotary pumps

Is a Plate fitted under the Lower End of each Sounding Pipe? Yes.

Are Pump Chambers, Tail Pipes, and Rods protected by substantial Casings? Yes.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

Pumping arrangement as per approved plans: dated 16-9-39.

CEMENTING AND PAINTING.

State if and where Portland or Bituminous Cement is used and how it is applied.

State particulars and Composition of Cement, Cement Wash, Paint, or Bitumen, in Tanks and elsewhere.

Double Bottom internally: cylinder oil
Tanktop: tar with sprayed cement
Forepeak: cylinder oil
Afterpeak: cementwash
Freshwatertank: cementwash
Forepeak tanktop: tar with sprayed cement
Aftepeak tanktop: tar with sprayed cement.

Hold: oil paint 2x.
Shell; bottom tar 2x
side Oilpaint 2x
Deck: Black varnish
Coamings, deckhouses,
bulwark etc. : Oil paint 2x

MASTS, SPARS, AND RIGGING.

Steam Vessels.—State particulars, which do not appear on reference Plans, as to Heights, Diameters, and Scantlings of Masts; Derrick Loads and Outreaches; Scantlings and arrangements of Derrick Tables and Outriggers.

Sailing Vessels.—The same particulars as for Steam Vessels, where applicable, also particulars of Rigging, details of Canvas and Sail Area.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

One mast, height above deck 11.55 M.
hinged. ⌀ 457/10 mm – ⌀ 160/7 mm.

Two derricks for 5 ton each long
10.35 M and ⌀ 241/65 mm.

The loading and discharging gear have been tested by the Dutch Harbour Inspection in accordance with the requirements.

EQUIPMENT.

State Equipment Numbers and corresponding Letter for Register Book.

Chain Cables, Stream Chains, Wires, &c.—State particulars of number of Certificates, where and when Tested, Length, Size, Weight, and Maker's Name.

Anchors.—State number of Certificates, where and when Tested, Weight of Head Shank and Stock, and Maker's Name and Type of Anchor.

Steering Gear.—Plans or Sketches showing arrangement and details of Steering Gear, including Auxiliary Gear, to be given, to include Diameter of Chains and Rods; Diameter and Scantlings of Quadrant; Diameter, Scantlings and Attachments of Quarter and Leading Blocks, Buffer Springs and Stretching Screws; Type and Make of Steering Gear and Control; Particulars of Relieving Tackle, Brakes, &c.; Particulars of Test Certificates for Chains, Rods, Stretching Screws, Buffer Springs, Spare Links, Shackles, &c.; state Spares provided; Particulars of Trials.

Windlass and Capstan.—State particulars of Type and Maker's Name and if satisfactory under trial.

Winches.—State Number, Size, and Type fitted.

Lifeboats.—Number and Dimensions.

C. 16.

No. of certificate 391.
Tested at N.V. Anker- en Kettingfabriek "Schiedam"
Total length of chain 11 x 15 fathoms
Size of chain 1"
Weight of chain 4260 kg.
No. of shackles 11 joining 4 end.
Length of link 6" Breadth of ditto 3 9/16"
Tensile strain applied 18 tons
Breaking strain applied to 3 links cut out of every 15 fathoms 27 tons
Marks: B.C. Test A.K.S. 9-1-40 J.A.
Makers' Name: N.V. Anker- Kettingfabriek "Schiedam"

Wires according Rules, and delivered with certificate of makers.

EQUIPMENT—*Continued.*

No. of certificate	332	333	334	335
Tested at	Schiedam	Schiedam	Schiedam	Schiedam
Weight of anchor (without stock)	464 kg.	465 kg.	166 kg.	81 kg.
Weight of iron stock	—	—	41 kg.	20 kg.
Length of shank	3'-9½"	3'-10"	5'-1½"	4'-3"
Length of arm	2'-5½"	2'-5½"	2'-4½"	1'-9½"
Diam. of shank	4½" x 3⅞"	4¾" x 3⅞"	3 13/16 x 2⅝"	3" x 2⅛"
Description	Hall type	Hall type	Stock shank	Stock type
Proof load applied	11.9 tons	11.9 tons	5.8 tons	3.9 tons
Makers name	N.V. Anker- en Kettingfabriek "Schiedam"			
Marks	B.C. Test. A.K.	5. 9-1-40 J.A.		13 C Test A.K.S. 9-1-40 J.A.
Anchor head marked	Cast Steel	Cast Steel		
	8/ 318 kg. No. 26 8-3-39 C.V.	8/ 319 kg. No. 25 8-3-39 C.V.		

EQUIPMENT—*Continued.*

Steering gear: Makers Bodewes Foxhol. English patent hand steering gear from wheelhouse to Quadrant by 2" steering rod and Gall chain.

Emergency tackles have been provided.

Windlass: Makers Bodewes Foxhol for 1" chain cable, driven by 8 H.P. Lister motor. Tried on trial trip and found in order.

Capstan Hand capstan made by Bodewes Foxhol

Winches 2, 3 tons (5 ton) winches made by Bodewes Foxhol and driven by 7-8 H.P. Lister motor.

Lifeboats BB and PS are
4.83 x 1.75 x 0.74 13 Pers.
4.82 x 1.78 x 0.73 13 pers.
both with copper air cases and approved by Dutch Shipping inspection

DEEP TANKS, OIL TANKS, AND OIL BUNKERS.

State particulars, which do not appear on reference Plans, of Position and Arrangement; Scantlings of Plating, Stiffeners, Deck Girders, Wash Bulkheads and Plates; Top Plating; Frame Connections; Means to prevent Overloading; Height of Filling, Air and Sounding Pipes; in the case of **Oil Tanks,** give Density and Flash Points of Oils; Arrangements of Expansion Trunks, Cofferdams, and details of Ventilation; state Particulars of Packing used.

State Arrangements of Pump Rooms, means of keeping Low Flash Point Oil separate from other Oil, and provisions made where Low Flash Point Oils are used for Oil Fuel.

State whether particulars not given are in accordance with approved Plans.

State name of approved Plans and date of approval.

As per approved Construction plan 8th May 1939.

DEEP TANKS, OIL TANKS, AND OIL BUNKERS—*Continued.*

			Test Head above Top of Tank.	Deflection at Full Tank.	Deflection with Test Head.	Date.	Initials.
No. 1	Tank,	Port,	Tested and found satisfactory.				
	„	Starb'd,	„				
2	„	Port,	„				
	„	Starb'd,	„				
3	„	Port,	„				
	„	Starb'd,	„				
4	„	Port,	„				
	„	Starb'd,	„				
5	„	Port,	„				
	„	Starb'd,	„				
6	„	Port,	„				
	„	Starb'd,	„				
7	„	Port,	„				
	„	Starb'd,	„				
8	„	Port,	„				
	„	Starb'd,	„				
9	„	Port,	„				
	„	Starb'd,	„				
10	„	Port,	„				
	„	Starb'd,	„				
11	„	Port,	„				
	„	Starb'd,	„				
12	„	Port,	„				
	„	Starb'd,	„				

MD to Poop deck. 14-12-39 MD

DEEP TANKS, OIL TANKS, AND OIL BUNKERS—*Continued.*

State which Tanks are used as Oil Fuel Bunkers.

Give position and size of Air Pipes or Ventilators from each Tank.

SURVEYORS' NOTES.

Give dates of visits also notes of any occurrence of which a record should be kept.

22-6-39 S. Discussed items in connection letter 19-6-39.

14-7-39 A Bottomplating laid. P.S. floors 20-55 erected.

22-7-39 A Verified thicknesses and testmarks All floors in place.

24-7-39 A. Stamped testpieces keelplates and tanktopplates.

27-7-39 S. Tested material keelplates and tanktopplates. Sulphurprints made.

1-8-39 S. Discussed proposed docking keel Examined progress of work

15-8-39 S Awaiting material. Examined progress of work.

25-8-39 S Examined work in hand.

20-9-39 A Double bottom ready for testing Engine floors en gradis in place. Frames erected 0-20. Aft. bulkhead and oil bunker bhd. frame 9 erected with tankdeck.

18-10-39 A Sternframe, frames, sideplating, motor foundation and lower deck all erected up to engineroom bhd.

14-11-39. A. R.Q. deck in place with centre line bulkheads, frames up to 56

27-11-39 A Examined progress of work

14-12-39 D Examined drawing in of sterntube Tested O.F. bunker and A.P. fresh watertank

20-12-39 A. Vessel all plated. Decks and hatches in place, except f.c. deck.

SURVEYORS' NOTES—*Continued.*

22-12-39 D Tested afterpeaktank

12-2-40 A Intermed. Survey Steelwork all completed

26-2-40 A Tested d.b.t. 3 S.B, 1 P.S and forepeaktank.

28-2-40 D Tested d.b.t. 3 P.S. and 1 S.B.

29-2-40 A " " " " 2 S.B. and 2 P.S. separately

4-3-40 D Hosetested bulkheads, decks and hatchcoamings

7-3-40 A Launched.

20-3-40 D Main motor in place Tested starting airpipes and ballastpump.

27-3-40 A D Trial trip, tried anchor and steering gear.

29-3-40 S. Gathered particulars for hull report book, tested bilgepipeline hosetested A. Bhd, checked freeboard marks.

REFRIGERATION.

State particulars of Arrangement, Makers, and Survey of Refrigerating Plant.

State extent, particulars, illustrated by Sketches of Insulation.

LOAD LINE PARTICULARS WHERE NOT STATED ON L.L.4D. FORM.

Registered Length Breadth Depth

Length on L.W.L. Beam at Gunwale Amidships

Moulded Depth as measured in Ship

Round of Beam Rise of Floor

Sheer at Stem Sheer at Sternpost

" $\frac{1}{3}$ from Stem " $\frac{1}{3}$ from Sternpost

Particulars of Sheer in Decks which are not parallel to Freeboard Deck

Fall in Sheer Thickness of Wood Deck

Extent of Wood Deck Thickness of Ceiling

Thickness of Sparring Depth of Framing

Drop in Tank Level Modifications in D.B. affecting Coef. (see Sketch).

Particuars of Erections (see Sketch)

	Length	Length of Overhang (Recesses, &c.)	Height
Forecastle			
Poop or R.Q.D.			

Bridge

Scantlings of Bulkheads of Erections

Openings in Bulkheads of Erections and Means of Closing same

Are the Engine and Boiler Openings covered by the Poop or R.Q.D. and enclosed by a strong Iron or Steel House?

Give Number, Size, and Area of Freeing Ports in Wells

Displacement in Salt Water Tons per inch

Tonnage under Deck

Means of making Freeboard Deck watertight in erections where Frames pass through

Freeboard assigned by the Committee, as per letter issued by Secretary dated

From Top of Statutory Deck Line to Centre of Disc

Fresh Water Line above Centre of Disc

Indian Summer " "

Winter Line below Centre of Disc

W.N.A. " "

Statutory Deck Line ins. above Top of Wood/Iron Deck at Side

Freeboard marks verified :—

Freeboard as assigned above subject to :—

LOAD LINE PARTICULARS—*Continued.*

Elevation and Plan Sketches showing Lengths and Arrangements of Erections, Length, Heights and variations of Double Bottom, Peak Tanks, Protection of Openings in Bulkheads, if not stated on L.L. 4 D. Form.

~~We~~ I have satisfied ~~ourselves,~~ myself, from personal examination, that this Ship has been built in accordance with the approved Plans and the Rule requirements, or their equivalent, that the materials used in the construction of the Hull and Equipment are in accordance with the Rules, and that the workmanship is in every respect satisfactory.

Rotterdam, 2-4-40.

Surveyor to the British Corporation Register of Shipping and Aircraft.

It is submitted that this Report be approved.

Chief Surveyor.

3 JUL 1940

Approved by the Committee for the Class of 135* on the 3rd July 1940

Secretary.

McCORQUODALE
GLASGOW & LONDON