

12 APR 1932

Index. No. 25842
(For London Office only.)

Rpt. On.

WRECK SECTION

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No. 100151.

No.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Poop, Bridge & Forecastle.
LABUDPort of Survey BirkenheadDate of Survey April 4th 1932Name of Surveyor H.C. MurrayParticulars of Classification +100 A1

EZRA

(Type of Superstructures.)

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

APSLEYHALL

Jugoslavia

British Registry
Sussex
H. Hartlepool.

142259

5334

1918-7

Moulded Dimensions: Length 404.6 Breadth 52.5 Depth 30.25
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 12,400 tons
 Coefficient of fineness for use with Tables .799 from Bengloe, sister ship

Depth for Freeboard (D)

Depth correction

Round of Beam correction

Moulded depth ... 30.25Singer plate ... 44.04

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) =

30.29(a) Where D is greater than Table depth
(D-Table depth) R = $(30.29 - 26.97) 3.00$
 $= +9.96$ (b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Moulded Breadth (B) 52.5 52.2Standard Round of Beam = $\frac{B \times 12}{50} = 12.53$ Ship's Round of Beam = $12\frac{1}{2}$ Difference Deficient .03

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{Nil}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	36'-0"	36.00	8'-0"		36.00
" overhang ...	-				
R.Q.D. enclosed ...	-				
" overhang ...	-				
Bridge enclosed ...	120'-0"	120.00	8'-0"		120.00
" overhang aft ...	-				
" overhang forward ...	-				
Fore enclosed ...	43'-7"	43.58	8'-0"		43.58
" overhang ...	-				
Trunk aft ...	-				
" forward ...	-				
Tonnage opening aft ...	-				
" forward ...	-				
Total ...	199.58	199.58			199.58

Standard Height of Superstructure 7.50" " R.Q.D. 42.00Deduction for complete superstructure 42.00Percentage covered $\frac{S}{L} = 49.34\%$ " $\frac{S_1}{L} = 49.34\%$ " $\frac{E}{L} = 49.34\%$ Percentage from Table, Line A.
(corrected for absence of fore-castle (if required))Percentage from Table, Line B. 35.44%
(corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $42.00 \times 35.44 = -14.89$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	50.46	1		50.46	62	63.00	1		63.00
$\frac{1}{8}$ L from A.P. ...	22.46	4		89.84	26.5	27.65	4		110.60
$\frac{3}{8}$ L " ...	5.55	2		11.10	8.0	6.91	2		13.82
Amidships ...		4		-	-	-	4		-
$\frac{5}{8}$ L from F.P. ...	11.10	2		22.20	13.0	13.63	2		27.26
$\frac{7}{8}$ L " ...	44.91	4		179.64	52.0	54.51	4		218.04
F.P. ...	100.92	1		100.92	125	126.00	1		126.00
Total ...				454.16					558.72

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{104.56}{18} \left(.75 - \frac{2467}{21} \right) = -2.912$

If limited on account of midship superstructure. -

Mean actual sheer aft = Excess
Mean standard sheer aftMean actual sheer forward = Excess
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = .162L" " aft of " = .135L

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 30.29Summer freeboard = 5.96Moulded draught (d) = 24.33

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.08 = 6"

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 11,743$

Tons per inch immersion at summer load water line

T = 42.66Deduction = $\frac{\Delta}{40T}$ inches= 6.88= 7"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{799+680}{1.36} = \frac{1,479}{1.36}$ Depth Correction ... 9.96Deduction for superstructures ... 14.89Sheer correction ... 2.91Round of Beam correction ... 2

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

Summer Freeboard = 71.487

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ...

Fresh Water Line " " ...

Tropical Line " " ...

Winter Line below " " ...

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

© 2020 1906 Freeboards assigned

6'-5 1/2" 6'-4"

Lloyd's Register

Foundation

1982-0302

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS							
Description of Hatchway	No 1	No 2 & 4	No 3 on Bridge/No 3 on Deck	No 4 on Bridge/No 4 on Deck	No 5	Hatch on Prop.	Hatch without Prop.
Dimensions of Hatchway	24'-0" x 16'-0"	36'-0" x 16'-0"	10'-0" x 16'-0"	8'-0" x 16'-0"	30'-0" x 16'-0"	5'-0" x 8'-0"	5'-0" x 6'-6"
COAMINGS	Height above Deck ... 30"	30"	30"	9'3 1/2" BA	30"	27"	9'3 1/2" BA
	Thickness Sides ... 1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Stiffeners ... 1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Brackets, Stays ... 2	3	1	3	3	1	1
HATCH BEAMS	Number ... 4	6	1	2	5	1	1
	Spacing ... 4'-9"	5'-1"	5'-0"	4'-0"	5'-0"	4'-0"	4'-0"
	Scantling and Sketch	7" plate 3/4" x 14'-0"	Same as	7" plate 3/4" x 14'-0"	Same as	7" plate 3/4" x 14'-0"	Same as
	How fitted	Bottom 6' x 3' x 3/4" BA	10'1"	11'6"	11'6"	30' x 4'0"	30' x 4'0"
	Bearing Surface ...	3"	3"	3"	3"	3"	3"
FORE AND AFTERS	Number ...	None	None	None	None	None	None
	Spacing ...	None	None	None	None	None	None
	Unsupported Lengths	None	None	None	None	None	None
	Scantling and Sketch	None	None	None	None	None	None
	Bearing Surface ...	None	None	None	None	None	None
HATCH COVERS	Material ...	WP	WP	WP	WP	WP	WP
	Thickness ...	3"	3"	3"	3"	3"	2 1/2"
	How fitted	F+ A	F+ A	F+ A	F+ A	F+ A	F+ A
	Bearing Surface ...	3"	3"	3"	3"	3"	2"
Spacing of Cleats	23"	25"	23"	24"	24"	26"	27"
Number of Tarpaulins	3	3	3	2	3	2	1

*Are wood fore and afters steel shod at all bearing surfaces? *Yes*
 Are battens and wedges efficient and in good condition? *Yes*
 Are tarpaulins in good condition and in accordance with rule requirements? *Yes*
 Are lashings provided in accordance with rule requirements? *Yes*

Particulars of fiddle, funnel and ventilator coamings:— *Fiddle Funnel & ventilator coamings in efficient condition. E.R. Skylights strongly constructed of steel with steel hinged flaps. Fiddle gratings fitted with hinged steel covers.*

Particulars of Flush Bunker Scuttles:—

None

Particulars of Compartmentalways:—

None

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

1-9" DIA VENT. COAMINGS 18"x 1/2" ON FORECASTLE DECK TO F. PEAK SPACE.
 2-16" DIA VENTS COAMINGS 36"x 3/4" ON FORECASTLE DECK TO FORECASTLE.
 1-16" DIA VENT COAMING 36"x 3/4" ON FORECASTLE DECK TO NO. 1 HOLD.
 1-18" DIA VENT COAMING 36"x 3/4" ON FORECASTLE DECK TO NO. 1 HOLD.
 3-16" DIA VENTS COAMINGS 36"x 3/4" ON FREEBOARD DECK TO HOLDS.
 3-16" DIA VENTS COAMINGS 36"x 3/4" ON FREEBOARD DECK TO HOLDS.
 2-16" DIA VENTS COAMINGS 36"x 3/4" ON BRIDGE DECK TO HOLDS.
 1-10" DIA VENT COAMING 18"x 1/2" ON BRIDGE DECK TO NO. 3 HOLD.
 2-10" DIA VENTS COAMINGS 18"x 1/2" ON BRIDGE DECK TO BUNKER TWEEN DECKS (FREEBOARD DECK).
 2-16" DIA VENTS COAMINGS 36"x 3/4" ON BRIDGE DECK TO LOWER BUNKER TWEEN DECKS.

ALL VENT COAMINGS SUPPLIED WITH WOOD FLUGS & CANVAS COVERS.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

ON FORECASTLE DECK. 1-2" DIA 18" HIGH TO MAIN TANK.
 ON FREEBOARD DECK. 3-2 1/2" DIA 28" HIGH TO DATANKS.
 ON BRIDGE DECK. 1-2 1/2" DIA 17" HIGH TO DATANKS.
 ON BRIDGE DECK. 2-2 1/2" DIA 14" HIGH TO DATANKS.
 ON BRIDGE DECK. 2-2 1/2" DIA 13" HIGH TO DATANKS.
 ON BRIDGE DECK. 1-2 1/2" DIA 9 1/2" HIGH TO DATANKS.

No Wood Flugs or Canvas Covers provided

Particulars of Gangway Cargo and Coaling Ports:—

None

Particulars of Scuppers and Sanitary Discharge Pipes — *Stronger scuppers in wells. 5"x3 1/2". Scuppers on bridge deck and within bridge space 5"x2 1/2" Collinson Type.*
All sanitary discharge pipes fitted with cast storm valves at the ship's side.

Particulars of Side Scuttles:—

All side scuttles fitted with hinged deadlights of substantial construction.

Particulars of Guard Rails:—

On Forecastle deck. 3'-0" high stanchions spaced 4'-0" apart 2 rails.

Particulars of Gangways, Lifelines, etc.:—

None fitted. The crew live in the Prop.

Subsidiary provisions made for rigging lifelines available for use in any part of the ship which might have to be used by the crew in the regular working thereof.

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	112'-0"	4'-3"	3'-6" x 1'-9"	4	24'5 1/2" sq ft	22'5 1/2" sq ft
Forward Well	93'-0"	4'-3"	3'-6" x 1'-9"	3	18'5 1/2" sq ft	18'6" sq ft

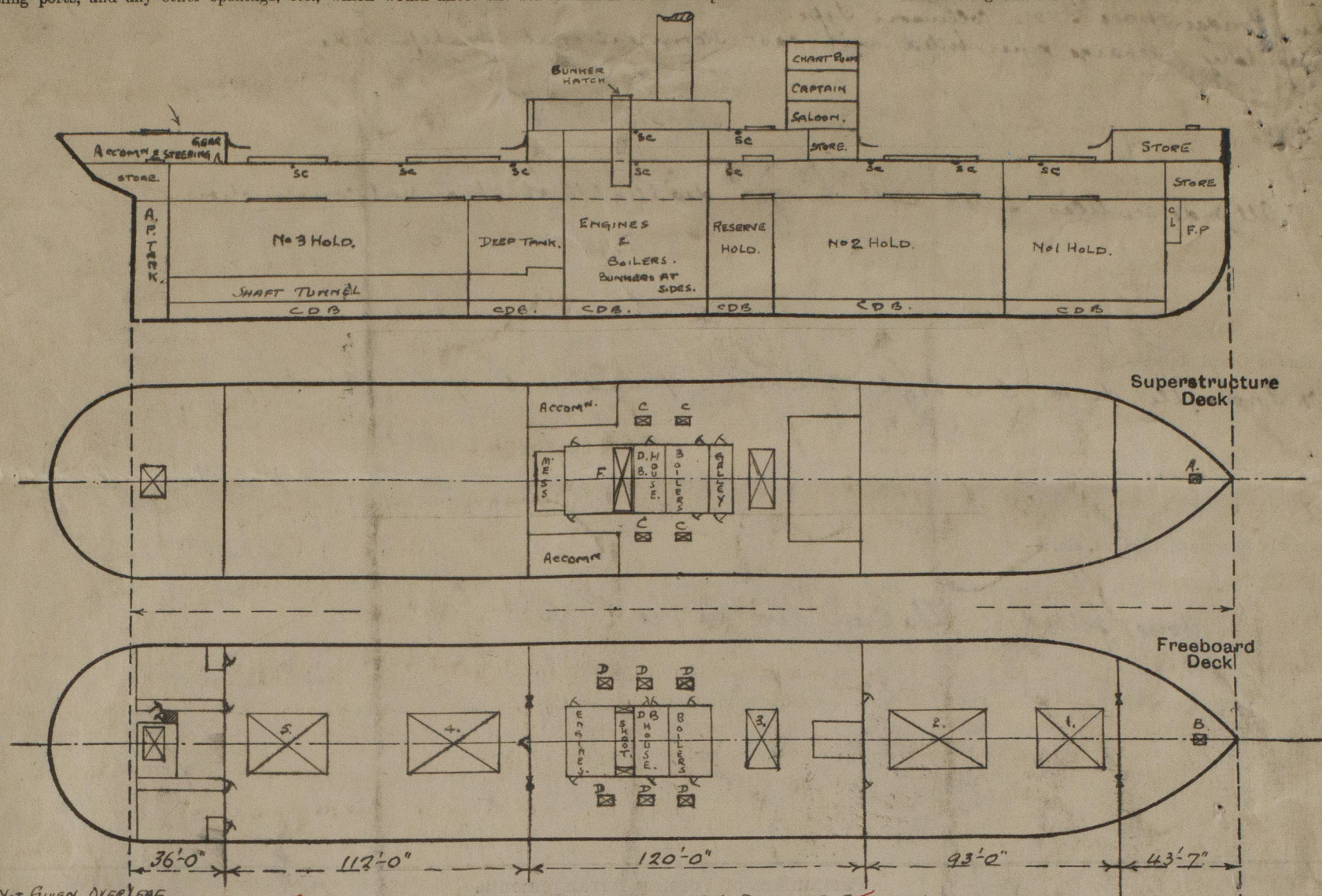
State position of each freeing port ... After Well:— *Prop Bulk. 19'-6" 26'-6" 20'-0" 20'-0" Sills 17"*
 (F. and A. position and height above deck edge) Forward Well:— *24'-0" 26'-0" 17'-0" 18'-0" Sills 16"*
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *open ports with rails.*
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	3/8"	3/8"	6 x 3 x 35"	30"	Bkts at top	5'-0" x 2'-0"	19"	8'-0"
Raised Quarter Deck Bulkhead	1/16"	3/8"	3/2 x 3 1/2 x 35"	30"	Bkts at top	2nd 5'-0" x 4'-0" 1st 5'-0" x 2'-6"	19"	8'-0"
Bridge, After Bulkhead	1/16"	3/8"	8 x 3 1/2 BA	30" - 38"	Bkts top & bottom	5'-0" x 2'-0"	19"	8'-0"
Bridge, Forward Bulkhead	3/8"	5/16"	3 x 3 x 35"	38"	Bkts at top	2nd 5'-0" x 4'-0" 1st 5'-0" x 2'-0"	18"	8'-0"
Forecastle Bulkhead	3/8"	5/16"	3 x 3 x 35"	38"	Bkts at top	2nd 5'-0" x 4'-0" 1st 5'-0" x 2'-0"	18"	8'-0"
Trunk, Aft	1/16"	3/8"	3 x 3 x 35"	30"	Bkts at top	5'-0" x 2'-0"	19"	8'-0"
Trunk, Forward	1/16"	3/8"	3 x 3 x 35"	30"	Bkts at top	5'-0" x 2'-0"	19"	8'-0"
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	7/16"	7/16"	3 x 3 x 35"	38"	Bkts at top	5'-0" x 2'-0"	19"	8'-0"
Exposed Machinery Casings on Superstructure Decks	7/16"	7/16"	3 x 3 x 35"	38"	Bkts at top	5'-0" x 2'-0"	19"	8'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	<i>Strong steel hinged doors manipulated from both sides.</i>
Raised Quarter Deck Bulkhead	<i>2 1/2" shifting boards in riveted channels full height.</i>
Bridge, After Bulkhead	<i>1 steel hinged door in centre, manipulated from both sides.</i>
Bridge, Forward Bulkhead	<i>Steel hinged doors secured by dog fasteners 2 1/2" bolts pitched 21".</i>
Forecastle Bulkhead	<i>2 1/2" shifting boards in riveted channels full height.</i>
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	<i>Steel hinged doors, not opened regarding overhead openings on Forecastle deck. 6 coalshoot openings which can be sealed closed.</i>
Exposed Machinery Casings on Superstructure Decks	<i>Steel hinged doors.</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



HATCHES NOT GIVEN OVERLEAF

- (A) 4'-0" x 3'-0" COAMING 24" x 3/4" W/COVERS 2 1/2" THICK 2" BEARING. CLEATS SPACED 28". 2 TARPULINS. ON FOLE DECK. TO FORECASTLE.
 (B) 4'-0" x 2'-10" COAMING 12" x 40 W/COVERS 2 1/2" THICK 2" BEARING. CLEATS SPACED 24". 2 TARPULINS. ON FREEBOARD DECK. IN FORECASTLE LEADING TO STORE.
 (C) 4'-0" x 3'-0" COAMING 36" x 3/4" W/COVERS 3" THICK 2" BEARING. CLEATS SPACED 23". 2 TARPULINS. ON BRIDGE DECK. TO TWEEN DECK BUNKERS.
 (D) 4'-0" x 3'-3" COAMING 9 x 3/4" BA. W/COVERS 2 1/2" THICK 2" BEARING SURFACE. CLEATS SPACED 24". 1 TARPULIN. ON FREEBOARD DECK TO LOWER TWEEN DECK BUNKERS. (CLEATS INEFFICIENT)
 (E) 17'-0" x 6'-6" COAMING 9 x 3/4" BA. ON TOP OF ENGINE CASING. 3" W/COVERS. 2" BEARING. FITTED F.V.A. 2 TARPULINS. CLEATS SPACED 19".
 TUNNEL ESCAPE IN POOP. STEEL HINGED DOOR. MANIPULATED BOTH SIDES. 5'-6" x 22" SILL 12 1/2".

State any special features in the construction of the ship:—

The coal chute openings on the fore and aft sides were at one time fitted with hinged doors. These doors are no longer fitted.

Particulars regarding existing provisions for the carriage of
 Timber Deck cargoes:—

Rule LXXXII. D.B. Tanks. No longitudinal subdivision except in the
 Engine Room. D.B. Tanks.

Rule LXXXIII. Bulwarks. The bulwarks are 14.3' high & according to Rule.

Rule LXXXVIII. Steering Arrangements. Leads not exposed (Telemotor arrangements)
 Steering engine secondary control from Poop Deck in
 case of failure of telemotor gear. Provision of block
 valves from No. 5 winch between Nos 4 & 5 Hatch
 (Well Deck).

Rule LXXXVIII. Lashing. No sockets on deck. No arrangements
 for lashing equipment.

Rule LXXXIX. Lashing. No eyeplates fitted for lashing.

(Rev. Letter 15/4/11)

Builder's name and yard number W. Hamilton & Co. Ltd. Glasgow No 307

Names of sister ships Ardgoil.

Owners West Hartlepool Steam Nav Co. Ltd.

Fee £ 13 : 12 : 0

Received by me



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