

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

4 OCT 1933

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having completely enclosed shelter deck with topgallant fore-castle on same

(Type of Superstructures.)

Ship's Name
"ANDREA"

Nationality and Port of Registry
Italian
Genoa

Official Number
1829

Gross Tonnage
5132

Date of Build
1921-2

Port of Survey Cardiff

Date of Survey 2nd & 3rd October 1933

Name of Surveyor J.D. Philston

Moulded Dimensions: Length 374.33' Breadth 51.0' Depth 26.12' to upper deck
34.12' to shelter deck

Moulded displacement at moulded draught = 85 per cent. of moulded depth

Coefficient of fineness for use with Tables

Particulars of Classification +100 A1
Sheer deck with freeboard

Depth for Freeboard (D)

Moulded depth 34.12'

Stringer plate041'

Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ see sketch

Depth for Freeboard (D) =

Depth correction

(a) Where D is greater than Table depth
(D-Table depth) R =

(b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) 51.0'

Standard Round of Beam = $\frac{B \times 12}{50} =$

Ship's Round of Beam = 12.2"

Difference

Restricted to

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

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	✓					Standard Height of Superstructure
" overhang	✓					" " R.Q.D.
R.Q.D. enclosed	✓					Deduction for complete superstructure
" overhang	✓					Percentage covered $\frac{S}{L} =$
Bridge enclosed... ..	✓					" " $\frac{S_1}{L} =$
" overhang aft	✓					" " $\frac{E}{L} =$
" overhang forward	✓					Percentage from Table, Line A. (corrected for absence of fore-castle (if required))
F'cle enclosed <u>SEE SKETCH</u>			<u>7.12'</u>			Percentage from Table, Line B. (corrected for absence of fore-castle (if required))
" overhang						Interpolation for bridge less than 2L (if required)
Trunk aft	✓					Deduction =
" forward	✓					
Tonnage opening aft	✓					
" " forward	✓					
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate INS	Effective Ordinate	S	M	Product	
A.P.		1			<u>144.0</u>		1			Mean actual sheer aft =
$\frac{1}{6}$ L from A.P.		4			<u>18.96</u>		4			Mean standard sheer aft =
$\frac{2}{6}$ L "		2			<u>4.74</u>		2			Mean actual sheer forward =
Amidships		4					4			Mean standard sheer forward =
$\frac{2}{6}$ L from F.P.		2			<u>10.46</u>		2			Length of enclosed superstructure forward of amidships =
$\frac{1}{6}$ L "		4			<u>41.87</u>		4			" " aft of " =
F.P.		1			<u>96.0</u>		1			
Total										

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

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Ft.

Depth to Freeboard Deck =

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches =

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

+

-

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard =

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

Tropical Fresh Water Line above Centre of Disc					Tropical Fresh Water Freeboard
Fresh Water Line " "					Fresh Water " "
Tropical Line " "					Tropical " "
Winter Line below " "					Winter " "
Winter North Atlantic Line " "					Winter North Atlantic " "

1906 Freeboards re-assigned by the Registro Italiano

W387-0148(172)

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
← Cargo Hatchways on Freebord Deck →											
Description of Hatchway	no1	no2	no3	no4	no5	no6	Bunker Hatch on Freeboard Deck	Bunker Hatch on Deck	After Peak Hatch	Forepeak Hatch	Forecastle Deck
Dimensions of Hatchway	29'-2" x 20'-0"	29'-2" x 20'-0"	13'-3" x 18'-0"	11'-0" x 16'-0"	21'-0" x 20'-0"	24'-2" x 20'-0"	6'-1" x 8'-0"	4'-7" x 14'-6"	2'-6" x 1'-10"	3'-5" x 2'-0"	
COAMINGS	Height above Deck	30"	30"	30"	30"	30"	30"	30"	3"	19"	11"
	Thickness	50"	50"	50"	50"	50"	50"	40"	25"	25"	50 B.A.
	Stiffeners	7 x 3 x 1/2 BA	7 x 3 x 1/2 BA	7 x 3 x 1/2 BA	7 x 3 x 1/2 BA	7 x 3 x 1/2 BA	7 x 3 x 1/2 BA	nil	nil	nil	nil
	Brackets, Stays	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
HATCH BEAMS	Number	5	5	2	2	5	5				
	Spacing	4'-10"	4'-10"	4'-5"	2'-9" 6"	4'-6"	4'-10"				
	Scantling and Sketch	plate 18" x 40" angles 4 x 3 x 40"	plate 18" x 40" angles 4 x 3 x 40"	plate 16" x 40" angles 4 x 3 x 37"	plate 16" x 40" angles 4 x 3 x 37"	plate 18" x 40" angles 4 x 3 x 40"	plate 18" x 40" angles 4 x 3 x 40"				
	Bearing Surface	3 3/4"	3 3/4"	3 3/4"	3 3/4"	3 3/4"	3 3/4"				
FORE AND AFTERS	Number										
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch										
	Bearing Surface										
HATCH COVERS	Material	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.
	Thickness	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	How fitted	fore & aft	fore & aft	fore & aft	fore & aft	fore & aft	fore & aft	transverse	fore & aft	fore & aft	transverse
	Bearing Surface	4' x 3"	4' x 3"	4' x 3"	4' x 3"	4' x 3"	4' x 3"	3"	2 3/4"	12"	1 1/2"
Spacing of Cleats		20" 6 24"	20" 6 24"	20" 6 24"	20" 6 24"	20" 6 24"	20" 6 24"	20" 6 24"	26"	18"	12" 6 20"
Number of Tarpaulins		3	3	3	3	3	3	3	2	2	3

*Are wood fore and afters steel shod at all bearing surfaces? *none*

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? *Ring bolts on cargo hatch sides.*

Particulars of fiddley, funnel and ventilator coamings :—

Tunnel opening in casing top protected by steel grate.
Tunnel gratings protected by efficient hinged steel covers.
Stokehold & engine room ventilators on casing top of steel, efficient.
Engine room skylight of steel, strongly constructed.

Particulars of Flush Bunker Scuttles:— *none*

Particulars of Companionways :—

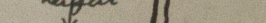
To stowards' store within tween deck; opening, in after end of bridge steel deck house, 2'-6" x 3'-9", 36" sill, closed by 1/4" hinged steel door, securing from both sides.
To crew space within after part of tween deck; opening, in efficient steel deck house, 4'-6" x 2'-0", 17" sills, closed by 1/4" hinged steel door. Closing appliances to overhaul.

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

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—				
6 on freeboard deck	to new space aft.	4 openings	5" dia x 24" high x 1/2" thick.	} Supplied with wood plugs & canvas covers.
"	"	3 "	3 1/2" " x 24" " x 1/2" "	
"	"	holds 2 bunkers.	9 1/2" " x 37" " x 3/8" "	
"	"	slawards store.	8 1/2" " x 24" " x 1/2" "	
"	forecastle deck	to fore-castle space.	2 1/2 " 5" " x 24" " x 1/2" "	

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

on foreboard deck to after peak tank 2 goosenecks 3" dia x 17" high.
 " " " " No 5 double bottom tank, 2 " " x 20" " (one gooseneck broken & fitted with wood plug)
 " " " " No 2 " " " 2 1/2 " x 21" "
 " " " " No 1 " " " 2 1/2 " x 19" "
 No closing appliances



Particulars of Gangway Cargo and Coaling Ports:— *none*

Particulars of Scuppers and Sanitary Discharge Pipes

2	Sanitary discharges from poop deck house, 1 port & 1 star-board, fitted with storm flaps.
1	" " " " midship deck house, port side, " " " "
1	" " " " bridge " " star-board side, " " " "
1	" " " " fore-castle, port side, " " " "

Particulars of Side Scuttles :

In fore-castle space, efficient & fitted with deadlights.
 " crew space aft, below freeboard deck, efficient & fitted with deadlights.
 All scuttles of substantial construction.

Particulars of Guard Rails :—

Particulars of Guard Rails:—
On fore-castle deck, steel bulwarks, 3'-9" high, for forward 10ft., then guard rails, 2 rows of rails, 3'-1" high, stanchions 4'-0" apart.
On freeboard deck, steel bulwarks 3'-6" high, except in way of midships accommodation (see sketch). Efficiently constructed & supported.

Particulars of Gangways, Lifelines, etc.:— *none*

Particulars of Freeing Arrangements

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
BULWARKS FROM AFTER After Well END. OF ... DECKHOUSE AMIDSHIPS.	149.5'	8'-6"	24" x 16"	4.		
BULWARKS FROM FORWARD Forward Well END. OF ... DECKHOUSE AMIDSHIPS.	148.0'	3'-6"	24" x 16" <i>also opening in bulwarks for accommodation ladder, 3'-6" wide, 3 rails with 8 1/2 sets (98'-0" aft of fore-castle bulkhead for board of after part of machine) (13' above dock level</i>	3		
State position of each freeing port ... } After Well :- 32'-6", 71'-6", 98'-6", 143'-6" (F. and A. position and height above deck edge) } Forward Well :- 32'-6", 63'-6", 139'-0" State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :- <i>hinged shutters</i>						
Additional area where sheer is less than standard.						

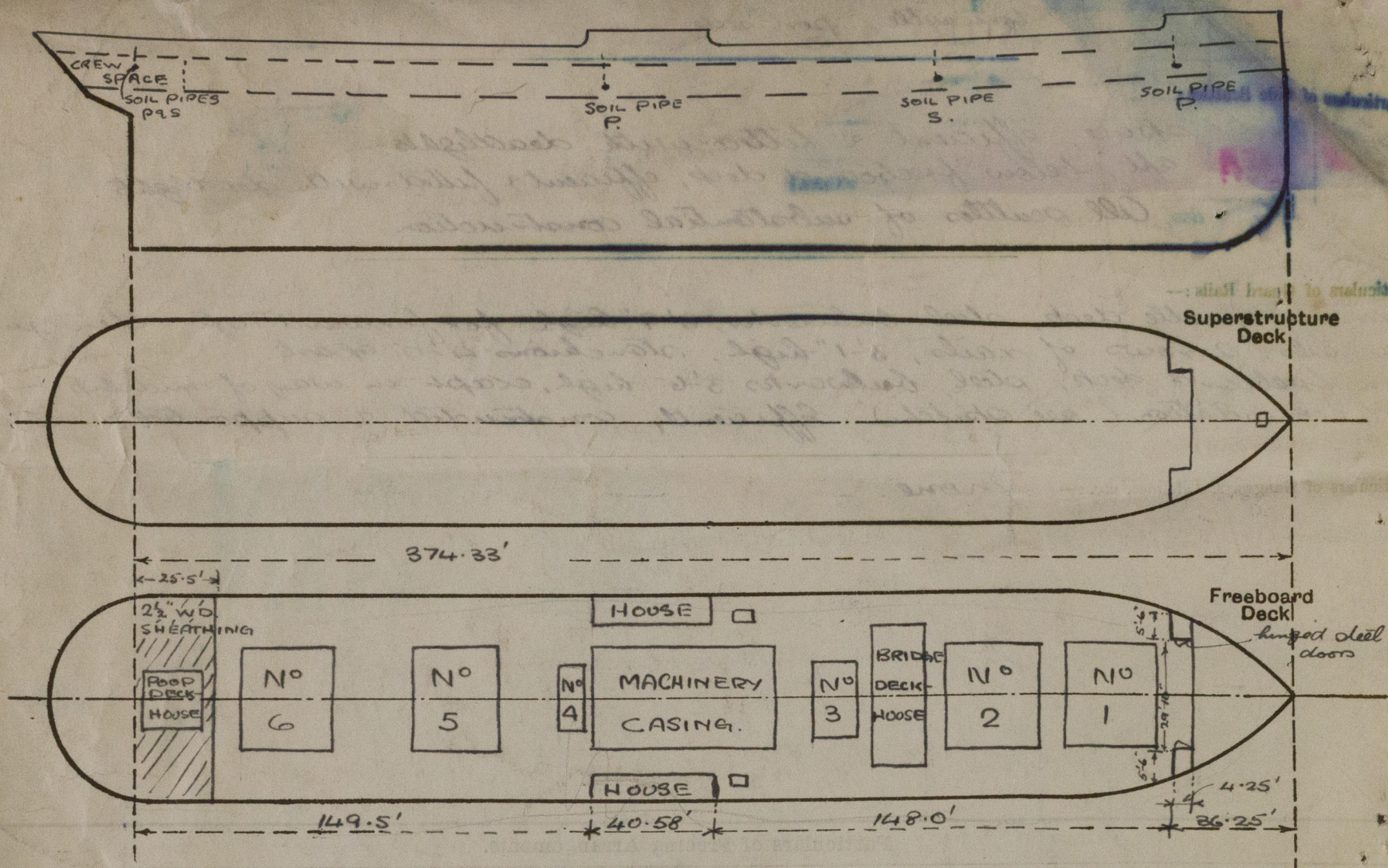
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓							
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	✓							
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	31"	31"	3½" x 3½" x 40"	2'-10" L ₅ 3'-0"	nil	1 @ 4'4" x 2'3" 1 @ 4'9" x 2'3"	24"	
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...	31"	25"	3½" x 3½" x 40"	2'-9"	Perforated at top.	4 @ 4'-6" x 2'-0"	19"	7'-3"
Exposed Machinery Casings on Super- structure Decks	✓							
Machinery Casings within Superstruc- tures 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	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead	✓
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	1- 2½" storm boards, full height (in rivetted channels)
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	1- hinged wood door.
Exposed Machinery Casings on Superstructure Decks	1/2" hinged steel door (bearing appliances to over-haul)
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.



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

Additional Hatch.

On freeboard deck within forecabin space, leading to forepeak store:— 3'9" x 2'6"
coaming 9 1/2" high x 1/2" thick, wood cover 2" thick with 2 3/4" rest bars, deck 18" apart, 2 to forepeak.

This vessel was measured afloat for freeboard purposes only.

It is requested that the assignment & conditions be wired to this office, and the certificate forwarded by return of post.

Builder's name and yard number Northumbreland S.B. Co. Ltd.

Names of sister ships

Owners "Corrado" Soc. Anon. di Nav.

Fee £ 13 : 12 : 0

Received by me



© 2019

Lloyd's Register
Foundation