ALL DIMENSIONS IN M[illegible] ... Lloyd's Rgstr. 13 DEC 1965 28829

Rpt. C.11 (Comp.)

RUSSIAN AUTHORITIES REQUES ASSIGNMENT OF FREEBOARD IN MILLIMETRES.

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR ~~STEAMER, SAILING SHIP~~, TANKER)

For LONDON OFFICE ONLY
Received 27 APR 1964
Index No.
Govt. Copy
Owners C11

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
GIORDANO BRUNO	1028.	RUSSIAN. ODESSA.	31794	5/1964.

Moulded Dimensions: Length 215·033. Breadth 31·000. Depth 15.527.
Freeboard Length 215·033. To CENTRE OF RUDDER STOCK.
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 72324. M.tons
Coefficient of fineness for use with Tables ·80

Port of Survey GENOA - SESTRI.
Date of Survey DURING - CONSTRUCTION.
Surveyor's Signature E. Winter.
Particulars of Classification Contemplated + 100A1 OIL TANKER. "ICE CLASS 3"

DEPTH FOR FREEBOARD (D).

Moulded depth 15.527
Stringer plate 33·5. ... ... ·034
Wood Sheathing on exposed deck
$T\left(\frac{L-S}{L}\right)$ =
Depth for Freeboard (D) = 15·561

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R =
8.33(15.561 − 14.336) 30 = + 306 m/m
(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) 31.000.
Standard Round of Beam = $\frac{B \times 22}{50}$ = 620
Ship's Round of Beam = 635.
Difference 15
Restricted to
Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S}{L}\right)$ = $\frac{15}{4}$ × ·817 = −27 m/m

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S_1)	Height	Height Correction	Effective Length (E)
Poop enclosed SEE SKETCH	46.636	46.636	2570/3210 AT AP.		46.636
„ overhang	NIL.				
R.Q.D. enclosed	–				
„ overhang	–				
Bridge enclosed SEE SKETCH	14.83	14.83	3000		14.83
„ overhang aft ...	NIL				
„ overhang forward ...	NIL.				
F'cle enclosed SEE SKETCH	28.428	28.428	2717/4248 AT F.P.		28.428
„ overhang	·098	·049			·049
Trunk aft	–				
„ forward	–				
Tonnage opening aft ...	–				
„ „ forward ...	–				
Total	89.994	89.945			89.945

Standard Height of Superstructure 2.290. m.
„ „ R.Q.D. –
Deduction for complete superstructure 1067 m/m
Percentage covered $\frac{S}{L}$ = 41.85
„ „ $\frac{S_1}{L}$ = } 41.83
„ „ $\frac{E}{L}$ = }
Percentage from Table, ~~Line A~~. Tanker 32.83
~~(corrected for absence of forecastle (if required))~~
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
~~Interpolation for bridge less than ·2L (if required)~~
Deduction = 1067 × ·3283 = − 350 m/m

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	2045	1	2045	518.	518	1	518
$\frac{1}{8}$L from A.P. ...	909	4	3636	78	78	4	312
$\frac{2}{8}$L „ ...	227	2	454	0	0	2	0
Amidships ...	0	4	0	0	0	4	0
$\frac{2}{8}$L from F.P. ...	454	2	908	0	0	2	0
$\frac{1}{8}$L „ ...	1817	4	7268	112.	112	4	448
F.P.	4090	1	4090	828.	828	1	828
Total ..			18401				2106

Mean actual sheer aft / Mean standard sheer aft = } Deficient
Mean actual sheer forward / Mean standard sheer forward = }
Length of enclosed superstructure / L forward of amidships = } Tanker
„ „ aft of „ = }

Correction = $\frac{\text{Difference between sums of products}}{18}\left(\cdot 75 - \frac{S}{2L}\right)$ = $\left(\frac{16798}{18} - 146\right) \times \frac{\cdot 5407}{789}\left(\cdot 75 - \cdot 2093\right)$ = + 410 m/m
If limited on account of midship superstructure. ✓
If limited to maximum allowance of 1½ ins. per 100ft. ✓

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

	Ft.
Depth to Freeboard Deck =	15.561
Summer freeboard =	3.773
Moulded draught (d) =	11.788
Keel allowance 38. =	
Extreme draught =	
Deduction for Tropical freeboard and addition for =	
Winter freeboard = $\frac{d}{48}$ inches =	246 m/m

Addition for Winter North Atlantic Freeboard (if required) = 246 + 179 = 425 m/m

Deduction for Fresh Water.
SEE OVER
Displacement in salt water at summer load water line
Δ = 64226
Tons per inch immersion at summer load water line
T = 58.9
Deduction = $\frac{\Delta}{40\ T}$ inches
= 273 m/m.

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 3128

Correction for coefficient 1.482/1.36 3409

	+	−
Depth Correction	306	–
Deduction for superstructures	–	350
Sheer correction	410	–
Round of Beam correction	–	2
Correction for Thickness of Deck amidships ...	–	–
Other corrections, scantlings, etc.	–	–
	716	352

+ 364
Summer Freeboard = 3773

1/5/64

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel UPPER Deck :— 3773 m/m

Tropical Fresh Water Line above Centre of Disc			519 m/m	Tropical Fresh Water Freeboard	3254 m/m
Fresh Water Line	„	„	273 m/m	Fresh Water „	3500 m/m
Tropical Line	„	„	246 m/m	Tropical „	3527 m/m
Winter Line	below	„	246 m/m	Winter „	4019 m/m
Winter North Atlantic Line	„	„	425 m/m	Winter North Atlantic „	4198 m/m

~~12 FEB 1962~~
12 MAY 1964

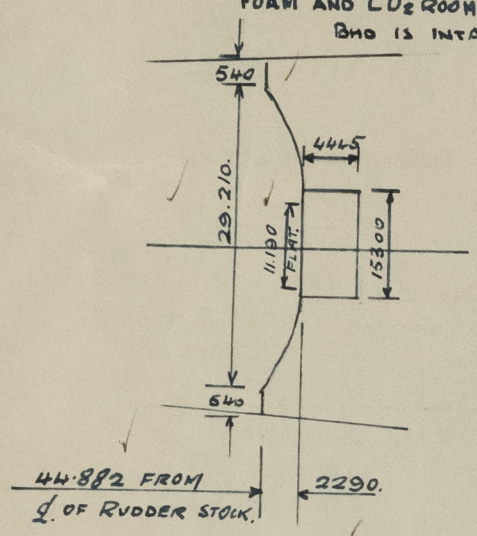
5m,4,59. T.

012078-012088-0351

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

POOP FRONT. - CLASS I CLOSING APPLIANCES.

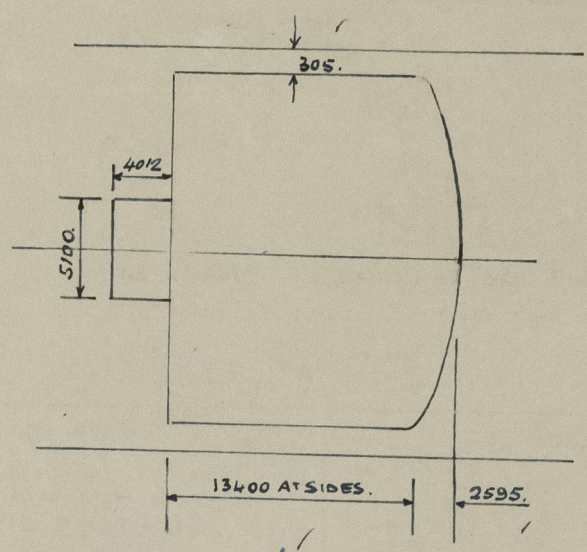
NB. THESE DOORS LEAD ONLY INTO. FOAM AND CO_2 ROOMS. OTHERWISE BHD IS INTACT.



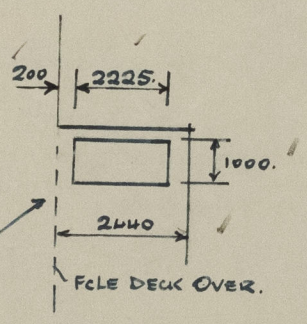
EQUIVALENT LENGTH = 46.636. m.

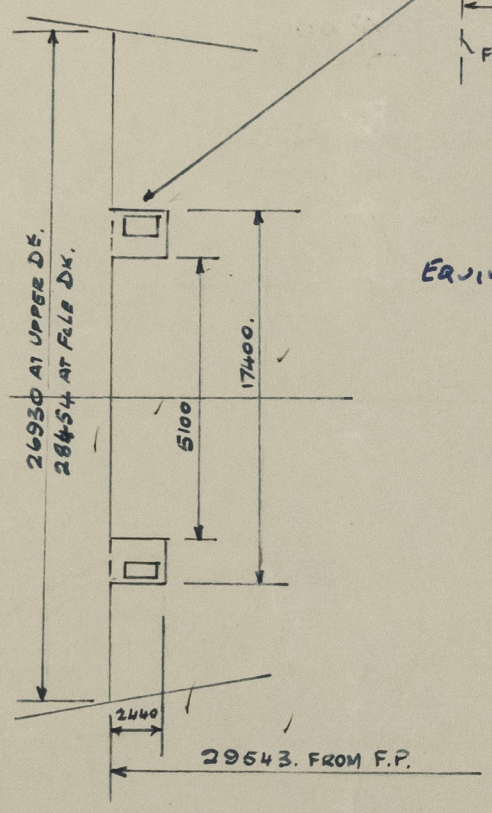
SHEER ALLOWANCE = 64 7m.

BRIDGE. AFT BHD. CLASS II.
FWD BHD. CLASS I.



EQUIVALENT LENGTH = 14.832. m.





EQUIVALENT LENGTH = 28.428. m.
OVERHANG = .098. m.
SHEER ALLOWANCE = 82 7m.

F'CLE FRONT. CLASS I CLOSING APPLIANCES.

	MLD DR.	M. TONS.	M. TONS/CM.
Δ S.L.W.	11.787.	64.220.	58.92.
Δ. S.L.W. + 75m/m.		64.662.	58.96.
Δ SLW - 75m/m.		63.778.	58.87.

Trade of ship INTERNATIONAL TANKER.

Names of sister ships "LEONARDO DA VINCI." "FEDOR POLETAEV".

Builder's name and yard number ANSALDO SPA. GENOA-SESTRI. YARD Nº 1595.

Owners BLACK SEA STATE STEAMSHIP LINES.

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950", paragraph 11.)

PLANS AT PRESENT IN H.O WITH 1ST ENTRY. FOR LEONARDO DA VINCI. YARD Nº 1593