

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

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

Ship's Name SOVAC RADIANT.	Official Number 1351 F	Nationality and Port of Registry PANAMA	Gross Tonnage 17598	Date of Build 1950 +	Port of Survey PALERMO
Moulded Dimensions: Length 601.1 ft Breadth 82.5 ft Depth 42.5 ft					Date of Survey 1st, 3rd, 4th, 6th, 8th, 10th & 12th, Aug 1955
Moulded displacement at moulded draught = 85 per cent. of moulded depth 34164 tons					Surveyor's Signature <i>W. Evans</i>
Coefficient of fineness for use with Tables (0.67) use 68					Particulars of Classification +100 A1.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 42.5	(a) Where D is greater than Table depth (D - Table depth) R = (42.62 - 40.07) 3 = + 7.65	Moulded Breadth (B) 82.5
Stringer plate (1.42")12	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \mathbf{19.8}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Nil	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = 20.0
Depth for Freeboard (D) = 42.62		Difference 0.2
		Restricted to (1 - .4337)
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.2}{4} \times .5632 = \mathbf{-.03}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	129.3"	133.77ft	8.5ft	-	134.99
" overhang ...	134.99	134.99	-	-	-
R.Q.D. enclosed ...					
" overhang ...	45.86				
Bridge enclosed ...	38.83"	45.85ft	8.5ft	-	45.86
" overhang aft ...	3'-6"	2.62ft	8.5ft	-	2.62
" overhang forward ...	Nil	76.36	-	-	-
F'dle enclosed ...	73.0ft	76.36	8.5ft	-	76.36
" overhang ...	81.9"	4.26	8.5ft	-	2.70
Trunk aft ...	5.39	2.70	-	-	-
" forward ...	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
" forward ...	-	-	-	-	-
Total ...	266.10	262.53			262.53

Standard Height of Superstructure **7.50'**

" " R.Q.D. ...

Deduction for complete superstructure **42.0'**

Percentage covered $\frac{S}{L} = \mathbf{44.27}$

" " $\frac{S_1}{L} = \mathbf{43.68}$

Percentage from Table, Line A. Tanker, **34.68**
(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 = **.3468 x 42" = -14.56"**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	70.11	1	70.11	15.5"	15.50	1	15.50
$\frac{1}{2}$ L from A.P. ...	31.20	4	124.80	3.5"	3.50	4	14.00
$\frac{3}{4}$ L " ...	7.71	2	15.42	0.5"	.50	2	1.00
Amidships ...	-	4	-	0	-	4	-
$\frac{3}{4}$ L from F.P. ...	15.42	2	30.84	0.5"	.50	2	1.00
$\frac{1}{2}$ L " ...	62.40	4	249.60	3.5"	3.50	4	14.00
F.P. ...	140.22	1	140.22	22.25"	22.25	1	22.25
Total ...			630.99	15.50			67.75

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{563.24(75 - .2213)}{18} = \mathbf{+ 16.54"$

If limited on account of midship superstructure. ☒ If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Mean actual sheer aft = **Deficient**

Mean standard sheer aft =

Mean actual sheer forward = **Deficient**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **Tanker**

" " aft of " = **Deficient Sheer.**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **42.62**

Summer freeboard = **10.37**

Moulded draught (d) = **32.25**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = $\frac{32.25}{4} = \mathbf{8.06" = 8"$

Addition for Winter North Atlantic Freeboard (if required) = $8.06 + 6.01 = \mathbf{14.07 = 14"$

Deduction for Fresh Water.

Displacement in salt water at summer load water line $\Delta = \mathbf{35175}$

Tons per inch immersion at summer load water line $T = \mathbf{98.25}$

Deduction = $\frac{\Delta}{40T}$ inches = $\frac{35175}{40 \times 98.25} = \mathbf{8.95" = 9"$

229.11

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **Nil**

	+	-
Depth Correction ...	7.65	-
Deduction for superstructures ...	14.56	-
Sheer correction ...	16.84	-
Round of Beam correction03	-
Correction for Thickness of Deck amidships ...	6.29	-
Other corrections, scantlings, etc. To ...	30.48	14.59
Summer Freeboard =	124.50	

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

AND, AS PREVIOUSLY ASSIGNED BY A.B.

Tropical Fresh Water Line above Centre of Disc	432
Fresh Water Line " "	229
Tropical Line " "	203
Winter Line below " "	203
Winter North Atlantic Line " "	356

Tropical Fresh Water Freeboard	2730
Fresh Water " "	2933
Tropical " "	2959
Winter " "	3365
Winter North Atlantic " "	3518

2m.9.39. T.

610874-010881-0044

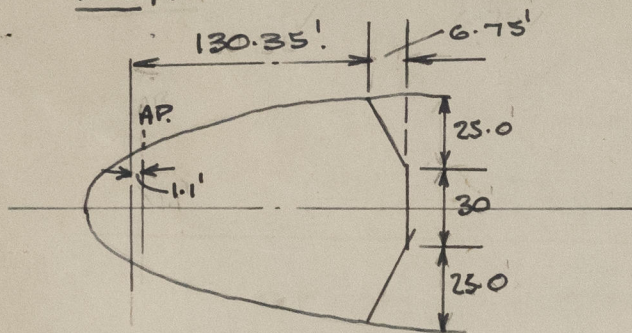
A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

W. H. Evans

Aug 1955

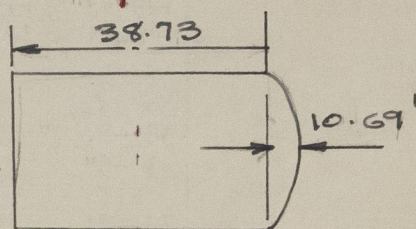
$$\begin{aligned} \text{Poop length to side} &= 130.35 \\ + \frac{30+80}{2} \times 6.75 &= \frac{464}{134.99} \end{aligned}$$

Poop.



BRIDGE.

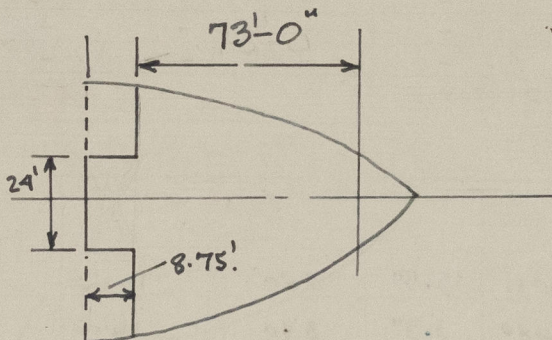
$$\begin{aligned} \text{Bridge length to side} &= 38.73 \\ + \frac{2}{3} \times 10.69 &= \frac{9.13}{45.86} \end{aligned}$$



Freeboard.

$$\begin{aligned} \text{length enclosed} &= 73.00 \\ + \frac{24 \times 8.75}{62.5} &= \frac{3.36}{76.36} \end{aligned}$$

$$O/H = 8.75 - 3.36 = 5.39'$$



Trade of ship

International

Names of sister ships

Builder's name and yard number

Sum J. B. and D. D. Co No 576

Owners

Fee £



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Foundation