

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

12 MAR 1943

Ship's Name EMPIRE PROWESS	Official Number 168954	Nationality and Port of Registry BRITISH WEST HARTLEPOOL	Gross Tonnage 7058	Date of Build APRIL 1943	Port of Survey W. HARTLEPOOL
Moulded Dimensions: Length 425'-0" Breadth 56'-0" Depth 37'-8" TO CR OF RUDDER STOCK 425'-7 1/8"				Date of Survey MARCH 1943	
Moulded displacement at moulded draught = 85 per cent. of moulded depth 17138 tons				Surveyor's Signature E. Lee	
Coefficient of fineness for use with Tables .786				Particulars of Classification + 100 A1. with freeboard.	

DEPTH FOR FREEBOARD (D). Moulded depth ... 37.66 Stringer plate ... 6.5"05 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ ✓ Depth for Freeboard (D) = 37.72	DEPTH CORRECTION. (a) Where D is greater than Table depth (D - Table depth) R = (37.72 - 28.38) 3 = +28.02" 9.34 (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) 56'-0" Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.44 Ship's Round of Beam = 10.56 Difference .56 Restricted to ✓ Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.56}{4} \times .9162 = -.13$
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	35'-8"	35.67	6'-9"	6.75/7.5	32.10
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	35.67	35.67			32.10

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate INCHES	Effective Ordinate	S M	Product
A.P. ...	52.57	1	52.57	31.0	31.00	1	31.00
1/8 L from A.P. ...	23.39	4	93.56	-	-	4	-
2/8 L " ...	5.78	2	11.56	-	-	2	-
Amidships ...	-	4	-	-	-	4	-
2/8 L from F.P. ...	11.57	2	23.14	-	-	2	-
1/8 L " ...	46.78	4	187.12	6.0	6.00	4	24.00
F.P. ...	105.13	1	105.13	81.0	81.00	1	81.00
Total ...			473.08				136.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{337.08}{18} (.75 - .0419) = +13.26$ If limited on account of midship superstructure. ✓		79.55 + 1.57 TABULAR FREEBOARD corrected for Flush Deck (if required) 81.12 Correction for coefficient $\frac{.786 + .68}{1.36} = 1.466/1.36$ 87.44	
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Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 37.72 Ft. Summer freeboard = 11.08 Moulded draught (d) = 26.64 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.66 = 6 3/4" Addition for Winter North Atlantic Freeboard (if required) =	Deduction for Fresh Water. FULL Displacement in salt water at summer load water line 26'-9" FULL DRAUGHT $\Delta =$ 14006 TONS Tons per inch immersion at summer load water line 26'-9" FULL DRAUGHT $T =$ 49.23 TONS. Deduction = $\frac{\Delta}{40 T}$ inches = 7.11 = 7"	DEPTH CORRECTION. (a) Where D is greater than Table depth (D - Table depth) R = (37.72 - 28.38) 3 = +28.02" 9.34 (b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓ If restricted by superstructures ✓
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-	
Tropical Fresh Water Line above Centre of Disc ... 1.3 3/4" Fresh Water Line " " ... 7" Tropical Line " " ... 6 3/4" Winter Line below " " ... 6 3/4" Winter North Atlantic Line " " ... 7"	Tropical Fresh Water Freeboard 9.21 1/4" Fresh Water " 1.0 - .6" Tropical " 1.0 - .6 1/4" Winter " 1.1 - .7 3/4" Winter North Atlantic " 1.1 - .7 3/4"

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.

Trade of ship

Ocean-going

Names of sister ships

"Empire Mortimer", "Empire Lato", "Empire Drive" & previous vessels

Builder's name and yard number

William Gray & Co. Ltd. Yard No 1142

Owners

Ministry of War Transport

Fee £

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