

23 SEP 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP, Bridge & Y'cle

JAMES HANSEN (Type of Superstructures.)

Ship's Name JAMES HANSEN Nationality and Port of Registry Norwegian Official Number 6074 Date of Build 1930. 8.

Port of Survey LONDON

Date of Survey 22nd Sept 1932

Name of Surveyor Edley Turing

Particulars of Classification +100A1
Carrying Petroleum in bulk

Moulded Dimensions: Length 395.0 ft Breadth 54.75 ft Depth 32.0 ft

Moulded displacement at moulded draught = 85 per cent. of moulded depth 13021 tons

Coefficient of fineness for use with Tables .775

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	32.0	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	54.75 ft
Ring plate	.05	(32.05 - 26.33) 3 = + 17.16		Standard Round of Beam = $\frac{B \times 12}{50}$	13.14"
Sheathing on exposed deck	<u>POOP 50% 2"</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	12"
T $\left(\frac{L-S}{L}\right)$				Difference	1.14
Depth for Freeboard (D) =	32.05	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	$= \frac{1.14}{4} \times .3032 = +.09$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	96.75	96.75	7'-6"	90%	95.53	Standard Height of Superstructure <u>7.45</u>
" overhang ...	<u>none</u>					" " R.Q.D. <u>✓</u>
R.Q.D. enclosed ...	<u>✓</u>					Deduction for complete superstructure <u>41.67</u>
" overhang ...	<u>✓</u>					Percentage covered $\frac{S}{L} = 40.82\%$
Bridge enclosed...	25.5	25.50	7'-6"	90%	22.95	" " $\frac{S_1}{L} = 69.68\%$
" overhang aft ...	3.5	2.62			2.62	" " $\frac{E}{L} = 51.66\%$
" overhang forward	<u>none</u>					Percentage from Table, Line A.
P'ele enclosed ...	35.5	35.50	7'-6"	✓	35.50	(corrected for absence of forecastle (if required))
" overhang ...	<u>none</u>					Percentage from Table, Line B. TANKER <u>42.83%</u>
Trunk aft <u>110.63 x 30</u>	<u>113.25</u>	60.62	3'-3"	90% x $\frac{3.25}{7.45}$	23.80	(corrected for absence of forecastle (if required))
" forward <u>99 x 30</u>	<u>99</u>	54.25	3'-3"	$\frac{3.25}{7.45}$	23.67	Interpolation for bridge less than 2L (if required)
Tonnage opening aft	<u>✓</u>					Deduction = $41.67 \times .4283 = -17.85$
" forward						
Total ...	161.25	275.24			204.07	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	49.50	1		49.50	48.00	48.00	1		48.00	Mean actual sheer aft = <u>Deficient > 75%</u>
$\frac{1}{2}$ L from A.P. ...	22.03	4		88.12	21.33	21.33	4		85.32	Mean actual sheer forward = <u>Excess</u>
$\frac{2}{3}$ L " ...	5.44	2		10.88	5.33	5.33	2		10.66	Mean standard sheer forward
Amidships ...	<u>✓</u>	4		<u>✓</u>	<u>✓</u>	<u>✓</u>	4		<u>✓</u>	Length of enclosed superstructure forward of amidships =
$\frac{2}{3}$ L from F.P. ...	10.89	2		21.78	11.85	11.85	2		23.70	" " aft of " = } <u>Tankers</u>
$\frac{1}{2}$ L " ...	44.05	4		176.20	47.40	47.40	4		189.60	
F.P. ...	99.00	1		99.00	96.00	96.00	1		96.00	
Total ...				445.48					453.28	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{7.80}{18} \times (.75 - .2041) = -.24$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)		
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient	$\frac{1.455}{1.36}$	61.35
Depth to Freeboard Deck = 32.05		$\Delta = 12788$				65.64
Summer freeboard = 5.39		Tons per inch immersion at summer load water line		Depth Correction ...	17.16	
Moulded draught (d) = 26.66		T = 43.40		Deduction for superstructures ...	17.85	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.66 = 6 $\frac{3}{4}$		Deduction = $\frac{\Delta}{40T}$ inches = 7.37 = 7 $\frac{1}{4}$		Sheer correction24	
Addition for Winter North Atlantic Freeboard (if required) = 3.95 = 4		DRAGHT 2.5 ft 2.6 ft		Round of Beam correction09	
		DISPLACEMENT 11842 tons 12354		Correction for Thickness of Deck amidships ...	<u>✓</u>	
				Other corrections, scantlings, etc. ...	<u>✓</u>	
					17.25 18.09	- .84
						Summer Freeboard = 64.80

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~wood~~ Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc	14" = 355%	Tropical Fresh Water Freeboard ...	5'-4 $\frac{3}{4}$ " = 1644%
Fresh Water Line	7 $\frac{1}{4}$ " = 184%	Fresh Water	4'-2 $\frac{3}{4}$ " = 1289%
Tropical Line	6 $\frac{3}{4}$ " = 171%	Tropical	4'-9 $\frac{1}{2}$ " = 1460%
Winter Line below	6 $\frac{3}{4}$ " = 171%	Winter	4'-10" = 1473%
Winter North Atlantic Line	10 $\frac{3}{4}$ " = 273%	Winter North Atlantic	5'-11 $\frac{1}{2}$ " = 1815%
			6'-3 $\frac{1}{2}$ " = 1917%

112 OCT 1932

RECEIVED
30 SEP 1932

19 FEB 1936

RECEIVED
110 OCT 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS						
Description of Hatchway	FORE HOLD	MAIN CARGO TANKS	SUMMER TANKS	BUNKER TRUNKED TO POOP DECK	POOPSPACE STORE	
Dimensions of Hatchway	10'6" x 10'6"	6'0" x 2'0"	5'0" x 5'10"	4'0" x 5'0"	2'8" x 4'0"	
COAMINGS	Height above Deck	33"	33"	33"	27" ABOVE POOP	
	Thickness of Sides	1/4"	1/4"	1/4"	1/4"	
	Stiffeners	7/8" x 5"	✓	✓	✓	
	Brackets, Stays	none	✓	✓	✓	
	Number	✓	✓	✓	✓	
HATCH BEAMS	Spacing	✓	✓	✓	✓	
	Scantling and Sketch	✓	✓	✓	✓	
	Bearing Surface	✓	✓	✓	✓	
	Number	✓	✓	✓	✓	
	Spacing	✓	✓	✓	✓	
FORE AND AFTERS	Unsupported Lengths	✓	✓	✓	✓	
	Scantling and Sketch	✓	✓	✓	✓	
	Bearing Surface	✓	✓	✓	✓	
	Number	✓	✓	✓	✓	
	Spacing	✓	✓	✓	✓	
HATCH COVERS	Material	Steel	Steel	STEEL	STEEL	PINE
	Thickness	1/2"	1/2"	1/2"	1/2"	3"
	How fitted	OIL TIGHT JOINT	OIL TIGHT JOINT	OIL TIGHT JOINT	OIL TIGHT JOINT	F&A
	Bearing Surface	✓	✓	✓	✓	2 1/2"
	Spacing of Cleats	✓	✓	✓	✓	21"
Number of Taraulins	✓	✓	✓	✓	✓	2

*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 casing and ventilators substantially constructed and in good condition
Engine room skylight steel construction with steel flaps in good condition
Hinged steel covers fitted over gratings.

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways:—

One in after end of poop deckhouse (leading to poop quarters) solid tank door, 24x57" Sills 16"
One from bridge deck to bridge to wind deck space covered by plug trap hatch in pantry.

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

On Poop. To Engine Room 1 at 8" coaming 33". TO POOP QUARTERS. 8 @ 7" x 10" coamings 30" x 33" & 5 @ 5" x 3" 1" x 25" high
On trunk aft. 2 @ 20" to pump room coamings 36" high
On Bridge Deck. 2 @ 6" 32" above bridge deck & one 1" x 25" above bridge deck
On freeboard deck forward 1 @ 6" & 1 @ 18" coamings 36" high
on 7' cle. 1 @ 18" to hold & 1 @ 9" to 7' cle.

Wood plugs & canvas covers provided for all vents.

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

Multi tank vents 19" above poop deck. Wire gauze fitted at openings.
Trunk Water & after peak air pipes 18" above poop deck.
Giant in way of fore hold 2 air pipes 1" x 24" above freeboard deck.
Fore peak tank 2 air pipes 20" above 7' cle deck.

Canvas covers provided.

Particulars of Gangway Cargo and Coaling Ports:—

none

Particulars of Scuppers and Sanitary Discharge Pipes:—

Sanitary discharges & scuppers from ship's quarters led to bronze valve at ship's side above freeboard deck
Sanitary discharges from poop quarters led to bronze stem valves in after peak.

Particulars of Side Scuttles:—

Hinged deadlights fitted to all side scuttles.

Particulars of Guard Rails:—

Poop bridge & 4' cle rails 36" high 3 bars stanchions 5'6" apart (average)
Trussard deck & A. Rails 42" above deck 3 bars stanchions 4'3" apart
Main & aft gangways. Rails 36" high 2 bars

Particulars of Gangways, Lifelines, etc.:—

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			<i>Open rails. Sheerstrake about 12" above deck</i>			
Forward Well						

State position of each freeing port ... After Well:—
 (F. and A. position and height above deck edge) Forward Well:—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 Additional area where sheer is less than standard.

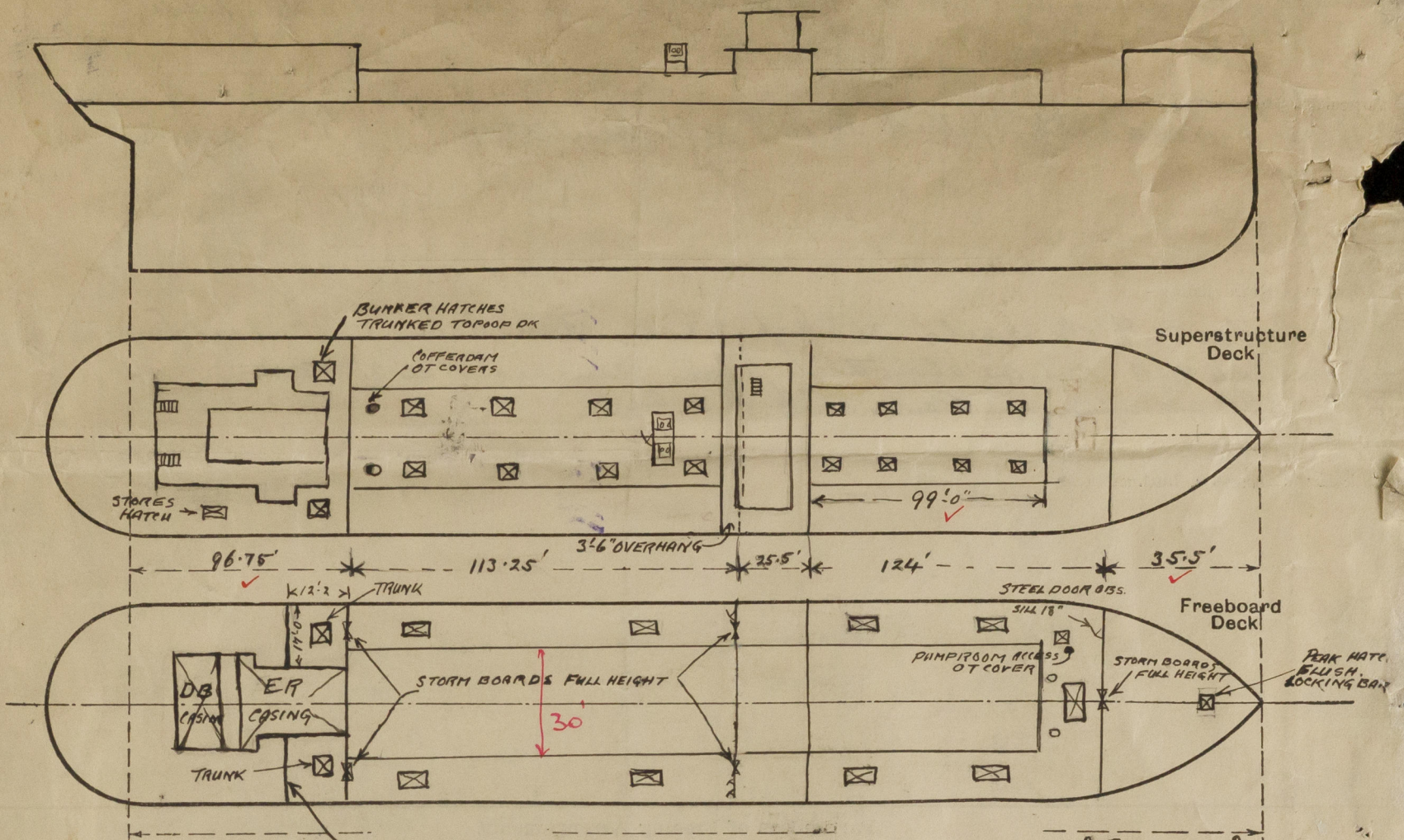
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓	.42	9"x3"x.53"	30"	Brackets T&B	20'51" high 45" wide	22"	7'-6"
Raised Quarter Deck Bulkhead	✓	.26	3"x3"x.30"	30"	Bar to bar 20'51" x 45"	20'24" x 57"	23"	7'-6"
Bridge, After Bulkhead	✓	.26	3"x3"x.30"	30"	Brackets T&B	none	18"	7'-6"
Bridge, Forward Bulkhead	✓	.42	8"x3"x.53"	30"	Bar to bar 10'51" x 45"	10'24" x 57"	21"	7'-6"
Forecastle Bulkhead	✓	.26	3"x2 1/2"x.30"	32"	Bar to bar 10'51" x 45"	10'24" x 57"	21"	7'-6"
Trunk, Aft	✓	.48	Intermediate Brackets about 5'0"		Full depth brackets	none	✓	3'-3"
Trunk, Forward	✓	.48	"	"	"	"	✓	3'-3"
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓	✓	✓	✓	Brackets at top	24"x57"	15"	7'-3"
Exposed Machinery Casings on Superstructure Decks	1.40	.32	3"x2 1/2"x.30"	30"	Brackets T&B	✓	✓	7'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	.32	4 1/2"x3"x.26"	24"	Bar to bar	24"x62"	13"	6'6" to 8'6"
Pump room Deckhouses on Flush Deck Ships	✓	.26	5"x2 1/2"x.30"	32"	Bar to bar	24"x62"	13"	6'6" to 8'6"

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

Poop Bulkhead	✓	3" x 2 1/4" stern boards, 45" span in Ratchet Channels (inner poop bulkhead intact, see sketch)
Raised Quarter Deck Bulkhead	✓	3"
Bridge, After Bulkhead	✓	45" span stern boards 2 1/4" in ratchet channels & solid tank doors, fastenings both sides
Bridge, Forward Bulkhead	✓	3"
Forecastle Bulkhead	✓	45" span stern boards 2 1/4" in ratchet channels, & 1 steel door opening from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓	Steel hinged doors, fastenings manipulated both sides
Exposed Machinery Casings on Superstructure Decks	✓	Steel hinged doors, fastenings manipulated both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	Steel hinged door, fastenings manipulated both sides.
Pump room Deckhouses on Flush Deck Ships	✓	Steel hinged door, fastenings manipulated both sides.

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 shewn on the following sketches:—



POOP:

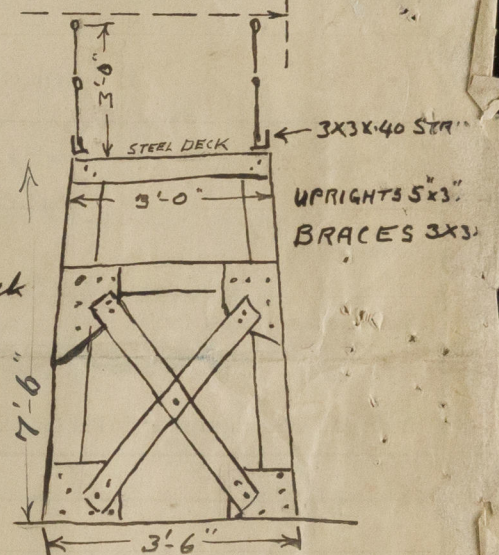
$$84.58 @ 100\% = 84.58$$

$$12.17 @ 90\% = \frac{10.95}{95.53}$$

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

Present freeboard assigned by Norske Veritas } FW 5'-9"
TADIC 5'-10" } below top of steel deck at side
WINTER 6'-9 1/2"

Survey held afloat with full cargo aboard and confined to taking particulars for this report.
So far as could be seen the vessel is in good condition.



GANGWAY SUPPORTS IN WAY OF TA
SIMILAR SCANTLINGS BUT ABOUT HA
HEIGHT & DIAGONAL BRACES OMITTE
SPACING OF SUPPORTS ABOUT 8'

Builder's name and yard number Hamström Whitmarshall N° 1062
(Shipyard) 50

Names of sister ships "PEIK" "BISCA" "EVINA" "STEGG" "BEAULIEU" "NINA BORTHEN" "GYLEE" "LEIESTEN" "ASHMOEK"

Owners Sturlungs Rederi A/s

Fee £ 14 : 9 : 0

Received by me

Expenses 2 . 10 . 6 .



© 2021

Lloyd's Register
Foundation