

Rpt. C.11.
MELISSA 35004
PORT LYAUTEY 35778
MARTHA 36078

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Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

10345

Computation of Freeboard for Tanker					Port of Survey ROTTERDAM
having RAISED QUARTER DECK, TRUNK AND FORECASTLE.					Date of Survey BUILDING.
(Type of Superstructures.)					Name of Surveyor C. LODDER.
Ship's Name MILDRED	Nationality and Port of Registry DUTCH. ROTTERDAM.	Official Number 552.39	Gross Tonnage 1026 M³	Date of Build 1939	Particulars of Classification +100 A1 "CARR. PETR. IN BULK." (CLASS CONTEMPLATED)
Moulded Dimensions: Length 54.30 MR. Breadth 8.42 MR. Depth 3.41 MR.					
Moulded displacement at moulded draught = 85 per cent. of moulded depth					
Coefficient of fineness for use with Tables .774					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... 3.410	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) 8.42
Stringer plate ... 9	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times \square}{50} = 168$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	8.33 (3.62 - 3.419) 13.712 = -23 .201	Ship's Round of Beam TO USE = 180
Depth for Freeboard (D) = 3.419	If restricted by superstructures Yes NIL Class 2 appliances to Forecastle	Difference Excess 12
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{12 \times 1912}{4} = -17$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	✓					Standard Height of Superstructure 1,830
„ overhang ...	✓					„ „ R.Q.D. 1,071
R.Q.D. enclosed ...	18.85	18.85	1260		18.85	Deduction for complete superstructure 605
„ overhang ...						Percentage covered $\frac{S}{L} = 52.18\%$
Bridge enclosed ...	✓					„ „ $\frac{S_i}{L} = 80.88\%$
„ overhang aft ...	✓					„ „ $\frac{E}{L} = 71.94\%$
„ overhang forward ...	✓					Percentage from Table, Line A. Tanker 65.39%
F'cle enclosed ...	9.48	9.48	1948		9.48	(corrected for absence of forecastle (if required))
„ overhang ...						Percentage from Table, Line B.
Trunk ...		15.59	1260	$\frac{1260}{1830}$	10.73	(corrected for absence of forecastle (if required))
„ forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...	✓					Deduction = 605 × 65.39 = 396
„ „ forward						
Total ...	28.33	43.92			39.06	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	706	1		706	810	810	1		810	Mean actual sheer aft = Excess
1/4 L from A.P. ...	314	4		1256	370	370	4		1480	Mean actual sheer forward = Excess
2/4 L „ ...	78	2		156	91	91	2		182	Mean standard sheer forward
Amidships ...	-	4		-	-	-	4		-	Length of enclosed superstructure forward of amidships =
2/4 L from F.P. ...	156	2		312	185	185	2		370	„ „ aft of „ = } Tanker
1/4 L „ ...	628	4		2512	747	747	4		2988	
F.P. ...	1412	1		1412	1668	1668	1		1668	
Total ...				6354					7498	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{1144}{18} \left(.75 - \frac{2609}{4891} \right) = -31$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	494
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.774 + .68}{1.36} \cdot \frac{1454}{1.36}$	528
Depth to Freeboard Deck = 3.419	$\Delta = 1198 \text{ m}^3$	Depth Correction ...	
Summer freeboard = 100	Tons per inch immersion at summer load water line	Deduction for superstructures ...	396
Moulded draught (d) = 3.319	$T = 3.89 \text{ m}^3/\text{cm.}$	Sheer correction ...	31
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ...	1
Winter freeboard = $\frac{d}{48} = 6.91 = 7 \text{ cm.}$	$= 7.7 = 8 \text{ cm.}$	Correction for Thickness of Deck amidships	
Addition for Winter North Atlantic Freeboard (if required) = $6.91 + 4.45 = 11.36 = 11 \text{ cm.}$	$\Delta = 1198 \text{ M}^3 \text{ AT } 3.32 \text{ MR. MLD.}$	Other corrections, scantlings, etc. ...	
	$T = 3.89 \text{ M}^3/\text{cm.}$		428
			428
			Summer Freeboard = 100

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

Tropical Fresh Water Line above Centre of Disc ...	10 cm.	Tropical Fresh Water Freeboard ...	NIL
Fresh Water Line „ „ ...	8	Fresh Water „ „ ...	2
Tropical Line „ „ ...	5	Tropical „ „ ...	5
Winter Line below „ „ ...	7	Winter „ „ ...	17
Winter North Atlantic Line „ „ ...	11	Winter North Atlantic „ „ ...	21

M/s. Mildred

Particulars of fiddle, funnel and ventilator coamings:— FIDDLEY, FUNNEL AND VENTILATOR COAMINGS GOOD. ✓
ENGINE ROOM SKYLIGHT OF STEEL WITH STEEL HINGED FLAPS. ✓
DONKEY BOILER ROOM GRATINGS COVERED BY STRONG STEEL HINGED FLAPS. ✓

Particulars of Flush Bunker Scuttles:— *NONE FITTED.*

Particulars of Companionways:— ON FORECASTLE: ONE STL. COMPANIONWAY TO FORECASTLE SPACE WITH STEEL HINGED DOORS, OPERATED FROM BOTH SIDES; SILL 24" ABOVE TRUNK DECK. ONE STL. COMPANIONWAY TO PUMP ROOM WITH STL. GASTIGHT HINGED DOOR CLOSED BY TOGGLES FROM OUTSIDE ONLY; SILL 24" ABOVE TRUNK. ON R.P.D. (FORWARD) STEEL COMPANIONWAY TO PUMP ROOM WITH STEEL GASTIGHT HINGED DOOR CLOSED BY TOGGLES FROM OUTSIDE; SILL 18."✓
AFTER END OF MOTOR CASING: STEEL HOUSE WITH 2 STRONG TENK HINGED DOORS LEADING TO CREW SPACE. DOORS OPERATED FROM BOTH SIDES; SILL 18."✓

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— ON FORECASTLE: 2 VENTS 36"x6³/₄" TO FLE SPACE, 3 VENTS 36"x8³/₄" AND ONE VENT 8³/₄" ON TOP OF COMPANIONWAY TO PUMPROOM.
ON RAISED QUARTERDECK: 2 VENTS 36"x10" TO PUMPROOM, 9 VENTS 36"x6³/₄" AND 4 GOOSENECK VENTS 30" IN HEIGHT TO CREWSPACE AND STOREROOMS.
ALL VENTILATORS CONSTRUCTED AS PER RULES AND WOOD PLUGS & CANVAS COVERS SUPPLIED AS REQUIRED.

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

ON FORECASTLE :	1 AIRPIPE 30" TO FORE PEAK TANK;	4 AIR PIPES 30" TO WING TANKS.
ON R.Q. DECK :	1 " 30" AFTER " 2 " 30" FRESH WATER TANKS;	
	2 AIRPIPES 8" O.K. BUNKERS SUPPORTED AND FITTED WITH PATENT GAS CAPS.	
ON TRUNK :	1 AIRPIPE 4" EACH CARGO HATCH " " " " " "	
	WOOD PLUGS SUPPLIED FOR ALL GOOSENECK AIR PIPES.	

Particulars of Gangway Cargo and Coaling Ports:— *NONE FITTED.* ✓

ALL SANITARY DISCHARGE PIPES FROM SPACE BELOW R.Q.D. FITTED WITH SUBSTANTIAL STORM VALVE (BRONZE) AT SHIP'S SIDE IN CONJUNCTION WITH COCK IN ACCESSIBLE POSITION. ✓
SANITARY DISCHARGE PIPES FROM SPACES ABOVE R.Q.D. FITTED WITH STORM VALVE ONLY. ✓

ALL SIDE SCUTTLES IN FORECASTLE AND CREWSPACE ARE OF SUBSTANTIAL CONSTRUCTION
WITH STRONG HINGED DEAD LIGHTS. ✓
SILL OF LOWEST SIDE SCUTTLE 434 C.M. ABOVE BASE LINE.

	ON FORE CASTLE:	OPEN RAIL,	H=40";	3 RODS;	STANCHIONS 5'-6" APART & RIVETED TO DECK.	✓
	ON TRUNK :	" "	H=43";	3 " ;	4'-6" " " " "	
	IN WELL :	" "	H=41";	3 " ;	5'-6" " " " "	STRINGER ANGLE. ✓
					T-BARS.	✓
	PART STEEL BULWARK SUBSTANTIALLY CONSTRUCTED; H=40"					
ON R.P.D.	:	" "	" "	" "	H=38"	✓

ACCESS TO FORECASTLE OVER TRUNK. CREW BERTHED AFT.

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>Fr. 9th D.</i> ...	<i>14.61 Mr</i>	<i>38"</i>	<i>1.25 x .22 Mr</i>	<i>4</i>	<i>1.10 M²</i>	<i>1.05 m²</i>
Forward Well	<i>25.97 Mr</i>	<i>40"</i>	<i>23.32 Mr OPEN RAIL. FREEING PORT 1.00 x .22 Mr</i>	<i>1</i>		<i>full length</i>

State position of each freeing port { After Well :— *3" ABOVE DECK.*
(F. and A. position and height above deck edge) { Forward Well :— *6" "*

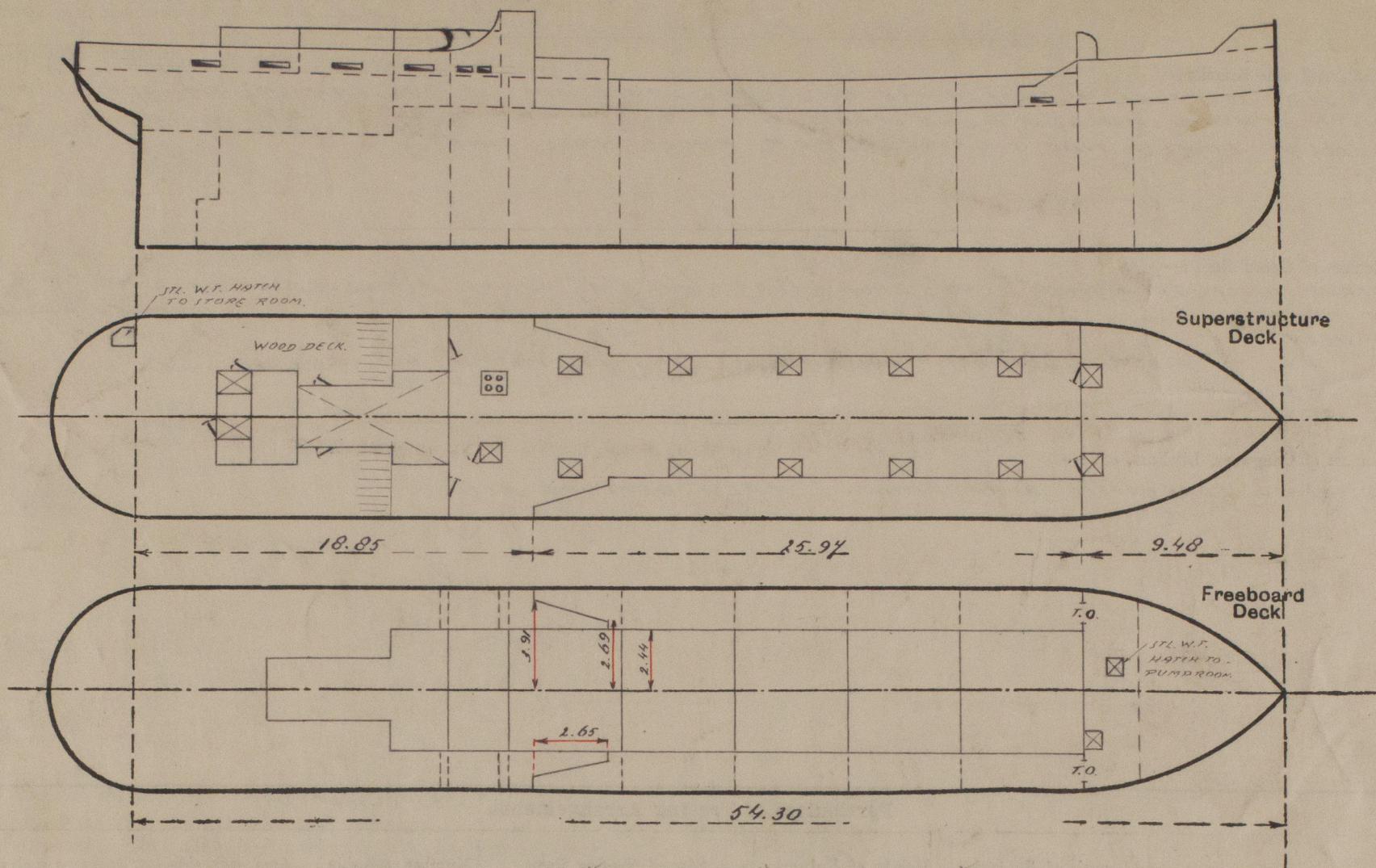
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— *NO.*

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 Bulkhead36"	.36"	15" x 2 1/4" x 31"	24"	LUGS			
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead35"	.35"	4 3/4" x 2 1/4" x 28"	24"	BKTL	4'-1" x 3'-0 1/2"	24"	
Trunk, etc36"	.36"	4 3/4" x 2 1/4" x 28"	21"	BKTL			
Trunk, Forward								
Exposed Machinery Casings on etc								
etc Raised Quarter Decks30"	.30"	4 3/4" x 2 1/4" x 28"	24"-30"	BKTL	4'-6" x 1'-10"	18"	6'-9"
Exposed Machinery Casings on Super-structure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...								

Poop Bulkhead	
Raised Quarter Deck Bulkhead	NO OPENINGS. ✓
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on	PORTABLE PLATES ON HOOK BOLTS NOT PASSING THROUGH BULKHEAD. ✓
Exposed Machinery Casings on	
Exposed Machinery Casings on Super-	STEEL HINGED DOORS OPERATED BOTH SIDES. ✓
structure Decks	
Machinery Casings within Superstruc-	
tures 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 shewn on the following sketches:—

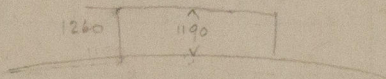


TRUNK: $S_1 = \frac{23.32 \times 2.44 + \frac{2.91 + 2.69}{2} \times 2.65}{4.21} = 15.59 \text{ MR.}$

ROUND OR BERM UPPERDECK 250 "M.
 " " " R.Q.D. & TRUNK 180 "
 HEIGHT R.Q.D. & TRUNK AT CENTRE 1190 "M.
 " " " SIDE 1260 "

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

THE VESSEL HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS.



Builder's name and yard number WERF DE NOORD; YARD N° 574.
 Names of sister ships SIMILAR SHIPS: M/S "MELISSA"; M/S "PORT LYAUTEY"
 Owners N.V. TANK KUSTVAART.
 Fee fl. 96.- : Will be Received by me [Signature]



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