

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Gunsport No
18016

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

a Bridge and a Forecastle

Port of Survey

Grimsby

Date of Survey

8-7-32

Name of Surveyor

F. R. Palmer

Particulars of Classification

100A1

S.S. Aut. No. 1-29

(Type of Superstructures.)
Ship's Name *Kylebrook*
Nationality and Port of Registry *British*
Official Number *145637*
Gross Tonnage *1578*
Date of Build *11-7-47*
1566
1924-8

Moulded Dimensions: Length *245-0* Breadth *36-75* Depth *20-4 1/2*
Moulded displacement at moulded draught = 85 per cent. of moulded depth *3.522* tons
Coefficient of fineness for use with Tables *791*

Depth for Freeboard (D)					Depth correction		Round of Beam correction	
Moulded depth	...	...	...	20.33 ⁷	(a) Where D is greater than Table depth		Moulded Breadth (B)	36.75 ⁻
Stringer plate	34.	...	...	03	(D - Table depth) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	8.82 ⁻
					(20.36 - 16.33) 1.88 ⁴⁰	2.58 + 7.67	Ship's Round of Beam	13.2 ⁻
Sheathing on exposed deck	$T \left(\frac{L-S}{L} \right) =$				(b) Where D is less than Table depth (if allowed)		Difference	4.18
					(Table depth - D) R =			
Depth for Freeboard (D) =				20.36 ⁴⁰	If restricted by superstructures		Restricted to	
							Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{4.18}{4} \times \frac{7228}{4} = 76$

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...	47-50	44-75	7-0	4-75	44-75
" overhang aft ...	75	56		56	56
" overhang forward					
Fore enclosed ...	21-87	21-87		21-87	21-87
" overhang ...	75	75	7-0	7-0	75
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	70-87	67-93			67-93

Standard Height of Superstructure

6-0

" " R.Q.D.

Deduction for complete superstructure

30-5

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

28-93

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

27-72

" " $\frac{E}{L} =$

27-72

Percentage from Table, Line A.

13-86

(corrected for absence of fore-castle (if required))

443-70

Percentage from Table, Line B.

17-56

(corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required)

 $\frac{4531}{245} = 1850$

Deduction =

30-5 x 1728

522

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	34-50	1		34-50	49-75	49-75	1		49-75
1/2 L from A.P. ...	15-35	4		61-40	22-33	21-33	4		85-32
3/4 L " ...	3-80	2		7-60	5-33	5-33	2		10-66
Amidships ...	0-00	4		0-00	0-00	0-00	4		0-00
3/4 L from F.P. ...	7-60	2		15-20	8-50	8-50	2		17-00
1/2 L " ...	30-70	4		122-80	33-97	33-97	4		135-88
F.P. ...	69-00	1		69-00	77-50	77-50	1		77-50
Total ...				310-50					386-75

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure
L

forward of amidships = $\frac{21-13}{245} = 0863$

" " aft of

= $\frac{26-37}{245} = 1076 \text{ allowed}$

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{65-61}{18} = 2-207$

If limited on account of midship superstructure, $2-207 \times \frac{1863}{9000} = 2-06$ If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 20-40
Summer freeboard = 2-79
Moulded draught (d) = 17-61

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 4-40 4 1/2

Addition for Winter North Atlantic Freeboard (if required = 2

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Δ =

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{791+68}{136}$

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

	+	-
Depth Correction	7-67	-
Deduction for superstructures	-	5-22
Sheer correction	-	2-06
Round of Beam correction	-	76
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	7-67	8-04

Summer Freeboard = 33-48

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

Tropical Fresh Water Line above Centre of Disc ...
Fresh Water Line " " ...
Tropical Line " " ...
Winter Line below " " ...
Winter North Atlantic Line " " ...

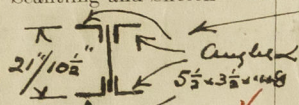
Tropical Fresh Water Freeboard ...
Fresh Water " ...
Tropical " ...
Winter " ...
Winter North Atlantic " ...

2-9 1/2

Lloyd's Register
Foundation

003106 - 003115 - 001612

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECK												
Description of Hatchway			No 1	No 2	No 3	No 4						
Dimensions of Hatchway			30'-0" x 20'-0"-26'-0"	30'-0" x 26'-0"	30'-0" x 26'-0"-25'-0"	30'-0" x 24'-8"-23'-6"						
COAMINGS	{	Height above Deck	3'-6"	3'-6"	3'-6"	3'-6"						
		Thickness	1 1/4"	1 1/4"	1 1/4"	1 1/4"						
		Sides	Sides & F End	Sides	Sides & F End	Sides & A End						
		Ends	2-2" rounds	2-2" rounds	2-2" rounds	2-2" rounds						
Stiffeners			7 x 3 x 1/2 x 13'-6"	7 x 3 x 1/2 x 13'-6"	7 x 3 x 1/2 x 13'-6"	7 x 3 x 1/2 x 13'-6"						
Brackets, Stays			Sides	1-1/2" x 1/2" x 13'-6"	1-1/2" x 1/2" x 13'-6"	1-1/2" x 1/2" x 13'-6"	1-1/2" x 1/2" x 13'-6"					
HATCH BEAMS	{	Number	5	5	5	5						
		Spacing	5'-0"	5'-0"	5'-0"	5'-0"						
		Scantling and Sketch										
		Bearing Surface	3 1/2"									
FORE AND AFTERS	{	Number	None									
		Spacing										
		Unsupported Lengths										
		Scantling and Sketch										
Bearing Surface												
HATCH COVERS	{	Material	Wood									
		Thickness	2 1/2"									
		How fitted	face raft									
		Bearing Surface	3"									
Spacing of Cleats			2 1/2"									
Number of Tarpaulins			3									

*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! see bottom. to be examined for condition*
Are lashings provided in accordance with rule requirements? *yes!*

Particulars of fiddle, funnel and ventilator workings:— The stockhold and engine room ventilators are in good and efficient condition. The engine room skylight is strongly constructed of steel coaming and steel plate. Sliding steel plate livepack covers are fitted over the fiddling gratings.

Particulars of Flush Bunker Scuttles:

None. ✓

Repair
a number of holes even to each hallway,
to be repaired or replaced as necessary.
Looks of both wood floor to cream to be
replaced under workable

Particulars of Companionways :—

None /

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

Particulars	Quantity	Unit	Remarks
with the Rules	1	each	closed with wood plugs and canvas cover.
Forecastle deck	1-7	ft. diam.	covering 36' x .30
"	1-12	"	36' x .32
"	2-13	"	36' x .32
"	1-6	"	36' x .30

Cells ventilators are fitted in accordance with the Rules.

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

Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—
All air pipes are fitted flush with deck and have brass screw
plugs fitted for closing the opening. ✓

Particulars of Gangway Cargo and Coaling Ports:—

Hants.



Particulars of Scuppers and Sanitary Discharge Pipes

[illegible]

Particulars of Side Scuttles :

de Scuttles :
 three 9" diam (p & s) in forecabin
 four 10" " (ss) in bridge lower deck
 three 10" x 2-8" " (p & s) " " " "
 all fitted with hinged fixed deadlights and are of sub-standard construction.

Particulars of Guard Rails :—

Forecastle side and front  Spaced 4'-0" to 4'-6" apart.
Base of " " and  " 4'-3" apart.

Particulars of Gangways, Lifelines, etc. :—

~~None.~~

Suitable provision made for rigging
lifelines available for the use of the
crew in any part of the ship which may
have to be used by the crew in the
regular working of the ship.

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	10'-6" 95.58	3'-6"	4'-0" x 1'-6"	6	36 sq ft -	19 20.3 sq ft
Forward Well	7'-6" 78.75	3'-6"	4'-0" x 1'-6"	5	30 sq ft ✓	16 sq ft. 15.8

State position of each freeing port } After Well:— *from bridge end to fore edge of opening 9'-11" 22'-0" 34'-0" 51'-4" 68'-10" 78'-0"*
 (F. and A. position and height above deck edge) } Forward Well:— " " *from " " 6'-9" 19'-9" 34'-0" 46'-2" 62'-10"* } 9' above deck.

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— *bars round bar across each opening.*

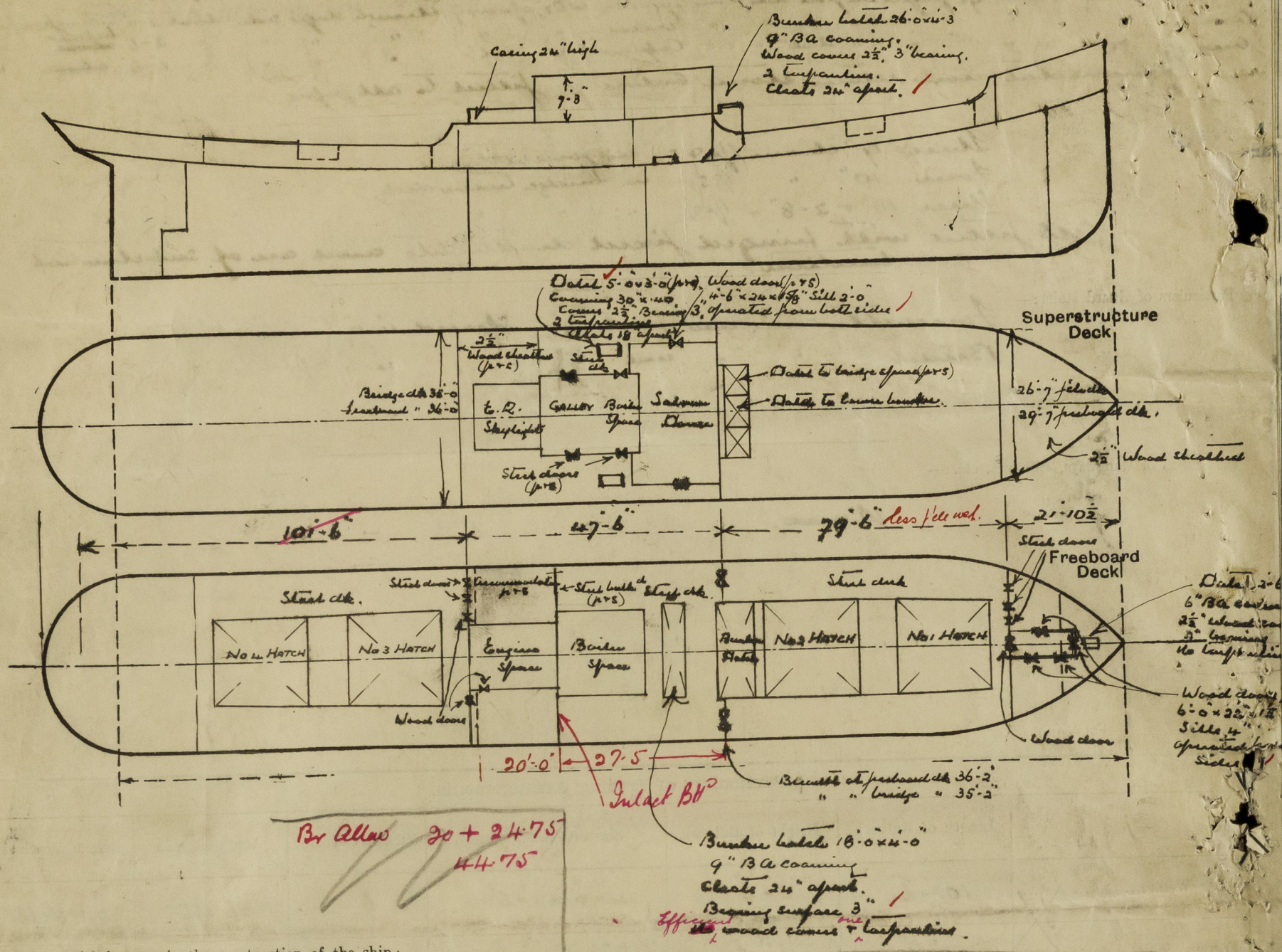
Additional area where sheer is less than standard. ✓

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	—	—	—	—	—	—	—	—
Raised Quarter Deck Bulkhead ...	—	—	—	—	—	—	—	—
Bridge, After Bulkhead	none	30	8 x 3 x 1/40 13a	8'-6" - 11'-0"	Brackets top & bottom	2 - 4'-7" x 24" 2 - 4'-8" x 23"	18" ✓	7'-0"
Bridge, Forward Bulkhead	"	40	Efficiently stiffened by barge plates brackets used only forward at center			2 - 4'-0" x 3'-0" 1 - 4'-7" x 24"	24" ✓	7'-0"
Forecastle Bulkhead	none	28	4 x 3 x 1/4 34	8'-6"	none	3 - 4'-8" x 23"	18" ✓	7'-0"
Trunk, Aft	—	—	—	—	—	—	—	—
Trunk, Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	18 x 32	30	3 1/2 x 3 x 3/4 ✓	11'-0"	} brackets at top	1 - 4'-7" x 24" (SS)	18" ✓	7'-0"
Exposed Machinery Casings on Super-structure Decks	none	30 - 28	" ✓	"		2 - 4'-6" x 24" (SS)	18" ✓	7'-3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	—	—	—	—	—	—	—	—
Deckhouses on Flush Deck Ships ...	—	—	—	—	—	—	—	—

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

Poop Bulkhead	✓	
Raised Quarter Deck Bulkhead	✓	
Bridge, After Bulkhead	✓	2 Hinged steel doors wood " 4'-7" x 2'4" x 1 1/2" } operated from both sides. ✓
Bridge, Forward Bulkhead	✓	Sleeping boards 2 1/2" thick fitted full length in angle base forming channels riveted to bulkhead. 3 Hinged steel doors and one wood door 4'-7" x 2'4" x 1 1/2" operated from both sides. ✓
Forecastle Bulkhead	✓	One wood door 4'-7" x 2'4" x 1 1/2" operated from both sides. ✓
Machinery Casings on Freeboard or Raised Quarter Decks	✓	Steel doors " " " " " " " "
Exposed Machinery Casings on Superstructure Decks	✓	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	
Deckhouses on Flush Deck Ships	✓	

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchway 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 shown on the following sketches:—



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

Special Features in the Construction of the Ship

Timber Cargo Arrangements when carrying Timber Deck Cargoes.
 Wood uprights lashed to bulkhead stanchions. (no sockets are fitted on deck)
 The uprights are fitted for securing the lashings.
 No efficient protection for the cargo in the form of guard rails or life lines is provided.
 The permanent means of protecting the stowing arrangements is fitted.
 The vessel has an efficient arrangement of blocks and tackle as one of the two means for stowing.
 It was not convenient to make an examination of the longitudinal subdivisions of the midships double bottom tanks at this time.
 The bulkhead plating 3'-6" x 125' forward and aft on each side is stiffened by a 6" x 3" x 1/4" B.A. on the upper edge and strongly supported by (forward) 13" x 6" x 3/4" angle stanchions and (aft) by 18" of same size spaced 15'-6" to 6'-0" apart and fitted in the vicinity of the deck beams.
 The stowing has been held in dry dock.
 The vessel is under survey for Part 55 of 2, Damage and Permanent Repairs as per S.I. 2. List.

Builder's name and yard number W. Dobson & Co, Newcastle, No 223.

Names of sister ships ✓

Owners R. D. Penning & Sons

Fee £ 9 : 7 : 0

Received by me

Expenses 7 - 0



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