

Reg. 9 attached. CARDIFF 49,684 31 MAY 1932 Index No. **33035** (For London Office only.) Lloyd's Register of Shipping.SURVEYS FOR FREEBOARD. U/S 960 12,10 mps.

Computation of Freeboard for Steamer, Sailing Ship, Tug
having *Complete Superstructure with Forecastle Deck.*

(Type of Superstructures.)

Ship's Name **"APPLEDORE"** Nationality and Port of Registry **BRITISH BIDEFORD** Official Number **161611** Gross Tonnage **5218** Date of Build **1929**

Moulded Dimensions: Length **405.00** Breadth **55.45** Depth **29.44**
Moulded displacement at moulded draught = 85 per cent. of moulded depth } **128.47** tons
Coefficient of fineness for use with Tables **796** } NOT AVAILABLE

Port of Survey **Cardiff**
Date of Survey **May 26th 1932**
Name of Surveyor **W.E. Marlborough**
Particulars of Classification **+100 A.I.**
With freeboard.

Depth for Freeboard (D)
Moulded depth ... **29.44**
Stringer plate **(.40)** ... **.02**
Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ ☒
Depth for Freeboard (D) = **29.44**

Depth correction
(a) Where D is greater than Table depth
(D-Table depth) R = $(29.45 - 27.00) \times 3 = 7.35$
(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) **55.45**
Standard Round of Beam = $\frac{B \times 12}{50} = 13.31$
Ship's Round of Beam = **13.38**
Difference **.12**
Restricted to
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.12}{4} \times .0060 = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	30.50	30.50	8.5		30.50
" overhang45	.37			.37
R.Q.D. enclosed ...	<input checked="" type="checkbox"/>				
" overhang ...	<input checked="" type="checkbox"/>				
Bridge enclosed...	369.25	369.25			369.25
" overhang aft ...	<input checked="" type="checkbox"/>				
" overhang forward	<input checked="" type="checkbox"/>				
" enclosure ...	<i>See sketch</i>		4.50		
" overhang ...	<input checked="" type="checkbox"/>				
Trunk aft ...	<input checked="" type="checkbox"/>				
" forward ...	<input checked="" type="checkbox"/>				
Tonnage opening aft ...	4.5	2.44			2.44
" " forward	<input checked="" type="checkbox"/>				
Total ...	405.00	402.56			402.56

Standard Height of Superstructure **7.50**
" " R.Q.D. ☒
Deduction for complete superstructure **42.00**
Percentage covered $\frac{S}{L} = 100\%$
" " $\frac{S_1}{L} = 99.40\%$
" " $\frac{E}{L} = 99.40\%$
Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) **99.26%**
Percentage from Table, Line B.
(corrected for absence of forecastle (if required))
Interpolation for bridge less than .2L (if required) ☒
Deduction = **42.00** \times **.9926** = **41.69**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	50.50	1		50.50	46.50	58.5	1		50.50
$\frac{1}{2}$ L from A.P. ...	22.47	4		89.88	16.59	25.72	4		89.88
$\frac{2}{3}$ L " ...	5.55	2		11.10	4.13	6.48	2		11.10
Amidships ...	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>
$\frac{2}{3}$ L from F.P. ...	11.11	2		22.22	8.24	6.84	2		13.68
$\frac{1}{2}$ L " ...	44.94	4		179.76	33.18	39.60	4		158.40
F.P. ...	101.00	1		101.00	96.50	108.5	1		108.50
Total ...				454.46		108.5			432.06

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{22.4}{18} \times .25 = +.31$
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.
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **29.45**
Summer freeboard = **3.77**
Moulded draught (d) = **25.68**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.42** = **6.3**
Addition for Winter North Atlantic Freeboard (if required) = ☒

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = 13291$
Tons per inch immersion at summer load water line
 $T = 46.4$
Deduction = $\frac{\Delta}{40 T}$ inches
= **7.16** = **7.4**

TABULAR FREEBOARD corrected for Flash Deck (if required)
Correction for coefficient $\frac{1476}{1360}$

	+	-
Depth Correction ...	7.35	
Deduction for superstructures ...		41.69
Sheer correction31	
Round of Beam correction ...		
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc. ...		
	7.66	41.69
Summer Freeboard =	45	

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

Tropical Fresh Water Line above Centre of Disc ...	13.3	Tropical Fresh Water Freeboard ...	2.72
Fresh Water Line " " ...	7.4	Fresh Water " " ...	3.2
Tropical Line " " ...	6.3	Tropical " " ...	3.24
Winter Line below " " ...	6.3	Winter " " ...	4.34
Winter North Atlantic Line " " ...	<input checked="" type="checkbox"/>	Winter North Atlantic " " ...	<input checked="" type="checkbox"/>

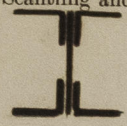
1 JUN 1932

2 FEB 1932

MARKING FORM RECEIVED

RECEIVED 7 JUN 1934

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Freeboard Deck						* Superstructure Deck				
Description of Hatchway	Nº 1	Nº 2	Nº 3	Nº 3A	Nº 4 & 5	Nº 1	Nº 2, 3, 4, 5	FORE END OF CASING	BUNKER HATCHES	BUNKER HATCHES
Dimensions of Hatchway	24'0" x 20'0"	31'6" x 20'0"	16'6" x 20'0"	14'0" x 20'0"	28'6" x 20'0"	24'0" x 20'0"	28'10" x 20'0"	4'4" x 10'3"	10'2" x 3'6"	4'6" x 3'6"
COAMINGS	Height above Deck ... 9"	9"	9"	9"	9"	3 1/2"	3 1/2"	3 1/2"	30"	30"
	Thickness ... 9 x 3 x 50 lb	9 x 3 x 50 lb	9 x 3 x 50 lb	9 x 3 x 50 lb	9 x 3 x 50 lb	44	44	44	40	40
	Stiffeners ...					44	44	44	40	40
	Brackets, Stays ...					9 x 3 x 44 lb	9 x 3 x 44 lb			
HATCH BEAMS	Number ... 5	6	1	2	5	5	5			
	Spacing ... 4'6"	4'6"	5'3"	4'8"	4'9 3/4"	4'6"	4'9 3/4"			
	Scantling and Sketch									
										
	Bearing Surface ... 3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"			
FORE AND AFTERS	Number ...									
	Spacing ...									
	Unsupported Lengths ...									
	Scantling* and Sketch									
	Bearing Surface ...									
HATCH COVERS	Material ... W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.	W.P.
	Thickness ... 2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	3"	3"	3"	3"	3"
	How fitted ... FTA	FTA	FTA	FTA	FTA	FTA	FTA	FTA	THWART	THWART
	Bearing Surface ... 3'4" x 8'2"	3'4" x 8'2"	3'4" x 8'2"	3'4" x 8'2"	3'4" x 8'2"	3'4" x 8'2"	3'4" x 8'2"	3" REST	3" REST	3" REST
Spacing of Cleats	24"	24"	24"	24"	24"	24"	24"	21"	21"	24"
Number of Tarpaulins	2	2	2	2	2	2	2	2	2	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 fiddley, funnel and ventilator coamings :—

Fidley Funnel & Ventilator Coamings in efficient condition.
Engine Room Skylight of Steel Strongly Constructed.
Stakehold Gratings Covered by Strong Steel hinged Storm Covers.

ars of Flush Bunker Scuttles:—

NONE ✓

particulars of Companionways :—

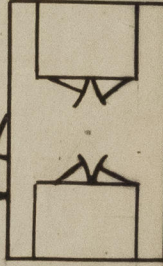
particulars of Companionways :-

1 Companion way of Four Mast 8'-4" x 20'-0" x 4'-6" high leading to Tween Decks & Holds Door of Steel. 21" Sill -
After " " " " " " " " " " " "

Doors operated from both sides -

{ 2 Companion ways thro After Deck house
1 1/8 Hardwood Doors 4'-6" x 2'-0", 21" Sill.
operates from Both side.

STEEL MASTHOUSE & COMPANION WAY
VENTS FITTED ON TOP.



Particulars of Ventilators in exposed positions on freeboard and superstructure decks: 1

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

Deck	Vents	18 dia?	Coaming	30"x34 led	h	Holds
Side Deck	2 Vents	18 dia?	Coaming	30"x34 led	h	Holds
Superstructure Deck	4 Vents	18 dia?	Coaming	36"x34ek led	h	Holds
"	"	2 "	14 "	"	30 "	" 2nd
"	"	2 "	12 "	"	30 "	" 2nd
"	"	2 "	9 "	"	30 "	" 2nd

All ventilators constructed
in accordance with Rules and
Coaming, closed with Wood Plugs
and Canvas Covers

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

Locations of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—			
Superstructure Deck 2	air pipes	14" high x 4" dia	from Fore Peak wood plug fitted
Superstructure Deck 8	air pipes	18" high x 4" "	Double Bottom Tanks
" " 4	"	18" " x 2 1/2" "	} Efficient
" " 2	"	18" " x 2" "	

Efficient means of closing
provided

Particulars of Gangway Cargo and Coaling Ports :—

— NONE —

Particulars of Scuppers and Sanitary Discharge Pipes:—
 Scuppers on Freeboard Deck 5, pipe scuppers P+S led below Freeboard Deck. These Scuppers are cemented over on Freeboard Deck.
 " Superstructure Deck 6, Scuppers P+S midway of Stringer Bar.
 " " " 2, pipe scuppers P+S. led above Freeboard Deck.
 Sanitary Discharge Pipes 4, Soil Pipes on Starboard Side led above Freeboard Deck Storm Valves fitted.
 " " " 1, " " P+S Aft " " " " " " " "

Particulars of Side Scuttles:—
None below Treboard Deck
 In Poop Space of substantial construction and
 fitted with hinged Deadlights ✓

Particulars of Guard Rails :—

Guard Rails	Stem to After end of Deck House	3'6" high, 3 Rails, 4'6" apart	Stanchion
"	Fore end of Saloon Deck House to F'd	3'6" " " " 4'9" "	"
"	" on F'd Deck	3'6" high, 3 Rails, Stanchions 5'4" apart	"

NONE

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Starboard Well	<i>Steel Bulwark amidships After end of After Deck House to Fore end of Saloon Deck House</i> <i>3'-6" high with 6x3x3/8 angle stays 5' apart, 2 Washports 4'5. 2'-6" x 14' 5" above Deck</i>					
Port Well	<i>Tonnage opening.</i>					

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—

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	✓	30	3" x 3" x 3/4"	22 1/2"	Brackets at top only	NONE	✓	✓
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead	✓	34	4" FLG ^d PLT	34"	NONE	5'-0" x 3'-1"	20"	✓
Bridge, Forward Bulkhead	✓	25	4" FLG ^d PLT	36"	"	5'-0" x 3'-1"	18"	✓
Forecastle Bulkhead	18" x 3/4"	30	3" x 3" x 3/2"			4'-6" x 2'-0" 5'-0" x 3'-1"	18"	✓
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Super- structure Decks	18" x 40	34	3" x 3" x 3/4"	30	Brackets at top	5'-6" x 2'-0"	18"	2'-6"
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	18" x 40	34	"	"	✓	4'-6" x 2'-1"	18"	✓
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	3" Weather Boards in Rivetted Channels full height ✓
Bridge, Forward Bulkhead	
Forecastle Bulkhead	Five Iron Doors manipulated from both sides. 2 openings with Riv ^d Channels 3" Weather Board full height ✓
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Superstructure Decks	2 Iron Doors manipulated from both sides ✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	2 " " " " " " ✓
Deckhouses on Flush Deck Ships ...	

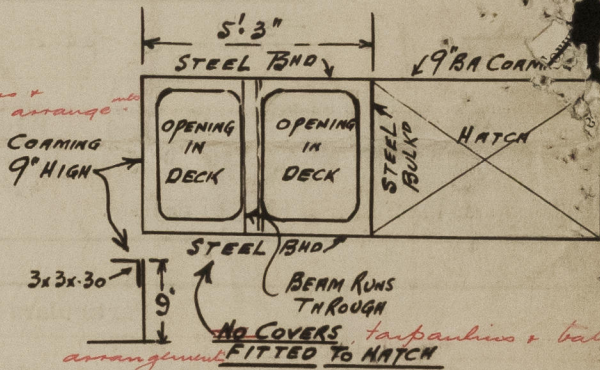
Hatch to Store aft. 3'-0" x 2'-4" x 2'-9" high x 3/4" thick, 3" Reel Bar, 2 3/4" Covers, cleats 2" apart } tarpaulin
Casing Top 16'-0" x 6'-6", 9 x 3 x 40 Bz. 3" " " " " " " } battens
Deck 2'-4" x 2'-6" x 1'-10" high x 3/4" thick. 3" " " " " " " } fitted

Inside Tween Deck on Superstructure Deck

Trussing Hatches. 24, 2'-4" x 2'-4", 9 x 3 x 40 Bz Coaming. 3" Reel Bar, 2 1/2" Hinged Wood Cover

Rumpler Hatches 1 P/S, 5'-3" x 3'-4", 9 x 3 x 40 Bz Coaming 3" " " 2 3/4" Covers, cleats 2"

1 P/S, 5'-3" x 3'-4". 9" Coaming on front two sides End. steel B^{hd} See Sketch



<u>25' 9" draft</u>	<u>- 10,000 Tons Draft</u>	<u>- 46.46 T.P.I.</u>
24' 0"	9,000	" "
22' 2"	8,000	" "
20' 4"	7,000	" "
18' 6"	6,000	" "

This vessel has been measured in Dry Dock

Fee £