

B.T. COPY

25 MAY 1932

Rpt. Rpt. C.11.

Por

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.Index. No. 27056
(For London Office only.)W 123
No. 30932

name "DAVID DAWSON" now "Avon River" of Bristol.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Poop. Bridge & Forecastle.
(Type of Superstructures.)

Port of Survey Sunderland.

Date of Survey 24th May 1932.

Name of Surveyor J. J. Paton

Particulars of Classification +100 A.I.

Ship's Name

"LAITHNESS"

Nationality and Port of Registry

British Newcastle

Official Number

142711

Gross Tonnage

5277

Date of Build

1918

11 Mo.

Moulded Dimensions: Length 399' 6" Breadth 52' 0" Depth 31' 0"

Moulded displacement at moulded draught = 85 per cent. of moulded depth (26' 4") 12103 12096 tons

Coefficient of fineness for use with Tables .773

Depth for Freeboard (D)

Moulded depth ... 31' 0"

Stringer plate .4804

Sheathing on exposed deck

 $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) = 31' 04"

Depth correction

(a) Where D is greater than Table depth
(D-Table depth) R =

(31' 04" - 26' 6") 3 = + 13' 23"

(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) 52' 0"

Standard Round of Beam = $\frac{B \times 12}{50} = 12' 48"$

Ship's Round of Beam = 13"

Difference .52

Restricted to 52' 4976

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = .06$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	49' 3"	49' 25"	8' 0"		49' 25"
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...	110' 86"	110' 86"	8' 0"		110' 86"
Bridge enclosed ...	112' 8"	110' 86"	8' 0"		110' 86"
" overhang aft ...	1' 36"	1' 36"			1' 36"
" overhang forward ...					
Fore enclosed ...	38' 3"	39' 25"	8' 0"		39' 25"
" overhang ...	1' 0"				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	201' 17"	200' 72"			200' 72"

Standard Height of Superstructure 7' 5"

" " R.Q.D.

Deduction for complete superstructure 41' 96"

Percentage covered $\frac{S}{L} = 50' 35"$ " " $\frac{S_1}{L} = 50' 24"$ " " $\frac{E}{L} = 50' 24"$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 41' 96" x .3624 = 15' 21"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	49' 95"	1		49' 95"	66' 00"	66' 00"	1		66' 00"
1/2 L from A.P. ...	22' 22"	4		88' 88"	26' 75"	26' 07"	4		104' 28"
2/3 L " ...	5' 50"	2		11' 00"	6' 75"	6' 52"	2		13' 04"
Amidships ...		4			0	0	4		
2/3 L from F.P. ...	10' 99"	2		21' 98"	13' 03"	13' 03"	2		26' 06"
1/2 L " ...	44' 45"	4		177' 80"	53' 05"	52' 14"	4		208' 56"
F.P. ...	99' 90"	1		99' 90"	120' 00"	120' 00"	1		120' 00"
Total ...				449' 51"					537' 94"

Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) =$ $\frac{88' 43" - 2517}{18} = - 2' 45"$

If limited on account of midship superstructure.

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 = 31' 04"

Summer freeboard = 5' 98"

Moulded draught (d) = 25' 06"

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6' 26' 6 1/4"

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 11' 59' 530$

Tons per inch immersion at summer load water line

T = 41' 8"

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

= 6' 81' 6 3/4"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

773 + 68

136

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

+ -

1323 -

- 15' 21"

- 2' 45"

- .06

- -

- -

1323 17' 72" - 44' 9"

Summer Freeboard = 71' 73"

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

28 MAY 1932

Tropical Fresh Water Line above Centre of Disc ... 73' 13 3/4"

Fresh Water Line " " ... 6' 7 1/4"

Tropical Line " " ... 6' 1/4"

Winter Line below " " ... 6' 1/4"

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ... 4' 10' 10 1/2"

Fresh Water " " ... 5' 5' 4 3/4"

Tropical " " ... 5' 5' 1/2"

Winter " " ... 6' 6"

Winter North Atlantic " " ...

MARKING FORM

17 APR 1932

MARKING FORM

1 NOV 1932

MARKING FORM

2261 NMI

Lloyd's Register

Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

[illegible]

Particulars of fiddley, funnel and ventilator coamings :—

Stockhold Gratings Covered by strong steel hinged covers.
Boiler room & Engine room Ventilators in efficient condition.
Engine room Skylight of steel, strongly constructed.

Particulars of Flush Bunker Scuttles:—

NONE. ✓

Particulars of Companionways :—

NONE.

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

All Vents have wood plugs
+ Canvas covers. ✓

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

No Pugs, Cows, or Drifting holes.
Satisfactory means of closing provided
for all air pipes.

Particulars of Gangway Cargo and Coaling Ports:—

NONE.

Particulars of Scuppers and Sanitary Discharge Pipes :—

Three Scuttling discharges on Starboard side. 3 $\frac{1}{2}$ " dia; led out below foreboard deck, fitted with G.I. storm valves [Horn Suction Accommodated] ✓
Two " " " " " " " " " " " " [Boat Accommodated] ✓
Two Scuttlings in bridge gunnery decks. 3" " " " " " " " " " ✓
Three Scuttlings in lower well } Gunwale bar cut. ✓
Three " aft }

Particulars of Side Scuttles :—

all side scuttles above freeboard deck.
Side scuttles in Port side 9" dia. fitted with G.I. hinged deadlights.
all side scuttles of substantial construction. ✓

Particulars of Guard Rails :—

Steel bulwarks in form of after wells. 3' 8" high. Efficiently constructed & supported.
On Forecastle. Rails 3' 3" high. Two posts, stanchions spaced 4' 6" ✓
" Bridge. " " " " " " " 4' 6" ✓
" Poop. " " " " " " " 4' 6" ✓

Particulars of Gangways, Lifelines, etc. :—

Effluent pipelines fitted each side
in after well

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	99'-8"	3'-8"	3'-6" x 1'-6"	4	21 f. ✓	19.93
Forward Well	99'-8"	3'-8"	3'-6" x 1'-6"	4	21 f. ✓	19.93

State position of each freeing port (F. and A. position and height above deck edge) } After Well: —
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such: — } Forward Well: —

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	$26\frac{1}{2} \times .44$	.40	$6 \times 3\frac{3}{8} \times .38$ L	2'-2" ✓	Joistens	4 @ $4'8" \times 1'10"$	$19\frac{1}{2}$ ✓	8'-0"
Raised Quarter Deck Bulkhead ...	—	—	—	—	—	$\left\{ \begin{array}{l} 1 @ 4'8" \times 1'10" \\ 1 @ 2'11\frac{1}{2} \times 3'11" \\ 1 @ 3'0" \times 5'8\frac{1}{2}" \end{array} \right\}$	$\left\{ \begin{array}{l} 15" \\ 29\frac{1}{2} \\ 15" \end{array} \right\}$ ✓	8'-0"
Bridge, After Bulkhead	$16" \times .35$	.30	$6 \times 3\frac{3}{8} \times .30$ $3 \times 3 \times .30$ } L ✓	3'-0" ✓	Joistens	NONE.	✓	8'-0"
Bridge, Forward Bulkhead	$19" \times .44$	.40	$9 \times 3\frac{3}{8} \times .56$ B.A. ✓	2'-2" ✓	Brackets top & bottom ✓	NONE.	✓	8'-0"
Forecastle Bulkhead	$15" \times .375$	.375	$6 \times 3\frac{3}{8} \times .30$ $3 \times 3 \times .30$ } L	2'-4"/3'-0" ✓	Joistens ✓	$\left\{ \begin{array}{l} 2 @ 4'8" \times 1'10" \\ 2 @ 4'6" \times 5'8\frac{1}{2}" \end{array} \right\}$ $\quad \quad \quad 3-3$	15" ✓	8'-0"
Trunk, Aft	—	—	—	—	—	—	—	—
Trunk, Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Super- structure Decks	$15" \times .375$	.375	$3 \times 3 \times .36$ L ✓	2'-2" ✓	Brackets at top to beams. ✓	$\left\{ \begin{array}{l} 6 @ 4'8" \times 1'10" \\ 1 @ 4'5" \times 3'1" \end{array} \right\}$	$16\frac{1}{2}$ ✓	7'-6"
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	$15" \times .375$	.375	$3 \times 3 \times .36$ L ✓	2'-2" ✓	Brackets at top to beams. ✓	$2 @ 4'8" \times 1'10"$	$16\frac{1}{2}$ ✓	8'-0"
Deckhouses on Flush Deck Ships ...	—	—	—	—	—	—	—	—

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

Particulars		Closing Appliances
Poop Bulkhead	...	Two steel doors .25. Operated from both sides. [Cross space & W.C's].
Raised Quarter Deck Bulkhead	...	1 ^{ruled} hinged opening with wood bands ^{ruled} hinged full height, also half height steel door .25. Operated from outside. Hinged door.
Bridge, After Bulkhead	...	1 steel door .25. Operated from both sides. 1 opening door. 1 steel door .25 & insulated (Bulky room) operated from outside only. Butterfly bolts.
Bridge, Forward Bulkhead	...	NONE. openings.
Forecastle Bulkhead	...	Two hinged openings with loose bands full height in Chaisels. ^{ruled} hinged Two steel doors .25 Operated from both sides. 1/2 Sidelines.
Exposed Machinery Casings on Fore-board or Raised Quarter Decks	...	6 steel doors .25. Operated both sides. Laidley, Galley, & Engine Room.
Exposed Machinery Casings on Superstructure Decks	...	1 wood door in Latrine. 1 1/2 W.P. with 1" Panels. 1 to Apprentices' accommodation.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	Two steel doors .25. Operated from both sides. 1/2 Laidley.
Deckhouses on Flush Deck Ships	...	

Lloyd's Register
Foundation

"David Dawson" ex "Caitness"

Rpt. 9a.

Continuation of Report No.

dated

27056

on the

Port of

Donnage opening 4'-2" x 3'-0" Lull 15" fitted on
Port Side at after end of keel
See Form C "(c)" from hwc. dated 21/10/35.

RETAIN

RETAIN

WS'14 - 0033 3/3



© 2020

Lloyd's Register
Foundation