

T. S. S. "DUCHESS OF RICHMOND"

550'-0" B.P. x 75'-0" M.L.D. x 44'-9" M.L.D. TO "B" DECK.

MIDSHIP SECTION. (AS FITTED)

SCALE $\frac{1}{4}'' = 1$ FOOT.

CLASS LLOYDS 100 A1.

SCANTLINGS

FRAMES SPACED

39' APART	AMIDSHIPS
27' "	FROM 3/5L FORWARD TO COLLISION BOW
18' "	IN FORE PEAK
24' "	IN AFT PEAK

EXTENT

SCANTLINGS

[illegible]

DOUBLE BOTTOM

CENTRE GIRDER
SIDE GIRDERS
MARGIN PLATE
FLOORS/LWT FLOORS-56-60 STIFFENER
WING BRACKETS OUTSIDE TANK
TANK TOP CENTRE STRAKE
TANK TOP PLATING
CENTRE GIRDER KEEL ANGLES DOUB
CENTRE GIRDER TOP ANGLES DOUBL
SIDE GIRDER ANGLES
MARGIN ANGLE TO SHELL
FRAMES
FRAMES FORWARD
REVERSE FRAMES
CENTRE GIRDER VERTICAL ANGLES
SIDE GIRDER VERTICAL ANGLES
MARGIN PLATE ANGLE TO BRACKET

EXTENT

EXTENT		SCANTLING AT ENDS		IN E. IN B.	
FOR 1/2 L AMIDSHIPS		50' x .68'	.54'	.68'	.72'
F & A		.50'	.50'	.50'	.50'
IN WAY OF 3/8" SPACING		42' x .67'	64" AT 2" SPACING	.67'	.67'
IN WAY OF 3/8" SPACING		.52'	.48'	.52'	.58'
IN WAY OF 3/8" SPACING		.53'	50' x "	.54'	.54'
FOR 1/2 L AMIDSHIPS		64' x .62'	.54'	.63'	.67'
		.56'	.52'	.63'	.67'
(27" SPACING)		.54'	.54'	.54'	.54'
FOR 1/2 L AMIDSHIPS		5' x .72'	.64'	.70'	.72'
FOR 1/2 L AMIDSHIPS		3 1/2' x 3/4' .62	.58'	.64'	.64'
F & A		3 1/2' x 3/4' .62			
FORE & AFT		4 3/4' x .66'	(IN NO. 1 & 2 HOLD 6 1/2' x .66)	5 3/4' x .66'	5 3/4' RTR # OIL BURNERS
MIDSHIPS & AFT		3 1/2' x 3/4' .52	.52'	.52'	.52'
FORWARD OF 3/5 L		3 1/2' x 3/4' .52	DOUBLE		NOTE: REV. 10 MAR 68 NO ENGINE EXHAUST AND ARE SINGLE (2) IN NEXT HOLD OUTSIDE NF 3
F & A		3 1/2' x 3/4' .52	.52'	.52'	.62'
F & A		3 1/2' x 3/4' .52	.52'	.60'	.62'
F & A		3 1/2' x 3/4' .48	.48'		
F & A		6 1/2' x .53" WITH	FORWARD 3/5 L THER	BR 8" x 8" OIL BURNER	

EXTENT		SCANTLING AT ENDS		IN E. IN B.	
FOR 1/2 L AMIDSHIPS		50' x .68'	.54'	.68'	.72'
F & A		.50'	.50'	.50'	.50'
IN WAY OF 3/8" SPACING		42' x .67'	64" AT 2" SPACING	.67'	.67'
IN WAY OF 3/8" SPACING		.52'	.48'	.52'	.58'
IN WAY OF 3/8" SPACING		.53'	50' x "	.54'	.54'
FOR 1/2 L AMIDSHIPS		64' x .62'	.54'	.63'	.67'
(27" SPACING)		.56'	.52'	.63'	.67'
FOR 1/2 L AMIDSHIPS		.58' x .72'	.64'	.70'	.72'
FOR 1/2 L AMIDSHIPS		3 1/2' x 3 1/2'	.58'	.64'	.64'
F & A		3 1/2' x 3 1/2'			
FORE & AFT		4 1/2' x .66'	(IN NO. 1 & 2 HOLD 6 1/2' x .66')	5 1/2' x .66'	5 1/2' x .66'
MIDSHIPS & AFT		3 1/2' x 3 1/2'	.52'	.52'	.52'
FORWARD OF 3/5 L		3 1/2' x 3 1/2'	DOUBLE		
F & A		3 1/2' x 3 1/2'	.52'	.52'	.62'
F & A		3 1/2' x 3 1/2'	.52'	.60'	.62'
F & A		3 1/2' x 3 1/2'	.48'		
F & A		6 1/2' x 5 1/2"	FORWARD 3 1/2' L	6 1/2' x 5 1/2"	OUTSIDE NO. 3

EQUIPMENT

SECOND LONGER NUMERAL	=	69455
SHELTER DECK (B) TO BRIDGE DECK (A)	520 X 8.25' X .75 =	3218
	60 X 8.0' X .80 =	240
BRIDGE DECK (A) TO PROMENADE DECK	325 X 8.25' X .75 =	2011
HOUSES ON BRIDGE DECK (A)	34.5 X 25' X .50 =	142
	51.5 X 8.25' X .50 =	212
PROMENADE DECK	247 X 8.25' X .50 =	1019
BOAT DECK	195 X 11.0' X .50 =	1072
	325 X 10.0' X .50 =	163
	20 X 8.25' X .50 =	83
EQUIPMENT NUMBER	=	77615

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3 BOWER ANCHORS STOCKLESS COLL. WT. 376 CWT.	4 HAWSEYS 3/4" STEEL WIRE 120 FATHOMS EACH
1 STREAM ANCHOR STOCKLESS 66 "	2 " 8" WHITE MANILLA 120 " "
330 FATHOMS 3/16" STUD CHAIN CABLE	2 WARPING LINES 3 1/2" S.W.R. 120 " "
110 FATHOMS 2 1/2" STREAM CHAIN STUD LINK	2 " 3" " " " " " "
150 " 6 1/2" STEEL WIRE HAWSEY	4 " 8" MANILLA 90 " "
140 " 7 1/2" " " TOWLINE	2 " 8" " " " " " "

THE THREE STRAKES OF SHELL PLATING NEXT THE KEEL (2'x60" BULB PLATE)
ARE .16 IN WAY OF 21" FRAME SPACING EXTENDING TO FULL POSITION OF COLLISION AND
ADDITIONAL HALF HEIGHT INTERCOSTALS FORWARD WHERE NECESSARY
TANK TOP PLATING UNDER DEEP TANK HAS EXTRA INTERCOSTAL ANGLE STIFFENERS
ADDITIONAL ORDERS UNDER TURBINES & THRUST SEATS.

BUTT RIVETING.

<u>KEEL PLATE:</u>	SINGLE INSIDE STRAIPS QUADRUPLR RIVETED ALL FORE & AFT
<u>SHELL PLATING:</u>	STRAKES "A" TO "R" INCLUSIVE OVERLAPPED & QUADRUPLR RIVETED TO TREBLE AT ENDS WHERE NOT EXCEEDING -68"
<u>BOAT DECK:</u>	STRINGER OVERLAPPED & DOUBLE RIVETED
<u>NAD E DECK:-</u>	PLATING OVERLAPPED & SINGLE RIVETED
	STRINGER PLATE OVERLAPPED & QUADRUPLR RIVETED
	PLATING OVERLAPPED & TREBLE RIVETED
<u>"A" DECK:-</u>	STRINGER PLATE OVERLAPPED & QUAD RIVETED, QUINTUPLE RIVETED IN WAY OF HEAVY PLATES AT BREAK
	PLATING OVERLAPPED & TREBLE RIVETED TO DOUBLE AT ENDS
<u>"B" DECK:-</u>	STRINGER PLATE OVERLAPPED & QUAD. RIVETED
	PLATING OVERLAPPED & DOUBLE RIVETED TO SINGLE AT ENDS WHERE NOT EXCEEDING 4"
<u>"C" DECK:-</u>	STRINGER PLATE OVERLAPPED & TREBLE RIVETED
	PLATING OVERLAPPED & DOUBLE RIVETED TO SINGLE AT ENDS
<u>"D" DECK:-</u>	STRINGER PLATE OVERLAPPED & DOUBLE RIVETED
	PLATING OVERLAPPED & SINGLE RIVETED
<u>"E" DECK:-</u>	STRINGER PLATE OVERLAPPED & DOUBLE RIVETED
	PLATING OVERLAPPED & SINGLE RIVETED
<u>INNER BOTTOM:-</u>	CENTRE STRAKE OVERLAPPED & TREBLE RIVETED
	MARGIN PLATE OVERLAPPED & TREBLE RIVETED
<u>CENTRE GIRDER:-</u>	REMAINDER OF TANK TOP PLATING OVERLAPPED & TREBLE RIVETED TO DOUBLE AT ENDS
<u>SIDE GIRDERS:-</u>	OVERLAPPED AND QUADRUPLR RIVETED, TREBLE RIVETED WHERE NOT EXCEEDING 60"
	OVERLAPPED AND TREBLE RIVETED.

OWNERS EXTRAS

FRAMES - FRAMES IN FORE & AFTER PEAKS & FOR 20 FT. FORWARD OF AFTER PEAK & 40 FT. AFT OF FORE PEAK ARE DOUBLED WITH ANGLE BAR FORM KEEL TO UPPER DECK (C) (DOUBLING BARS $3\frac{1}{2} \times 3\frac{1}{2} \times 42$ FOR W & $3\frac{1}{2} \times 3\frac{1}{2} \times 30$)

DOUBLE BOTTOM:- REVERSE FRAMES INCREASED IN NO^S 1 & 2 HOLES AS OF SCANTLING. FRAME BRACKET ANGLES TO MARGIN IN NO^S 1 & 2 HOLES ARE 6" G¹ ANGLES & EXTEND 6" BEYOND THE BRACKET DOUBLED ANGLES FITTED TO SIDE ORDERS & SHELL IN NO^S 1 & 2 HOLES. (SEE LIST OF SCANTLING ON THIS PLAN)

SHELL PLATING:- FOUR STRAKES OF SHELL PLATING ON EACH SIDE OF VESSEL ABOUT THE L.W.L. ARE DOUBLED FOR A MEAN LENGTH OF ABOUT 130 FT. FROM THE STEM, AND SHELL PLATING IN WAY OF FORWARD HOLD FROM KEEL TO UPPER TURN OF BILGE IS $\frac{3}{8}$ INCH THICKER THAN LLOYD'S REQUIREMENTS

DECKS: ON ALL DECK & STRINGERS BELOW D¹ DECK CHOCK ANGLES ARE DOUBLED FOR A MEAN LENGTH OF 70 FT. ABOARD THE STEM.

KEEL DOUBLING

FRAMES CUT & BRACKETED AT
WATERTIGHT & O.T. FLATS

TWO BEAMS OF SHELL PLATING ABOUT
1/2 DEPTH OF VESSEL ARE TREBLE
RIVETED FOR 75 FT EACH SIDE OF
1/2 LENGTH FORWARD & AFT & 1 BEAM
HAS AN ADDITIONAL PAIR OF
RIVETS IN EACH FRAME SPACE FOR
THE SAME EXTENT

SECTION IN WAY OF N°2 HOLD

John Brown & Co Ltd

No 523

"Duchess of
Richmond"

GLASGOW REPORT No. 48696

Midship section (as built)

RETAIN



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