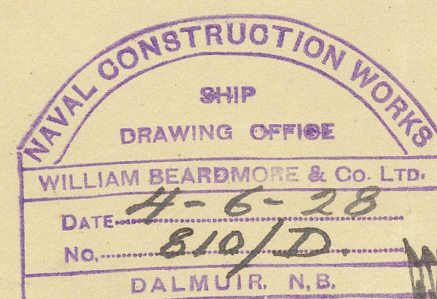


T. S. S. "DUCHESS OF ATHOLL."

580'-0" x 75'-0" x 44'-9" TO "C" DECK.

MIDSHIP SECTION.



SCALE- 1/4" = 1 FOOT.

CLASS, LLOYDS 100 A.1.

WITH FREEBOARD CORRESPONDING TO A DRAFT NOT EXCEEDING 27'-0" EXTREME.

LENGTH ON L.W.L. 596'-0" OVER CRUISER STERN.

SHEER ON "D" DECK ON L.W.L. LENGTH = 11'-6" FOR

"A" DECK = 5'-6" AFT.

BLOCK COEFFICIENT = .70

SCANTLINGS.

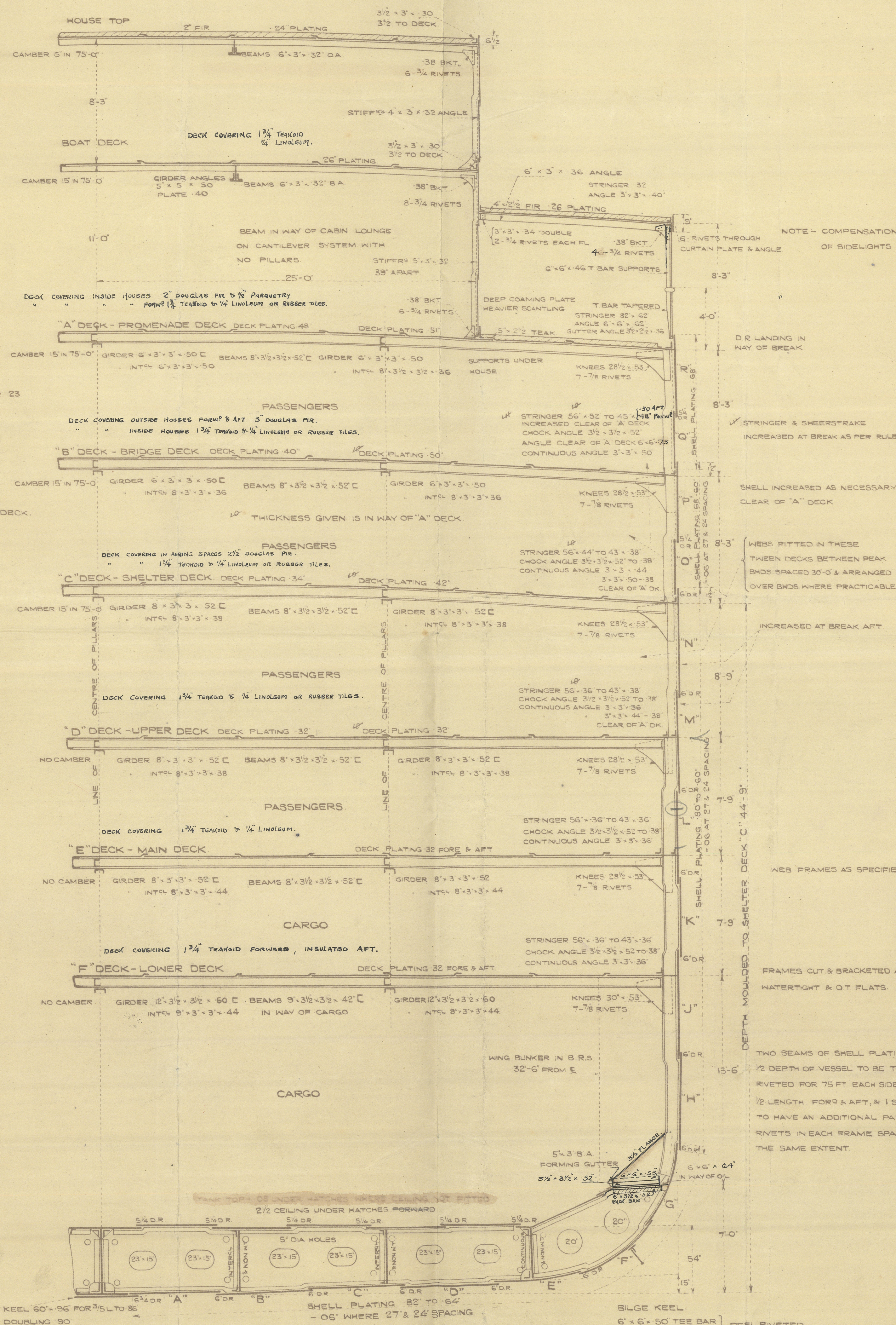
FRAMES SPACED AS PER PROFILE.

FRAMING.	EXTENT.	SCANTLINGS.
FRAMES	AFT PEAK	9" x 3 1/2" x 40' BA TO "C" DECK
		DOUBLED WITH 3 1/2" x 3 1/2" x 50' ANGLE TO "D" DECK & TO FR 23
	FORE PEAK	9" x 3 1/2" x 40' BA TO "B" DECK
		ON ALTERNATE FRAMES 3" FLANGE CUT DOWN TO 6/2
		BETWEEN "B" & "C" DECK
	IN WAY OF "G" DECK	DOUBLED WITH 3 1/2" x 3 1/2" x 42' ANGLE TO "D" DECK
	IN WAY OF "F" DECK NOS 1, 3 & 4 HOLDS	10" x 3 1/2" x 46' BA FOR 50' AFT TO "D" DECK
		11" x 3 1/2" x 43' BA TO "D" DECK
		DOUBLED WITH 3 1/2" x 3 1/2" x 42' ANGLE IN N° 1 HOLD TO "D" DECK.
	N° 7 HOLD	12" x 3 1/2" x 45' BA TO "D" DECK
	IN ENGINE ROOM	8" x 3 1/2" x 54' ANGLE TO "D" DECK
REV FRAMES		9" x 4" x 48' TO "D" & "E" DECKS ALTERNATELY
FRAMES	IN WAY OF OF TANKS	12" x 3 1/2" x 3 1/2" x 44' CHANNEL TO CROWN OF TANKS
		9" x 3 1/2" x 44' BA CROWN OF TANKS TO "D" DECK.
UPPER FRAMES		8" x 3 1/2" x 42' ANGLE TO "A" DECK
		EXCEPT WHERE OTHERWISE MENTIONED ABOVE

DOUBLE BOTTOM	EXTENT	SCANTLING	AT ENDS	IN B.S.
CENTRE GIRDER	FOR 1/2 L. MIDSHIPS	50" x 68"	54"	68" 70"
SIDE GIRDERS	F & A OUTSIDE B.S.	50"	50"	50" 56"
MARGIN PLATES	IN WAY OF 39' SPACING	42" x 67"	64" AT 27' SPACING	67" 68"
FLOORS (W/FLOORS 56' STIFFENED)	IN WAY OF 39' SPACING	52"	48"	52" 58"
WING BRACKETS OUTSIDE TANK	IN WAY OF 39' SPACING	53"	50"	54" 54"
TANK TOP CENTRE STRAKE.	FOR 1/2 L. MIDSHIPS	64" x 62"	51"	63" 67"
TANK TOP PLATING	AT 27' SPACING	54"	51"	63" 67"
CENTRE GIRDER KEEL ANGLES DOUBLE FOR 1/2 L. MIDSHIPS.		5" x 5" x 74"	67"	74" 74"
CENTRE GIRDER TOP ANGLES DOUBLE FOR 1/2 L. MIDSHIPS		3 1/2" x 3 1/2" x 67"	58"	67" 74"
SIDE GIRDER ANGLES DOUBLE AS PER SECTION 10 PAR C	FOR 1/2 L. MIDSHIPS	3 1/2" x 3 1/2" x 52"	62" WHERE NOT CEMENT COVERED	
MARGIN ANGLE TO SHELL	FORE & AFT	6" x 6" x 66"	64"	66" 66"
FRAMES.	MIDSHIPS & AFT	3 1/2" x 3 1/2" x 52"	52"	52" 52"
FRAMES FORWARD.	FORWARD 3/5 L.	3 1/2" x 3 1/2" x 52"	DOUBLE	
REVERSE FRAMES. SECTION 10 PAR 5	F & A OUTSIDE B.S.	3 1/2" x 3 1/2" x 52"	52"	52" 62"
CENTRE GIRDER VERTICAL ANGLES	F & A OUTSIDE B.S.	3 1/2" x 3 1/2" x 55"	55"	55" 63"
SIDE GIRDER VERTICAL ANGLES	F & A OUTSIDE B.S.	3 1/2" x 3 1/2" x 48"	48"	48" 58"
MARGIN PLATE ANGLE TO BRACKET.	FORE & AFT	6" x 6" x 54"	DOUBLE IN O.F. BUNKERS	
REVERSE FRAMES DOUBLE UNDER ENGINES & BOILER BEARERS AS PER RULE				
	STEM 11" x 3"			

EQUIPMENT

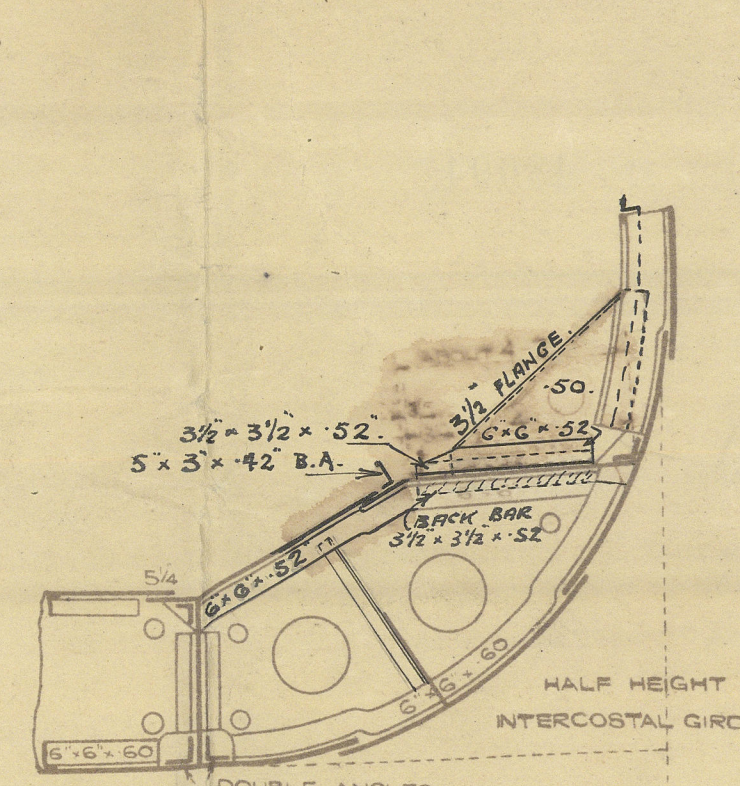
3 BOWER ANCHORS STOCKLESS COLL. WT 376 CWT.	4 HAWISERS 3 1/2" STEEL WIRE 120 FATHOMS EACH
1 STREAM ANCHOR STOCKLESS	2 8" WHITE MANILA 120
330 FATHOMS 3 1/2" STUD CHAIN CABLE	2 WARPING LINES 3 1/2" F.S.W.R 120
110 FATHOMS 2 1/2" STREAM CHAIN STUD LINK	2 3"
150 FATHOMS 6 1/2" STEEL WIRE HAWSER	4 8" MANILA 90
40 FATHOMS 7 1/2" TOWLINE	2 8" 120



KEEL PLATE -	TO HAVE SINGLE INSIDE STRAPS QUADRUPLE RIVETED ALL FORE & AFT
SHELL PLATING -	STRAKES "A" TO "N" INCLUSIVE OVERLAPPED & QUADRUPLE RIVETED TO TREBLE AT ENDS WHERE NOT EXCEEDING 68", STRAKES "Q" TO "R" OVERLAPPED & QUADRUPLE RIVETED TO T.R. AT ENDS
BOAT DECK -	STRINGER OVERLAPPED & DOUBLE RIVETED
"A" DECK -	PLATING OVERLAPPED & SINGLE RIVETED
"B" DECK -	STRINGER PLATE OVERLAPPED & QUADRUPLE RIVETED
"C" DECK -	PLATING OVERLAPPED & TREBLE RIVETED
"D" DECK -	STRINGER PLATE OVERLAPPED & TREBLE RIVETED, QUAD RIVETED CLEAR OF "A" WHERE EXCEEDING 68"
"E" DECK -	PLATING OVERLAPPED & TREBLE RIVETED TO DOUBLE AT ENDS
"F" DECK -	STRINGER PLATE OVERLAPPED & TREBLE RIVETED
INNER BOTTOM -	PLATING OVERLAPPED & SINGLE RIVETED
	CENTRE STRAKE OVERLAPPED & TREBLE RIVETED
	MARGIN PLATE OVERLAPPED & TREBLE RIVETED
	REMAINDER OF TANK TOP PLATING OVERLAPPED & TREBLE RIVETED TO DOUBLE AT ENDS
CENTRE GIRDER -	OVERLAPPED & QUADRUPLE RIVETED, TREBLE RIVETED WHERE NOT EXCEEDING 60"
SIDE GIRDERS -	OVERLAPPED & TREBLE RIVETED
	THE SPACING OF THE RIVETS AS PER SECT 14 PAR 3 FOR 36" SPACING

OWNERS EXTRAS

FRAMES - FRAMES IN FORE & AFTER PEAKS & FOR 20 FT FORE & AFTER PEAK & 40 FT AFT OF FORE PEAK TO BE DOUBLED FROM KEEL TO UPPER DECK (D).
DOUBLE BOTTOM - REVERSE FRAMES IN NOS 1 & 2 HOLDS FROM OUTER GIRDER TO TANK MARGIN TO BE 6" x 6" ANGLES & TO EXTEND TO MARGIN IN NOS 1 & 2 HOLDS TO BE 6" x 6" ANGLES & TO EXTEND 6' BEYOND THE BRACKET. DOUBLE ANGLES FITTED TO SIDE GIRDERS & SHELL IN NOS 1 & 2 HOLDS.
SHELL PLATING - FOUR STRAKES OF SHELL PLATING ON EACH SIDE OF VESSEL ABOUT THE L.W.L. TO BE 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 TO BE 3/8" THICKER THAN LLOYDS REQUIREMENTS
DECKS - ON ALL DECKS BELOW UPPER DECK (D) CHOCK ANGLES TO BE DOUBLE RIVETED FOR A MEAN LENGTH OF 70 FT ABOARD THE STEM



SECTION IN WAY OF NO 2 HOLD.
FLOOR PLATES DOWN TO SHELL & EXTRA GIRDERS AS REQUIRED.

THE THREE STRAKES OF SHELL PLATING NEXT THE KEEL 76" IN WAY OF 27' FRAME SPACING, EXTENDING TO RULE POSITION OF COLLISION BMD. ADDITIONAL HALF HEIGHT INTERCOSTALS WHERE REQUIRED.
TANK TOP PLATING UNDER DEEP TANK TO HAVE EXTRA INTERCOSTAL ANGLE STIFFENERS
TANK DIVISIONAL FLOORS STIFFENED BETWEEN INTERCOSTALS
TANK TOP PLATING UNDER BOILERS, PICKLED
ADDITIONAL GIRDERS UNDER TURBINES & THRUST SEATS

Y. S. S. Duchess of Atholl.

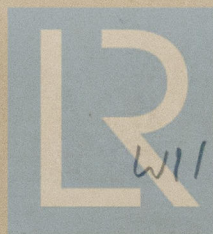
REMAIN

Midship Section (as built).

Messrs. W. Beardmore & Co. Ltd. Yard No 6448.

77165

GLASGOW REPORT No 48094



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