

# M.V. SURAT & SHILLONG

NOS. 561-2

MIDSHIP SECTION. (AS BUILT)

SCALE: 1" = 2' ONE FOOT.

MID. DIMS 435'-0" x 57'-6" x 37'-3" TO UPPER DECK.  
28'-3" TO 2ND DECK. 20'-3" TO 3RD DECK.

TO CLASS 100 A.I. WITH FREEBOARD CORRESPONDING TO THE DRAFT  
CONTEMPLATED BY THE RULES FOR A.C.S.S. VESSEL WITH TONNAGE OPENING.

ALEXANDER STEPHEN & SONS, LTD.  
SHIPBUILDERS & ENGINEERS  
CLASGOW.  
DATE 7-12-38.

LLOYDS NUMERALS		
L x D	= 435 x 36.25	= 15770
L x (B + D)	= 435 x (57.5 + 36.25)	= 40782
D TO UPPER DECK	= 435 x 37.25	= 11.68
d - PAINTING	= 21.75 + 5 (BULKHEADS) = 22.25	
d N°2 HOLD (1/2 L TO PAINTING)	= 18.93 + 5 ( " ) = 19.43	
d N°2 HOLD (AFT OF 1/2 L DEPT TANKS)	= 16.59 + 5 ( " ) = 17.09	
d ENGINE ROOM	= 20.5 - 4.5 = 15.75	
d N°3 HOLD	= 20.5 - 4.5 = 15.75	
D FOR FRAMING	= 36.25	

EQUIPMENT NUMBER		
L x (B + D)	= 435 x (57.5 + 37.25)	= 41216.25
FORECASTLE	= 40 x 7.5 x 7.5	= 224
SALOON HOUSE	= 30.5 x 8 x 50	= 122
ENGINEERS HOUSE	= 75 x 8 x 50	= 300
AFTER HOUSE	= 46 x 8 x 50	= 184
		42046.25

EQUIPMENT		
ANCHORS	2 BOWER ANCHORS EACH 72 CWT STOCKLESS	
ANCHOR	1 ANCHOR 62	
STREAM	1 STREAM 20% EX-STOCK	
CHAIN CABLE	300 FMS 2 1/2" STUD LINK CHAIN CABLE	
STREAM CHAIN OR WIRE	120 FMS 1 1/2" STREAM CHAIN OR 5 (6/12) F.S.W.	
TON LINE	130 FMS 5 (6/24) S.F.S.W.	
HAWSEERS	2 @ 100 FMS 8 HEMP OR 2 1/2 (6/12) F.S.W.	
WARDS	2 @ 100 FMS 8 HEMP OR 2 1/2 (6/12) F.S.W.	

STEM 10' x 6"

OWNERS EXTRAS

ENGINE ROOM D.B. TANK FLOORS & INTERIORS AND ATTACHMENT ANGLES TO BE 3/32 OVER RULE.  
BOILER ROOM TANK TOP PLATING UNDER BOILERS AND ALL FLOORS INTERIORS AND ATTACHMENT ANGLES IN TANK UNDER BOILERS TO BE 3/32 OVER RULE.  
CEILING TANK TOP PLATING IN DEEP TANK TO BE OF THICKNESS REQUIRED BY RULE WITH NO BOLLING FITTED (6" x .08 OVER RULE UNDER HATCH).  
FORE & AFT PEAK BULKHEAD PLATING INCREASED .05 OVER RULE & STIFFES SPACED 2' APART.  
UPPER & 2ND DECK ALL PLATING INCREASED .30 OVER RULE.  
SPECIAL ATTACHMENT OF TANK WING BRACKETS & FLOORS TO MARGIN.

DOUBLE BOTTOM		
BATHING	LENGTH	ENG. SP.
48'-48"	44' x 54'	48"
CENTRE GIRDER	TOP ANGLE	3" x 3" x 48"
	BOTTOM ANGLE	5" x 5" x 50"
41'	SOLID FLOORS (SPACED 7'-0")	42"
41'	INTER. BKT FLOORS	42"
41'	WT. FLOORS	42"
44'	STIFFENERS ON WT. FLOORS	42"
44'	FRAMES ON SOLID FLOORS	42"
44'	REV. FMS. ON SOLID	42"
44'	FRAMES ON BRACKET	42"
44'	REV. FMS.	42"
44'	INTER. PLATING	42"
44'	TOP ANGLE	3" x 3" x 48"
44'	BOTTOM	5" x 5" x 50"
44'	VERT. ANGLES ON C. GIRDER	3" x 3" x 48"
44'	MARGIN-INSIDE	3" x 3" x 48"
44'	INTER. SOLID	3" x 3" x 48"
44'	(BKT)	3" x 3" x 48"
44'	TANK TOP CENTRE STRAKE	42"
44'	PLATING	42"
44'	MARGIN PLATE	42"
44'	ANGLE	42"
44'	GUSSETS	42"
44'	WING BRACKETS (35 PL. ON NOS)	42"

ALL BULB ANGLES N.B.S.  
SEPARATE PLAN OF STRENGTHENING OF DOUBLE BOTTOM FMS OF 1/2 L TO BE SUBMITTED  
INCREASES IN BOLLER SPACES AS PER RULE

RIVETING OF TANK WING BRACKETS		
IN WAY OF PAINTING	MARGIN OUTER ANGLE	TO MARGIN INSIDE ANGLE
N°1 HOLD (UPPER)	14	14
N°2 HOLD (OVER OIL)	14	14
DEEP TANK	14	14
ENGINE ROOM	14	14
N°3 HOLD	14	14
N°4 HOLD	14	14

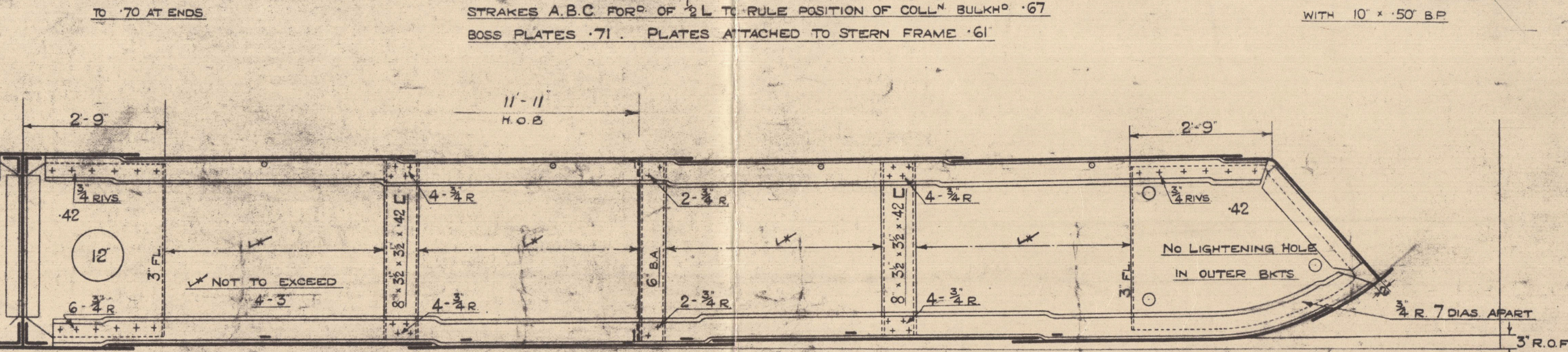
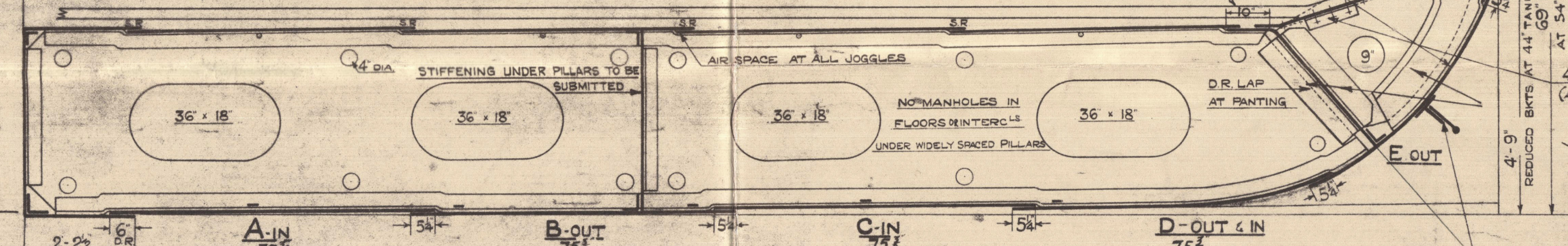
GUSSET TO MARGIN: 1/2 RIV. SPACED 5 DIA.  
1/2 RIV. THIRD FLOORS. REMAINDER OF RIV. 3/4 DIA.  
RIVETS IN GUSSET TO WING BRACKET SPACED 4" APART  
WIDTH OF LAP ON FRAMES TO SUIT NUMBER OF RIVETS.

SIDE FRAMING ALL SECTIONS ARE BULB ANGLE N.B.S.

AFT PEAK	IN WAY OF	NOS. 3 & 4	ENGINE	OIL	DEEP	N°2 HOLD	1/2 L TO	15" L TO	FORE
FRAME SPACE	TUNNEL REDDS	HOLDS	ROOM	FUEL	TANK	AFT OF 1/2 L	COLLM B&P	COLLM B&P	PEAK
24'	31'	31'	31'	31'	31'	31'	31' to 27'	27'	24'
8' x 38' x 35'	9' x 38' x 44'	10' x 38' x 40'	10' x 38' x 40'	10' x 38' x 48'	11' x 38' x 43'	10' x 38' x 48'	11' x 38' x 44'	12' x 38' x 57'	8' x 38' x 35'
TO UPPER DK	TO 3RD DK	TO 3RD DK	TO 3RD DK	TO 2ND DK	TO 2ND DK	TO 3RD DK	TO 3RD DK	TO 3RD DK	TO FOLE DK
TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES	TWEEN DK FRAMES
7' x 38' x 38'	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER	3RD DK TO UPPER

THE REQUIREMENTS OF SECT. 20 OF RULES TO BE COMPLIED WITH - F.P. OF OIL TO BE ABOVE 150°F

TANK TOP COMPLETELY COVERED WITH CEILING (2" MIN) OVER OIL FUEL TANKS - 2" AIR SPACE BETWEEN CEILING & TANK TOP  
N°1 & 4 HOLDS (CLEAR OF OIL FUEL) AND DEEP TANK - 2" RINE UNDER SQUARE OF HATCHES (2" O. ALL ROUND  
BEYOND HATCH) NO AIR SPACE. TANK TOP WHERE NO CEILING OVER OIL FUEL TO HAVE O.R. SEAMS.



SKETCH OF BRACKET FLOOR

SECTION IN WAY OF ENGINE ROOM

DETAIL PLAN OF DOUBLE BOTTOM IN ENG. ROOM  
TO BE SUBMITTED

T. TOP LEVEL THWAFTSHIPS AND ROSE & APT

T. TOP SEAMS O.R. IN ENG. ROOM

4'-6" TO UNDERSIDE OF 1 1/2" TOP PLATE ABOVE BASE

14'-0" OFF & P&S

OIL FUEL BUNKER (P&S)

SEPARATE PLAN TO BE SUBMITTED

WEB FRAMES 25' x 48'

SPACED AS PER PROFILE

FRAME ANGLE 5' x 5' x 48'

FACE BARS 5' x 5' x 50' B.A. DOUBLE

46 BKT AT AFT PM

(INTER. FMS LOGGED)

WELDED PLATE COLLARS AT FRAMES

ANGLE PLATE SQUARES

AT BEAMS IN WAY OF

O.F. TANK

5' x 38' REV. BAR ON BEAMS AT

WEB FRAMES

2" SPACED

4" DIA

9'-0" INSIDE

UPPER DECK (OWNERS SHELTER DECK)

ALL DECKS 14" R.O.B. IN 57'-0"

BEAMS ON EVERY FRAME

6' x 38 B.P.

SUPPORTS SPACED 6'-0"

BULKHEAD FITTED FROM 4'-0" FOR 2"

OF SALOON HOUSE TO 4'-0" AFT

OF ENGINE ROOM

FORECASTLE SIDE

PLATING 14"

SHEERSTRAKE

RULE 31 x 72" FOR 1/2 L TO

FIT 72" x 63" - 47 AT ENDS

NO COMPENSATION REQ. FOR 12"

SIDEWALLS AT AFT END

UPPER DECK (OWNERS SHELTER DECK)

ALL DECKS 14" R.O.B. IN 57'-0"



MESS<sup>RS</sup> ALEX<sup>R</sup> STEPHEN & SONS, LD.

M/V. "SURAT"

N<sup>o</sup> 561.

MIDSHIP SECTION  
(AS BUILT.)

GLASGOW REPORT No 60460

W86-0122



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