

SHIP NOS 1135-6-7-8

RUDDER PLAN

DRAWING NO 19.A

SCALE 1IN = 1FT

MATERIAL

MAIN PIECE INGOT STEEL

ARMS FORGED IRON

ARMS TO BE SHRUNKON AND KEYED TO MAIN PIECE

TO PASS BRITISH CORPORATION TESTS
AND TO SURVEYORS SATISFACTION

RUDDER PARTICULARS:-

AREA OF RUDDER 51.7 SQUARE FEET

SPEED 14 1/4 KNOTS

CR. OF GRAVITY FORE & AFT 11' 6" AFT OF CR OF RUDDER STOCK

DO. DO. VERTICAL 3' 9" BELOW BOTTOM OF BEARING

405-5

Upper Area =

$$S = 22.78 \times 1.7 \times 100^2$$

$$= 23.2 \times 10^6$$

$$= 5.16 \times 10^6$$

Lower Area =

$$R = 3.94 \times \sqrt{3.94 \times 1.7}$$

$$= 2.94 \times 1.56 \times 1.57$$

$$= 3.94 \times 4.1$$

$$= 8.04$$

$$S_1 = 23.2 \sqrt{51.7 \times 8 \times 1425^2}$$

$$= 23.2 \sqrt{841000}$$

$$= 23.2 \times 43.6$$

$$= 10.1 \times 10^6$$

$$= 11.30 \times 10^6$$

RIVETING

7/8 DIA RIVETS, SPACED 3 1/2 IN APART IN TIPS OF

RUDDER ARMS TO 5 1/4 INCHES AT POST. 7/8 DIA TAP RIVETS

TO BE SUBSTITUTED (SPACED AS ABOVE) WHERE THE

THICKNESS OF ARM EXCEEDS 4 INCH

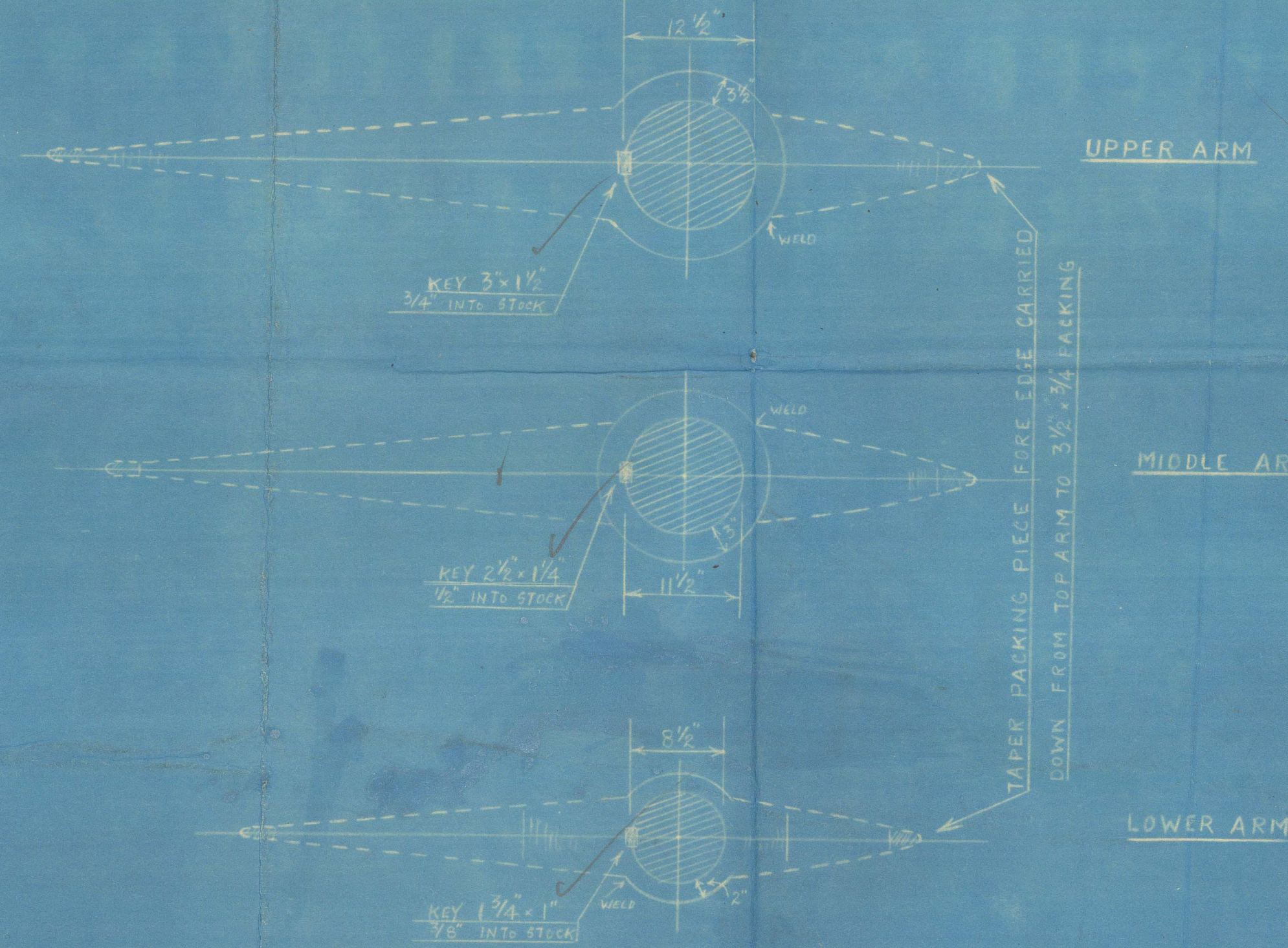
3/4 DIA RIVETS IN PACKING FRAME, SPACED 3 3/8 IN APART 6" & 6"

RIVETS IN TIPS OF RUDDER ARMS TO BE CAREFULLY SPACED

& DRILLED. RIVET HOLES IN RUDDER PLATES TO BE COUNTERSUNK.



SECTIONS THROUGH ARMS.



NOTE:- SIDE PLATES SLOTTED IN WAY OF ARMS
AND WELDED TO ARMS, AND MAIN PIECE. *Rounded ends on plates.*

22 FEB 1945

Approved
21-2-45
C. H. H.

2

Spade Sudder
Smiths Block Co.

Nos. 1135-6-7-8.

24.2.15.

1135 SOUTHERN STRIFE

1136 " TRUCE

1137 THORARINN

1138 THORDR.



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012752-012760-0191

Spade Knobler

Smiths Dock Co

No 1135-8

22 FEB 1945



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