

5/7 "HATSUSE"

SHIP N° 834.

# MODIFICATIONS TO RUDDER AND STERN FOOT.

ORIGINAL AREA = 50½ SQ. FT.  
AREA WITH ADDITION AS SHOWN BELOW 58½ SQ. FT.  
V.C.G. = 4.31' FROM UNDERSIDE OF BEARING.  
L.C.G. = 1.28' AFT OF C OF STOCK.  
SPEED = 10½ KNOTS.

SCALE: 1" = 1 FOOT.



DIAMETER OF STOCK TO BRITISH CORPORATION FORMULA FOR  
BALANCED RUDDERS WITH NO BOTTOM BEARING

$$= .26 \sqrt{R.A.V.}$$

$$R = 4.31 + \sqrt{4.31^2 + 1.28^2} = 8.79$$

$$\text{DIAMETER OF STOCK} = .26 \sqrt{8.79 \times 58.5 \times 0.5 \times 10.5}$$

$$= 9.95 \text{ SA } 10" \text{ DIA.}$$

ACTUAL STOCK = 10½" DIA.

$$\frac{24 \times 566.00}{2} = 26,388.00$$

$$= 9.98 \text{ SA } 10"$$

$$\frac{180}{115} = 1.57$$

$$\frac{4.47}{1.13} = 3.96$$

$$\frac{40}{25} = 1.6$$

$$\frac{44}{25} = 1.76$$

$$\frac{10.275 \times 19.5}{2} = 25.5$$

$$\frac{10.275 \times 19.5}{2} = 25.5$$

$$.26 \times 35 = 9.10$$

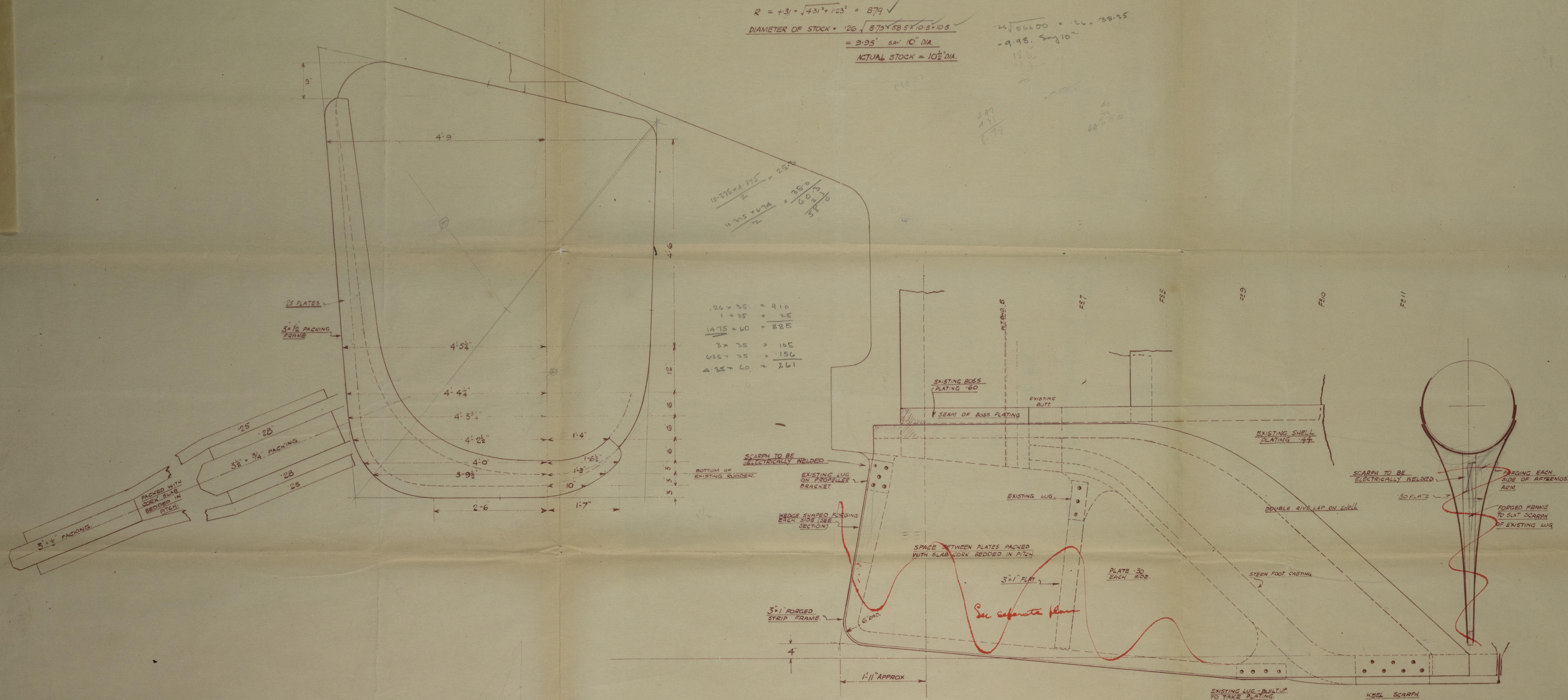
$$1 \times 35 = 35$$

$$14.75 \times 60 = 885$$

$$3 \times 35 = 105$$

$$6.25 \times 25 = 156$$

$$4.35 \times 60 = 261$$



12 DEC 1928

J. H. for H. 13-12-28



H

Mod. to Rudder & Sternfoot [B.C. SKETCH  
ATTACHED.]

Smiths Dock Co.

Nº 834.

13 - 12 - 28

5/5 "Hatsuse"

H

Mod. to Rudder & Sternfoot.

Smiths Dock Co 834.

Bag.



© 2021

Lloyd's Register  
Foundation