



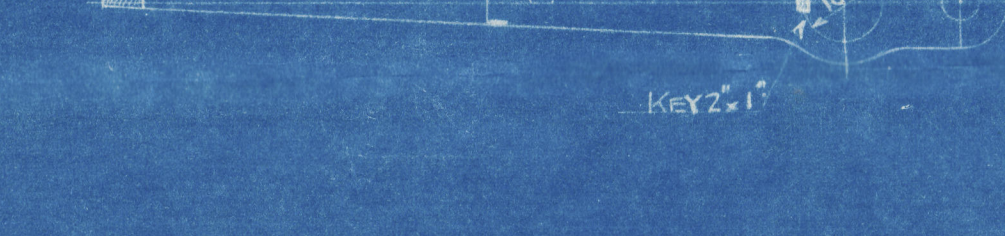
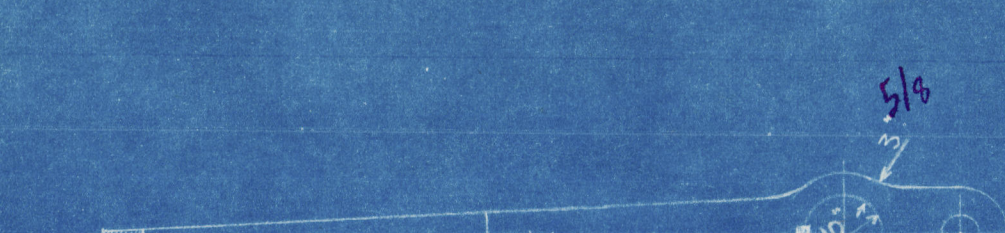
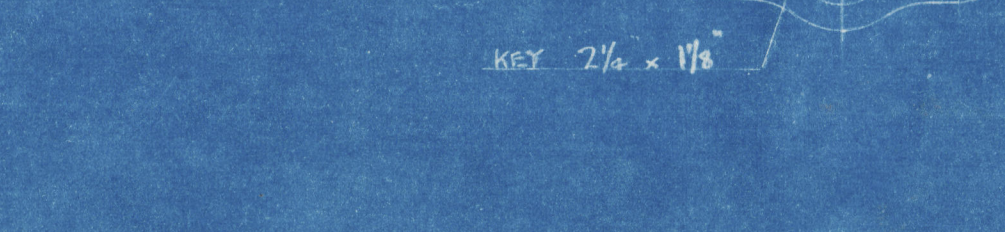
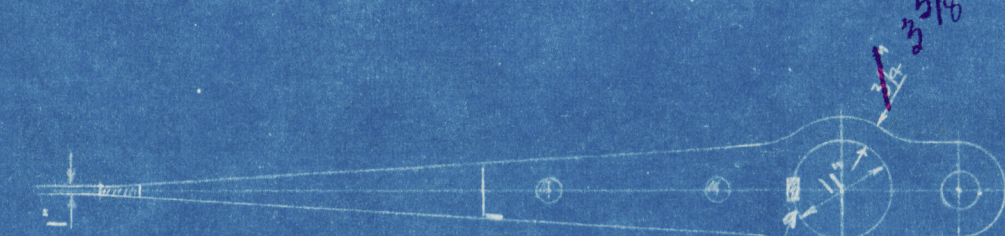
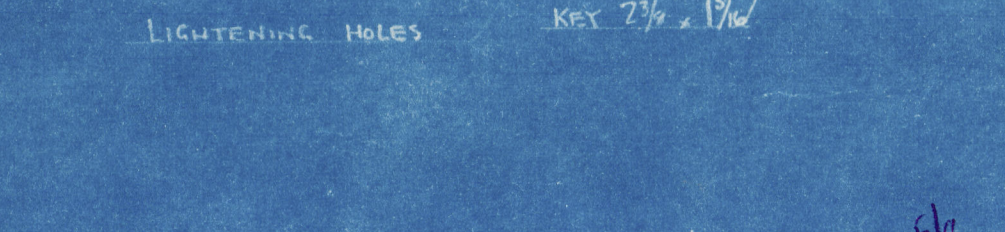
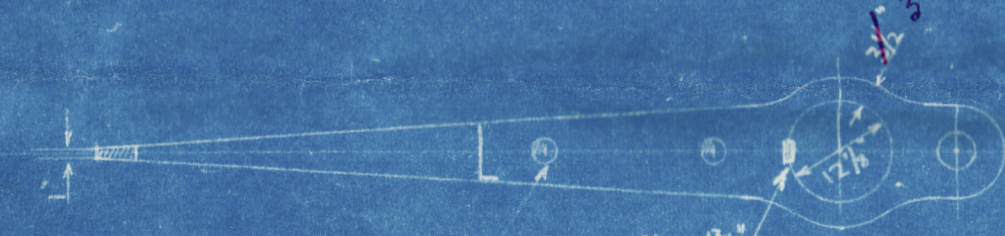
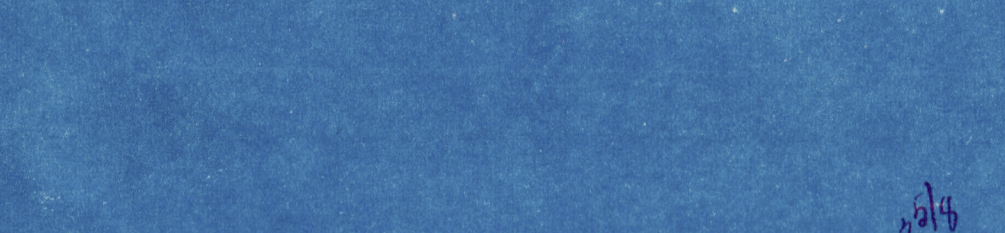
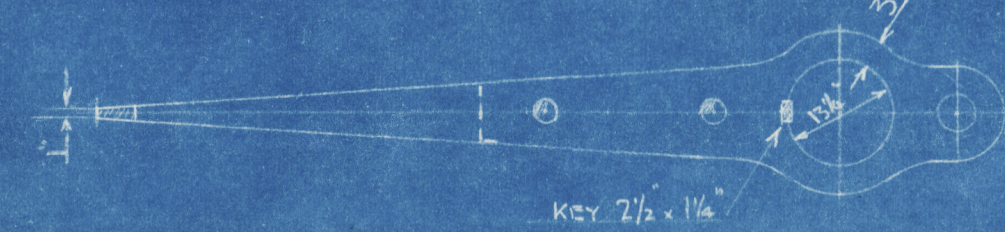
N^os 1034-5.
PROPOSED FORGED RUDDER.
SCALE 1/2" = 1 FOOT

RUDDER STOCK - FORGED STEEL.
RUDDER POST - FORGED STEEL.
RUDDER ARMS - FORGED STEEL.

SPEED OF VESSEL = 12 KNOTS.
MAX HELM ANGLE = 40 DEGREES.
RUDDER AREA = 166.7 SQ. FEET.
AREA COEFFICIENT = $\frac{42 \times 26.4}{166.7} = 6.7$

NOTES - FORGED STEEL PINTLES, COMPLETE WITH GR LINERS, NUTS AND SLIT PINS TO BE SUPPLIED WITH RUDDER, ALSO FORGED STEEL STOP AT AFTER END, AND FITTED COUPLING BOLTS, TOGETHER WITH KEY FOR SCREWING UP THESE BOLTS. CONTRACTORS ALSO TO CUT KEYWAYS, TAP HOLES IN UPPER STOCK FOR LIFTING, ARMS TO BE AT RIGHT ANGLES TO ϕ OF POST, BORED OUT ACCURATELY AND CAREFULLY SHOWN ON POST AND KEYED. KEYS TO BE OF MILD STEEL AND TO HAVE 1/8" TAPER IN LENGTH. KEYS AND SEATS TO BE ACCURATELY MACHINED TO DIMENSIONS GIVEN AND ALL KEYS DRIVEN UP. PARTS MACHINED WHERE THIRDED REED.

PLATES AND ANGLES SUPPLIED AND FITTED BY SHIPBUILDERS.



2 x 3/4 x 50 ANGLE
3/4" PL STARS SIDE
RUDDER PLATE, SLOT
UNWELDED TO ARM AS
PER DETAIL OF ARM
WELDED TO PLATE

3" FLANGE CUT
DOWN AS REQUIRED

WELDS 3" LONG 2"
APART ON ALTERNATE
SIDES OF ARM
DOUBLE AT ENDS

FULL WELD

FULL FILLET WELD

19'-8 1/4"

Plates designed that
will plates

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

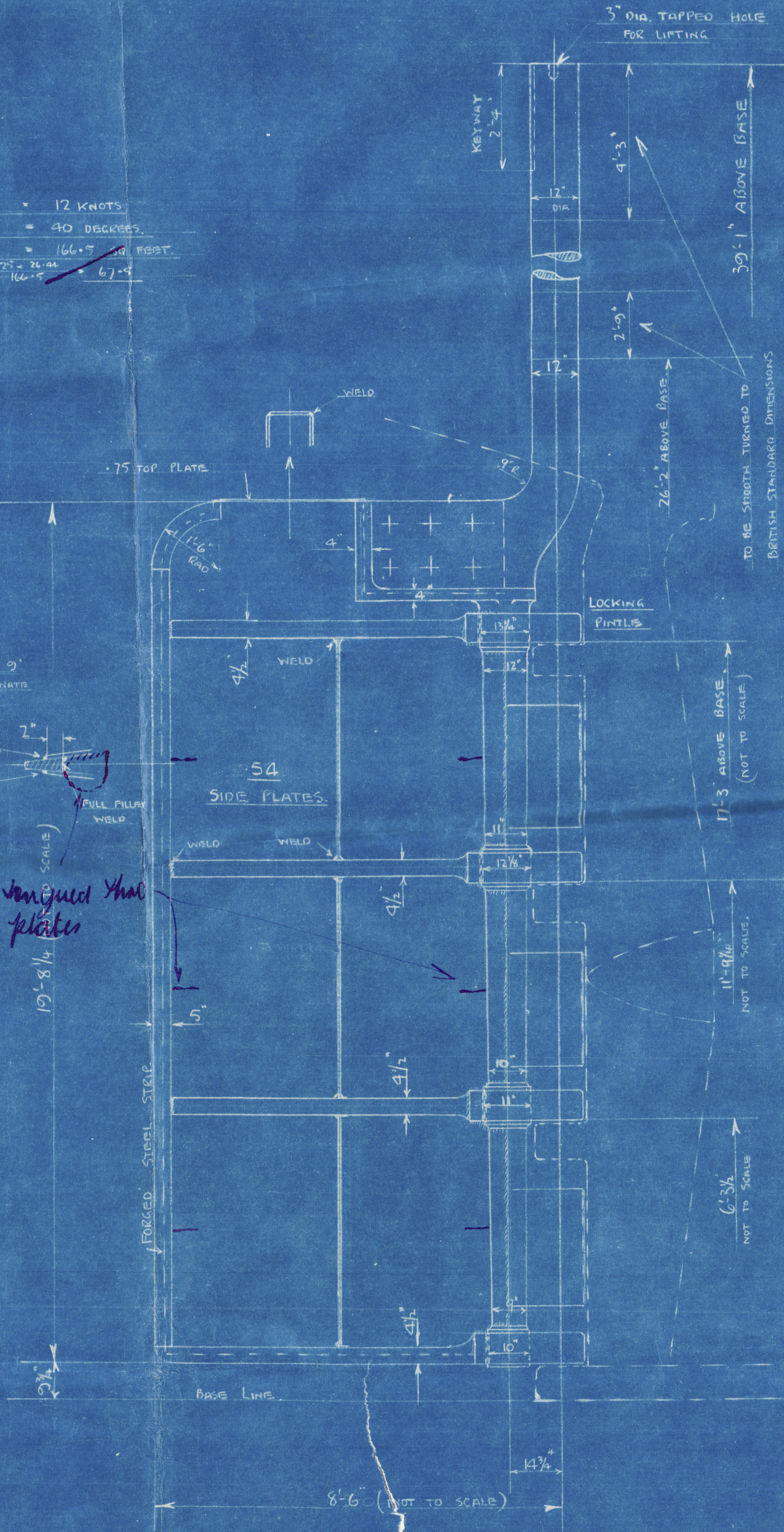
19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"

19'-8 1/4"



TO BE SMOOTH TURNED TO
BRITISH STANDARD DIMENSIONS

LOCKING
PINTLE

17'-3" ABOVE BASE
(NOT TO SCALE)

11'-6 1/4"

11'-6 1/4"

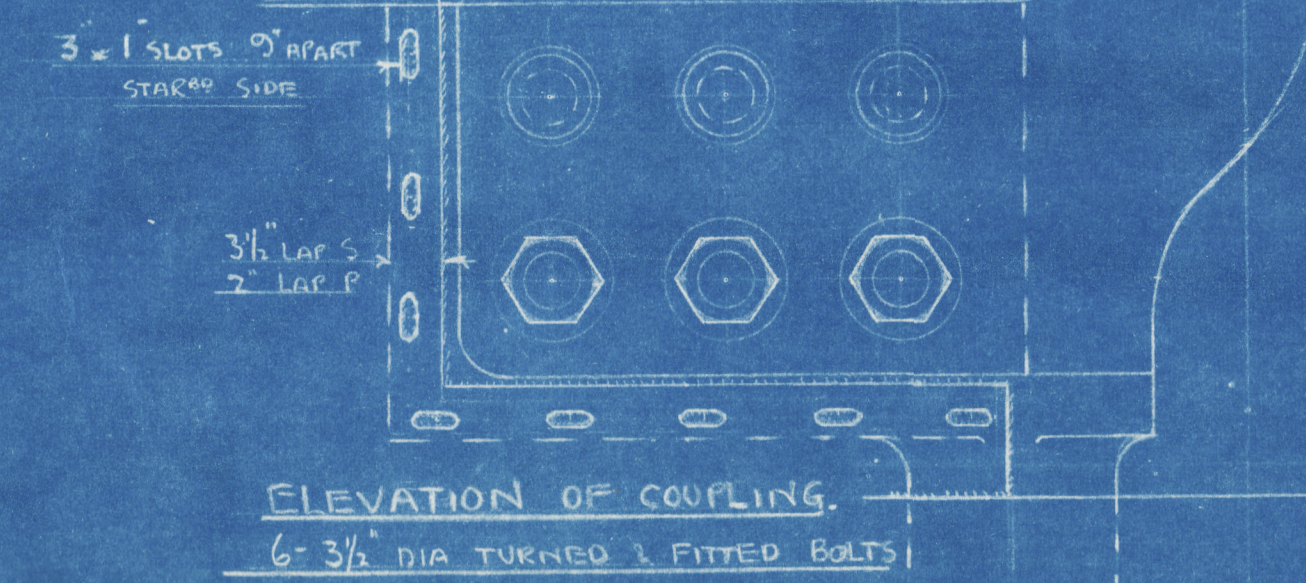
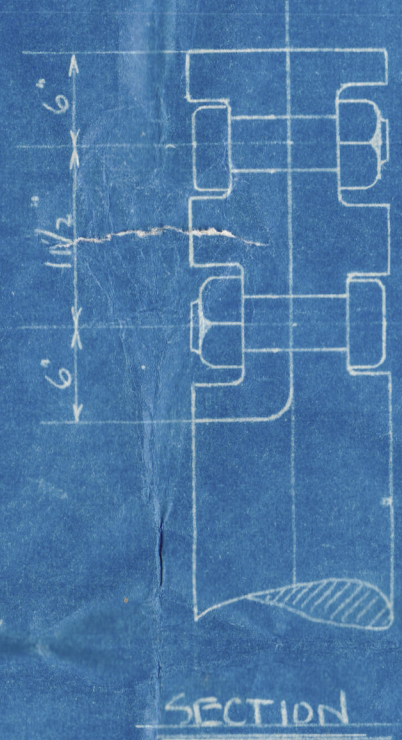
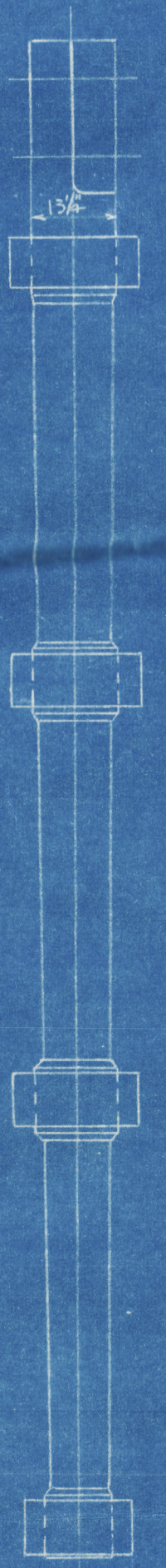
11'-6 1/4"

11'-6 1/4"

11'-6 1/4"

11'-6 1/4"

11'-6 1/4"



ELEVATION OF COUPLING
6" 3/8" DIA TURNED & FITTED BOLTS

3 x 1" SLOTS 9" HEART
STARRED SIDE

3/4" LAF S
2" LAF P

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

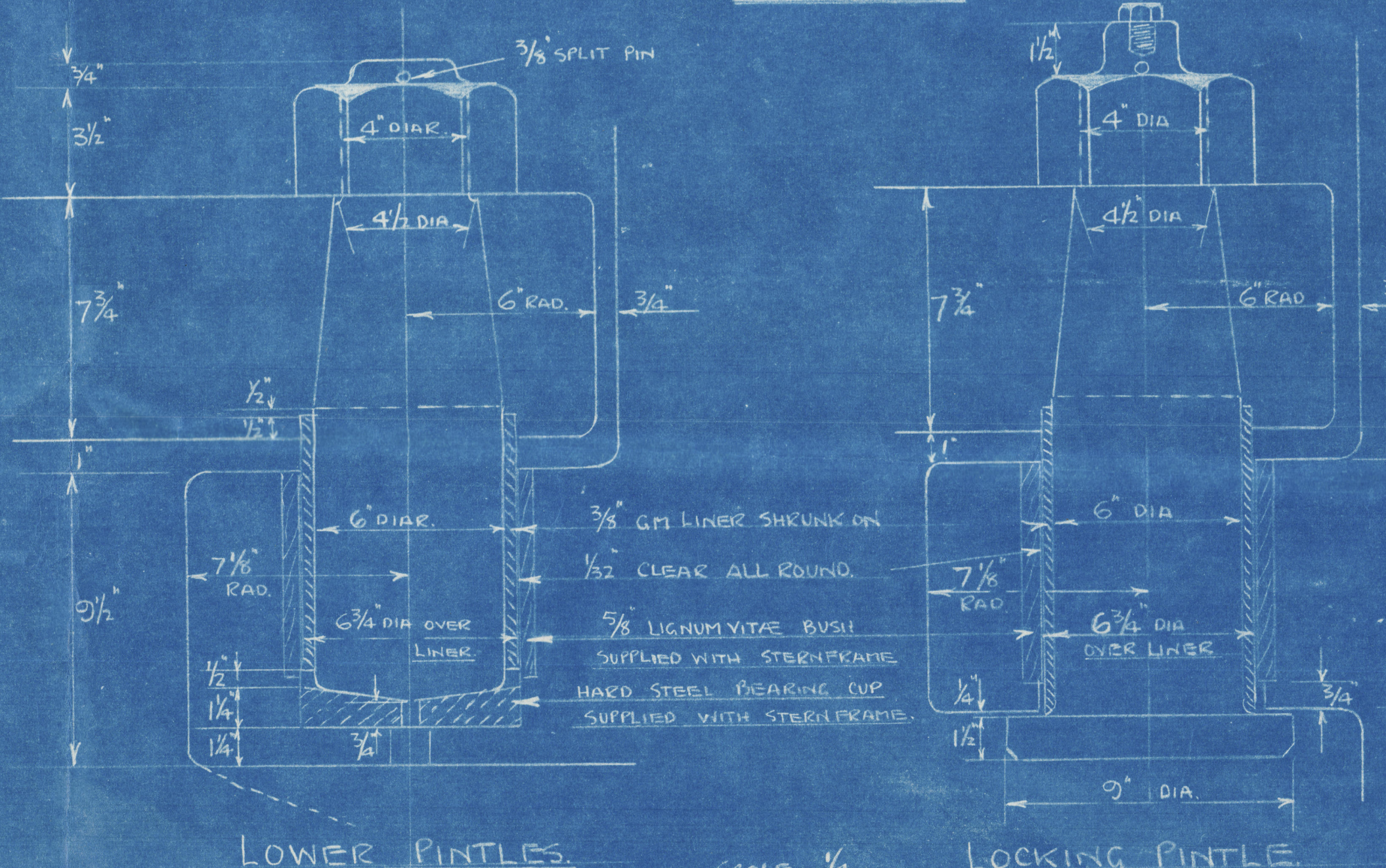
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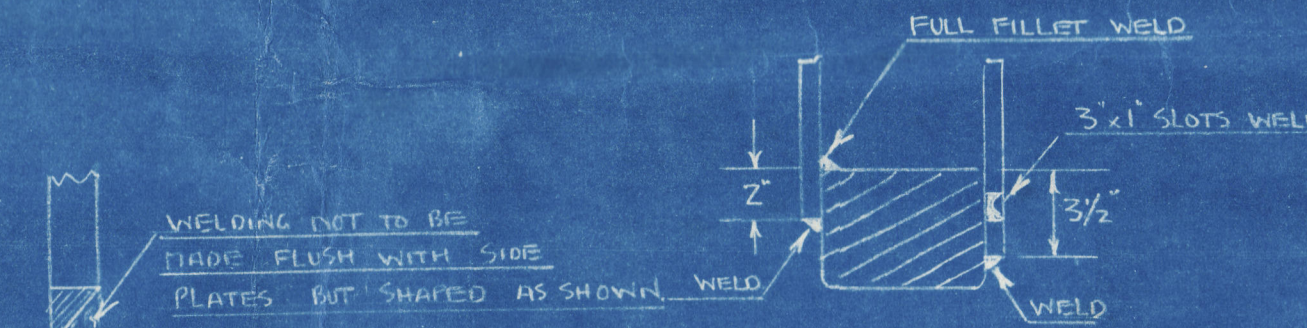
SECTIONAL PLAN



LOWER PINTLE

SCALE 1/4"

LOCKING PINTLE



DETAIL OF PLUG WELDS

WELDS 3" LONG 2"
APART (C/E TO C/E)
ALTERNATELY AT TOP
& BOTTOM OF ARM
DOUBLE AT ENDS

needed to
determine
inflection

3" x 1" SLOTS WELDED

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

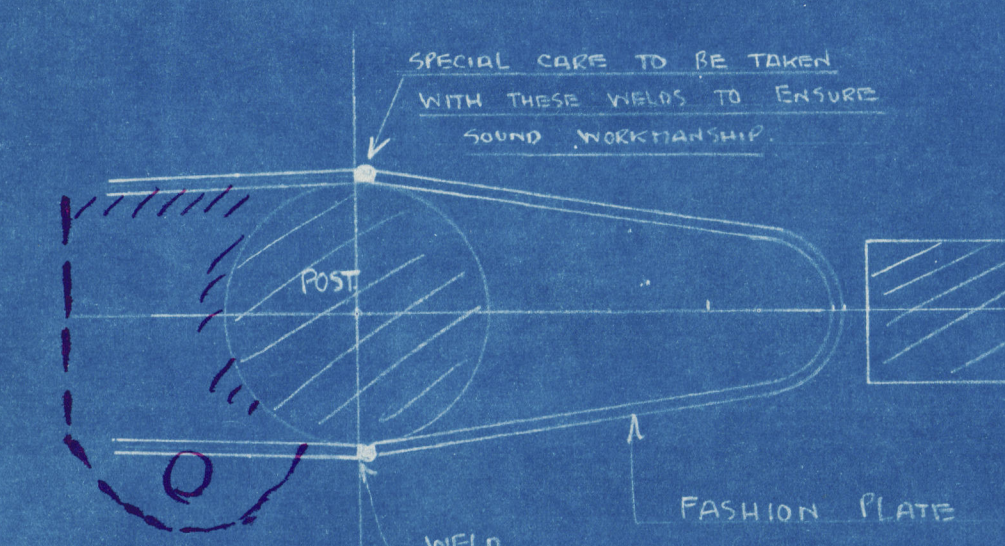
WELD

WELD

WELD

WELD

WELDING OF SIDE PLATES TO ARMS



WELDING OF PLATES TO POST

WELD

WELD

WELD

WELD

WELD

WELD

WELD

WELD

18-9-39

006512-006522-0065



6

HARLAND & WOLFF LTD.
BELFAST

No. 1034/5

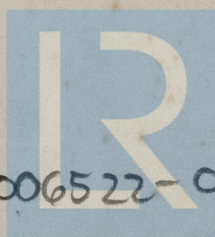
TITLE Proposed forged
Rudder

DATE APPROVED 18.9.39

Belfast Report No

A raybank
"Shirroabank"

D.S. 283.



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Lloyd's Register
Foundation

006512-006522-0046