

This Drawing may only be used for the manufacture of Articles to be supplied to the Air Ministry.

AIR MINISTRY A.G.S. No 963

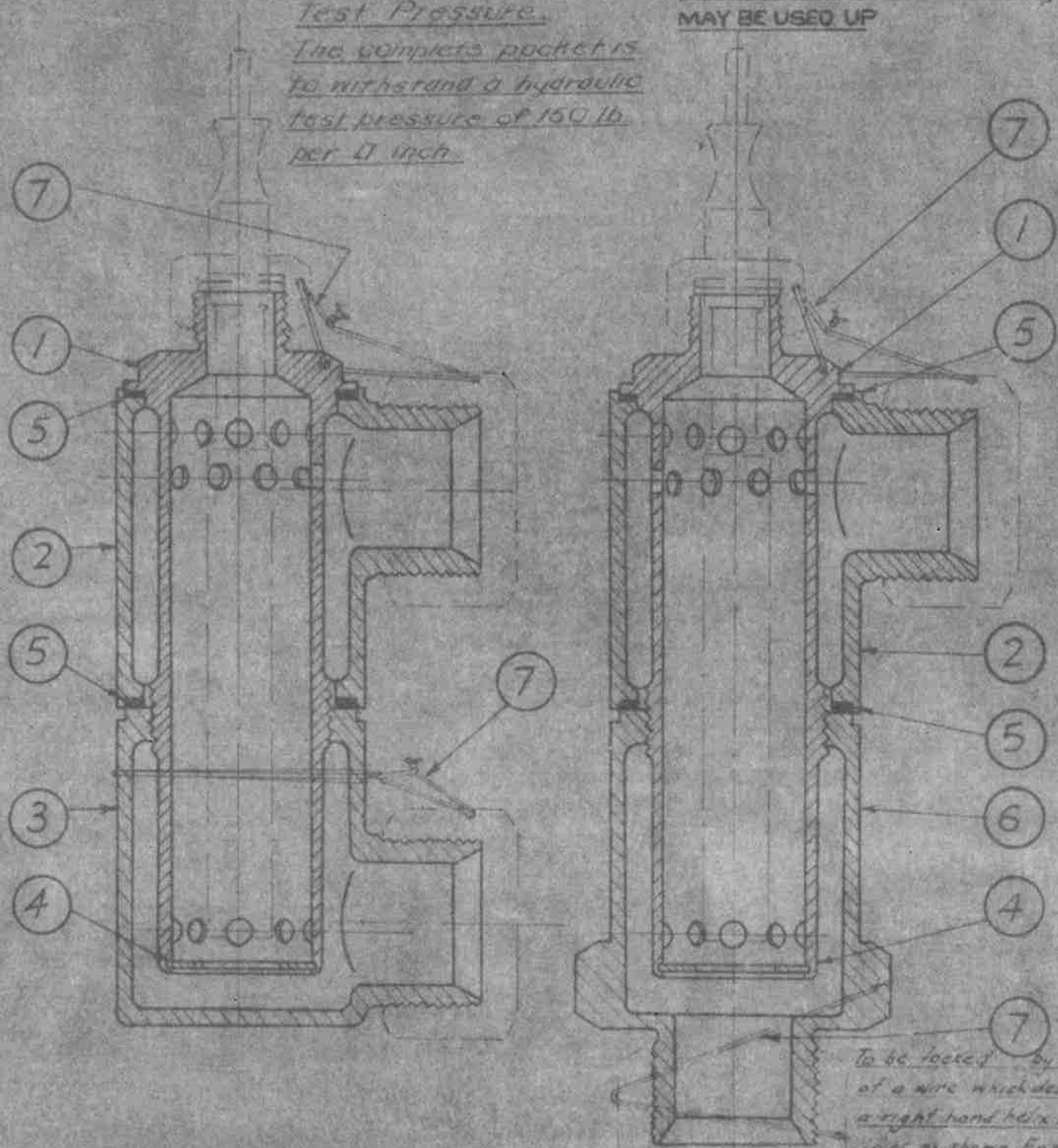
SHEET No. 1

No. of SHEETS 3

OBSCOLESCENT - NO FURTHER MANUFACTURE - EXISTING STOCKS MAY BE USED UP

Test Pressure.

The complete pocket is to withstand a hydraulic test pressure of 150 lb per sq inch.



UNIVERSAL TYPE
A.G.S. 963/A

ELBOW TYPE
A.G.S. 963/B

Part No.	A.G.S. No.	DESCRIPTION	QTY	REMARKS
1	963/1	Reeve	1	
2	963/2	Body Casting	1	
4	963/4	End Plug	1	
5	N.D.	Fibre Washer	2	1.61" dia x .72" dia x .25"
7	N.D.	Locking Wire	As Req.	See A.G.S. No 769
3	963/3	Body Casting	1	For Assembly A
6	963/6	Union Body (Alternative)	1	For Assembly B

DRAWN BY CHECKED BY OR TECHNICAL DEVELOPMENT AIR MINISTRY	TITLE - OIL THERMOMETER POCKET				DESIGNED BY G. von Eede	APPROVED BY Dean	DATE 8/25/36
	7/6 B.S. PIPE						
REF. NO.	X	B	3	4			
REVISION	AGS 963/1	AGS 963/2	AGS 963/3	AGS 963/4			

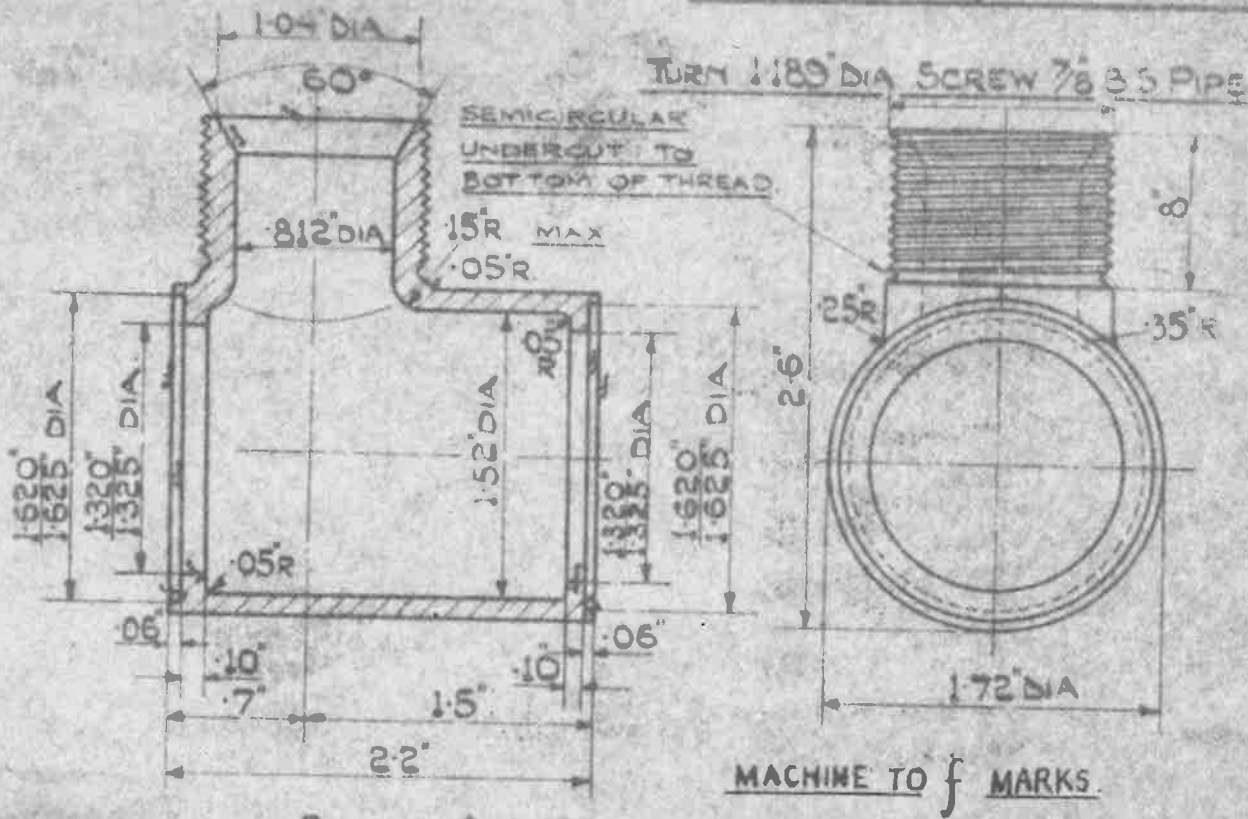
SCREW THREADS TO BE IN ACCORDANCE WITH B.S. SPEC. 84 FOR B.S.P. MEDIUM FIT.

AIR MINISTRY AGS. No 963

SHEET No 2. No of SHEETS 3

15.5.36
511886/36

OBSOLESCENT



MACHINE TO f MARKS.

BODY CASTING. PART 2.

MATERIAL - ALUMINIUM (CLASS 3 CASTING. SEE DRG. NO. AD 15528-3) (LATEST ISSUE)

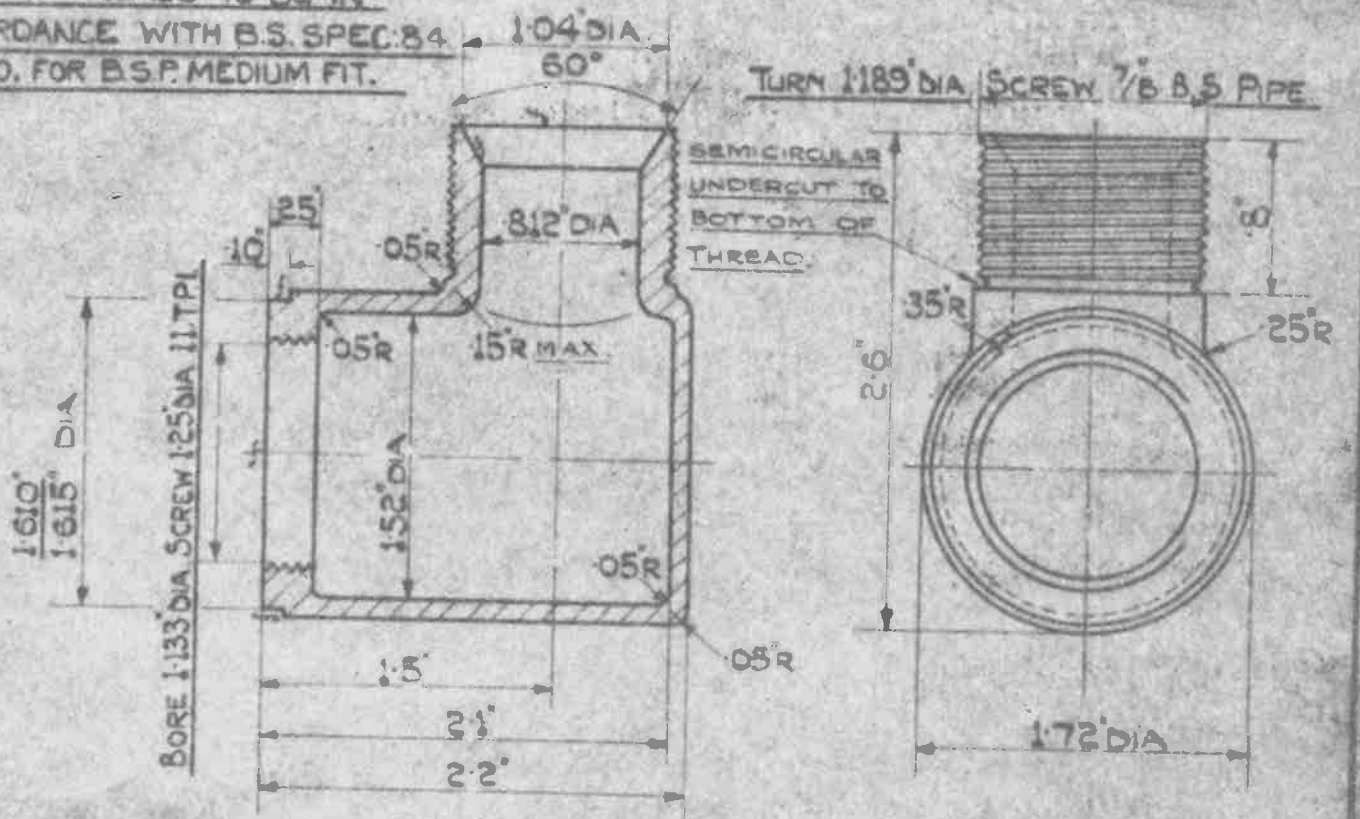
SPEC. - L.5 OR L.33 OR DTD 424 (LATEST ISSUES)

SCALE - FULL SIZE.

FINISH - TO BE ANODISED TO SPEC. D.T.D. 910 (LATEST ISSUE)

SCREW THREADS TO BE IN ACCORDANCE WITH B.S. SPEC. 84 - 1940, FOR B.S.P. MEDIUM FIT.

OBSOLESCENT



MACHINE TO f MARKS.

BODY CASTING PART 3.

MATERIAL - ALUMINIUM (CLASS 3 CASTING. SEE DRG. NO. AD 15528-3) (LATEST ISSUE)

SPEC. - L.5 OR L.33 OR DTD 424 (LATEST ISSUES)

SCALE - FULL SIZE.

FINISH - TO BE ANODISED TO SPEC. D.T.D. 910 (LATEST ISSUE).

ISSUED BY DRAWING OFFICE
DIRECTORATE OF
TECHNICAL DEVELOPMENT
AIR MINISTRY

TITLE: - OIL THERMOMETER POCKET
7/8 B.S. PIPE

DRAWN W.F. FOSTER
RE-TRACED L.P. 10.1.33

ISSUE NO	1	2	3	4	5
ALTERATION NO	1	2	3	4	5

CHECKED H.P.S. NO. 24238
RE-CHECKED A. FITT 2.3.35
RE-BASTABLE

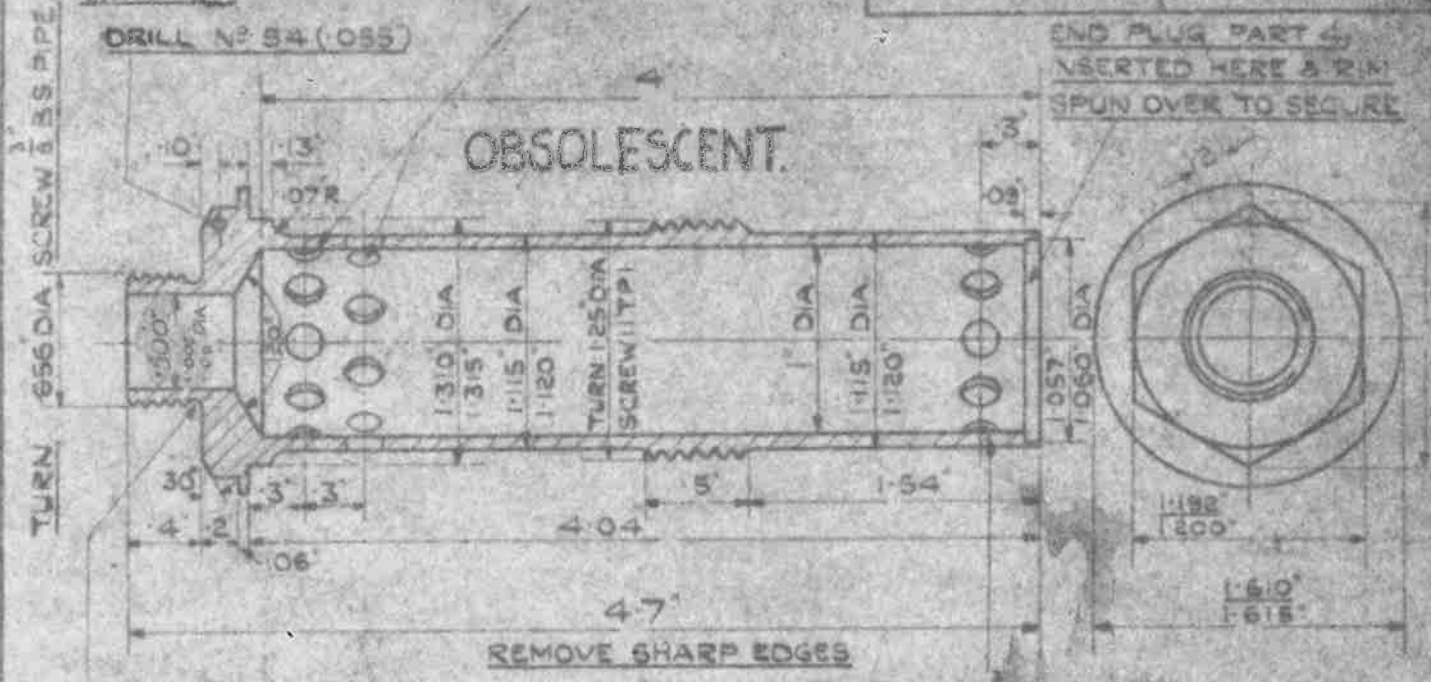
PLT. No. 15.5.36
AGS/275/AGS/663
AGS 762

THE ECCENTRICITY OF THE HOLE TO THE PIPE THREAD TO BE WITHIN .003"

10-16 DIA HOLES ON EACH SIDE - CIRCLE - STAGGERED HOLES EQUALLY SPACED

AIR MINISTRY/G.S.No. 963
SHEET No. 3 No. OF SHEETS 3

15-5-36
511886/36



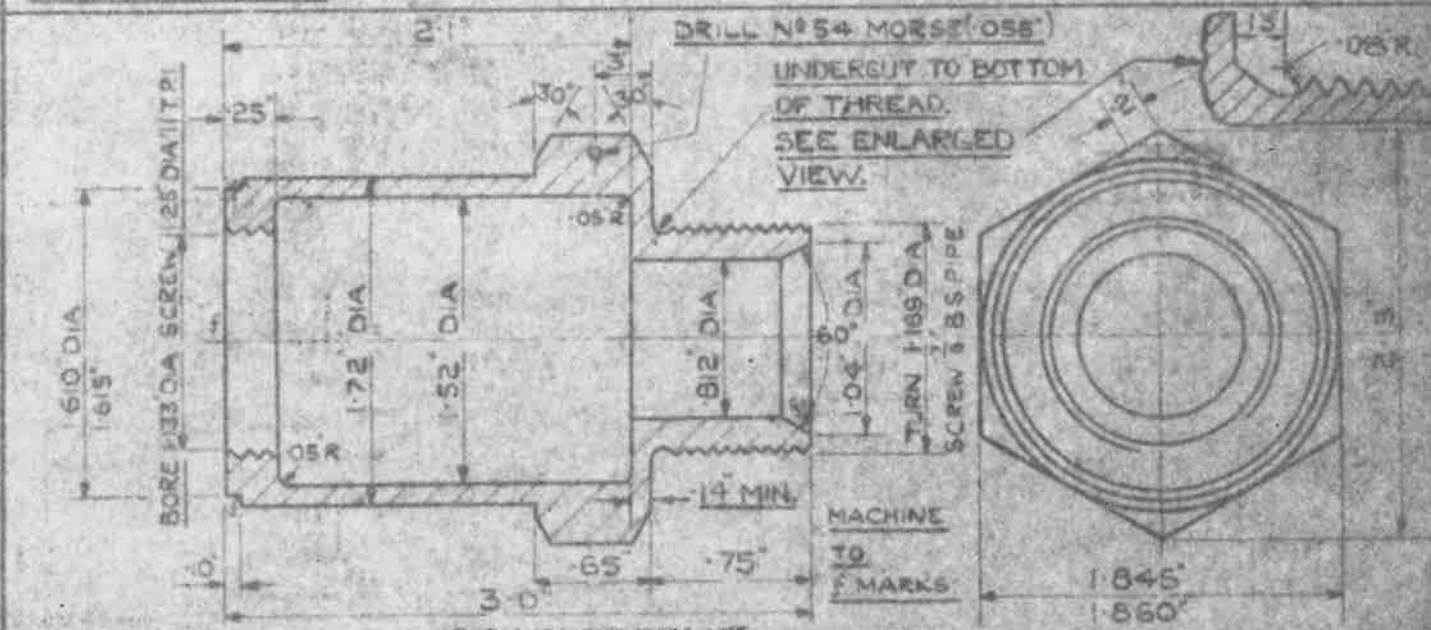
SEMI-CIRCULAR UNDERCUT TO BOTTOM OF THREAD

SCREW THREADS TO BE IN ACCORDANCE WITH B.S. SPEC: B4-1940 FOR MEDIUM FIT.

SLEEVE PART 1.
MATERIAL - MILD STEEL
SPEC - S6
(LATEST ISSUE)

FINISH - CADMIUM PLATED TO SPEC DTD 904 (LATEST ISSUE)
MACHINE ALL OVER

SCALE - FULL SIZE



SCREW THREADS TO BE IN ACCORDANCE WITH B.S. SPEC: B4-1940 FOR MEDIUM FIT.

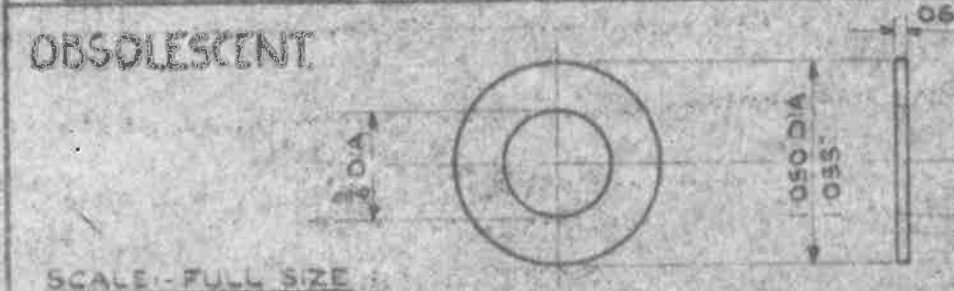
UNION BODY PART 6

MATERIAL - ALUMINIUM
SPEC - L5 OR L33 OR DTD 424 (LATEST ISSUE)

FINISH - TO BE ANODISED TO SPEC DTD 910 (LATEST ISSUE)

CLASS 3 CASTING
SEE DRG PAQ 15528-3 (LATEST ISSUE)

SCALE - FULL SIZE



END PLUG PART 4
MATERIAL - MILD STEEL
SPEC - S6
(LATEST ISSUE)

FINISH - TO BE CADMIUM PLATED TO SPEC DTD 904 (LATEST ISSUE)
MACHINE ALL OVER

SCALE - FULL SIZE

ISSUED BY DRAWING OFFICE DIRECTORATE OF TECHNICAL DEVELOPMENT AIR MINISTRY	TITLE: OIL THERMOMETER POCKET 3/8" BS PIPE	DRAWN DEAN	RE-TRACED 09 25-1-36
	ISSUE NO: 8	CHECKED HPS HOSB RECHITMILL G.M. J. T...	APPROVED A. PITTA
ALTN NO:	AS NO: AS NO: 1011965/20		

THIS DRAWING MAY ONLY BE USED FOR THE
MANUFACTURE OF ARTICLES TO BE SUPPLIED
TO THE MINISTRY OF AIRCRAFT PRODUCTION.

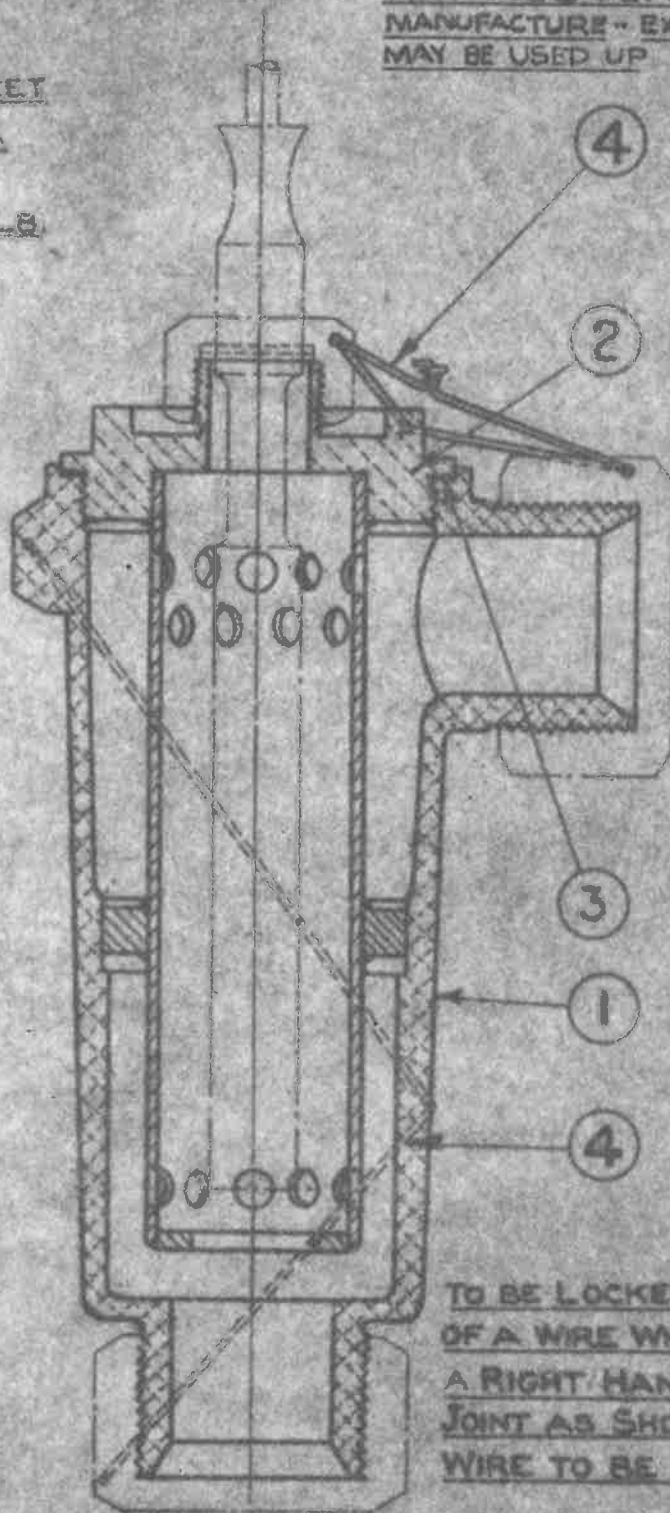
MINISTRY OF
AIRCRAFT
PRODUCTION

AGS. No 963

SHEET No 1. No of SHEETS

OBSOLESCENT - NO FURTHER
MANUFACTURE - EXISTING STOCKS
MAY BE USED UP

TEST PRESSURE.
THE COMPLETE POCKET
IS TO WITHSTAND A
HYDRAULIC TEST
PRESSURE OF 150 LB.
PER Q INCH.



TO BE LOCKED BY MEANS
OF A WIRE WHICH DESCRIBES
A RIGHT HAND HELIX ROUND
JOINT AS SHOWN. ENDS OF
WIRE TO BE BENT OVER.

ELBOW TYPE
AGS. 963/M.

PART No	A.G.S. No	DESCRIPTION	No OFF	REMARKS
1	963/M/1	BODY CASTING	1	
2	963/M/2	SLEEVE	1	
3	ND.	FIBRE WASHER	1	2 1/2" x 1.94" x 1/2"
4	ND.	LOCKING WIRE	AS REQD.	SEE A.G.S. No 769.

ISSUED BY DRAWING OFFICE
DIRECTORATE OF
TECHNICAL DEVELOPMENT
MINISTRY OF
AIRCRAFT PRODUCTION.

TITLE - OIL THERMOMETER
POCKET & B.S. PIPE

ISSUE No 2
ALTER No

DRAWN
K.M.G.

CHECKED

26.2.62

TRADE
16.2.62
N. HARRISON

APPROVED

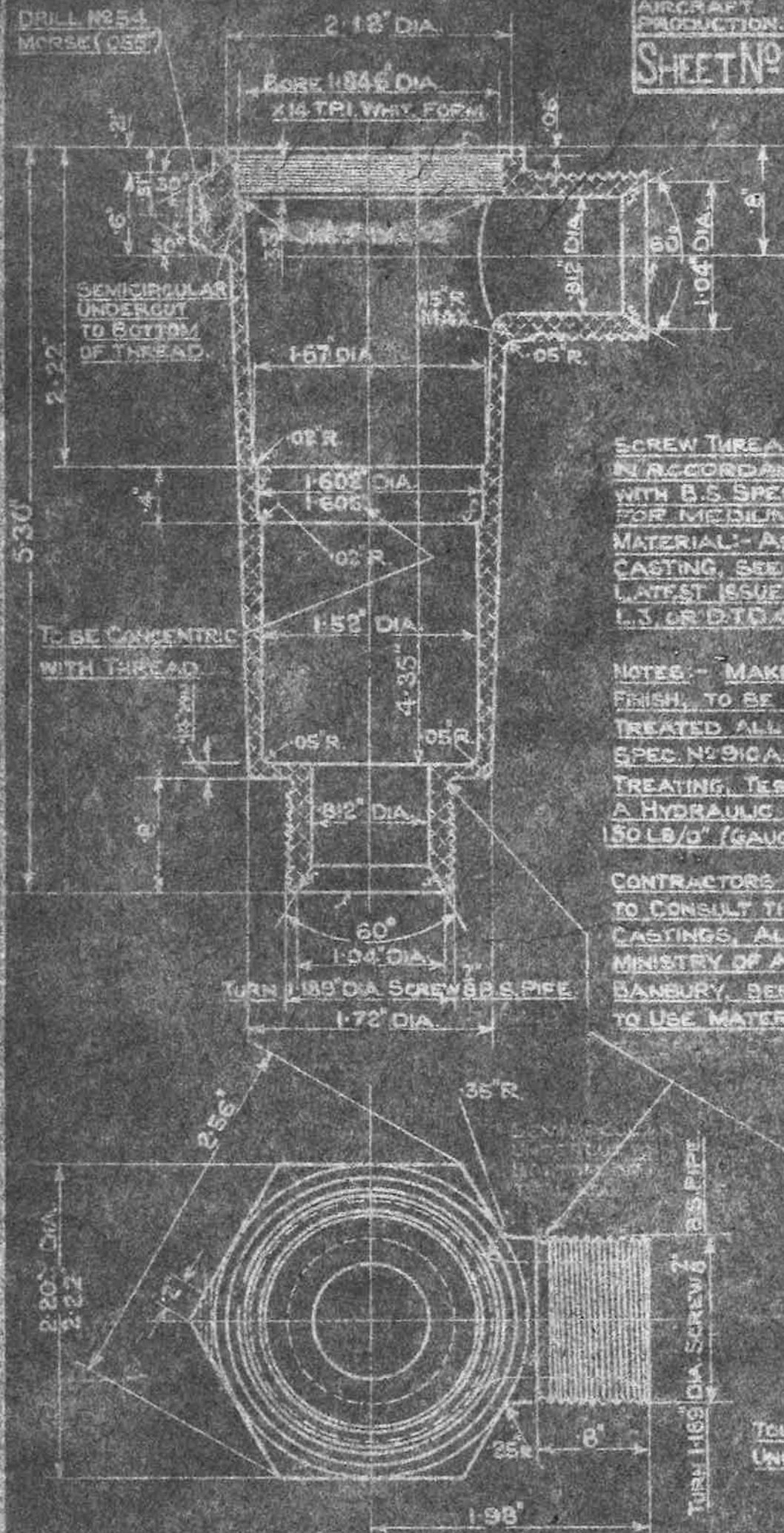
[Signature]

DRILL NO 54
MORSE (055)

MINISTRY OF
AIRCRAFT
PRODUCTION

AGS No 963/M

SHEET No 2 IN No of SHEETS 3



SCREW THREADS TO BE
IN ACCORDANCE
WITH B.S. SPEC 184-1940
FOR METRIC FIT
MATERIAL:- ALUMINIUM (CLASS 3
CASTING, SEE DRG No A.D. 1525-3
LATEST ISSUE) SPEC 8-15 OR
L.3. OR D.T.D. 424 (LATEST ISSUES)

NOTES:- MAKE FROM DIECASTING
FINISH, TO BE ANODICALLY
TREATED ALL OVER TO D.T.D.
SPEC No 910A. AFTER ANODICALLY
TREATING, TEST INTERNALLY WITH
A HYDRAULIC PRESSURE OF
150 LB/SQ IN (GAUGE)

CONTRACTORS ARE RECOMMENDED
TO CONSULT THE DIRECTOR OF
CASTINGS, ALUMINIUM CONTROL,
MINISTRY OF AIRCRAFT PRODUCTION,
BANGURY, BEFORE PROCEEDING
TO USE MATERIAL TO SPECIFIED D.T.D.

SCRAP SECTION
SHOWING UNDERCUT
TO BOTTOM OF
THREAD. SCALING
DOUBLE FULL SIZE.

TOLERANCE TO BE $\pm .005$
UNLESS OTHERWISE STATED

BODY CASTING. PART I.

SCALE:- FULL SIZE

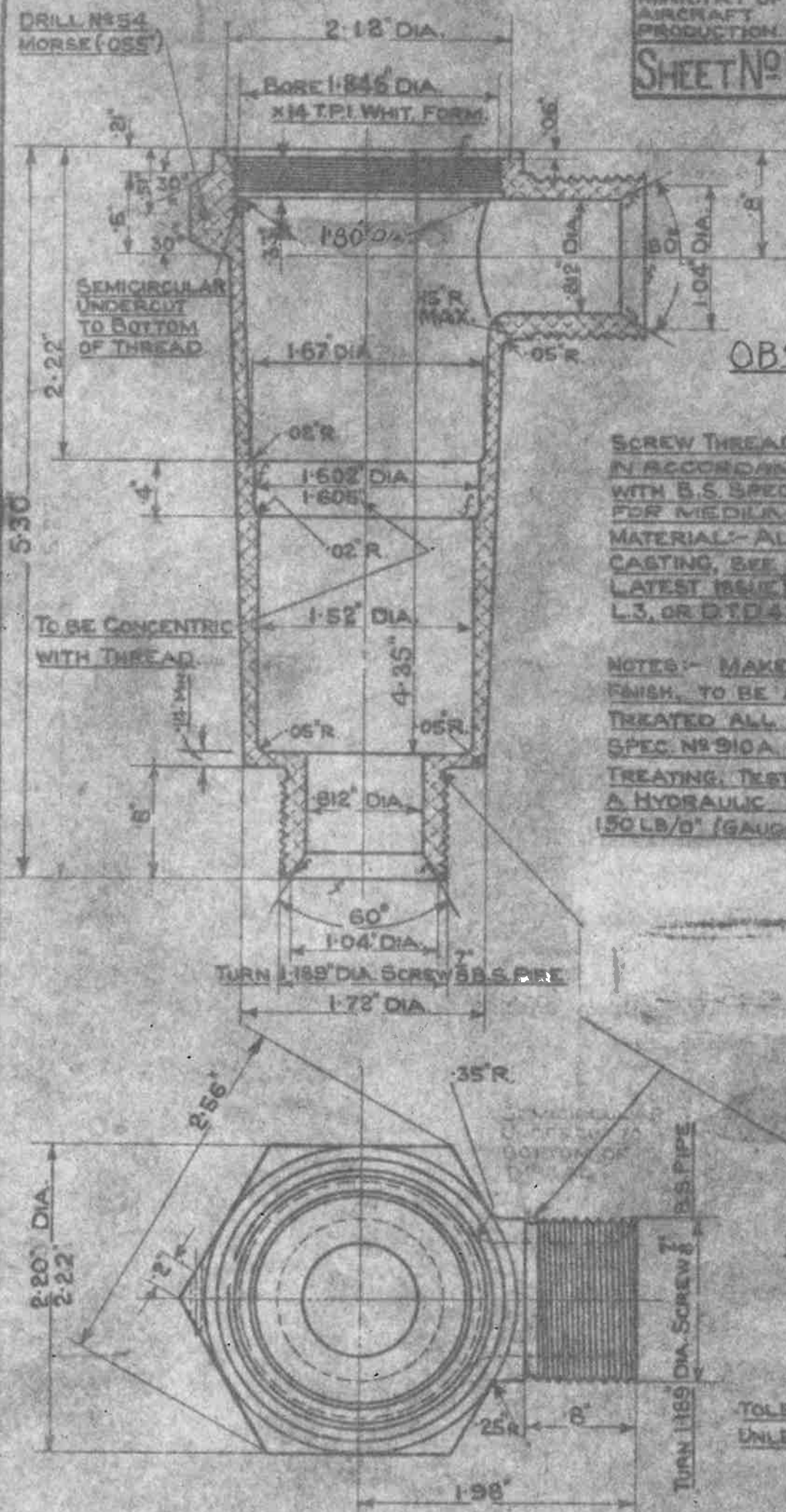
MACHINE TO MARKS

ISSUED BY DRAWING OFFICE
DIRECTORATE OF
TECHNICAL DEVELOPMENT
MINISTRY OF AIRCRAFT
PRODUCTION

TITLE:- OIL THERMOMETER
POCKET 7/8" B.S. PIPE
ISSUE No 1
REVISED No

DRAWN: E.S. Allen
CHECKED: J.P. Allen
TRACED: 29.10.41
H. HARRISON
APPROVED: J.P. Allen

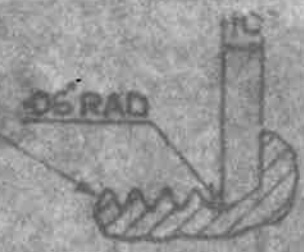
DRILL NO 54 MORSE (055)



OBSOLESCE

SCREW THREADS TO BE IN ACCORDANCE WITH B.S. SPEC: 84-1940 FOR MEDIUM FIT MATERIAL- ALUMINIUM (CLASS 3 CASTING, SEE DRG No A.D. 15528 LATEST ISSUE) SPEC: 1-15 OR L3, OR D.T.D 424 (LATEST ISSUE)

NOTES- MAKE FROM DIECASTING FINISH, TO BE ANODICALLY TREATED ALL OVER TO D.T.D SPEC No 910A AFTER ANODICAL TREATING, TEST INTERNALLY WITH A HYDRAULIC PRESSURE OF 150 LB/SQ (GAUGE)



SCRAP SECTION SHOWING UNDER-CUT TO BOTTOM OF THREAD. SCALE- DOUBLE FULL SIZE.

TOLERANCE TO BE $\pm .005$ UNLESS OTHERWISE STATED

BODY CASTING. PART I.

SCALE:- FULL SIZE

MACHINE TO MARKS

ISSUED BY DRAWING OFFICE DIRECTORATE OF TECHNICAL DEVELOPMENT MINISTRY OF AIRCRAFT PRODUCTION	TITLE - OIL THERMOMETER POCKET, 1/2 B.S. PIPE.				DRAWN <i>C. G. Allen</i>	TRACED 29.10.41 R. HARRISON	
	ISSUE NO	1	2	3	4	CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>
	ALTERS NO						

SCREW THREADS TO BE IN ACCORDANCE

THE ECCENTRICITY OF THE HOLE TO THE $\frac{3}{16}$ "

MINISTRY OF AIRCRAFT PRODUCTION

AGS No 963

WITH B.S. SPEC. B4-1940 FOR MEDIUM FIT

B.S. PIPE THREAD TO BE WITHIN 0.003"

SHEET No 3 / No OF SHEETS

OBSOLESCE

SEMICIRCULAR UNDERCUT TO BOTTOM OF THREAD

TURN $\frac{5}{16}$ " DIA. SCREW IN B.S. PIPE.

DRILL No 54 MORSE (.055")

CAP TO BE M/C ALL OVER.

20 SWG $\frac{1}{8}$ " DIA. STEEL PIPE WELDED INTO POSITION AS SHOWN

10 - $\frac{3}{16}$ " DIA. HOLES ON EACH PITCH CIRCLE - STAGGERED HOLES EQUALLY SPACED

1.937" DIA. X 14 T.P.L. WHIT. FORM

STEEL RING. SPOT WELDED INTO POSITION AS SHOWN.

END PLUG INSERTED HERE AND WELDED INTO POSITION.

REMOVE SHARP EDGES.

TO BE CONCENTRIC WITH THREAD.

TOLERANCE TO BE $\pm .005$ " UNLESS OTHERWISE STATED.

MACHINE TO $\frac{1}{2}$ MARKS

SCALE:- FULL SIZE.

SLEEVE. PART 2
MATERIAL:- MILD STEEL.
SPEC^s S.6 & 2T 26
(LATEST ISSUE)

FINISH:- CADMIUM PLATED TO SPEC^s D.T.O. 904. LATEST ISSUE.

ISSUED BY DRAWING OFFICE
DIRECTORATE OF
TECHNICAL DEVELOPMENT
MINISTRY OF AIRCRAFT
PRODUCTION.

TITLE:- OIL THERMOMETER POCKET
 $\frac{7}{8}$ " B.S. PIPE

DRAWN:
C. J. Allen

TRACED
30.10.41
H. HARRISON.

ISSUE No 1 2 3
ALTER No

CHECKED
H. HARRISON

APPROVED
H. HARRISON