FEDERAL SUPPLY CLASS

RATIONALE

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ISSUED 1953-04 REVISED 1960-04 NONCURRENT 1973-08 REAFFIRMED NONCURRENT 2006-07 STABILIZED 2013-02

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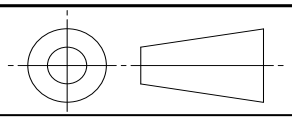
THIRD ANGLE PROJECTION



CUSTODIAN: E-25

SAE Aerospace
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AEROSPACE RECOMMENDED PRACTICE

PROPELLER ATTACHMENT - NOSE MOUNTED

SAE ARP277

REV. B

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MOUNTING DATA

FOR APPLICABLE DIMENSIONS SEE TABLE 1

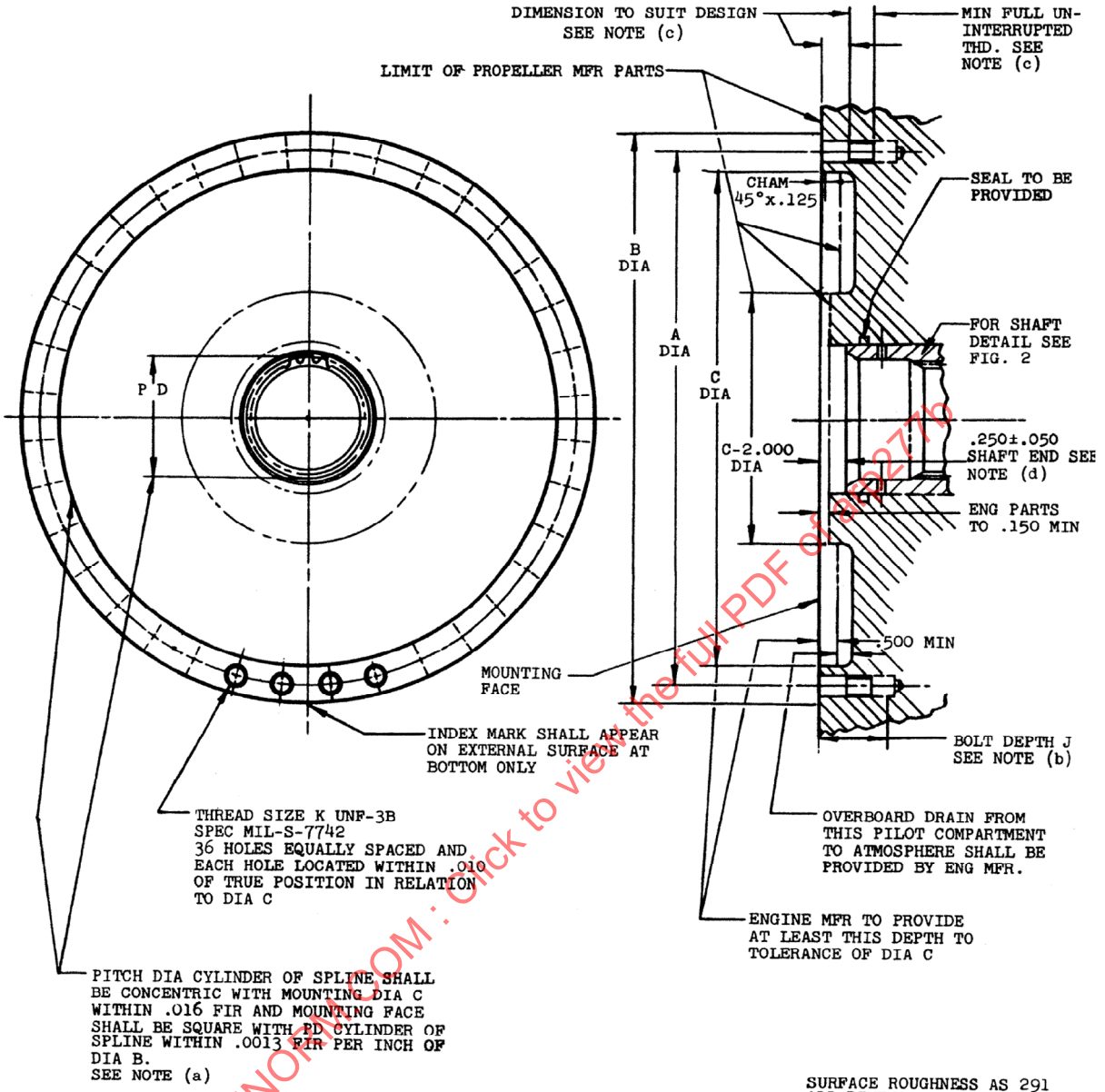

FIGURE 1

SURFACE ROUGHNESS AS 291
ALL DIMENSIONS IN INCHES

UNLESS OTHERWISE SPECIFIED
BREAK SHARP EDGES .003-.015
TOLERANCES:
LINEAR DIMENSIONS ±.010
ANGULAR DIMENSIONS ± 2°

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ENGINE SHAFT DATA

FOR APPLICABLE DIMENSIONS SEE TABLE 1

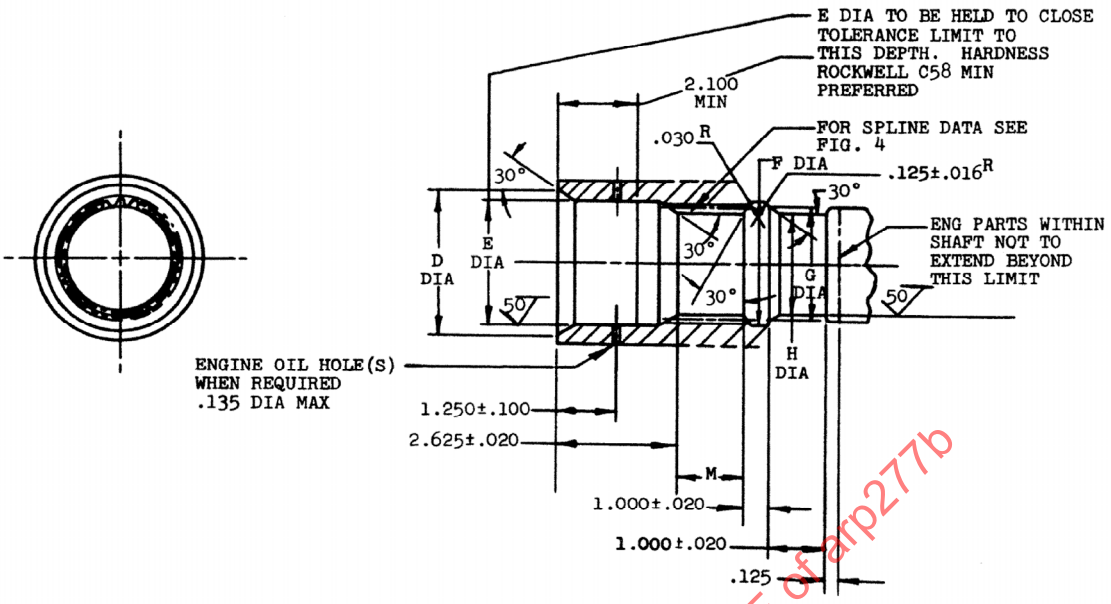

FIGURE 2

PROPELLER END DATA AND TYPICAL INSTALLATION

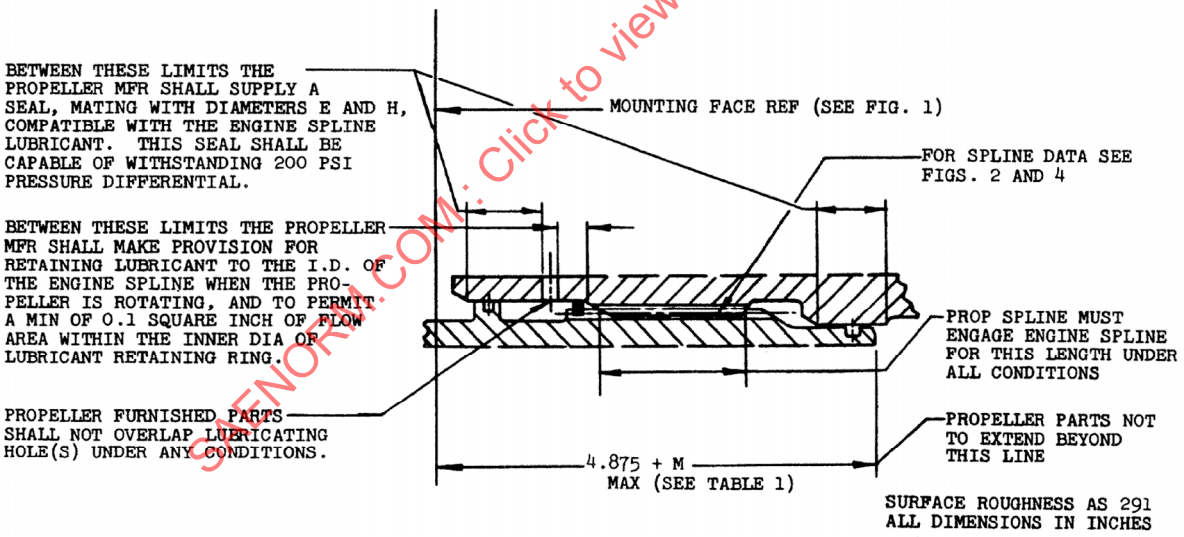

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FIGURE 3

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SIZE	A BASIC	B ENG MIN	C +.004 -.000	D	E +.002 -.000	F MIN	G	H +.002 -.000	J MAX	K THD SIZE	L LB-IN	M LENGTH
20-20	20.000	21.250	18.750	4.850	4.562	4.550	4.100	3.875	1.500	.375-24	5,000	2.250
22-22	22.000	23.250	20.750	5.350	5.062	5.050	4.600	4.375	1.750	.4375-20	6,000	2.500
24-24	24.000	25.375	22.625	5.865	5.562	5.550	5.100	4.875	2.000	.500-20	7,000	2.750
26-26	26.000	27.375	24.625	6.615	6.312	6.300	5.850	5.625	2.000	.500-20	8,000	3.250
28-28	28.000	29.500	26.500	7.365	7.062	7.050	6.600	6.375	2.250	.5625-18	9,000	3.750
30-30	30.000	31.500	28.500	7.865	7.562	7.550	7.100	6.875	2.250	.5625-18	10,000	4.250
32-32	32.000	33.500	30.500	8.365	8.062	8.050	7.600	7.375	2.250	.5625-18	11,000	4.750

TABLE I FOR FIGURES 1, 2 & 3

NOTES:

(a) INCLUDING THE MAX ENGINE SHAFT ECCENTRICITY AND MISALIGNMENT SPECIFIED HEREIN, AND UNDER THE CONDITIONS OF MAXIMUM PROPELLER DESIGN LOADING, THE FORCES EXERTED BY THE PROPELLER SPLINES ON THE ENGINE DRIVE SPLINES SHALL NOT EXCEED A SIDE LOAD OF 6000 POUNDS, A FORE AND AFT THRUST OF 1500 POUNDS, AND A MOMENT OF L. FOR NORMAL CONTINUOUS OPERATION THE FORCES SHALL NOT EXCEED 45% OF THESE SPECIFIED DESIGN VALUES.

(b) MAX BOLT DEPTH J INDICATES AMOUNT OF MIN REMOVAL SPACE TO BE ALLOWED IN PROP MFR PARTS FOR THE ATTACHMENT BOLT. PROP MFR SHALL REFER TO ENG MFR INSTALLATION DWG WHICH SHALL SHOW MAX AND MIN REQUIRED DEPTH OF INSTALLED BOLT.

(c) PROP MFR SHALL REFER TO ENG MFR ENGINE INSTALLATION DWG WHICH SHALL SHOW MAX DEPTH TO FIRST FULL UNINTERRUPTED THD AND MIN DEPTH TO LAST FULL UNINTERRUPTED THD AVAILABLE FOR BOLT ENGAGEMENT.

(d) MAX END PLAY .050 (THIS LIMIT IS INCLUDED IN THE TOLERANCE)

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