

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

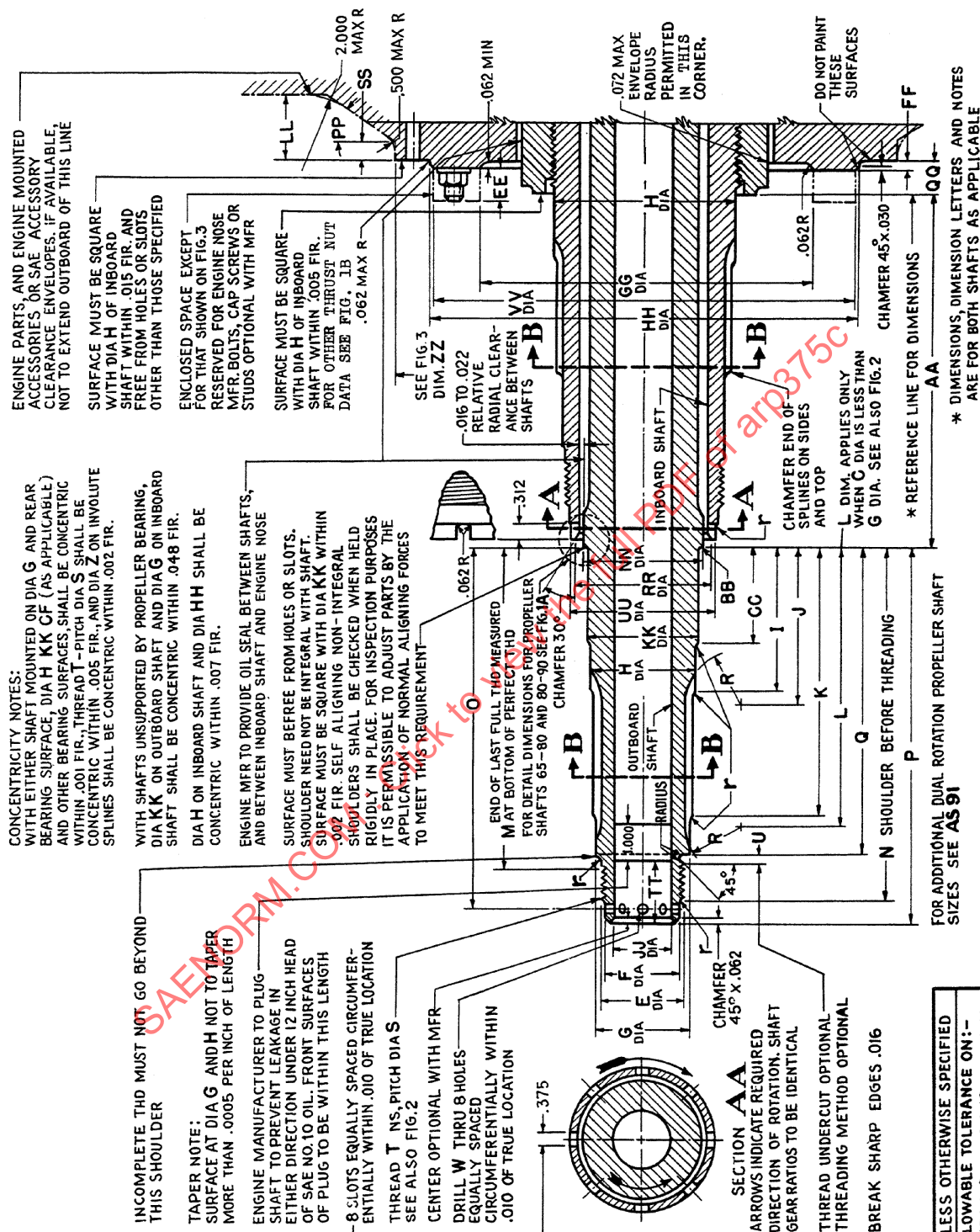


FIG. 1

FOR ADDITIONAL DUA
SIZES SEE AS91

UNLESS OTHERWISE SPECIFIED
ALLOWABLE TOLERANCE ON:--
LINEAR DIMENSIONS
ANGULAR DIMENSIONS
±.01
±2°

PREPARED BY SAE COMMITTEE E-25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS



AEROSPACE RECOMMENDED PRACTICE

PROPELLER SHAFT ENDS, DUAL ROTATION (PROPELLER SUPPLIED BEARING)

ARP375
SHEET 1 OF 5

REV.
C

LET	TOLERANCE		41 — 60		51 — 70		65 — 80		80 — 90	
	OUT-BOARD SHAFT	IN-BOARD SHAFT	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES
A	+ .000	— .005	3.083	4.680	3.750	5.539	5.250	6.411	6.411	7.554
B	MAX.		2.917	4.436	3.583	5.294	5.000	6.151	6.151	7.294
C	+ .000	— .020	2.850	—	3.517	—	4.900	—	—	—
D	+ .010	— .020	—	4.321	—	5.179	—	6.036	6.036	7.179
E	+ .0000	— .0030	.1299	.2233	.1299	.2233	.1953	.2233	.2233	.2234
F	+ .000	— .004	2.807	4.245	3.432	5.120	4.870	5.995	5.995	7.120
G	+ .000	— .005	2.688	4.062	3.312	4.938	4.688	5.812	5.812	6.938
H	+ .000	— .002	2.812	4.296	3.500	5.156	4.875	6.011	6.011	7.156
I	+ .000	— .002	3.125	4.687	3.812	5.562	5.281	6.426	6.426	7.570
J	± .020	± .025	4.438	1.812	7.375	1.812	11.250	3.250	15.125	3.312
K	± .030	± .040	4.938	2.312	7.875	2.312	11.750	3.750	15.625	3.812
L	± .020	—	8.250	5.375	11.188	5.375	16.125	7.400	20.750	8.000
M	± .020	—	—	—	11.312	—	—	—	—	—
N	+ .000*	+ .010*	9.475	8.360	12.412	8.360	18.297	10.360	23.735	11.610
O	+ .010	— .030	10.641	9.735	13.578	9.735	19.672	11.610	25.110	13.110
P	± .015	—	10.938	—	13.812	—	20.062	—	25.562	—
Q	± .020	—	11.312	10.625	14.250	10.625	20.312	12.500	25.812	14.062
R	± .010	± .020	9.375	8.250	12.312	8.250	18.188	10.250	23.625	11.500
S	MAX		1.530	2.030	1.530	2.030	2.030	2.030	2.030	3.030
	MIN		1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
r	+ .030	— .000	.062	.062	.062	.062	.062	.062	.062	.062
S	+ .0000	— .0030	2.7560	—	3.3810	—	—	—	—	—
	+ .0000	— .0050	—	4.1668	—	5.0418	4.7918	5.9168	5.9168	—
	+ .0000	— .0080	—	—	—	—	—	—	—	7.0418
T	—	—	2.8125-12	4.250-8	3.4375-12	5.125-8	4.875-8	6.000-8	6.000-8	7.125-8
U	± .030	—	.170	.250	.170	.250	.250	.250	.250	.250
V	APPROX	—	.035	.068	.035	.068	.060	.068	.068	.068
W	± .0100	—	.2656	—	.2656	—	.2656	—	.2656	—
X	—	—	36	32	44	38	41	44	44	52
Y	—	—	12/24	7/16	12/24	7/16	8/16	7/16	7/16	7/16
Z	THEO	—	3.0000	4.5714	3.6667	5.4286	5.1250	6.2857	6.2857	7.4286
AA	± .040	—	10.688	—	10.688	—	16.062	—	17.625	—
BB	MAX	—	.094	—	.094	—	.094	—	.094	—
CB	± .020	—	—	—	—	—	7.875	—	8.875	—
CC	± .020	—	2.375	—	2.375	—	3.875	—	4.875	—
CF	+ .0000	— .0035	—	—	—	—	5.3143 135MM BRG	—	6.4567 164MM BRG	—
EE	MAX	—	.750	—	.750	—	.750	—	1.000	—
FF	± .010	—	.312	—	.312	—	.312	—	.312	—
GG	MIN	—	7.750	—	8.750	—	9.625	—	11.375	—
HH	± .001	—	10.123	—	11.123	—	12.625	—	14.373	—
JJ	+ .005	—	2.188	—	2.812	—	4.125	—	5.156	—
KK	+ .0000	—	3.1498 (80 MM BRG)	—	3.8191 (97MM BRG)	—	5.3543 136MM BRG	—	6.4960 165MM BRG	—
LL	MIN	—	2.062 **	—	2.062 **	—	4.000	—	4.000	—
MM	***	—	***	—	***	—	***	—	***	—
NN	+ .000	— .010	3.604	—	4.354	—	5.812	—	6.938	—
PP	MIN	—	35° **	—	35° **	—	45°	—	45°	—
QQ	± .035	—	.938	—	.938	—	.938	—	.938	—
RR	—	± .010	—	3.852	—	4.602	—	5.688	—	6.750
SS	MIN	—	.500	—	.500	—	.500	—	.500	—
TT	± .030	—	3.000	—	3.000	—	2.000	—	2.000	—
UU	—	+ .010	—	4.000	—	4.812	—	5.781	—	6.875
VV	MAX	—	10.102	—	11.072	—	12.574	—	14.250	—

*** SEE FIG. 1B, PAGE 2A

INBOARD AXIAL DIMENSIONS ARE FROM THRUST NUT

M DIM. MAX LIMIT GIVES MIN FULL THREAD

* MINUS VALUE DEPENDS ON METHOD OF THREADING AND THD RUNOUT RELATION TO SHOULDER Q

* TO OBTAIN DIM. FOR FULL NUMBER OF PITCHES, WHEN DESIRED, DEDUCT BASIC M FROM BASIC N

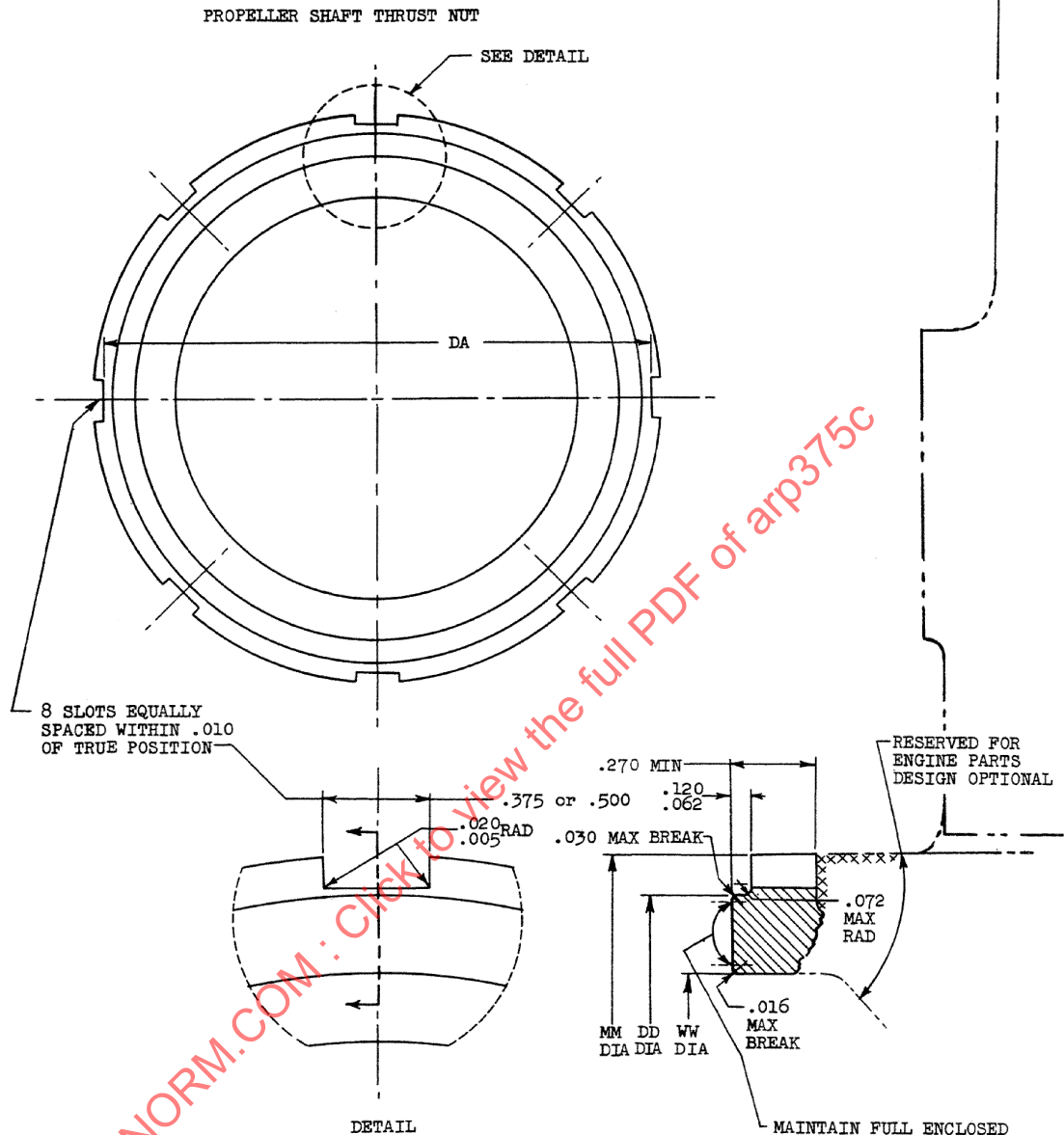
M DIM. DOES NOT APPLY WHEN UNDERCUT IS USED

** LL TO BE 4.000 AND PP TO BE 45° WHEN PRACTICABLE

TABLE FOR FIG. 1.1A AND 2

UNLESS OTHERWISE SPECIFIED

ALLOWABLE TOLERANCE ON:-
LINEAR DIMENSIONS ± .01
ANGULAR DIMENSIONS ± 2°



LET	TOLERANCE	41-60	51-70	65-80	80-90
DA	$\pm .010$	5.880	6.770	7.600	8.812
DD	$\pm .010$	5.812	6.688	7.562	8.750
MM	MAX	6.188	7.062	7.938	9.125
	***MIN	6.120	6.995	7.910	9.100
WW	MAX	5.010	5.885	6.760	7.948

*** MIN VALUE OF MM APPLIES OVER THE .270 MIN LENGTH, DETAILED ABOVE, BEYOND WHICH THE CONTOUR MAY VARY TO SUIT DESIGN OF THE ENGINE NOSE BUT SHALL NEVER EXCEED THE MAXIMUM VALUE OF MM.

FIG. 1B

UNLESS OTHERWISE SPECIFIED

BREAK ALL EDGES .005-.016
ALLOWABLE TOLERANCE ON:-
LINEAR DIMENSIONS $\pm .01$
ANGULAR DIMENSIONS $\pm 2^\circ$

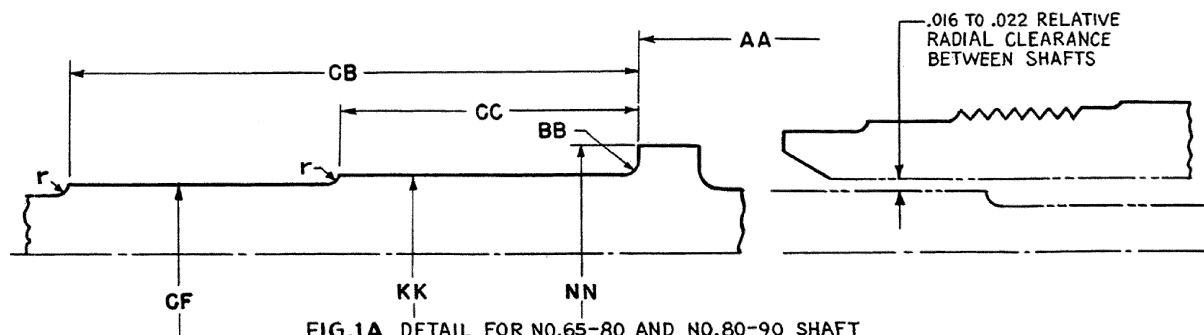


FIG. 1A DETAIL FOR N0.65-80 AND N0.80-90 SHAFT

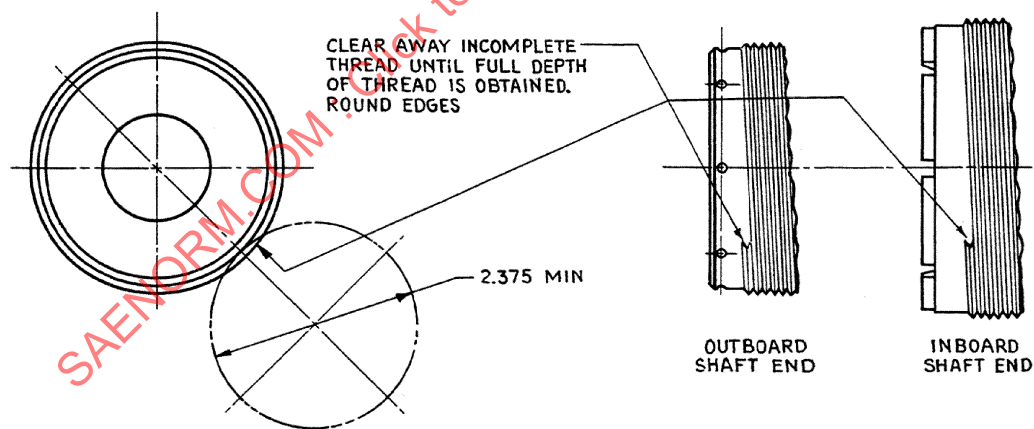
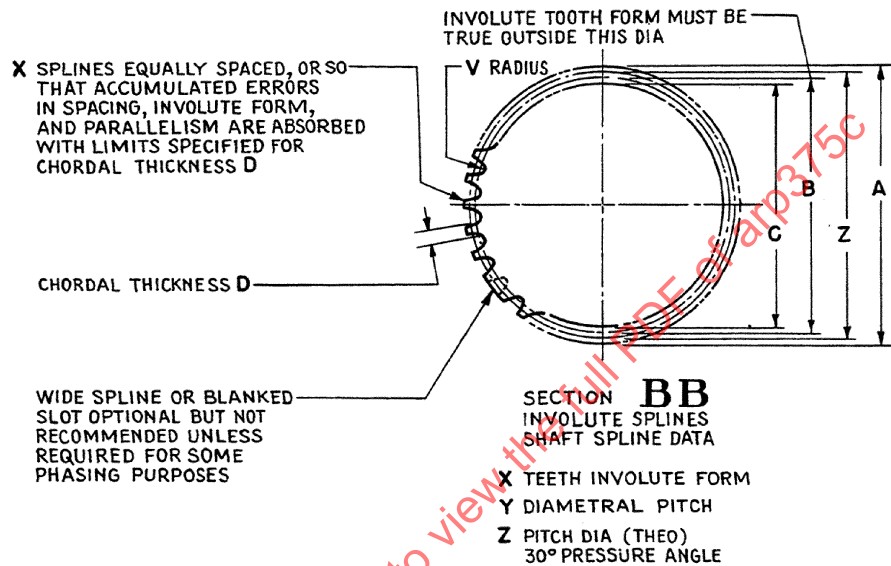
REMOVAL OF INCOMPLETE THREAD
METHOD OF REMOVAL OPTIONAL

FIG. 2

UNLESS OTHERWISE SPECIFIED	
ALLOWABLE TOLERANCE ON:-	
LINEAR DIMENSIONS	$\pm .01$
ANGULAR DIMENSIONS	$\pm 2^\circ$