FEDERAL SUPPLY CLASS

RATIONALE

THIS NONCURRENT STANDARD HAS BEEN STABILIZED.

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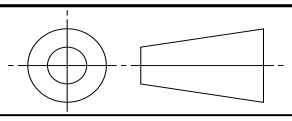
ISSUED 1943-07 REVISED 1954-12 NONCURRENT 1973-08 REAFFIRMED NONCURRENT 2006-05 STABILIZED 2013-03

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

PROPELLER SHAFT ENDS, DUAL ROTATION
(PROPELLER SUPPLIED BEARING)

SAE AS91

REV. D

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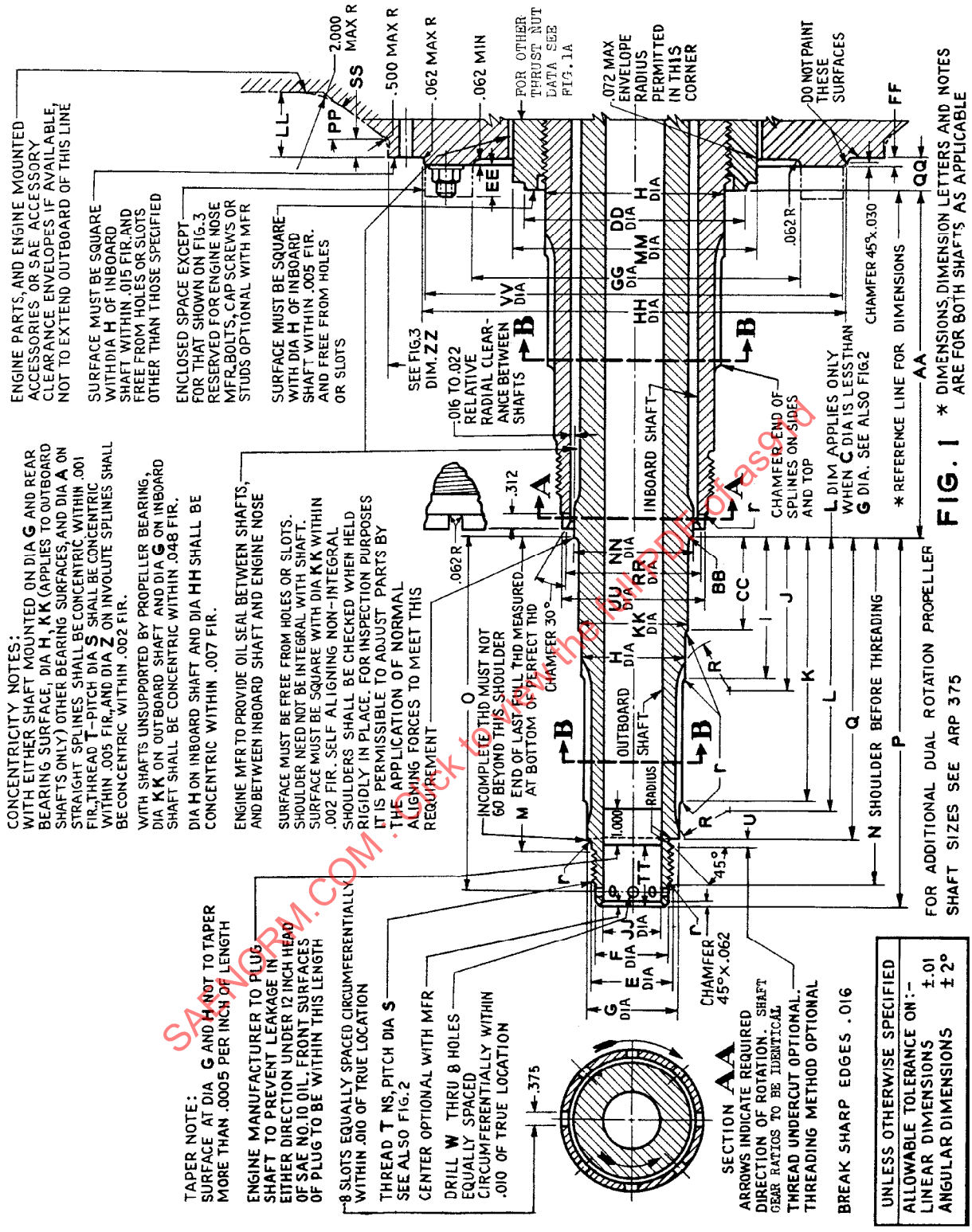


FIG. 1

SAE Aerospace An SAE International Group	AEROSPACE STANDARD PROPELLER SHAFT ENDS, DUAL ROTATION (PROPELLER SUPPLIED BEARING)	SAE AS91 SHEET 1 OF 5	REV. D

LET	TOLERANCE		40 — 60***		50 — 70***		60 — 80		60L — 80	
	OUTBOARD SHAFT	INBOARD SHAFT	STRAIGHT SPLINES	INVOLUTE SPLINES	STRAIGHT SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES	INVOLUTE SPLINES
A	+.000	-.002	3.117	—	3.804	—	—	—	—	—
	+.000	-.005	—	4.680	—	5.539	4.680	6.411	4.680	6.411
B	MAX		2.875	4.436	3.554	5.294	4.436	6.151	4.436	6.151
C	MIN		2.783	—	3.462	—	—	—	—	—
	+.010	-.020	—	4.321	—	5.179	4.321	6.036	4.321	6.036
D	±.0008		.3040	—	.375	—	—	—	—	—
	+.0000	-.0030	—	.2233	—	.2233	.2233	.2233	.2233	.2233
E	+.000	-.004	2.807	4.245	3.432	5.120	4.245	5.995	4.245	5.995
F	+.000	-.005	2.688	4.062	3.312	4.938	4.062	5.812	4.062	5.812
G	+.000	-.002	2.812	4.296	3.500	5.156	4.296	6.011	4.296	6.011
H	+.000	-.002	3.125	4.687	3.812	5.562	4.687	6.426	4.687	6.426
I	±.020	±.025	4.438	1.812	7.375	1.812	8.250	3.250	13.250	3.250
J	±.030	±.040	4.938	2.312	7.875	2.312	8.750	3.750	13.750	3.750
K	±.020		8.250	5.375	11.188	5.375	12.297	7.400	17.297	7.400
L	±.020	—	8.375	—	11.312	—	—	—	—	—
M	+.000-*	+.010-*	9.475	8.360	12.412	8.360	13.808	10.360	18.808	10.360
N	+.010	-.030	10.641	9.735	13.578	9.735	15.183	11.610	20.183	11.610
O	±.015	—	10.938	—	13.812	—	15.438	—	20.438	—
P	±.020		11.312	10.625	14.250	10.625	15.688	12.500	20.688	12.500
Q		±.020	9.375	8.250	12.312	8.250	13.688	10.250	18.688	10.250
R	MAX		1.530	2.030	1.530	2.030	2.030	2.030	2.030	2.030
	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	4.1668	5.9168	4.1668	5.9168
T	—		2.8125-12	4.250-8	3.4375-12	5.125-8	4.250-8	6.000-8	4.250-8	6.000-8
U	±.030		.170	.250	.170	.250	.250	.250	.250	.250
V	APPROX		—	.068	—	.068	.068	.068	.068	.068
W	±.0100	—	.2656	—	.2656	—	.2656	—	.2656	—
X	—		16	32	16	38	32	44	32	44
Y	—		—	7/16	—	7/16	7/16	7/16	7/16	7/16
Z	THEO		—	4.5714	—	5.4286	4.5714	6.2857	4.5714	6.2857
AA	±.040		10.688		10.688		12.562		12.562	
BB	MAX	—	.094	—	.094	—	.094	—	.094	—
CC	±.020	—	2.375	—	2.375	—	4.938	—	5.938	—
EE	MAX		.750		.750		.750		.750	
FF			.312		.312		.312		.312	
GG	MIN		7.750		8.750		9.625		9.625	
HH	±.001		10.123		11.123		12.625		12.625	
JJ	+.005 -.000	—	2.188	—	2.812	—	3.562	—	3.562	—
KK	+.0005 -.0000	—	3.1498 (80MM BRG)		3.8191 (97MM BRG)		4.7246 (120 MM BRG)		4.7246 (120MM BRG)	
LL	MIN		2.062 **		2.062 **		2.062 **		2.062 **	
NN	MIN	—	3.594	—	4.344	—	5.375	—	5.375	—
PP	MIN		35° **		35° **		35° **		35° **	
QQ	±.025		.938		.938		.938		938	
RR			—	3.852	—	4.602	—	5.688	—	5.688
SS	MIN		.500		.500		.500		.500	
TT	±.030	—	3.000	—	3.000	—	3.000	—	3.000	—
UU			—	4.000	—	4.812	—	5.781	—	5.781
VV	MAX		10.102		11.072		12.574		12.574	

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

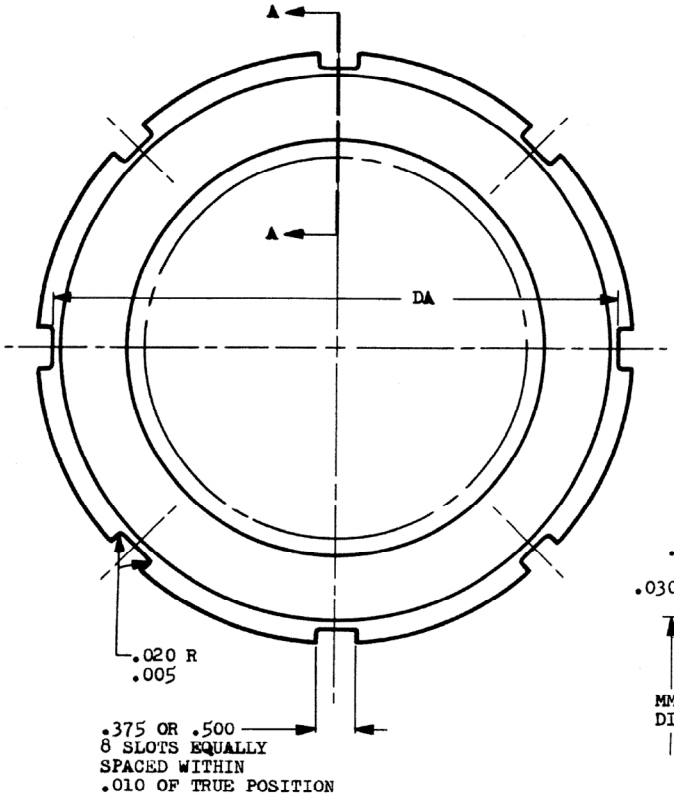
M DIM. DOES NOT APPLY WHEN UNDERCUT IS USED

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

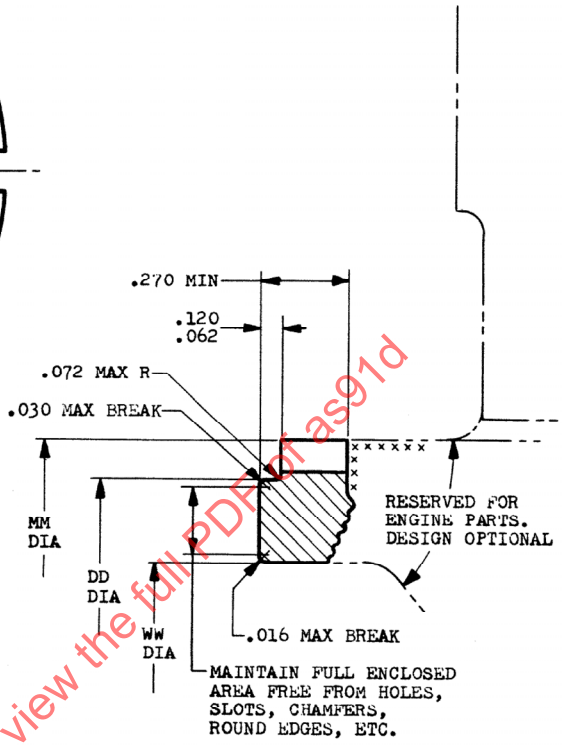
*** INACTIVE FOR NEW DESIGN

TABLE FOR FIG. 1 AND 2

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



PROPELLER SHAFT THRUST NUT



ENLARGED SECTION A-A

LETTER	TOLERANCE	SHAFT SIZE			
		40-60***	50-70***	60-80	60L-80
DA	±.010	5.880	6.770	7.600	7.600
DD	±.010	5.812	6.688	7.562	7.562
MM	MAX	6.188	7.062	7.938	7.938
	MIN #	6.120	6.995	7.910	7.910
WW	MAX	5.010	5.885	6.760	6.760

*** INACTIVE FOR NEW DESIGN.

MIN VALUE OF MM APPLIES ONLY TO .270 MIN LENGTH DETAILED ABOVE, BEYOND WHICH MM MAX ONLY APPLIES AND MM MIN MAY SUIT DESIGN AS FAR AS ENGINE NOSE OUTLINE.

UNLESS OTHERWISE SPECIFIED
BREAK ALL EDGES .005-.016 ALLOWABLE TOLERANCE ON: - LINEAR DIMENSIONS ±.01 ANGULAR DIMENSIONS ±2°

FIG. 1A