Society of Automotive Engineers, Inc.
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AERONAUTICAL RECOMMENDED PRACTICE

ARP 375

PROPELLER SHAFT ENDS, DUAL ROTATION
(PROPELLER SUPPLIED BEARING)

Issued 11-1-47
Revised

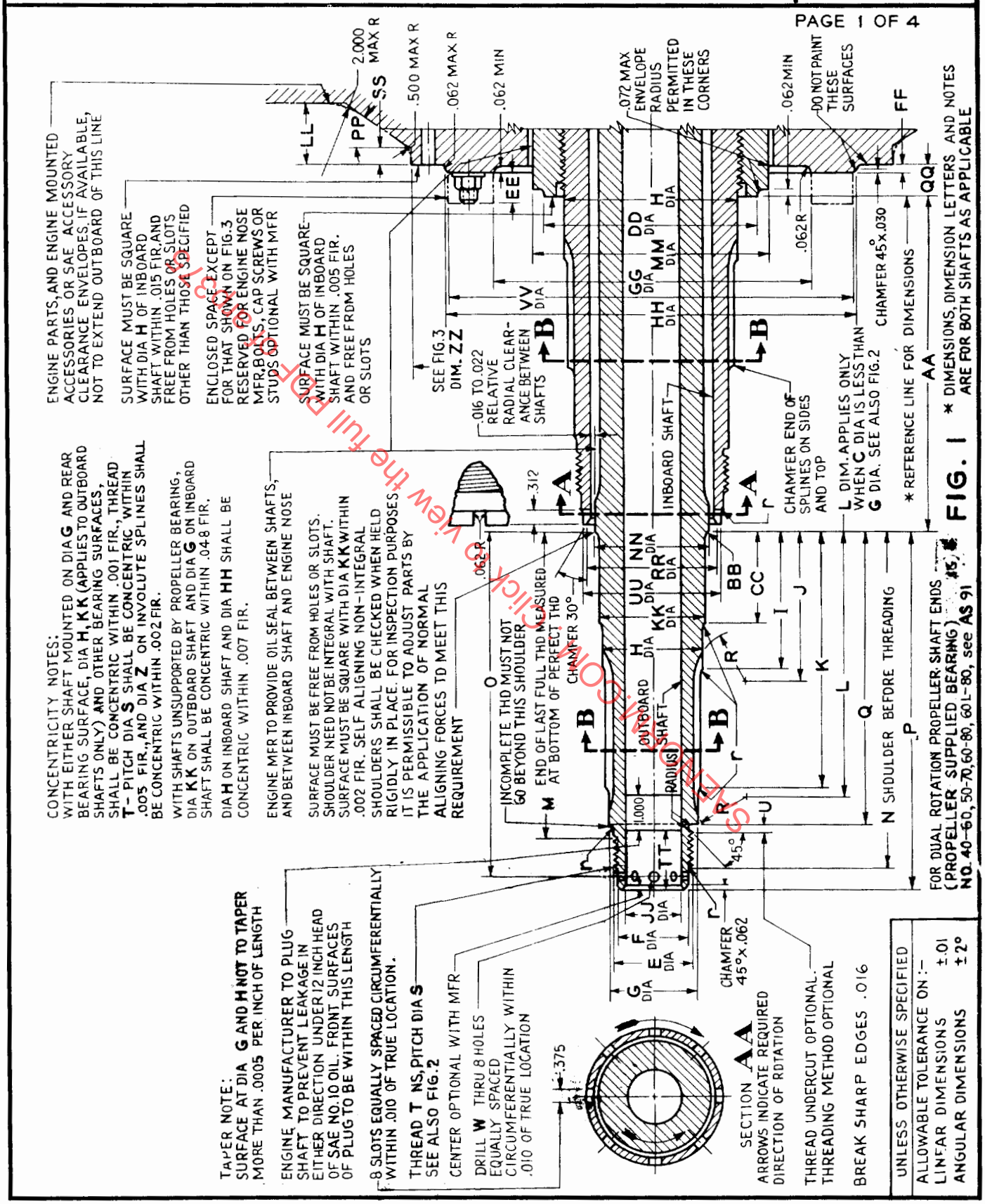

FIG. 1

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LET	TOLERANCE OUT-BOARD SHAFT	TOLERANCE IN-BOARD SHAFT	41 — 60 INVOLUTE SPLINES	41 — 60 INVOLUTE SPLINES	51 — 70 INVOLUTE SPLINES	51 — 70 INVOLUTE SPLINES	70 — 90 INVOLUTE SPLINES	70 — 90 INVOLUTE SPLINES	70L — 90 INVOLUTE SPLINES	70L — 90 INVOLUTE SPLINES	80 — 100 INVOLUTE SPLINES	80 — 100 INVOLUTE SPLINES	80L — 100 INVOLUTE SPLINES	80L — 100 INVOLUTE SPLINES
A	+.000	−.005	3.083	4.680	3.750	5.539	5.539	7.554	5.539	7.554	6.411	8.667	6.411	8.667
			—	—	—	—	—	—	—	—	—	—	—	—
B	MAX		2.917	4.436	3.583	5.294	5.294	7.294	5.294	7.294	6.151	8.313	6.151	8.313
C	+.000	−.020	2.850	—	3.517	—	—	—	—	—	—	—	—	—
	+.010	−.020	—	4.321	—	5.179	5.179	7.179	5.179	7.179	6.036	8.199	6.036	8.199
D	+.0000	−.0030	.1299	.2233	.1299	.2233	.2233	.2234	.2233	.2234	.2233	.2607	.2233	.2607
E	+.000	−.004	2.807	4.245	3.432	5.120	5.120	7.120	5.120	7.120	5.995	8.120	5.995	8.120
F	+.000	−.005	2.688	4.062	3.312	4.938	4.938	6.938	4.938	6.938	5.812	7.938	5.812	7.938
G	+.000	−.002	2.812	4.296	3.500	5.156	5.156	7.156	5.156	7.156	6.011	8.174	6.011	8.174
H	+.000	−.002	3.125	4.687	3.812	5.562	5.562	7.570	5.562	7.570	6.426	8.682	6.426	8.682
I	±.020	±.025	4.438	1.812	7.375	1.812	14.188	3.312	20.188	3.312	15.875	3.500	23.875	3.500
J	±.030	±.040	4.938	2.312	7.875	2.312	14.688	3.812	20.688	3.812	16.375	4.000	24.375	4.000
K	±.020		8.250	5.375	11.188	5.375	19.062	8.000	25.062	8.000	21.500	9.000	29.500	9.000
L	±.020	—	—	—	11.312	—	—	—	—	—	—	—	—	—
M	+.000−*	+.010−*	9.475	8.360	12.412	8.360	21.235	11.610	27.235	11.610	24.485	13.735	32.485	13.735
N	+.010	−.030	10.641	9.735	13.578	9.735	22.610	13.110	28.610	13.110	25.860	15.235	33.860	15.235
O	±.015	—	10.938	—	13.812	—	23.000	—	29.000	—	26.312	—	34.312	—
P	±.020		11.312	10.625	14.250	10.625	23.250	14.062	29.250	14.062	26.562	15.875	34.562	15.875
Q		±.020	9.375	8.250	12.312	8.250	21.125	11.500	27.125	11.500	24.375	13.625	32.375	13.625
R	MAX		1.530	2.030	1.530	2.030	2.030	3.030	2.030	3.030	2.030	3.030	2.030	3.030
	MIN		1.125	1.125	1.125	1.125	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	.062	.062	.062	.062
S	+.0000	−.0030	2.7560	—	3.3810	—	—	—	—	—	—	—	—	—
	+.0000	−.0050	—	4.1668	—	5.0418	5.0418	—	5.0418	—	5.9168	—	5.9168	—
	+.0000	−.0080	—	—	—	—	—	7.0418	—	7.0418	—	8.0418	—	8.0418
T	—		2.8125-12	4.250-8	3.4375-12	5.125-8	5.125-8	7.125-8	5.125-8	7.125-8	6.000-8	8.125-8	6.000-8	8.125-8
U	±.030		.170	.250	.170	.250	.250	.250	.250	.250	.250	.250	.250	.250
V	APPROX		.035	.068	.035	.068	.068	.068	.068	.068	.068	.080	.068	.080
W		—	.2656	—	.2656	—	.2656	—	.2656	—	.2656	—	.2656	—
X	—		36	32	44	38	38	52	38	52	44	51	44	51
Y	—		12/24	7/16	12/24	7/16	7/16	7/16	7/16	7/16	7/16	6/12	7/16	6/12
Z	THEO		3.0000	4.5714	3.6667	5.4286	5.4286	7.4286	5.4286	7.4286	6.2857	8.5000	6.2857	8.5000
AA	±.030		10.688		10.688		14.125		14.125		15.938		15.938	
BB	MAX	—	.094	—	.094	—	.094	—	.094	—	.094	—	.094	—
CC	±.020	—	2.375	—	2.375	—	6.000	—	6.000	—	6.000	—	6.000	—
DD			5.812		6.688		8.750		8.750		10.000		10.000	
EE	MAX		.750		.750		1.000		1.000		1.000		1.000	
FF			.312		.312		.312		.312		.375		.375	
GG	MIN		7.750		8.750		11.375		11.375		13.000		13.000	
HH	±.001		10.123		11.123		14.373		14.373		15.248		15.248	
JJ	+.005 −.000	—	2.188	—	2.812	—	4.375	—	4.375	—	5.156	—	5.156	—
KK	+.0000 −.0005	—	3.1498 (80MM BRG)		3.8191 (97MM BRG)		5.5908 (142MM BRG)		5.5908 (142MM BRG)		6.4567 (164 MM BRG)		6.4567 (164 MM BRG)	
LL	MIN		2.062 **		2.062 **		4.000		4.000		4.000		4.000	
MM	MAX		6.188		7.062		9.125		9.125		10.875		10.875	
NN	MIN	—	3.594	—	4.344	—	6.250	—	6.250	—	7.125	—	7.125	—
PP	MIN		35° **		35° **		45°		45°		45°		45°	
QQ	±.025		.938		.938		.938		.938		1.062		1.062	
RR		—		3.852	—	4.602	—	6.750	—	6.750	—	7.750	—	7.750
SS	MIN		.500		.500		.500		.500		.500		.500	
TT	±.030	—	3.000	—	3.000	—	3.000	—	3.000	—	3.000	—	3.000	—
UU		—		4.000	—	4.812	—	6.875	—	6.875	—	7.875	—	7.875
VV	MAX		10.102		11.072		14.250		14.250		15.125		15.125	

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 AND 2

UNLESS OTHERWISE SPECIFIED

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

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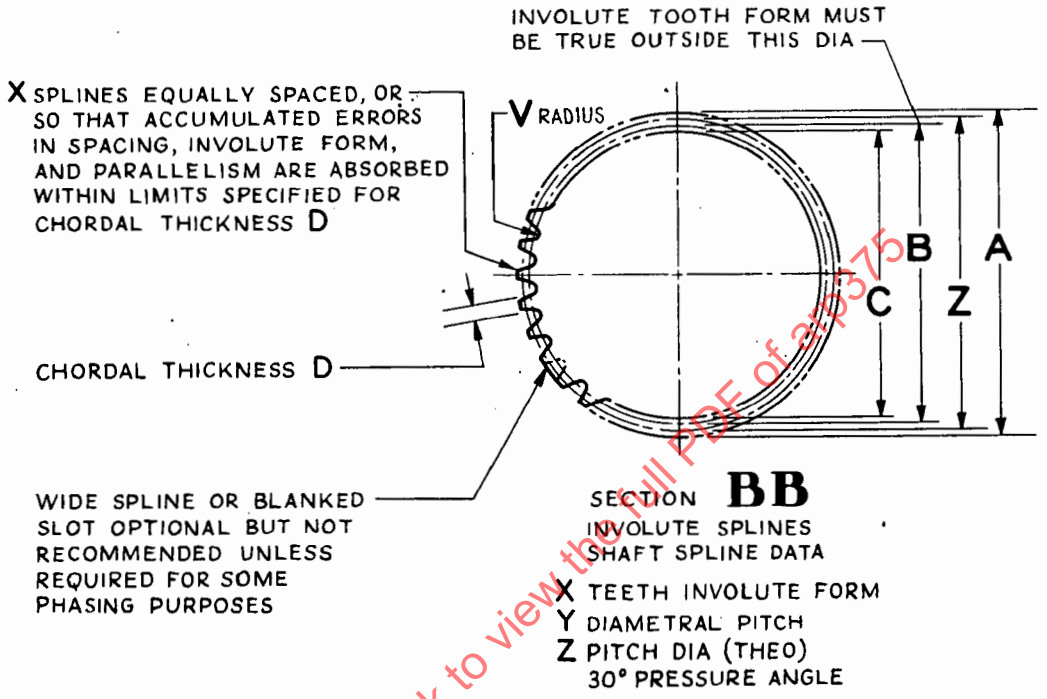

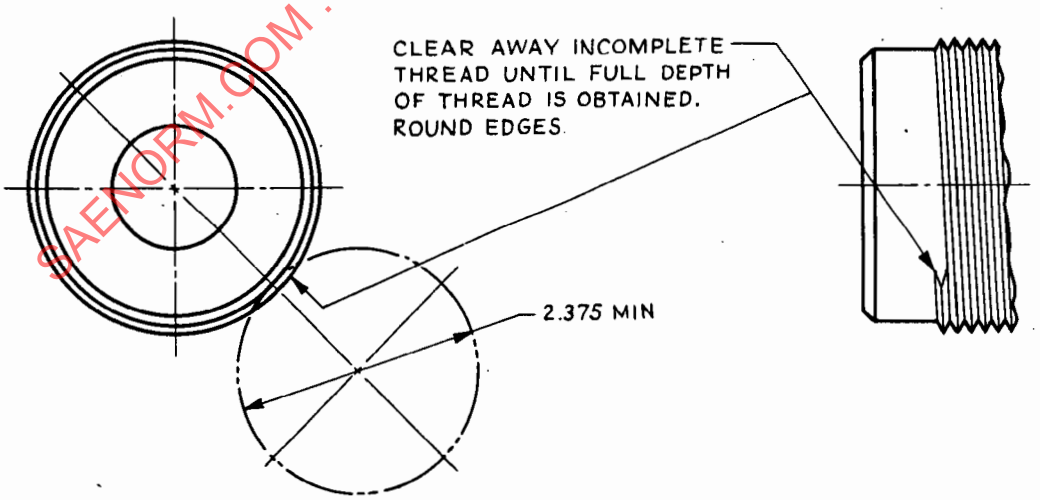

REMOVAL OF INCOMPLETE THREAD
METHOD OF REMOVAL OPTIONAL

FIG. 2

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

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