

CONTROL LEVER - CONNECTIONS
(60° V SERRATIONS)

Issued 10-15-53
Revised 1-1-62

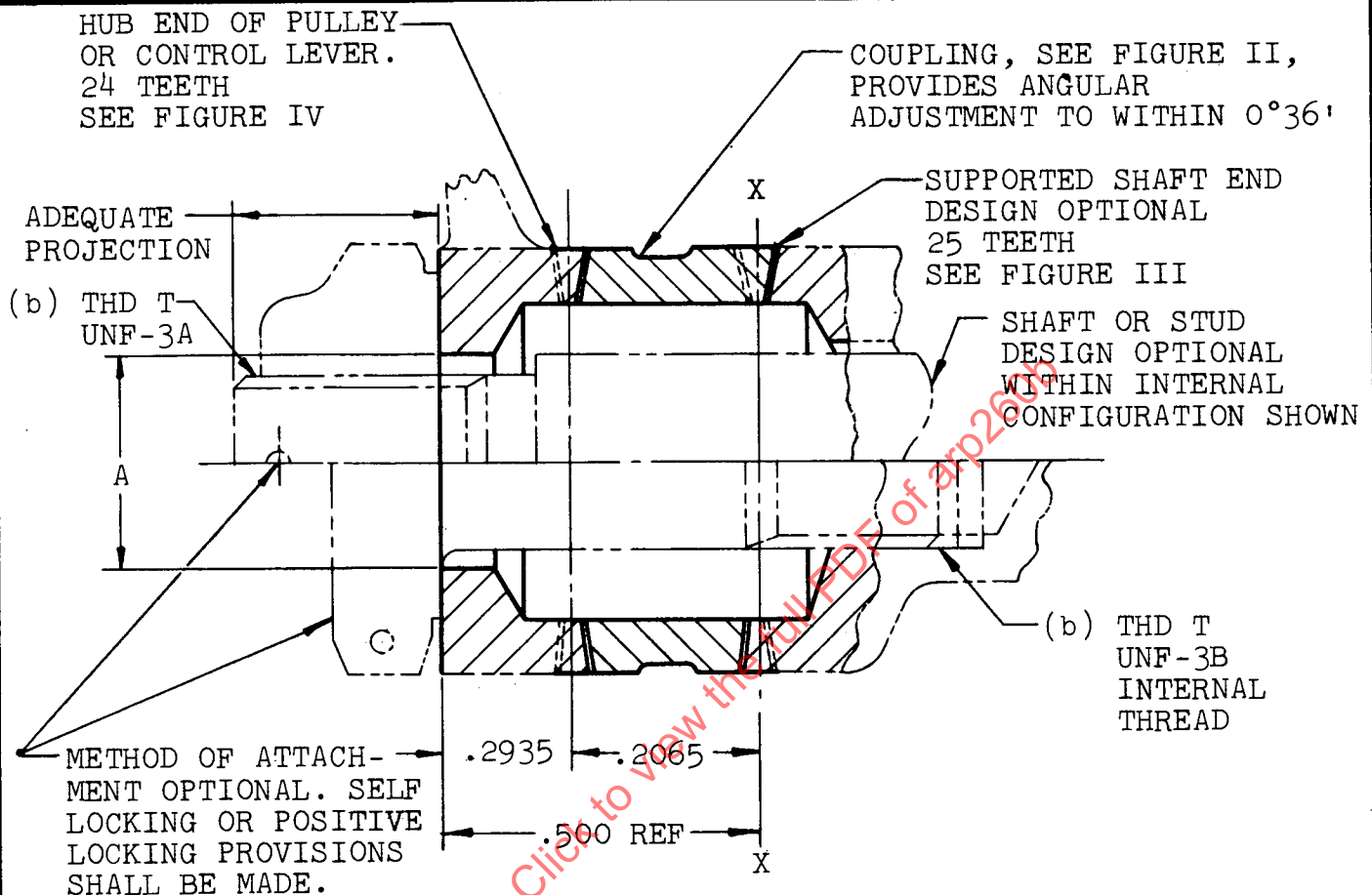


FIGURE I
INSTALLATION

NOM SIZE T	A DIA +.005 -.002	T	MAX APPLIED OVERHUNG MOMENT LB-IN.	MAX TORQUE LB-IN.	(a) MIN-MAX WRENCH TORQUE LB-IN.
.250	.281	.250 -28	100	750	70- 85
.312	.344	.3125-24	250	750	125-170
.375	.406	.375 -24	500	750	225-300
.500	.531	.500 -20	1100	750	500-750

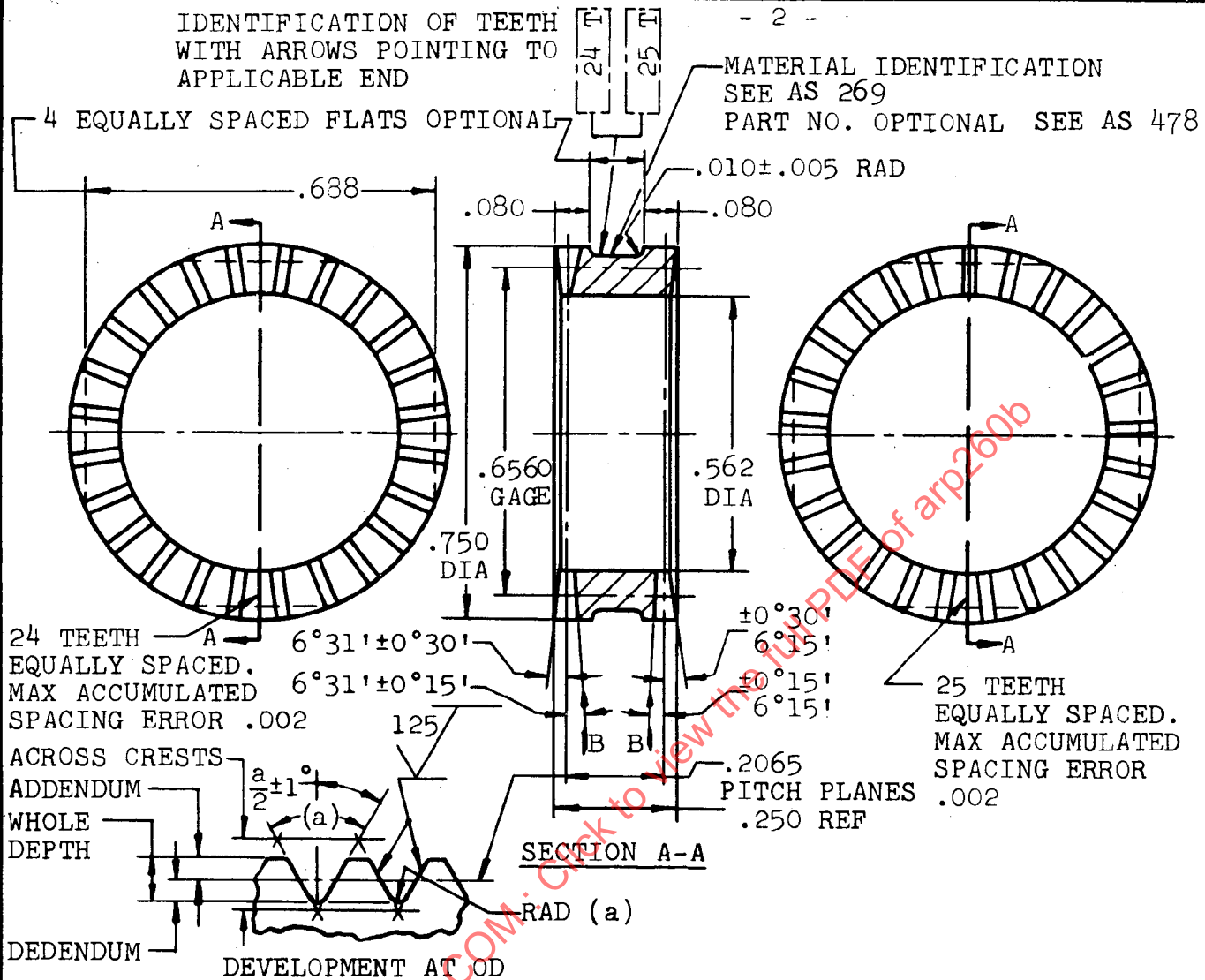
FIGURE I REPRESENTS GENERAL INSTALLATION FOR AIRCRAFT ENGINE TO AIRCRAFT CONTROLS.

NOMINAL USE: POWER LEVER, PROPELLER CONTROL, ETC.

FOR OTHER COMPLETE INTER-CONTROL APPLICATIONS, VARIATION IN DESIGN AND METHOD OF ATTACHMENT PERMITTED.

(a) MINIMUM WRENCH TORQUE REQUIRED TO PREVENT TOOTH SEPARATION UNDER COMBINED TORSION AND BENDING LOADS APPLIED ABOUT AXIS XX THROUGH LEVER OR PULLEY SIDE FORCES.

(b) REFERENCE SPECIFICATION MIL-S-7742.



SERRATED FACE COUPLING DATA

NO. OF TEETH	24	25
ADDENDUM	.0190-.0230	.0170-.0210
DEDENDUM	.0300-.0380	.0280-.0360
CHORDAL THICKNESS (THEOR) AT GAGE	.0429	.0412
MAJOR & MINOR APEX (THEOR) ANGLE	6°31'7"	6°15'22"
ACROSS CRESTS (THEOR)	.0857	.0822

RADIAL CENTERLINE OF TEETH SHALL PASS THRU GEOMETRIC CENTER WITHIN .003.
 (a) ANGLE PRODUCED BY 60° TOOL WITH .003-.013 TIP RADIUS IN DIRECTION B.
 GAGE DIA SHALL BE CONCENTRIC WITHIN .004 FIR.

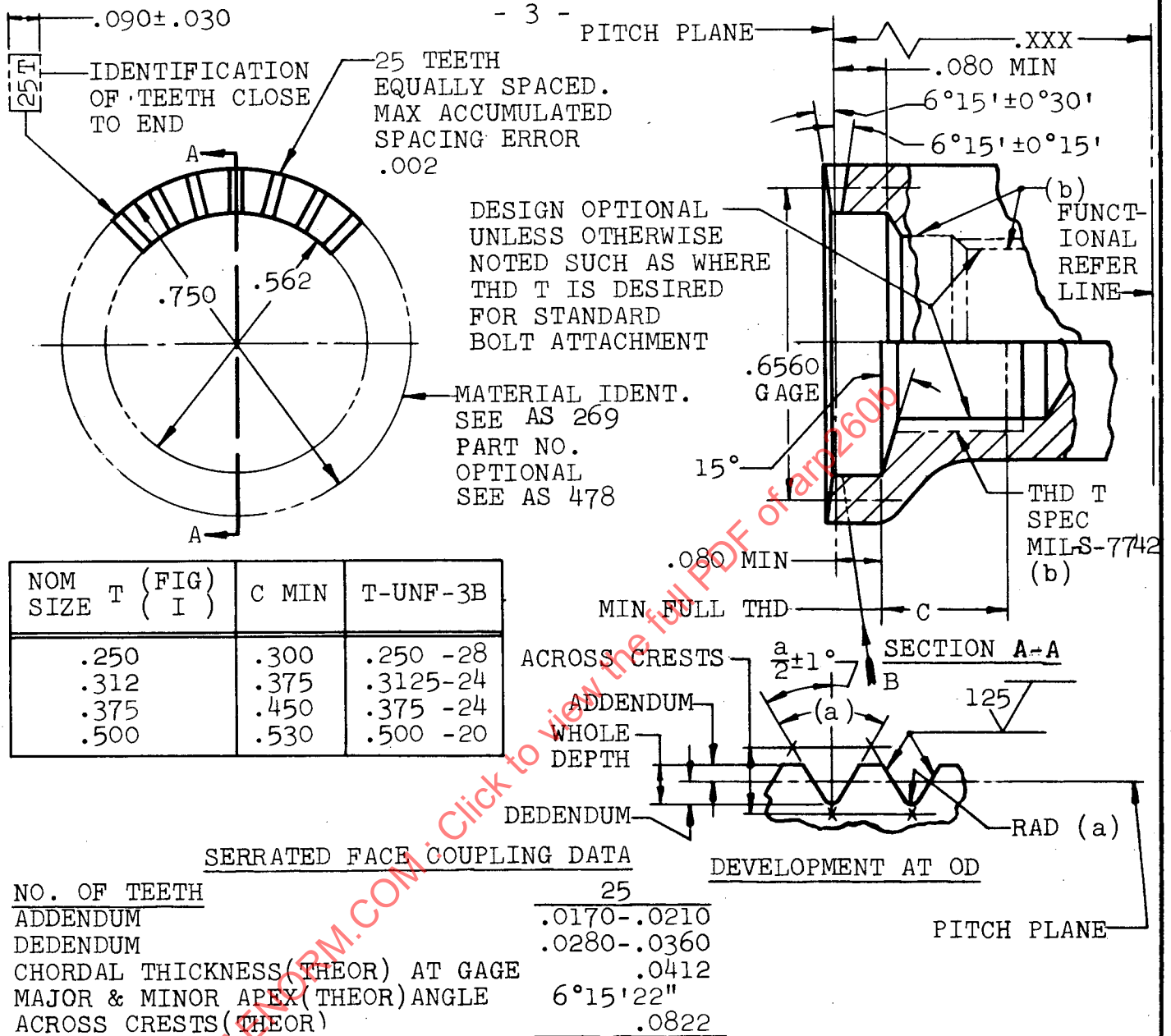
PITCH PLANES OF TEETH SHALL BE PARALLEL WITHIN .004 FIR. AT A
 .750 DIA.

MATERIAL: RECOMMEND STEEL. HARDNESS ROCKWELL C26 MINIMUM.
 SURFACE ROUGHNESS: AS 291

BREAK SHARP EDGES .003-.015 (.003-.005 AT TOP LAND OF TEETH)

DIMENSIONS IN INCHES: UNLESS OTHERWISE SPECIFIED: TOLERANCES; LINEAR
 DIMENSIONS ±.010 ANGULAR DIMENSIONS ±2°. CASTINGS ±.030, FORGING ±.060
 NOMINAL USE: ANGULAR ADJUSTMENT FOR CONTROL LEVERS. -.000

FIGURE II COUPLING - SERRATED FACE



RADIAL CENTERLINE OF TEETH SHALL PASS THRU GEOMETRIC CENTER WITHIN .003.
(a) ANGLE PRODUCED BY 60° TOOL WITH .003-.013 TIP RADIUS IN DIRECTION B.
(b) DESIGN MAY BE HOLE FOR SHAFT, THD FOR STUD, ETC; KEYED, PINNED, LOCKED OR SPLINED. ANGULAR RELATIONSHIP OF FACE OF TEETH TO SPLINE, ETC; UNIMPORTANT.

PITCH PLANES OF TEETH SHALL BE SQ WITH BORE, PD OF SPLINE OR THD, OR PARALLEL AT A .750 DIA ON FUNCTIONAL SURFACE WITHIN .004 FIR.

MATERIAL: RECOMMEND STEEL. HARDNESS ROCKWELL C26 MIN.

SURFACE ROUGHNESS: AS 291

BREAK SHARP EDGES .003-.015 (.003-.005 AT TOP LAND OF TEETH)

DIMENSIONS IN INCHES: UNLESS OTHERWISE SPECIFIED: TOLERANCES; LINEAR DIMENSIONS ±.010 ANGULAR DIMENSIONS ±2°. CASTINGS ±.030, FORGINGS +.060 -.000

FIGURE III - SUPPORTED SHAFT END