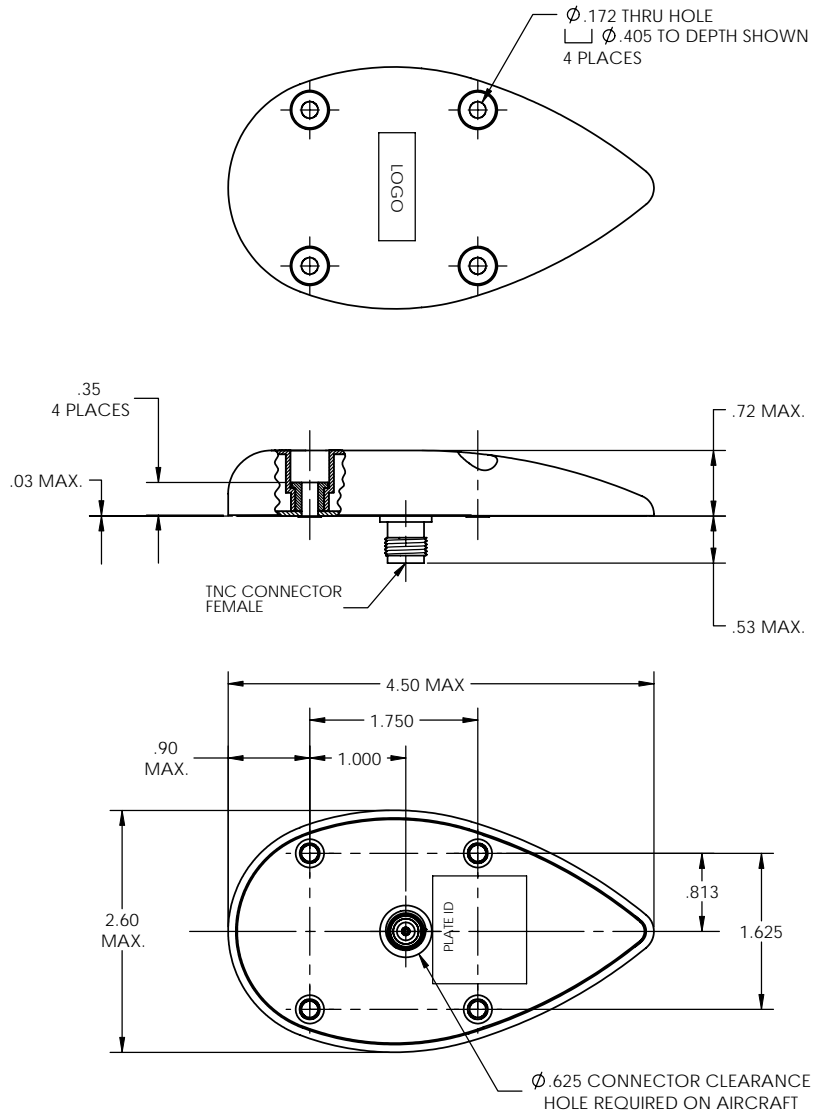


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INSTALLATION DRAWING

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVAL
A	RELEASED DRAWING	JF 08/26/04	WS 08/27/04
B	REF ECN 08-095	MIN 12/03/08	DH 12/03/08



ANTENNA NOTES & SPECIFICATIONS

- 1.0 PASSIVE ANTENNA CHARACTERISTICS ($T_A = -55^\circ\text{C}$ TO $+70^\circ\text{C}$)
 - 1.1 FREQUENCY 1575.42 ± 3MHz
 - 1.2 POLARIZATION RIGHT HAND CIRCULAR
 - 1.3 AXIAL RATIO 3.0 dB ON BORESIGHT (ZENITH) MAX.
 - 1.4 POWER HANDLING 1.0 WATT
 - 1.5 RADIATION GAIN PATTERN MINIMUM

-1.0 dBic	$0 < \theta < 75^\circ$
-2.5 dBic	$75^\circ < \theta < 80^\circ$
-4.5 dBic	$80^\circ < \theta < 85^\circ$
-7.5 dBic	$\theta = 90^\circ$ (HORIZON)
+5.0 dBic	nominal at $\theta = 0^\circ$ (ZENITH)
 - 1.6 AZIMUTH GAIN VARIATION < or = 3.0 dB AT > or = 5° ELEVATION
- 2.0 PREAMPLIFIER CHARACTERISTICS ($T_A = 20^\circ\text{C} \pm 5^\circ\text{C}$)
 - 2.1 GAIN AT 1575.42 ± 3MHz 17 ± 3 dB
- 3.0 PREAMPLIFIER CHARACTERISTICS ($T_A = -55^\circ\text{C}$ TO $+70^\circ\text{C}$)
 - 3.1 FREQUENCY 1575.42 ± 3MHz
 - 3.2 OUTPUT IMPEDANCE 50 OHMS (NOMINAL)
 - 3.3 OUTPUT VSWR 1.5 : 1 MAX.
R/L -13.98 dB
 - 3.4 GAIN AT 1575.42 ± 3MHz 17 ± 3 dB
 - 3.5 NOISE FIGURE 3.8 dB MAX.
 - 3.6 SELECTIVITY - 35 dB MIN. SATCOM BAND (1626.5 MHz)
 - 3.7 DC VOLTAGE 4 TO 24 VDC
 - 3.8 DC CURRENT 20 mA MAX.
 - 3.9 STABILITY UNCONDITIONALLY STABLE FOR ANY LOAD IMPEDANCE ON TNC CONNECTOR
 - 3.10 BURNOUT PROTECTION 30dBm / 1.0 W CW UNMODULATED
- 4.0 WEIGHT 4.2 Oz. MAX.
- 5.0 SPEED RATING 330 KIAS AT SEA LEVEL
- 6.0 CONNECTOR TNC FEMALE
- 7.0 TSO C144 (INCOMPLETE SYSTEM)
RTCA DO-160D ENV. CAT.: [F2X]ACB[S(L)U(F,F1)T(C,C1,R)]XRFDXSXXXX[XX]X[XXX][1B]CA
- 8.0 A42020 INSTALLATION INSTRUCTION SUPPLIED WITH ANTENNA.
- 9.0 RADOME MATERIAL: WHITE NYLON WITH UV INHIBITOR.

WARNING: THIS PRODUCT IS TO BE INSTALLED EXCLUSIVELY WITH GPS RECEIVER EQUIPMENT REQUIRING 17dB GAIN.

NOTICE: THIS PRODUCT IS TSO C144 COMPLIANT WITH AN FAA APPROVED GAIN DEVIATION TO C144 SPECIFICATIONS AND HAS A NOMINAL GAIN OF 17dB.

ASSY DWG C42028

UNLESS OTHERWISE SPECIFIED		CONTRACT NO.		Comant Industries, inc.			
DIMENSIONS ARE IN INCHES				17dB GPS ANTENNA			
TOLERANCES ON							
DECIMALS .XX ± .03 .XXX ± .010							
FRACTIONS ± 1/16 ANGLES ± 1°				APPROVALS		DATE	
MACHINE FINISH 125 ✓ PER ANSI-B46.1		DRAWN	J. FRANKS			08/26/04	
REMOVE BURRS AND SHARP EDGES .015 MAX		CHECK	J. GOMEZ			08/26/04	
MEET DIMENSIONS BEFORE PLATING		ENGR	W. STIERHOFF			08/27/04	
DIMENSIONS ARE PER ASME Y14.5M		QC	S. ADAMS			08/26/04	
MATERIAL :		APPD	W. STIERHOFF			08/27/04	
DO NOT SCALE DRAWING				DWG SIZE	CODE IDENT	DWG. NO.	REV.
				C	51351	CI 420-221	B
				SCALE: 1:1		CAD FILE: --	SHEET: 1 OF 1

DWG NO C1420-221 REV B