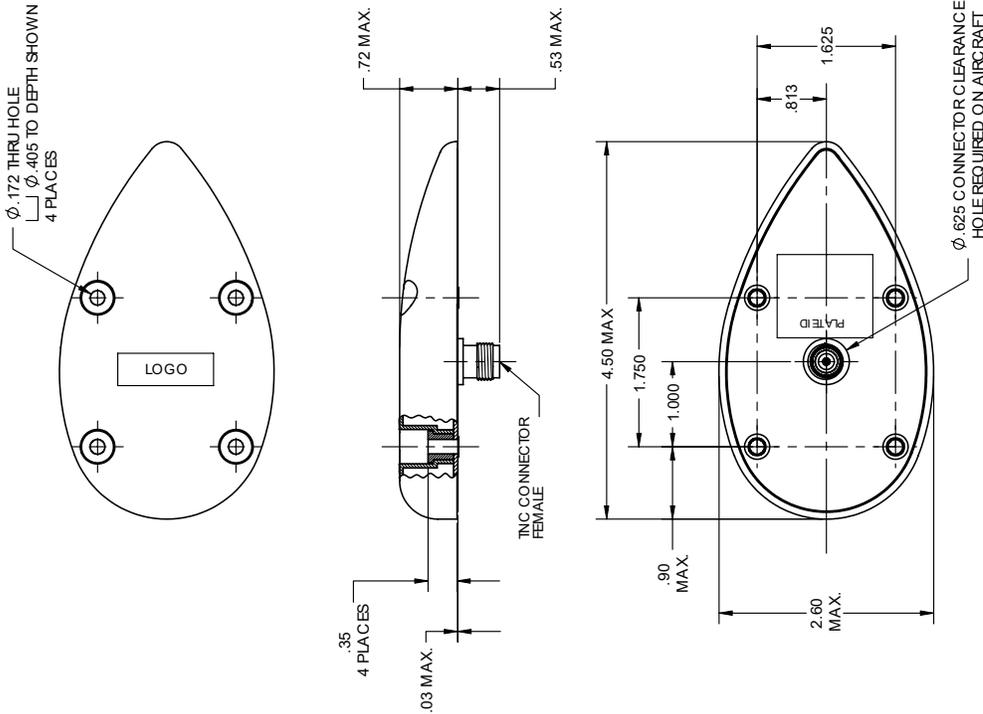


INSTALLATION DRAWING

THIS DRAWING IS UNCLASSIFIED BY THE DRAWING NUMBER. THE REPRODUCTION OF THIS DRAWING IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF Comant Industries, Inc. IS PROHIBITED.



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

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

ANTENNA NOTES & SPECIFICATIONS

- PASSIVE ANTENNA CHARACTERISTICS (T_a = -55° C TO +70° C)
 - FREQUENCY 1575.42 ± 3MHz
 - POLARIZATION RIGHT HAND CIRCULAR
 - AXIAL RATIO 3.0 dB ON BORESIGHT (ZENITH) MAX.
 - POWER HANDLING 1.0 WATT
 - RADIATION GAIN PATTERN MINIMUM
 - 1.0 dBic 0° < or = θ < 75°
 - 2.5 dBic 75° < or = θ < 80°
 - 4.5 dBic 80° < or = θ < 85°
 - 7.5 dBic 85° < or = θ < 90°
 - +5.0 dBic nominal at θ = 0° (ZENITH)
 - AZIMUTH GAIN VARIATION < or = 3.0 dB AT > or = 5° ELEVATION
- PREAMPLIFIER CHARACTERISTICS (T_a = 20° C ± 5° C)
 - GAIN AT 1575.42 ± 3MHz 17 ± 3 dB
- PREAMPLIFIER CHARACTERISTICS (T_a = -55° C TO +70° C)
 - FREQUENCY 1575.42 ± 3MHz
 - OUTPUT IMPEDANCE 50 OHMS (NOMINAL)
 - OUTPUT VSWR 1.5 : 1 MAX.
 - RETURN LOSS 13.98 dB
 - GAIN AT 1575.42 ± 3MHz 17 ± 3 dB
 - NOISE FIGURE 3.8 dB MAX.
 - SELECTIVITY .35 dB MIN. SATCOM BAND (1626.5 MHz)
 - DC VOLTAGE 4 TO 24 VDC
 - DC CURRENT 20 mA MAX.
 - STABILITY UNCONDITIONALLY STABLE FOR ANY LOAD IMPEDANCE ON TNC CONNECTOR
 - BURNOUT PROTECTION 30dBm / 1.0 W CW UNMODULATED
 - WEIGHT 4.2 Oz. MAX.
 - SPEED RATING 330 KIAS AT SEA LEVEL
 - CONNECTOR TNC FEMALE
 - TSO C144 (INCOMPLETE SYSTEM)
- RTCA DO-160B ENV. CAT.: [F2]XAC[SI]U[F-F1]TC,C1[R]XRFDX[XXXXXX]P[XXXXXX]I[B]CA
- A42020 INSTALLATION INSTRUCTION SUPPLIED WITH ANTENNA.
- RADOME MATERIAL: WHITE NYLON WITH UV INHIBITOR.

UNLESS OTHERWISE SPECIFIED		CONTRACT NO.	
DIMENSIONS ARE IN INCHES			
TOLERANCES UNLESS OTHERWISE SPECIFIED			
DECIMALS .XX ± .03 .XXX ± .010	FRACTIONS ± 1/16 ANGLES ± 1°		
MACHINE FINISH 125 ✓ PER ANSI B46.1		APPROVALS	
REMOVE BURRS AND SHARP EDGES 0.15 MAX.		DRAWN J. FRANKS	DATE 08/26/04
DIMENSIONS ARE PER ASME Y14.5M		CHECK J. GOMEZ	08/26/04
MATERIAL:		ENGR W. STIERHOFF	08/27/04
		QC S. ADAMS	08/26/04
		APPD W. STIERHOFF	08/27/04
DO NOT SCALE DRAWING			

Comant Industries, inc.

17dB GPS ANTENNA

REV. B	CODE IDENT C 51351	DWG NO. CI 420-221
SCALE: 1:1	CAD FILE: --	SHEET: 1 OF 1