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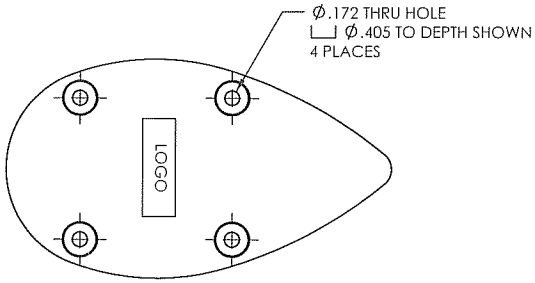
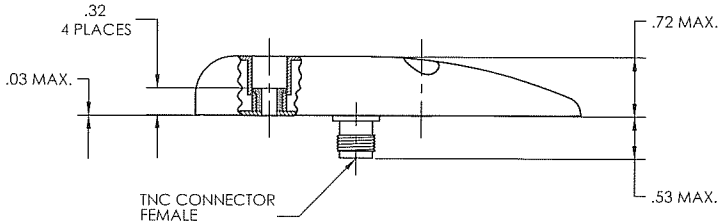
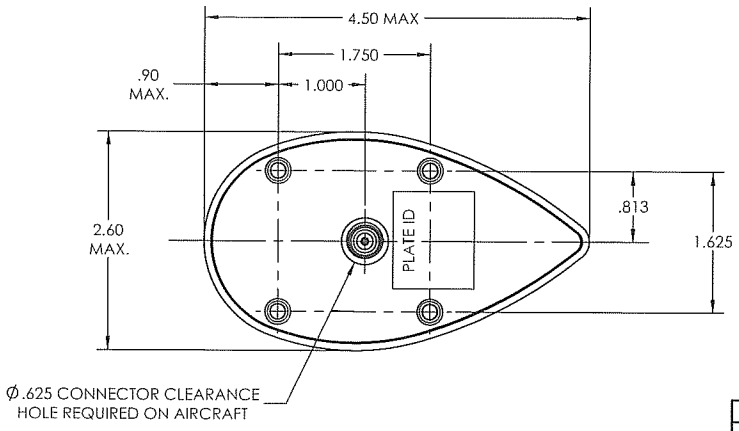
REVISIONS				
LTR	DESCRIPTION		DATE	APPROVAL
A	RELEASED DRAWING	JF	8/26/04	W.S
B	REF ECN 08-095	MN	11/18/08	DH 11/19/08







INSTALLATION DRAWING

ASSY DWG NO. C42027

ANTENNA NOTES & SPECIFICATIONS

1.0 PASSIVE ANTENNA CHARACTERISTICS (T_A= -55° C TO +70° 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 < or = θ < 75°
  -2.5 dBic 75° < or = θ < 80°
  -4.5 dBic 80° < or = θ < or = 85°
  -7.5 dBic θ = 90° (HORIZON)
  +5.0 dBic nominal at θ = 0° (ZENITH)

- 1.6 AZIMUTH GAIN VARIATION ____ < or = 3.0 dB AT > or = 5° ELEVATION

2.0 PREAMPLIFIER CHARACTERISTICS (T_A= 20° C ± 5° C)

- 2.1 GAIN AT 1575.42 ± 3MHz ____ 27.0 dB MIN – 30.5 dB MAX.

3.0 PREAMPLIFIER CHARACTERISTICS (T_A= -55° C TO + 70° 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 ____ 26.5 dB MIN – 31.5 dB MAX.
- 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 ____ 25 mA MIN / 40 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)]XRFDXSXXXXX[XX]X[XXXX][1B]CA

8.0 A42017 INSTALLATION INSTRUCTION SUPPLIED WITH ANTENNA.

9.0 RADOME MATERIAL: WHITE NYLON WITH UV INHIBITOR.

UNLESS OTHERWISE SPECIFIED	CONTRACT NO.			Comant Industries, inc.			
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .010 FRACTIONS ± 1/16 ANGLES ± 1°	APPROVALS		DATE	GPS ANTENNA			
MACHINE FINISH 125√ PER ANSI- B46.1 REMOVE BURRS AND SHARP EDGES .015 MAX MEET DIMENSIONS BEFORE PLATING DIMENSIONS ARE PER ASME Y14.5M	DRAWN	J. FRANKS	8/26/04				
	CHECK	J. GOMEZ	8/26/04				
	ENGR	W. STIERHOFF	8/27/04				
MATERIAL :	QC	S. ADAMS	8/26/04	DWG SIZE C	CODE IDENT 51351	DWG. NO. CI 420-220	REV. B
DO NOT SCALE DRAWING	APPD	W. STIERHOFF	8/27/04	SCALE: 1:1	CAD FILE: --	SHEET : 1 OF 1	

DWG NO. CI 420-220 REV. B