







			1	3	RG142	CABLE, COAX
			2	129-076858-02		CONNECTOR, RT--5000 INSTALL STRAIGHT (TNC)
		X	1		RG142	ANTENNA, CABLE
	QUANTITY	UNIT	DASH NUMBER	QTY REQD	DATE ORDERED AND SHIP DATE	INDICATIVE OR DESCRIPTION
						PARTS LIST



**C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL**

NOTES:

1. ENVIRONMENT:
1.1 OPERATING TEMP: +60°C TO -30°C
2. PHYSICAL:
2.1 WEIGHT OF UNIT WITH ONE SLOT FILLED: 3.0 ±0.1 LBS
2.2 WEIGHT OF UNIT WITH TWO SLOTS FILLED: 3.2 ±0.1 LBS
2.3 WEIGHT OF UNIT WITH THREE SLOTS FILLED: 3.4 ±0.1 LBS
2.4 WEIGHT OF UNIT WITH FOUR SLOTS FILLED: 3.7 ±0.1 LBS
3. SYSTEM NAMEPLATE (APPROX. LOCATION)
4. SYMBOL  DENOTES APPROX. CENTER OF GRAVITY
5. 1/4 TURN FASTENERS STUD PER MIL-F-25173 LOCATION PER MS25212.
6. FOR C-5000 SYSTEM INTERFACE CONNECTOR MATES WITH P/N 00062F00Y0C-914.1 CABLE PLUG (WED P/N 129-215344-01) THIS CABLE PLUG HAS TWO MALE JACK SCREWS. MFG BY: POSITRONIC INDUSTRIES, INC. SPRINGFIELD, MD.
7. FOR FLEXCOMM (RT-30,RT-118,RT-138,RT-138F,RT-406F,RT-450) AND RT-9600,RT-9600F,RT-7200 INSTALLATIONS. CONNECTOR MATES WITH P/N 00062F00Y60C-914.2 CABLE PLUG (WED P/N 129-215344-02) THIS CABLE PLUG HAS ONE EACH MALE/FEMALE JACK SCREWS, MALE NEAR PIN 1. MFG BY: POSITRONIC INDUSTRIES, INC. SPRINGFIELD, MD.
8. IT IS RECOMMENDED THAT CABLE PLUGS P501, P502, P503 BE SPECIAL MARKED IN SOME MANNER TO ASSURE PROPER TRANSCEIVER INTERFACE CONNECTION.
9. DIMENSIONS SHOWN FOR REFERENCE ONLY.

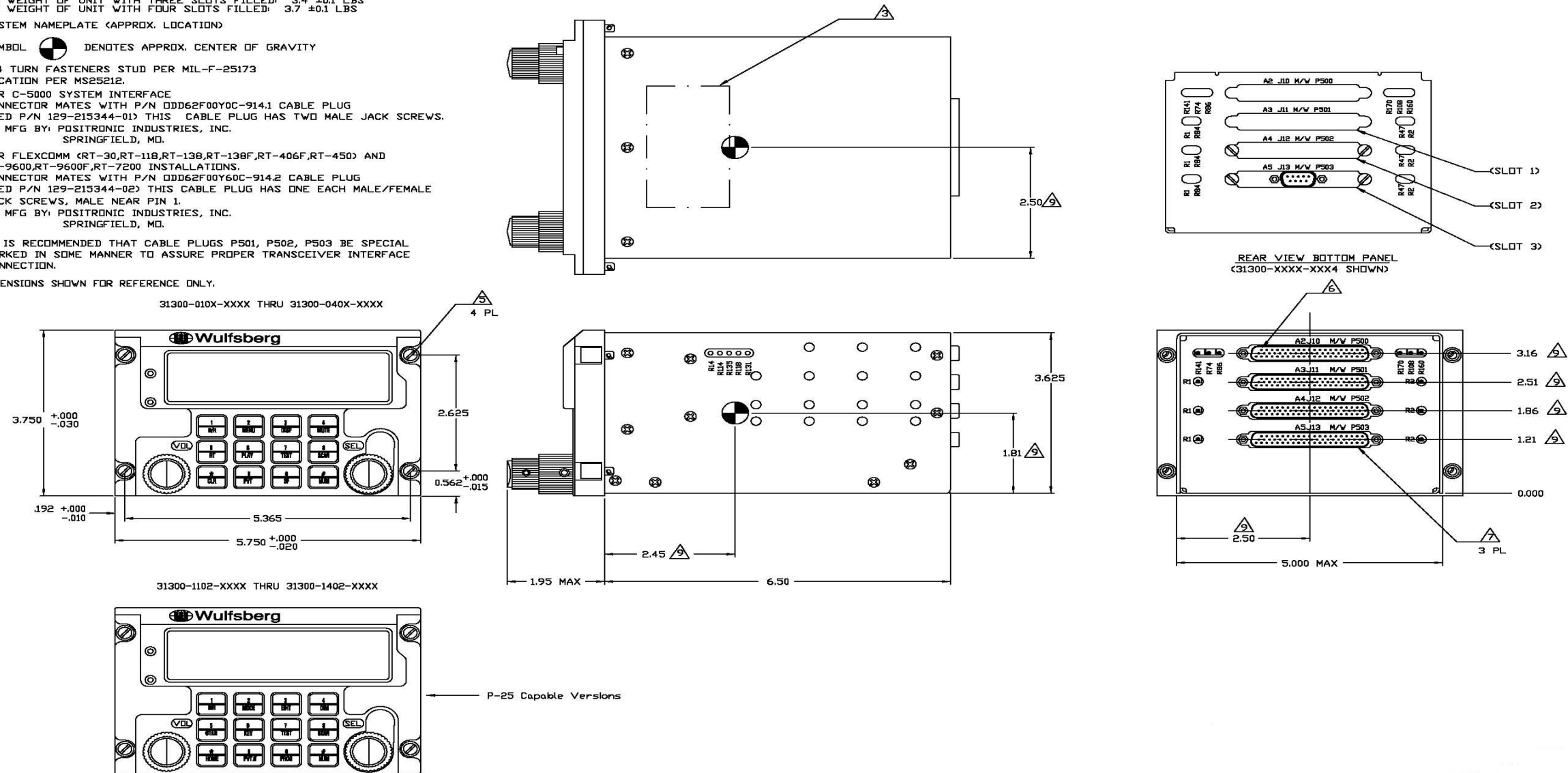


Figure 3-1. C-5000 Envelope Drawing (Sheet 1 of 1)
Dwg No. 154-031300, Rev. K

C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL

NOTES:

1. APPLICABLE TO: -0611 to -5611.
2. FLAVOR WEIGHT

400-015526-0611 THRU -0711	18.0 LBS. ± .4 LBS.
400-015526-0811 THRU -1311	18.0 LBS. ± .4 LBS.
400-015526-1411 THRU -2511	18.5 LBS. ± .4 LBS.
400-015526-2611 THRU -3311	18.0 LBS. ± .4 LBS.
400-015526-3411 THRU -3511	18.5 LBS. ± .4 LBS.
400-015526-5311 THRU -5611	18.0 LBS. ± .4 LBS.
400-015526-5011 THRU -5211	18.5 LBS. ± .4 LBS.
3. AMBIENT OPERATING TEMPERATURE RANGE: -30°C TO +60°C
4. MAXIMUM OPERATING ALTITUDE: 51,000 FT. ABOVE M.S.L.
5. MATING CONNECTORS:
 - J101 MATES WITH WED P/N 129-21657-01
 - J102 MATES WITH WED P/N 129-016857-01 OR -02
 - J103 MATES WITH WED P/N 129-016858-01 OR -02



 DENOTES APPROX. CENTER OF GRAVITY

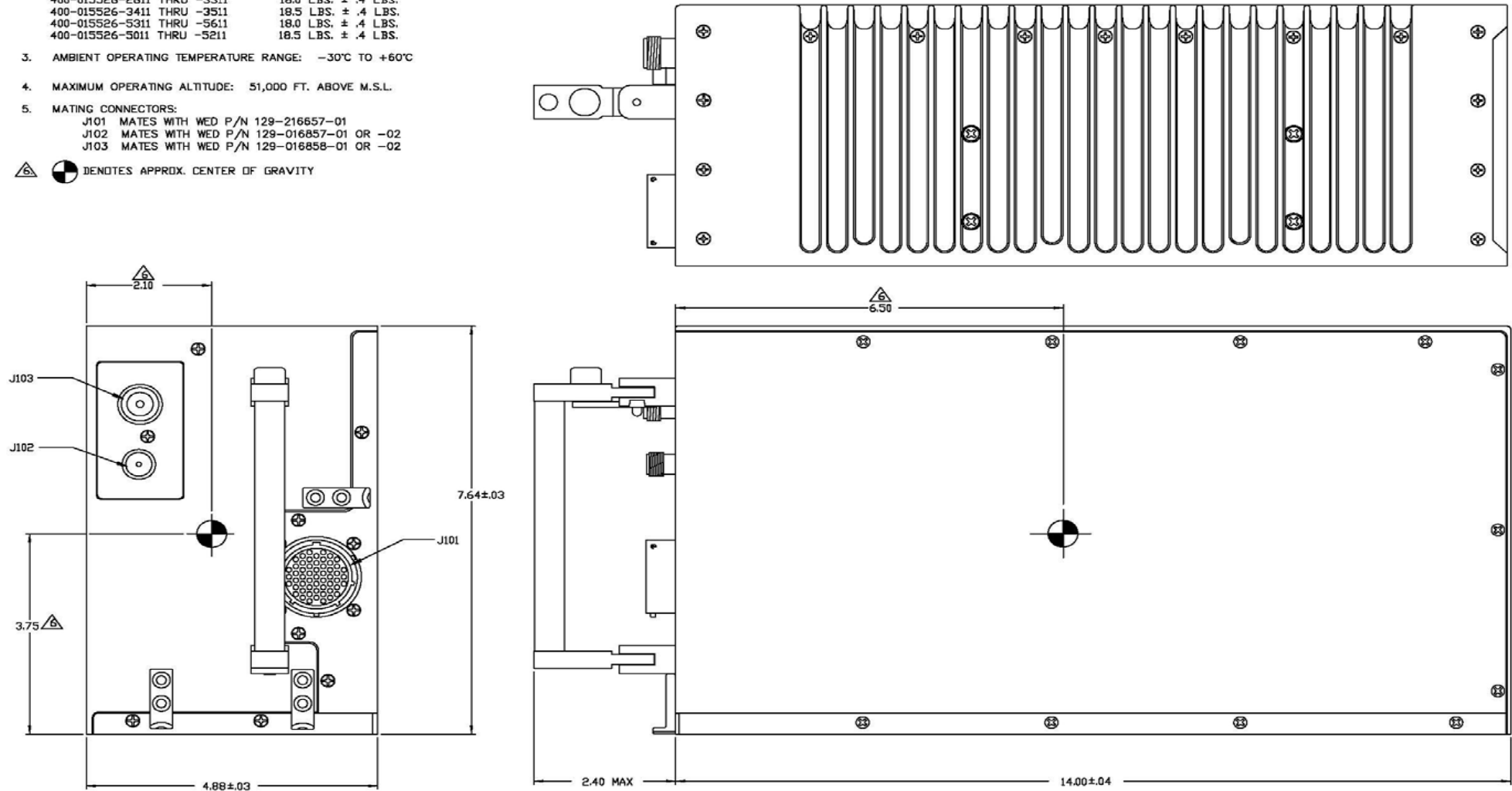


Figure 3-2. RT-5000 Envelope Drawing (Sheet 1 of 1)
 Dwg No.154-015526, Rev E

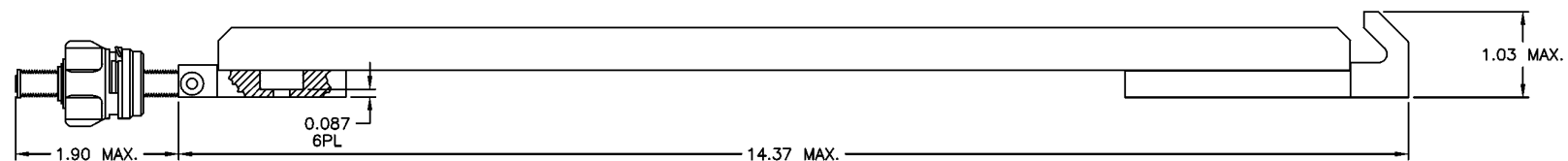
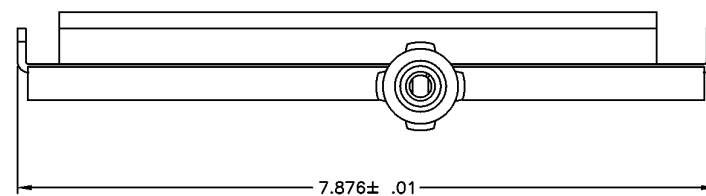
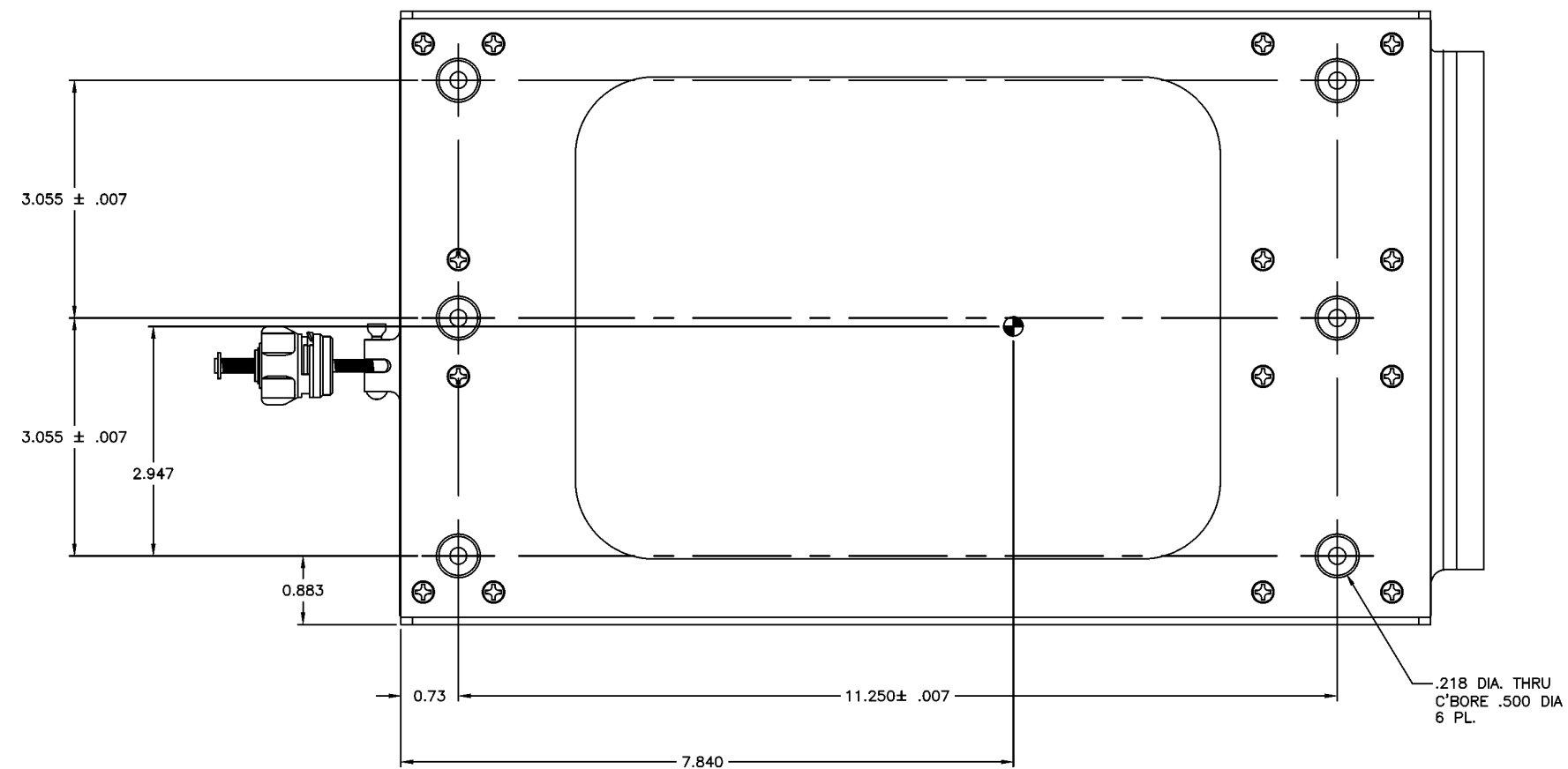


Wulfsberg Electronics Division
A Chelton Group Company
Prescott, AZ 86301 U.S.A.

C-5000 COMMUNICATION MANAGEMENT CONTROLLER INSTALLATION MANUAL

NOTES:

1. WEIGHT: 1.5 LBS. $\pm$.4 LBS.
2. DIMENSIONS SHOWN FOR RERENEC ONLY.
3. APPROX. CENTER OF GRAVITY IS INDICATED BY THE  SYMBOL.



-01 SHOWN

Figure 3-3. RT-5000 Tray Horizontal Mount (Sheet 1 of 1)
Dwg No. 154-016835, Rev A

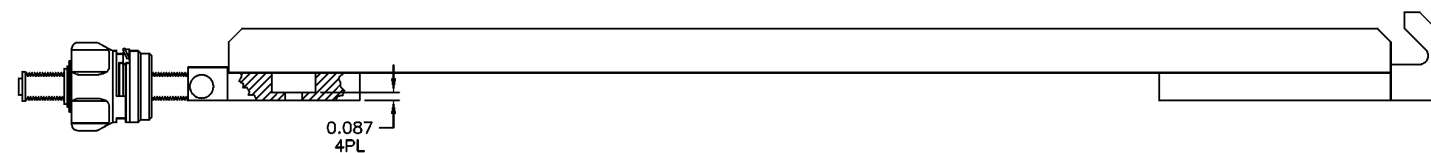
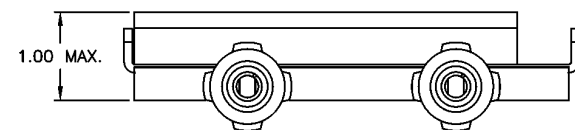
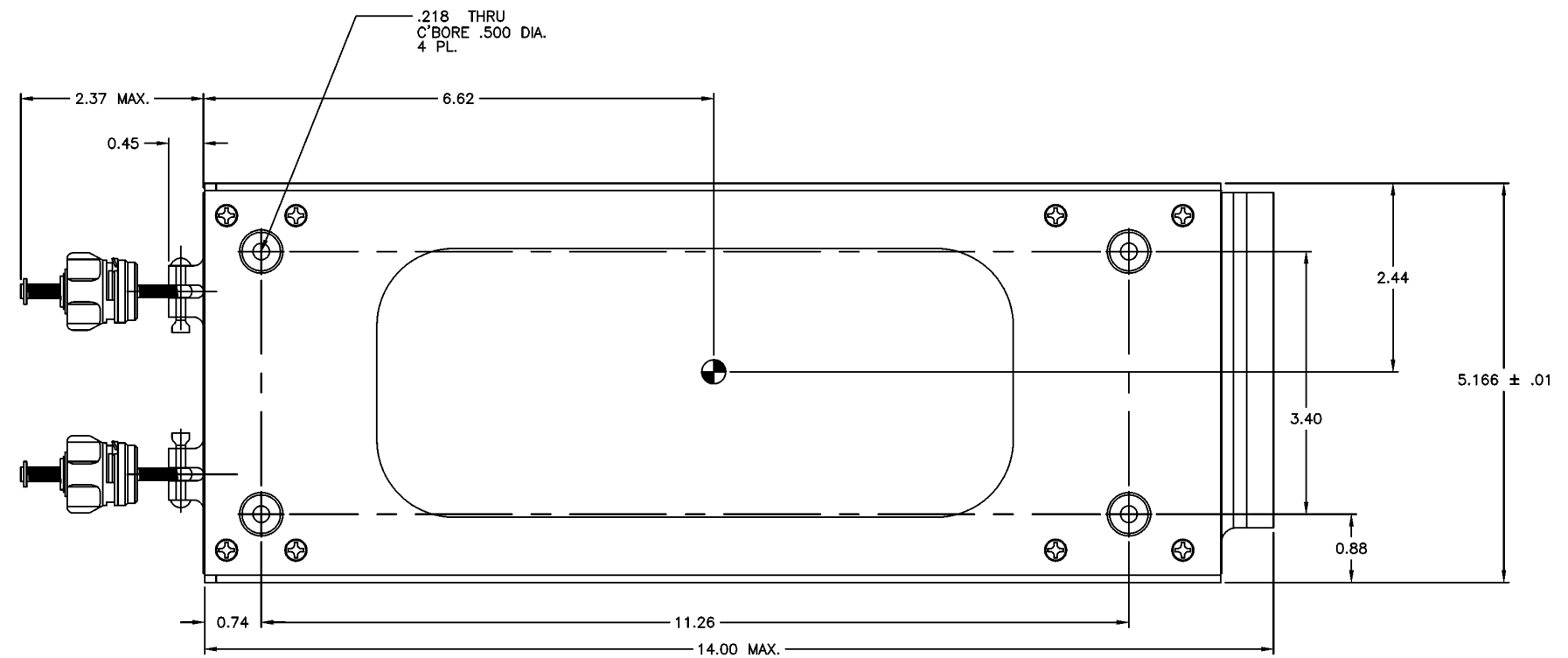


Wulfsberg Electronics Division
A Chelton Group Company
Prescott, AZ 86301 U.S.A.

C-5000 COMMUNICATION MANAGEMENT CONTROLLER INSTALLATION MANUAL

NOTES:

1. MAX. WEIGHT: 1.5 +/- 0.4 LBS.
2. DIMENSIONS SHOWN FOR REFERENCE ONLY.
3. APPROX. CENTER OF GRAVITY IS INDICATED BY THE  SYMBOL.



-01 SHOWN

Figure 3-4. RT-5000 Tray Vertical Mount (Sheet 1 of 1)
Dwg No. 154-016605, Rev B

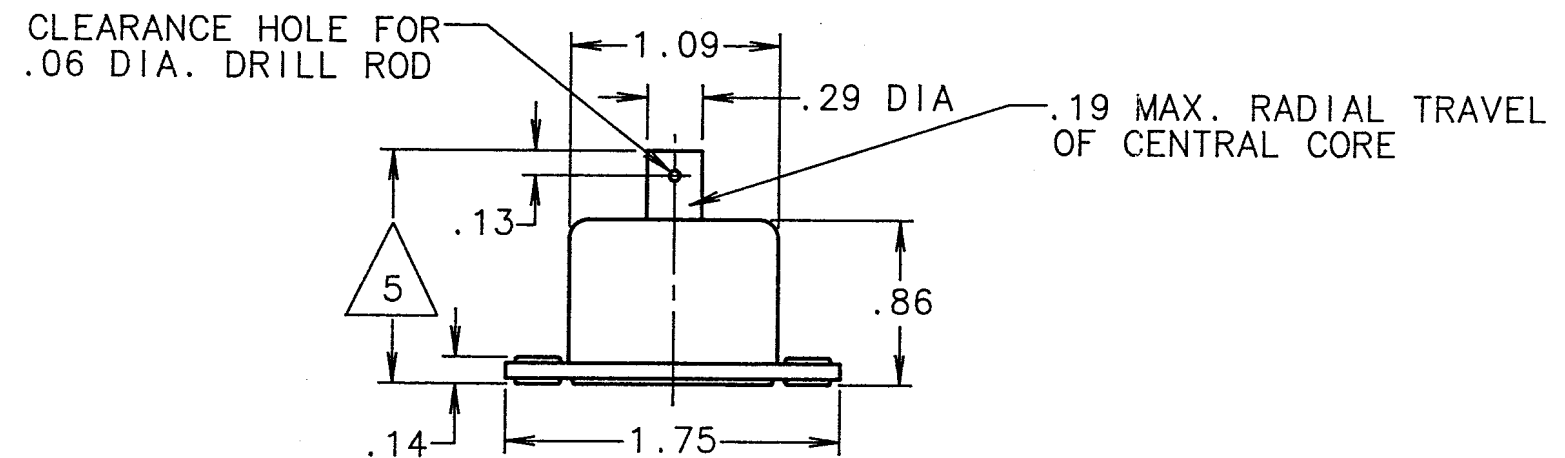
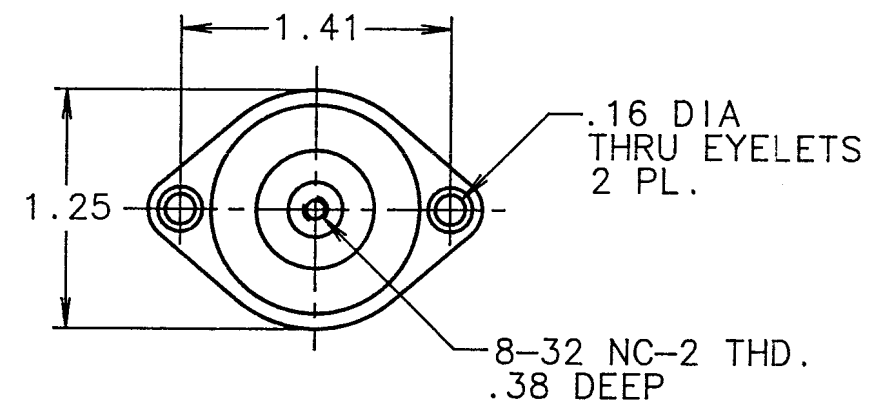


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**C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL**

NOTES:

1. RECOMMENDED
INSTALLATION HARDWARE: #8-32 STAINLESS STEEL
MACHINE SCREWS.
2. TEMPERATURE RATING: -65°F TO $+300^{\circ}\text{F}$
3. LOAD RANGE: 3 LB – 5 LB/ISOLATOR.
4. DIM. SHOWN FOR REF. ONLY.
5. APPROX FREE HEIGHT = 1.22, MAX EXTENDED HEIGHT = 1.56.



-01 SHOWN

Figure 3-5. Vibration Isolator (Sheet 1 of 1)
Dwg No. 246-017812, Rev A

**C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL**

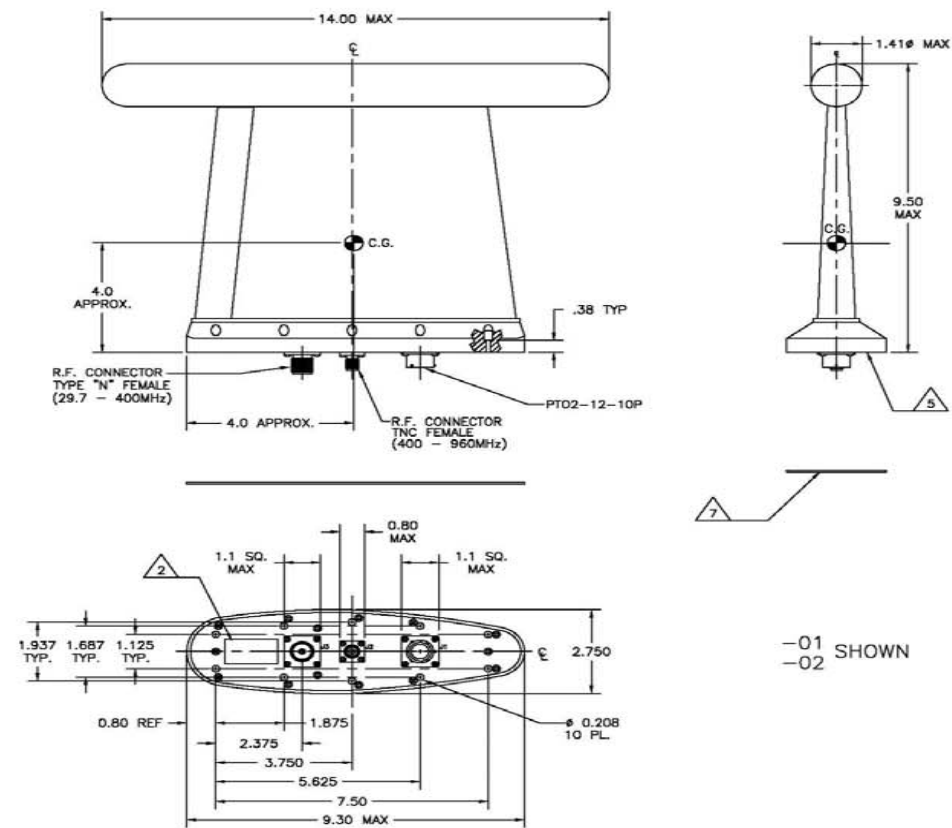


**Figure 3-6. AT-560 Envelope Drawing (Sheet 1 of 1)
Dwg No. 121-040130, Rev F**

**C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL**

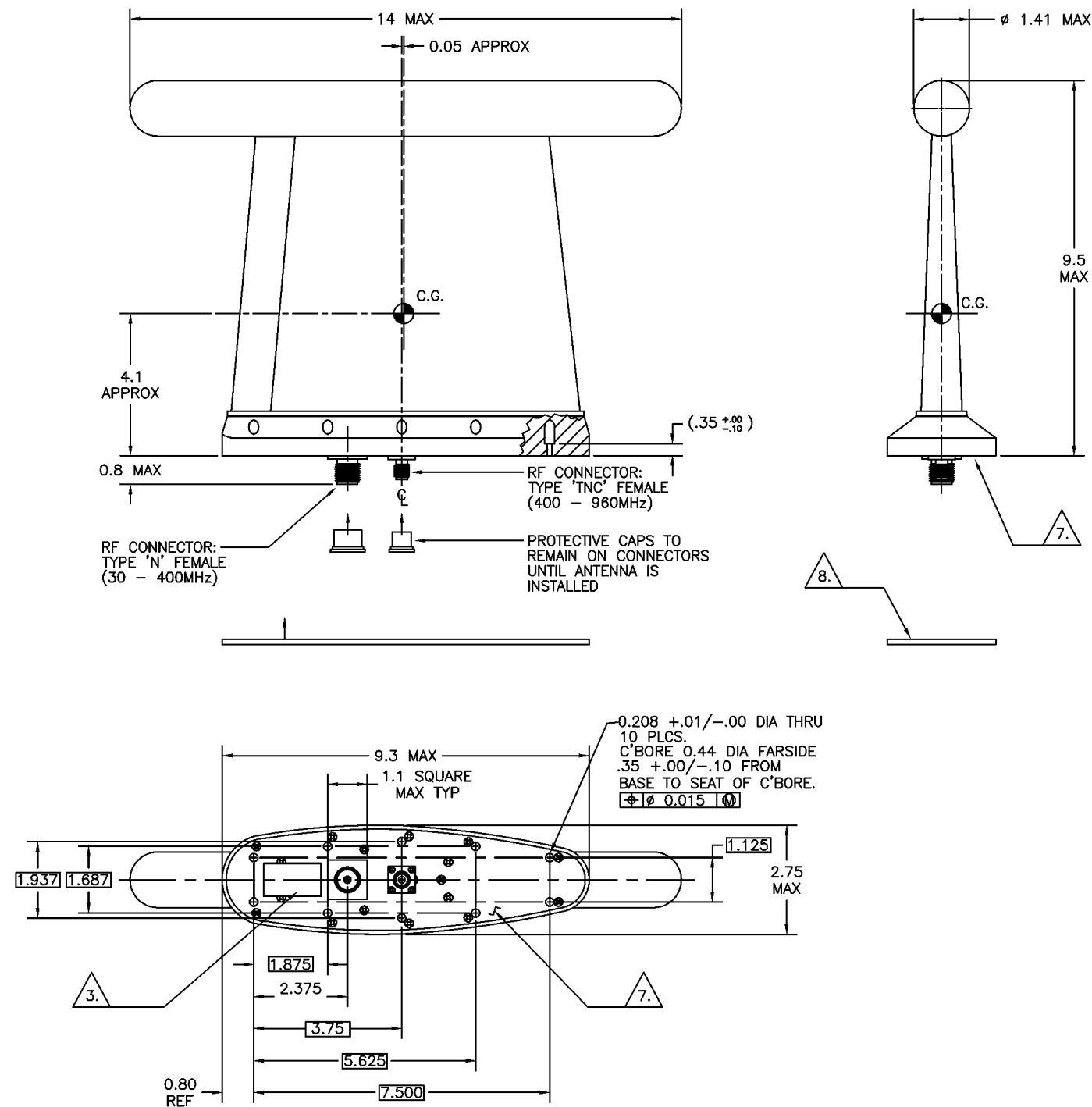


Figure 3-7. AT-160 Envelope Drawing (Sheet 1 of 1)
Dwg No. 121-040129, Rev E

NOTES:

1. (WARNING, PERFORMANCE IS MARGINAL BELOW 50 MHz. FOR IMPROVED PERFORMANCE IN THE 30 - 50 MHz REGION. SEE THE AT-550 OR AT-5000 ANTENNA).
2. SPECIFICATIONS:
 - 2.1 ELECTRICAL:
 - 2.1.1 FREQUENCY RANGE: LOW SPLIT: 29.7 - 400 MHz
HIGH SPLIT: 400 - 960 MHz
 - 2.1.2 IMPEDANCE: 50 OHMS
 - 2.1.3 VSWR: 2.5:1 MAX
 - 2.1.4 RF POWER: LOW SLIT 25W DSBAM
HIGH SPLIT: 25W CW
 - 2.1.5 POLARIZATION: VERTICAL
 - 2.1.6 RADIATION PATTERN: OMNIDIRECTIONAL IN AZIMUTH
 - 2.1.7 SPEC. GAIN:

30 MHz:	-21 dBi
60 MHz:	-21 dBi
88 MHz:	-12 dBi
108-174 MHz:	-3 dBi AV
225-960 MHz:	0.0 dBi AV
 - 2.2 MECHANICAL:
 - 2.2.1 WEIGHT: 2.7LBS (1.22kg) MAX
 - 2.2.2 FINISH: EPOXY PAINT GLOSS PER DEF. STAN. 80-161.
WHITE (-01); BLACK (-02)
 - 2.3 ENVIRONMENTAL, DESIGNED TO MEET:
 - 2.3.1 TEMPERATURE: -55° C TO +70° C
 - 2.3.2 VIBRATION: MIL-E-5400, CURVE IIIB
 - 2.3.3 ALTITUDE: 50,000 FT
 - 2.3.4 SHOCK: MIL-STD-810E; METH.516.4;
PROC. (20G,11ms)
 - 2.3.4 CSD: COMPASS SAFE DISTANCE IS LESS THAN 12 INCHES.

3. LABEL MUST SHOW THE FOLLOWING INFORMATION:
ANTENNA: AT-160
WULFSBERG ELECTRONICS DIVISION
P/N: 121-040129-01 (WHT) OR 121-040129-02 (BLK)
S.N.: (SERIAL NO. TO BE SUPPLIED BY MFR.)
MFR.: NAME AND MFR. PART NUMBER

4. INSTALLATION REQUIRES A 1.38 DIA. MIN. CLEARANCE HOLE IN THE AIRCRAFT SKIN FOR THE FEMALE "N" CONNECTOR MOUNTED ON THE ANTENNA. A .94 DIA. HOLE IS ALSO REQUIRED TO CLEAR THE FEMALE "TNC" CONNECTOR. THE INSTALLER MAY DESIRE TO USE LARGER HOLES TO CLEAR THE MALE CABLE CONNECTORS OR TO ALLOW FOR HOLE LOCATION TOLERANCES. MOUNT ANTENNA WITH NO. 10 SCREWS.

5. DIMENSIONS SHOWN FOR REFERENCE ONLY.

6. APPROVED VENDORS: CHELTON, INC.

WED DASH NO.	COLOR	VENDOR P/N
-01	WHT	12-334
-02	BLK	12-334 P4

7. ALUMINUM BASEPLATE, UNPAINTED, MUST MAKE GOOD ELECTRICAL CONTACT WITH AIRFRAME. ANTENNA SHOULD BE MOUNTED ON NEAR FLAT SURFACE USING R.F. GASKET.

8. SUPPLIED WITH RUBBER CONDUCTIVE RF GASKET:
WED P/N: 146-040129-01

**C-5000 COMMUNICATION MANAGEMENT CONTROLLER
INSTALLATION MANUAL**

NOTES:

1. SPECIFICATIONS:
 - 1.1 ELECTRICAL
 - 1.1.1 FREQUENCY RANGE: 29.7 – 88MHz
108 – 174MHz
225 – 400MHz
400 – 960MHz
 - 1.1.2 IMPEDANCE: 50 OHMS (NOMINAL)
 - 1.1.3 VSWR: ≤2.5:1 ALL BANDS
 - 1.1.4 RF POWER: LOW SPLIT: 15W DSBAM
HIGH SPLIT: 25W CW
 - 1.1.5 POLARIZATION: ESSENTIALLY VERTICAL (WHEN MOUNTED VERTICALLY)
 - 1.1.6 RADIATION PATTERNS: OMNIDIRECTIONAL IN AZIMUTH (NOMINAL)
 - 1.1.7 SPEC. GAIN: 30MHz –15dBi
88MHz –7.5dBi
118–174MHz –3dBi ave
225–960MHz 0 dBi ave
 - 1.1.8 CONNECTORS: RF 29.7–400MHz N-TYPE FEMALE
RF 400–960MHz TNC FEMALE
DC PT02–12–10P
 - 1.2 MECHANICAL
 - 1.2.1 WEIGHT: 3.5LBS MAX
 - 1.2.2 FINISH: GLOSS WHITE EPOXY TO DEF. STAN. 80–161. OTHER FINISHES ARE AVAILABLE. COMPASS SAFE DISTANCE LESS THAN 12 INCHES.
 - 1.2.3 C.S.D.:
 - 1.3 ENVIRONMENTAL; DESIGNED TO MEET
 - 1.3.1 TEMPERATURE: –55° C TO +70° C
 - 1.3.2 VIBRATION: MIL–E–5400, CURVE III
 - 1.3.3 ALTITUDE: 55,000 FT
 - 1.3.4 SHOCK: MIL–STD–810C; METH.516.4; PROC. I(20G, 11ms)
2. LABEL MUST SHOW THE FOLLOWING INFORMATION:
ANTENNA AT–5000
WULFSBERG ELECTRONICS DIVISION
P/N: 121–040045–01 (WHI) OR 121–040045–02 (BLK)
S/N: (SERIAL NUMBER TO BE SUPPLIED BY MANUFACTURER).
MFR. NAME AND PART NUMBER
3. INSTALLATION:
IT IS RECOMMENDED THAT SQUARE CLEARANCE HOLES (WITH RADIUS CORNERS) FOR THE CONNECTORS, BE USED IN THE AIRCRAFT SKIN TO AVOID WEAKENING THE METAL AROUND THE SCREW HOLES. THE INSTALLER MAY DESIRE TO USE THE FOLLOWING SIZES FOR CONNECTOR CLEARANCES:
J1 (TNC CONN.): 0.75" SQUARE
J2 (N-TYPE CONN.): 1.125" SQUARE
J3 (10 PIN, PT02–12–10P, DC CONN.): 1.125" SQUARE
MOUNT ANTENNA WITH 6 – NO. 10 SCREWS.
WIRE PER SIGNAL DIAGRAM 152–140131.
4. DIMENSIONS SHOWN FOR REFERENCE ONLY.
5. ALUMINUM ALLOY BASEPLATE TO REMAIN UNPAINTED BY INSTALLER. BASEPLATE FINISHED BY MANUFACTURER WITH PROTECTIVE TREATMENT CHROMATE FILM CONVERSION TO DEF STAN 03–18. MUST MAKE GOOD ELECTRICAL CONTACT WITH AIRFRAME.
6. ANTENNA SHOULD BE INSTALLED ON FLAT SURFACE USING RF GASKET (WED P/N: 146–040046–01) SUPPLIED WITH ANTENNA.
7. NOTE REMOVED.
8. SUPPLIER TO FURNISH TEST DATA SHEETS WITH EACH SHIPMENT.
9. PLASTIC PROTECTIVE CONNECTOR CAPS TO REMAIN FITTED ON CONNECTORS UNTIL ANTENNA IS INSTALLED.
10. DRAINAGE:
 - 10.1 WHEN ANTENNA IS INSTALLED ON THE TOP SURFACE OF AIRCRAFT, i.e.: UPRIGHT MOUNTING AS DEPICTED:
 - 10.1.A DRAIN HOLES IN THE TOP PLATE OF ANTENNA SHOULD BE SEALED USING PLUGS 8021–0137, SUPPLIED WITH KIT, WET ASSEMBLED WITH THIKOL OR SIMILAR SEALING COMPOUND.
 - 10.1.B DRAIN SLOTS IN ANTENNA FLANGE AT MOUNTING FACE MUST NOT BE OBSTRUCTED.
 - 10.2 WHEN THE ANTENNA IS MOUNTED ON THE UNDERSIDE OF THE AIRCRAFT, i.e.: INVERTED MOUNTING:
 - 10.2.A DRAIN HOLES IN THE TOP OF THE ANTENNA PLATE MUST NOT BE OBSTRUCTED.
 - 10.2.B DRAIN SLOTS IN ANTENNA FLANGE AT MOUNTING FACE SHOULD BE SEALED BY APPLYING A SMALL FILLET OF THIKOL (OR SIMILAR SEALING COMPOUND).
11. APPROVED VENDOR:
CHELTON(ELECTROSTATICS) LTD.

WED DASH NO.	VENDOR P/N	COLOR
–01	12–224	WHITE
–02	12–224 P4	BLACK

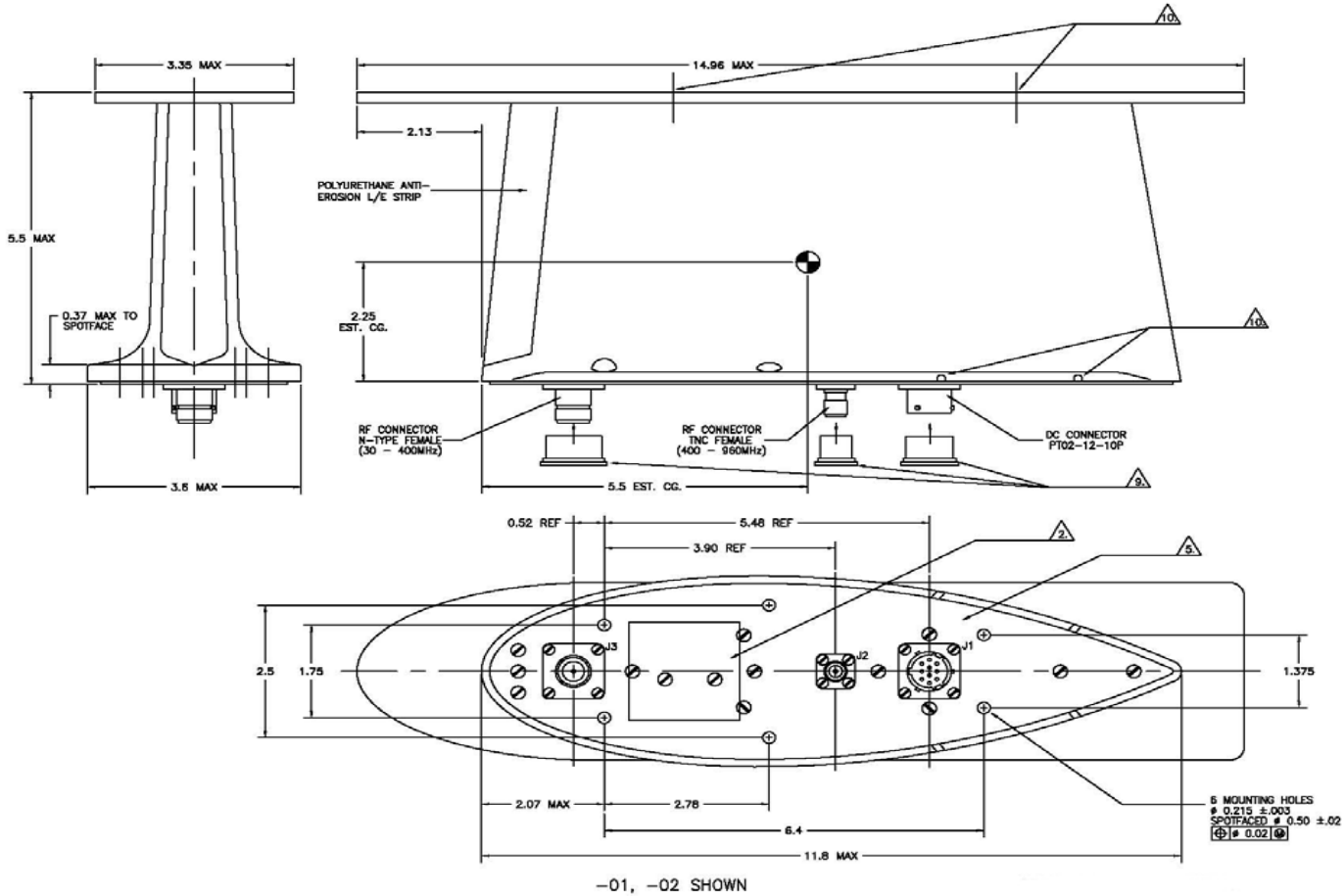
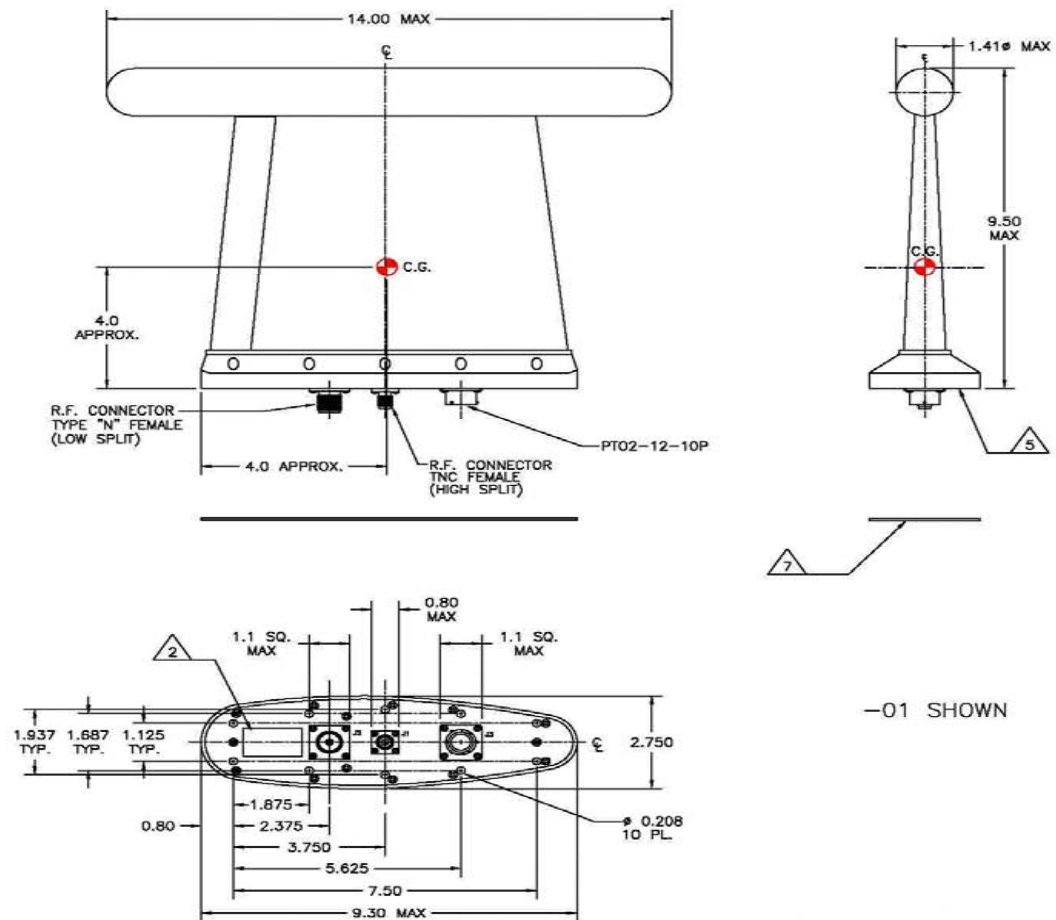


Figure 3-8. AT-5000 Envelope Drawing (Sheet 1 of 1)
Dwg No. 121-040045, Rev D

C-5000 COMMUNICATION MANAGEMENT CONTROLLER INSTALLATION MANUAL



NOTES:

1. SPECIFICATIONS:
 - 1.1 ELECTRICAL
 - 1.1.1 FREQUENCY RANGE: LOW SPLIT: 29.7 - 400 MHz
HIGH SPLIT: 400 - 960 MHz
 - 1.1.2 IMPEDANCE: 50 OHMS
 - 1.1.3 VSWR: 2.5:1 MAX
 - 1.1.4 RF POWER: LOW SPLIT: 15W DSBAM
HIGH SPLIT: 25W CW
 - 1.1.5 POLARIZATION: VERTICAL
 - 1.1.6 RADIATION PATTERN: OMNIDIRECTIONAL IN AZIMUTH
 - 1.1.7 SPEC. GAIN: 30 MHz: -14 dBi
88 MHz: -6 dBi
108-174 MHz: 0.0 dBi AV
220-960 MHz: 0.0 dBi AV
 - 1.2 MECHANICAL:
 - 2.2.1 WEIGHT: 2.7 LBS MAX
 - 2.2.2 FINISH: WHITE PER FED-STD-595
 - 1.3 ENVIRONMENTAL, DESIGNED TO MEET:
 - 2.3.1 TEMPERATURE: -55 C° TO +70 C°
 - 2.3.2 VIBRATION: MIL-E-5400, CURVE IIIIB
 - 2.3.3 ALTITUDE: 40,000 FT
 - 2.3.4 SHOCK: MIL-STD-810E; METH.516.4; PROC.I (20G,11ms)
2. LABEL MUST SHOW THE FOLLOWING INFORMATION:

ANTENNA AT-550
WULFSBERG ELECTRONICS DIVISION
P/N: 121-017850-01
S.N. (SERIAL NO. TO BE SUPPLIED BY MFR.)
MFR. NAME AND PART NUMBER
3. INSTALLATION: IT IS RECOMMENDED THAT SQUARE CLEARANCE HOLES (WITH RADIUS CORNERS) FOR THE CONNECTORS BE USED IN THE AIRCRAFT SKIN TO AVOID WEAKENING THE METAL AROUND THE SCREW HOLES. THE INSTALLER MAY DESIRE TO USE THE FOLLOWING SIZES.

J2 (N CONN): 1.125
J1 (TNC CONN): 0.75
J3 (10 PIN CONN): 1.125
MOUNT ANTENNA WITH NO. 10 SCREWS.
WIRE PER SIGNAL DIAGRAM 152-117922.

4. DIMENSIONS SHOWN FOR REFERENCE ONLY.
5. THIS AREA TO BE PAINT FREE.
6. APPROVED VENDOR: DAYTON-GRANGER INC., P/N: 720058 (-01)
7. SUPPLIED WITH A SILICONE RUBBER CONDUCTIVE GASKET.
D.G. P/N: 540446, REPLACEMENT GASKET W.E.D. P/N: 146-017850-01.
8. SUPPLIER TO FURNISH TEST DATA SHEETS WITH EACH SHIPMENT.
9. IMPORTANT: CONNECT ANTENNA TO APPROPRIATE LOGIC CONVERTER.
BE SURE BOTH ANTENNA AND LOGIC CONVERTER ARE MANUFACTURED BY THE SAME MANUFACTURER.

Figure 3-9. AT-550 Envelope Drawing (Sheet 1 of 1)
Dwg No. 121-017850, Rev H