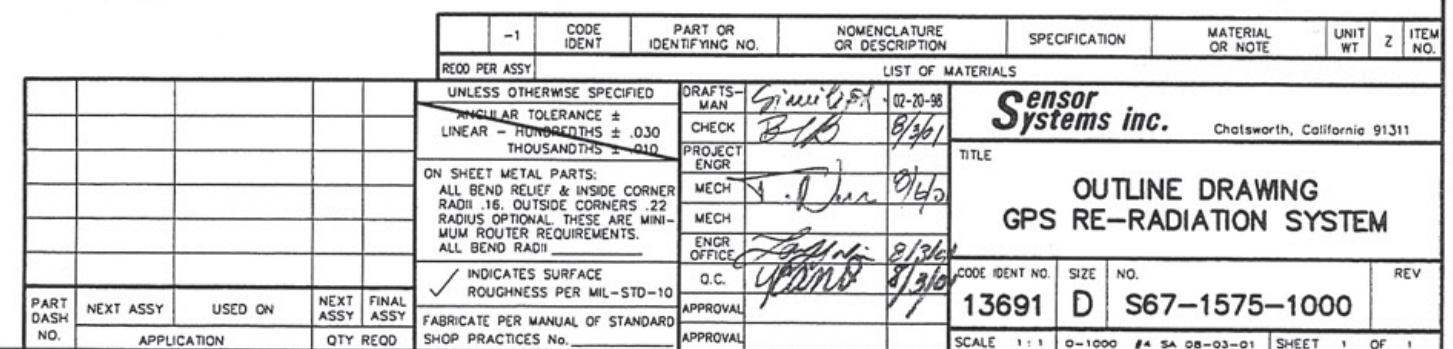
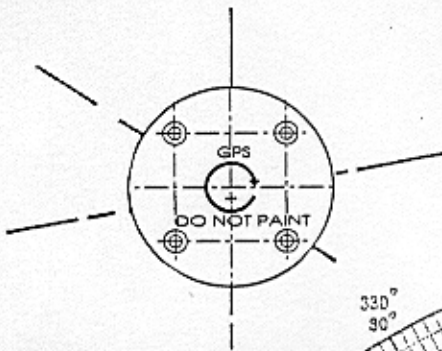
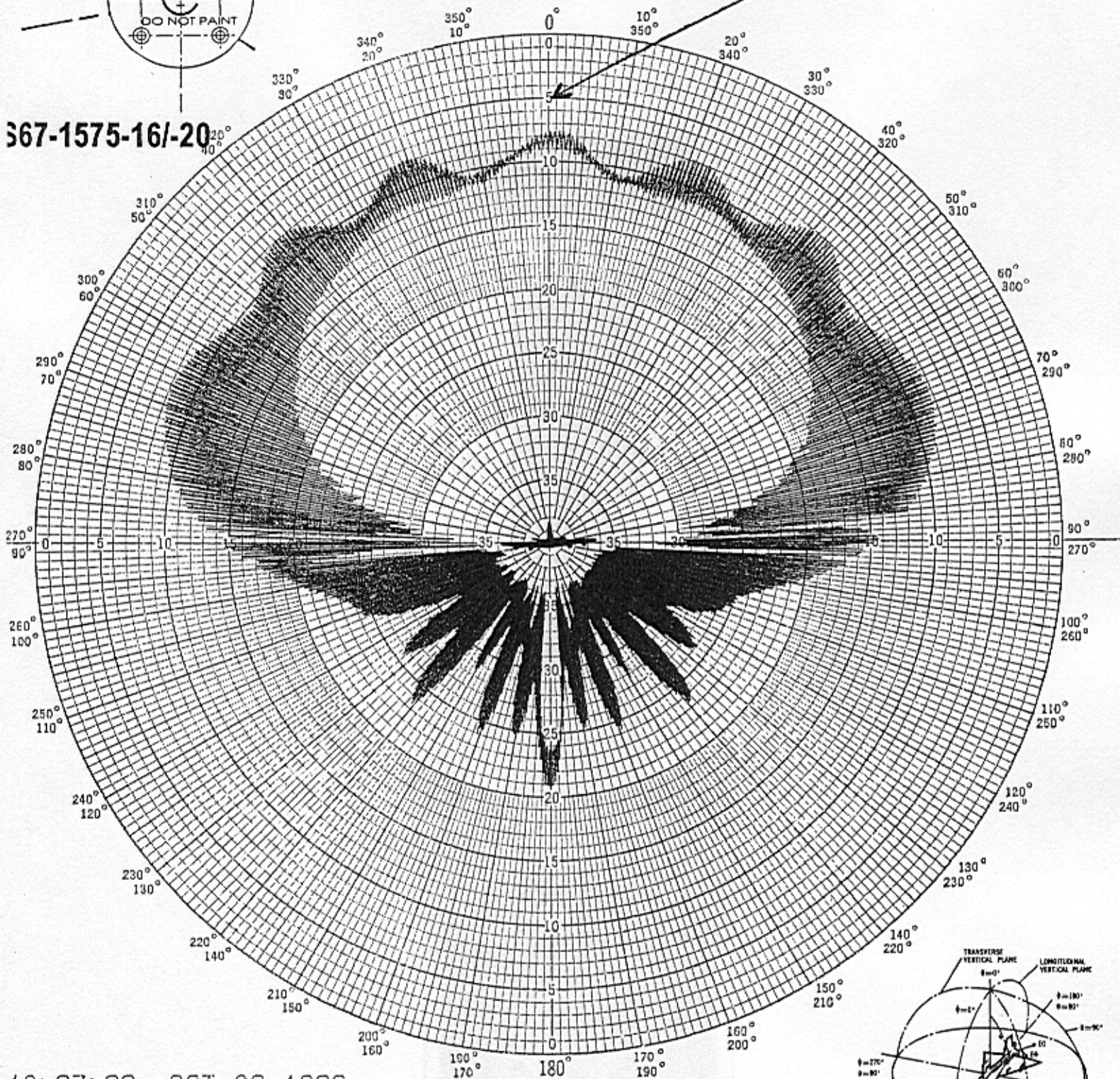




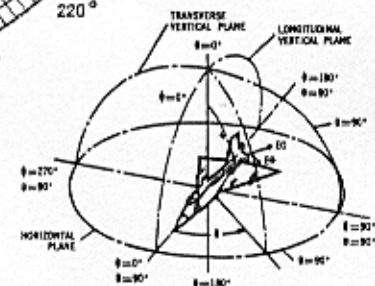


REF GAIN +5 dBi dBi

367-1575-16/-20



10:27:22 OCT-02-1998



PROGRAM Gain & Pattern Test
 ANTENNA TYPE 367-1575-16/-20
 SERIAL NO. 13
 TEST LOCATION ANCHOR CHAMBER #1
 GROUND PLANE TYPE PER 13
 OPERATOR RM
 PROJECT ENGINEER 13
 QUALITY ASSURANCE 13

FREQUENCY 15.75 GHz
 POLARIZATION E_θ FULL E_φ
 MODEL SCALE +5 dBi
 GAIN +5 dBi
 REF. ANTENNA
 REMARKS





DESCRIPTION

S67-1575-20: L1 GPS antenna operating at 1575.42 MHz. Spherical radius molded radome provides enhanced protection against rain, ice and lightning strikes. Application for airborne, marine, ground vehicles and manpack installation.

S67-1575-39: Same as (-20) except preamplifier/filter assembly. Internal 26 dB gain amplifier requires +4 to +24 VDC which is provided through the coaxial connector. Height .57 inches.

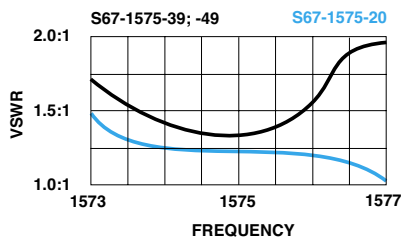
NSN: 5985-01-441-5048

S67-1575-49: Same as (-39) except 40 dB gain preamplifier. Height .60 inches.

S67-1575-59: Same as (-49) except 13 dB gain preamplifier.

FEDERAL & MILITARY SPECS: FAA TSO C115a and C129, DO-160, MIL-STD-810, MIL-C-5541, MIL-E-5400.

PERFORMANCE



1575 MHz
L1



RADIATION PATTERN

SPECIFICATIONS	GPS		
	S67-1575-20	S67-1575-39	S67-1575-49 S67-1575-59
ELECTRICAL			
Frequency	1575.42 MHz	1575.42 MHz	1575.42 MHz
VSWR	1.5:1	2.0:1	2.0:1
Polarization	RHCP	RHCP	RHCP
Impedance	50 ohms	50 ohms	50 ohms
Antenna Gain (Typ)	3 dBic @ Zenith		
Gain Coverage (min) ...	-1.0 dBic $0^\circ \leq \theta \leq 75^\circ$ -2.5 dBic $75^\circ < \theta \leq 80^\circ$ -4.5 dBic $80^\circ < \theta \leq 85^\circ$ -7.5 dBic $\theta = 90^\circ$ @ Horizon		
Gain (preamp)		26.0 dB	40.0 dB (-49) 13.0 dB (-59)
Noise Figure		2.8 dB	2.8 dB
Power Handling	1 watt	1 watt	1 watt
Voltage		+4 to 24 VDC	+4 to 24 VDC
Current		25 mA	45 mA
Lightning Protection ...		DC grounded	

MECHANICAL

Weight	3 oz.	5 oz.	5 oz.
Height	40 in.	.57 in.	.60 in.
Width		3.5 in.	
Material	6061-T6 aluminum / thermoset plastic		
Finish	Skydrol resistant enamel		
Connector	TNC		

ENVIRONMENTAL

Temperature	-67°F to +185°F		
Vibration	10 G's		
Altitude	55,000 ft.		

OUTLINE DRAWING

