

SOLUTION:

TED MANUFACTURING 4-70 GPS NOTCH FILTER

Your global positioning system receives its positional information at 1575.42 megahertz. The communications radios on-board your aircraft typically broadcast in the 121.5 megahertz range. That is a wide separation in frequency bandwidth but it's not the complete picture. Your comm's are also producing harmonics and in the thirteenth harmonic they produce significant noise at the GPS frequency.

Now you can filter that signal and avoid potentially hazardous situations.

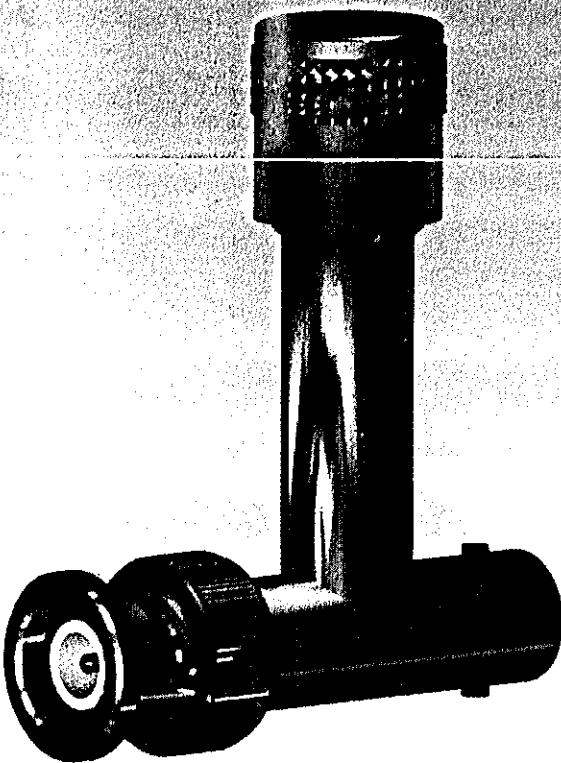
Remember, your radio's 100 watt source is broadcasting out an antenna located a few feet away from the GPS receiver's antenna. The low-power true GPS positional information is being broadcast via satellites orbiting some 20 miles overhead. The TED 4-70 notch filter is a simple low cost way to clean up the receiver's frequency environment.

The TED 4-70 notch filter installs quickly and easily via standard BNC bayonet couplings, in-line between radios and antenna. The 4-70 rejects in excess of 50 dB of 1575.42 signal at the source. Each filter is individually tuned and checked to assure maximum performance. Of course, the 4-70 also passes strenuous environmental criteria so important in aircraft applications.

Major GPS manufacturers recognize this problem and recommend using the 4-70 on new and retrofit installation.

TED Manufacturing has been producing the highest quality components to the most exacting tolerances for the aviation industry for more than 35 years. TED Manufacturing goes beyond the point of simply meeting engineering minimums. At TED, we believe superb quality is fundamental and that exceeding customer expectations is our measure of success.

The GPS notch filter model 4-70 is just one example of how TED Manufacturing can put our experience to work for you to produce your special connector/filtering needs. For pricing and delivery on the 4-70 or to speak with our Design Department please call 913-631-6211.



SPECIFICATIONS:

PLATING - NICKEL

CONTACTS - NICKEL, WITH 30u GOLD PLATE

MAXIMUM VOLTAGE - 500 VOLTS

DIELECTRIC STRENGTH - 1500 VOLTS

INSULATION RESISTANCE - 5000 MEGOHMS

TEMPERATURE RANGE - -55°C TO +85°C

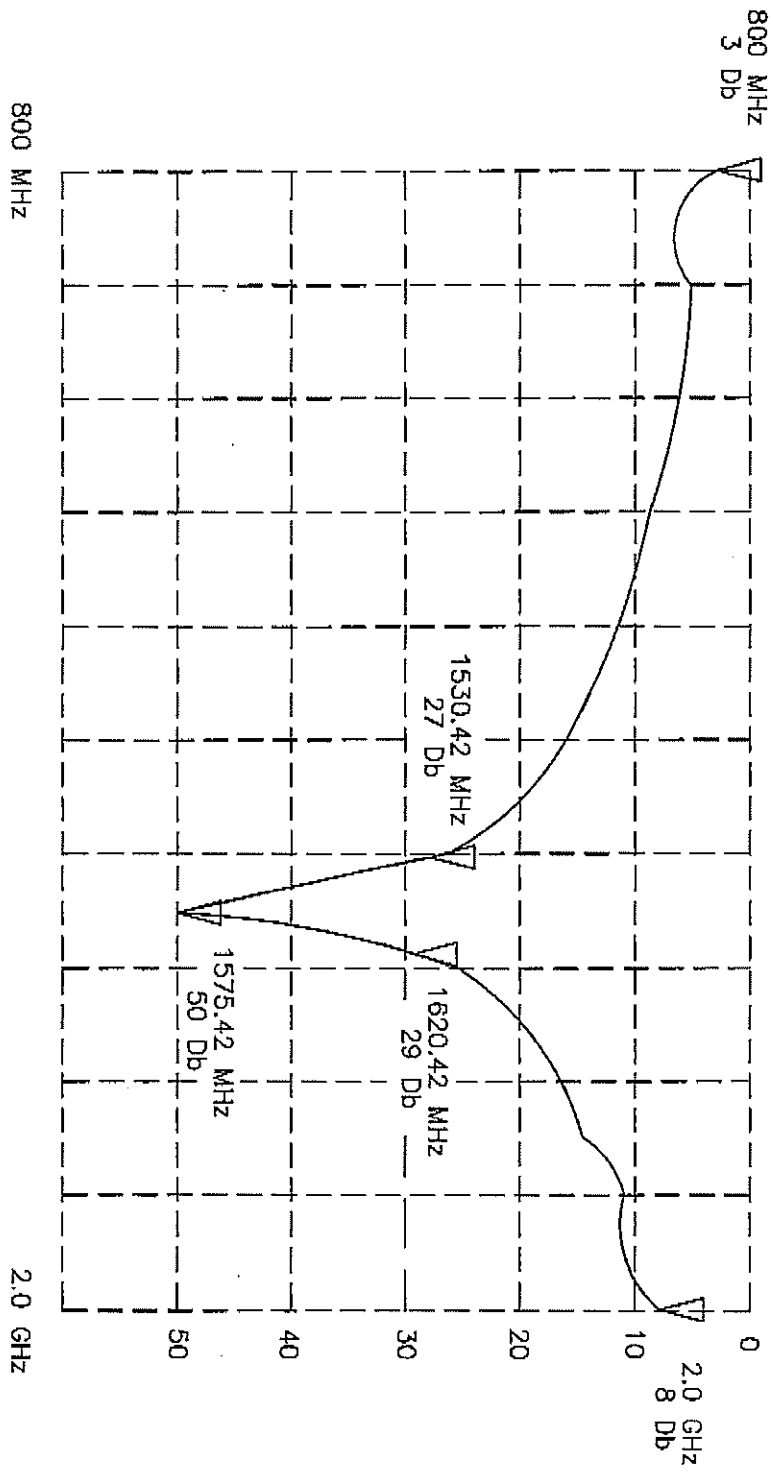
Parameter	Typ.	Units
Center Notch Frequency	1575.42	Mhz
Attenuation over $f \pm 1.5$ Mhz	52	dB
Insertion loss from 118 to 137 Mhz	0.1	dB
Impedance from 118 to 137 Mhz	50	Ohms
VSWR from 118 to 137 Mhz	1.5:1	



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ATTENUATION OF NOTCH
TED 4-70-54