From: Danny Hankins

To: Doug Young
Date: May 23, 2002

Subject:
Request for Info - STA File # 0166-EX-ST-2002- Reply

Message:

Our proposal to mitigate these objections involves changing the location and/or altitude for testing the frequencies in question. Our proposed alternate location is the Great Bend Airport, GBD, located in Great Bend, Kansas. The coordinates for GBD are as follows:

Lat = 38-20-30 N
Lon = 98-51-30 W
EL = 1887 ft MSL

The FCC's Wireless Telecommunications Bureau objects to the use of >131.23, 131.25 & 131.275 MHz due to likely interference to Arinc.

The frequencies 131.23, 131.25 and 131.275 were chosen to test interference into the GPS system. These frequencies can be tested while the aircraft is on the ground at Great Bend. The aircraft will be parked for a short time and acquire signals from GPS satellites. Then, an FTE will transmit for 20 seconds on each of these three frequencies (consecutively) using the RT-5000 while GPS systems are monitored to see how many of the acquired satellites, if any, are lost.

In addition, the frequencies between 160 and 167.5 MHz are pretty congested with land mobile operations. To limit the impact, they would prefer to have operation on these frequencies limited to an altitude of 1.6 km and power limited to 10 watts consistent with operation on board aircraft under part 90.

The test frequencies between 160 and 167.5 MHz are: 160.0, 161.0, 164.8, 165.7, and 167.5 MHz. Our engineers say we can test these frequencies at 3,000 ft AGL at GBD. This will be a max altitude of 1.5 km MSL. We will listen on each frequency to verify that we are not receiving traffic before performing our 20-second duration transmission.

After consulting with techs from Wulfsberg and our own engineers, we still request that we be allowed to use the high power setting (15 Watts AM mode) for the 160.x frequencies. We must have the worst case scenario for these interference tests. The customer will likely use this radio in the high power 15 Watt setting rather than the low power 10 Watt mode imposed on non-government users in CONUS under FCC regulations. We must test the aircraft under conditions that it will encounter.

We conferred with the FAA Regional Frequency Manager in Kansas City, MO. He has no issues with performing the tests as outlined above at GBD. We have also relayed this information to our military POC, but have not yet received a reply. All other frequencies would still be tested per the original plan in the area of Wichita, Kansas. Our current schedule calls for testing to begin in early June. If the FCC OET cannot permit the tests to be conducted at GBD, then we would appreciate the suggestion of another location as near to Wichita, KS as possible (with a good runway) where we would be permitted to conduct testing as outlined above.

Danny B. Hankins
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