

GPS Interference Testing Frequencies and Parameters  
ARINC / ASRI Coordination

Location: Beech Factory Airport (BEC), Wichita, Sedgwick County, KS, within 2 km of coordinates 37-41-41 N Lat, 097-13-00 W Lon

Frequencies	Emissions	Power
• 131.2417 MHz	5K00A3E / 5K60A3E	20 W mean
• 131.250 MHz	5K00A3E / 5K60A3E / 6K00A3E	20 W mean
• 131.2583 MHz	5K00A3E / 5K60A3E	20 W mean
• 131.2667 MHz	5K00A3E / 5K60A3E	20 W mean
• 131.275 MHz	5K00A3E / 5K60A3E / 6K00A3E	20 W mean
• 131.2833 MHz	5K00A3E / 5K60A3E	20 W mean
• 131.2917 MHz	5K00A3E / 5K60A3E	20 W mean
• 131.300 MHz	5K00A3E / 5K60A3E / 6K00A3E	20 W mean
• 131.3083 MHz	5K00A3E / 5K60A3E	20 W mean

The purpose of the transmissions is to certify that VHF comm. radio communications will not interfere with GPS navigation systems on board aircraft. The testing is required for certification of the aircraft. All of the transmitters used are FCC certified.

The test frequencies were chosen because their 12<sup>th</sup> or 13<sup>th</sup> harmonics fall within +/- 1 MHz of the GPS L1 frequency, M1575.42. The procedure requires that the GPS system acquire satellites. The VHF radio is tuned to a test frequency and transmits for up to 20 seconds while the GPS system is monitored to verify that no satellites are dropped, or other indication of interference is observed. This procedure is required for each of the test frequencies requested.