

(2) The frequencies available for assignment to radionavigation land test stations for the testing of airborne receiving equipment are 108.000 and 108.050 MHz for VHF omni-range; 108.100 and 108.150 MHz for localizer; 334.550 and 334.700 MHz for glide slope; 978 and 979 MHz (X channel)/1104 MHz (Y channel) for DME; 1030 MHz for air traffic control radar beacon transponders; 1090 MHz for Traffic Alert and Collision Avoidance Systems (TCAS); and 5031.0 MHz for microwave landing systems. Additionally, the frequencies in paragraph (b) of this section may be assigned to radionavigation land test stations after coordination with the FAA. The following conditions apply:

(i) The maximum power authorized on the frequencies 108.150 and 334.550 MHz is 1 milliwatt. The maximum power authorized on all other frequencies is one watt.

(ii) The pulse repetition rate (PRR) of the 1030 MHz ATC radar beacon test set will be 235 pulses per second (pps) ± 5 pps.

(iii) The assignment of 108.000 MHz is subject to the condition that no interference will be caused to the reception of FM broadcasting stations and stations using the frequency are not protected against interference from FM broadcasting stations.

(d) *Frequencies available for ELT test stations.* The frequencies available for assignment to ELT test stations are 121.600, 121.650, 121.700, 121.750, 121.800, 121.850, and 121.900 MHz. Licensees must:

(1) Not cause harmful interference to voice communications on these frequencies or any harmonically related frequency.

(2) Coordinate with the appropriate FAA Regional Spectrum Management Office prior to each activation of the transmitter.

(e) *Frequencies available for differential GPS stations.* Frequencies in the 112–118 MHz band may be assigned to Special Category I (SCAT-I) ground stations for differential GPS data links.

(1) The frequencies available are on 25 kHz centers with the lowest assignable frequency being centered at 112.000 MHz and the highest assignable frequency being centered at 117.950 MHz.

(2) Applicants must coordinate a frequency, time slot assignment, and three-letter identifier with the FAA and provide this information to the Commission upon application.

[53 FR 28940, Aug. 1, 1988, as amended at 54 FR 11721, Mar. 22, 1989; 63 FR 68958, Dec. 14, 1998; 64 FR 27476, May 20, 1999; 69 FR 32886, June 14, 2004]

§ 87.477 Condition of grant for radionavigation land stations.

Radionavigation land stations may be designated by the FAA as part of the National Airspace System. Stations so designated will be required to serve the public under IFT conditions. This condition of grant is applicable to all radionavigation land stations.

§ 87.479 Harmful interference to radionavigation land stations.

(a) Military or other Government stations have been authorized to establish wide-band systems using frequency-hopping spread spectrum techniques in the 960–1215 MHz band. Authorization for a Joint Tactical Information Distribution Systems (JTIDS) has been permitted on the basis of non-interference to the established aeronautical radionavigation service in this band. In order to accommodate the requirements for the system within the band, restrictions are imposed. Transmissions will be automatically prevented if:

(1) The frequency-hopping mode fails to distribute the JTIDS spectrum uniformly across the band;

(2) The radiated pulse varies from the specified width of 6.4 microseconds ± 5 %;

(3) The energy radiated within ± 7 MHz of 1030 and 1090 MHz exceeds a level of 60 dB below the peak of the JTIDS spectrum as measured in a 300 kHz bandwidth. The JTIDS will be prohibited from transmitting if the time slot duty factor exceeds a 20 percent duty factor for any single user and a 40 percent composite duty factor for all JTIDS emitters in a geographic area.

(b) If radionavigation systems operating in the 960–1215 MHz band experience interference or unexplained loss of equipment performance, the situation must be reported immediately to the nearest office of the FAA, the National