(d) *Intermodulation immunity.* The receiver shall meet the requirements specified in paragraph (a) of this section in the presence of interference from two-signal, third order intermodulation products of two VHF-FM broadcast signals having levels in accordance with the following:

(1) $2N_1 + N_2 + 72 \leq 0$ for VHF-FM sound broadcasting signals in the range 107.7–108 MHz; and

(2) $2N_1 + N_2 + 3\ (24 - 20\log \text{delta } f/0.4) \leq 0$ for VHF-FM sound broadcasting signals below 107.7 MHz, where the frequencies of the two VHF-FM sound broadcasting signals produce, within the receiver, a two signal, third-order intermodulation product on the desired VDB frequency.

(3) In the formulas in paragraphs (d)(1) and (d)(2) of this section, N_1 and N_2 are the levels (dBm) of the two VHF FM sound broadcasting signals at the VHF data broadcast (VDB) receiver input. Neither level shall exceed the desensitization criteria set forth in paragraph (c) of this section. Delta f = 108.1 − f_1, where f_1 is the frequency of N_1, the VHF FM sound broadcasting signal closer to 108.1 MHz.

[69 FR 32881, June 14, 2004]

Subpart E—Frequencies

§ 87.169 Scope.

This subpart contains class of station symbols and a frequency table which lists assignable frequencies. Frequencies in the Aviation Services will transmit communications for the safe, expeditious, and economic operation of aircraft and the protection of life and property in the air. Each class of land station may communicate in accordance with the particular sections of this part which govern these classes. Land stations in the Aviation Services in Alaska may transmit messages concerning sickness, death, weather, ice conditions or other matters relating to safety of life and property if there is no other established means of communications between the points in question and no charge is made for the communications service.

[69 FR 32882, June 14, 2004]

§ 87.171 Class of station symbols.

The two or three letter symbols for the classes of station in the aviation services are:

Symbol and class of station

AX—Aeronautical fixed
AXO—Aeronautical operational fixed
DGP—Differential GPS
FA—Aeronautical land (unspecified)
FAU—Aeronautical advisory (unicom)
FAC—Airport control tower
FAE—Aeronautical enroute
FAM—Aeronautical multicom
FAR—Aeronautical search and rescue
FAS—Aviation support
FAT—Flight test
FAW—Automatic weather observation
GCO—Ground Communication Outlet
MA—Aircraft (Air carrier and Private)
MA1—Air carrier aircraft only
MA2—Private aircraft only
MOU—Aeronautical utility mobile
MRT—ELT test
RCO—Remote Communications Outlet
RL—Radionavigation land (unspecified)
RLA—Marker beacon
RLB—Radiobeacon
RLD—RADAR/TEST
RLG—Glide path
RLL—Localizer
RLO—VHF omni-range
RLS—Surveillance radar
RLT—Radionavigation land test
RLW—Microwave landing system
RNV—Radio Navigation Land/DME
RPC—Ramp Control
TJ—Aircraft earth station in the Aeronautical Mobile-Satellite Service
UAT—Universal Access Transceiver

[53 FR 28940, Aug. 1, 1988, as amended at 57 FR 45750, Oct. 5, 1992; 64 FR 27475, May 20, 1999; 69 FR 32882, June 14, 2004; 71 FR 70676, Dec. 6, 2006; 76 FR 17351, Mar. 29, 2011]

§ 87.173 Frequencies.

(a) The table in paragraph (b) of this section lists assignable carrier frequencies or frequency bands.

(1) The single letter symbol appearing in the ''Subpart'' column indicates the subpart of this part which contains additional applicable regulations.

(2) The two or three letter symbol appearing in the ''Class of Station'' column indicates the class of station to which the frequency is assignable.

(b) Frequency table: