Federal Communications Commission

§ 90.250 Meteor burst communications.

Meteor burst communications may be authorized for the use of private radio stations subject to the following provisions:

- (a) Station operation is limited to the State of Alaska only.
- (b) The frequency 44.20 MHz may be used for base station operation and 45.90 MHz for remote station operation on a primary basis. The frequencies 42.40 and 44.10 MHz may be used by base and remote stations, respectively, on a secondary basis to common carrier stations utilizing meteor burst communications. Users shall cooperate among themselves to the extent practicable to promote compatible operation.
- (c) The maximum transmitter output power shall not exceed 2000 watts for base stations and 500 watts for remote stations.
- (d) Co-channel base stations of different licensees shall be located at least 241 km (150 miles) apart. A remote station and a base station of different licensees shall be located at least 241 km (150 miles) apart if the remote units of the different licensees operate on the same frequency. Waiver of this requirement may be granted if affected users agree to a cooperative sharing arrangement.
- (e) The authorized emission designator to be used in F1E, F7W, G1E or G7W to allow for Phase Shift Keying (PSK) or Frequency Shift Keying (FSK).
- (f) The maximum authorized bandwidth is 20 kHz.
- (g) Station identification in accordance with $\S90.425(a)$ or (b) shall only be required for the base station.
- (h) Stations may be required to comply with additional conditions of operation as necessary on a case-by-case basis as specified in the authorization.
- (i) Stations employing meteor burst communications shall not cause interference to other stations operating in accordance with the allocation table. New authorizations will be issued subject to the Commission's developmental grant procedure as outlined in subpart Q of this part. Prior to expiration of the developmental authorization, application Form 601 should be

filed for issuance of a permanent authorization.

[48 FR 34043, July 27, 1983, as amended at 49 FR 48712, Dec. 14, 1984; 58 FR 44957, Aug. 25, 1993; 72 FR 35196, June 27, 2007]

Subpart K—Standards for Special Frequencies or Frequency Bands

§ 90.251 Scope.

This subpart sets forth special requirements applicable to the use of certain frequencies or frequency bands.

[54 FR 39740, Sept. 28, 1989]

§ 90.253 Use of frequency 5167.5 kHz.

The frequency 5167.5 kHz may be used by any station authorized under this part to communicate with any other station in the State of Alaska for emergency communications. The maximum power permitted is 150 watts peak envelope power (PEP). All stations operating on this frequency must be located in or within 50 nautical miles (92.6 km) of the State of Alaska. This frequency may also be used by stations authorized in the Alaska-private fixed service for calling and listening, but only for establishing communication before switching to another frequency.

[49 FR 32201, Aug. 13, 1984]

§ 90.255 [Reserved]

§ 90.257 Assignment and use of frequencies in the band 72–76 MHz.

- (a) The following criteria shall govern the authorization and use of frequencies within the band 72–76 MHz by fixed stations. (For call box operations see §90.241).
- (1) The following frequencies in the band 72–76 MHz may be used for fixed operations:

MHz				
72.02	72.80			
72.04	72.82			
72.06	72.84			
72.08	72.86			
72.10	72.88			
72.12	72.90			
72.14	72.92			
72.16	72.94			
72.18	72.96			

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72.20		72.98
72.22		75.42
72.24		75.46
72.26		75.50
72.28		75.54
72.30		75.58
72.32		75.62
72.34		75.64
72.36		75.66
72.38		75.68
72.40		75.70
72.42		75.72
72.46		75.74
72.50		75.76
72.54		75.78
72.58		75.80
72.62		75.82
72.64		75.84
72.66		75.86
72.68		75.88
72.70		75.90
72.72		75.92
72.74		75.94
72.76		75.96
72.78		75.98

- (2) All authorizations are subject to the condition that no harmful interference will be caused to television reception on Channels 4 and 5.
- (3) The applicant must agree to eliminate any harmful interference caused by his operation to TV reception on either Channel 4 or 5 that might develop by whatever means are necessary. Such action must be taken within 90 days of notification by the Commission. If such interference is not eliminated within the 90-day period, operation of the fixed station will be discontinued.
- (4) Vertical polarization must be used.
- (5) Whenever it is proposed to locate a 72–76 MHz fixed station less than 128 km (80 mi.) but more than 16 km (10 mi.) from the site of a TV transmitter operating on either channel 4 or 5, or from the post office of a community in which such channels are assigned but not in operation, the fixed station shall be authorized only if there are fewer than 100 family dwelling units (as defined by the U.S. Bureau of the Census), excluding units 112 or more km (70 mi.) distant from the TV antenna site, located within a circle centered at the location of the proposed fixed station.

The radius shall be determined by use of the following chart entitled, "Chart for Determining Radius From Fixed Station in 72–76 MHz Band to Interference Contour Along Which 10 Percent of Service From Adjacent Channel Television Station Would Be Destroyed." Two charts are available, one for Channel 4, and one for Channel 5. The Commission may, however, in a particular case, authorize the location of a fixed station within a circle containing 100 or more family dwelling units upon a showing that:

- (i) The proposed site is the only suitable location.
- (ii) It is not feasible, technically or otherwise, to use other available frequencies.
- (iii) The applicant has a plan to control any interference that might develop to TV reception from his operations.
- (iv) The applicant is financially able and agrees to make such adjustments in the TV receivers affected as may be necessary to eliminate any interference caused by his operations.
- (v) All applications seeking authority to operate with a separation of less than 16 km (10 mi.) will be returned without action.
- (b) The following criteria governs the authorization and use of frequencies in the 72–76 MHz band by mobile stations in the Industrial/Business Pool.
- (1) Mobile operation on frequencies in the 72-76 MHz band is subject to the condition that no interference is caused to the reception of television stations operating on Channel 4 or 5. Interference will be considered to occur whenever reception of a regularly used television signal is impaired by signals radiated by stations operating under these rules in the 72 to 76 MHz band regardless of the quality of such reception or the strength of the signal used. In order to minimize the hazard of such interference, it shall be the duty of the licensee to determine whether interference is being caused to television reception, wherever television receivers other than those under the control of the licensee, are located within 31 m. (100 ft.) of any point where the stations licensed under these rules may be operated. In any case, it shall be the responsibility of the licensee to correct,

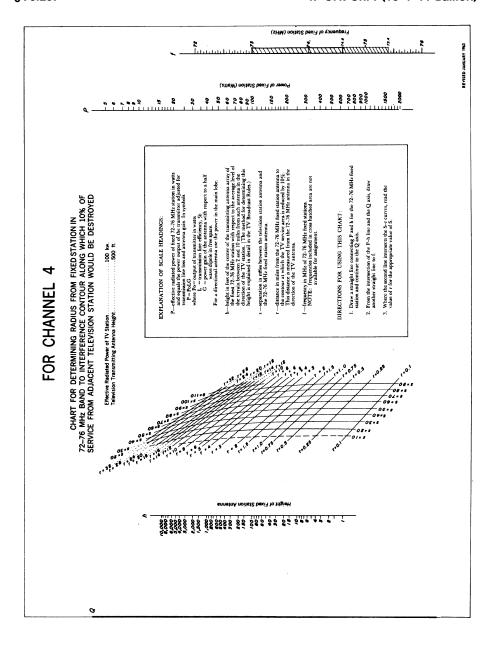
Federal Communications Commission

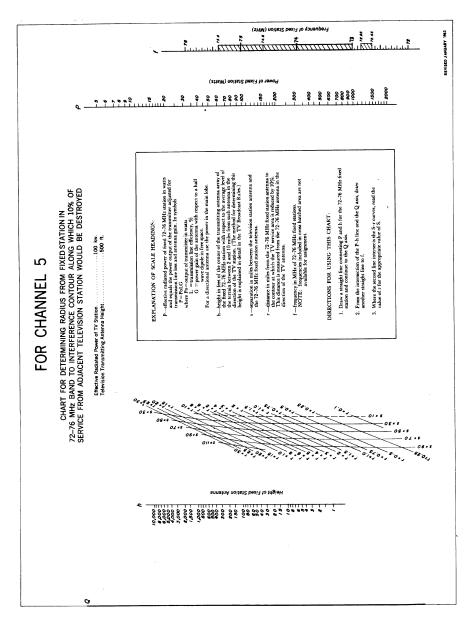
at its own expense, any such interference and if the interference cannot be eliminated by the application of suitable techniques, the operation of the offending transmitter shall be suspended. If the complainant refuses to permit the licensee to apply remedial techniques which demonstrably will eliminate the interference without impairment of the original reception, the licensee is absolved of further responsibility.

(2) The maximum transmitter output power that will be authorized is 1 watt; and each station authorized will be classified and licensed as a mobile station. Any units of such a station, however, may be used to provide the operational functions of a base or fixed station. The antennas of transmitters operating on these frequencies must be

directly mounted or installed upon the transmitting unit: Except that when permanently installed aboard a vehicle, antenna and transmitter may be separated as required for convenience in mounting. Horizontal polarization will not be allowed; and the gain of antennas employed shall not exceed that of a halfwave dipole. The maximum bandwidth that will be authorized is 20 kHz. Tone control transmissions are permitted.

(c) Radio remote control of models is permitted on frequencies 10 kHz removed from these frequencies authorized for fixed and mobile operations in the 72–76 MHz band. Remote control operations are secondary to operation of fixed and mobile stations as provided for in this section.





 $[43~\mathrm{FR}~54791,~\mathrm{Nov}.~22,~1978;~44~\mathrm{FR}~32219,~\mathrm{June}~5,~1979,~\mathrm{as}$ amended at 47 FR 51879, Nov. 18, 1982; 49 FR 41249, Oct. 22, 1984; 54 FR 38681, Sept. 20, 1989; 58 FR 30129, May 26, 1993; 60 FR 37268, July 19, 1995; 62 FR 18928, Apr. 17, 1997; 72 FR 35196, June 27, 2007]