

of the contiguous 48 states (including the District of Columbia) and the State of Alaska, or the State of Hawaii, or any U.S. possession or any foreign point; or between any U.S. possession and any other point; or between the State of Alaska and any other point; or between the State of Hawaii and any other point. In addition, radiocommunications within the contiguous 48 states (including the District of Columbia) in connection with the relaying of international traffic between stations which provide the above service, are also deemed to be the international fixed public radiocommunications service; provided, however, that communications solely between Alaska, or any one of the contiguous 48 states (including the District of Columbia), and either Canada or Mexico are not deemed to be in the international fixed public radiocommunication service when such radiocommunications are transmitted on frequencies above 72 MHz.

International fixed public control service. A fixed service carried on for the purpose of communicating between transmitting stations, receiving stations, message centers or control points in the international fixed public radiocommunication service.

Occupied bandwidth. The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Point-to-point telegraph station. The term "point-to-point telegraph station" means a fixed station authorized for radiotelegraph communication.

Point-to-point telephone station. The term "point-to-point telephone station" means a fixed station authorized for radiotelephone communication.

Point of communication. The term "point of communication" means a specific location designated in the license to which a station is authorized to communicate for the transmission of public correspondence.

Radiotelegraph. The term "radiotelegraph" as used in this part shall be construed to include types N0N, A1A, A2A, A3C, F1B, F2B, and F3C emission.

Radiotelephone. The term "radiotelephone" as used in this part, with

respect to operation on frequencies below 30 MHz, means a system of radiocommunication for the transmission of speech or, in some cases, other sounds by means of amplitude modulation including double sideband (A3E), single sideband (R3E, H3E, J3E) or independent sideband (B3E) transmission.

[38 FR 22478, Aug. 21, 1973, as amended at 49 FR 48701, Dec. 14, 1984]

§ 23.11 Use of radiotelephone emissions by radiotelegraph stations.

The licensee of a radiotelegraph station, using frequencies below 30 MHz, may be authorized to use radiotelephone emissions as defined in § 23.1 for the following purposes:

- (a) Transmission of addressed program material as set forth in § 23.51.
- (b) Controlling the transmission or reception of addressed program material
- (c) Controlling the transmission or reception of facsimile material.

[28 FR 13032, Dec. 5, 1963, as amended at 36 FR 2562, Feb. 6, 1971; 38 FR 22479, Aug. 21, 1973]

§ 23.12 Use of radiotelegraph emissions by radiotelephone stations.

The licensee of a point-to-point radiotelephone station may be authorized to use type N0N, A1A, A2A, F1B, or F2B emission for identification, for test purposes or for the exchange of service messages.

[49 FR 48701, Dec. 14, 1984]

§ 23.13 Types of emission.

Stations in the international fixed public radiocommunication services may be authorized to use any of the types of emission or combinations thereof, described in part 2 of this chapter, as well as new types which may be developed: *Provided*, That harmful interference to adjacent operations is not caused thereby, *And provided further*, That the intelligence to be transmitted will use the bandwidth requested to a degree of efficiency compatible with the current state of the art. A determination of the possibilities of interference will be made as

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outlined in § 23.20. In certain cases frequencies or emissions may be authorized on a temporary basis to determine if interference will occur. During normal operations, emissions shall be centered about an assigned frequency. Non-centered emissions may be employed for short periods of time as needed to avoid interfering signals or meet fluctuating traffic loading: *Provided*, That the occupied bandwidth of these emissions be contained within the authorized bandwidth, *And provided further*, That prior to any such use, the Commission be notified of the reference frequency or frequencies proposed to be used in lieu of the assigned frequency.

[38 FR 22479, Aug. 21, 1973]

§ 23.14 Emission, bandwidth, modulation and transmission characteristics.

In the services under this part emissions are designated by their classification and their necessary bandwidth in accordance with the following procedures:

(a) *Designation of emissions in applications.* In applying for new frequency assignments for emissions not presently authorized, the emissions proposed to be used shall be described and their bandwidths specified as outlined in part 2 of this chapter.

(b) *Designation of emissions in authorizations.* The emission designations used in authorizations will indicate only the maximum value of the necessary bandwidth for each type of modulation authorized.

(c) *New types of emissions.* If application is made for a type of emission not covered by part 2 of this chapter, a full description of the emission must be provided and, if possible, measurements of its occupied bandwidth.

[38 FR 22479, Aug. 21, 1973, as amended at 49 FR 48701, Dec. 14, 1984]

§ 23.15 Emission limitations.

(a) For all transmitters placed into operation after September 19, 1973, and for all transmitters after September 19, 1975, which operate on frequencies below 30 MHz:

(1) The occupied bandwidth of emission shall be confined within the least

possible spectrum space consistent with the state of the art and the required quality of transmission, and in no event shall be more than the authorized bandwidth.

(2) Spurious emissions of transmitters of mean power of 50 kilowatts or less shall be attenuated at least 40 decibels below the mean power of the fundamental without exceeding the power of 50 milliwatts.

(3) Spurious emissions of transmitters of mean power exceeding 50 kilowatts shall be attenuated at least 60 decibels below the mean power of the fundamental and every effort should be made to keep the level of spurious emissions below the power of 50 milliwatts.

(b) For all transmitters placed into operation after September 19, 1973, and for all transmitters after September 19, 1975, which operate on frequencies above 30 MHz, the mean powers of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 decibels;

(2) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: at least 35 decibels;

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: at least 43 plus 10 log (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(c) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than that specified in this section.

[38 FR 22479, Aug. 21, 1973; 38 FR 24901, Sept. 11, 1973]

§ 23.16 Frequency tolerances.

(a) The frequency tolerance for stations in the International Fixed Public Radiocommunications Services shall