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emission may be utilized within the authorized bandwidth. In such cases, the frequency stability requirements of §90.213 do not apply, but the out-ofband emission limits of §90.210(f) must be met.

- (d) Licensees, except for licensees authorized on Channels 161 through 170 and 181 through 185, may combine any number of their authorized, contiguous channels (including channels derived from multiple authorizations) to form channels wider than 5 kHz.
- (e) In combining authorized, contiguous channels (including channels derived from multiple authorizations) to form channels wider than 5 kHz, the emission limits in §90.210(f) must be met only at the outermost edges of the contiguous channels. Transmitters shall be tested to confirm compliance with this requirement with the transmission located as close to the band edges as permitted by the design of the transmitter. The frequency stability requirements in §90.213 shall apply only to the outermost of the contiguous channels authorized to the licensee. However, the frequency stability employed for transmissions operating inside the outermost contiguous channels must be such that the emission limits in §90.210(f) are met over the temperature and voltage variations prescribed in §2.995 of this chapter.
- (f) A Phase I non-nationwide licensee operating a paging base station, or a fixed station transmitting on frequencies in the 220–221 MHz band, may only operate such stations at the coordinates of the licensee's authorized land mobile base station.
- (g) The transmissions of a Phase I non-nationwide licensee's paging base station, or fixed station transmitting on frequencies in the 220–221 MHz band, must meet the requirements of §§ 90.723(d), (g), (h), and (k), and 90.729, and such a station must operate at the effective radiated power and antenna height-above-average-terrain prescribed in the licensee's land mobile base station authorization.
- (h) Licensees using 220–222 MHz spectrum for geophysical telemetry operations are authorized to operate fixed stations on a secondary, non-interference basis to licensees operating in the 220–222 MHz band on a primary

basis under the conditions that such licensees:

- (1) Provide notification of their operations to co-channel non-nationwide Phase I licensees with an authorized base station, or fixed station transmitting on frequencies in the 220–221 MHz band, located within 45 km of the secondary licensee's station, to co-channel, Phase II EA or Regional licensee authorized to operate in the EA or REAG in which the secondary licensee's station is located, and to co-channel Phase I or Phase II nationwide licensees:
- (2) Operate only at temporary locations in accordance with the provisions of §1.931 of this chapter;
- (3) Not transmit at a power level greater than one watt ERP:
- (4) Not transmit from an antenna higher than 2 meters (6.6 feet) above ground; and
- (5) Not operate on Channels 111 through 120, 161 through 170, or 181 through 185.
- (i) All licensees constructing and operating base stations or fixed stations on frequencies in the 220–222 MHz band must:
- (1) Comply with any rules and international agreements that restrict use of their authorized frequencies, including the provisions of §90.715 relating to U.S./Mexican border areas:
- (2) Comply with the provisions of §17.6 of this chapter with regard to antenna structures; and
- (3) Comply with the provisions of §§ 1.1301 through 1.1319 of this chapter with regard to actions that may or will have a significant impact on the quality of the human environment.

[56 FR 19603, Apr. 29, 1991, as amended at 56 FR 32517, July 17, 1991; 57 FR 32450, July 22, 1992; 59 FR 59967, Nov. 21, 1994; 62 FR 15997, Apr. 3, 1996; 62 FR 18936, Apr. 17, 1997; 63 FR 32591, June 12, 1998; 63 FR 68971, Dec. 14, 1998]

## § 90.735 Station identification.

- (a) Except for nationwide systems authorized in the 220–222 MHz band, station identification is required pursuant to \$90.425 of this part.
- (b) Trunked systems shall employ an automatic device to transmit the call sign of the base station at 30 minute intervals. The identification shall be made on the lowest frequency in the

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base station trunked group assigned to the licensee. If this frequency is in use at the time identification is required, the identification may be made at the termination of the communication in progress on this frequency.

(c) Station identification may be by voice or International Morse Code. If the call sign is transmitted in International Morse Code, it must be at a rate of between 15 to 20 words per minute, and by means of tone modulation of the transmitter, with the tone frequency being between 800 and 1000 hertz.

(d) Digital transmissions may also be identified by digital transmission of the station call sign. A licensee that identifies its station in this manner must provide the Commission, upon its request, information (such as digital codes and algorithms) sufficient to decipher the data transmission to ascertain the call sign transmitted.

[56 FR 19603, Apr. 29, 1991, as amended at 62 FR 15997, Apr. 3, 1997]

# § 90.739 Number of systems authorized in a geographical area.

There is no limit on the number of licenses that may be authorized to a single licensee.

[62 FR 46214, Sept. 2, 1997]

# § 90.741 Urban areas for Phase I nationwide systems.

Licensees of Phase I nationwide systems must construct base stations, or fixed stations transmitting on frequencies in the 220–221 MHz band, in a minimum of 28 of the urban areas listed in the following Table within ten years of initial license grant. A base station, or fixed station, is considered to be within one of the listed urban areas if it is within 60 kilometers (37.3 miles) of the specified coordinates (coordinates are referenced to North American Datum 1983 (NAD83)).

**TABLE** 

Urban area	North latitude	West longitude
New York, New York-Northeastern New Jersey	40°45′06.4″	73°59′37.5″
Los Angeles-Long Beach, California	34°03′15.0″	118°14′31.3″
Chicago, Illinois-Northwestern Indiana		87°38′22.2″
Philadelphia, Pennsylvania/New Jersey	39°56′58.4″	75°09′19.6″
Detroit, Michigan	42°19′48.1″	83°02′56.7″
Boston, Massachusetts	42°21′24.4″	71°03′23.2″
San Francisco-Oakland, California	37°46′38.7″	122°24′43.9″
Washington, DC/Maryland/Virginia	38°53′51.4″	77°00′31.9″
Dallas-Fort Worth, Texas	32°47′09.5″	96°47′38.0″
Houston, Texas	29°45′26.8″	95°21′37.8″
St Louis, Missouri/Illinois	38°37′45.2″	90°12′22.4″
Miami, Florida	25°46′38.4″	80°11′31.2″
Pittsburgh, Pennsylvania	40°26′19.2″	79°59′59.2″
Baltimore, Maryland	39°17′26.4″	76°36′43.9″
Minneapolis-St Paul, Minnesota	44°58′56.9″	93°15′43.8″
Cleveland, Ohio	41°29′51.2″	81°41′49.5″
Atlanta, Georgia	33°45′10.4″	84°23′36.7″
San Diego, California	32°42′53.2″	117°09′24.1″
Denver, Colorado	39°44′58.0″	104°59′23.9″
Seattle-Everett, Washington	47°36′31.4″	122°20′16.5″
Milwaukee, Wisconsin	43°02′19.0″	87°54′15.3″
Tampa, Florida	27°56′59.1″	82°27′24.3″
Cincinnati, Ohio/Kentucky	39°06′07.2″	84°30′34.8″
Kansas City, Missouri/Kansas	39°04′56.0″	94°35′20.8″
Buffalo, New York	42°52′52.2″	78°52′20.1″
Phoenix, Arizona	33°27′12.2″	112°04′30.5″
San Jose, California	37°20′15.8″	121°53′27.8″
Indianapolis, Indiana		86°09'46.0"
New Orleans, Louisiana	29°56′53.7″	90°04′10.3″
Portland, Oregon/Washington	45°31′05.4″	122°40′39.3″
Columbus, Ohio	39°57′47.2″	83°00′16.7″
Hartford, Connecticut	41°46′12.4″	72°40′47.3″
San Antonio, Texas	29°25′37.8″	98°29′07.1″
Rochester, New York	43°09′41.2″	77°36′20.0″
Sacramento, California		121°29′44.8″
Memphis, Tennessee/Arkansas/Mississippi		90°03′13.3″
Louisville, Kentucky/Indiana		85°45′48.9″
Providence-Pawtucket-Warwick, RI/MA	41°49′32.4″	71°24′39.2″