Description of emission	Necessary bandwidth		Designation of emission
	Formula	Sample calculation	
6. Composite Emissions			
Radio-relay system	B_n=2K÷t, K=1.6	Pulse position modulated by 36 voice channel baseband; pulse width at half amplitude=0.4 us, Bandwidth: 8×10^6 Hz=8 MHz (Bandwidth independent of the number of voice channels)	8M00M7E
Radio-relay system	B_n = 2K/t K=1.6	Pulse position modulated by 36 voice channel baseband: pulse width at half amplitude 0.4 μS; B_n = 8×10^6 Hz = 8 MHz (Bandwidth independent of the number of voice channels)	8M00M7E
Composite transmission digital modulation using DSB-AM (Microwave radio relay system).	B_n = 2RK/$\log_2$S	Digital modulation used to send 5 megabits per second by use of amplitude modulation of the main carrier with 4 signaling states R = 5×10^6 bits per second; K = 1; S = 4; B_n = 5 MHz	5M00K7
Binary Frequency Shift Keying.	(0.03 < 2D/R < 1.0); B_n = 3.86D + 0.27R (1.0 < 2D/R <2) B_n = 2.4D + 1.0R	Digital modulation used to send 1 megabit per second by frequency shift keying with 2 signaling states and 0.75 MHz peak deviation of the carrier R = 1×10^6 bps; D = 0.75×10^6 Hz; B_n = 2.8 MHz	2M80F1D
Multilevel Frequency Shift Keying.	B_n = (R/$\log_2$S) + 2DK	Digital modulation to send 10 megabits per second by use of frequency shift keying with four signaling states and 2 MHz peak deviation of the main carrier R = 10×10^6 bps; D = 2 MHz; K = 1; S = 4; B_n = 9 MHz	9M00F7D
Phase Shift Keying	B_n = 2RK/$\log_2$S	Digital modulation used to send 10 megabits per second by use of phase shift keying with 4 signaling states R = 10×10^6 bps; K = 1; S = 4; B_n = 10 MHz	10M0G7D
Quadrature Amplitude Modulation (QAM).	B_n = 2R/$\log_2$S	64 QAM used to send 135 Mbps has the same necessary bandwidth as 64–PSK used to send 135 Mbps; R = 135×10^6 bps; S = 64; B_n = 45 MHz	45M0W
Minimum Shift Keying ...	2-ary: B_n = R(1.18) 4-ary: B_n = R(2.34)	Digital modulation used to send 2 megabits per second using 2-ary minimum shift keying R = 2.36×10^6 bps; B_n = 2.36 MHz	2M36G1D

[28 FR 12465, Nov. 22, 1963, as amended at 37 FR 8883, May 2, 1972; 37 FR 9996, May 18, 1972; 48 FR 16492, Apr. 18, 1983; 49 FR 48698, Dec. 14, 1984; 68 FR 68543, Dec. 9, 2003]

Subpart D—Call Signs and Other Forms of Identifying Radio Transmissions

AUTHORITY: Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082; 47 U.S.C. 154, 155, 303.

§ 2.301 Station identification requirement.

Each station using radio frequencies shall identify its transmissions according to the procedures prescribed by the rules governing the class of station to which it belongs with a view to the elimination of harmful interference and the general enforcement of applicable radio treaties, conventions, regulations, arrangements, and agreements in force, and the enforcement of the Communications Act of 1934, as amended, and the Commission's rules.

[34 FR 5104, Mar. 12, 1969]

§ 2.302 Call signs.

The table which follows indicates the composition and blocks of international call signs available for assignment when such call signs are required by the rules pertaining to particular classes of stations. When stations operating in two or more classes are authorized to the same licensee for the same location, the Commission may elect to assign a separate call sign to