

the purpose of determining distance, direction, speed, or position by means of a radiolocation device on any frequency available for radiolocation purposes without specific authorization from the Commission, provided type accepted equipment or equipment authorized pursuant to §90.203(b)(4) and (5) is used and all other rule requirements are satisfied.

(Secs. 4, 303, 307, 48 Stat., as amended, 1066, 1082, 1083; 47 U.S.C. 154, 303, 307; secs. 4(i) and 303(r), Communications Act of 1934, as amended, §§0.131 and 0.331 of the Commission's Rules and 5 U.S.C. 553 (b)(3)(B) and (d)(3))

[43 FR 54791, Nov. 22, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §90.19, see the List of CFR Sections Affected in the Finding Aids section of this volume.

**§90.21 Fire Radio Service.**

(a) *Eligibility.* Any territory, possession, state, county, city, town, or simi-

lar governmental entity, and persons or organizations charged with specific fire protection activities are eligible to hold authorizations in the Fire Radio Service to operate radio stations for transmission of communications essential to official fire activities of the licensee. Applications from persons or organizations other than governmental entities must be accompanied by a statement from the governmental entity having legal jurisdiction over the area to be served, supporting the request.

(b) *Frequencies available.* The following table indicates frequencies available for assignment to stations in the Fire Radio Service, together with the class of station(s) to which they are normally assigned and the specific assignment limitations which are explained in paragraph (c) of this section:

FIRE RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations
Kilohertz		
1630 .....	Base or mobile .....	
Megahertz:		
33.42 .....	Mobile or fixed .....	1
33.44 .....	Base or mobile .....	
33.46 .....	Mobile .....	
33.48 .....	Base or mobile .....	
33.50 .....	Mobile .....	
33.52 .....	Base or mobile .....	
33.54 .....	Mobile .....	
33.56 .....	Base or mobile .....	
33.58 .....	Mobile .....	
33.60 .....	Base or mobile .....	
33.62 .....	Mobile .....	
33.64 .....	Base or mobile .....	
33.66 .....	Mobile .....	
33.68 .....	Base or mobile .....	
33.70 .....	.....do .....	
33.72 .....	.....do .....	
33.74 .....	.....do .....	
33.76 .....	.....do .....	
33.78 .....	.....do .....	
33.80 .....	.....do .....	
33.82 .....	.....do .....	
33.84 .....	.....do .....	
33.86 .....	.....do .....	
33.88 .....	.....do .....	
33.90 .....	.....do .....	
33.92 .....	.....do .....	
33.94 .....	.....do .....	
33.96 .....	.....do .....	
33.98 .....	.....do .....	
45.88 .....	.....do .....	2
46.06 .....	.....do .....	
46.08 .....	.....do .....	
46.10 .....	.....do .....	
46.12 .....	.....do .....	
46.14 .....	.....do .....	
46.16 .....	.....do .....	

FIRE RADIO SERVICE FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations
46.18	.....do	
46.20	.....do	
46.22	Mobile	
46.24	.....do	
46.26	.....do	
46.28	.....do	
46.30	Mobile or fixed	1
46.32	Mobile	
46.34	.....do	
46.36	Base or mobile	
46.38	.....do	
46.40	.....do	
46.42	.....do	
46.44	.....do	
46.46	.....do	
46.48	.....do	
46.50	.....do	
72.00 to 76.00	Operational fixed	3
72.44	Mobile	19
72.48	.....do	19
72.52	.....do	19
72.56	.....do	19
72.60	.....do	19
75.44	.....do	19
75.48	.....do	19
75.52	.....do	19
75.56	.....do	19
75.60	.....do	19
150 to 170	Base or mobile	21
153.77	Mobile	
153.7775	.....do	16
153.83	Mobile	18
153.8375	.....do	18, 16
153.890	Mobile	
153.8975	.....do	16
153.950	.....do	
153.9575	.....do	16
154.010	.....do	
154.0175	.....do	16
154.070	.....do	4
154.0775	.....do	4, 16
154.130	Base or mobile	4
154.1375	.....do	4, 16
154.145	.....do	4
154.1525	.....do	4, 16
154.160	.....do	4
154.1675	.....do	4, 16
154.175	.....do	4
154.1825	.....do	4, 16
154.190	.....do	4
154.1975	.....do	4, 16
154.205	.....do	4
154.2125	.....do	4, 16
154.220	.....do	4
154.2275	.....do	4, 16
154.235	.....do	4
154.2425	.....do	4, 16
154.250	.....do	4
154.2575	.....do	4, 16
154.265	.....do	2, 4
154.2725	.....do	2, 4, 16
154.280	.....do	2, 4
154.2875	.....do	2, 4, 16
154.295	.....do	2, 4
154.3025	.....do	2, 4, 16
154.310	.....do	4
154.3175	.....do	4, 16
154.325	.....do	4
154.3325	.....do	4, 16
154.340	.....do	4
154.3475	.....do	4, 16
154.355	.....do	4

## FIRE RADIO SERVICE FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations
154.3625	.....do	4, 26
154.370	.....do	4
154.3775	.....do	4, 16
154.385	.....do	4
154.3925	.....do	4, 16
154.400	.....do	4
154.4075	.....do	4, 16
154.415	.....do	4
154.4225	.....do	4, 16
154.430	.....do	4
154.4375	.....do	4, 16
154.445	.....do	4
154.4525	.....do	4, 16
166.250	.....do	5
169–172	Mobile	14
170.150	Base or mobile	5
220–222	Base and mobile	17
450–470	Fixed, base, or mobile	6, 21
453.0375	Mobile	22
453.050	Base or mobile	7
453.05625	.....do	20
453.06250	.....do	16
453.06875	.....do	20
453.0875	Mobile	22
453.100	Base or mobile	7
453.10625	.....do	7, 20
453.11250	.....do	7, 16
453.11875	.....do	7, 20
453.1375	Mobile	22
453.150	Base or mobile	7
453.15625	.....do	7, 20
453.16250	.....do	7, 16
453.16875	.....do	7, 20
453.1875	Mobile	22
453.200	Base or mobile	7
453.20625	.....do	7, 20
453.21250	.....do	7, 16
453.21875	.....do	7, 20
453.2375	Mobile	22
453.250	Base or mobile	7
453.25625	.....do	7, 20
453.26250	.....do	7, 16
453.26875	.....do	7, 20
453.2875	Mobile	22
453.300	Base or mobile	7
453.30625	.....do	7, 20
453.31250	.....do	7, 16
453.31875	.....do	7, 20
453.3375	Mobile	22
453.350	Base or mobile	7
453.35625	.....do	7, 20
453.36250	.....do	7, 16
453.36875	.....do	7, 20
453.3875	Mobile	22
453.400	Base or mobile	7
453.40625	.....do	7, 20
453.41250	.....do	7, 16
453.41875	.....do	7, 20
453.4375	Mobile	22
453.450	Base or mobile	7
453.45625	.....do	7, 20
453.46250	.....do	7, 16
453.46875	.....do	7, 20
453.4875	Mobile	22
453.500	Base or mobile	7
453.50625	.....do	7, 20
453.51250	.....do	7, 16
453.51875	.....do	7, 20
453.5375	Mobile	22
453.550	Base or mobile	7
453.55625	.....do	7, 20
453.56250	.....do	7, 16

FIRE RADIO SERVICE FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations
453.56875	.....do	7, 20
453.5875	Mobile	22
453.600	Base or mobile	7
453.60625	.....do	7, 20
453.61250	.....do	7, 16
453.61875	.....do	7, 20
453.6375	Mobile	22
453.650	Base or mobile	7
453.65625	.....do	7, 20
453.66250	.....do	7, 16
453.66875	.....do	7, 20
453.6875	Mobile	22
453.700	Base or mobile	7
453.70625	.....do	7, 20
453.71250	.....do	7, 16
453.71875	.....do	7, 20
453.7375	Mobile	22
453.750	Base or mobile	7
453.75625	.....do	7, 20
453.76250	.....do	7, 16
453.76875	.....do	7, 20
453.7875	Mobile	22
453.800	Base or mobile	7
453.80625	.....do	7, 20
453.81250	.....do	7, 16
453.81875	.....do	7, 20
453.8375	Mobile	7, 22
453.850	Base or mobile	7
453.85625	.....do	7, 20
453.86250	.....do	7, 16
453.86875	.....do	7, 20
453.8875	Mobile	22
453.900	Base or mobile	7
453.90625	.....do	7, 20
453.91250	.....do	7, 16
453.91875	.....do	7, 20
453.9375	Mobile	22
453.950	Base or mobile	7
453.95625	.....do	7, 20
453.96250	.....do	7, 16
453.96875	.....do	7, 20
458.0375	Mobile	22
458.050	.....do	7
458.05625	.....do	7, 20
458.06250	.....do	7, 16
458.06875	.....do	7, 20
458.0875	.....do	22
458.100	.....do	7
458.10625	.....do	7, 20
458.11250	.....do	7, 16
458.11875	.....do	7, 20
458.1375	.....do	22
458.150	.....do	7
458.15625	.....do	7, 20
458.16250	.....do	7, 16
458.16875	.....do	7, 20
458.1875	.....do	22
458.200	.....do	7
458.20625	.....do	7, 20
458.21250	.....do	7, 16
458.21875	.....do	7, 20
458.2375	.....do	22
458.250	.....do	7
458.25625	.....do	7, 20
458.26250	.....do	7, 16
458.26875	.....do	7, 20
458.2875	.....do	22
458.300	.....do	7
458.30625	.....do	7, 20
458.31250	.....do	7, 16
458.31875	.....do	7, 20
458.3375	.....do	22

FIRE RADIO SERVICE FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations
458.350 .....	.....do .....	7
458.35625 .....	.....do .....	7, 20
458.36250 .....	.....do .....	7, 16
458.36875 .....	.....do .....	7, 20
458.3875 .....	.....do .....	22
458.400 .....	.....do .....	7
458.40625 .....	.....do .....	7, 20
458.41250 .....	.....do .....	7, 16
458.41875 .....	.....do .....	7, 20
458.4375 .....	.....do .....	22
458.450 .....	.....do .....	7
458.45625 .....	.....do .....	7, 20
458.46250 .....	.....do .....	7, 16
458.46875 .....	.....do .....	7, 20
458.4875 .....	.....do .....	22
458.500 .....	.....do .....	7
458.50625 .....	.....do .....	7, 20
458.51250 .....	.....do .....	7, 16
458.51875 .....	.....do .....	7, 20
458.5375 .....	.....do .....	22
458.550 .....	.....do .....	7
458.55625 .....	.....do .....	7, 20
458.56250 .....	.....do .....	7, 16
458.56875 .....	.....do .....	7, 20
458.5875 .....	.....do .....	22
458.600 .....	.....do .....	7
458.60625 .....	.....do .....	7, 20
458.61250 .....	.....do .....	7, 16
458.61875 .....	.....do .....	7, 20
458.6375 .....	.....do .....	22
458.650 .....	.....do .....	7
458.65625 .....	.....do .....	7, 20
458.66250 .....	.....do .....	7, 16
458.66875 .....	.....do .....	7, 20
458.6875 .....	.....do .....	22
458.700 .....	.....do .....	7
458.70625 .....	.....do .....	7, 20
458.71250 .....	.....do .....	7, 16
458.71875 .....	.....do .....	7, 20
458.7375 .....	.....do .....	22
458.750 .....	.....do .....	7
458.75625 .....	.....do .....	7, 20
458.76250 .....	.....do .....	7, 16
458.76875 .....	.....do .....	7, 20
458.7875 .....	.....do .....	22
458.800 .....	.....do .....	7
458.80625 .....	.....do .....	7, 20
458.81250 .....	.....do .....	7, 16
458.81875 .....	.....do .....	7, 20
458.8375 .....	.....do .....	22
458.850 .....	.....do .....	7
458.85625 .....	.....do .....	7, 20
458.86250 .....	.....do .....	7, 16
458.86875 .....	.....do .....	7, 20
458.8875 .....	.....do .....	22
458.900 .....	.....do .....	7
458.90625 .....	.....do .....	7, 20
458.91250 .....	.....do .....	7, 16
458.91875 .....	.....do .....	7, 20
458.9375 .....	.....do .....	22
458.950 .....	.....do .....	7
458.95625 .....	.....do .....	7, 20
458.96250 .....	.....do .....	7, 16
458.96875 .....	.....do .....	7, 20
460.5125 .....	Mobile .....	22
460.525 .....	Base or mobile .....	8
460.53125 .....	.....do .....	8, 20
460.53750 .....	.....do .....	8, 16
460.54375 .....	.....do .....	8, 20
460.550 .....	.....do .....	8
460.55625 .....	.....do .....	8, 20
460.56250 .....	.....do .....	8, 16

FIRE RADIO SERVICE FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations
460.56875 .....	.....do .....	8, 20
460.575 .....	.....do .....	
460.58125 .....	.....do .....	20
460.58750 .....	.....do .....	16
460.59375 .....	.....do .....	20
460.600 .....	.....do .....	
460.60625 .....	.....do .....	20
460.61250 .....	.....do .....	16
460.61875 .....	.....do .....	20
460.625 .....	.....do .....	
460.63125 .....	.....do .....	20
460.63750 .....	.....do .....	16
460.64375 .....	.....do .....	20
465.5125 .....	Mobile .....	22
465.525 .....	.....do .....	8
465.53125 .....	.....do .....	8, 20
465.53750 .....	.....do .....	8, 16
465.54375 .....	.....do .....	8, 20
465.550 .....	.....do .....	8
465.55625 .....	.....do .....	8, 20
465.56250 .....	.....do .....	8, 16
465.56875 .....	.....do .....	8, 20
465.575 .....	.....do .....	
465.58125 .....	.....do .....	20
465.58750 .....	.....do .....	16
465.59375 .....	.....do .....	20
465.600 .....	.....do .....	
465.60625 .....	.....do .....	20
465.61250 .....	.....do .....	16
465.61875 .....	.....do .....	20
465.625 .....	.....do .....	
465.63125 .....	.....do .....	20
465.63750 .....	.....do .....	16
465.64375 .....	.....do .....	20
470–512 .....	Base or mobile .....	9
806–824 .....	Mobile .....	10
851–869 .....	Base or mobile .....	10
928 and above .....	Operational fixed .....	11
929–930 .....	Base only .....	15
1427 to 1435 .....	Operational fixed, base or mobile .....	12
2450 to 2500 .....	Base or mobile .....	13
10,550 to 10,680*	.....do .....	

\* The frequencies in the band 10.55–1068 GHz are available for Digital Termination Systems and for associated internodal links in the Point-to-Point Microwave Radio Service. No new licenses will be issued under this subpart but current licenses will be renewed.

(c) Explanation of assignment limitations appearing in the frequency table of paragraph (b) of this section:

(1) The maximum output power of any transmitter authorized to operate on this frequency shall not exceed 10 watts.

(2) This frequency is reserved for assignment to stations in this service for intersystem operations only and these operations must be primarily base-mobile communications.

(3) The frequencies available for use at operational fixed stations in the band 72–76 MHz are listed in §90.257(a)(1). These frequencies are shared with other services and are

available only in accordance with the provisions of §90.257.

(4) This frequency is not available for assignment to stations in this service in Puerto Rico or the Virgin Islands.

(5) This frequency may be assigned to stations in the Fire Radio Service, only at points within 240 km. (150 mi.) of New York, NY.

(6) The requirements for secondary fixed use of frequencies in this band are set forth in §90.261.

(7) This frequency is available in this service on a shared basis with all other Public-Safety Radio Services.

(8) This frequency is shared with the Police and Emergency Medical Radio Services.

(9) Subpart L contains rules for assignment of frequencies in the 470–512 MHz band.

(10) Subpart S contains rules for assignment of frequencies in the 806–824 MHz and 851–869 MHz bands.

(11) Assignment of frequencies above 928 MHz for operational-fixed stations is governed by part 94 of this chapter.

(12) This frequency band is available to stations in this service subject to the provisions of §90.259.

(13) Available only on a shared basis with stations in other services, and subject to no protection from interference due to the operation of industrial, scientific, or medical (ISM) devices. In the 2483.5–2500 MHz band, no applications for new stations or modification to existing stations to increase the number of transmitters will be accepted. Existing licensees as of July 25, 1985, or on a subsequent date following as a result of submitting an application for license on or before July 25, 1985, are grandfathered and their operation is co-primary with the Radiodetermination Satellite Service.

(14) Frequencies in this band will be assigned for low power wireless microphones in accordance with the provisions of §90.265.

(15) Frequencies in this band are available only for one-way paging operations in accordance with §90.494.

(16) This frequency is not available in the 150–170 MHz band until August 18, 1996. This frequency will be assigned with an authorized bandwidth not to exceed 11.25 kHz. In the 450–470 MHz band, secondary telemetry operations pursuant to §90.238(e) will be authorized on this frequency.

(17) Subpart T contains rules for assignment of frequencies in the 220–222 MHz band.

(18) The maximum output power of any transmitter authorized to operate on this frequency shall not exceed 100 watts. Stations authorized prior to July 15, 1992 for fixed operations will be permitted to continue such operations, but at a maximum transmitter power output of 10 watts.

(19) This frequency is available to the Fire Radio Service for fire call box operations on a shared basis in the Manufacturers, Forest Products, Special Industrial, Railroad, and Fire Radio

Services and interservice coordination is required. All communications on this frequency must be conducted with persons or organizations charged with specific fire protection responsibility. All operations on this frequency are subject to the provisions of §90.257(b).

(20) This frequency is not available until August 18, 1996. After August 18, 1996 this frequency will be assigned with an authorized bandwidth not to exceed 6 kHz.

(21) Assignment of frequencies in this band are subject to the provisions of §90.173

(22) This frequency is available for systems first licensed prior to August 18, 1995. No new systems will be authorized after August 18, 1995, but prior authorized systems may be modified, expanded, and renewed.

(d) *Additional frequencies available.* In addition to the frequencies shown in the frequency table of this section, the following frequencies are available in this service. (See also §90.253.)

(1) Substitution of frequencies available below 25 MHz may be made in accordance with the provisions of §90.263.

(2) [Reserved]

(3) Frequencies in the band 73.0–74.6 MHz may be assigned to stations authorized their use on or before December 1, 1961, but no new stations will be authorized in this band, nor will expansion of existing systems be permitted. (See also §90.257.)

(4) The frequency bands 31.99 to 32.00 MHz, 33.00 to 33.01 MHz, 33.99 to 34.00 MHz, 37.93 to 38.00 MHz, 39.00 to 39.01 MHz, 39.99 to 40.00 MHz and 42.00 to 42.01 MHz, are available for assignment for developmental operation subject to the provisions of subpart Q.

(5) Frequencies in the 421–430 MHz band are available in the Detroit, Cleveland, and Buffalo areas in accordance with the rules in §§90.273 through 90.281.

(e) *Limitation on number of frequencies assignable.* Normally only two frequencies or pairs of frequencies in the paired frequency mode of operation, will be assigned for mobile service operations by a single applicant in a given area. The assignment of an additional frequency or pair of frequencies will be made only upon a satisfactory showing of need, except that:

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(1) Additional frequencies above 25 MHz may be assigned in connection with the operation of mobile repeaters in accordance with §90.247, notwithstanding this limitation.

(2) The assignment of an additional frequency or frequencies may be authorized notwithstanding this limitation for common, intra-county, intra-fire-district, or intrastate fire coordination operations. The frequency or frequencies requested must be in accordance with a frequency utilization plan, for the area involved, on file with the Commission.

(3) Frequencies in the 25–50 MHz, 150–170 MHz, 450–512 MHz and 902–928 MHz bands may be assigned for the operation of Location and Monitoring Service (LMS) systems in accordance with the provisions of subpart M of this part, notwithstanding this limitation.

(4) A licensee of a radio station in this service may operate radio units for the purpose of determining distance, direction, speed, or position by means of a radiolocation device on any frequency available for radiolocation purposes without specific authorization from the Commission, provided type accepted equipment or equipment authorized pursuant to §90.203(b) (4) and

(5) is used and all other rule requirements are satisfied.

(Secs. 4, 303, 307, 48 Stat., as amended, 1066, 1082, 1083; 47 U.S.C. 154, 303, 307; secs. 4(i) and 303(r), Communications Act of 1934, as amended, §§0.131 and 0.331 of the Commission's Rules and 5 U.S.C. 553 (b)(3)(B) and (d)(3))

[43 FR 54791, Nov. 22, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §90.21, see the List of CFR Sections Affected in the Finding Aids section of this volume.

**§90.23 Highway Maintenance Radio Service.**

(a) *Eligibility.* Any territory, possession, State, county, city, town, and similar governmental entity is eligible to hold authorizations in the Highway Maintenance Radio Service to operate stations for transmission of communications essential to official highway activities of the licensee.

(b) *Frequencies available.* The following table indicates frequencies available for assignment to stations in the Highway Maintenance Radio Service, together with the class of station(s) to which they are normally assigned and the specific assignment limitations which are explained in paragraph (c) of this section:

HIGHWAY MAINTENANCE RADIO SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations
Megahertz:		
33.02 .....	Base or mobile .....	1
33.06 .....	.....do .....	1
33.10 .....	.....do .....	1
37.90 .....	.....do .....	1
37.92 .....	.....do .....	
37.94 .....	.....do .....	1
37.96 .....	.....do .....	
37.98 .....	.....do .....	1
45.68 .....	.....do .....	
45.72 .....	.....do .....	
45.76 .....	.....do .....	
45.80 .....	.....do .....	
45.84 .....	.....do .....	
47.02 .....	.....do .....	2, 17
47.04 .....	.....do .....	2, 17
47.06 .....	.....do .....	2, 17
47.08 .....	.....do .....	2, 17
47.10 .....	.....do .....	2, 17
47.12 .....	.....do .....	2, 17
47.14 .....	.....do .....	2, 17
47.16 .....	.....do .....	2, 17
47.18 .....	.....do .....	2, 17
47.20 .....	.....do .....	2, 17
47.22 .....	.....do .....	2, 17
47.24 .....	.....do .....	2, 17
47.26 .....	.....do .....	2, 17
47.28 .....	.....do .....	2, 17
47.30 .....	.....do .....	2, 17