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(MTF) signal generators must be licensed as radionavigation land test stations (MTF). Transmission must be limited to cases when radiation is necessary and there is no alternative.

(c) Transmissions by emergency locator transmitter (ELT) test stations must be limited to necessary testing of ELTs and to training operations related to the use of such transmitters.

 $[53\ \mathrm{FR}\ 28940,\ \mathrm{Aug.}\ 1,\ 1988,\ \mathrm{as}\ \mathrm{amended}\ \mathrm{at}\ 58\ \mathrm{FR}\ 67696,\ \mathrm{Dec.}\ 22,\ 1993]$

§87.473 Supplemental eligibility.

(a) Licenses for radionavigation land test stations (MTF) will be granted only to applicants engaged in the development, manufacture or maintenance of aircraft radionavigation equipment. Licenses for radionavigation land test stations (OTF) will be granted only to applicants who agree to establish the facility at an airport for the use of the public.

(b) Licenses for ELT test stations will be granted only to applicants to train personnel in the operation and location of ELTs, or for testing related to the manufacture or design of ELTs.

[53 FR 28940, Aug. 1, 1988, as amended at 63 FR 68958, Dec. 14, 1998]

§87.475 Frequencies.

(a) Frequency coordination. The Commission will assign frequencies to radionavigation land stations and radionavigation land test stations after coordination with the FAA. The applicant must notify the appropriate Regional Office of the FAA prior to submission to the Commission of an application for a new station or for modification of an existing station to change frequency, power, location or emission. Each application must include the FAA Regional Office notified and date of notification.

(b) Frequencies available for radionavigation land stations. (1) LORAN-C is a long range navigation system which operates in the 90–110 kHz band.

(2) Radiobeacon stations enable an aircraft station to determine bearing or direction in relation to the radiobeacon station. Radiobeacons operate in the bands 190–285 kHz; 325–435 kHz; 510–525 kHz; and 525–535 kHz. Radiobeacons may be authorized, pri-

marily for off-shore use, in the band 525-535 kHz on a non-interference basis to travelers information stations.

(3) Aeronautical marker beacon stations radiate a vertical distinctive pattern on 75 MHz which provides position information to aircraft.

(4) The following table lists the specific frequencies in the 108.100–111.950 MHz band which are assignable to localizer stations with simultaneous radiotelephone channels and their associated glide path station frequency from the 328.600–335.400 MHz band.

| Localizer (MHz) Glide path (MHz) 108.100 334.700 108.150 334.550 108.300 334.100 108.500 329.900 108.500 329.900 108.500 329.900 108.700 330.500 108.700 330.350 108.900 329.300 108.950 329.150 109.100 331.450 109.300 332.000 109.550 332.600 109.550 332.600 109.750 333.050 109.750 333.050 109.750 333.050 109.750 333.050 109.750 333.050 109.950 333.850 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 111.7 | ne 920.000 900.100 MHZ Sana. | |
|--|------------------------------|------------------|
| 108.150 334.550 108.300 334.100 108.300 334.100 108.500 329.900 108.550 329.970 108.700 330.500 108.750 330.350 108.900 329.300 108.950 329.150 109.100 331.400 109.150 331.250 109.300 332.000 109.550 332.600 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.650 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.050 110.750 330.050 110.750 330.050 110.990 30.800 110.950 330.850 111.50 331.550 111.100 <td< th=""><th>Localizer (MHz)</th><th>Glide path (MHz)</th></td<> | Localizer (MHz) | Glide path (MHz) |
| 108.300 334.100 108.350 333.950 108.500 329.900 108.550 329.750 108.700 330.500 108.750 330.350 108.900 329.300 108.950 329.150 109.100 331.400 109.300 332.000 109.350 331.850 109.500 332.600 109.550 332.450 109.750 333.800 109.750 333.800 109.950 333.850 110.100 334.450 110.100 334.425 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.750 330.050 110.750 330.050 110.900 30.800 110.950 30.800 111.150 331.550 111.100 331.550 111.150 331.550 111.500 <td< th=""><th>108.100</th><th>334.700</th></td<> | 108.100 | 334.700 |
| 108.350 333.950 108.500 329.900 108.500 329.900 108.700 330.500 108.750 330.350 108.900 329.300 108.950 329.150 109.100 331.400 109.150 331.250 109.350 332.600 109.550 332.450 109.700 333.200 109.750 333.500 109.950 333.800 109.950 333.800 109.950 333.650 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.050 110.750 330.050 110.750 330.050 111.900 330.800 110.950 330.800 111.50 331.550 111.100 331.550 111.50 332.500 111.50 | 108.150 | 334.550 |
| 108.500 329.900 108.750 329.750 108.700 330.500 108.750 330.350 108.900 329.300 108.950 329.150 109.100 331.400 109.150 331.250 109.300 332.000 109.500 332.600 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.650 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.050 110.750 330.050 110.750 330.050 110.750 330.050 110.750 330.050 110.750 330.050 110.750 330.050 111.50 331.550 111.100 331.550 111.50 <td< td=""><td>108.300</td><td>334.100</td></td<> | 108.300 | 334.100 |
| 108.550 329.750 108.700 330.500 108.700 330.350 108.900 329.300 108.950 329.150 109.100 331.250 109.300 332.200 109.350 331.850 109.550 332.450 109.700 333.200 109.750 333.800 109.950 333.800 109.950 333.800 109.950 333.800 110.100 334.425 110.300 334.000 110.550 329.600 110.550 329.600 110.750 330.200 110.750 330.200 110.750 330.200 110.950 330.800 110.950 330.800 111.100 331.750 111.100 331.750 111.50 332.900 111.50 332.900 111.50 332.900 111.50 332.900 111.50 33 | 108.350 | 333.950 |
| 108.700 330.500 108.750 330.350 108.900 329.300 108.950 329.150 109.100 331.400 109.150 331.250 109.350 332.000 109.350 332.450 109.550 332.450 109.700 333.200 109.750 333.350 109.900 333.800 109.950 333.650 110.100 334.450 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.250 110.750 330.250 110.750 330.250 110.900 330.800 110.950 330.800 111.150 331.550 111.150 331.550 111.50 332.900 111.50 332.900 111.50 332.900 111.550 332.750 111.750 333.550 111.750 | 108.500 | 329.900 |
| 108.750 | 108.550 | 329.750 |
| 108.900 329.300 108.950 329.150 109.100 331.400 109.150 331.250 109.300 332.000 109.550 332.600 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.650 110.100 334.450 110.150 334.250 110.350 334.850 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.900 330.800 111.900 330.800 111.150 331.550 111.150 331.550 111.50 332.900 111.50 332.900 111.50 332.900 111.50 332.900 111.50 333.350 | 108.700 | 330.500 |
| 108.950 329.150 109.100 331.400 109.100 331.250 109.300 332.000 109.350 331.850 109.550 332.450 109.750 333.200 109.750 333.800 109.990 333.800 109.950 334.450 110.100 334.425 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.750 330.050 110.750 330.050 110.900 330.800 110.950 330.800 111.100 331.750 111.150 331.550 111.50 332.900 111.550 332.900 111.550 332.900 111.750 333.350 111.750 333.350 | 108.750 | 330.350 |
| 109.100 331.400 109.150 331.250 109.300 332.000 109.350 331.850 109.500 332.600 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.650 110.100 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.500 110.750 330.500 110.750 330.500 110.900 330.800 110.950 330.800 111.100 331.750 111.100 331.550 111.50 332.900 111.550 332.900 111.550 332.900 111.550 332.750 111.700 333.500 111.750 333.500 111.750 333.550 | 108.900 | 329.300 |
| 109.150 331.250 109.300 332.000 109.350 331.850 109.500 332.600 109.550 332.450 109.700 333.050 109.900 333.800 109.900 333.800 109.950 333.450 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.990 330.800 110.950 330.650 111.100 331.750 111.350 332.300 111.50 332.900 111.50 332.900 111.50 332.900 111.50 332.900 111.50 333.350 111.750 333.350 | 108.950 | 329.150 |
| 109.300 332.000 109.350 331.850 109.500 332.600 109.550 332.450 109.700 333.200 109.750 333.800 109.950 333.800 109.950 334.800 110.100 334.425 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.200 110.750 330.200 110.990 330.800 110.950 330.800 111.100 331.750 111.150 331.550 111.500 332.900 111.550 332.900 111.550 332.900 111.550 332.900 111.750 333.550 111.750 333.350 111.750 333.350 | 109.100 | 331.400 |
| 109.350 | 109.150 | 331.250 |
| 109.500 332.600 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.400 110.100 334.400 110.150 334.250 110.300 335.000 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.900 330.850 111.150 331.700 111.150 331.550 111.350 332.150 111.500 332.900 111.550 332.900 111.550 332.900 111.750 333.350 111.750 333.350 111.750 333.350 111.900 331.100 | 109.300 | 332.000 |
| 109.550 332.450 109.700 333.200 109.750 333.050 109.900 333.800 109.950 333.650 110.100 334.420 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.200 110.750 330.200 110.750 330.050 110.900 330.800 110.950 330.650 111.100 331.750 111.350 332.300 111.550 332.900 111.550 332.900 111.550 332.900 111.750 333.350 111.750 333.350 | 109.350 | 331.850 |
| 109.700 333.200 109.750 333.500 109.900 333.800 109.950 333.650 110.100 334.450 110.300 335.000 110.350 334.850 110.500 329.600 110.750 330.250 110.750 330.050 110.750 330.800 110.900 330.800 110.950 330.650 111.100 331.750 111.350 332.550 111.550 332.900 111.550 332.900 111.550 332.900 111.750 333.350 111.750 333.350 | | |
| 109.750 333.050 333.050 109.900 333.800 109.950 333.650 334.400 110.150 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.950 330.650 111.10.900 330.800 110.950 110.950 330.550 111.150 331.750 111.150 331.550 111.350 332.300 111.350 332.300 111.350 332.900 111.550 332.750 111.700 333.500 111.550 332.750 111.700 333.500 111.750 333.550 111.700 333.500 111.750 333.550 111.700 333.500 111.750 333.550 111.700 333.500 331.100 331.100 | | |
| 109.900 333.800 333.800 109.950 333.650 110.100 334.400 110.150 334.250 110.300 335.000 110.350 329.600 110.550 329.600 110.700 330.200 110.750 330.050 110.750 330.050 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.550 332.150 111.500 332.900 111.550 332.900 111.550 332.900 111.550 332.900 111.550 332.900 111.550 333.350 111.700 333.350 111.770 333.350 111.770 333.350 111.770 333.350 111.770 333.350 111.900 331.100 | | |
| 109.950 | | |
| 110.100 334.400 110.150 334.250 110.300 335.000 110.350 334.850 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.950 330.800 110.950 330.800 110.950 330.550 111.100 331.700 111.150 331.550 111.300 332.900 111.350 332.250 111.500 332.900 111.550 332.750 111.700 333.350 111.750 333.350 111.750 333.350 111.750 333.350 | | |
| 110.150 | | |
| 110.300 | | |
| 110.350 | | |
| 110.500 329.600 110.550 329.450 110.700 330.200 110.750 330.050 110.900 330.800 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.150 111.500 332.900 111.550 111.500 332.900 111.550 332.900 111.700 333.350 111.790 333.350 111.790 333.350 | | |
| 110.550 329.450 110.700 330.200 110.750 330.050 110.900 330.800 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.900 111.550 332.900 111.550 332.900 111.750 333.350 111.790 333.350 111.790 333.350 | | |
| 110.700 330.200 110.750 330.505 110.900 330.800 110.950 330.650 111.100 331.750 111.150 331.550 111.300 332.300 111.550 332.150 111.550 332.750 111.700 333.500 111.750 333.550 111.790 333.500 111.790 333.500 111.790 333.500 | | |
| 110.750 330.050 110.900 330.800 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.550 111.750 333.350 111.900 331.100 | | |
| 110.900 330.800 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 110.950 330.650 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.150 111.550 332.900 111.550 332.950 111.700 333.500 111.750 333.350 111.750 333.350 111.790 331.100 | | |
| 111.100 331.700 111.150 331.550 111.300 332.300 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.150 331.550 111.300 332.300 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.300 332.300 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.350 332.150 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.500 332.900 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.550 332.750 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.700 333.500 111.750 333.350 111.900 331.100 | | |
| 111.750 333.350 111.900 331.100 | | |
| 111.900 331.100 | | |
| | | |
| 111.950 330.950 | | |
| | 111.950 | 330.950 |

(5) VHF omni-range (VOR) stations are to be assigned frequencies in the 112.050-117.950 MHz band (50 kHz channel spacing) and the following frequencies in the 108-112 MHz band:

| 108.200 | 108.650 |
|---------|---------|
| 108.250 | 108.800 |
| 108.400 | 108.850 |
| 108.450 | 109.000 |
| 108.600 | 109.050 |