### **Federal Communications Commission**

# §22.727 Power limits for conventional rural radiotelephone transmitters.

The transmitting power of transmitters operating on the channels listed in §22.725 must not exceed the limits in this section.

(a) Maximum ERP. The effective radiated power (ERP) of central office and rural subscriber station transmitters must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
152–153	1400
157–159	150
454–455	3500
459–460	150

(b) *Basic power limit.* Except as provided in paragraph (d) of this section, the ERP of central office station transmitters must not exceed 500 Watts.

(c) Height-power limits. Except as provided in paragraph (d) of this section, the ERP of central office station transmitters must not exceed the amount that would result in an average distance to the "service contour" of 41.6 kilometers (26 miles) for VHF channels or 30.7 kilometers (19 miles) for UHF channels. The average distance to the "service contour" is calculated by taking the arithmetic mean of the distances determined using the procedures specified in §22.567 for the eight cardinal radial directions, excluding cardinal radial directions for which 90% or more of the distance so calculated is over water.

(d) Encompassed interfering contour areas. Central office station transmitters are exempt from the basic power and height-power limits of this section if the area within their interfering contours is totally encompassed by the interfering contours of operating cochannel central office station transmitters controlled by the same licensee. For the purpose of this paragraph, operating transmitters are authorized transmitters that are providing service to subscribers.

(e) Adjacent channel protection. The ERP of central office station transmitters must not exceed 500 Watts if they transmit on channel 454.025 MHz and are located less than 7 kilometers (4.3 miles) from any Private Radio Services station receiving on adjacent channel 454.000 MHz.

 $[59\ {\rm FR}\ 59507,\ {\rm Nov.}\ 17,\ 1994,\ {\rm as}\ {\rm amended}\ {\rm at}\ 70\ {\rm FR}\ 19309,\ {\rm Apr.}\ 13,\ 2005]$ 

#### §22.731 Emission limitations.

Upon application for multichannel operation, the FCC may authorize emission bandwidths wider than those specified in §22.357, provided that spectrum utilization is equal to or better than that achieved by single channel operation.

#### §22.733 Priority of service.

Within the Rural Radiotelephone Service, the channels listed in §22.725 are intended primarily for use in rendition of public message service between rural subscriber and central office stations and to provide radio trunking facilities between central offices. The channels may also be used, however, for the rendition of private leased-line communication service provided that such usage would not reduce or impair the extent or quality of communication service that would be available, in the absence of private leased-line service, to the general public receiving or subsequently requesting public message service from a central office.

#### §22.737 Temporary fixed stations.

The FCC may, upon proper application therefor, authorize the construction and operation of temporary fixed stations. Temporary fixed stations are to be used as rural subscriber, interoffice, or central office stations when those stations are unavailable or when service from those stations is disrupted by storms or emergencies.

(a) Six month limitation. If it is necessary for a temporary fixed station to remain at the same location for more than six months, the licensee of that station must apply for authorization to operate the station at the specific location at least 30 days before the end of the six month period.

(b) International communications. Communications between the United States and Canada or Mexico must not be carried using a temporary fixed station without prior authorization from the FCC. Licensees desiring to carry

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such communications should apply sufficiently in advance to allow for the time necessary to coordinate with Canada or Mexico.

#### BASIC EXCHANGE TELEPHONE RADIO SYSTEMS

# §22.757 Channels for basic exchange telephone radio systems.

The channels listed in §22.725 are also allocated for paired assignment to transmitters in basic exchange telephone radio systems.

[70 FR 19309, Apr. 13, 2005]

## §22.759 Power limit for BETRS.

The effective radiated power of central office and rural subscriber station transmitters used in basic exchange telephone radio systems must not exceed the limits in this section.

(a) *Maximum ERP*. The effective radiated power (ERP) of central office and rural subscriber station transmitters in BETRS must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
152–153	1400
157–159	150
454–455	3500
459–460	150

(b) *Height-power limit*. The ERP of central office stations in BETRS must not exceed the amount calculated as follows:

ERP<sub>w</sub>=557,418÷h<sub>m</sub>2

where  $\mathrm{ERP}_{\mathrm{w}}$  is the effective radiated power in Watts

 $h_{\rm m}$  is the average (eight cardinal radial) antenna height above average terrain in meters

## Subpart G—Air-Ground Radiotelephone Service

## §22.801 Scope.

The rules in this subpart govern the licensing and operation of air-ground stations and systems. The licensing and operation of these stations and systems is also subject to rules elsewhere in this part and in part 1 of this chapter that generally apply to the Public Mobile Services. In case of con-

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flict, however, the rules in this subpart govern.

[70 FR 19309, Apr. 13, 2005]

### GENERAL AVIATION AIR-GROUND STATIONS

## § 22.805 Channels for general aviation air-ground service.

The following channels are allocated for the provision of radiotelephone service to airborne mobile subscribers in general aviation aircraft. These channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

SIGNALLING CHANNEL PAIR

Ground	Airborne mobile
454.675	459.675

COMMUNICATION CHANNEL PAIRS

Ground	Airborne mobile
454.700	459.700
454.725	459.725
454.750	459.750
454.775	459.775
454.800	459.800
454.825	459.825
454.850	459.850
454.875	459.875
454.900	459.900
454.925	459.925
454.950	459.950
454.975	459.975

(a) Channel 454.675 MHz is assigned to each and every ground station, to be used only for automatically alerting airborne mobile stations of incoming calls.

(b) All airborne mobile channels are assigned for use by each and every airborne mobile station.

## § 22.807 General aviation air-ground application requirements.

In addition to the information required by subparts B and D of this part, FCC Form 601 applications for authorization to operate a general aviation air-ground station must contain the applicable supplementary information described in this section.

(a) *Administrative information*. The following information is required by FCC Form 601.

(1) The number of transmitter sites for which authorization is requested.