

# US Amateur Radio Bands

## US AMATEUR POWER LIMITS

FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

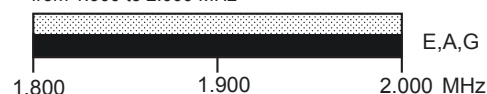
**Effective Date**  
**March 5, 2012**

Published by:  
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**AMATEUR RADIO®**  
**www.arrl.org**  
225 Main Street, Newington, CT USA 06111-1494

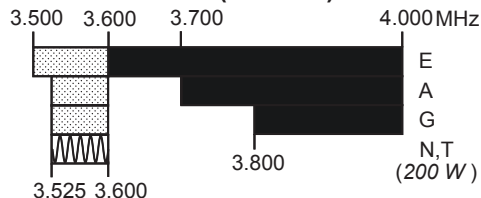


### 160 Meters (1.8 MHz)

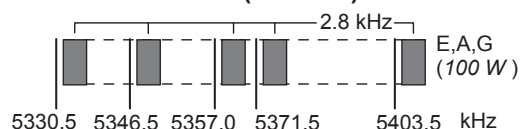
Avoid interference to radiolocation operations from 1.900 to 2.000 MHz



### 80 Meters (3.5 MHz)

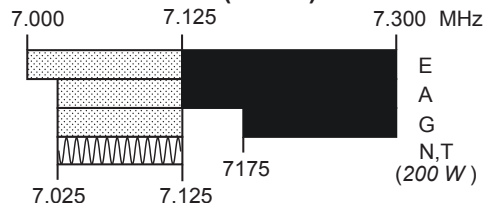


### 60 Meters (5.3 MHz)



General, Advanced, and Amateur Extra licensees may operate on these five channels on a secondary basis with a maximum effective radiated output of 100 W PEP. Permitted operating modes include upper sideband voice (USB), CW, RTTY, PSK31 and other digital modes such as PACTOR III as defined by the FCC Report and Order of November 18, 2011. USB is limited to 2.8 kHz centered on 5332, 5348, 5358.5, 5373 and 5405 kHz. CW and digital emissions must be centered 1.5 kHz above the channel frequencies indicated above. Only one signal at a time is permitted on any channel.

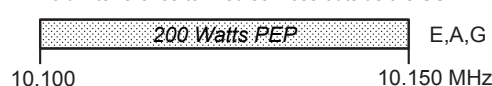
### 40 Meters (7 MHz)



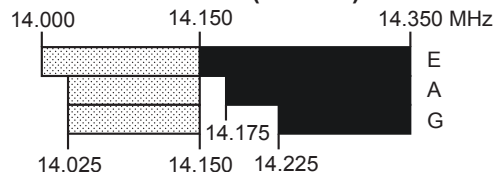
Phone and Image modes are permitted between 7.075 and 7.100 MHz for FCC licensed stations in ITU Regions 1 and 3 and by FCC licensed stations in ITU Region 2 West of 130 degrees West longitude or South of 20 degrees North latitude. See Sections 97.305(c) and 97.307(f)(11). Novice and Technician licensees outside ITU Region 2 may use CW only between 7.025 and 7.075 MHz and between 7.100 and 7.125 MHz. 7.200 to 7.300 MHz is not available outside ITU Region 2. See Section 97.301(e). These exemptions do not apply to stations in the continental US.

### 30 Meters (10.1 MHz)

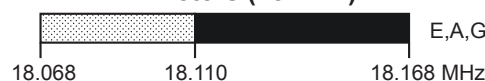
Avoid interference to fixed services outside the US.



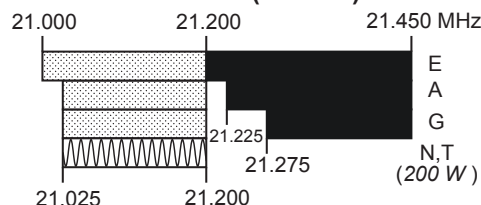
### 20 Meters (14 MHz)



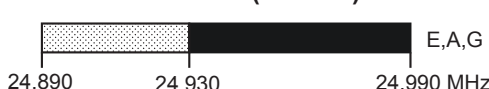
### 17 Meters (18 MHz)



### 15 Meters (21 MHz)



### 12 Meters (24 MHz)



### 10 Meters (28 MHz)



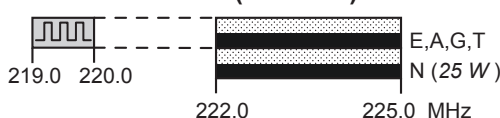
### 6 Meters (50 MHz)



### 2 Meters (144 MHz)



### 1.25 Meters (222 MHz)



\*Geographical and power restrictions may apply to all bands above 420 MHz. See *The ARRL Operating Manual* for information about your area.

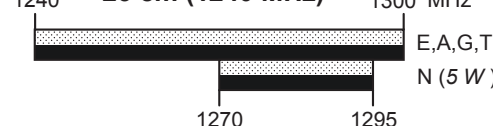
### 70 cm (420 MHz) \*



### 33 cm (902 MHz) \*



### 23 cm (1240 MHz) \*



All licensees except Novices are authorized all modes on the following frequencies:

|               |                 |                   |
|---------------|-----------------|-------------------|
| 2300-2310 MHz | 10.0-10.5 GHz * | 122.25-123.0 GHz  |
| 2390-2450 MHz | 24.0-24.25 GHz  | 134-141 GHz       |
| 3300-3500 MHz | 47.0-47.2 GHz   | 241-250 GHz       |
| 5650-5925 MHz | 76.0-81.0 GHz   | All above 275 GHz |

\* No pulse emissions

## KEY

### Note:

CW operation is permitted throughout all amateur bands.

MCW is authorized above 50.1 MHz, except for 144.0-144.1 and 219-220 MHz.

Test transmissions are authorized above 51 MHz, except for 219-220 MHz

- = RTTY and data
- = phone and image
- = CW only
- = SSB phone
- = USB phone, CW, RTTY, and data.
- = Fixed digital message forwarding systems only

E = Amateur Extra  
A = Advanced  
G = General  
T = Technician  
N = Novice

See *ARRLWeb* at [www.arrl.org](http://www.arrl.org) for detailed band plans.

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