

**Home School
Ham Radio
Week 8**

Which of the following is a purpose of the Amateur Radio Service as stated in the FCC rules and regulations?

- A** Providing personal radio communications for as many citizens
- B** Providing communications for international non-profit organizations
- C** Advancing skills in the technical and communication phases of the radio art
- D** All of these choices are correct

Which agency regulates and enforces the rules for the Amateur Radio Service in the United States?

- A** FEMA
- B** Homeland Security
- C** The FCC
- D** All of these choices are correct

World



Government



Federal
Communications
Commission



Innovation, Science and
Economic Development Canada

Civilian

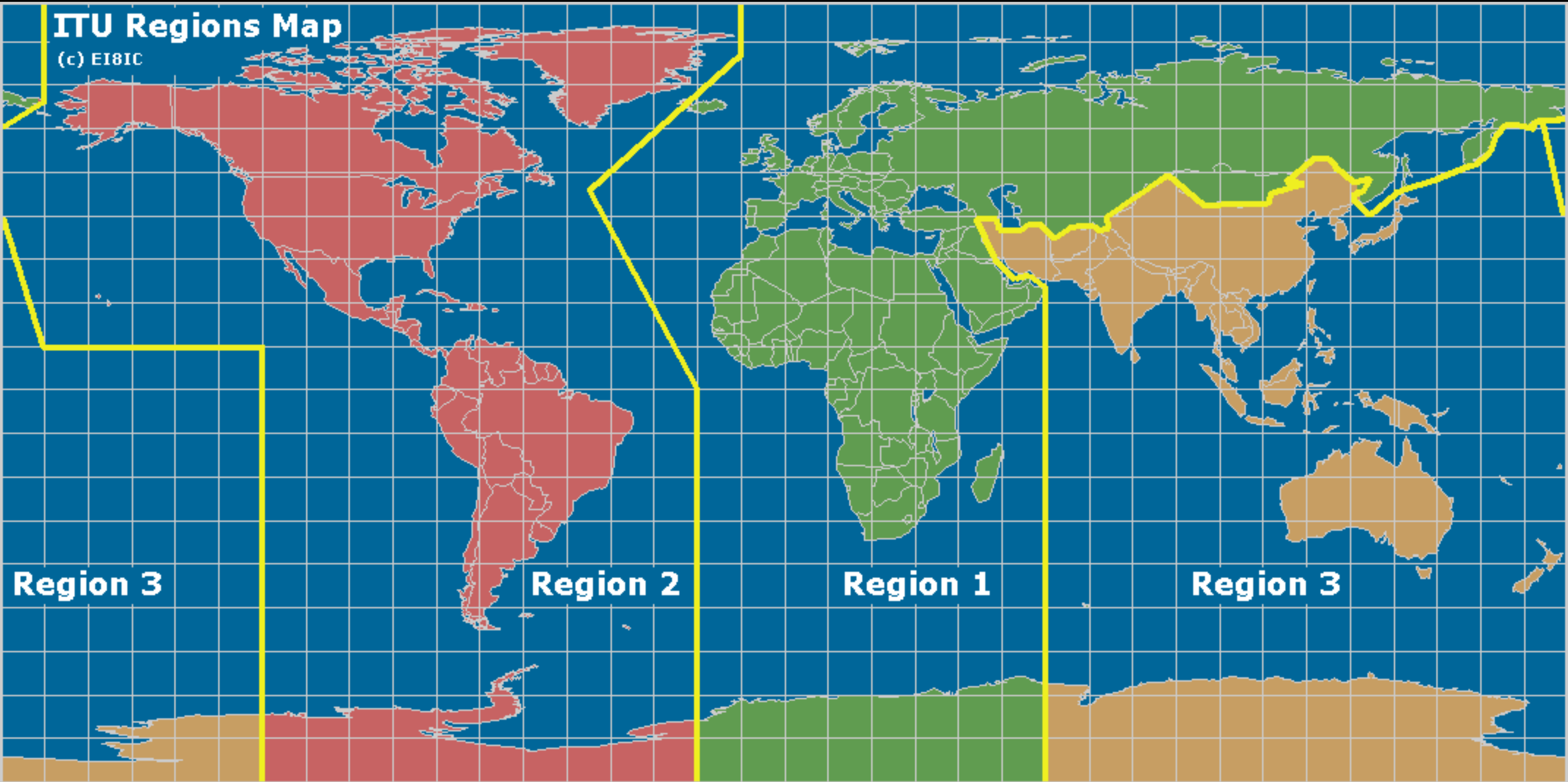


American
Radio
Relay
League



ITU Regions Map

(c) EI8IC



Region 2

Region 1

Region 3

Region 3

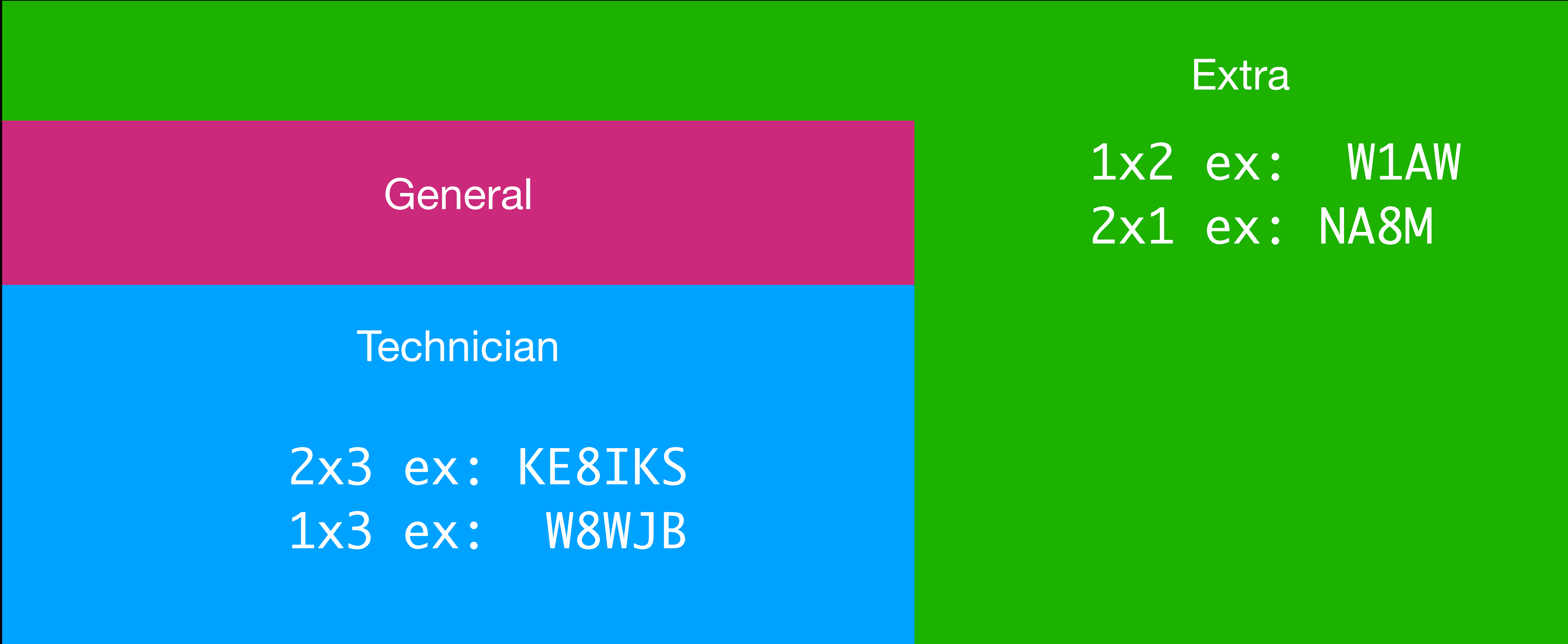
With which countries are FCC-licensed amateur radio stations prohibited from exchanging communications?

- A** Any country whose administration has notified the International Telecommunications Union (ITU) that it objects to such communications
- B** Any country whose administration has notified the American Radio Relay League (ARRL) that it objects to such communications
- C** Any country engaged in hostilities with another country
- D** Any country in violation of the War Powers Act of 1934

What is proof of possession of an FCC-issued operator/primary license grant?

- A** A printed operator/primary station license issued by the FCC must be displayed at the transmitter site
- B** The control operator must have an operator/primary station license in his or her possession when in control of a transmitter
- C** The control operator's operator/primary station license must appear in the FCC ULS consolidated licensee database
- D** All of these choices are correct

US Prefixes: K, N, W



Under which of the following circumstances may an amateur radio station make one-way transmissions?

- A Under no circumstances**
- B When transmitting code practice, information bulletins, or transmissions necessary to provide emergency communications**
- C At any time, as long as no music is transmitted**
- D At any time, as long as the material being transmitted did not originate from a commercial broadcast station**

When is it permissible to transmit messages encoded to hide their meaning?

- A** Only during contests
- B** Only when operating mobile
- C** Only when transmitting control commands to space stations or radio control craft
- D** Only when frequencies above 1280 MHz are used

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Under what conditions is an amateur station authorized to transmit music using a phone emission?

- A** **When incidental to an authorized retransmission of manned spacecraft communications**
- B** **When the music produces no spurious emissions**
- C** **When the purpose is to interfere with an illegal transmission**
- D** **When the music is transmitted above 1280 MHz**

When may amateur radio operators use their stations to notify other amateurs of the availability of equipment for sale or trade?

- A** **When the equipment is normally used in an amateur station and such activity is not conducted on a regular basis**
- B** **When the asking price is \$100.00 or less**
- C** **When the asking price is less than its appraised value**
- D** **When the equipment is not the personal property of either the station licensee or the control operator or their close relatives**

What, if any, are the restrictions concerning transmission of language that may be considered indecent or obscene?

- A** The FCC maintains a list of words that are not permitted to be used on amateur frequencies
- B** Any such language is prohibited
- C** The ITU maintains a list of words that are not permitted to be used on amateur frequencies
- D** There is no such prohibition

What is an amateur station control point?

- A** The location of the station's transmitting antenna
- B** The location of the station transmitting apparatus
- C** The location at which the control operator function is performed
- D** The mailing address of the station licensee

Who does the FCC presume to be the control operator of an amateur station, unless documentation to the contrary is in the station records?

- A** The station custodian
- B** The third-party participant
- C** The person operating the station equipment
- D** The station licensee

What determines the transmitting privileges of an amateur station?

- A** The frequency authorized by the frequency coordinator
- B** The frequencies printed on the license grant
- C** The highest class of operator license held by anyone on the premises
- D** The class of operator license held by the control operator

US Amateur Radio Bands

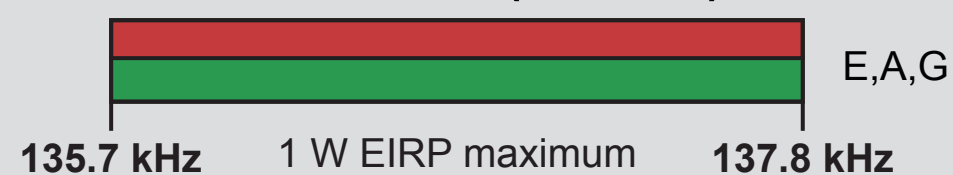
US AMATEUR POWER LIMITS — FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.



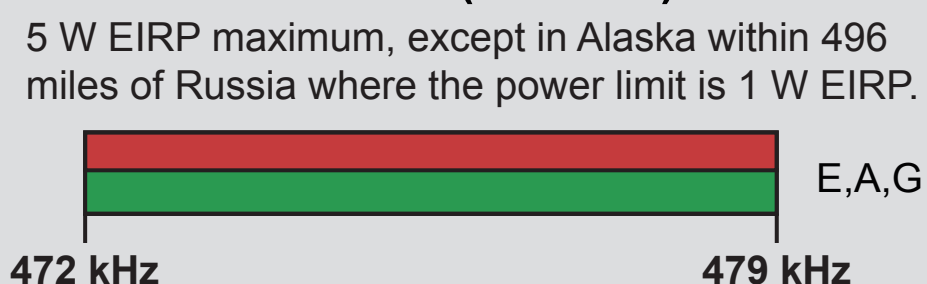
ARRL The national association for **AMATEUR RADIO**

Amateurs wishing to operate on either 2,200 or 630 meters must first register with the Utilities Technology Council online at <https://utc.org/plc-database-amateur-notification-process/>. You need only register once for each band.

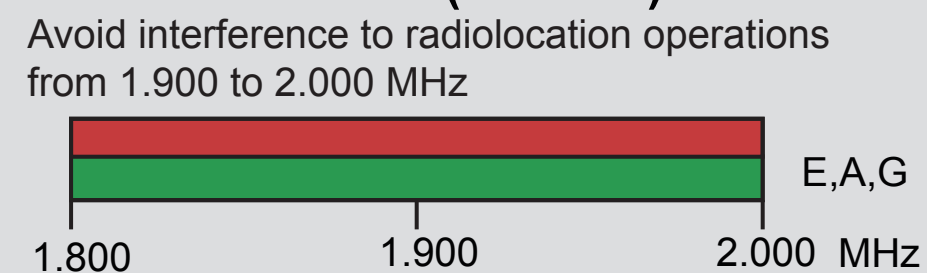
2,200 Meters (135 kHz)



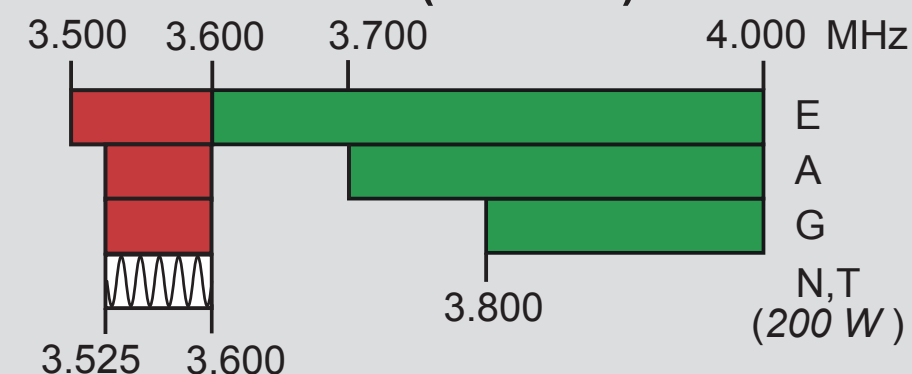
630 Meters (472 kHz)



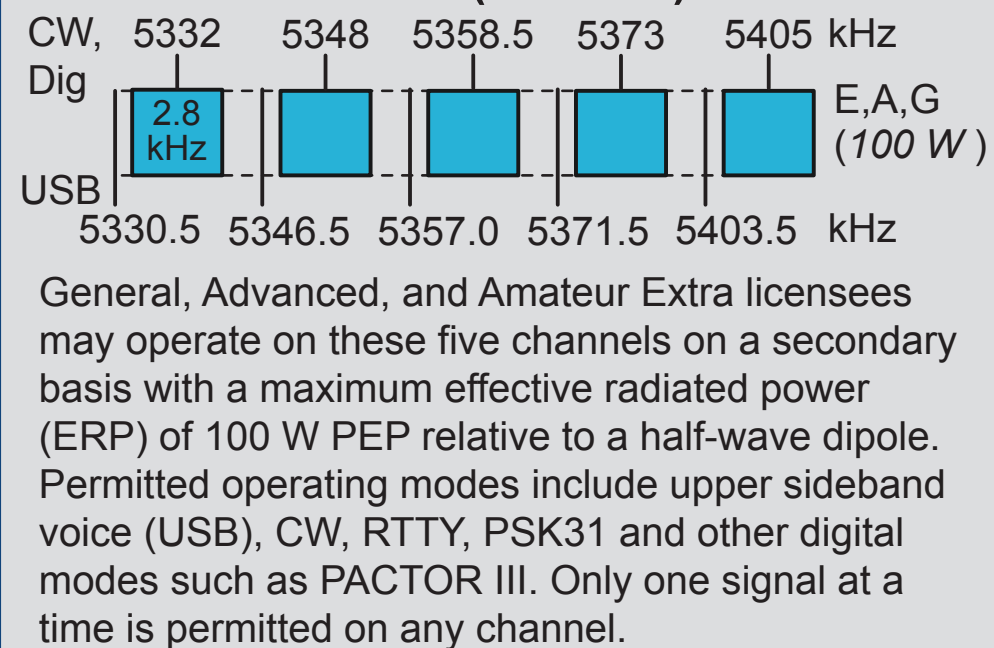
160 Meters (1.8 MHz)



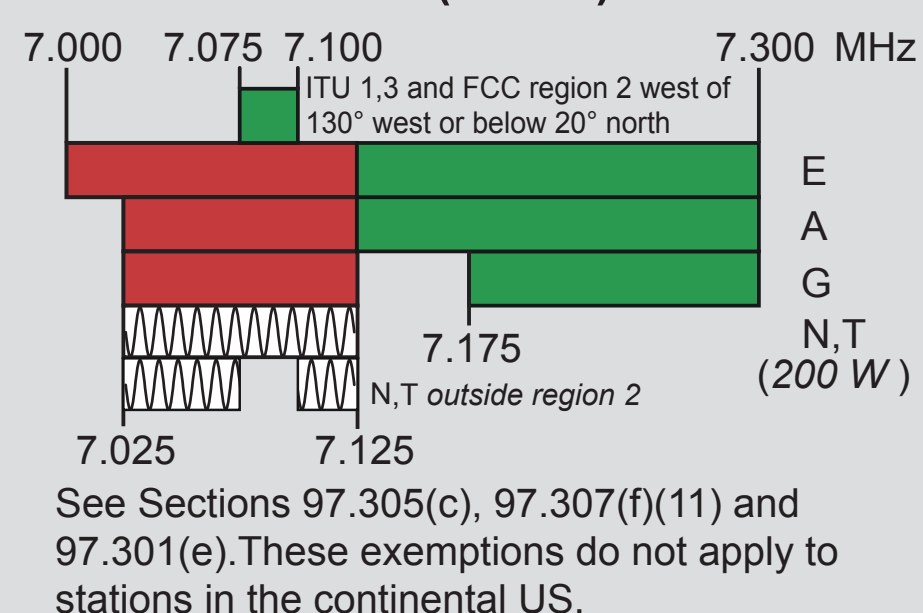
80 Meters (3.5 MHz)



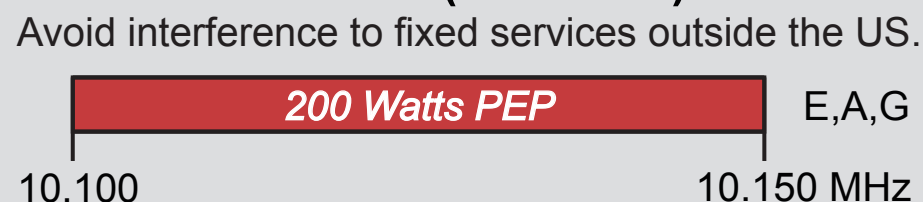
60 Meters (5.3 MHz)



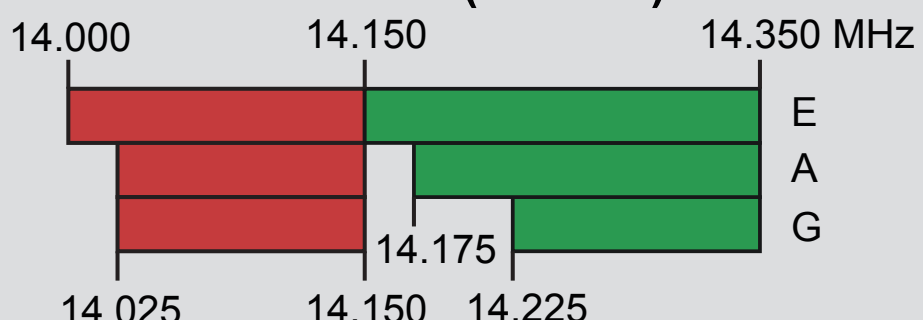
40 Meters (7 MHz)



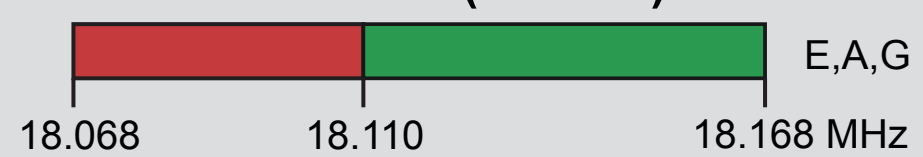
30 Meters (10.1 MHz)



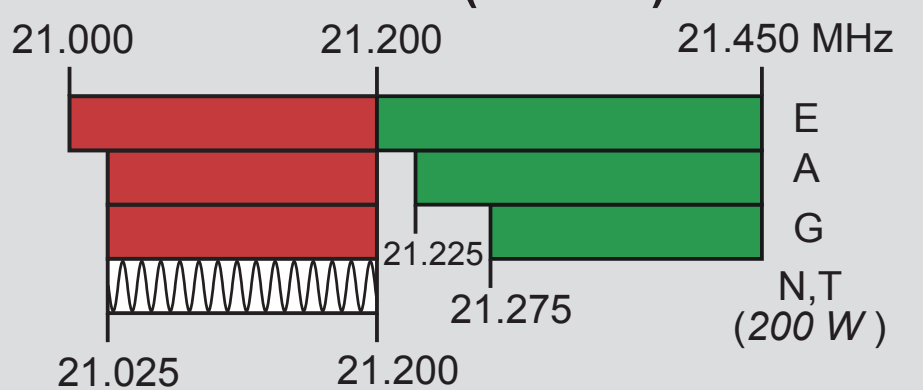
20 Meters (14 MHz)



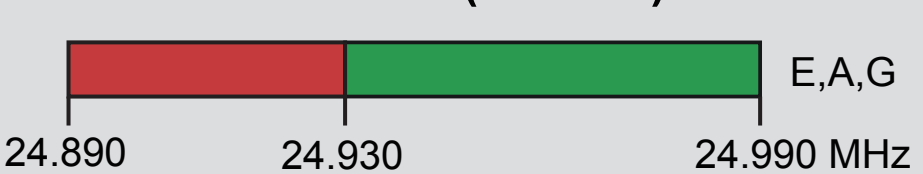
17 Meters (18 MHz)



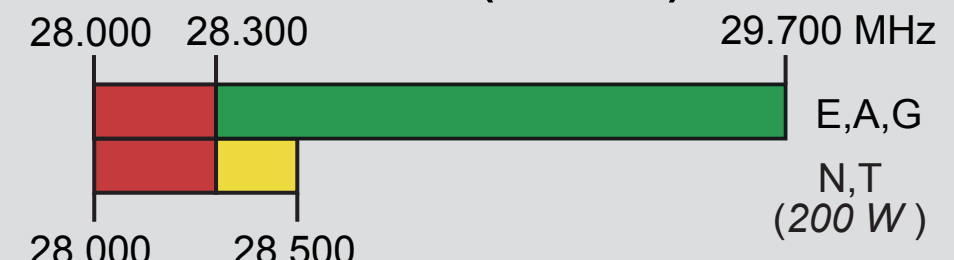
15 Meters (21 MHz)



12 Meters (24 MHz)



10 Meters (28 MHz)



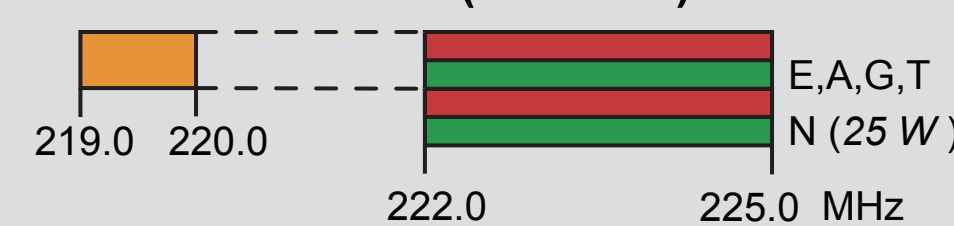
6 Meters (50 MHz)



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.

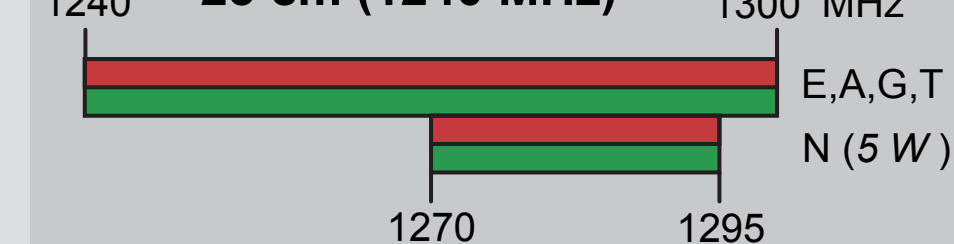
70 cm (420 MHz)*



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 for detailed band plans.

ARRL We're At Your Service

ARRL Headquarters:
860-594-0200 (Fax 860-594-0259)
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Toll-Free 1-888-277-5289 (860-594-0338)
email: membership@arrl.org

Getting Started in Amateur Radio:
Toll-Free 1-800-326-3942 (860-594-0355)
email: newham@arrl.org

Exams: 860-594-0300 email: vec@arrl.org

On which HF bands does a Technician class operator have phone privileges?

- A** None
- B** 10 meter band only
- C** 80 meter, 40 meter, 15 meter and 10 meter bands
- D** 30 meter band only

Emergency Services



Radio Amateur Civil Emergency Service

- Government
- Newaygo Emergency Services
- War Powers Act of 1941
- Special privileges during emergency



Amateur Radio Emergency Service

- Citizen, run by ARRL & RAC
- Emergency Coordinators
- May participate in any emergency or event

When do the FCC rules NOT apply to the operation of an amateur station?

- A** When operating a RACES station
- B** When operating under special FEMA rules
- C** When operating under special ARES rules
- D** Never, FCC rules always apply