

Communicating With Other Hams Chapter 6

Bands

What is a **band plan**, beyond the privileges established by the **FCC**?

A **voluntary guideline** for using different modes or activities within an amateur band

2 M Band

144 to 148 MHz

Most common repeater frequency offset **plus or minus 600 kHz**

70 cm Band

420 to 450 MHz >>> **446.000 MHz**

Most common repeater frequency offset **plus or minus 5 MHz**

Identifications and Call Signs

Call another station

Say the station's call sign then identify with your call sign

Example: W1ABC this is N6HGC

What is the meaning of the procedural signal "**CQ**"? **Calling any station**

How to indicate that you are listening on a repeater? **Say your call sign**

How to respond to a CQ? Say the **other station's call sign** followed by **your call sign**

FCC rules regarding power >>> amateur must **use the minimum transmitter power necessary**

Station identification is required at least **every ten minutes** during the test and **at the end**

On-air transmissions to **test** antennas >>> **Identify the transmitting station**

Method is encouraged by the FCC when identifying your station >>> Use of a **phonetic alphabet**

What is the "Q" Signal?

Indicates that you are receiving interference from other stations >>> **QRM**

Indicates that you are changing frequency >>> **QSY**

Simplex & Repeaters

Transmitting and receiving on the same frequency >>> **Simplex** communication

Sub-audible tone transmitted with normal voice audio to open the squelch of a receiver >>> **CTCSS**

Muting of receiver audio controlled solely by the presence of an RF signal >>> **Carrier squelch**

I can hear but not access a repeater even when transmitting with the proper offset?

- A. The repeater receiver requires **audio tone burst** for access
- B. The repeater receiver requires a **CTCSS** tone for access
- C. The repeater receiver may require a **DCS tone** sequence for access
- D. **All of these choices are correct**

Satellites > Use amateur radio satellites to talk to operators in other countries

Any amateur whose license privileges transmission on the satellite uplink frequency can be the operator

Always use the minimum power to complete the contact

The beacon is a transmission from a space station that contains information about the satellite

A Satellite Tracking Program gives times when the satellite can be accessed

Doppler Shift is the frequency change caused by the motion of the transmitting station

U/V Mode is the satellite uplink is in the 70 cm band and the downlink is in the 2 meter band

Spin Fade is caused by the rotation of the satellite and its antennas

LEO stands for Low Earth Orbit

FM packet is commonly used for digital satellite communications

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Direction Finding > A directional antenna is used to find noise interference or jamming (Fox Hunt)

Contest > Contacting as many stations as possible in a specific period of time
Send minimum information for station identification and contest exchange

Grid Locator > A letter-number designator assigned to a geographic location

Special Event Call Signs > A temporary 1 X 1 call sign operations in conjunction with an activity of special significance to the amateur community

Radio Control > RC is limited to 1 Watt and your call sign and address must be affixed to the transmitter

Operating Rules

What rules applies to your station at the request of public service officials? >>> **Only FCC Rules**

ARES = Amateur Radio Emergency Service

Amateur radio organized to assist emergency public services sponsored by the ARRL

RACES = Radio Amateur Civil Emergency Service

Service using amateur stations for emergency management or civil defense communications

What do **RACES** and **ARES** have in common? >>> Both provide **communications during emergencies**

Immediate attention of net control to report an emergency? >>> **"Priority"** or **"Emergency"** & **call sign**

What should you do to minimize **disruptions to an emergency traffic net** once you have checked in?

Do not transmit on the net frequency **until asked** to do so by the **net control** station

Most important job of an amateur operator when **handling emergency traffic** messages?

Passing messages exactly as written, spoken or as received

When normal communications systems are not available an **amateur station** may **use any means** of radio communications at its disposal for essential communications in connection with immediate safety of **human life** and **protection of property**

Formal Traffic Messages

What is the **preamble** in a formal traffic message?

Information needed to track the message through the amateur radio traffic handling system

What is the term "**check**" in reference to a formal traffic message? >>> **count of the number of words**

Who must submit the request to allow amateur to provide communications on behalf of their employers during a government sponsored disaster drill? >>> The **government agency sponsoring** the event

When is it legal for an amateur licensee to provide communications on **behalf of their employer** during a government sponsored disaster drill or exercise? >>> Only **FCC has granted a waiver**