

## **Radio Teacher Technician Test Subelement T8 Notes**

**These notes cover the information needed to answer the questions on Subelement T8 of the Amateur Radio Technician Test. They can be used by instructors as a reference to make sure that all of the information in this subelement is addressed in class.**

Subelement T8 covers emergency operations, tactical call signs, preparation for emergency operations, RACES/ARES, using ham radio at civic events and net operations.

### **Declaration of a Communications Emergency:**

Any special conditions and rules to be observed during the emergency are included in a Federal Communications Commission (FCC) declaration of a temporary state of communication emergency. After the FCC has declared a communications emergency you must avoid those frequencies dedicated to supporting the emergency unless you are participating in the relief effort. An FCC declaration of a communications emergency is legally required to restrict a frequency to emergency-only communication.

Only when specially authorized by the FCC, or in an actual emergency are amateur stations allowed to communicate with stations operating in other radio services.

No station has exclusive use of a frequency if the FCC has not declared a communication emergency.

### **RACES/ARES:**

Radio Amateur Civil Emergency Service (RACES) organizations are restricted to serving local, state, and federal government emergency management agencies. Amateur Radio Emergency Service (ARES) supports non-governmental agencies like the Red Cross, Salvation Army, and National Weather Service.

You must register with the responsible civil defense organization before you can participate in RACES activities.

You must have an amateur radio license before you can join an ARES group.

### **Operations and Rules:**

Casual conversation between stations during a public service event should be avoided because idle chatter may interfere with important traffic.

If a reporter asks to use your amateur radio transceiver to make a news report, advise them that the FCC prohibits such use.

**Emergency Operations:**

If you are in contact with another station and an emergency call is heard you should stop your contact immediately and take the emergency call.

If you hear someone reporting an emergency assume the emergency is real and act accordingly.

To initiate an emergency call on amateur radio say "Mayday, Mayday, Mayday" followed by "any station come in please" and identify your station.

To help coordinate public-service communications and provide more efficient net operations use tactical call signs such as "command post" or "weather center" during an emergency.

The penalties for making a false emergency call include having your license revoked, a large fine and prison term.

Emergency communications has priority at all times and on all frequencies in the Amateur Radio Service.

To be prepared for an emergency situation where your assistance might be needed one should check at least twice a year to make sure you have all of your emergency response equipment and know where it is, make sure you have a way to run your equipment if there is a power failure in your area and participate in drills that test your ability to set up and operate in the field.

You may use your amateur station to transmit a "SOS" or "MAYDAY" signal when there is immediate threat to human life or property.

An alternate source of power to operate radio equipment during emergencies can be the battery in a car or truck, a bicycle generator or a portable solar panel.

You may use non-amateur frequencies or equipment to call for help in a situation involving immediate danger to life or property. You can use a modified amateur radio transceiver to transmit on the local fire department frequency in an emergency.

In a genuine emergency you may use any means at your disposal to call for help on any frequency.

**Net Operations:**

Emergency traffic has the highest priority.

Personal information concerning victims should not be transmitted over amateur radio frequencies during emergencies.

Once you have checked in do not transmit on the net frequency until asked to do so by the net control station. This should minimize disruptions to the emergency traffic net.

One thing that must be included when passing emergency messages is the name of the person originating the message.

One way to reduce the chances of casual listeners overhearing sensitive emergency traffic is to pass messages using a non-voice mode such as packet radio or Morse code.

A strong and clear signal is of primary importance for a net control station.

The net control station should stop all net activity if someone breaks in with emergency traffic until the emergency has been handled.

If a large scale emergency has just occurred and no net control station is available you should open the emergency net immediately and ask for check-ins.

**Message Handling:**

The preamble of a message contains the information needed to track the message as it passes through the amateur radio traffic handling system.

The "check" of a message is a count of the number of words in the message.

The recommended guideline of 25 words is the maximum to be included in the text of an emergency message.

The Technicians Question Pool release 2 and Rules for Amateur Radio, Part 97 are the source documents of these notes. This information is available to the public.

If you have any questions, comments or corrections please post a message at <http://groups.google.com/group/RadioTeacher>