



Radio Amateur Civil  
Emergency Service  
(RACES)  
Guidelines for North Carolina

*Revised April 2003*

## **RACES Guidelines for North Carolina**

### **I. Overview**

RACES is the Radio Amateur Civil Emergency Service, and is defined in Part 97 of the FCC Rules. It is essentially a "restricted mode" of Amateur Radio communications, to be activated by FEMA, state or county civil defense agencies (called Emergency Management in North Carolina). To lawfully participate in RACES communications, an Amateur Radio station must first be registered with his county civil defense agency. When RACES is activated, stations so registered may only contact other RACES stations or those stations authorized by the government to communicate with RACES stations. Under some circumstances, such as wartime, RACES can be activated such that all other Amateur operation must cease, and RACES stations may only operate on a restricted subset of the Amateur frequencies. Therefore, it is important for all Amateur Radio operators to be aware of the RACES rules, and for their stations to be registered with the civil defense agency in their county.

ARES is the Amateur Radio Emergency Service and is a radio service created and supported by the American Radio Relay League. Almost all of our disaster and public service communications is provided by ARES. ARES operates under normal Amateur rules and therefore is not as restricted as RACES operation, so most of our preparedness and deployment takes place under ARES. In North Carolina, by both tradition and written agreement, those Amateurs who are registered in ARES are also considered to be registered in RACES. This eliminates the need to keep two lists and allows us to "switch hats" if RACES is activated.

### **II. The Short Version.**

The whole objective of this document is to make sure that all stations are registered properly, so they can legally operate if RACES is activated. Almost everything else simply restates current ARES responsibilities in RACES terms. If we do the following, we will stay out of trouble:

- A. All stations should register for ARES/RACES with their County EC (who is also the County RACES Officer).
- B. County ECs must keep an accurate list of ARES/RACES stations on file with their county director of Emergency Management, and with the Section EC (who is also the State RACES Officer). This ensures that amateurs can legally operate if RACES is activated.
- C. Hold drills at least once a year to remind people what RACES is.

### **III. Agencies Served.**

Unlike ARES, RACES serves civil defense agencies only. The civil defense agencies below have jurisdiction in North Carolina.

- A. Federal Emergency Management Agency (hereinafter referred to as FEMA). FEMA is an agency of the United States Department of Homeland Security.

- B. North Carolina Division of Emergency Management (hereinafter referred to as NCEM). NCEM is an agency of the North Carolina Department of Crime Control and Public Safety.
- C. County Office of Emergency Management (hereinafter referred to as County OEM). County OEMs are agencies of their corresponding county government. The exact name of the agency will vary from county to county.

#### **IV. Eligibility**

- A. Any United States citizen, who possesses a valid FCC Amateur Radio Operator License, Technician Class or higher, is eligible to become a member of RACES. The services of amateurs who have a Novice Class license may be used, but this is not recommended due to the privilege limitations.
- B. State and County RACES Officers must have a General or higher class license.

#### **V. Organizational Structure**

- A. State Level. At the state level, the RACES command structure is organized to facilitate communications with North Carolina Emergency Management.
  - 1. State RACES Officer. The ARES Section Emergency Coordinator also serves as the State RACES Officer. When the ARRL Section Manager appoints the Section Emergency Coordinator, that person will normally be nominated as State RACES Officer at the same time (subject to acceptance by the NC Director of Emergency Management). If for some reason the SEC is unable to serve as a RACES Officer, then the Section Manager may nominate a different person to serve as State RACES Officer. The State RACES Officer may designate a State RACES Assistant to serve as Acting State RACES Officer in case of his absence during an activation.
  - 2. State RACES Assistants. ARES District Emergency Coordinators (both ASECs and Area DECs) corresponding to NCEM Branch and Area Offices, and the Emergency Coordinator for NCEM will serve as liaison between their NCEM counterparts and North Carolina RACES. Since RACES only permits communications on behalf of civil defense agencies, Skywarn ECs do not have a specific role under RACES.
  - 3. RACES Stations. All state RACES officials must also be registered RACES stations at their county level.
- B. County Level. At the county level, the RACES command structure is organized to facilitate communications with the County OEMs.
  - 1. County RACES Officers – The ARES Emergency Coordinator for the county normally serves as the County RACES Officer. When the ARES SEC appoints a county Emergency Coordinator, that person will normally be nominated as County RACES Officer at the same time (subject to acceptance by the county director of emergency management). If for some reason the EC is unable to serve as a RACES Officer, then the SEC may nominate a different person to serve as a County RACES

- Officer. The County RACES Officer may designate a County RACES Assistant to serve as Acting County RACES Officer in case of his absence during an activation.
2. County RACES Assistants. The County RACES Officer may appoint assistants to serve in his absence, or to address specific needs. This appointment should coincide as much as possible with Assistant Emergency Coordinator appointments.
  3. RACES Stations. All stations that have registered with the County RACES Officer, and are on file with the county director of emergency management, may participate in RACES activations at both the county and state level, if permitted by the rules of the particular activation.

## **VI. Emergency Activations**

- A. National Emergency (War Emergency Powers). In the event of an emergency which necessitates the invoking of the President's War Emergency Powers under the provisions of Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. §606, RACES stations and amateur stations participating in RACES may only transmit on the specially designated frequency segments in FCC Rule §97.407 (shown in the Subpart E Appendix to this document).
- B. State or Regional. In the event of an emergency in which activation of RACES is requested by NCEM or FEMA, then North Carolina RACES shall be activated by the State RACES Officer, or his designee. Amateurs participating as RACES Stations may only communicate with other RACES Stations, and certain other stations authorized by the responsible agency.
- C. County. In the event of an emergency in which activation of a county RACES unit is requested by the County OEM, or by FEMA, then that county's RACES shall be activated by the County RACES Officer, or his designee. Amateurs participating as RACES Stations may only communicate with other RACES Stations, and certain other stations authorized by the responsible agency.

## **VII. Drills.**

- A. Most training, drills and activations will take place under the ARES organization, rather than RACES. RACES drills are held for three main purposes: to remind Amateurs to register their stations, to verify registration lists, and to encourage awareness of the RACES rules and regulations.
- B. Statewide RACES drills. North Carolina RACES shall seek permission from NCEM to conduct a minimum of at least one drill per year, on RACES frequencies. More drills may be held, subject to the restrictions of FCC Rule §97.407 (e) (4).
- C. County RACES drills. County RACES Officer shall seek permission from their county director of emergency management to hold at least one drill per year, on RACES frequencies. More drills may be held, subject to the restrictions of FCC Rule §97.407 (e) (4).

## **VIII. RACES Station Responsibilities.**

- A. Most training, drills and activations will take place under the ARES organization, rather than RACES. RACES stations are encouraged to participate in both.
- B. FCC Rules and Regulations apply to the operation of a radio in the amateur service and therefore apply to the RACES organization.
- C. Duties of RACES Stations. Amateurs participating in RACES are expected to do each of the following:
  - 1. Register their station with the ARES County Emergency Coordinator/County RACES Officer, using form FSD-98 or other form provided by the County RACES Officer.
  - 2. Inform their County RACES Officer of any callsign, name, address, telephone number or e-mail address change that takes place after initial registration.
  - 3. Become familiar with the RACES Rules (Subpart E).
  - 4. Observe RACES rules during an activation or drill.
  - 5. Participate in RACES drills, whenever applicable.
  - 6. Inform the County RACES Officer of the status of your station at least once per year.
- D. Duties of County RACES Officers. County RACES Officers are expected to do each of the following:
  - 1. Maintain a good relationship with the county director of emergency management.
  - 2. Encourage Amateurs to join ARES/RACES.
  - 3. Maintain an accurate list of registered RACES stations in the county.
  - 4. Make sure that repeater, node and other unattended stations that might be used during an activation are registered for RACES operation.
  - 5. Submit a hardcopy list of registered RACES stations to the county director of emergency management at least once per year, and more frequently if the list changes. The hardcopy list is required, even if the list is also submitted electronically.
  - 6. Submit a copy of the list of registered RACES stations to the State RACES Officer also.
  - 7. Seek permission from your county director of emergency management to conduct at least one RACES drill per year. Conduct this drill on RACES frequencies.
  - 8. Designate preferred frequencies for county RACES operation.

## **IX. RACES Modes and Frequencies**

- A. The mode of transmission should be selected to utilize the available communications resources. Both the mode and frequency must remain flexible to suit the emergency situation. Non-voice modes are preferred when the communications should not be easily intercepted by the general public.
- B. State Activations. The frequencies shown in Table 1 will be used for initial communications in each mode in the event of a statewide activation that does not require operation on RACES frequencies listed in FCC Rule §97.407 (b).

<b>Mode</b>	<b>Primary</b>	<b>Secondary</b>
Single Sideband	3923 kHz	7232 kHz
CW	3573 kHz	3695 kHz
Digital (Pactor)	3624 kHz	7104 kHz

Table 1. Frequencies for RACES when not restricted by §97.407 (b).

- C. The frequencies shown in Table 2 will be used for initial communications in each mode in the event of a statewide activation requiring operation on RACES frequencies listed in FCC Rule §97.407 (b).

<b>Mode</b>	<b>Primary</b>	<b>Secondary</b>	<b>Tertiary</b>
Single Sideband	3935 kHz	7250 kHz	14340 kHz
CW	3535 kHz	7120 kHz	10120 kHz
Digital (Pactor)	3545 kHz	7104 kHz	10130 kHz

Table 2. Frequencies for RACES when restricted by §97.407 (b).

- D. County Activations. The County RACES Officer should designate frequencies to be used for initial communications in each mode in the event of a countywide activation requiring operation on RACES frequencies. FCC Rule §97.407 (b) lists the frequencies available for this purpose.

## **X. Miscellaneous Provisions**

- A. This document shall be reviewed annually by the State RACES Officer, or sooner if dictated by changes in rules or civil defense agency requirements.
- B. Additional information on RACES can be found in “Guidance for Radio Amateur Civil Emergency Service,” Civil Preparedness Guide, published by the Federal Emergency Management agency; <http://www.fema.gov/library/civilpg.shtm>

## **XI. FCC RULES, Part 97 Subpart E-Providing Emergency Communications**

### **§97.401 Operation during a disaster.**

- (a) When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, in an area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential communication needs and facilitate relief actions.
- (b) (deleted March 3, 2003)
- (c) When a disaster disrupts normal communication systems in a particular area, the FCC may declare a temporary state of communication emergency. The declaration will set forth any special conditions and special rules to be observed by stations during the communication emergency. A request for a declaration of a temporary state of emergency should be directed

to the EIC in the area concerned.

- (d) A station in, or within 92.6 km of, Alaska may transmit emissions J3E and R3E on the channel at 5.1675 MHz for emergency communications. The channel must be shared with stations licensed in the Alaska-private fixed service. The transmitter power must not exceed 150 W.

**§97.403 Safety of life and protection of property.**

No provision of these rules prevents the use by an amateur station of any means of radiocommunication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

**§97.405 Station in distress.**

- (a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.
- (b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a), of any means of radiocommunications at its disposal to assist a station in distress.

**§97.407 Radio Amateur Civil Emergency Service (RACES).**

- (a) No station may transmit in RACES unless it is an FCC-licensed primary, club, or military recreation station and it is certified by a civil defense organization as registered with that organization, or it is an FCC-licensed RACES station. No person may be the control operator of a RACES station, or may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.
- (b) The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates the invoking of the President's War Emergency Powers under the provisions of Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. §606, RACES stations and amateur stations participating in RACES may only transmit on the following frequency segments:
  - (1) The 1800-1825 kHz, 1975-2000 kHz, 3.50-3.55 MHz, 3.93-3.98 MHz, 3.984-4.000 MHz, 7.079-7.125 MHz, 7.245-7.255 MHz, 10.10-10.15 MHz, 14.047-14.053 MHz, 14.22-14.23 MHz, 14.331-14.350 MHz, 21.047-21.053 MHz, 21.228-21.267 MHz, 28.55-28.75 MHz, 29.237-29.273 MHz, 29.45-29.65 MHz, 50.35-50.75 MHz, 52-54 MHz, 144.50-145.71 MHz, 146-148 MHz, 2390-2450 MHz segments;
  - (2) The 1.25 m, 70 cm and 23 cm bands; and
  - (3) The channels at 3.997 MHz and 53.30 MHz may be used in emergency areas when required to make initial contact with a military unit and for communications with military stations on matters requiring coordination.
- (c) A RACES station may only communicate with:
  - (1) Another RACES station;
  - (2) An amateur station registered with a civil defense organization;
  - (3) A United States Government station authorized by the responsible agency to

- communicate with RACES stations;
- (4) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- (d) An amateur station registered with a civil defense organization may only communicate with:
- (1) A RACES station licensed to the civil defense organization with which the amateur station is registered;
  - (2) The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:
    - (i) A RACES station licensed to another civil defense organization;
    - (ii) An amateur station registered with the same or another civil defense organization;
    - (iii) A United States Government station authorized by the responsible agency to communicate with RACES stations; and
    - (iv) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.
- (e) All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only civil defense communications of the following types may be transmitted:
- (1) Messages concerning impending or actual conditions jeopardizing the public safety, or affecting the national defense or security during periods of local, regional, or national civil emergencies;
  - (2) Messages directly concerning the immediate safety of life of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;
  - (3) Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and
  - (4) Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organizations served. Such drills and tests may not exceed a total time of 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State, Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.