

Chapter 2: ARES and the Radio Amateur Civil Emergency Service (RACES)

After World War II, it became evident that the international situation was destined to be tense and the need for some civil-defense measures became apparent. Successive government agencies designated to head up such a program called on amateur representatives to participate.

In the discussions that followed, amateurs were interested in getting two points across: First, that Amateur Radio had a potential for, and capability of, playing a major role in this program. And second, that our participation should be in our own name, as an Amateur Radio Service, even if and after war should break out. These principles were included in the planning by the formulation of regulations creating a new branch of the amateur service, the Radio Amateur Civil Emergency Service, or RACES.

Recognition of the role of Amateur Radio as a public service means responsibility. Every amateur should have access to a current version of the FCC rules and regulations for Amateur Radio (Part 97), which includes the Amateur Service, the Amateur-Satellite Service, and the Radio Amateur Civil Emergency Service. RACES could be the only part of Amateur Radio allowed to operate if the President invokes the “war powers” granted him by the Communications Act. *“Upon proclamation by the President that there exists war or a threat of war, or a state of public peril or disaster or other national emergency, or in order to preserve the neutrality of the United States, the President, if he deems it necessary in the interest of national security or defense, may suspend or amend, for such time as he may see fit, the rules and regulations applicable to any or all stations or devices capable of emitting electromagnetic radiations within the jurisdiction of the United States as prescribed by the Commission, and may cause the closing of any station for radio communication”*

2.1 What is RACES?

The FCC rules define RACES (Radio Amateur Civil Emergency Service) as “A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.” For this discussion, we’ll use the terms “civil defense,” “emergency preparedness,” and “emergency management” interchangeably.

RACES is a radio service available to government emergency management organizations at all times, for official government emergency communications as specified in 47 CFR 97.407 and 97.111(a)(4). There is no specific declaration or emergency event that activates RACES. The “activation” is the direction of the emergency management official to properly qualified individuals to engage in the permitted types of communications in the Radio Amateur Civil Emergency Service. Except for two specific cases, any communications that could be conducted under the RACES rules can also be conducted under the Amateur Service (non-RACES) rules. Those two exceptions are: communications with US Government radio stations for RACES communications, and communications in RACES

when the Amateur Service has been ordered off the air by the President's war emergency powers under Title 47 of the United States Code, Section 606 (47 USC 606).

To understand what RACES is and what it isn't, it may help to look at some of the other definitions in the FCC rules, § 97.3(a):

(1) Amateur operator. A person named in an amateur operator/primary license station grant on the ULS consolidated licensee database to be the control operator of an amateur station.

(2) Amateur radio services. The amateur service, the amateur-satellite service and the radio amateur civil emergency service.

(4) Amateur service. A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

(5) Amateur station. A station in an amateur radio service consisting of the apparatus necessary for carrying on radiocommunications.

(38) RACES (radio amateur civil emergency service). A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.

So, what is a "radio service?" A radio service is a categorization of users of the radio spectrum that have a common specific radiocommunication purpose. Examples include the Broadcasting Service, the Aeronautical Mobile Service, the Land Mobile Service, the Maritime Mobile Service, and, of course, the Amateur Service.

The word "Service" in ARES' name has a different meaning than "Service" in RACES. The meaning of "Service" as used in ARES is consistent with the meaning of public service — actions carried out with the aim of providing a public good. RACES is an FCC-regulated radio service. ARES is an organization of individuals who apply specialized telecommunications skills for a public good.

The Amateur Radio Services comprise the Amateur Service, the Amateur-Satellite Service, and the Radio Amateur Civil Emergency Service. Most amateur activity is conducted in the Amateur Service. A person doesn't join the Amateur Service, they get a license and operate in that service in accordance with the applicable rules. When an amateur communicates via one of the many amateur satellites, they don't join the Amateur-Satellite service; they operate in that service according to the applicable rules. When an Amateur operates in the Radio Amateur Civil Emergency Service, they don't join the Radio Amateur Civil Emergency Service; they operate in that service according to the applicable rules.

RACES is a radio service with specific operating criteria. It is not an organization. The rules for operating in RACES require the *operator to enroll* in (“join”) the civil defense (“emergency management”) organization for the jurisdiction in which they will serve, and to register their station with that organization. When there was a local or state government civil defense organization, the communications volunteers of that organization could be expected to utilize various radio services as directed by a civil defense (emergency management) official, in accordance with the rules for each radio service. This included the Local Government Radio Service, the Police Radio Service, the Fire Radio Service, the Emergency Medical Radio Service, etc.; the Disaster Communications Service, and the Radio Amateur Civil Emergency Service. The volunteers didn’t join any of these other radio services; they joined the civil defense organization and operated in the radio service appropriate to the situation.

There is no RACES organization, hence there is no RACES to join. What amateurs “join” is the volunteer program of the emergency management organization; or, as the FCC rules put it, the Amateur Radio operator must be enrolled in the civil defense (CD) organization and the station to be used in RACES must be registered with that organization.

In the Cold War era, citizens voluntarily joined the CD program to provide one of several specific services: air raid wardens, shelter, fire suppression, first aid, auxiliary police, communications, etc. Many amateurs volunteered to help with communications, which included operating in RACES. They reported to the Radio Officer (not “RACES Officer” or “RACES Radio Officer”), who was responsible for all Civil Defense radio communications, not just RACES. Over time, public interest in the CD program waned, with the RACES part of the program being (in many cases) the last surviving vestige.

Civil Defense evolved into Emergency Management, and the volunteer program evolved into the Community Emergency Response Team (CERT) program. CERT is the reincarnation of CD, with one major difference: CD volunteers were specialists, CERT volunteers are generalists. Every CERT member is trained in all areas of the program. In those jurisdictions where RACES exists as an organization, it carries on as the communications specialty of the civil defense program — sometimes as a government volunteer organization, sometimes as an autonomous or semi-autonomous organization. RACES was never intended to be an organization unto itself — it is the radio component of emergency management, to be used to achieve the mission of the civil defense program.

2.2 When is RACES Operational?

An amateur station operates in RACES only when such operations cannot be conducted under the normal Amateur Service rules:

1. When it is necessary to communicate between an emergency management agency and Federal Government stations for official government emergency communications.

2. When it is necessary to communicate for an emergency management agency official government emergency communications while the Amateur service is ordered off the air in accordance with the President's War Emergency Powers.

Anything else done by amateurs who consider themselves RACES "members" is not RACES. Participating in the weekly RACES net on the 2 meter repeater is not RACES, since communications in that net are not specifically authorized by the civil defense organization for the area served (97.407(c) and (d)). RACES "members" sharing information by radio in anticipation of being asked to help, or self-deploying (i.e., not at the direction of an emergency management official), are operating in the Amateur Service, not in the Radio Amateur Civil Emergency Service, regardless of their enrollment status with an emergency management organization.

ARES operates in the Amateur Service, where these specific operations are not permitted. ARES members who want to be able to help in these situations, and to help their emergency management agency in other ways, can do so on the same basis as other citizens — by joining the emergency management agency's volunteer program, which in many cases is the Community Emergency Response Team, CERT. Enrolling in CERT, or whatever the emergency management volunteer program is called, satisfies the enrollment clause of FCC rule 97.407(a). The registration clause of that rule is met by providing information about the station — at the minimum, that should be the call sign, station location, and what bands and modes that station can operate. Emergency managers may require other information to register a station as they see fit; for example, information about availability of emergency power for that station. Enrolling the licensed Amateur Radio operator and registering the station is all that the FCC rules require to establish eligibility to operate in RACES. To be authorized to operate in RACES, the operator must be directed by an emergency management official to engage in specific official government emergency communications (97.407(d)) with an authorized station (97.407(c)).

There does not need to be any group or program specifically called RACES for there to be communications in RACES. ARES members can provide communications in the radio service RACES — if they meet the enrollment and registration requirement of the emergency management organization. It is not enough for ARES to affiliate with the emergency management organization — the individual operators must personally enroll themselves and register their stations. Why is the individual connection required? It goes back to one of the basic principles of the Incident Command System — Unity of Command — which says that anyone working under ICS has one, and only one, boss. If you are working for the emergency management organization you can't also be taking orders at the same time from the ARES Emergency Coordinator, the Section Emergency Coordinator, and the Section Manager. The emergency management organization has to know what resources are available to it. It can't be in a position where it has to compete for a pool of volunteers who are available one minute but committed to some other agency the next. The level of commitment expected by an

emergency management organization is a matter to be worked out between that organization and the volunteers.

ARES leadership positions include the Emergency Coordinator (EC), the District Emergency Coordinator (DEC), and the Section Emergency Coordinator (SEC). These positions are all “Coordinators,” not “Managers.” The served agency emergency manager and the ARES Emergency Coordinator should establish a clear understanding of the EC’s role in the activation and utilization of ARES volunteers. ARES volunteers should expect to have the same relationship with the served agency as other volunteer groups.

Suppose an ARES Emergency Coordinator says to the Emergency Manager, “I have a roster of my ARES volunteers and I know what their capabilities are. If you need emergency communications, please call me and I’ll assign my ARES volunteers. I’m not going to give you my roster, but we want to be your RACES capability.” If the emergency manager does call, can these volunteers operate in RACES? No, because the operators are not enrolled in the government agency’s civil defense (emergency management) program, nor have they registered their equipment; nor is the emergency management organization specifically authorizing the communications to be transmitted in RACES, since the EC has imposed himself/herself between the emergency management organization and the volunteers.

Let’s assume that a CERT program is the civil defense (emergency management) program for a jurisdiction, so joining CERT meets the enrollment requirement for an Amateur Radio operator to be eligible to operate in RACES. A typical CERT training program has 30 hours of instruction — about the same length of time as for an Amateur Radio licensing class. ARES members who become members of CERT get access to a group of dedicated citizens willing to invest 30 hours of their time to be able to help their fellow citizens — exactly the kind of people who get Amateur Radio licenses and join ARES. It is hard to imagine a better ARES recruitment opportunity than CERT, and it is hard to imagine a better recruitment opportunity for CERT than ARES. If ARES members expect CERT volunteers to invest 30 hours to get an Amateur Radio license, isn’t it fair to expect ARES members to invest 30 hours to be certified in the CERT program?

RACES is operational only when it needs to be (to communicate with Federal Government stations, or when the Amateur Service has been ordered off the air) and when the emergency management official has directed participating stations to engage in official government emergency communications.

2.3 ARES and RACES

RACES was never intended to be an organization unto itself. RACES is not an autonomous entity affiliated with an emergency management agency. It is a capability available to emergency management officials to utilize their volunteers who have Amateur Radio licenses to engage in official

government emergency communications. RACES is a Radio Service, not an organization. With this understanding, it is clear that the one-hour per week and 72-hours twice per year RACES exercise rules (97.407(d)(4)) do not apply to amateur activities which are otherwise permitted under non-RACES Part 97 rules. If the emergency management official directs that an exercise be conducted in the Radio Amateur Civil Emergency Service, then the RACES rules including the exercise restrictions apply; but if amateurs (ARES or others) are merely participating in an exercise that involves the emergency management agency, then they are operating in the Amateur Service and the RACES exercise restrictions do not apply.

Consider that several amateurs are enrolled in an emergency management program so they can communicate in RACES when requested by an emergency management organization. If these amateurs, who might call themselves RACES members, operate in the ARRL's annual Simulated Emergency Test (SET), does 97.407(d)(4) apply? No, because their participation in the SET is not done under the authority of a RACES rule, as evidenced by the fact that many ARES members who are not enrolled in a civil defense program can engage in the exact same communications under their license authority in the Amateur Service. Amateurs do not lose operating privileges as a result of enrolling in a civil defense program and registering their station.

It also becomes clear that the restrictions on with whom RACES stations may communicate (FCC rule 97.407(c)) apply only to RACES operation when the Amateur Service is ordered off the air, since these restrictions do not apply to the Amateur Service or the Amateur-Satellite Service. If the Amateur Service is not off the air, an amateur operator may communicate with non-RACES amateurs in the Amateur Service during the same operating period in which they communicate in RACES.

For example, at the direction of emergency management an amateur operating in RACES communicates by radio with a neighboring town's emergency operations center. After completing that communication, a non-RACES amateur calls to ask about traffic directions. Can the RACES amateur communicate with the non-RACES amateur? It depends — not on the FCC rules, but on the RACES amateur's instructions from the emergency management official to whom they have volunteered. If the emergency management official said that while on duty the volunteer is to use the radio only for official government emergency communications, then the volunteer must do what they agreed to do; otherwise they might be dismissed from the emergency management program. That is a matter of their agreement as a volunteer, not an FCC rule. If the emergency management official allows such communications, but is not directing that it be done as official emergency government communications, then the amateur may communicate in the Amateur Service (not the Radio Amateur Civil Emergency Service) any non-official communications. There is no need to "switch hats" — there is no announcement that needs to be made when switching between the RACES and the Amateur Service. ARES communications are conducted in the Amateur Service, RACES communications are conducted in the Radio Amateur Civil Emergency Service; both services share the same frequencies.

There is no “when RACES is activated” — either one is operating in the Radio Amateur Civil Emergency Service because they are communicating official government emergency communications with a Federal Government radio station, which is not permitted in the Amateur Service, or because the Amateur Service and the Amateur-Satellite Service have been ordered off the air; otherwise they are operating in the Amateur Service or Amateur-Satellite Service. If you are not allowed to do something in one service but you are allowed to do it in the other service, then you must be operating in the service where it is allowed. Many amateurs believe “In an emergency, anything goes.” This is not true. There are specific rules that specify what a station may do in certain emergency circumstances, not whatever someone might consider to be an emergency. These rules are 97.403, “Safety of life and protection of property,” and 97.405, “Station in distress.”

§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 this section, of any means of radiocommunications at its disposal to assist a station in distress.

“Immediate safety of human life and immediate protection of property” means actually happening or about to happen, not just the mere possibility that something could happen; “when normal communication systems are not available” – inaccessible or inoperative; “any means of radiocommunication at its disposal to provide essential communication needs” — essential communication needs directly related to the “immediate” situation, not routine communications that happen to occur during an emergency situation. A station in distress or assisting a station in distress may use “any means at its disposal to attract attention, make known its condition and location, and obtain assistance.” If you think about the meaning of the key terms in these rules, you will see that they are a long way from “anything goes.”

The leeway afforded an amateur by 97.403 and 97.405 applies only to the immediate situation that is specifically life-threatening or property-threatening, not the broader situation in which it occurs. For example, communications to request a med-evac helicopter to a multi-vehicle collision could come

under 97.403, but not communications to request tow-trucks to clear the roadway after the med-evac flight has departed.

Emergency communications always has priority — it says so in rule 97.101(c): “At all times and on all frequencies, each control operator must give priority to stations providing emergency communications, except to stations transmitting communications for training drills and tests in RACES.”

2.4 Other Amateur Emergency Communications Capabilities

There are a number of other Amateur Radio facilities, not sponsored or directly affiliated with the League, which are nevertheless an integral part of our public service effort. Some of these organizations are the monitoring services, MARS, local and state programs such as ACS/DCS, independent nets — both international and domestic — and other similar activities. While naturally we want you to participate in organizations sponsored by your League, it’s better to participate in a non-League sponsored public service organization than not to participate at all. In this manual we cannot give details of the operation of these other organizations because there are too many of them, and their operations change too rapidly.