

A.R.E.S. And R.A.C.E.S.
What You Should Know
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There seems to be no shortage of confusion regarding A.R.E.S and R.A.C.E.S. There are many similarities between A.R.E.S and R.A.C.E.S. There are some important differences. This document will look at the similarities and differences and the laws affecting each. Let's take a look at the facts and the laws.

What is A.R.E.S.?



A.R.E.S. - The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. **A.R.E.S was created by the ARRL, a non-government entity.**

What is R.A.C.E.S.?



R.A.C.E.S. - RACES stands for "Radio Amateur Civil Emergency Service," **a protocol created by the Federal Emergency Management Agency (FEMA) and the Federal Communications Commission** ([FCC Part 97, Section 407](#)). The volunteers serve their respective jurisdictions pursuant to guidelines and mandates established by local emergency management officials.

RACES volunteer operators are:

- Licensed Radio Amateurs
- Certified by a civil defense agency
- Able to communicate on Amateur Radio frequencies during drills, exercises and emergencies.
- Activated by local, county and state jurisdictions.

What are the similarities between A.R.E.S and R.A.C.E.S ?

A.R.E.S provides communications during emergencies and disasters.

R.A.C.E.S provides communications during emergencies and disasters.

A.R.E.S shall not self deploy.

R.A.C.E.S shall not self deploy.

A.R.E.S is regulated under the authority of the FCC.

R.A.C.E.S is regulated under the authority of the FCC.

A.R.E.S uses amateur radio frequencies.

R.A.C.E.S uses amateur radio frequencies.

A.R.E.S is comprised of FCC licensed volunteer radio operators.

R.A.C.E.S is comprised of FCC licensed volunteer radio operators.

What are the differences between A.R.E.S and R.A.C.E.S ?

A.R.E.S was created by the Amateur Radio Relay League (ARRL) a non-government entity.

R.A.C.E.S was created by the Federal Emergency Management Agency (FEMA) and the Federal Communications Commission (FCC).

A.R.E.S can drill and test emergency and disaster communications as often as desired.

R.A.C.E.S is limited by FCC Title 47, Part 97, Section 97.407(e)(4):

(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 organization 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.

[54 FR 25857, June 20, 1989, as amended at 65 FR 6550, Feb. 10, 2000]

A.R.E.S members register their equipment with A.R.E.S.

R.A.C.E.S members register their equipment with the served civil defense organization.

A.R.E.S. - The FCC does not specifically limit A.R.E.S emergency and disaster communications during an emergency or disaster.

R.A.C.E.S. - The FCC does specifically limit R.A.C.E.S under FCC Title 47, Part 97, Section 97.407(e)(1)(2)(3):

(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;

If a R.A.C.E.S station/operator communicates with an A.R.E.S station/operator, the communications must meet the above three types.

What power does the President have regarding A.R.E.S and R.A.C.E.S. ?

In 1934 Congress passed the Communications Act. The Communications Act of 1934 contains section 706. Under provisions of section 706, the President of the United States of America is granted Emergency War Powers. Section 706 was amended to 47 U.S.C. 606. How does 47 U.S.C. 606 affect A.R.E.S and R.A.C.E.S. ? Section “c” specifically applies.

The following is taken from the Cornell University Law School website.

Legal Information Institute

OPEN ACCESS TO LAW SINCE 1992

47 U.S. Code § 606 - War powers of President

(a) **Priority communications**

During the continuance of a war in which the United States is engaged, the President is authorized, if he finds it necessary for the national defense and security, to direct that such communications as in his judgment may be essential to the national defense and security shall have preference or priority with any carrier subject to this chapter.

He may give these directions at and for such times as he may determine, and may modify, change, suspend, or annul them and for any such purpose he is authorized to issue orders directly, or through such person or persons as he designates for the purpose, or through the Commission.

Any carrier complying with any such order or direction for preference or priority herein authorized shall be exempt from any and all provisions in existing law imposing civil or criminal penalties, obligations, or liabilities upon carriers by reason of giving preference or priority in compliance with such order or direction.

(c) Suspension or amendment of rules and regulations applicable to certain emission stations or devices

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, or any device capable of emitting electromagnetic radiations between 10 kilocycles and 100,000 megacycles, which is suitable for use as a navigational aid beyond five miles, and the removal therefrom of its apparatus and equipment, or he may authorize the use or control of any such station or device and/or its apparatus and equipment, by any department of the Government under such regulations as he may prescribe upon just compensation to the owners. The authority granted to the President, under this subsection, to cause the closing of any station or device and the removal therefrom of its apparatus and equipment, or to authorize the use or control of any station or device and/or its apparatus and equipment, may be exercised in the Canal Zone.

(f) Affect on State laws and powers

Nothing in subsection (c) of this section shall be construed to amend, repeal, impair, or affect existing laws or powers of the States in relation to taxation or the lawful police regulations of the several States, except wherein such laws, powers, or regulations may affect the transmission of Government communications, or the issue of stocks and bonds by any communication system or systems.

(g) **Limitations upon Presidential power**

Nothing in subsection (c) or (d) of this section shall be construed to authorize the President to make any amendment to the rules and regulations of the Commission which the Commission would not be authorized by law to make; and nothing in subsection (d) of this section shall be construed to authorize the President to take any action the force and effect of which shall continue beyond the date after which taking of such action would not have been authorized.

(h) **Penalties**

Any person who willfully does or causes or suffers to be done any act prohibited pursuant to the exercise of the President's authority under this section, or who willfully fails to do any act which he is required to do pursuant to the exercise of the President's authority under this section, or who willfully causes or suffers such failure, shall, upon conviction thereof, be punished for such offense by a fine of not more than \$1,000 or by imprisonment for not more than one year, or both, and, if a firm, partnership, association, or corporation, by fine of not more than \$5,000, except that any person who commits such an offense with intent to injure the United States, or with intent to secure an advantage to any foreign nation, shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

<https://www.law.cornell.edu/uscode/text/47/606> (edited)

In the highlighted sections above, we see that under certain conditions and by proclamation, the President of the United States has the power under law to shut down ALL radio stations including A.R.E.S and R.A.C.E.S. While the President is granted this power, it may or may not be exercised. Even if the President of the United States makes this proclamation, the President may choose to allow A.R.E.S and or R.A.C.E.S to continue to operate and assist as and where necessary.

A.R.E.S can provide communications at non emergency public service events.

R.A.C.E.S is prohibited by FCC rule part 97.407(e)(1)(2)(3) from providing communications at non emergency public service events.

Can an amateur radio operator be both A.R.E.S and R.A.C.E.S. ?

An amateur radio operator that is properly licensed can be both a member of A.R.E.S and a R.A.C.E.S civil defense organization, however, when operating the radio... the operator must be either acting as A.R.E.S or R.A.C.E.S and may not operate as both at the same time.

Example 1: Radio operator X is a R.A.C.E.S member associated with a local fire department. Radio operator X is also an A.R.E.S member. Radio operator X wants to assist with radio communications at a non emergency public service event. Radio operator X may participate, but may only participate as an A.R.E.S member since the event is not an emergency or disaster.

Example 2: Radio operator X is a R.A.C.E.S member associated with a local fire department. Radio operator X is also an A.R.E.S member. The President of the United States has made a proclamation under 47 U.S.C. 606. Using the War Powers Act, and under proclamation, the President has ordered that all amateur radio communications are suspended and prohibited except for those by R.A.C.E.S. Radio operator X may now only operate as a R.A.C.E.S member and only at the direction and under the supervision of the local fire department which sponsors the R.A.C.E.S which he is registered with.

Under the War Powers Act, does R.A.C.E.S have special restrictions?

Yes. FCC rule part 97.407(b)(1)(2)(3) reads:

(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.

Can a R.A.C.E.S station communicate with an A.R.E.S. Station?

Under a proclamation, under the War Powers Act, R.A.C.E.S and A.R.E.S stations may not communicate if the President has prohibited all amateur radio communications.

A station operating as R.A.C.E.S may not communicate with an A.R.E.S station if the civil defense organization sponsoring the R.A.C.E.S station prohibits such communication between the R.A.C.E.S station and the A.R.E.S. Station. FCC rule part 97.407(d)(2)(iv):

(d) An amateur station registered with a civil defense organization may only communicate with:

(2) The following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:

(iv) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.

Upon authorization of the responsible civil defense official, a R.A.C.E.S station can communicate with an A.R.E.S station. Such communication is “authorized by the FCC” under FCC rule part 97.111(a)(2)(3)(4) which reads:

§97.111 Authorized transmissions.

(a) An amateur station may transmit the following types of two-way communications:

(2) Transmissions necessary to meet essential communication needs and to facilitate relief actions.

(3) Transmissions necessary to exchange messages with a station in another FCC-regulated service while providing emergency communications;

(4) Transmissions necessary to exchange messages with a United States government station, necessary to providing communications in RACES;

In emergency or disaster communications the FCC does not prohibit a R.A.C.E.S station from communicating with an A.R.E.S station, however, the communication must be authorized by the responsible civil defense official on the R.A.C.E.S station side before such communication is allowed.

What is FCC rule part 97 regarding R.A.C.E.S.?

§ 97.407

Radio amateur civil emergency service.

(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 organization 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.

[54 FR 25857, June 20, 1989, as amended at 65 FR 6550, Feb. 10, 2000]

What are FCC authorized amateur radio communications?

Title 47: Telecommunication

[PART 97—AMATEUR RADIO SERVICE](#)

[Subpart B—Station Operation Standards](#)

§97.111 Authorized transmissions.

(a) An amateur station may transmit the following types of two-way communications:

(1) Transmissions necessary to exchange messages with other stations in the amateur service, except those in any country whose administration has notified the ITU that it objects to such communications. The FCC will issue public notices of current arrangements for international communications.

(2) Transmissions necessary to meet essential communication needs and to facilitate relief actions.

(3) Transmissions necessary to exchange messages with a station in another FCC-regulated service while providing emergency communications;

(4) Transmissions necessary to exchange messages with a United States government station, necessary to providing communications in RACES; and

(5) Transmissions necessary to exchange messages with a station in a service not regulated by the FCC, but authorized by the FCC to communicate with amateur stations. An amateur station may exchange messages with a participating United States military station during an Armed Forces Day Communications Test.

(b) In addition to one-way transmissions specifically authorized elsewhere in this part, an amateur station may transmit the following types of one-way communications:

(1) Brief transmissions necessary to make adjustments to the station;

(2) Brief transmissions necessary to establishing two-way communications with other stations;

(3) Telecommand;

(4) Transmissions necessary to providing emergency communications;

(5) Transmissions necessary to assisting persons learning, or improving proficiency in, the international Morse code; and

(6) Transmissions necessary to disseminate information bulletins.

(7) Transmissions of telemetry.

[54 FR 25857, June 20, 1989, as amended at 56 FR 56171, Nov. 1, 1991; 71 FR 25982, May 3, 2006; 71 FR 66462, Nov. 15, 2006]

DISCLAIMER: I am a firefighter and a licensed extra class amateur radio operator. **I am not a lawyer or legal expert.** I have not had formal legal training in amateur radio law. All of the above document is strictly and completely based on my personal opinion and interpretation of the referenced laws. **Please consult with a licensed attorney.**

A.R.E.S and R.A.C.E.S are both critical resources when emergencies and disasters happen that overwhelm normal communications. It is hoped that this document has helped to identify some of the differences and dispel some of the misunderstandings between A.R.E.S and R.A.C.E.S. 73