

Regulations

This session concerns regulations. Remember, our ham tickets are only permission from the federal government to conduct amateur radio activities. The feds make the rules and we have to follow them. Without rules, the radio spectrum would be a free-for-all, and nobody would be able to get anything done. Rules make things work pretty efficiently, and without people getting too badly interfered with – most of the time. By following the regulations honestly, we make it easier for ourselves to enjoy our hobby.

Who makes and publishes the federal communications regulations? The Federal Communications Commission (FCC) is responsible for civilian radio communications rules under the Code of Federal Regulations Title 47. Amateur Radio is part of the Personal Radio Service under the Commission, and the rules governing the Amateur Radio Service are Part 97 of CFR 47.

Part 97 is divided into subparts as follows: A. General Provisions, B. Station Operation Standards, C. Special Operations, D. Technical Standards, E. Providing Emergency Communications and F. Qualifying Examinations Systems. We will talk about most of the parts, but go lightly on some of them. If you're interested in learning about the regulations in depth, you can obtain a copy of Part 97 from the American Radio Relay League. They publish a complete set of the regs.

Let's talk about the General Provisions, Subpart A. This subpart explains the basis and purpose of Amateur Radio. It tells us why the service exists, and in general how it is to be used by us. The Regulation recognizes the value of amateur radio to the public in general as a voluntary, not for pay, communications service -- especially **for the provision of emergency communications**. The emergency communications piece is probably the most important part of allowing the service not only to exist, but also why such large portions of the radio spectrum are assigned to ham radio. It's not by accident that this function is listed first.

Next, ham radio is to encourage and enhance the ham operator's proven ability to advance and improve the art, science, skill and technical abilities of amateurs and others in radio communications. It is a function of the hobby to increase the reservoir within the amateur service of **trained operators, technicians and electronics experts**. Please put emphasis on the word "trained". Finally, the amateur radio services serve as the means of enhancing international goodwill and friendships through free contacts with others around the globe.

You already know that you have to hold a station license to operate a transmitter on amateur frequencies, and that the different licenses (Technician, General, and Extra) enjoy different privileges. Also, when a station is operated, someone has to be in charge of it to make sure the station is operating according to the regulations. That "someone" is the control operator, who

has to be licensed, have privileges to operate in that manner on that frequency, and be present and in control of the equipment at all times.

In Subpart B, Station Operation Standards are set forth. Foremost are three general requirements: 1) the station must be operated using good engineering and good amateur practice; 2) each licensee and control operator must use care in selecting and using the best frequencies and power levels for good quality communications. Note well that no frequency is or will be assigned for exclusive use of any station. Frequencies are **shared!**; 3) Priority shall be given to stations providing emergency communications or to those providing RACES training drills and tests; and 4) No operator shall willfully or maliciously interfere with or cause interference to anyone else. Item number 4 – interference – is where most hams get in trouble with the FCC. In case you didn't know, there is a cadre, or group, of ham operators who monitor the ham frequencies, and report poor operating practices and regulations violations. These reports can end up with the FCC, and eventually result in federal investigation, orders and penalties. These hams are volunteers in the ARRL Field Service, are trained in listening and reporting, and are authorized to send post cards to people who appear to be operating in violation of the FCC rules (Part 97). They also send out cards to those who have demonstrated good operating practices. The "good guy" cards far exceed the "naughty boy" cards, by the way. The volunteer observers are called "Official Observers", appointed under the authority of the ARRL Section Manager. It's a good idea to pay attention and make an effort to correct poor operating practices if you get a "card" in the mail.

Identification of the station you are operating is a mandatory activity. You must identify your station, by callsign, at the end of any single communications transmission, at least every ten minutes during a communications. You are not allowed to transmit unidentified signals, nor are you allowed to transmit a callsign not authorized to the station being operated.

Subpart C. Special Operations.

If you are interested in operating an auxiliary station, a beacon station, a repeater or other specialized stations, you would be wise to read this part and understand it fully. Most hams don't get that deeply into that specialized activity, with the exception of talking on repeaters on VHF and UHF. Repeater owners and trustees need this knowledge, however.

Subpart D deals with Technical standards such as where amateur radio stations may transmit (frequencies). The United States, by the way is in ITU Region 2. Allowed frequency sub-bands are different than in other Regions of the World. (ITU stands for International Telecommunications Union). Location restrictions and band sharing requirements are contained in this section. Bandwidth standards, emission types and transmitter power standards are also covered by Subpart D.

Subpart E, dealing with Emergency Communications is covered here. Emergency communications by an amateur radio station to save human lives and protect property is permitted **when normal communication systems are not available**. If normal communications methods are available, amateur radio communications may NOT be allowed. The emergency communications provisions are also applicable for any amateur station in distress.

One should be careful when considering the use of an amateur station for emergency life safety or property protection, or for a station “in distress” situation, because the FCC generally investigates these incidents thoroughly – and has disallowed this after the fact. Such decisions by the FCC generally end up with bad outcomes for the person who thought he/she was doing the right thing.

Subpart E also deals with the Radio Amateur Civil Emergency Service (RACES). RACES stations differ from Amateur Radio Emergency Services stations in that RACES stations are certified and registered by a governmental civil defense organization. RACES stations are authorized to transmit on certain specified frequencies, and communicate only with certain other governmentally authorized stations.

Subpart F deals with amateur radio licensing, qualifying, testing, test standards, Volunteer Examiners, VE Coordinators and administration of tests.

Conclusion:

Well, there you have a light overview of the FCC regulations governing amateur radio. You’ve already had some exposure to the regs through the study and testing for your license. We would always recommend that you read 47 CFR Part 97 through thoroughly at least once. That way you can get a good feeling for what is required and expected of you and the rest of the amateur community when participating in our communications activities. This knowledge will hopefully keep you pleasantly involved and active in ham radio, and out of trouble with not only “Uncle Charlie” but also the rest of our hobby community. As you become more familiar and experienced in radio communications, you will find yourself branching out into more kinds of operations such as “working” as many countries as you can, emergency communications and public service to others within and outside our hobby community.

To obtain a copy of FCC Regulations 47 CFR Part 97, FCC Rules and Regulations for the Amateur Radio Service, you can either Google 47 CFR Part 97 on the Internet, or you can obtain a copy (for a price) from the American Radio Relay League in Newington, CT.