



WELCOME TO AMATEUR RADIO

**A SHORT GUIDE FOR
THE NEW HAM**



Congratulations on passing your Amateur Radio license exam!

Welcome to a friendly, high-tech hobby that's got something fun for everyone! Everyone can become an Amateur Radio operator. Age, gender or physical ability are no restrictions. People from all walks of life pass their entry-level exam and earn their Amateur (ham) Radio license. They all share the diverse world of activities you can explore with ham radio. The youngest ham I know of passed their Technician license exam at five years old.

You never know who you'll run into when communicating through Amateur Radio: Young people, retirees, teachers and students, engineers and scientists, doctors, mechanics and technicians, royalty, politicians and homemakers...

Ham radio operators use two-way radio stations from their homes, cars, boats and outdoors to make hundreds of friends around town and around the world. They communicate with each other using voice, computers, and Morse code. Some hams bounce their signals off the upper regions of the atmosphere, so they can talk with hams on the other side of the world. Other hams use satellites. Many use hand-held radios that fit in their pockets. There is even an Echolink App for worldwide Voice Over IP, VOIP, communication from your cellphone.

Hams exchange pictures of each other using amateur television. Some also like to work on electronic circuits, building their own radios and antennas. A few pioneers in Amateur Radio have even contributed to advances in technology that we all enjoy today. There are even ham-astronauts who take radios with them on space shuttle missions and thrill thousands of hams on earth with a call from space!

Using even the simplest of radio setups and antennas, amateurs communicate with each other for fun, during emergencies, and even in contests. The Rialto Amateur Radio Club is here to provide Emergency Communications, EmComm, in times of disasters and emergencies including:

Fires	Earthquakes	Floods	Hazmat spills	CERT
Traffic accidents	Search and Rescues	Tornadoes	Community service	



With a Technician Class license, you will have all ham radio privileges above 30 megahertz (MHz). These privileges include the very popular 2-meter band. Many Technician licensees enjoy using small (2 meter) hand-held radios to stay in touch with other hams in their area. Technicians may operate FM voice, digital packet (computers), and fast or slow scan amateur television, single-sideband voice and several other interesting modes. You can even make international radio contacts via satellites, using relatively simple equipment.

Your entry level license is just a start in the wonderful world of Amateur Radio! It's a hobby that can last a lifetime. Here are a few links to get you started in your new hobby.

New Ham resources

[I got my license, now what? A resource for new hams.](#)

[Hamspeak, a glossary of terms.](#)

Joe's favorite repeaters:

- [WinSys](#), 147.210, +, 100
- [Catalina](#), 147.090, +, 136.5
- [Big Bear](#), 147.33, +, 131.8
- [Keller Peak](#), 146.385, +, 146.2
- [Visit Ham Nation on YouTube](#)

Again, congratulations and welcome! Hope to meet you on the air soon.

73 (best regards)



Joe Martinez, NJ6OE

President

Rialto Amateur Radio Club

www.K6RIA.net



What do I do now?

You've passed your Amateur Radio license exam. Now what? You probably have many questions, such as; "how long will it take to get my license?", "how do I check on the progress of my license?", "what can I do with my license once it is issued?", "what equipment should I buy?", "should I buy new or used equipment?", "where do I buy equipment?", "how do I program my equipment?", "how do I get on the air?", "how do I meet other hams?", "what are there for local activities?", "is there anything more?". These are all common questions for the new ham.

First, let's explore **how long it takes after the exam session for your new license** to be issued.

It takes, on the average, of about two weeks for a new license to be issued from the time you pass the exam. The paperwork must be forwarded from the VE team (the folks that put on the exam session) to the VEC (Volunteer Examination Coordinator) and then on the FCC (Federal Communications Commission) who will issue your license. After about two weeks, you might begin checking for the issuance of your license. If you have web access, you can check at the following URL: <http://www.arrl.org/fcc/fcclook.php3>

The good news is, once your license appears in the FCC's database, you may begin using your license immediately. There is no need to wait for the paper copy of the license to arrive (which might be a month or more).

If, for some reason, your license has not shown up in the FCC's database within a month, look on the back of your CSCE (Certificate of Successful Completion) that you received at the test session for numbers to call to check on the status of your license grant. Speaking of the CSCE, it is a very important document. Be sure to retain your copy of the CSCE at least until your license arrives. It is the only document you have that proves you have passed your exam.



You may have questions about Amateur Radio and don't know just where to turn. There is a place, the Rialto Amateur Radio Club (RARC) has an "Elmer's Bureau" to answer your questions. What is an "Elmer", you might ask? Simply put, an "Elmer" is an experienced ham that is ready, willing and able to answer a new ham's questions and help the new ham get established in Amateur Radio. It's an old tradition in the Amateur Radio world. Please feel free to make use of the "Elmer's Bureau". Never, ever feel afraid to ask any question. Chances are, it's been asked before and will be asked again. Always remember, the only "stupid" question is one that is never asked.

Feel free to contact any of the following "Elmer's" with your questions:

Joe Martinez, NJ6OE, NJ6OE@arrl.net

Bill Runyan, KC6QCR, kc6qcr@aol.com

John Reynolds, W5 JFR, johnw5jfr@roadrunner.com

Other local Amateur Radio Clubs, ARC's, your best support is to join a club close to home

San Bernardino, Citrus Belt ARC <http://www.w6jbt.org/>

Ontario, Inland Empire ARC <http://www.w6jbt.org/>

Riverside ARC <http://w6tj.org/>

Victor Valley ARC <http://vvarc.org/>



What can I do once my license has been issued?

Your Technician license grants you all Amateur privileges above 30 MHz. You can get a taste of Amateur Radio by getting on the very popular two meter band. Equipment is moderately inexpensive (around \$ 100.00 new or less used). Two meter FM is probably the most popular band and mode in Amateur Radio.

There is, however, a lot more Amateur Radio available to you with your Technician class license. You can get a taste of longer range national and international contacts on the 6 meter band (using single sideband and CW). Regional and nationwide contacts can be made on the two meter band (via SSB and CW) using tropo ducting, (meteor scatter and aurora). You can also make some national and international contacts via satellite using some fairly inexpensive equipment. Packet radio can give you a taste of the digital world of Amateur Radio via two meters. Packet offers the ability to connect to distant points via nodes (digital repeaters) or via packet/Internet gateways, send messages to friends nationwide via packet bulletin boards or send packet bulletins nationwide or worldwide through the packet BBS system. How about communicating via amateur television on the 70 centimeter band? There is also the opportunity to make local contacts on the 1 ¼ meter and 70 centimeter bands.

Yes, there is a lot more to Amateur Radio above 30 MHz than just two meter FM.

What Equipment Do I Need And Where Do I Buy It?

This is a question almost every new ham asks. Before this can be addressed properly, a question or two needs to be asked. First, are you looking for new or used equipment, or a combination thereof? Second, are you looking for just the basics or do you want to get a bit more?

There is another question many new hams ask about equipment. That is “Why is it so expensive?” I think the answer lies in economics. There are relatively few hams in the world (relative to the world population) and therefore fewer pieces of Amateur Radio equipment are sold in relation to other electronics items. The fewer you sell, usually the higher the price. The price of Amateur Radio equipment has remained relatively steady in the last 25 years (and has come down in many cases). Feature for feature, Amateur Radio equipment today gives you



much more “bang for the buck” than it did 25 years ago and is the same price or lower than it was then. Also consider that communications equipment lasts a long time. I know of many hams that are using the same equipment they purchased 10 years ago. If we look at it over a period of 10 years, say a \$ 500.00 investment in equipment will come out to about a \$ 50.00 per year investment. Not much over a 10 year period.

Now, let’s address the second question first. The very basic equipment for a new Technician class licensee, in my opinion, is a two meter handheld transceiver. It will get you on the air quickly, but is somewhat limited. Most two meter handhelds today have an output power of about 5 watts. This sounds fairly powerful, but is limited by a fairly inefficient antenna (the “rubber duck” - which actually exhibits a “negative gain”). It’s fine if you are located fairly close to a repeater and you are operating outside, but when you try to operate it some distance from a repeater, especially if you are in a building or in a vehicle, you find you can’t communicate very well. I might recommend picking up some accessories for the handheld. These would be in the form of a magnetic mount, mag mount, antenna for your vehicle and an outside antenna for your home (a quarter wavelength of better). The better you radiate your signal, the better you will communicate. I would also highly recommend an extra rechargeable battery pack and an alkaline battery shell (for those times you have two dead rechargeable batteries and no way to recharge them (“AA” alkaline batteries are readily available almost everywhere)). If your handheld can be powered from an external 12 volt source, I’d recommend picking up a small power supply for the home and an external power cord for your vehicle. These will save your batteries. To increase the range of your handheld, you might consider an amplifier. These range from 25 to 50 watts output.

Now, on to a better equipped two meter station. You might consider picking up a two meter mobile for use in your vehicle and in your home. The power output of these transceivers usually range between 25 and 50 watts and give you much greater range. For these, you will need an external antenna for your vehicle and home, as well as a larger power supply for your home. You can pick up a “slide mount” bracket so you can use the radio both in the vehicle and in the house.



You might also consider a better handheld and mobile rig. A dual band unit(s) offers you a great deal more versatility. You have the advantages of having two bands rather than just one. If you are considering operating on some of “FM repeaters in space” (satellites) you will need to be able to operate both 2 meters as well as 70 centimeters.

The bottom line in equipment is that it’s an investment in the future. In looking at equipment, the new ham may not know where he or she is going to go in relation to the many aspects of Amateur Radio. It is better to start out simple and build from there.

New vs. used equipment

New equipment is just that, new. You are getting something right out of the box that, if it malfunctions, it can be sent back for repair or replacement. Used equipment is always a gamble. It may work or it may not. If it malfunctions, it has to be put in for repair at your expense.

In buying used equipment, be sure to try it, if possible, before you buy. If possible, have the seller program a few local repeaters and try the unit. Be sure it works. In buying older equipment, especially VHF and UHF equipment, make sure it has CTCSS (PL) encoding. Some older units do not have this and may have to be modified by you to provide for this feature. Make sure all parts are there, everything functions as it should and be sure it has a manual. With modern Amateur Radio gear being fairly complex, a manual is an absolute necessity. Even with older, tube type equipment an operators manual is good to have. Tube equipment requires tuning and without the manual, you may have no idea how to tune it. While you can sometimes buy a replacement manual from the manufacturer, never count on it. Avoid the “trust me, it works” without trying it first (especially if the price is very low). One other thing to watch out for in buying used equipment – make sure you are not buying at “new prices”. I have seen on many occasions where a ham is selling used equipment at nearly new or at above new prices. This usually occurs when a piece of gear was purchased say for \$ 200.00 a couple of years ago, for example, and since the time of purchase, the price has dropped. In some cases the ham selling the equipment is unaware of the price drop. He or she may be able to be “talked down” in price if you can show them that they are trying to sell a piece of old gear at a higher



price than new. I might suggest that in buying used gear (especially that which is still currently on the market) you check on the new prices before buying used. Used equipment should be priced 25% to 50% off the original purchase price. You should be able to get the \$200.00 gear for \$100 to \$150.

Where do you buy equipment? New is fairly easy. There are numbers of Amateur Radio equipment outlets that sell new equipment. Two of the larger dealers are Amateur Electronic Supply, Las Vegas, NV and Ham Radio Outlet (HRO). They offer equipment from all of the major manufacturers. There are a number of other dealers, but space and time restrict me from listing them here. I am partial to Ham Radio Outlet as they have a store in Anaheim and Burbank, CA. AES offers no taxes for California, out of the state of Nevada, buyers. Both AES and HRO offer on line buying as well. The advantage of being able to go to the (candy) store is that you can look at and “play” with the equipment. As a side note, both AES and HRO offer used equipment that carry an in house warranty. You can call or e-mail both AES and HRO for catalogs. Their web sites also offer links to the major manufacturers to review products.

Amateur Electronic Supply

1-800-558-0411

<http://www.aesham.com>

Ham Radio Outlet

1-800-444-0047

<http://www.hamradio.com>

For used gear... Many new equipment dealers take trade-ins on new equipment. They usually check out the used equipment they take in, refurbish it and sell it as used. Expect to get a price 50% lower than they expect to sell it for. They usually offer some sort of warranty on the used



equipment. New dealers also offer demo equipment, or open box equipment, for sale at a lower price. Be sure to check these out.

Buying used equipment from private parties is always a gamble. For the most part, hams are honest and will let you know if the equipment they have for sale has a problem with it. Beware, though, a low price may indicate there is a problem with the equipment. Be sure to observe the cautions in buying used equipment mentioned earlier.

Used equipment may be found at various ham fests and electronics flea markets during the spring, summer and fall. You also can find used equipment on line on various ham radio sites and on some of the auction sites such as EBay.

Programming Your Equipment

For many new hams, programming your equipment presents a challenge. Even well established hams can become easily frustrated when confronted with the programming the newer generation of Amateur Radio equipment. It doesn't have to be this way if programming is approached correctly.

First and foremost is your attitude! Your attitude in programming your equipment can make all the difference in the world. As with anything, tell yourself you can't do it and you'll never be able to, no matter how hard you try. Tell yourself you can do it and keep telling yourself you can and eventually you will be able to. Thomas Edison once said that invention was "10 percent inspiration and 90 percent perspiration". I modify that statement slightly for programming your equipment. It is 10 percent knowledge and 90 percent attitude. Face it, everyone makes mistakes. You will make mistakes in programming your equipment, but learn from those mistakes. You will succeed! Of course, you can take a shortcut by buying the programming software for your particular piece of equipment (usually around \$ 30.00 to \$ 40.00) and program your rig from your PC. In programming your rig, always have the manual handy to refer to while you are programming. Don't get frustrated. If you find yourself getting frustrated, walk away for a while. Remember, it's only a hobby. Sit down, have a cool drink, relax and take your mind off the frustration. Return to your programming when the frustration has passed. Final



word on your attitude on programming your radio. Never, ever be afraid to ask for help. E-mail someone from the “Elmer’s Bureau”; or get on line and ask at an Eham.net forum. They can help you. Don’t be afraid to admit you are having problems. Everyone has at one time or another. You may think you have stupid questions, but as we all know, the only stupid question is one that is never asked.

Now, onto the first step in programming your equipment; planning. You can’t program your equipment without proper planning. Write down what you want to program into your rig. Now, lay it out in the manner you want it to appear. Decide what you want in your memories and in what order. On your list put down the receive frequency, the offset and any CTCSS tone that may be required. After preparing your list, put it aside until you decide to program your rig. Proper planning is one of the keys to avoiding frustration down the road.

The next step is reading. There is an old saying; “When all else fails, read the book.” This is a cute saying, but can lead to a great deal of frustration in programming equipment. First, sit down and skim the entire manual. It may be large (50 pages and sometimes more) but it’s time well spent. Don’t try to absorb every word in the manual. Really, only pay attention to the programming sections. One thing to remember at this point; look at the rig while you are reading, learn where critical buttons and knobs are, but do not try to start programming at this point. One function to learn is how to do a master reset on the rig. Learning this will become apparent in the next step.

After reading, it’s now time to practice and play. The first thing to remember is you are always smarter than the equipment (there’s that attitude again). It will only do what you tell it to do. You can’t hurt the rig by mis-programming it. At worst, if you totally goof up the programming, you always have the master reset procedure that will return the rig to its factory programmed parameters and you can start again. First, select the parameters you wish to change in the rig (like receive power saver, auto repeater offset, auto power off and the like). Change these and see how they come out. Be sure to follow the manual as you make the changes. Now it’s time to program a few memories. First, in the VFO mode, set the receive frequency, set the offset (minus, plus or simplex)



Remember the offset frequency should be:

- 2 meters, 600 kHz (or .600)
- 1 ¼ meters, 1.6 MHz (or 1.6)
- 70 centimeters, 5 MHz (or 5.0)

Does the repeater you are programming have a CTCSS tone for access? If it does, program this. Now that you've done all this in the VFO mode, write it to a selected memory, per the manual. See, it's not all that hard. Do a few more to get used to it. When you feel comfortable, move onto the next step.

Now for the final acid test; programming your rig! Get out the list of memories that you prepared earlier. Go slow and follow each step. In no time, you'll have your equipment programmed just the way you want it.

Repeater Operating

Before you make your first FM repeater contact, you should learn some repeater operating techniques. It's worth a few minutes to listen and familiarize yourself with the procedures used by other hams in your area. Accepted procedures can vary slightly from repeater to repeater.

Your First Transmission

Making your first transmission on a repeater is as simple as signing your call. If the repeater is quiet, just say "NJ6OE" or "NJ6OE monitoring" (of course, use your own call sign). After you stop transmitting, you will usually hear the unmodulated repeater carrier for a second or two. This squelch tail lets you know that the repeater is working. Someone interested in talking to you will call you after your initial transmission. Some repeaters have specific rules for making yourself heard. In general, however, your call sign is all you need. Don't call CQ to initiate a conversation on a repeater. It takes longer to complete a CQ than to transmit your call sign. Efficient communication is the goal. You are not on HF, trying to attract the attention of someone who is casually tuning across the band. In the FM mode, stations are either



monitoring their favorite frequency or not. Except for scanner operation, there is not much tuning across the repeater bands.

To join a conversation in progress, transmit your call sign during a break between transmissions. The station that transmits next will usually acknowledge you. Don't use the word "break" to join a conversation -- unless you want to use the repeater to help in an emergency. To make a distress call over a repeater, say "break break" and then your call sign to alert all stations to stand by while you deal with the emergency.

A further word about emergencies: Regardless of the band, mode or your class of license, FCC Rules specify that, in case of emergency, the normal rules can be suspended. If you hear an emergency call for help, you should do whatever you can to establish contact with the station needing assistance, and immediately pass the information on to the proper authorities. If you are talking with another station and you hear an emergency call for help, stop your QSO immediately and take the emergency call. To call another station when the repeater is not in use, just give both calls. For example, "KA6NNE this is NJ6OE". If the repeater is in use, but the conversation sounds like it is about to end, wait before calling another station. However, if the conversation sounds like it is going to continue for a while, then transmit only your call sign between their transmissions. After you are acknowledged, ask to make a quick call.

Usually, the other stations will stand by. Make your call short. If your friend responds, try to meet on another repeater or on a simplex frequency. Otherwise, ask your friend to stand by until the present conversation ends. Use plain language on a repeater. The use of "Q" signals were made for CW, not for voice. "10" codes are generally frowned on. If you want to know someone's location, say "Where are you?" If you want to know whether someone you're talking with is using a mobile rig or a hand-held radio, just ask: "What kind of radio are you using?" You get the idea.

Courtesy Counts

If you are in the midst of a conversation and another station transmits his or her call sign between transmissions, the next station in line to transmit should acknowledge the new station



and permit the new arrival to make a call or join the conversation. It is impolite not to acknowledge new stations, or to acknowledge them but not let them speak. The calling station may need to use the repeater immediately. He or she may have an emergency to handle, so let him or her make a transmission promptly. A brief pause before you begin each transmission allows other stations to break in --there could be an emergency. Don't key your microphone as soon as someone else releases theirs. If your exchanges are too quick, you can prevent other stations from getting in.

The courtesy tones found on some repeaters prompt users to leave a space between transmissions. The beeper sounds a second or two after each transmission to permit new stations to transmit their call signs in the intervening time. The conversation may continue only after the beeper sounds. If a station is too quick and begins transmitting before the beeper sounds, the repeater may indicate the violation, sometimes by shutting down!

Keep transmissions as short as possible, so more people can use the repeater. Again, long transmissions could prevent someone with an emergency from getting the chance to call for help through the repeater. All repeaters encourage short transmissions by "timing out" (shutting down for a few minutes) when someone gets longwinded. The time-out timer also prevents the repeater from transmitting continuously, due to distant signals or interference. Because it has such a wide coverage area, a continuously transmitting repeater could cause unnecessary interference. Continuous operation can also damage the repeater.

You must transmit your call sign at the end of a contact and at least every 10 minutes during the course of any communication. You do not have to transmit the call sign of the station to which you are transmitting. Never transmit without identifying. For example, keying your microphone to turn on the repeater without saying your station call sign is illegal. If you do not want to engage in conversation, but simply want to check if you are able to access a particular repeater, simply say "NJ6OE testing."



Fixed Stations and Prime Time

Repeaters were originally intended to enhance mobile communications. During commuter rush hours, mobile stations still have preference over fixed stations on some repeaters. During mobile prime time, fixed stations should generally yield to mobile stations. When you're operating as a fixed station, don't abandon the repeater completely, though. Monitor the mobiles: your assistance may be needed in an emergency. Use good judgment: rush hours are not the time to test your radio extensively or to join a net that doesn't deal with the weather, highway conditions or other subjects related to commuting. Third-party communications nets probably should not be conducted on a repeater during prime commuting hours.

Simplex Operation

After you have made a contact on a repeater, move the conversation to a simplex frequency if possible. The repeater is not a soapbox. You may like to listen to yourself, but others, who may need to use the repeater, will not appreciate your tying up the repeater unnecessarily. The easiest way to determine if you are able to communicate with the other station on simplex is to listen to the repeater input frequency. Since this is the frequency the other station uses to transmit to the repeater, if you can hear his signals there, you should be able to use simplex. If you want to perform an on-the-air test of a pair of hand-held radios, you should select an unoccupied simplex frequency. The function of a repeater is to provide communications between stations that can't otherwise communicate because of terrain, equipment limitations or both. It follows that stations who are able to communicate without a repeater should not use one. That way, the repeater is available for stations that need it. (Besides, communication on simplex offers a degree of privacy impossible to achieve on a repeater. On simplex you can usually have extensive conversations without interruption.) Select a frequency designated for FM simplex operation. Otherwise, you may interfere with stations operating in other modes without realizing it. (The reason for this is simple: changing to a simplex frequency is far easier than changing the frequencies a repeater uses.) To see if you and the other station can communicate on a simplex frequency, listen on the repeater input frequency. If you can clearly hear what's going into the repeater, you don't need the repeater to communicate.



Common VHF/UHF FM Simplex Frequencies

2-Meter Band

146.52*, 146.535, 146.55, 146.565, 146.58, 146.595, 147.42, 147.435, 147.45, 147.465, 147.48, 147.495, 147.51, 147.525, 147.54, 147.555, 147.57, 147.585

1.25-Meter Band

223.42, 223.44, 223.46, 223.48, 223.50*, 223.52

70-cm Band

446.0*, 446.25, 446.50, 446.75

* National simplex calling frequency

Meeting other Hams

Of course, ham radio is all about meeting new people and sharing your Amateur Radio experiences. You will meet any number of other hams on the air. The question always is; "How do I meet hams in person?" There are various avenues to meet other hams in your general area.

First are ham clubs, associations and organizations. To find ham clubs in your local area, I suggest going to the American Radio Relay League (ARRL) web site and click on clubs (<http://www.arrl.org/clubs>). The club web page will list radio clubs that are located in your area along with where and when they meet and a local contact. There are many clubs in the Rialto area.

Another good way to meet local hams is through emergency communications, EmComm, organizations such as the Amateur Radio Emergency Service (ARES) and the Radio Amateur Civil Emergency Service (RACES). Many times, these organizations are associated with a local radio club or with a county Emergency Management Agency. Membership in ARES or RACES is free and the only two requirements for membership in ARES or RACES is being a licensed



Amateur Radio operator and having a sincere desire to serve your community in times of disaster or emergency.

In many areas, hams have informal get togethers. The best way to locate the gatherings is to listen on the air or ask at a local radio club meeting.

Local Activities

There always seem to be activities going on between hams in any area. There are individual and small group activities such as contests. There are larger and more organized activities such as ham fests and flea markets, Special Events, emergency drills and Field Day (save the last full weekend in June for FD).

Ham fests and flea markets occur throughout the US and are a great way to purchase equipment and supplies as well as meeting other hams that you have met on the air. Some of these events are just flea markets and some offer other activities. The other activities may be in the form of forums on various subjects and at many ham fests, VE testing is held. To find out when ham fests and flea markets are scheduled, listen to any of the many nets in the state.

Special events are activities where hams provide communications for public service events in the local area. These events may take the form of walks, foot races, bike rides and races, parades and even dog sled races. They occur throughout the year. They are fun events that allow hams to provide a public service as well as letting hams exercise the equipment they might use in an actual emergency. Our communications usually takes the form of logistics communications for the event, but we also provide communications for emergencies that might occur during the event. They are fun events which allow you to meet other hams in the local area as well as participating in an event that benefits the public and exposes the public to what Amateur Radio is all about. To find out about Special Events in your area, check with your local radio club, ARES/RACES organization or listen to nets in your local area.

Emergency communications is part of what Amateur Radio is all about. And the Rialto Amateur Radio Club is formed for EmComm. We, as hams, can be called on at any time to provide backup communications for various governmental and disaster relief organizations



involved in a local disaster or emergency. To exercise our capabilities and train hams in emergency communications procedures, drills are held on a regular basis. To find out about these drills, contact your local ARES/RACES Emergency Coordinator.

Field Day is a yearly event sponsored by the American Radio Relay League (ARRL). It is always on the last full weekend in June. It's a chance for hams to hone their operating skills by setting up and operating under less than optimum conditions (in the field). The object of Field Day is to contact as many stations as possible in a 24 hour period. It's a great chance for the new ham to become acquainted with HF and other aspects of Amateur Radio and have a chance to operate new modes. It's a chance for new hams to meet other hams from the local area and have a great time. Some Field Day operators use the event as an excuse to spend the weekend outside and others just visit for a few hours. Either way, it's fun and a good chance to socialize with other area hams. Most Field Day sites are sponsored by local clubs.

Nets

Nets are an important part of Amateur Radio. They keep hams informed about what's going on in their local area, in their state and throughout the country and the world. Nets take many forms. Some are oriented toward emergency communications, some are severe weather related, some are related to sailing, some pass written traffic, some serve to inform hams of Amateur Radio items for sale in a local area and some keep hams informed about various pieces of equipment (both current and antique). To say the least, nets are varied. Think of a subject related to Amateur Radio and there is probably a net somewhere in the world that covers it.

To learn more about nets in your area, connect to the ARRL web site: <http://www.arrl.org> and do a search for nets OR click on the club website <http://www.k6ria.net/download.html>.

Is There Anything More?

Now that you have passed your Technician Class exam and are waiting for your license, you might ask the question; is there anything more?



As you may know, there are three classes of Amateur Radio license in this country. They are the Technician, General and Extra classes. The Technician Class offers all Amateur privileges above 30 MHz and requires **no International Morse Code requirement**. The General and Extra Class offer more privileges including Amateur privileges in the HF range (3 - 30 MHz). Upgrading your license offers you new horizons in worldwide communications. The major difference between the General and Extra Classes is the amount of frequency space you have to operate on (the higher the class of license, the more privileges). Each exam is progressively harder. The General Class has a 35 question exam and the Extra Class has a 50 question exam. As with the Technician exam, the question pool is published and all exam questions are taken from the appropriate question pool. The General and Extra Class exams may be self studied or you may take a class to help you along.

Upgrading Classes

Upgrading classes are usually offered in the Fall, Winter and Spring in various parts of the state. These classes can help you along in your quest for a higher class license. They won't teach you everything. You need to do some study on your own. They will, however, help to answer your questions on those items you may be having trouble with.

The best places to find out about upgrading classes is to check with your local radio club for classes they may be offering or listen to various nets for announcements of upcoming classes.

Useful Web Sites

The following are web sites that are useful for the new ham. There are many numbers of web sites relating to ham radio, but there just isn't enough room to list them all here.

Repeater Frequencies, Net lists, Antennas and more

<http://www.k6ria.net/download.html>



General Amateur Radio

<http://www.arrl.org/> The National Association for Amateur Radio – covering everything relating to Amateur Radio

<http://www.ac6v.com> A good resource site – has hundreds of links to almost every Amateur Radio activity one can think of.

<http://www.eham.net> A very useful site for all manner of Amateur Radio related topics

<http://www.hamuniverse.com> A very useful site for all manner of Ham related topics

<http://www.dxzone.com> A very useful site for all manner of Ham related topics

<http://www.qrz.com> A good site for call sign lookups as well as sample tests for all level of licenses and many general interest items.

New Ham Related Articles

<http://www.qsl.net/wd4bis/Newham/newham.html> A good site with many articles that relate to the new ham.

Amateur Radio Emergency Communications (ARES/RACES)

<http://www.K6RIA.net>

<http://www.emcomm.org>

Ham Radio Equipment (new and used) and Related Items

<http://www.hamradio.com> The Ham Radio Outlet web site – source of new and used equipment

<http://www.aesham.com> The Amateur Electronic Supply web site – source of new and used equipment

<http://hamstation.com> The Ham Station web site – source of new and used equipment

<http://www.hambidder.com> An Amateur Radio auction type site

<http://thesignman.com> A good source of name/call sign badges and related items.

