

Hi,

Here is a bit of info about amateur radio that you might find interesting....

The Randolph Amateur Radio Club (radio clubs tend to list themselves as Podunk ARC or Jonesville ARS; Amateur Radio Club or AR Society) is a general interest group having a number of varied interests; antenna building, kits, homebrew, DXing, contesting, etc. About a third of our members are YLs (Young Ladies—actual age is not a consideration) most with a license. We are kid-comfortable and welcome their presence and participation. We have a monthly breakfast at Jed's BBQ on the second Saturday at 8:00 AM; a monthly Supper on the fourth Tuesday at 6:00 PM followed by the meeting at 7:00 PM. We do change our venue for the September meeting to the Golden Corral for eyeball QSOs and election of officers and for the December non-meeting Get Together supper; specific information will be in the monthly calendar e-mail. Dues are \$15.00 per annum pro rated and \$3.00 for family members. You will be receiving our e-mail club info/activities calendar unless you want to opt out of the privilege.

Please feel free to contact me [Butch Simpson, WS4H] with any questions that you might have, especially as you start studying for the Technician and, hopefully, later exams. I am available via e-mail at butch@atomic.net or 336-381-4584 (leave a message if I'm not home)

Some Ham Radio Areas of Interest:

DXing: Hunting, working (2-way conversation), and confirming (either a written confirmation or QSL card <http://www.ux5uoqsl.com/> or confirming electronically on ARRL's Logbook of the World) stations outside the lower 48 states. There is a DX awards program sponsored by the ARRL, DXCC (confirming 100 DX entities), with many variations and sub awards <http://www.arrl.org/dxcc> .

Rag Chewing: Carrying on a long conversation with another ham operator either as a random contact or on a Sked (regularly scheduled day, time, and frequency).

Nets: Checking in on a scheduled on-air meeting of hams with a similar interest (Drake radios; serving on the USS Lexington; ex-Submariners; GE employees; Salvation Army net; etc.) <http://ac6v.com/nets.htm>

County Hunting: Collecting and/or providing contacts in all 3077 U.S. counties <http://www.countyhunter.com/counties.htm> Some county hunters have worked All Counties multiple times.

List Hunting: My own term. In addition to hunting counties, Hams hunt Islands on the Air (IOTA); Mountain Summits (SOTA); Light Houses; Museum Ships; National Weather Service stations; Route 66 towns; etc; generally called Special Events.

Contesting: Typically, you try to work as many stations as possible within the time limits and rules provided. Serious contesters will often go to a desirable country to operate multiple stations and make thousands of contacts. Go to the bottom of this page for the [Contest Corral](#) listing of all contests (Check out the entry for EME (Moon Bounce—See Below)

Satellites: Ham radio operators build, and arrange launching for, and then work other stations on satellites. <http://www.amsat.org/amsat-new/index.php>

Moon Bounce: EME (earth-moon-earth) is a far out (pun intended) branch of ham radio usually, but not always, involving high powered radios, extreme antennas, and specialized software all used to make a contact with someone else who has contracted this lunacy.

[http://en.wikipedia.org/wiki/EME_\(communications\)](http://en.wikipedia.org/wiki/EME_(communications))

Meteor Scatter: Making contacts by bouncing a signal off the vapor trail of meteors in our atmosphere; akin to EME.

QRP: Using the least possible amount of power to make contacts, often small fractions of a Watt, milliwatts; MPW, miles per Watt, is one measure of success often reaching thousands of miles per Watt...I once made contact with a station in the Rep. of South Africa who was using 4 watts or about 2000 miles per Watt.

Mobile Operating: Many hams operate mobile from everything from backpack, bicycle, ice cream truck, to 18-wheeler, (I have personally worked each one of the above mobile methods and have seen a “duck mobile” amateur TV station (quack, quack type duck)) to satellite mobile— there is a station on the ISS.

Digital Modes: There are several keyboard digital modes for keyboard to keyboard conversations (PSK31, RTTY, Pactor) plus SSTV (slow scan TV, sending a digital image via radio) and CW (Morse code, is digital in that there are two units used—a binary code-Dah and Dit). The really neat thing about the digital keyboard modes and the various SSTV modes is that they are developed and programmed by hams and the necessary software suites are freeware!
<http://www.g0hwc.com/>

Some Related Web Sites:

<http://www.arrl.org/> The ARRL is our national organization and a good source of reference materials. The membership dues are mostly for the magazine, QST, but will allow you to access the archives (100 years now. BTW, one of my manias is collecting QSTs, as of now I have all but fewer than 100 issues between 1922 and this month.) If you click on “Licensing, Education, and Training”

<http://www.arrl.org/licensing-education-training> you will be taken to a good starting point.

Clicking on “Finding an Exam Session” will get you to the ARRL’s exam teams (Volunteer Examiners or VEs); our team is affiliated with the W4VEC group: <http://w4vec.org/> look under North Carolina, Asheboro.

<http://www.howstuffworks.com/search.php?terms=amateur+radio> How Stuff Works is a fantastic source of beginner information. This link will take you to the Amateur Radio index page, a really good place to start your learning.

<http://www.qrz.com/> QRZ actually means “who is calling me”...from the home page click on “site menu” and look down the list to “Practice Amateur Radio Exams” this is where you can take practice exams after you study the material that you get from the ARRL. In the upper left corner is a search window, type in WS4H and you will see my info. License exam practice tests are located under “Resources” <http://www.qrz.com/ht/> .

<http://www.dxwatch.com/dxsd1/dxsd1.php?f=91> DX watch is a spotting site, it lists stations that are currently on the air who have been spotted by various hams. This address is the filter arrangement that I use for my DXing, I look at spots reported by US stations, for hams using SSB, on HF bands. You can set up the page for whatever configuration that suits your needs. If you register for the site you will be able to put your cursor on a DX call and have a popup give you some info like the country and ITU and CQ zone (info for contesting), after you enter your Lat/Lon it will give you beam headings to aim your antenna (once you have a tower and a beam).

<http://ac6v.com/> AC6V is a web site with thousands of ham-related links. Use the alpha index to narrow down your choices.

http://www.hamradio.com/all_products.cfm HRO is one of the bigger vendors of ham gear, go to HRO Catalog and scroll down to the bottom of the page to order a paper catalog. Use the paper catalog to find an item and then look up the price on the web site. They are good people and have the best prices around, I have never had a problem that they wouldn’t help me with.

<http://dx-world.net/> If you are going to be a DXer, DX World will be valuable to you. Lots of up-to-date info on current DX-peditions and activations.

<http://www.425dxn.org/> A bit less flashy, a lot less flashy, the 425 DX News provides DX resources also. They have a free monthly DX magazine that is quite nice.

As for Getting Started...

Go to the ARRL web site and click on "Licensing Education and Training" then, on the left side click on "Licensing Preparation and Exams" then "Level 1 Technician" then "Preparing for the Tech Exam", "Learn More". The [Ham Radio License Manual](#) has all the info you need for the Tech exam plus all of the questions that are used to make up the tests. The [Tech Q & A](#) book is the Reader's Digest version, a question, the four answers, the correct answer with a sentence or two as to why it is correct. Either one will work. The advantage of the Manual is you have a reference book for getting started, I still have my copy of [Now You're Talking](#) that I used to become a ham in 1993—and still use it occasionally.

There are three license classes:

Technician which allows you full access to the VHF / UHF bands in all modes of operation plus very limited access to one HF band, 10 meters single side band (28.300—28.500 MHz) and CW (Morse code 28.000—28.300 MHz) plus a some CW frequencies on 15 and 40 meters.

General which expands HF privileges with limited voice, CW, and digital modes on all bands

Extra gives full privileges for all bands and modes

Frequency/License Chart: [Your Mode and Frequency Privilege](#)

Exams: The licensing exams are given by local teams of Volunteer Examiners (VEs) with the exams being forwarded to that particular groups Volunteer Examiner Coordinator (Our local VE team (Randolph County) is affiliated with W4VEC) All exams are given in Asheboro six times per year on the even months in the Asheboro Library, you can check W4VEC (link below) for particulars and contact me with any questions. The ARRL web site has study guides available and QRZ has practice tests for all levels available (web site links below). Something for consideration...If you are getting along well with the Technician material you may want to consider adding the General class material to your study (materials available from the same source as the Tech.). The reason being you can, if you pass the Technician exam, take the General for no extra fee and within a few days you will be licensed for much of each HF band as well as for all of the VHF/UHF bands. Once you are making scores consistently in the mid to upper 80% range on practice tests, you are ready to test.

My station is open to anyone interested in ham radio, just give me a call or drop me an e-mail and we'll find a good time for a visit. If you go to my QRZ spot (<http://www.qrz.com/> then enter WS4H in the upper left search window) you'll see it. My e-mail is butch@atomic.net and my phone number is 336-381-4584.

Listening in Right Now:

VHF: Here is a listing of web sites that provide real-time streaming of the VHF ham bands (repeaters): http://streema.com/radios/genre/Ham_Radio A scanner should give you access; use the frequency chart from above to set the scanner.

HF: Here is a listing of live ham radio station web cams with audio. Try them at different times of the day. http://www.q0hwc.com/streaming_ham_webcams.html To listen in with a short-wave radio you will need one with Single Side Band as a listening mode.

DX on the Air: A real-time listing of who and what frequency is on the air can be found at: <http://www.dxwatch.com/dxsd1/dxsd1.php?f=2037> . If you register with the site and sign in, you can establish filters that limit "spots" from, say, Japan which won't be of much help here. Being signed in will allow you to "decode" the station call signs. EI88WAW isn't too descriptive to a non-ham; to me I can tell that it's a special event call sign from the Republic of Ireland. Registered users are given the basic station info when you roll over the call sign and you are given full info when you click on the call.

Setting up a station will cost money, how much depends on what you are hoping to do with it and your budget. Buying good used equipment and making a few wire antennas will greatly reduce your initial outlay. Starting from scratch you can figure (in 2018) on about \$100 to \$500 for a VHF / UHF FM station which will give you communications in the central part of NC via repeaters. A basic HF station, with mixed new & used gear and homemade antennas, will run in the \$500-\$1200 range which will give you world-wide contacts. A bit further up the food chain will get you a rig with more features which will add to operating ease and efficiency. From that point on the sky's the limit with high-end multi-multi (multiple radio / multiple operator) contesting stations costing perhaps \$500,000 or more and covering several acres of ground [VE6JY Antenna Farm](#) . In the greater scheme of things amateur radio will cost most hams much less than owning a Bass boat or collecting antique cars...with no washing and waxing and little upkeep needed.

Antenna Party! One of the real perks to joining a local Ham Radio club is the knowledge base contained within its membership. If the club members know that you are new to ham radio, there will probably be one or more offers to help you set up a station—some clubs even have loaner gear available—and offers to help with the antenna(s). Getting a line over a 75-foot-tall poplar can be daunting to the uninitiated while fairly simple to the experienced.

For the newbie getting a station set up and working properly can be a major hump to get over—the antenna party is the solution. You'll need to gather equipment and supplies well in advance...

VHF/UHF Station: mobile radio; power supply (25 amps); antenna for desired bands; low-loss coax; coax waterproofing; tools as needed

HF Station: 100-Watt HF radio; power supply (25-35 amps); wire antennas for desired bands; antenna tuner (radio may have an internal tuner); coax; coax waterproofing; solar-resistant line; pulley to fit line; 15 lb (barbell) weight;

The equipment and coax can be either new or good used (ham fest), a 25-amp power supply will operate both the V/UHF and HF rigs, and buy the lowest loss coax you can afford. Make your own wire antennas—20 and 40 meters are a good place to start, 100' of 14-gauge light grey wire from a big box home store will make both; make insulators from grey PVC pipe. As soon as you have your gear together contact one of the “volunteers” and ask him/her about how to put it all together...then stand back!

Please feel free to contact me with any questions that you might have, especially as you start studying for the Technician and, hopefully, later exams. I am available via e-mail at butch@atomic.net or 381-4584 (leave a message if I'm not home)

Here are a few more ham radio sites...

Getting Your License:

<http://www.hamradiolicenseexam.com/index.html> Ham Test On line is a for pay study web site with a money back guarantee.

<http://www.w5yi.org/catalog.php?sort=2> Gordon West study guides

<http://www.arrl.org/shop/Licensing-Education-and-Training/> American Radio Relay League—ARRL—web site with their license study guides

<http://www.arrl.org/licensing-preparation-exams> ARRL getting started page

<http://ac6v.com/> Go to AC6V and look up License Preparation for more links.

Test Sessions:

Think hard about it before taking your test(s) at a Ham Fest; long lines to test; less than optimal facilities; slow scoring results; long waits for call signs are all very possible. When you are ready to test find a session somewhere!

<http://w4vec.org/> W4VEC is a local testing coordinator and is the one our team is affiliated with. If you test with a W4VEC team you will probably have your call sign within a few days Saturday sessions usually result in call signs being available early Monday morning—if there isn't a Monday holiday on the calendar. Once your call sign is listed on the FCC web site you are legal to operate on the air

http://www.w5yi.org/exam_locations_ama.php This is another coordinating group; call signs may be several weeks before being issued.

http://www.arrl.org/exam_sessions/search The ARRL has many testing teams but is slow in letting you know what your call sign is.

Buying Stuff-Ham Fests:

Both new and used items are available; of course, the used items are AS IS and usually no refund is available. If the seller tells you he hasn't had time to check it out, consider the item inoperable. Price adjustment (dickering) is normal and expected.

<http://www.arrl.org/hamfests-and-conventions-calendar> This is the ARRL Ham Fest listing by states and date

<http://www.w4bfb.org/hamfest2011/forums.html> The Charlotte ham fest is my season opener, second weekend in March

<http://rars.org/hamfest/> Raleigh Amateur Radio Society RARS-fest in April

<http://shelbyhamfest.com/> Shelby Hamfest in Shelby, NC Labor Day weekend, really big one

<http://www.hamvention.org/> Dayton, OH area Hamvention is the largest amateur radio ham fest & convention in the world in May.

Buying Stuff-E-Bay:

Be very, very, very, very, very, very, very, very, very, very careful. I have gotten some good deals and have been "Less than satisfied" with other E-Bay purchases. The bidding environment seems to run up prices higher than ham fests and the shipping really adds to the total. I have seen some items go for more than retail catalog price and the "winner" still had to pay for shipping the item.

Logging Programs:

<http://www.hosenose.com/> Hosenose. com is the company that makes the logging program that I use. At the time I first purchased it, there were almost no freeware programs available that could do what Logic 4 could do (I'm now up to Logic 9). That is no longer true. One high level, comprehensive freeware program is <http://www.winlog32.co.uk/> ; Logger 32 is another freeware item: <http://www.g4ifb.com/html/logger32.html>. I have played around with them a little bit but not enough to become proficient. Several hams that I know sing their praises. They will do most of what my program will and for free (donations are accepted).

Buying Stuff-Retail:

Several of these vendors have free shipping with a minimum purchase!

<http://www.hamradio.com/> Ham Radio Outlet...If I am planning on buying from a retailer HRO will probably be the one! They are also at the Charlotte, Shelby, and Dayton ham fests. Free shipping with most \$100+ orders.

<http://www.gigaparts.com/specials.php?type=radio> Giga Parts and another full-service dealer with generally competitive pricing...free shipping with \$99+ for radio gear

<http://arraysolutions.com/> Array solutions is a developer and vendor for serious station operating equipment and accessories.

<http://www.dxengineering.com/> DX engineering is another site for station accessories and equipment, lots of neat stuff.

Equipment Reviews:

<http://www.eham.net/> eHam.net is a pretty interesting site, be careful asking questions or commenting—you, as a beginner, will need a thick skin because some of the lurkers have no patience for newbies. Go to the Product Reviews (Left sidebar) when you are thinking about buying something.

If you join the [ARRL](#) you will be able to search for in-depth reviews of equipment on line and in the organization's journal, QST

Antennas:

Basic Antenna Info: This link is more for the newly-licensed ham than for the “Ham-Curious” individual. But what the heck, here it is: <http://www.hamuniverse.com/n4jaantennabook.html> . This material is by Jim Abercrombie, N4JA (SK)...SK is the Morse Code abbreviation for Silent Key which, for hams, means a ham that has died, his key is now silent... Lots of good info in these pages and is worth a read by anyone interested in the radio arts.

Wire Antennas: Try this link [wire antennas for ham](#) radio to discover the gamut of wire antenna types (287 projects!)...There's got to be one that suits your needs. Plus, you can't beat the price...hint: buy a 100' spool of 16 gage stranded wire in light grey which will make you a 20- and 40-meter dipole. Now all you need are some trees...

My station is open to anyone interested in ham radio, just give me a call or drop me an e-mail and we'll find a good time for a visit. if you go to my QRZ spot (<http://www.qrz.com/> then enter WS4H in the upper left search window) you'll see it. My e-mail is butch@atomic.net and my phone number is 336-381-4584 [Butch Simpson, WS4H].