

Congratulations,

The hours of reading, studying, and memorization have paid off in you passing the exam. Good Job! Now the fun is about to begin, but where to start? What do I do next? Do I buy a radio? What kind? Where from? Who am I going to talk to? What am I going to say? The good thing is WE have all been where you are with lots of questions and looking for answers.



Our goal in creating this kit is to help you get started and provide resources where you might look for some of the answers to those questions and many others. Let's start by suggesting you look at joining a local radio club like Wabash Valley Amateur Radio Association (WVARA for short). We can be found at www.W9UUU.org. By joining a club, you have some of the greatest resources available—decades worth of information from people (Elmers) who have been enjoying this hobby for many years or people like yourself who are just starting out. In belonging to a club you are part of a group of other

Hams who are just as excited as you about amateur radio. During monthly meetings you will have an opportunity to interact with other club members, so when you get on the radio locally, you can put a face to a call sign. Enclosed you will find an application, listed on it are some of the other benefits from joining the WVARA.

Look at the repeater page in this packet. You will find information about local repeaters. How they work, and how can you use them. As a Technician you will be able to access some of the VHF/UHF bands and repeaters in our area.

The internet can also be a resource to look to for more information. There are numerous websites and videos that speak on many topics related to ham radio. We have created an information sheet on websites that may want to refer to for some help. And don't forget to check out our webpage at W9UUU.org

You may also want to consider becoming a member of the ARRL (American Radio Relay League). They can be found on the web at <https://www.arrl.org/join-arrl-renew-membership/>. For \$49/year you can join and with your membership, you will have full access to tons of information as well as a monthly magazine called QST. Non-ARRL Members and new hams may obtain a sample copy of the NEW ARRL On-The-Air Magazine by completing the request form at <http://www.arrl.org/ota-sample>

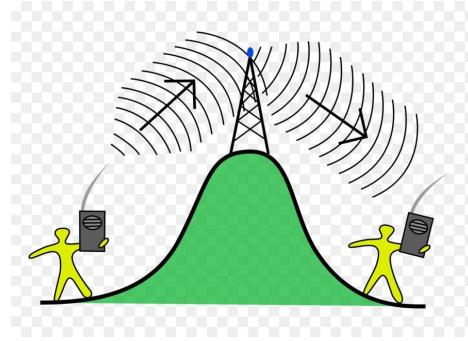
Take some time and look at the materials provided. It is our hope that it will make your journey into amateur radio much easier.

We look forward to seeing you at our next club meeting.

How does a repeater work?

A repeater can receive a weak signal, or a signal from a HT, or mobile user and re-transmit it over a wider area. Most repeaters are placed in higher locations to improve the transmitting signal.

Before a radio can be used with a repeater, the radio will need to be programmed with the correct settings.



Programming the radio to use a repeater will vary with different radio manufacturers. But all of the local repeaters use an Input frequency and an Offset frequency. The radio will listen for a signal from the repeater on one frequency and the radio will transmit a signal back to the repeater on a different frequency.

Input Frequency: The frequency that the radio needs to transmit on, so that the repeater can re-transmit the signal. (Repeaterbook.com calls them an uplink)

Output Frequency: The frequency that the repeater transmits on, and the radio is listening to. (Repeaterbook.com calls them a downlink - on the club's page and most other webpages it is just referred to as frequency or input freq.)

The Offset: The difference between the Output and the Input frequencies (either a positive or a negative frequency). For 2m repeaters, the offset is normally +/- 600 kHz

PL or CTCSS Tone: Also referred to as Private Line (PL) or Continuous Tone Coded Squelch Systems (CTCSS) are sub-audible **tones** that are transmitted simultaneously with the speech portion of the transmission. It is these **tones** that prevent other people and repeaters from receiving the transmission. If a repeater is set up to use a PL tone the radio will have to be programmed with this tone to operate on that repeater. If a repeater does not list a PL Tone, then it most likely isn't required to use the repeater.

The K9ITQ repeater/the clubs repeater uses the freq. of 146.685 or downlink freq. with an offset -0.600 kHz and an uplink or transmit freq of 146.0850. With a PL tone of 151.4. Most of the newer radios know the offsets by just putting in the frequency. And are programmed with the most common table of PL tones.





Local Repeaters

Frequency	Offset	PL tone	Call	Location
145.230 MHz	-600 kHz		W9SKI	West Terre Haute, IN
145.350 MHz	-600 kHz		NC9U	North Terre Haute
145.420 MHz	-600 kHz		N9CCA	Center Point, IN
145.440 MHz	-600 kHz		AD0TY	Rockville, IN
146.685 MHz	-600 kHz	151.4 Hz	K9IKQ	WTH, IN
146.715 MHz	-600 kHz	151.4 Hz	W9COD	Clinton, IN
146.775 MHz	-600 kHz	136.5 Hz	KC9AK	Dugger, IN
146.805 MHz	-600 kHz		KC9SJJ	Terre Haute, IN
147.150 MHz	+600 kHz		K9ITK	WTH, IN
147.360 MHz	+600 kHz	107.2 Hz	WA9ISV	Robinson, IL
444.350 MHz	+5 MHz		W9SKI	TH IN
444.600 MHz	+5 MHz		W0THI	Terre Haute, IN
444.750 MHz	+5 MHz		K9ITK	WTH, IN

Weekly Nets

Net	Frequency	Day & Time
Vigo County ARES Net	146.685 MHz	(1st Sun of the month) 8:30 PM (EST/EDT)
WVARA Net	146.595 MHz	(1st Sun of the month) 9:00 PM " "
WVARA Net	146.685 MHz	(all except 1st Sunday) " "
Dugger (KC9AK)	146.775 MHz	Monday's 8:00 PM
Clay County ARES Net	145.420 MHz	Monday 9:00 PM
W9COD ARES Net	146.715 Mhz	Tuesday 8:00 PM
KC9SJJ Ecom net	146.805 Mhz	Tuesday 8:00 PM
Terre Haute Radio Club Net	147.150 MHz	Wednesday 08:00 PM
Crossroads of America Amateur Radio Ladies Association Net (open to everyone)	146.685 MHz	Thursday 9:00 PM
Cabin Fever net	146.685 Mhz	Nightly 7:00 PM

How do you make a call?

LISTEN to make sure that the repeater is not already in use.

BEGIN by calling out on the air with your callsign and the words listening or mobile monitoring

Sometimes you may hear a station but not understand all of their callsign, just state on the air "last station calling and give your callsign" you might even include your first name and callsign.

Callsigns on repeaters are normally just stated as the letters and the number.

(K9BB-- not phonetically --(kilo nine bravo bravo). One exception to this rule is if a person is having trouble making out your callsign.

CQ is not used when calling out on repeaters. Just simply listen to make certain the repeater is not in use and then key your mic and say your call sign and "listening". If someone happens to be listening and they want to talk to you they will respond.

If you call out by using the words testing or radio check, most hams are just going to give you a short report on how well they heard you. They are not looking to engage in a long conversation.

After you make contact with someone don't be afraid to let them know you are new. When talking to someone, the Who, What, When and Why go a long way in talking to another person. (Who are you? --What are you doing? might be trying out your new radio --When-- might be when you got your tech. license-- Why-- might be why you got into the hobby).

Don't be surprised if you are asked a lot of questions instead of the other way around. He or she is just trying to get you to feel relaxed on the air. But most hams will try to tell you a little bit about themselves also.

Keep your traffic short, sometimes other hams are just getting back to you to acknowledge your calling out. Listen for the signs of someone trying to wrap up the conversation.

Thank them for reaching out to you or calling you back.

Remember you are new, mistakes might happen, it's not the end of the world. Other stations might let you know if a mistake was made and how to correct it.

Practice by listening, participating in different nets will make you more relaxed and give you a great chance to hear others.

Enjoy-- talking with other hams can be a lot of fun !!



Ham Radio Links of Interest



<https://hamradioschool.com/> site for newer hams
<https://newhams.info/> “ “ “
<http://www.arrl.org/buying-your-first-radio> Buying 1st radio info
<https://www.youtube.com/watch?v=Vxft-rYHGDw&t=370s> --Ground Plane 2m antenna-
<https://medium.com/@OpenQnl/homebrew-1-2-wavelength-2m-j-pole-antenna-build-part-1-of-2-3c426d76361a> - J-pole antenna
Slim Jim antenna (ladder type)--
<https://n9taxlabs.com/> -- can be bought on eBay also
<https://edsantennas.weebly.com/> - Ed Fong antenna
www.eham.net site for lots of product reviews , forums and help to questions you may have
<https://kv5r.com/ham-radio/coax-loss-calculator/> -- line loss
<http://amateurradiotech.com/antenna-connector-types/> antenna-connector-types
<https://www.repeaterbook.com/> -- repeater info
<https://www.bridgecomsystems.com/> --place to learn about DMR radio info
<http://www.echolink.org/> -- use your computer or cellphone talk to hams and repeaters around the world
https://www.youtube.com/watch?v=urb08_o4O4M Buying 1st HF radio
<http://websdr.org/> -- website to listen to HF radio around the world
<http://www.ac6v.com/> -- Tons of reference pages
<https://www.dxzone.com/> -- “ “
<https://www.dxzone.com/the-best-amateur-radio-links-of-2020/>
<https://www.qrz.com/> callsign lookup
<https://docs.google.com/spreadsheets/d/1cpalUPJOG9Kdb0Xo-hyzhcVKcyvOr37vrGIF1mIETHs/edit#gid=906307814> -- list of HF nets online
<https://www.youtube.com/user/davecasler> ask Dave
<https://www.youtube.com/user/EricHofer1004> Ham radio concepts
<https://www.youtube.com/user/hoshnasi> Ham radio crash course
<https://www.youtube.com/watch?reload=9&v=XglshrJieYo> Best Handheld Radio 2020
<https://www.youtube.com/watch?v=zFzklurG-do> Best Mobile Ham Radio 2020
https://www.youtube.com/watch?v=bSF-q_gaqgg Best Radios To Buy When Starting Out. VHF/UHF/HF
Information on access to the free On the Air blog and podcast can be found at
<http://www.arrl.org/ota>

What you will find out over time is that there is *NOT ONE PERFECT* radio or antenna setup that fits all budgets or works under all conditions.

WVARA Club Membership Benefits

We invite you to maximize your enjoyment of ham radio by joining the WVARA. Our purpose is to extend knowledge of the radio art, to advance the general interest and welfare of amateur radio in the community, to encourage service to the public, and to promote friendly social contact among amateur radio operators everywhere.

Monthly membership meetings with topics and presentations designed to enhance your knowledge of amateur radio

Meet other hams and make new friends with similar interests

Elmers who are senior members of **WVARA** are a great resource for answering your questions

Free subscription to the official publication of the WVARA is "The Bandspread" a monthly E-Newsletter with the latest in WVARA club news

Hamfest / Turkeyfest two opportunities to meet other hams and find great deals from other hams and equipment vendors! Plus a chance to win prizes and much more

Club Field Day a great chance to practice your emergency operating skills, temporary station setup, and much more! It's a great learning experience and a lot of fun

Club Repeaters available to members to extend the reach of their radios

VE Test Sessions where you can upgrade your license

WVARA Picnic Each summer during the month of August

WVARA Christmas Party

Brentlinger Award dinner in March

Ham Camp a day dedicated for new amateurs to learn radio skills

Involvement in community events, presentations, and emergency preparedness

Annual club auction Club members bring items to sell