



The QUARAE



Volume 20 Issue 2

Editor John Lindvay WB3IFD

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It Seems to Me

I have been building kits. I started out building a one tube receiver. I have not finished it yet. There is a lot a wood working involved. I can't cut a straight line in wood. The second kit is a UBX40 kit that comes from India. The kit is always changing in better ways to assemble it and I have been waiting to build it after the renovations slow down. The third kit I am building is a Ramsey Receiver. I waited forever (3 months) for the enclosure to be shipped to me from MFJ. After I start assembling component on the circuit board, I found that they sent some wrong parts. I have been going to Digikey, Newark and Banggood to get the missing capacitors that I need. I found out it is cheaper to go to Banggood and buy a huge assortment of capacitors which costs the same if you were to buy just one. I am still waiting for some of them. The fourth kit I am building is a QRP transceiver. Again missing parts!!

I have a few kits waiting to be assembled. One is a clock. One is a frequency counter. Another is a partially assembled 3 tube kit I picked up at a hamfest last year. While browsing around Banggood, I have seen many other kits that I would like to build all priced quite reasonably less than \$10 dollars. One must be careful when buying something from them, because there usually is no paperwork included. One must search the internet for instructions that are hopefully not in Chinese. When you buy something, from China and it is not in their American warehouse, it might take a month or more to receive it.

Just recently the Wattsburg Club has started a group to build (home brew) a 6 meter AM Transceiver. I

am in the group and started to build mine. Rick Cutter came up with the board and a lot of the parts. He has already constructed one that works!

On Thursday nights we get together and solder parts into the boards. We use Rick's working unit as a guide to what parts go where. It is lots of fun to solder parts and rag chew at the same time.

Attendance at the RAE monthly meeting has been sparse to say the least. The only attendees have been mostly board members and officers of the club. Frank Etzler puts on a demonstration that is very interesting and informative on some aspect of ham radio at each meeting.

TECH License Class

What: The 2019 Tech License Ham Class

When: Wednesdays, February 20, 2019 - April 17, 2019 6:00 PM to 8:00 PM

Where: Corry Hi Ed, 221 N. Center Street, Corry, PA 814-664-9405

Instructor: Peter Albright, AA2AD

Pre register by stopping in at Hi Ed or calling 814-664-9405

Cost: \$39 includes both ARRL Study Guide Hi Ed facility fee.

The FCC exam will be administered on April 17, during the last class session.

**Radio Association of Erie Club Meeting –
February 7th at the Red Cross Bldg. at 7 PM.**



January General Meeting Minutes

Began At: 7:00 P.M.

Board Members and Officers Present: KB3ZVH-RICHARD, KC3GBD-BOB, K3PLV-CRAIG, N8WXQ-FRANK

Members Present: KA3CPV-JOE, KB3JZL-GENE, WB3DOM-RON, WB3IFD-JOHN

Program: Magnetic Loop Antennas

New Hams: None

Silent Keys: None

Visitors: None

Treasurer's Report: In checking \$1727.50 Debits \$91.97 for Electric

Facilities Report: Get Estimate for the repair of the roof at clubhouse

Repeater Report: Get in contact with Adam for maintenance and FCC License

Public Service: Done till Spring

Contesting Report: Winter Field Day 01-27-19 and 01-28-19

Old Business: None

New Business: None

Meeting End At: 7:50 P.M.

Submitted by Secretary Richard Quinn-KB#ZVH, Also Acting President Because K!ZIK-ED Was out of town

I did a theatrical performance about puns. It was a play on words.

Amateur radio (illegally) aiding yacht racers

By Dan Romanchik, KB6NU



The [Golden Globe Race](#), a 30,000 mile, non-stop solo yacht race to celebrate Sir Robin Knox-Johnston's historic 1968/9 world first solo non-stop circumnavigation. There are 18 sailors in the race, which started on July 1, 2018 from Les Sables-D'Olonne, France. Amateur radio is at the heart of the latest controversy surrounding the race. [Scuttlebut Sailing News](#) reported on January 21, 2019 (day 205 of the race): "Sailors have been making use of the Amateur Radio net (ham radio) for decades, and while National telecommunication authorities have often turned a deaf ear to unlicensed operators using made-up call signs while at sea, warnings from a National regulator to Golden Globe Race skippers has created intrigue into an exciting finale for race leaders. "Modern navigation and routing tools are restricted from use in the 2018-19

contest, limiting GGR skippers to the type of equipment available for the inaugural Sunday Times Golden Globe solo non-stop round the world race in 1968-69. That includes Amateur Radio. "The skippers have been using this free communication system to gain weather forecasts and maintain contact with their teams, which is allowed under the Race Rules. However, it is the responsibility of each skipper to ensure that they abide by National and International regulations which Jean-Luc Van Den Heede and Mark Slats, in first and second in the race, have not been doing. [[Neither Van den Heede or Slats have valid amateur radio licenses...Dan]] "Said the warning: You use an amateur callsign and are making connections with amateur radio operators. The call sign letters are not registered, and thus illegal. I ask you to stop. If you have a legal amateur callsign then I urge you to present it." As a result of this warning, Slats is considering dropping out of the race, even though the race is nearly complete. [Yachting Monthly](#) reports "Mark Slats, who is less than 50 miles from Golden Globe Race leader Jean-Luc Van Den Heede, has announced he is thinking about retiring from the race after being banned from broadcasting on the Ham Radio Net. "Race organizers said the Dutch skipper does not have the required license, and has been warned by the Dutch authorities to stop broadcasting, which has left him unable to communicate with his shore team. "Under the rules of the race, all of the entrants are able to use this free communication system to gain weather forecasts and maintain contact with their teams, but, it is the responsibility of each skipper to ensure that they abide by national and international regulations." It's not only the yachters that are flouting the rules, it's the amateur radio operators who are communicating with them. According to [Yachting Monthly](#), OFCOM, the UK regulator issued the following warning: "Fair warning both to unregistered GGR skippers and to legitimate Ham radio operators communicating with them. In Britain, the Ham Radio net is controlled by OFCOM, which recently revoked more than 500 licences for non-compliance. This includes communicating with unregistered Ham radio operators. The maximum penalty is 6 months in prison, a £5,000 fine and loss of their licence." This is a fascinating story, and I wish that I'd found out about this sooner. It would be interesting to listen in on some of these communications. One

question I have is why these guys failed to obtain a valid amateur radio license? The Golden Globe Radio website notes, "[The race] will be sailed under the auspices of the Royal Nomuka Yacht Club in the Kingdom of Tonga. His Royal Highness, Crown Prince Tupouto'a Ulukalala is Patron of the Race." They probably could have issued valid amateur radio licenses to all the racers. If any of you have heard the communications or know any more about the technical details, I'd love to hear from you.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and one of the hosts of the No Nonsense Amateur Radio Podcast (NoNonsenseAmateurRadio.Com). When he's not think about operating maritime mobile, you'll find him on 30m, 40m, and 80m.

I burned 20,000 calories the other day. I left the brownies in the oven too long

Equipment First Test

By [Drew Mortensen AC3DS](#)

Yesterday, at around 5:00, six students (1 had to go home early) were able to fire up an HF radio and hear over the air Morse code for the first time.

At the beginning of our after school program, I pulled out all of the loaned equipment and placed it down in front of the students. The "oohs" and "ahhhs" were immediate. None had ever seen a Ham radio or related equipment before. I started by asking them what they thought each piece was and how it fit into the workflow of a system. After working through the descriptions and purposes through guessing and discussion, I told them, "Well, what are you waiting for? Set it up!" They dove right in and began setting it up, but soon realized there were a few problems for them to overcome.

The first problem was that one of the ring terminals on the 2 meter radio had fallen off. Several students had experience soldering, so they grabbed a soldering station from an adjacent room and



immediately put a new ring terminal on. Problem solved.

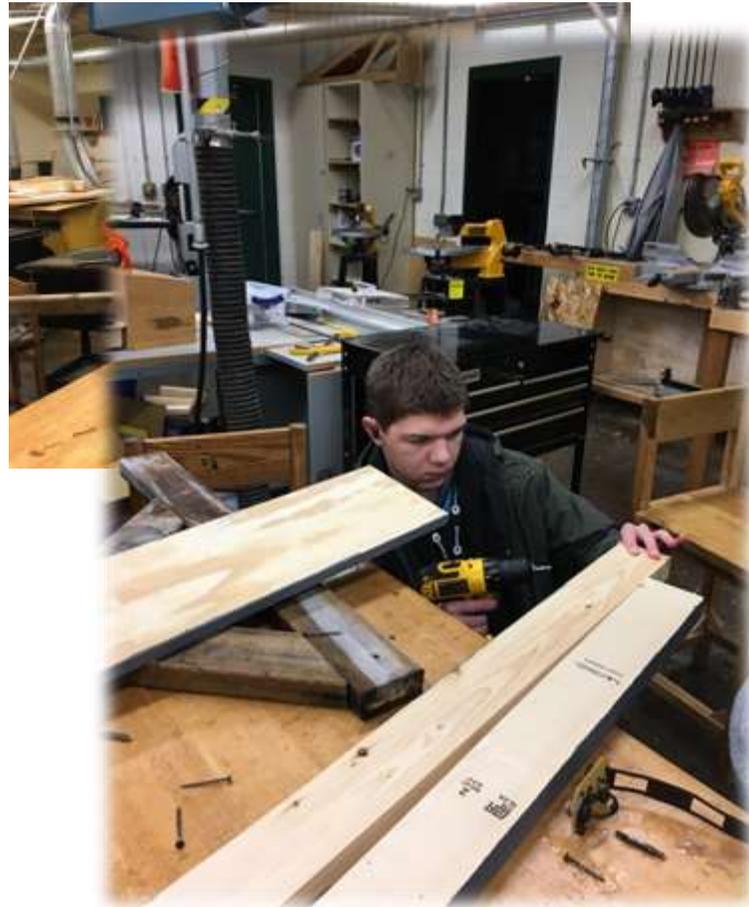
The second problem that they ran into was that they couldn't get the stranded power cable wire from the HF radio to stay seated on the back of the Astron 35 power supply. They decided to remedy this by adding ring terminals. A student with no history of soldering took over this task and did a completely acceptable job. Problem solved

While soldering was being worked out by a few students, others took to figuring out how to get the antenna up. They unwound the horizontal wire dipole and stretched it out around the room. Two problems emerged: 1) How to hang this up inside for testing, and 2) There was no coax to connect to the radio. The first problem was solved by them getting a ladder and managing to hang it from the ceiling, with supports about every ten feet. The lack of coax was solved by calling Neal. Neal came to the rescue while the students were hanging the

antenna.

Around 5:00 everything was set and we were ready to turn on the HF radio for the first time. As we were approaching the big moment, another student who happened to be in the building stopped by and asked what we were doing and joined in for the last 40 minutes. The radio turned on (Whew - the soldered ring terminals worked!) and the static was enough to generate excitement. After a short while of tuning around and learning about the connection between the band names (in meters) and the frequencies they saw on the screen, they heard some faint Morse code. Occasionally we could make out some extremely distorted sounds which we thought were speech.

Though we didn't make any contacts, and we didn't hear anyone talk, it was still a very profitable first experience. There was a lot of problem solving happening and the kids were active. One student remarked "Today was more hands-on than I have done in any other club in the past three years." I was proud of their perseverance. The students recognized that this was a necessary first step and that next week we will aim to improve on the



progress we made.

The Area 51 student group met yesterday after school and continued to work on Amateur Radio activities. Their goal was to get the 20m antenna outside and up into the air. This was an ambitious goal considering that it was snowing.

The first step that they took was to attempt to identify areas outside of our room which could be used to tie off the ends of the 20m horizontal dipole antenna. Finding none, and knowing that we will eventually be putting the antenna on the roof and up high, they opted to build temporary supports to get the antenna off the ground. To the woodshop they went and build they did.

The students had little to no experience with woodworking, but they quickly realized that I wasn't going to be providing schematics or directions, and so it was up to them to figure out the design. When it came to using the mitre saw, band saw, and other tools, I did provide supervisory oversight and safety instruction, but ultimately it was still them that did all of the measuring, marking, choosing, and operation of tools. Seeing them use power drills for the first time was quite the comedy.

It took quite some time for the support structures to be assembled, but by around 5:00 they were up. The students chose to add 10' of 1/2" pvc pipe to an 8' 2x4 to give considerable height. Unfortunately, the PVC was not able to withstand the lateral stress of the wire pulling on it and it bent like a fishing rod. Adapt we did though and the antenna was quickly added onto the 2x4 and brought a meager 5' off the ground at the ends and 2' at the center. Nevertheless, it was sufficient to test to see the difference between the antenna inside the room (last week) and outside.

With time running against us (we end at 5:30), we scrambled to get the radio set up and connected to see if we could hear anything. A few quick turns of the VFO and bam, there was a voice, crisp and clear. We listened for a few minutes and got a

single call sign, which we looked up and found was from Texas. TEXAS! Yippe Ki Yah! We kept spinning the knob and heard about six to eight conversations across the 20m band. The students were exhausted, but thrilled. We had confirmation that the antenna works, and that was a big step forward.

This was our first time hearing voices on the radio clearly, and it was a good experience for them. They did the work, and they reaped the benefits. We didn't spend any time preparing for the test, but they gained experiential understanding which will hopefully help to motivate them to study in the future.

I appreciate the help you have given me in my pursuit of the hobby. I appreciate the support you have given to these students. With some luck, we can hopefully keep the momentum going.

Thank you for your support and encouragement. These students are gaining valuable life experiences because of your generosity.

Drew Mortensen AC3DS

Radio Calendar

February 2 – Groundhog Day

February 2 - Vermont QSO Party. See www.ranv.org/vtqso.html

February 2 - International 10-10 Winter SSB Contest. See www.ten-ten.org

February 2 - Minnesota QSO Party. See www.w0aa.org

February 2 - British Columbia QSO Party. See orcadxcc.org/bcqp_rules.html

February 3 - North American CW Sprint. See ncjweb.com/Sprint-Rules.pdf

February 5 – Corry Club Meeting

February 7 – RAE club Meeting

February 9 - OMISS QSO Party. See omiss.net/Facelift/qsoparty.php

February 11 - ARRL School Club Roundup
www.arrl.org/school-club-roundup

February 11 – Birthday of Thomas Edison. Inventor of the phonograph and light bulb, among other things.

February 12 – Wattsburg Club Meeting

February 12 – Lincoln’s Birthday

February 14 – Valentine’s Day, a Christian folk festival that is patterned after a pagan festival called “Lupercalia.”

February 16 - ARRL International CW DX Contest,
www.arrl.org/arrl-dx

February 16 – VE Session at Greene Township Bldg.

February 18 – Conneaut Club Meeting

February 18 – President’s Day

February 18 – Birthday of Alessandro Volta, Italian physicist and pioneer in the science of electricity.

February 23 - South Carolina QSO Party See scqso.com/rules

February 23 - North American RTTY QSO Party,
www.ncjweb.com

February 24 - The South Hills Hamfest, located in South Park Township, PA. See <http://n3sh.org>

February 24 - North Carolina QSO
ncqsoparty.org/rules