March 2019
Our 100th Year
Volume 57, Issue 3

The Voice Coil
Award-Winning Newsletter of the Mahoning Valley Amateur Radio Association
Established 1919

The Voice Coil

Ed. Sez

Though it's still winter, we'll be in hamfest/convention season before you know it. The annual Cuyahoga Falls Amateur Radio Club Hamfest arrives in April—no need to worry about the weather with this event held indoors.

Then there's the main event, Hamvention in Xenia, OH, during May. Though most of us still refer to it as the Dayton Hamfest, it looks like this new location will be the home of the event for many years to come. But some of the events still happen in Dayton, such as Four Days in May, Contest University, and others. I guess if we want to be technically correct, Hamvention covers it all.

The first of the W8QLY special events stations logged nearly 300 QSOs during the President's Day weekend, despite the marginal band conditions. Kudos to Rich, Bob, Dave S., Dave F., Frank, Mark, and Mike M. for their efforts to spread the word about our 100th anniversary. We hope the other scheduled events will be as successful.

Again, the *Voice Coil* presents a blast from the past, including Andy's (WA8ZLK) history of the MVARA repeaters—ones that have operated in the valley since the 1970s.

There's also a copy of an article from the *Tribune Chronicle* that describes our Santa Net, a long-standing tradition of the MVARA. With the closing of Tod Children's Hospital several years ago, the event has since moved to the Akron Children's Hospital location in Boardman.

73, K8MSH

Next Meeting:

March 14, 2019, 7 pm
GOP Headquarters meeting room. 8381 Market St., Boardman, OH
(in Adamas Plaza)

Come early for dinner at Bruno Bros. (in the Plaza), for pizza, drinks, and social time.

2019 Officers

President: Jim Stiffler, WB8UJS
Vice President: Wes Boyd, W8IZC
Secretary: Dave Salmen, WB8IBA
Treasurer: Nancy Brett, KD8QNY
Trustees: Dean DeMain, W8YSU
Doug Sage, KB8TPG
Gene A. Boccia, WQ8H
Jerry Goddard, KC8EFO

Newsletter Editor: Mark Haverstock, K8MSH

Awards Manager: Dave Fairbanks, N8NB, 330.759.6993, 4770 Logan Ave. Youngstown, OH 44505

The Mahoning Valley Amateur Radio Association, Inc, meets the second Thursday of every month. Location and time are subject to change. Dues are $20.00 per year, $10.00 each for additional family member. Contact Nancy, kd8qny@zoominternet.net for membership details.

The club call is **W8QLY**; equipment operated under this call includes a two meter voice repeater at 146.745 (-600, 110.9 PL). Club email: mvara.w8qly@gmail.com

For License Classes and VE testing, Contact Wes Boyd, W8IZC, W8IZC@yahoo.com

MONDAY NIGHT NET operates every Monday at 9:00. PM on 146.745 MHz.

SKYWARN NET - First Wednesday of the month at 8:30 PM on 146.745 MHz as weather warrants.

ARES NET- First and third Mondays of each month at 8:30 PM on 146.745 MHz; prior to the Monday Night Net.

Special Event Station W8QLY

Rich, KB8GAE

On February 16th, 17th, and 18th the sound of Whiskey Eight Quebec Lima Yankee reverberated through the ether as the first MVARA centennial special event station was on the air. We had a lot of fun working QSO's. Here are some comments from the operators.

KK8DX Bob: Bob Dukish KK8DX operated from 10 AM to Noon on Sunday morning, and even though he had an old HF radio and a temporary antenna consisting of a "short" long-wire, he managed to eke out a few contacts on 40 meters. He chit-chatted a bit with the contacts and found that one contact and he had both served together in a small USAF Squadron based in Central New York back in the 1980s.

The club was given unanimous accolades for its longevity and Bob said that many people were surprised to hear that one of the founding members from 1919, Andy Brincko WA8ZLK, was going to be operating during the special event weekend. All joking aside, Bob said it was an enjoyable event, and he strongly encourages everyone to sign-up for the next go-round.

N8NB Dave: In a few words I was very pleasantly surprised with my experience operating on 20 meters. The first thing that surprised me was the number of people wanting to make a contact. I could not write fast enough to record all the call signs as quickly as people were calling.

Most were very grateful to get into the log and wanted to congratulate us for having a club that could last 100 years. One fellow in Texas was from Warren and was thrilled to find one of our stations on the air. Canadians and several callers from the west coast were happy to make a contact. I was surprised with the international interest I experienced. Brazil, Rwanda, Switzerland, England and South Africa were in the mix. It seemed there was a pipeline to South Africa and several of the operators wanted to get together when I visit there in April. This would be a special thrill to me. It's amazing that after 58 years in the hobby that I can still enjoy it as much as I did Sunday.

WB8YHD Frank : The W8QLY Centennial Event Station operation was a lot of fun. The whole concept and project was laid back and easy going. The schedule had me down to work the Saturday 4-6 p.m. slot, But I also ended up helping Andy, WA8ZLK, with the 9 - Midnight shift Friday. That was a great start listening and backing Andy up. He did a great job. My shift on Sunday evening netted a few calls and was lots of fun to work. All had nice things to say about our Club and the special event we were running. They loved

(Continued page 13)

How's Your PL-259?

February's program covered everything you wanted to know about the installation of coaxial connectors. Several videos were shown, including one of K3LR and his unusual, yet effective method of connecting the ground braid. Dave, N8NB gave a live demonstration using the DX Engineering collection of coax tools.

Current Activities

March 7: VE session at Red Cross, 3530 Belmont Avenue, Youngstown. Doors open at 6:30pm. Testing begins at 7pm.

March 14: Club meeting, 7pm

Contact Us:

Email: **mvara.W8QLY@gmail.com**

Snail-mail: MVARA, P.O. Box 1414, Poland, OH 44514

Meeting ideas/ suggestions? Contact Dave, KD8NZF, KD8NZF@zoominternet.net

Hamfest Calendar

03/03/2019 – Winter Hamfest - **Location:** Lorain County Community College, 1005 North Abbe Road, Elyria, OH 44035. **Website:** https://www.noars.net/winter-hamfest/ **Sponsor:** Northern Ohio Amateur Radio Society **Talk-In:** 146.70 (PL 110.9) **Public Contact:** Tom Porter , W8KYZ, 161 Herrmann Drive Avon Lake, OH 44012 Phone: 440-930-9115. **Email:** winterhamfest@noars.net

04/13/2019 - 65th Annual Cuyahoga Falls Amateur Radio Club Hamfest - **Location:** Emidio & Son's Party Center - 48 East Bath Road - Cuyahoga Falls , OH 44221 - **Website:** http://www.cfarc.org - **Sponsor:** The Cuyahoga Falls Amateur Radio Club, Inc. - **Public Contact:** Pat Morrow, N8OQP - 627 Brewer Avenue Akron, OH 44305 - Phone: 234-206-0270 - **Email:** retired_guru@neo.rr.com

05/17-19/2019 - 2019 ARRL National Convention at Dayton Hamvention® - **Location:** Greene County Expo Center - 120 Fairgrounds Road - Xenia, OH 45385 - **Website:** http://hamvention.org - **Sponsor:** Dayton Amateur Radio Association - **Public Contact:** Henry Ruminski, W8HJR - PO Box 964 Dayton, OH 45401 - Phone: 937-232-9272 - **Email:** media@hamvention.org

06/01/2019 - BreezeShooters Amateur Radio Club - **Location:** Big Butler Fairgrounds - 1127 New Castle Road - Prospect, PA 16052 - **Website:** http://www.breezeshooters.org - **Contact:** Cathy Heiles, KB3OYS - 134 Easley Road Pittsburgh, PA 15237 - Phone: 412-600-3846 - **Email:** kb3oys@breezeshooters.org

Events

Know of any regional events that should be included in the Voice Coil? Send the information to: **MVARAVoiceCoil@gmail.com**

Norm Into – K8NI Silent Key

During the February 2019 MVARA Membership meeting President Jim Stifler, WB8UJS, asked the attending members for a moment of silence in honor of Norm Into, K8NI who passed away Feb. 9th, 2019.

The MVARA had the privilege of having Norm as a member. For those not aware, Norm made numerous donations to our club including both of our loaner HF radios that are available for member use to get on the air following a General Class license upgrade. Norm wanted those radios, an Icom 706 and an Icom 746 Pro used to help others learn to enjoy the hobby he loved. He also donated his entire home station to YSU Amateur Radio Club for student use.

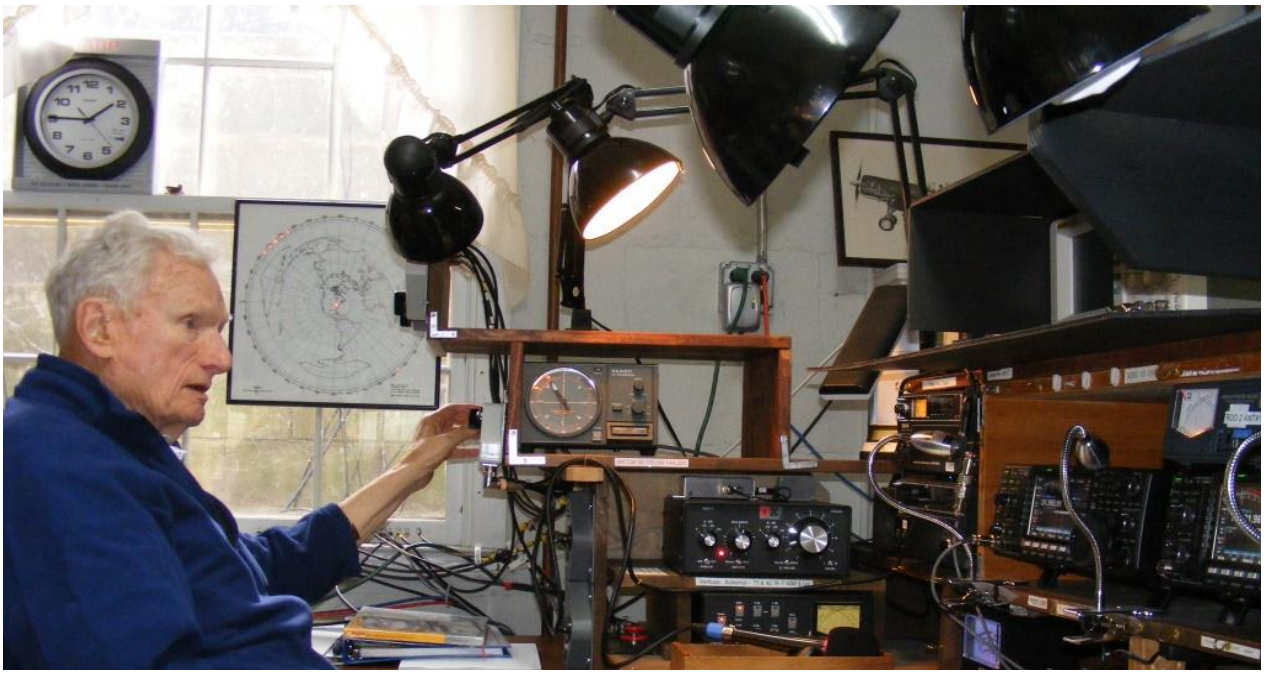
Norm grew up in Connecticut and got involved with Ham Radio at an early age building tube radios on breadboards and graduated to putting some of the first 2 meter VHF repeaters on the air on the east coast. orm was a Yale alum and also attended Rutgers & Temple Universities as well as time spent at the University of Hartford.

He'd tell tales of working the Yale University Amateur Radio Club station, W1YU, one of the oldest continuously operated Amateur Radio Club stations in the country, between classes and late at night to get "the big DX". As a Navy pilot Norm flew all nature of planes for our country following World War II from Corsairs to multi-engine bombers. He loved to combine his love of flying with Ham Radio and operate from his planes as he flew across the country and many times across the oceans.

After his time in college and the military Norm built an amazing career in the electronics field working for RCA on many military contracts that involved classified communications systems for the Strategic Air Command as well as astronaut communications systems for the first NASA Apollo moon landing. He built the Computer Test Corporation, a company that came to dominate memory testing processes at the time. He eventually sold that company to Siemens Corporation.

With all his life's accomplishments the endearing quality of Norm Into was he was "one of the guys", K8NI. He loved to talk radio, compare DX notes, compare propagation and work CW. He had fun solving problems and building radios. He loved making new antennas and even at 90 years of age he loved to talk to you about the latest technology in radio.

Norm Into, K8NI, a member of the Mahoning Valley Amateur Radio Association. We will miss him.



Amateur radio (illegally) aiding yacht racers

By Dan Romanchik, KB6NU

The Golden Globe Race (https://goldengloberace.com), 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. Scuttlebutt Sailing News reported (https://www.sailingscuttlebutt.com/2019/01/21/maintaining-information-barrier/) 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 Monthy* reports (https://www.yachtingmonthly.com/boat-events/golden-globe-race/golden-globe-race-slats-considers-quitting-comms-row-68574):

"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 organisers said the Dutch skipper does not have the required licence, 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.

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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 thinking about operating maritime mobile, you'll find him on 30m, 40m, and 80m.

US Amateur Radio Population Grows Slightly in 2018

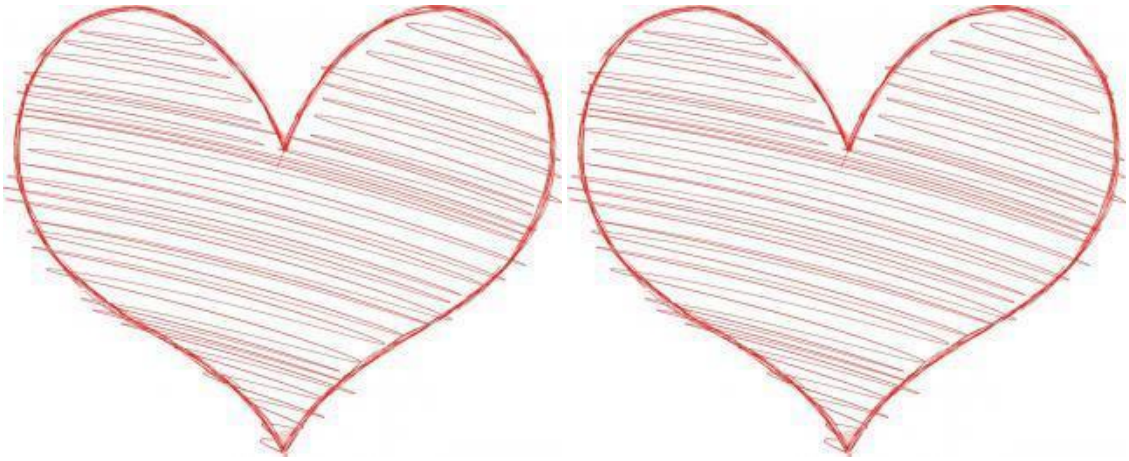
The US Amateur Radio population once again grew by about 1%, based upon 2017 and 2018 year-end FCC database statistics provided by Joe Speroni, AH0A. The 755,430 total licensees represent nearly 7,300 more license holders than those that were in the database at the end of 2017. Nearly 51% of the Amateur Radio population in the US -- 384,145 -- hold a Technician license. Generals are second with 175,949, and Amateur Extras number 147,369. Advanced and Novice licensee populations continue to decline, with 39,607 Advanced and 8,360 Novices, as the FCC no longer issues Advanced or Novice licenses. A more significant statistic is 31,576 *new* FCC licenses last year, although that's 620 fewer than came aboard in 2017.

"New amateur licenses granted by FCC are down 2% over last year," noted ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM, "but this is the fifth year in a row the total has been greater than 31,000. I predict that the number of new licensees will be more than 30,000 at the end of this year as well, and I'm optimistic this trend will continue."

Upgrades also are down slightly, compared to last year -- 9,456 in 2018 versus 9,576 in 2017, she added. "For the fifth year in a row, we have conducted more than 7,000 Amateur Radio exam sessions in a year -- an important milestone for the ARRL VEC," Somma recounted. "Our program continues to provide outstanding service to the ARRL, its members, and the entire Amateur Radio community."

ARRL VEC filed a total 30,393 license application forms last year, compared to 31,014 in 2017. That includes new, upgrade, modification, renewal, and club station filings. At 7,035 in 2018, the number of exam sessions conducted by ARRL VEC marginally trailed the 7,075 held in 2017. ARRL VEC served 34,493 exam applicants in 2018, compared to 35,352 in 2017. Exam elements administered by ARRL decreased from 47,152 last year to 45,817 this year, Somma said. Nearly 1,800 new Volunteer Examiners (VEs) have been added to the ARRL VEC program.

NEW HAM RADIO DATING SERVICE EMERGES



By K5PO, on the scene

LONELY OAKS, Texas – After seeing the flood of #hamentine tweets on his Twitter feed for Valentine's Day, Lonely Oaks ham radio operator and Sr. Web Developer Bobby Grindle had a grand idea to solve a common problem of single operators on the prowl: Finding that special YL!

Grindle's team of crack coders/hams sprung into action and the site was able to launch just two days after the lovebird holiday at www.1-to-1.perfect50ohm-YL-match.com. "We've had a huge response!" cited Grindle. "Apparently I'm not the only successful and single ham radio op out there looking for that special YL to fill my shack!"

"Maybe you don't want to go solo on the long car ride to Dayton, or perhaps you would just like the warm company of a fine lady at the local club meeting at Denny's. If so, well then buddy, this site is for you!" claims Grindle with his used car salesman-styled pitch.

Unlike many dating websites, Gridle's matching service doesn't really use any algorithms at all. "Basically, if you're a lady, and a ham radio operator… well… that's plenty."

Users are invited to first start with a text-based "QSO" through the site's servers. If they seem to be resonant, they're encouraged to have a live video-chat "Eyeball QSO." Those that really arc-over may even opt to meet in person.

Grindle concedes that the site seems to be a bit lacking in a vital element. "We have some 30,000 registered members since just last Monday, but only… well… we have just two YLs."

hamhijinks.com

License Refresher Answers: E4A01 (C) E4A02 (B) G4B01 (D) G4B02 (D)

MVARA History Series ~ Our First Repeater

Andy Brincko WA8ZLK

When the MVARA was first bitten by the "repeater bug" in the early 1970's, the whole concept of VHF/UHF FM and repeaters was new to the ham radio community.

Amateur operation on the 6m, 2m, 1.25m, and 70 cm bands prior to the advent of FM repeaters was all on simplex with CW, AM, or SSB being the chosen modulation modes. DXing was done with large arrays of yagi or collinear antennas. Local operation was mostly fixed location on six and two meters simplex with amplitude modulation. AM/SSB transceivers for six and two-meters were available from companies such as Clegg, Hallicrafters, Heathkit, Swan, Gonset, and a few others. All were vacuum tube units, none offered FM as an available mode and most were large and heavy. It was hard to think of any of them as being mobile or portable radios.

Back then, when the term walkie-talkie was tossed about, the image of WWII and Korean War vintage monsters, such as the PRC-6 came to mind. These were compact but they were battery eaters. Gonset made a couple of units known as the "Communicators", they were somewhat cube shaped and had handles but they were more luggable than portable. Finally Heathkit offered the "Benton Harbor Lunchboxes" which were known as the Sixer (50 MHz) and the Twoer (144 MHz). They were AM, more compact, lighter in weight, had a crystal controlled transmitter and a super-regenerative receiver, that defined the phrase;"it drifts a bit." Benton Harbor Lunchbox receiver drift it seemed could be measured in MHz/hr.

Of course there were a lot of home-brewed units out there too. Folks built complicated things from scratch back then and built them well.

In light of the above, there was a hunger and need for true portable and mobile amateur operations and the equipment for them. Two-meter FM satisfied that hunger… eventually. Some of "Old Timers" didn't see the need, but eventually the promise of reliable, local, mobile communications caught the local hams' attention.

Repeaters began to pop up and here in Youngstown an MVARA member by the name of Ralph Sherman, (I can't remember his call) and a group of hams at WKBN Radio and TV with others from the valley, put a machine on 146.31/146.94. The folks that used this machine got on the air mostly via converted surplus taxi-cab, police and railroad radios. In fact, according to Joe Shultz WB8GVB, when the MVARA .31/.91 machine went on the air, a large number of retired railroad transceivers were obtained and sold to MVARA members who were interested in using the "new" club machine. These were all crystal controlled and had limited frequency agility. Later, a number of members purchased frequency synthesizer kits to take the place of the crystals. Conveniently, the output of the kit synthesizers, plugged into an empty crystal socket on the surplus radios and voila you had channelized dial-a-frequency. Commercially available amateur FM transceivers were still a couple of years away.

Soon, a 2-meter band plan was developed; initially by the FCC who issued repeater authorizations and assigned frequency pairs. Eventually though this function was turned over to the amateur community. Statewide repeater coordinating councils under the auspices of the ARRL were formed. The 146.31/146.94 pair on Ralph's machine was not compliant with the new band plan which dictated 600 kHz spacing between transmitters and receivers on two- meter FM repeaters. Ralph and his gang moved their machine to a compatible frequency pair, though this writer doesn't remember where. This move freed up the compatible .31/.91 and .34/.94 pairs. Only, the .31/.91 pair was available, in Youngstown however since there was an assigned .34/.94 machine nearby; somewhere near Cleveland, I believe.

I don't recall clearly how it all happened but the MVARA obtained authorization to put a repeater on the 146.31/146.91 frequency pair. We were early enough to have needed FCC authorization. This, to the best of my knowledge, was sometime in the early, 1970's.

Art Lewis, (WA8VSJ) and a group of hams from Liberty on Youngstown's north side, soon had a machine operating on 147.00 MHz up 600 kHz transmit from Art's Liberty QTH. This group went by the name of the Liberty Amateur Repeater Association. Also, Lanny Nass, a colleague of Ralph Sherman's at WKBN set up a repeater at his home in Canfield. This machine was on 146.22/146.82 MHz.

Figure-1:Brookfield, US Air Force radar base operations building showing "Gap Filler" radome which later would house the MVARA 146.31/146.91 repeater. This photo was taken in the early to mid 1980's after .31/.91 had been dismantled. Photo used with permission of Radomes.org

MVARA's .31/.91 machine was an engineering marvel for the time. It was, from the start, a multi-site system. The 2-meter transmitter, and receiver, UHF link receivers and system controls were located at the abandoned U.S. Air Force Surveillance Radar along to Ohio Rte 7 just South of RTE 82, near Brookfield, Ohio. The Air Force chose that site for their radar base because of its strategic location between Pittsburgh and Cleveland and because it was one of the highest, if not the highest point in Trumbull County.

The radar base, when it was active watched for attacking Russian bombers, provided targeting information for U.S. the Army's Nike anti-aircraft missiles ringing Cleveland and Pittsburgh, and for Air Force interceptor aircraft stationed at Youngstown Municipal Airport and other nearby Air Force bases.

While Brookfield had two large Dish antennae for long range radar, the elevation above average terrain at Brookfield, made this base a great location for a second type of radar, known as a "Gap Filler Radar." The Gap Filler Radar employed a high RPM antenna aimed at the horizon, and was designed to detect low flying Russian Aircraft, that may have been attempting to avoid the sky watching long range radars (LRR's) at the Brookfield and other sites. The Gap Filler Radar had an average range of 65 miles, requiring its antenna to sit in a bright white fiberglass radome, some 70 to 100 feet above the ground. This "gap filler" radar tower made the Brookfield radar station a great place for a 2 meter repeater once the Air Force was done with it.

After ICBMs made nuclear bombers somewhat obsolete the Air Force abandoned its 50's vintage radar sites and shut them down. Regular operations ceased at Brookfield in 1959. At Brookfield, the US government eventually ceded the abandoned site to Trumbull County government, a move that gave the MVARA an opportunity to make use of that Gap Filler radar tower. Soon the MVARA took over the "ops building" and the "Gap Filler" tower.

Some sixty to seventy feet beneath the Gap Filler Radome, a crumbling block-house which had been the "Ops Building", and housed the radar sets, screens and communications gear, provided a home for the repeater gear and a lot of the local fauna. Mice were particularly happy to have access to the abandoned building and they often tried, sometimes successfully, to move in to the repeater enclosures as well. Special rack enclosures we placed in the blockhouse, held the main 2m repeater transmitter/receiver, power supplies, three (3) UHF link receivers (440 MHz), a voting system and repeater controller.

We were fortunate that the 120v, mains power had never been shut off to the blockhouse when the Air Force abandoned the site. A very hefty 120 volt service was fully available for our use. Somewhere on the base, a back-up generator was still in use to provide uninterrupted power to the buildings on the base that the County was then using for a county- run nursing home. The Ops Building also shared that back-up power.

Three additional remote 2m receive sites were also part of the MVARA .31/.91 machine. These were linked to Brookfield by the previously mentioned UHF links. At each remote site, 2-meter receive audio was fed to the audio stages of the UHF link transmitter. Low loss coax sent the UHF signal to a multi-element high-gain yagi pointed at Brookfield. At the main site, the audio received from each UHF link transmitter was first fed to the voting system.

It was the voting system's task to analyze the degree of quieting on each link and pass the audio from the best sounding link on to the main 2 meter repeater transmitter. Ideally, this would allow any 2 meter mobile or fixed signal in the repeater's service area have a strong readable access to the Brookfield site. In reality this was a very tough order to fill.

You must remember that in that day, all of this control was analog not digital, all of this FM gear was analog vacuum-tube based commercial FM equipment converted from some other service. Also, the operational environments at the remote sites were all different. Some were warm and dry, others were cool, cold and/or damp. So it was difficult to keep the voting system which was solid-state but still analog or at best mixed signal, operating as intended.

The remote sites were located at New Bedford, PA, Warren, OH, and Boardman OH. The New Bedford site was just across the state-line at Bill Wallace's (K3SVO) mobile radio shop. Initial operations for the repeater were from this location while the equipment for the remote sites was being configured and set-up. There was a 100 ft tall communications pole at Bill's location. This had been obtained from a site near the border between Liberty and Youngstown and moved to and erected at Bill's New Bedford location.

At Warren, the remote receive site was high atop a senior citizen's apartment tower (Riverside Apartments) on North Tod Avenue. Finally, the Boardman 2-meter receiving site was located near the northeast corner of the intersection of US Rte 224 and Ohio Rte 7 at the Radio and TV shop owned by MVARA member Dave Kaiser (K8DYX).

The MVARA financed the purchase of the surplus RCA commercial gear from an RCA surplus depot we learned of through Bill Wallace, K3SVO. Also the MVARA financed the voting system and controls, with these being purchased from various commercial vendors. MVARA members of course placed all the gear in suitable enclosures, wired it all up and set it up at the four sites

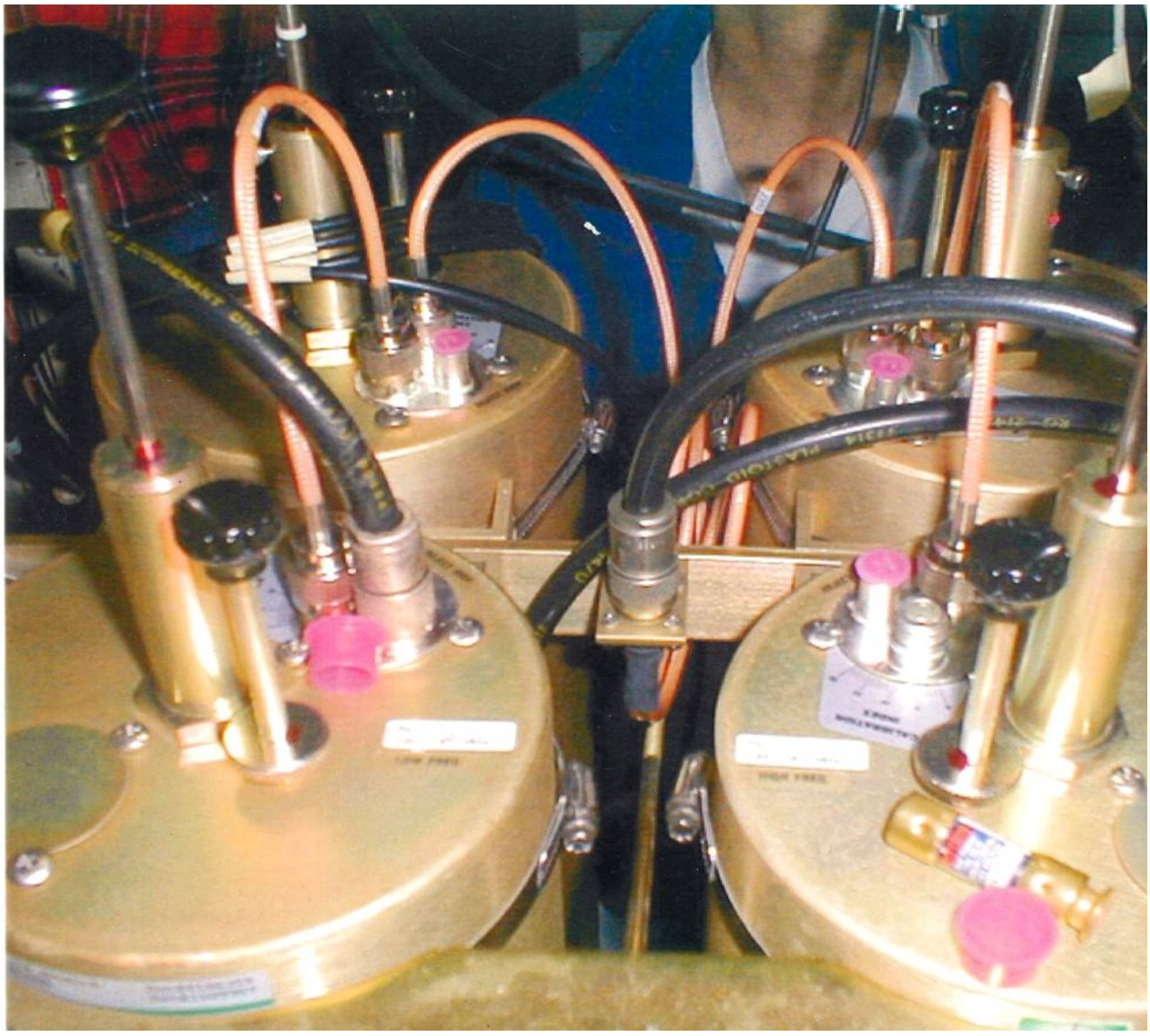
The members primarily involved in all of this were, Joe Shultz (WB8GVB) club president in the later 70s, Bill Wallace SK (K3SVO), John Kizar (K8AJR), Dave Kaiser SK (K8DYX) and yours truly Andy WA8ZLK. There may have been, and I believe there were, others who helped out from time-to-time. My apologies to those I may have forgotten.

After a few years of operation, due to the vintage of the equipment, and damages inflicted by the aforementioned fauna and lightning strikes, operating and maintaining the multi-site system became a financial burden that the MVARA no longer wanted to bear. The members listed above formed the MVRA (Mahoning Valley Repeater Association) and purchased the .31/.91 system from the MVARA. The MVARA continued to operate the repeater as a multi-site system for a few years longer.

When Bill Wallace passed away, the New Bedford site was moved to John Kizar's QTH in Coitsville, not too far from the New Bedford Site. Sometime later an opportunity presented itself move the system to the WFMJ TV tower above I-680 on the south side of Youngstown.

This had something to do with my cousin marrying the daughter of the Chief Engineer of TV operations at WFMJ at the time, Mr. Larry Oleson. Mr. Oleson provided us with the names and information on how to petition WFMJ station management for a position on their TV tower. We went through channels and soon had permission to place an antenna on the WFMJ tower. We also received access to a climate controlled equipment building at the base of the tower where we were able to install the repeater gear. During a scheduled antenna maintenance and construction project on the WFMJ tower, we were able to get our antenna and feed line put in place. This arrangement brought about the demise of .31/.91 as a multi-site machine, although I think we may have continued to use the remote site at Warren for awhile longer.

Eventually, the MVRA and the LRA merged and jointly operated both the 147.00 and the 146.91 machines. As members of the LRA retired and moved to warmer climates the LRA also, disbanded and ceased operations. The 147.00 frequency was ceded to a group in Austintown and Wes, W8IZC, picked up the .31/.91 pair.



Tribune Chronicle / Mark W. Lipczynski

Three-year-old Richard Wilcox of Cortland sits on his father's lap at Forum Health Tod Children's Hospital while Gene Ruscello of the Mahoning Valley Amateur Radio Association relays a message to Santa Claus. The amateur radio organization has brought the "Santa Claus Network" to the hospital for the past four years, giving sick children the chance to talk to Santa live from the "North Pole."

Santa, kids networking

Children's Hospital radios North Pole for patients

By BOB BROMLEY
Tribune Chronicle

YOUNGSTOWN — Six-year-old Dallas Kesner impressed Santa Claus with his ability to name all nine reindeer.

"Why, that's very good! Sometimes, I can't even remember all their names!" Santa exclaimed.

The Austintown boy and other children hospitalized at Forum Health Tod Children's Hospital had the chance Tuesday night to talk to Santa through the use of hand-held radios. The Mahoning Valley Amateur Radio Association brought the "Santa Claus" Networks to the hospital, giving the sick youngsters the opportunity to talk to Santa live from the "North Pole."

When asked by Santa what he wanted for Christmas, Dallas declined to get specific.

"I'm going to put my list with the cookies I leave for you. ... I want lots of stuff," Dallas told Santa.

The Mahoning Valley Amateur Radio Association, which has more than 200 members in Trumbull and Mahoning counties, has been bringing Santa to the hospital for the past four years.

"This is a unique way for us to cheer up kids and make their Christmas a little brighter. The kids really get excited when they get to talk to Santa," said Jack Sovik, a member of the organization.

The ham radio operators visited children in the hospital's intensive care unit, its hematology and oncology ward and on the medical/surgical floor.

The Santa Claus network is one way the hospital tries to make the disappointing experience of being hospitalized over the holidays a little easier to take, said Holly Jaschok, of the Child Life and Education Department.

The hospital makes every effort to avoid having a child be in the hospital at

■ See **Santa** Page **2A**

Tribune Chronicle, 12/19/2001

W8QLY Special Event (continued)

The idea of our four different QSL cards for four different operating events in 2019 to celebrate our 100 year anniversary. We had some nice conversations about our Club with operators from Florida and Georgia to Newfoundland. No pressure, all fun. It also gave me an opportunity to try out my new "fence" antenna and it seemed to work pretty well. All in all, a nice relaxing evening of Amateur Radio during our first MVARA Centennial Special Event. I'd highly recommend that any interested MVARA member look into participating in our future operating events.

WA8ZLK Andy : I worked Saturday evening late 10- 11 PM, Sunday evening late 9 to 11 pm and Monday morning. I logged only 13 qso's but I was being heard because a lot of very weak signals came back to my calls. Most that came back I could not even see on the IC 7300's bandscope. I fought and fought with the bands and did log what I could. Dave Brett called me from Alabama I think ,on Saturday night. Frank Sole came on frequency and told me Dave had sent him a text saying heard with a good 5 x 5. Neither Frank or I could hear Dave however. Up and down the band from my frequency I could see many stronger signals but I guess they weren't chasing wallpaper. Near the end of my Monday morning shift 40 m opened up and I logged 5 contacts in the last four minutes of my scheduled operating time. Earlier on my Monday shift, I set up my hamstick rotary dipole for 40 m and poked it up about 20 feet in the air on my painter's pole support. I worked one or two with it but 40 m was still stingy so I went back to my vertical., which is what I was on when 40m popped open here.

KE8IWZ Mike: Mike Malarky KE8IWZ operated 1800-2000 on Sunday, 17 FEB. I spent time working all 3 bands on 2 different rigs. It was quite a challenge.

There were regularly scheduled Nets ± 20 of our calling frequencies at 1800 on 80-40. I worked around them but contacts were hard to find. 20 was like it had been all weekend, very difficult. It was my first experience working a special Event, and despite the conditions it was fun. Sign me up for the next one, and I encourage everyone to get involved.

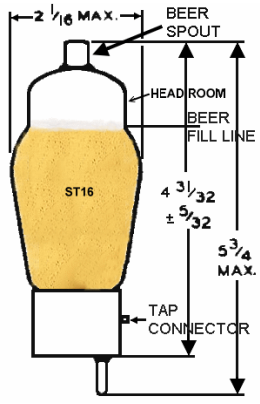
KB8GAE Rich: I had a blast operating Monday from 1 to 3 pm. Starting on 40 meters I had a steady stream of callers for about an hour. When things slowed I went to 20 meters for a handful of contacts and then went back to 40 where there was more consistent action. A couple of interesting contacts were K3NEM Fred, operating from the ham station at the National Electronics Museum in Maryland, and after much back and forth, being able to log W4RJP Rob, running ten watts from Florida. When I didn't have stations piled up I had a good time rag chewing and it was great to have so many hams congratulate us on reaching the 100 year milestone as a club. Everyone had nice things to say about our qrz.com page and the good looking QSLs.

In addition to operating I also enjoyed chasing W8QLY. I would type W8QLY into the search box on DX Summit.com to see the latest spot and use that frequency to start listening. If I heard nothing I would tune up and down from there. I was able to work Mark, K8MSH, on 40, Dave, N8NB, on 20, and Frank, WB8YHD, on 80. What a great hobby!

The first centennial special event is in the log books. If you are able to participate in the next one I think you will like the relaxed pace where you have plenty of time to chat. Let Mark or Nancy know if you don't have an HF rig, or you are a technician with limited HF privileges, and they will try to hook you up with someone you can operate with.

Thanks to Nancy, Dave, Mark, and the centennial committee for organizing such a fun event. I can't wait for the next one May 4th and hope to hear all of you on the air.

Amateur License Refresher **Dave, KD8NZF**



It's probably been awhile since you took your Amateur License exam. Here are a few sample questions from the current question pools just to keep those synapses firing.

Extra Pool

E4A01
Which of the following parameter determines the bandwidth of a digital or computer-based oscilloscope?
A. Input capacitance
B. Input impedance
C. Sampling rate
D. Sample resolution

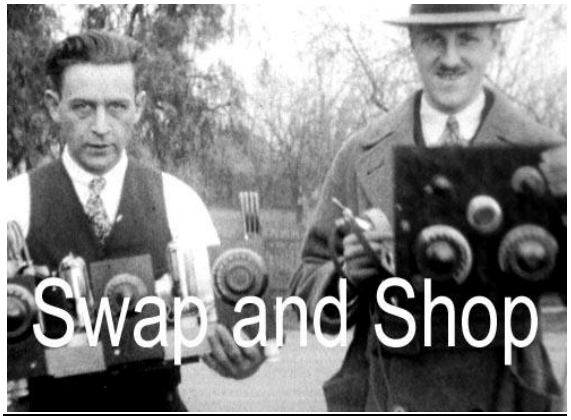
E4A02
Which of the following parameters would a spectrum analyzer display on the vertical and horizontal ax
A. RF amplitude and time
B. RF amplitude and frequency
C. SWR and frequency
D. SWR and time

General Pool

G4B01
What item of test equipment contains horizontal and vertical channel amplifiers?
A. An ohmmeter
B. A signal generator
C. An ammeter
D. An oscilloscope

G4B02
Which of the following is an advantage of an oscilloscope versus a digital voltmeter?
A. An oscilloscope uses less power
B. Complex impedances can be easily measured
C. Input impedance is much lower
D. Complex waveforms can be measured

Answers pg. 7

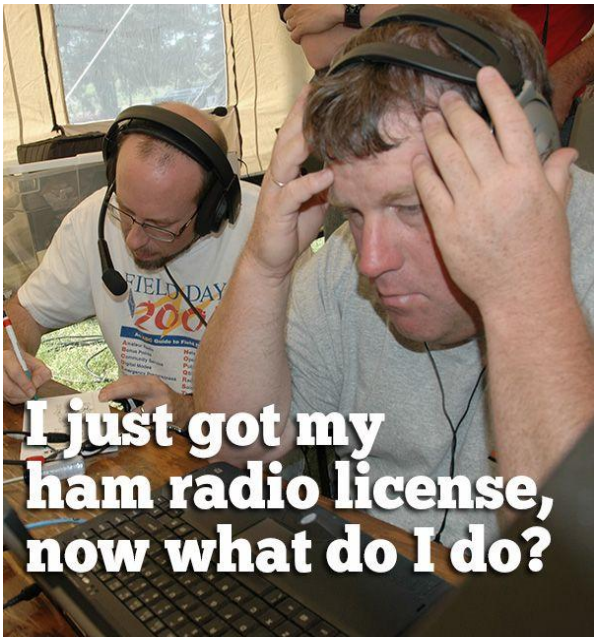


Contact Joe, WB8WYX, 330.755.3616

-Yaesu SP-20 $150
-MFJ-267 Dummy load/wattmeter $125
-Ameritron ARB-704 w/ Yaesu, Icom cables $60
-Yaesu FT-847 Transceiver w/Shure 550 mic. $650
-Dentron MT-2000A Tuner $125
-Ameritron AL-811H wired for 220V & ATP-102 tuning pulser (installed) $650

Estate Items Contact Frank, WB8YHD,
younghotdog@yahoo.com

ARRL Ham Manual 1975 $2
Bird Model 43 Watt meter no slug $150
B&K Precision PS-500 Prescaler $5
Devry Institute VTVM $5
Eico Mod 1064S variable bench supply $10
Fluke Mod 8030A Digitial Multi Meter $10
Heathkit capacitor checker IT-11 $75
Heathkit FET checker IT-121 $20
Heathkit HW-2036 2mtr & pwr supply $20
Heathkit IM 5228 VTVM $5
Kenwood TM-241 moblie 2 meter xcvr $40
Realistic Pro-2005 400 chan scanner rcvr $40
Icom 02AT with batt, mic, ant $20
Icom 2AT with batteries, ant $10
Icom 4AT with batteries $10
Icom IC-756 Pro II service manual $10
Micronta VOM $5
Olson SWR & Power meter $5
Realistic HTX 202 2 meter HT $20
WinRadio WR-G31DDC Excalibur SDR rcvr $500
Hewlett Packard 5381A freq counter $40
Daiwa CN-101L swr/pwr meter 1.8-150 mhz $45
Ten Tec Argonaut II $400
Kent Single Paddle CW key $100



Station Loaner Program

If you're a new ham/newly upgraded and want to get on the HF bands, MVARA has a loaner program for club members. The club has two complete stations with radio, power supply, microphone, CW key, and antenna tuner. All you need to do is supply your own coax, antenna, and keep the equipment in good condition while you have it.

Loan period is up to 6 months. However, you will be responsible for returning the station temporarily for use during Field Day weekend in June.

With the new ARRL proposal, it looks like even Tech class amateurs may soon have more phone priveleges on some of the HF bands. Contact MVARA at our email address: **mvara.W8QLY@gmail.com**

Contest and Special Event Operating Information

Dave Fairbanks N8NB

Data below as well as more information courtesy of the following website:
http://www.hornucopia.com/contestcal/index.html.

March 2019	
NCCC RTTY Sprint	0145Z-0215Z, Mar 1
QRP Fox Hunt	0200Z-0330Z, Mar 1
NCCC Sprint Ladder	0230Z-0300Z, Mar 1
Novice Rig Roundup	0000Z, Mar 2 to 2359Z, Mar 10
ARRL Inter. DX Contest, SSB	0000Z, Mar 2 to 2400Z, Mar 3
Wake-Up! QRP Sprint	0600Z-0629Z, Mar 2 and 0630Z-0659Z, Mar 2 and 0700Z-0729Z, Mar 2 and 0730Z-0800Z, Mar 2
Open Ukraine RTTY Championship	1800Z-2059Z, Mar 2 (Low Band) and 2100Z-2359Z, Mar 2 (Low Band) and 0800Z-1059Z, Mar 3 (High Band) and 1100Z-1359Z, Mar 3 (High Band)
UBA Spring Contest, CW	0700Z-1100Z, Mar 3
SARL Hamnet 40m Simulated Emerg Contest	1200Z-1400Z, Mar 3
NSARA Contest	1200Z-1600Z, Mar 3 and 1800Z-2200Z, Mar 3
RSGB 80m Club Championship, Data	2000Z-2130Z, Mar 4
ARS Spartan Sprint	0200Z-0400Z, Mar 5
AGCW YL-CW Party	1900Z-2100Z, Mar 5
QRP Fox Hunt	0200Z-0330Z, Mar 6
Phone Fray	0230Z-0300Z, Mar 6
CWops Mini-CWT Test	1300Z-1400Z, Mar 6 and 1900Z-2000Z, Mar 6 and 0300Z-0400Z, Mar 7
UKEICC 80m Contest	2000Z-2100Z, Mar 6
NRAU 10m Activity Contest	1800Z-1900Z, Mar 7 (CW) and 1900Z-2000Z, Mar 7 (SSB) and 2000Z-2100Z, Mar 7 (FM) and 2100Z-2200Z, Mar 7 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Mar 7
NCCC RTTY Sprint	0145Z-0215Z, Mar 8
QRP Fox Hunt	0200Z-0330Z, Mar 8
NCCC Sprint	0230Z-0300Z, Mar 8
YB DX RTTY Contest	0000Z-2359Z, Mar 9
RSGB Commonwealth Contest	1000Z, Mar 9 to 1000Z, Mar 10
SARL VHF/UHF Analogue Contest	1000Z, Mar 9 to 1000Z, Mar 10
South America 10 Meter Contest	1200Z, Mar 9 to 1200Z, Mar 10
F9AA Cup, SSB	1200Z, Mar 9 to 1200Z, Mar 10
SKCC Weekend Sprintathon	1200Z, Mar 9 to 2400Z, Mar 10
AGCW QRP Contest	1400Z-2000Z, Mar 9
Oklahoma QSO Party	1500Z, Mar 9 to 0200Z, Mar 10 and 1400Z-2100Z, Mar 10
Stew Perry Topband Challenge	1500Z, Mar 9 to 1500Z, Mar 10
EA PSK63 Contest	1600Z, Mar 9 to 1600Z, Mar 10
TESLA Memorial HF CW Contest	1800Z, Mar 9 to 0559Z, Mar 10
QCWA QSO Party	1800Z, Mar 9 to 1800Z, Mar 10
Idaho QSO Party	1900Z, Mar 9 to 1900Z, Mar 10

QRP ARCI Spring Thaw SSB Shootout	2200Z-2300Z, Mar 9
North American Sprint, RTTY	0000Z-0400Z, Mar 10
UBA Spring Contest, 2m	0700Z-1100Z, Mar 10
WAB 3.5 MHz Phone/CW	1800Z-2200Z, Mar 10
Wisconsin QSO Party	1800Z, Mar 10 to 0100Z, Mar 11
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Mar 11
QRP Fox Hunt	0100Z-0230Z, Mar 13
Phone Fray	0230Z-0300Z, Mar 13
CWops Mini-CWT Test	1300Z-1400Z, Mar 13 and 1900Z-2000Z, Mar 13 and 0300Z-0400Z, Mar 14
RSGB 80m Club Championship, CW	2000Z-2130Z, Mar 13
AWA John Rollins Memorial DX Contest	2300Z, Mar 13 to 2300Z, Mar 14 and 2300Z, Mar 16 to 2300Z, Mar 17
QRP Fox Hunt	0100Z-0230Z, Mar 15
NCCC RTTY Sprint	0145Z-0215Z, Mar 15
NCCC Sprint	0230Z-0300Z, Mar 15
BARTG HF RTTY Contest	0200Z, Mar 16 to 0200Z, Mar 18
Russian DX Contest	1200Z, Mar 16 to 1200Z, Mar 17
Virginia QSO Party	1400Z, Mar 16 to 0400Z, Mar 17 and 1200Z-2400Z, Mar 17
Louisiana QSO Party	1400Z, Mar 16 to 0200Z, Mar 17
AGCW VHF/UHF Contest	1400Z-1700Z, Mar 16 (144) and 1700Z-1800Z, Mar 16 (432)
Feld Hell Sprint	2000Z-2159Z, Mar 16
UBA Spring Contest, SSB	0700Z-1100Z, Mar 17
Run for the Bacon QRP Contest	0100Z-0300Z, Mar 18
Bucharest Contest	1800Z-2059Z, Mar 18
CLARA Chatter Party	1700Z, Mar 19 to 1700Z, Mar 20 and 1700Z, Mar 23 to 1700Z, Mar 24
QRP Fox Hunt	0100Z-0230Z, Mar 20
Phone Fray	0230Z-0300Z, Mar 20
CWops Mini-CWT Test	1300Z-1400Z, Mar 20 and 1900Z-2000Z, Mar 20 and 0300Z-0400Z, Mar 21
NAQCC CW Sprint	0030Z-0230Z, Mar 21
QRP Fox Hunt	0100Z-0230Z, Mar 22
NCCC RTTY Sprint	0145Z-0215Z, Mar 22
NCCC Sprint	0230Z-0300Z, Mar 22
FOC QSO Party	0000Z-2359Z, Mar 23
UK/EI DX Contest, CW	1200Z, Mar 23 to 1200Z, Mar 24
North American SSB Sprint Contest	0000Z-0400Z, Mar 24
UBA Spring Contest, 6m	0600Z-1000Z, Mar 24
SKCC Sprint	0000Z-0200Z, Mar 27
QRP Fox Hunt	0100Z-0230Z, Mar 27
Phone Fray	0230Z-0300Z, Mar 27
CWops Mini-CWT Test	1300Z-1400Z, Mar 27 and 1900Z-2000Z, Mar 27 and 0300Z-0400Z, Mar 28
UKEICC 80m Contest	2000Z-2100Z, Mar 27
RSGB 80m Club Championship, SSB	2000Z-2130Z, Mar 28
QRP Fox Hunt	0100Z-0230Z, Mar 29
NCCC RTTY Sprint	0145Z-0215Z, Mar 29
NCCC Sprint	0230Z-0300Z, Mar 29
CQ WW WPX Contest, SSB	0000Z, Mar 30 to 2359Z, Mar 31
Feld Hell Sprint	0000Z-2359Z, Mar 30

DX Operating Information

Dave Fairbanks N8NB

The Bouvet Dxpedition is still in the preparation process. You can follow at: https://www.rebeldxgroup.com/. Credit for the below information and further information on these operations and others can be found at the following website: http://www.ng3k.com

March						
2019 Mar01	2019 Mar15	**Cayman Is**	**ZF2CA**	G4CWH Direct	OPDX 20181217	By G4CWH fm Grand Cayman I (IOTA NA-016); 160-10m; CW SSB; QRV for BERU Contest; exact dates not clear
ARRL International DX Contest, Phone (Mar 2-3, 2019) Check here for pericontest activity too.						
2019 Mar03	2019 Mar30	**Sint Maarten**	**PJ7AA**	AA9A	DXNews 20181204	By AA9A fm IOTA NA-105; 80-10m, perhaps 160m; mainly CW FT8, some SSB
2019 Mar05	2019 Mar12	**Gambia**	**C56DF** NEW	LoTW	425DXN 20190216	By G3XTT; 40-10m; low power; wires; CW; QRV for RSGB Commonwealth Contest
2019 Mar06	2019 Mar09	**Bhutan**	**A52**	See Info	TDDX 20190205	By JH1AJT DJ9ZB E21EIC as A52ZB and A52IC; 160-10; CW SSB FT8; focus on 160m FT8, 1840 QSX 1908 for JA (FT8 normal mode); QSL A52ZB via DJ9ZB and A52IC via E21EIC
2019 Mar06	2019 Mar12	**French Polynesia**	**FO**	LoTW	425DXN 20190201	By OK2ZI as FO/OK2ZI fm Tahiti (IOTA OC-046); 40-10m; CW SSB + digital (incl FT8); QSL also OK via OK2ZI and Club Log
2019 Mar06	2019 Mar13	**Guantanamo**	**KG4** NEW	Home Call	OPDX 20190211	By N4SIA as KG4AS and KP2L as KG4SC fm the Naval Station club station; HF, incl KG4SC on 5357 kHz; CW SSB FT8
2019 Mar08	2019 Mar16	**Bahamas**	**C6AKT**	LoTW	DXNews 20181130	By M1KTA fm nr Glass Window Bridge, Eleuthera I (IOTA NA-001); 80 40 20 15 10m; CW; QSL also OK via M1KTA and Club Log
2019 Mar08	2019 Mar16	**Lesotho**	**7P8LB**	M0OXO	DXW.Net 20190130	By LA7THA LB2HG OE5CWO OE7PGI LA7WCA LA7RRA LA3BO LA9KKA LA9VPA fm Molengoane Lodge (KG30vo); HF w/ focus on low bands; focus on FT8, also SSB CW; logsearch on Club Log
2019 Mar09	2019 Mar11	**South Cook Is**	**E51** NEW	Home Call	DXW.Net 20190215	By DL1AUZ as E51AUZ and DM7PQ as E51NPQ fm Rarotonga (IOTA OC-013); holiday style operation
2019 Mar10	2019 Mar16	**Vietnam**	**XV9JK**	SP5APW	DXW.Net 20190119	By SP5APW fm Cu Lao Thu, Phu Quy I (IOTA AS-157); mainly 20 17m; SSB; possbily FT8 on 40 30m if conditions are bad; call sign requested; QSL also OK via Club Log
2019 Mar11	2019 Mar27	**Juan Fernandez**	**XR0ZRC**	LoTW	DXNews 20190106	By R7AL RA1ZZ RK8A RL5F RW9JZ CE1TBN fm IOTA SA-005 (FF06oi); 160-10m; CW SSB FT8; 3 sttions; QSL also OK via R7AL (Buro or direct) and Club Log

2019 Mar13	2019 Mar25	**Uganda**	**5X3C**	LoTW	TDDX 20190125	By an international team fm KJ0hd; 160-10m; CW SSB RTTY FT8; 5X3E on FT8
2019 Mar13	2019 Apr17	**Barbados**	**8P6DR**	LoTW	TDDX 20190208	By G3RWL; 80-10m; CW RTTY; QSL also OK via Club Log (preferred), email request, RSGB Buro
2019 Mar14	2019 Mar22	**South Cook Is**	**E51HMK**	LoTW	TDDX 20180622	By DK2HM fm Rarotonga (IOTA OC-013); 80-10ml mainly SSB, some digital, incl FT8; 300w; Windom; QSL also OK via DK2HM (Buro or direct), Club Log, eQSL
2019 Mar14	2019 Mar26	**Togo**	**5V7EI**	LoTW	DXW.Net 20181230	By 13 op EIDX Group team; 160-10m; SSB CW + digital; 5 QRO stations; QSL also OK via M0OXO
2019 Mar14	2019 Mar30	**Curacao**	**PJ2**	LoTW	DK5ON 20181209	By DK5ON as PJ2/DK5ON; 80-6m; CW SSB RTTY FT8; 5w; QSL also OK via DK5ON (Buro or direct) and Club Log
2019 Mar15	2019 Mar17	**Jersey**	**MJ5Z** NEW	LoTW	M0CFW 20190214	By M0CFW; QRV for Russian DX Contest; QRV as MJ0CFW before/after the contest; QSL also OK via Club Log
2019 Mar16	2019 Apr06	**Vietnam**	**3W9JF**	F6CTF Direct	DXW.Net 20190111	By F6CTF fm Hoi An; HF; QSL also OK via eQSL
2019 Mar18	2019 Apr02	**Niue**	**E6ET**	Club Log	DXW.Net 20180603	By 5B4ALX; 160-6m, focus on 160 60 30 10m; SSB CW RTTY, some FT8; 1 kw; verticals; QRV for CQ WPX SSB; see Web for full QSL details
2019 Mar21	2019 Apr22	**French Guiana**	**TO2BC**	LoTW	TDDX 20190131	By DL7BC fm GJ43vu; 40-10m; mainly SSB, some RTTY PSK, CW on request; QSL also OK via DL7BC and Club Log
2019 Mar27	2019 Mar31	**South Cook Is**	**E51** NEW	Home Call	DXW.Net 20190215	By DL1AUZ as E51AUZ and DM7PQ as E51NPQ fm Aitutaki (IOTA OC-014); holiday style operation
CQ WPX Contest, SSB (Mar 30-31, 2019) Check here for pericontest activity too.						

65 Great Things About Ham Radio (Continued)

40. Dayton
41. Field Day
42. Working DX
43. Being DX
44. DXpeditions
45. Contesting
46. Award-chasing
47. Double-hop sporadic-E
48. Worldwide DX on 6 meters (once or twice every 11 years)
49. Tropospheric ducting
50. Gray-line propagation
51. TEP, chordal hops, etc.
52. Getting through on CW when nothing else will
53. Unexpected band openings
54. Building your own gear
55. Using gear you've built yourself
56. Operating QRP from some remote location
57. Experimenting with antennas
58. Working DX while mobile or while hiking
59. Experimenting with new modes and new technology
60. The opportunity to help build an internet that doesn't rely on the internet
61. DXing on your HT via IRLP and Echolink
62. Contributing to knowledge about propagation
63. Keeping track of people's GPS units via PRS
64. Ham radio balloon launches to the edge of space, and as always...
65. Reading CQ!

-From CQ Magazine

LINKS

KK8DX Solution

In late December I submitted a petition for rulemaking to the FCC. It was promptly taken up and opened for comments on the FCC Website in February, after the government shutdown. The reason that I suggested a change in rulemaking to the FCC is due to a problem that I had been working on since autumn 2018. Weather caused local ARES volunteers to be called out to assist the Mahoning County Ohio EMA in providing damage assessment after severe floods damaged a number of homes in the Boardman and Poland Ohio areas.

I worked for three, eight-hour days with other ARES volunteers to talk with residents and asset damage. Our groups were split-up to efficiently cover areas hardest hit. Net control did a fantastic job of actively assigning us to areas to canvas, and keeping track of our locations. After a very short time of being on-scene in this event, I found that it was extremely difficult to meet the 10-minute deadline to ID per FCC rules, because of the need to collect damage reports while interacting with affected persons, and transmit updates to Net Control. We could have signed off at the beginning of conducting an assessment with Net Control, and signed back on at its conclusion, but it was best to stay linked to the net, since we were in unfamiliar areas, additionally we were working the event with ARES members from other areas of Ohio in a changing situation.

Tactical calls were used during the event to concentrate focus, along with our assigned FCC call letters, which we broadcast (to meet the ten-minute rule). I was asked by a local public service person why we kept giving our own individual FCC call signs, I explained that it was an FCC rule. At that point in time, I realized that we could satisfy the FCC rule if we loaded our individual call signs on to an automatic CW keying transmitting device, which would auto I.D. each station's call in the field during an emergency event for the 10 minutes ID rule to be satisfied. This would help relieve congestion on the channel and also relive the operators worry to ID for FCC rules. It would allow them to better concentrate on the emergency work at hand.

My change to the rules does not mandate this new procedure, but only allows for it. Comments can be made at https://www.fcc.gov/ecfs/ and type in the name of filer searchbox *Dukish.* or my call KK8DX. Description and videos are available at the website, www.fixtron.com.

Amateur Radio Rig "Cheat Sheets"

This is a collection of programming helps, also known as "Cheat Sheets," for many common amateur radios. (*There are also a few non rig-related references*)

https://www.ke4rx.org/cheatsheet/

Mahoning Valley Amateur Radio Survey

Name	Call Sign
What license do you have?	Tech ☐ General ☐ Extra ☐
How old were you when you received your first license? 10-20 ☐ 20-30 ☐ 30-40 ☐ 40-50 ☐ 50-60 ☐ 60-70 ☐ 70-80 ☐	
What year(s) did you get your license?	
When does your ARRL member expire?	
Why did you get your license?	
Did someone mentor you? Who?	
Do you listen or participate in local nets? Yes ☐ No☐	
Are you involved in ARES -Amateur Radio Emergency Services? Yes ☐ No☐	
Do you take your radios with you on vacation? Yes ☐ No☐	

Thank you – please email your responses to mvara.w8qly@gmail.com
or mail to MVARA - P.O. Box 14141, Poland, Ohio 44514

The Last Word

Extra Class, General Class, Technician Class, we all know those as the current license grades or levels in the United State Amateur Radio service. Each level has its own requirements to pass and set of privileges earned. Some of us have taken the challenge to "upgrade" over the years. Many of us are very happy with the license grade we have had for a number of years. As they say different strokes for different folks.

Unfortunately, there are a few of us that seem to "grade others" by their license class as some sort of indicator of technical superiority. Does that make sense? There are Technician class licensees that are research engineers at some of the biggest technology companies in the world and there are Extra class licensees that are technically adept enough to reliably power their radios up and that's it. License grade is no indication of technical abilities or level of interest or level of involvement.

What's more important to realize is we're all Amateur Radio operators no matter what our grade of license. We've all loved the hobby enough to earn our grade of license no matter what it might be. We should all honor each other for that interest and dedication. We are all part of the greatest technical hobby on the planet.

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https://www.facebook.com/mahvalradio

The ***VOICE COIL*** is the monthly publication of the Mahoning Valley Amateur Radio Association, Inc. (MVARA) and is intended to present news, issues and opinions of interest to MVARA members and the Amateur Radio Community. We encourage contributions of articles, letters to the editor, etc. and welcome newsletter exchanges with other clubs from around the country and around the world. Permission is granted to reprint material contained herein as long as proper credit is given to this newsletter and the author. Ideas for and contributions to the VOICE COIL should be submitted to:

MVARAVoiceCoil@gmail.com

Submissions must be received **no later than the 24th** of the month prior to the month of issue, unless otherwise specified. **Submissions should be in MS Word format or ASCII text—no PDF, please!** Material received after the deadline will be used in the next month's VOICE COIL if it is still current and /or newsworthy.

The ***VOICE COIL*** is published by the MVARA. All material contained herein is considered the opinion of the author and not necessarily that of the MVARA. Announcements of events are for informational purposes and do not necessarily constitute an endorsement by the MVARA. No responsibility for accuracy is assumed by the editor or newsletter staff. Typos are included for the entertainment of those who enjoy looking for them and should be reported immediately to any nearby MVARA member :-)