

The Oscillator

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All Face to Face Club Meetings & Village Facilities (The Bunker) are Closed!

July - Vacation Time

It seems strange to say we are on vacation but we are. There will a Board meeting in July but no regular meeting in person or on the air. Please check into our nets to keep up with Club news.

August - Meeting

Depending on what the Village of Hazel Crest allows us to do, we will have a social night at the Bunker on Friday, August 28, 2020, 7:30 PM or we will have a meeting on the WD9HSY repeater instead.

From The President's Desk

Stay well and 73, Todd, KA9IUC

This could be subtitled Covid 19 Fallout Bad and Good. We were sure knee deep in the bad. Staying at home, just about everything being cancelled, including meetings, social get togethers, national conventions and all kinds of other enjoyable happenings. But things are starting to improve at least in our area. Things are starting to open up and things are slowly getting back to normal. Have been doing a few things in the recovery but probably enjoyed a hair cut the most. I have seen some good to being at home. More time to play radio, work on home projects and hobbies like model trains. I also took advantage of Contest University being free and on the internet. I am looking forward to QSO Today Ham Fest in August. I am sure looking forward to Club activities to get back to normal. There is plenty to do so don't sit idle and mope.

2021 - Tri-Town RAC's 90th Year

Board Meetings are held the second Monday of the Month, all members welcome. We are holding them via Zoom. If you have something you wish to bring before the Board, please contact Trish so she can send you an invitation for the meeting.

Facebook: <https://www.facebook.com/tritownrac>
Check out the Club Website: WWW.W9VT.ORG

Officers, Board Members, & Committee Heads for 2020

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Club Meetings & Nets

Club meetings are the 4th Friday of each month 7:30 pm at the Village of Hazel Crest Village Hall, 170th and Holmes. All are welcome and refreshments will serve. Don't forget to bring a Friend.

Club Hangouts:

The Club's Repeater 146.805 WD9HSY/R & 146.49 Simplex 442.375 Homewood, 441.300 Grant Park WA9WLN/R, "Waldofar" 443.325 Frankfort WD9HSY/R & 147.165 Kankakee Co. WD9HSY/R All UHF's use a 114.8 PL & All VHF's use a 107.2 PL

Club Nets

2 Mtr FM 49'ers Net Wednesday, 8:00 PM Local, The Club's Repeater 146.805 -600kc 107.2 PL
2 Mtr FM Preparedness Net Sundays, 8:00 PM local, The Club's Repeater 146.805 -600kc 107.2
10 Mtr SSB Net Thursdays, 8:00 PM local on 28.490 SSB USB
40 Mtr Tri-Town Alumni Net Weekdays, 2200 UTC 7.285 SSB LSB
80 Mtr SSB Net Saturdays, 9am local 3.860 SSB LSB

Tri-Town 10 meter net

As previously announced Jerry, K9PMV, of Blue Island, has reactivating this net. The net meets each Thursday at 8 PM on 28.490 MHz SSB. So far Jerry has had as many as 7 check ins plus some DX stations. Of late it has been a core group of 4-5 check ins.. There are general discussions on ham related subjects and other topics of interest. Please support Jerry's efforts by getting on 10 Meters and check into the net!

2020 Tri-Town RAC Calendar (All COVID-19 Pending)

July 24	Vacation - No Meeting
August 28	Social Night at the Club Station, if things change or on air meeting
September 12	Picnic - Portable on the Air, if things change
October 23	Meeting - to be determined
November 20	Meeting - to be determined
December 11	Christmas Party/Meeting - to be determined

Reactivation of the Tri-Town 10 meter net

The Club wants to thank Jerry, K9PMV, of Blue Island, for reactivating this net. The net meets each Thursday at 8 PM on 28.490 MHz SSB. So far Jerry has had 5-7 check ins each net. There are general discussions and even QSYs to try other modes on 10 meters. Get on HF, check into the net!

The 3.862 MHz Net Continues to Grow

Jim, KB9VR of Monee, started the Saturday morning SSB net on 3.862 MHz and the number of check ins to the net have continued to grow. The last few nets have been very busy with eighteen to twenty-four check ins. Jim and others act as net control and there is a friendly competition to see who gets more ARRL check ins. Of late there has been a check in of note, Bob Heil, K9EID of Fairview Heights, IL and Heil Sound.

Deadline for sending in your FD results is the 28rd of July ---

The FD Rules Package link is on the Facebook page. Download it for the Forms you need to submit. If you put "Tri-Town Radio Amateur Club" on line #2, the ARRL will put your score in with ours as an aggregate score..... Other than adding Tri-Town to your Summary sheet, you do your own FD as 100% you. Your Call, your Class privileges.

	<h1>Field Day</h1> <p>Please write legibly. Make certain you have filled out this form completely and have enclosed any required dupe sheets, photographs and bonus claims.</p>	<p>Entries must be postmarked within 30 days of the end of the event and mailed to: Field Day Entries ARRL 225 Main St. Newington, CT 06111 USA</p>
1. Field Day Call Used _____	GOTA Station Call _____	
2. Club or Group name _____	Tri-Town Radio Amateur Club	
3. Number of Participants _____	4. Number of Transmitters in Simultaneous Operation _____	

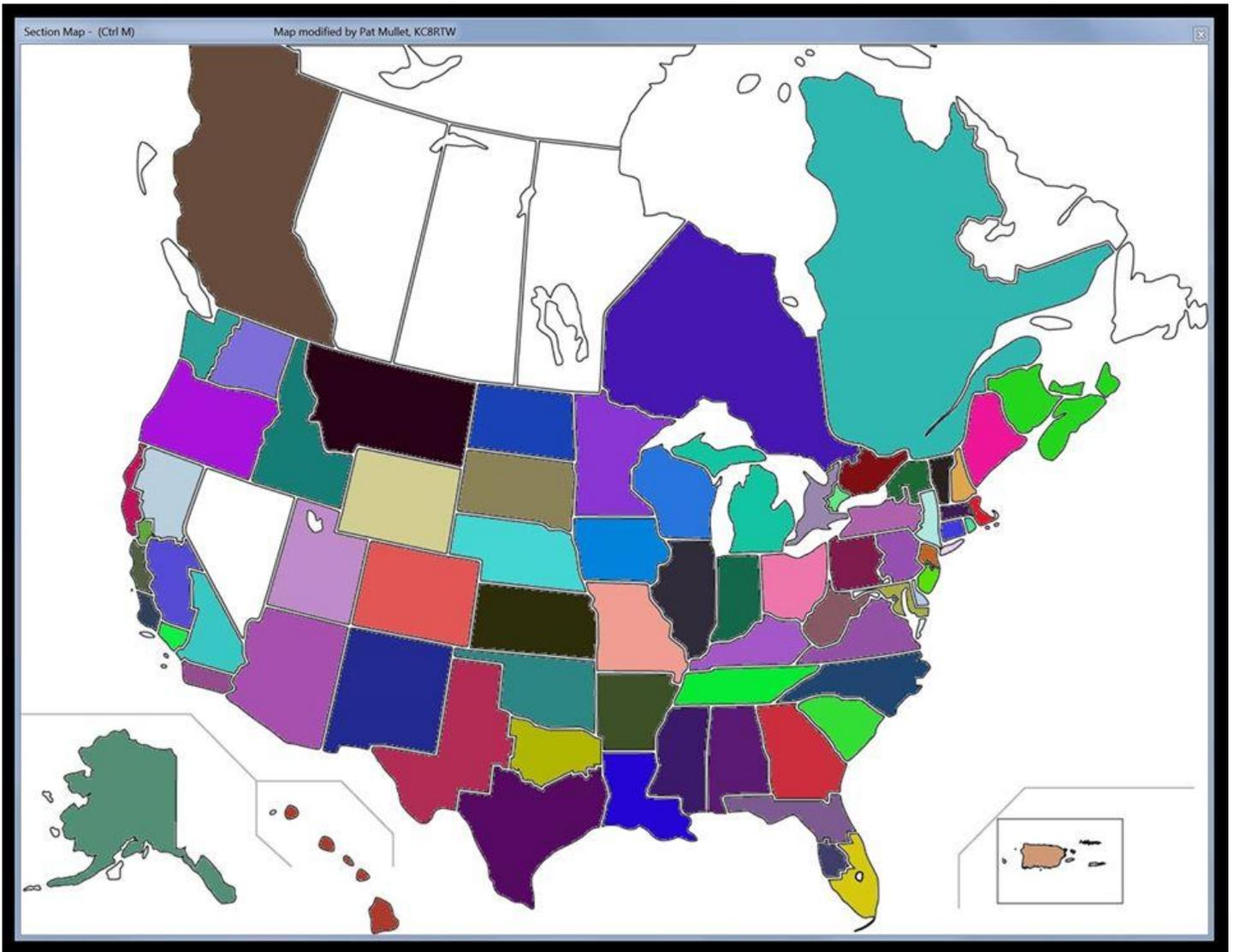




Waking up the morning after Field Day



How many states did you work over FD?



Field Day 2020 at Todd's QTH KA9IUC

This year's Field Day was different from the past. I made more contacts this year than any other working from the Bunker. I worked FT8 on 20, 15, 10 and 6 meters. Did not work continuously but did make 194 QSOs. I found the bands to be good and plenty of stations to work. Most of them were 1D like me. I got my dupe sheet and bonus point materials in order and went on the ARRL web site to file my report. It was easy and quick. Within minutes they acknowledged that they had received my report and that it was complete. I credited Tri-Town with my point score. So far five operators have credited their points to Tri-Town. Please remember to do this when you file and you must file by July 28, 2020. Please send any comments or pictures about your Field Day to The Oscillator Editor for future publication.



Todd's QTH



Brian's QTH

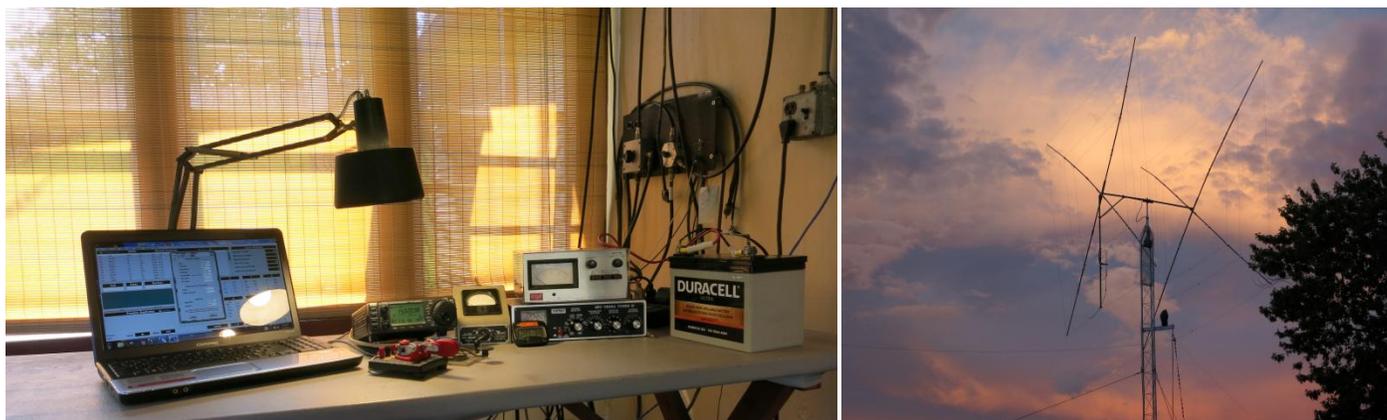
Field Day 2020 at Brian's QTH WD9HSY

All Betsy has to say to the kids is, "It's Field Day weekend" and they leave me alone. Betsy and the kids are all licensed too and have all been to the Bunker and "Played Field Day" so they know, It's Play Radio or Run Away! It helps that Dan is in the USAF and in S. Korean, so he has an excuse! Anyway Field Day was crazy and fun and wild and tiring! I ran a bunch of FT4 and FT8 with auto logging from N3FJP. I was able to work 49 of 50 states, PR, USVI, and 6 Canadian Provinces.

I did FT4/FT8 (This is the 1st year for this mode at FD) No matter what you hear, FT is not an easy mode to use in a contest, but it should get better with updates to the software.

It was crazy seeing 60+ decodes in a FT8 15 sec cycle, a quarter to a third calling CQ FD. Here is where it gets crazy. So much "Stuff" is flying across your screen in a 7 or 15 second blast, it is almost too fast to process. I was able to keep it up for a few hours before my brain started to hurt. I was doing 50 to 60 contacts an hour at my best to less than 30 when I was getting tired. I have to say that RTTY may still be faster, but with FT gaining popularity, FT is around to stay!

Facebook: <https://www.facebook.com/tritownrac>
Check out the Club Website: WWW.W9VT.ORG



Field Day 2020 at Jerry's QTH K9PMV

by Jerry K9PMV

Home is Blue Island and Field Day was portable in my backyard. OK, so we can't really go out and congregate in the field somewhere this year. I decided that I would make the most of it and operate in the field day spirit. That meant bringing the gear from the house and setting it up in the backyard patio. I also decided to operate on battery power and run five watts QRP. This was quite a learning experience for me. I usually make two hundred CW contacts, more or less, on field day. This year I made 229 contacts, all on five watts QRP CW. My antennas were a 102 foot G5RV for 80 and 40 meters and a Mosley two element triband quad for 20, 15, and 10 meters. The quad really showed its merit as 66% of my contacts were made using it on twenty meters. I also managed to work my way through a twenty meter pile up to contact KH6CJJ in Hawaii. Not bad for five watts. I also learned the capacity of my 35 AH battery. It had a full charge at the beginning and read 13.7 VDC. It stood up fine for the whole field day and it read 12.7 VDC at the end of operations.

Field Day is all about operating under unusual circumstances. Pandemic is certainly an unusual circumstance. Judging by the crush of signals on the bands, I believe the Amateur Radio community showed that it was up to the challenge.

NQN Filters Designer, Maker Ed Wetherhold, W3NQN, SK

Edward E. "Ed" Wetherhold, W3NQN, of Annapolis, Maryland, died on July 9. He was 93. Licensed in 1947, Wetherhold was an electrical engineer who served in the US Air Force Reserve before spending 30 years at the Annapolis Signal Analysis Center of Alliant Techsystems (formerly the defense division of Honeywell).

Wetherhold was best known within the amateur radio community for designing and manufacturing HF band-pass filters, and his designs became the gold standard for multioperator stations and DXpeditions.

An ARRL Technical Advisor, his articles appeared in *QST*, *QEX*, *Ham Radio*, and elsewhere. His article, "An Amateur Application of Modern Filter Design," appeared in the July 1966 issue of *QST*. Wetherhold was a member of the Anne Arundel Radio Club.

"His passive CW filter was one of the longest-running *ARRL Handbook* projects ever, and many, many stations use NQN band-pass filter designs, both homebuilt and commercial," said ARRL Contributing Editor Ward Silver, N0AX. "He sure left a massive mark on ham radio." — *Thanks to The Daily DX via Joe Reisert, W1JR, and to Ward Silver, N0AX*

EME SSTV Party Could Become an Annual Event

Many stations are reported to have made Earth-moon-Earth (EME) SSTV transmissions on last year's 50th anniversary celebration of the moon landing.

"We could only do it on the exact date 50 years later, and EME conditions were not very good last year," said Jan van Muijlwijk, PA3FXB, of the PI9CAM team at Dwingeloo Astronomic Observatory. "[W]e saw many stations joining the SSTV party, and we were surprised to see what is possible even with small dishes. Because of that, we would like to try to make it an annual EME SSTV party."

A lunar landing EME SSTV party is set for July 26. "Moon conditions will be better than last year," van Muijlwijk said. "The moon is not very high in the northern hemisphere but much closer than last year, so we expect stronger signals and better images. The PI9CAM team will transmit several lunar landing and space-related images on 1296.110 MHz using Martin 2 mode.

International Lighthouse Lightship Weekend on Track for 2020

Registrations for this year's popular International Lighthouse Lightship Weekend (**ILLW**) appear to have been largely unaffected by the current COVID-19 pandemic. The event will take place this year over the August 22 – 23 weekend. By mid-July, more than 200 entries had been received, and some 400 are expected to have signed up by the event weekend.

New to this year's event is Corsica at Phare d'Alistro, which for ILLW purposes carries the French number of FR0030. Two lighthouses in Ghana will be on the air for the first time, as well as Buck Island Lighthouse in the US Virgin Islands (VI0001). Germany is well in the lead with 54 entries, followed by Australia with 29 entries, and the US with 27 entries.

This event is designed as a fun weekend to encourage exposure to amateur radio and lighthouses to the visiting public, and ILLW stresses contacts should be more than just an exchange of signal reports. All participants are urged to observe local COVID-19 safety guidelines. —*Thanks to Kevin Mulcahey, VK2CE*

Annual KPH "Night of Nights" Has Been Canceled

The Maritime Radio Historical Society (**MRHS**) and the National Park Service have announced that the annual KPH Night of Nights has been canceled due to COVID-19 precautions. This would have been the 21st such event, which commemorates what is believed to be the last commercial Morse transmission in the US.

While KPH, KFS, and K6KPH will not be on the air for Night of Nights XXI, MRHS members will be active from home. Members will use their own call signs on the usual K6KPH frequencies of 3550, 7050, and 14,050 kHz starting at 0001 UTC on July 13 (the evening of July 12 in North American time zones) and will send the Night of Nights opening message traditionally transmitted via KPH. They will then stand by for calls or will call "CQ NON" or "CQ Night of Nights." Listen for WB6OVV, N6BBF, WB6UZX, AA6IF, N6AD, W6AWO, W6DHM, and possibly others.

Husky-1 CubeSat Helped Pave the Way for Future Missions

AMSAT Vice President of Engineering Jerry Buxton, N0JY, said that while it was disappointing that the amateur transponder on **HuskySat-1** (HO-107) was not available any longer, following the satellite's science missions, the overall HuskySat-1 project and mission "were quite beneficial for our partner and for AMSAT." The linear transponder module (LTM) on HuskySat-1 was operational for more than 3 months, failing during or just after a period of full sun when LTM temperatures topped 80 °C (176 °F). HuskySat-1 was the first CubeSat from the Husky Satellite Lab at the University of Washington and the first mission with AMSAT's LTM V/u transponder on board. University researchers conducted their work using an FCC Part 5 Experimental license.

"The HuskySat-1 team was able to command their satellite and experiments and receive the telemetry they sought, and AMSAT was able to work through the extensive process of making a new design for a 'black box' radio module that can be integrated into a non-AMSAT spacecraft and fly in the space environment," Buxton said in a recent post to the AMSAT-BB reflector. "While licensed and operated as an amateur radio satellite by AMSAT during the transponder use, some facts set HO-107 apart from our Fox-1 CubeSats and other AMSAT satellites," Buxton explained, pointing out that HuskySat-1 was not an AMSAT satellite.

"There is no doubt that HO-107 was a success in many ways beyond the operational life of the transponder," Buxton added. — *Thanks to AMSAT News Service*

New Extra Class License Manual & Extra Q&A Now Available

Go all the way to the top! ARRL has everything you need to pass the Amateur Extra Class license exam with confidence. ***The ARRL Extra Class License Manual for Ham Radio*** is your ticket to every privilege granted to amateur radio operators — all frequencies, operating modes, and power levels. It has all the questions and answers, with detailed explanations, for examinations taken between July 1, 2020, and June 30, 2024.

Use this book with **ARRL Exam Review for Ham Radio** online to review the material. You can even take practice exams, so there are no surprises on exam day! When you've successfully passed the exam, *The ARRL Extra Class License Manual* will serve as your reference as you explore your new privileges! If you're looking for a more direct route to studying for the exam, ***ARRL's Extra Q&A*** contains all exam questions and the answers. To upgrade to Amateur Extra, you must already hold a General class license (or have recently passed all of the exam elements required for a General license).

The ARRL Extra Class License Manual new 12th edition spiral bound (ARRL Item No. 1311, ISBN: 978-1-62595-131-1, \$32.95 retail) and ***ARRL's Extra Q&A*** new 5th edition (ARRL Item No. 1335, ISBN: 978-1-62595-133-5, \$19.95 retail) are now shipping. Order from the **ARRL Store**, or find an **ARRL publications dealer**; For additional questions or ordering, call 860-594-0355 (toll-free in the US, 888-277-5289). Both ***The ARRL Extra Class License Manual*** and ***ARRL's Extra Q&A*** are available as an e-book for the Amazon Kindle.

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AMSAT-DL Submits Lunar Lander Proposal to ESA

Germany's amateur satellite organization **AMSAT-DL** has submitted a comprehensive **proposal** to the European Space Agency (**ESA**) for its Lunar Amateur Radio Transponder (LunART) lunar lander — a communications platform on the Large European Lander to support communication and payload experiments. AMSAT-DL's Peter Gülzow, DB2OS, and Matthias Bopp, DD1US, say that a LunART (called "LunaART" in the **AMSAT-DL proposal**) would support direct communication with Earth via amateur radio, support university and student payloads and offer direct access to their experiments, and expand the reach of radio science. It could also provide backup communication capability and capacity during an emergency, or when the ESA network is busy.

The comprehensive radio platform would use the European frequency protocol of 2.4 GHz up and 10.45 GHz down (approximately 100 W), pioneered in the **QO-100** satellite, the first geosynchronous amateur radio payload. The platform would also include a VHF/UHF transponder. AMSAT-DL would develop and build the necessary hardware and software and provide ground station support via the 20-meter dish at AMSAT-DL headquarters in Bochum, Germany. They envision developing a smaller ground station with an approximately 1-meter dish to support groups, including schools and universities. Low-power beacons would transmit on various frequencies from VHF (145 MHz) through SHF (up to 24 GHz or even 47 GHz), AMSAT-DL's proposal says.

"This transponder would also be an ideal platform to develop new transmission schemes with novel modulation and coding techniques optimized for long-distance communications with the corresponding high latency (long delays)," AMSAT-DL said. "

The proposal is on open access at the ESA website and is now being evaluated. AMSAT-DL's LunART follows the Lunar Amateur Radio Interaction Experiment (LARIE) proposal from Andy Thomas, G0SFJ. Both refer to weak signal modes and suggest the same frequency bands. Thomas said he welcomes LunART as a well-developed proposal and hopes ESA will support it as well. — *Thanks to Southgate Amateur Radio News, AMSAT-DL, and ESA*

Russian-Ukrainian "Radio War" Remains at a High Level

The **June newsletter** of the International Amateur Radio Union Region 1 Monitoring System (**IARUMS**) reports that what's being called "the Russian-Ukrainian radio war" continues apace.

"The Russian-Ukrainian radio war remained on a high escalation level also in June," IARUMS Region 1 Coordinator Peter Jost, HB9CET, said. "Almost every day, we heard the massive spiteful and provocative broadcasts. In June, they used more frequencies than before, affecting our bands very hard. It is a great annoyance and a big shame!"

Jost points out that the IARU Monitoring System has little opportunity to stop the on-the-air conflict. "Only national authorities can hopefully do something against international complaints," Jost said. "It is very important and very helpful that many other [IARU] member-societies also observe these frequencies and make complaints to their regulators. We have to coordinate this well within IARU and act together. This is the only way we have a certain power."

In May, Jost reported that the radio war has raged "for years" at 7055 kHz LSB (as well as on 7050 or 7060 kHz). Jost also reported continued daily transmissions from the Russian over-the-horizon radar known as "Contayner" in the 40- and 20-meter amateur bands and elsewhere. The Chinese "V" has been reported on 20 meters, from 14,246 to 14,256 kHz.

Rescued Radio Amateur Says, “Ham Radio Saved My Life”

ARRL member Alden Sumner Jones IV, KC1JWR, of Bennington, Vermont, is thankful for amateur radio, after he suffered a medical incident and lost consciousness on June 15 while hiking with others along a remote section of the Long Trail, not far from his home. An EMT from Appalachian Mountain Rescue (AMR), who was hiking nearby, saw Jones pass out but was unable to connect with 911 via his cell phone. Jones, 41, regained consciousness and was successful in contacting Ron Wonderlick, AG1W, via the Northern Berkshire Amateur Radio Club’s K1FFK repeater on Mount Greylock, and Wonderlick initiated what turned into an 8-hour effort to get Jones off the trail and to a medical facility, acting as a relay among Jones, emergency crews, and other agencies involved. As the *Bennington Post* reported, “The Vermont State Police also received assistance from several licensed amateur radio operators who helped facilitate communications, greatly assisting in the rescue.”

Matthew Sacco, KC1JPU, headed to a staging area where rescue crews were gathering. When he could not make it into the repeater, he employed some ham radio ingenuity to fashion a J-pole antenna from some window line he had on hand, casting it into a tree using a fishing pole. That did the trick. An individual on site was able to obtain an accurate location for Jones using the GPS on his cell phone.

After it was determined that rescuers could not reach Jones using an all-terrain vehicle, arrangements were made to have a search-and-rescue crew from New York retrieve Jones by helicopter. Amateur radio participants were able to relay critical information, including an accurate location, as preparations continued.

Jones, meanwhile, took advantage of his time with the EMT and other rescuers to talk up amateur radio and explaining how to get licensed. According to one account, rescuers were having trouble making contact with the helicopter, so Jones loaned them a better antenna he happened to have. Jones was eventually flown to a hospital in Albany, New York, again taking advantage of the occasion to promote amateur radio to the helicopter pilot and crew. Jones is said to be recovering. “Ham radio saved my life last night, and I am very thankful for how everyone helped me,” Jones said afterward.

MARS Announces HF Skills Exercise

Members of the Military Auxiliary Radio System (MARS) will conduct an HF skills exercise July 20 – 24 to hone their operating skills and messaging-handling capabilities. MARS members will be reaching out to the amateur radio community via the 60-meters Channel 1 Net (5330.5 kHz dial) twice a day, the SATERN HF net (14.265 MHz), and by contacting various stations via HFLink throughout the exercise. MARS members will be requesting assistance with collecting county status information as well as airport weather information, called METARs. MARS members will also be passing ICS 213 messages to numerous Department of Defense (DoD), federal, and amateur radio addressees.

This exercise will be announced via WWV at 00:10 and via WWVH at 00:50 starting on or about July 13. WWV and WWVH listeners will be asked to take an online listener survey. This HF radio training event will not impact regular communications. — *Thanks to Paul English, Chief, Army MARS*

Illinois QSO party

The Illinois QSO party is held on Sunday October 18, 2020, the third full weekend in October (local times) Details at: <http://www.w9awe.org/ILQP%20FAQ.html>

Tri-Town Radio Amateur Club Inc.
PO Box 1296
Homewood, IL 60430-0296

July 2020



Tri-Town Radio Amateur Club Membership Application 2020

Name _____ Call _____

Address _____ License Class _____ ARRL Member Y / N

City, State _____ Zip _____ Phone _____

Email Address: _____

_____ Regular Membership	\$	25.00
_____ SWL Membership	\$	25.00
_____ Extra Family Membership	\$	6.00

\$ _____ Total Paid by Club Member

For Example: Regular Member, with Family (25+6) = \$ 31.00

Membership Renewals for 2020 are Due!

General meeting 4 th Friday of the Month 7:30 PM

Facebook: <https://www.facebook.com/tritownrac>

Check out the Club Website: WWW.W9VT.ORG

**All Face to Face Club Meetings
& Village Facilities (The Bunker) are Closed!**