

A.R.A.T.S

Coherer

Association of The Tonawandas, Inc. - since
1954

July 2021

Volume 3 Issue 7

EDITOR'S MESSAGE

Hello members, a lot has changed in a year. We will be having our meetings at City Hall, starting September 15th, 2021 at 200 Niagara Street, City of Tonawanda, NY. This year we have 2 board seats open. Bob (KC2SZQ) temporarily appointed Joe (N2ZZDU) and Steve (KD2PBZ), as Board members.

Here are some locations you can take a
VE Exam in place of ARATS.

Lancaster ARC: John H. Maxwell

(716) 404-9256 or

maxwell@acsu.buffalo.edu

South Towns AMS (WB2ELW)

Robert A. Koster (716)649-7272

Rkoster53@roadrunner.com

Lockport Amt. Radio Assoc.



Remember NO meeting's the 3rd. Wednesday at City Hall, City of Tonawanda 200 Niagara Street, Tonawanda, NY, until September 15, 2021. ARATS are going to have their annual summer picnic on July 21, 2021 at 6 p.m. at the Adams Fire Company at 7113 Nash Rd., NT NY 14120. Come on out to have a bit to eat and to say Hi to members you may not have seen in a while.

Well, I hope everyone had a good Fourth of July and you still have all your fingers and hand I hate to say that but it is the fourth and people do play with things in the wrong way and Bang !!!!, Same with electronics.

Stay safe, and see ya

The official Newsletter of The Amateur Radio

President Message

Hello again,

On Saturday June 26th & Sunday 27th ARATS held field day actives at Adams fire company 7113 Nash Rd, at hall 1, this was a new location for our club, and we didn't really know what to expect that weekend.

We got down to hall 1 at 9:30 am for set up and by 2 pm we were up and contesting, Bob K2LED had his go box on wheels (Pictures on the ARATS web site & Facebook page) Jim N2UHJ was set up in his tent running 160/80 meters, Phil KD2QCT had his HF radio working 20 meters, Bill N2WUT had his go box working 10 meters and I was on 15 meters with my Kenwood.

Joe N2ZDU was playing Chef Pierre on the grill and kept us fed and happy, Steve KD2PZ was a big help with the set up and working a radio or too, other members came down throughout the two days, Doug KD2DKH EMO officer for NT. Came down to field day on Saturday.

Two of the Adams Chief's and 13 members came down to the see what field day is all about and a couple of Adams members are expressing some interest in taking the test to become hams.

We had 24 members come down to field day over the two days and with the Adams members the count was around 48, we had more than enough food and the weather held off with just rain in the morning, and by 9:30 the rain stopped, and the rest of the day was rain free, and it just turned out to be a great day!

It was a great weekend good food, nice weather, and a lot of radio time.

We put up are banner with are new call on it and that weekend we used W2VCI as our club call.

A huge thanks to all who showed up for set up Saturday morning and the members who worked so hard to make the weekend a big success, thank you to Bill N2WUT for setting up the logging programs, Don KC2ZZV, Phil KD2QCT our field day chairs, and of course Chef Pierre!

I talked to Jim our Adam's president about a picnic and got the ok, so, I reserved Wednesday July 21st, 2021, for are annual ARATS picnic in the pavilion at hall 1, time 6pm please bring a dish to pass.

Our first ARATS general meeting will be on Wednesday September 15th, 2021, at 6 pm, 200 Niagara Street, City of Tonawanda NY. this year we have 2 board seats open, after field day this we held a short meeting with the members, and I temporarily appointed Joe N2ZDU & Steve KD2PBZ.

Any members wishing to run for a board seat please indicate at our picnic or if you can't make the picnic at the general meeting so we can vote that night.

In closing I can't wait to see everyone at the picnic and meeting its was a long year, and we just need to get back to normal again!

Information about the picnic and our first meeting will be posted on the ARATS face book page at www.w2vci.com

Here some info about some Net's, Monday night there is a 6 Meter Net with Bob K2LEH 50.200 at 8pm, Jim N2UHJ holds a 10-meter net on Tuesday Night at 8pm 28.330, Steve KD2PBZ will be filling in for Jim, Keith WB2VUO has a side band Net on Wednesday at 8pm 144.210 and our ARATS Net is on Thursday Night at 8:30pm 146.955.

Keep on Playing Radio, See you at the picnic!

73's Your President.

Bob Fleischauer.

How Amateurs Accomplish the Impossible
During Disasters by Ron Hashiro , AH6RH

The media is full of summary reports of how amateur radio operators responding to disasters seem to overcome insurmountable obstacles and accomplish their mission of getting the message through to the destination. Ever wondered why an amateur radio operator has better chance of getting through when "high technology" radio systems fail?

The answer is quite simple, TEAMWORK! As a resource within the community, amateur radio operators are bonded by a brotherhood (sisterhood?) that is simple as the beginning of time...we look out for one another and extend a helping hand in times of dire need.

During a disaster, dozens of amateurs will scan the bands looking for signs of a signal from the handful of hams trapped at the affected scene. When such a signal is found, every resource from outside the affected area will be brought to bear on the signal to establish reliable contact. High – powered amplifiers, directional antennas, sensitive receivers, and cross-band radios are just a few of the techniques that hams use to establish and build that reliable contact, conserving precious emergency power for the hams stuck at the disaster scene.

All of this outside teamwork can be thwarted if you and your station is less than par. Good communication is as strong as the weakest link and as the one operating under less-than-ideal conditions, it is possible that you may wind up as the vital station holding the weakest link. Taking time to stock a few provisions and building up some operator skills will go a long way in performing your end of an "impossible miracle".

- 1) Make sure you have spare antennas, coax, and connector adapters to build or rebuild your station. Even something as inexpensive and unexciting as a j-pole made from 300-ohm tv feeder ladder line will blow away the lame duck performance from any rubber duck antenna. A ribbon J-pole rolls up nicely into a sandwich bag to put in your backpack yet can be taped up against a glass window for maximum VHF or UHF performance.
- 2) Take the time to arrange for emergency power. Marine, wheelchair, or RV batteries are favorites for powering 12-volt transceivers but are common enough to be low in cost compared to other emergency power systems.
- 3) Stock up on alkaline batteries. As hurricane season approaches, be stocked up on alkaline, especially AA and D cells. They are surprisingly cheap at the large discounters such as SAM's Club , BJ's, or Costco. Try to standardize the battery appliances in your home to use either of these two types to get the most for your money.
- 4) Get a swr meter or antenna analyzer. It's hard to transmit full power into an antenna if it isn't a good match. It's best to find out and correct it before you go on the air than to risk damaging your RF finals.
- 5) Practice your message passing and NCS skills. It's been shown time and time again that a new operator will often need about five net sessions to feel comfortable as a radio operator handling messages. There's a certain rhythm to handling messages or being an NCS. Like learning to ride a bike or play a musical instrument, it's one of these skills that can only be mastered by participation and interaction.
- 6) If you've been hemming and hawing about buying a fifty-watt VHF or dual-band mobile, here's a good reason. Much of the local communications work during an emergency will be done via simplex work. To be effective from the disaster scene, a mobile with fifty watts will perform much better on simplex overcoming the terrain than a walkie that puts out one to five watts. Here's the perfect excuse (er...reason) to convince your spouse that you really need to bring out the credit card. After all, you are being proactive about the safety and well-being of your family and your neighborhood, of course.

As you can see, it doesn't take much to tip the odds in your favor. Take an assessment of your situation, make a checklist, and promise yourself that by the end of the month you'll have these simple things underway. With five NCS sessions under your belt and a few items tucked away you'll feel much better the next time you hear the civil defense sirens sound that you can accomplish "the impossible" rather than be stuck with fear and frustration.

Don't delay. Start today!

Ham Radio is doing what it does best in times of crisis

The uses for Ham Radio extend far beyond emergency situations though. Take for example the International Space Station (ISS). An astronaut traveling on board will typically bring a 1 – 5-watt handheld ham radio with them. And by holding the radio to the window, which positions its antenna in the line of sight with other radios down on earth, a lone man flying through space can chat with those of us on the ground with this amazing simple technology. Outside of space adventures and emergency situations, you'll also find ham radio being used for :

MOON Bouncing: As if bouncing radio waves off of our ionosphere to lengthen the distance of our communications isn't enough. Some ham radio operators get their kicks by bouncing radio waves off of the moon communicate with others around the world.

DISTANCE dialing: Other ham operators will take part in contests to see how many hams they can connect with in distant locations. Don't be surprised to get a postcard back when you make a contact, this can make for a great collection throughout the years.

Of course, this list is by no means exhaustive and the uses for ham radio are limited by your imagination. At its core though, ham radio enthusiasts are known for their nature of being tinkerers and inventors. So, whether you want to dive deep into wireless communications, build up your electronics theory, or experiment with digital signaling, there's something for every maker in a ham radio hobby.

Field Day 2021 Bill N2WUT and
Phil , KD2QCT



Field Day 2021 , Jim N2UHQ



The Amateur's Code

The Radio Amateur is:

- Considerate: Never knowingly operating in such a way as to lessen the pleasure of others.
- Loyal: Offering loyalty, encouragement and support to other amateurs, local club and the American Radio Relay league, through which Amateur Radio in the United States is represented nationally and internationally.
- Progressive: With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
- Friendly: With slow and patient operation when requested friendly advice and counsel to the beginner, kindly assistance co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
- Balanced: Radio is an avocation, never interfering with duties owed to family, job, school or community.
- Patriotic: With station and skilled always ready for service to country and community.

REMINDERS

Membership is open to anyone interested in Amateur Radio. Regular dues are \$20 a year. An additional one-time fee of \$8 exists for new membership, which includes an ARATS name badge. Other rates are also available. Applications are available at any ARATS Meeting. For more information, please contact any ARATS member.

As of right now the ARATS website is up and running at w2vci.com

ARATS WEEKLY

NETS

2Meter Net Every Thursday at 8:30 pm
146.955Mhz - offset PL 151.4
Net Controllers many

6Meter Net Every Monday at 8 pm
50.200 MHz
Net Controller K2LEH

10Meter Net Every Tuesday at 8pm
28.330 MHz
Net Controller N2UHJ

Bulletins 2m Saturday 9pm

The 6 meter is not an ARATS Net.

There is a ARATS Emergency Net on Simplex frequency of 144.300. On the First and Third Thursday night of every month immediately following the regular ARATS 2meter net.

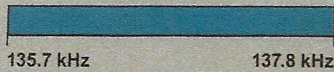
US Amateur Radio Bands

Operator license classes: E = Amateur Extra A = Advanced G = General T = Technician N = Novice
 CW operation is permitted throughout all amateur bands. Except as noted, all frequencies are in megahertz (MHz).

■ = RTTY, data, phone, image
 ■ = USB phone, RTTY, data and CW
 ■ = RTTY and data
 ■ = phone and image
■ = SSB phone
 = CW only

LF – Low Frequency band

2200 Meters (135 kHz) E,A,G
 1 W EIRP maximum



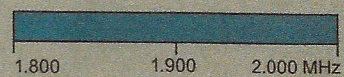
MF – Medium Frequency bands

630 Meters (472 kHz) E,A,G

5 W EIRP max, except in Alaska within 496 miles of Russia where the limit is 1 W EIRP



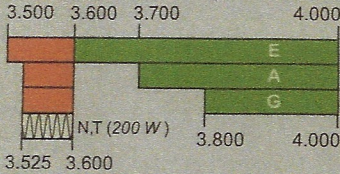
160 Meters (1.8 MHz) E,A,G



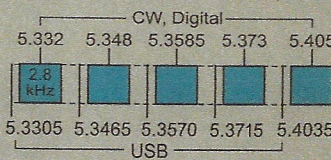
Amateurs wishing to operate on 2200 or 630 meters must first register with the Utilities Technology Council online at <https://utc.org/plc-database-amateur-notification-process/>. You need only register once for each band.

HF – High Frequency bands

80 Meters (3.5 MHz) E,A,G,T,N

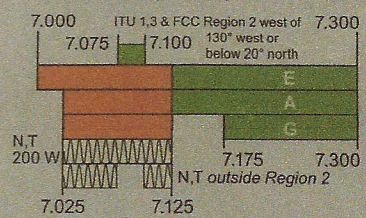


60 Meters (5.3 MHz) E, A, G (100 W)

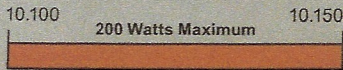


Gen, Adv, and Extra licensees may operate on a secondary basis with a maximum ERP of 100 W maximum.

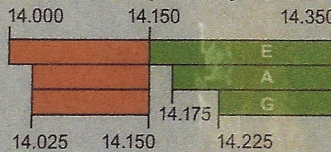
40 Meters (7 MHz) E,A,G,T,N



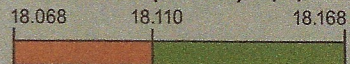
30 Meters (10.1 MHz) E,A,G



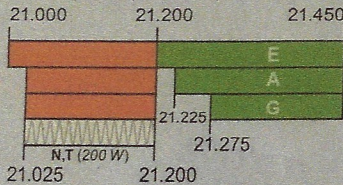
20 Meters (14 MHz) E,A,G



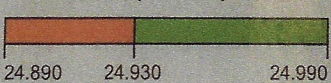
17 Meters (18 MHz) E,A,G



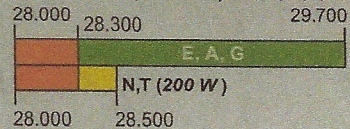
15 Meters (21 MHz) E,A,G,T,N



12 Meters (24 MHz) E,A,G

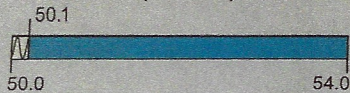


10 Meters (28 MHz) E,A,G,T,N

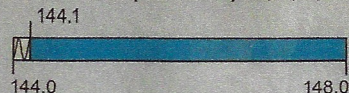


VHF – Very High Frequency bands

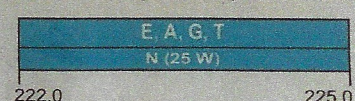
6 Meters (50 MHz) E,A,G,T



2 Meters (144 MHz) E,A,G,T



1.25 Meters (222 MHz) E,A,G,T,N

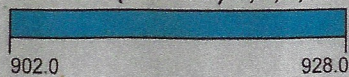


UHF – Ultra High Frequency bands

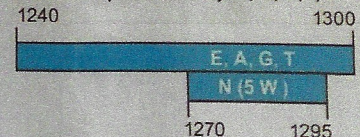
70 cm (420 MHz) E,A,G,T



33 cm (902 MHz) E,A,G,T



23 cm (1240 MHz) E,A,G,T,N



SHF&EHF – Super and Extremely High Frequency bands

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	3300-3500 MHz	10.0-10.5 GHz	47.0-47.2 GHz	122.25-123.0 GHz	241-250 GHz
2390-2450 MHz	5650-5925 MHz	24.0-24.25 GHz	76.0-81.0 GHz	134-141 GHz	All above 275 GHz

See www.arrl.org/band-plan for detailed band plans.

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ARATS Membership Application



Amateur Radio Association of the Tonawandas
P.O. Box 430, North Tonawanda, New York 14120-0430

As a paid member, you will receive an electronic copy of the ARATS Coherer Newsletter

Dues are payable at the time of application. The following dues schedule applies:

1. **New Member:** \$20.00 per year, plus \$8 new member fee which includes ARATS ID badge.
2. **Renewal Member:** \$20 per year (Dues paid in Nov. or Dec. will carry through the next calendar year).
3. **Family Membership:** \$2 per year per person. (Immediate family members living at the same address).
4. **Out of Town Membership:** (Perm., 75+ miles from North Tonawanda, voting privileges by mail)
5. **Student Membership:** \$10 per year. (full time students up 12th grade. Includes new membership fee. If applicable).
6. **Special membership:** Varies (Only for qualifying memberships, i.e. VE session new hams, life members, others)

Personal Information

Name on Badge: _____ DOB: _____
 Name: _____ Call: _____
 Street Address: _____
 City: _____ State: _____ ZIP: _____
 Email: _____ Phone: () _____
 Other: () _____

Application Type

- New \$20*
- Renewal \$20*
- Family \$2*
- Out of Town \$12 (no fee if new)
- Student \$10*
- Change of Information*
- Special** (Circle) VE, Life, Other

License Class

- Novice
- Technician
- General
- Advanced
- Extra
- None (New Ham)*
- None (Non Ham)

Other

- ARRL Member
- ARES/RACES Member
- Contesting
- Volunteer Examiner
- Other

* Please add \$8 New Member Fee if new member or requesting a new ARATS badge. If new ham, we'll hold your badge until you get your call
 ** Special applications cannot be submitted online.

Additional:

Would you consider assisting ARATS in any of the following:

<input type="checkbox"/> Holiday Party Committee	<input type="checkbox"/> Program Committee
<input type="checkbox"/> Picnic Committee	<input type="checkbox"/> Field Day Committee

Amount Enclosed

Dues-Jan 1, ____ Through Dec.31, _____ \$ _____
 New Member Fee (\$8-one time) \$ _____
 Maintenance Donation \$ _____
 (Your donation will assist maintaining and upgrading club equipment)
 Total \$ _____

New Members Only:

Sponsor _____
 Co-Sponsor _____

Official Use Only

App Review Date _____
 Status _____
 VE Session _____
 Notes _____

