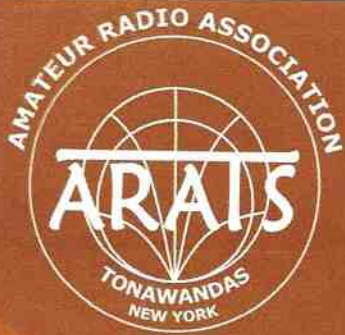




A.R.A.T.S. Coherer

SEPTEMBER 2025

Volume 8
Issue 8

The Official Newsletter of
The Amateur Radio Association
of the Tonawandas, Inc.
- Since 1954

EDITORS MESSAGE

This club belongs to you, the members. Your ideas, energy, and participation are what keep ARATS vibrant and relevant. I encourage each of you to share your thoughts on how we can make our club even better. Want to organize a new activity? Propose a project? Now's the time to step up! Let's hear your ideas - big or small via email to me directly.

MEETING DATES & LOCATION

Remember meetings are on the 3rd Wednesday of each month at City Hall, City of Tonawanda, 200 Niagara Street, Tonawanda NY Unless otherwise noted time will be 7 p.m.

VE EXAM LOCATIONS

Lancaster ARC: John H. Maxwell
(716) 404-9256 or

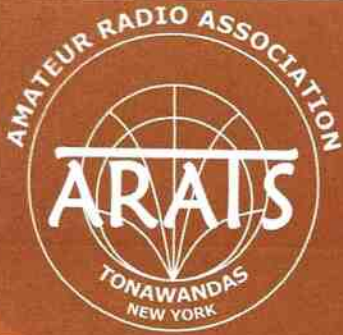
maxwell@acsu.buffalo.edu

South Towns AMS (WB2ELW)

Robert A. Koster (716) 649-7272
Rkoster53@roadrunner.com
ILockport Amateur Radio Association
Lara.W2RUI@gmail.com
President: Mike (716) 240-8826

Contact any of these Clubs and they will get you started.





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President Message

I hope everyone had a good and safe summer and it looks like we will be in the mid 70's through the first half of October and the 60's the last half of the month.

For our first Board / General Meeting we are back at 200 Niagara Street, City Hall, we had 12 members in attendance.

Our next membership meeting Wednesday October 15, I have arranged a field trip to the Niagara County Public Safety Building Dispatch Center. That night I am asking members to meet at the County Safety Building at 6:45 pm so we can start our tour at 7:15 pm. Please be on time or you may not get into the building.

I will have Bob K2MNC put out an email with directions to the NCPSB.

Directions are also on the ARATS web site President's message page.

That night, depending on the number of members we have, we may need to break up in groups of 10 for the tour of their facility.

The County Building is located at 5574 Niagara Street Ext., Lockport NY 14095.

If you have never had a chance to go through their facility this is one meeting night you don't want to miss.

I am still looking for members who have projects and would like to give a presentation on a meeting night.

Our repeater is up and running at DeGraff Hosp. site, Joe (N2ZDU), Sam (N2MHB) , and Ted (W2HKS) went up to the site and Joe put a third bracket to help secure our antenna.

Ted (W2HKS) brought his antenna tuner and he was able to get a 1.2 to 1 match with 75 watts out. The antenna was turned from East, West to a North, South direction.

Thank you to the members who helped clean out the EOC room at NT Fire HQ.

73's and hope to see members on the 15th of October.

President – Bob, KC2SZQ

ARISS

ARISS, or Amateur Radio on the International Space Station (ISS), was formed to design, build and operate Amateur Radio equipment in space for educational purposes.

Amateur Radio was a regular payload on the Shuttle missions beginning with the STS-9 mission in November 1983, when Owen Garriott, W5LFL, carried a hand-held ham radio aboard Space Shuttle Columbia. The Shuttle Amateur Radio Experiment (SAREX) provided students with the Unique opportunity to talk directly with astronauts in the Shuttle while they orbited the Earth traveling 17,000 miles per hour. With the help of Amateur Radio Operators, students could attempt to contact the astronauts flying on a SAREX mission through voice, packet (computer) radio, or television, depending on which equipment configuration the Shuttle takes into space. When the astronauts were asleep, a robot computer Amateur Radio station aboard the Shuttle made contact with hundreds of hams around the world.

Students could track the Shuttle's orbit using computer software, "eavesdrop" on Shuttle communications, and listen to NASA mission commentary and bulletins about astronaut-planned transmissions. There is a app that you can download and see where the ISS is and when it will pass over your house (area).

Nasa.gov/spot-the-station

The primary ISS frequencies for amateur radio are:

145.800MHz for voice (downlink) and packet (downlink and uplink)
And 437.800 MHz for the FM repeater (downlink) with an uplink of 145.990 MHz

There is an ISS Fan Club web page that has more frequencies to use depending on your location in the world.

Give it a try, I see them every time they pass over my house, when there are no clouds, remember they are fast and very bright, they do not have any blinking lights like an airplane. I got lucky and contacted them when they send a QSL Card.

Ham Radio in the Internet Age

Even if you are relatively young, you can probably think back on what TV was like when you were a kid and then realize that TV today is completely different. Most people watch on-demand, Saturday morning cartoons are gone, and high-definition digital signals are the norm.

RADIOS

One of the biggest changes in the hobby has been in the radio end. Hams tend to use two kinds of gear, HF and VHF/UHF (that's high frequency, very high frequency, and ultra-high frequency). HF gear is made to talk over long distances, while VHF/UHF gear is for talking around town.

DIGITAL MODES

Paradoxically, you might not need as hot a receiver, or as big of an antenna, or as much power as you might think. Hams have long known that voice communication is inefficient. Morse code could be the earliest form of digital radio communication.

COMPUTER LOGGING

There was a time when every ham had a logbook – a notebook to write down contacts – and a stack of QSL cards. Many people use a computer to track their contacts. While you could just use a spreadsheet, there are many ways to log and – more importantly – share logs online.

DX AND PROPAGATION

But there is even more help out there. Many people enjoy working rare foreign stations or special event stations held at parks or historical locations. These days, if you hear a station like that on air, you can report it on the internet so other people can find them. In some cases, the operators will report themselves.

WHY NOT YOU?

Some old hams say the internet is ruining ham radio. I say it is changing ham radio just like it has changed virtually everything else. Some of those changes aren't that drastic anyway.

Get out there and chase DX and have fun using your computer, etc.

SAFETY IS NOT AN ACCIDENT

PPE (personal protective equipment) is an essential part of safety planning and requirements will be specific to your stations and events.

TYPES of PPE

Safety Boots – These have steel toe caps and possibly non-slip, electrically-insulating soles.

GLOVES

Tough industrial gloves should be worn if you are handling rough items that could cause injury to your hands.

TOOL BELT

Not strictly PPE but very handy if your site is spread out. May also stop tools dropping on someone if you need to work at height.

HIGH VISIBILITY CLOTHING (HiVis)

Should be worn in poor visibility or in areas where there are moving vehicles. Far too many accident reports have phrases like: I didn't see them until it was too late.

GOGGLES and EYE SHIELDS

Should be worn for any activity that can give rise to flying particles, debris, dust or grit.

HARD HATS

These, along with HiVis, are emblematic of Health and Safety but are major contributors to reducing injury.

Equipment

Again, this list is not exhaustive. You should always follow manufacturers' instructions and any guidance provided by the Safety websites and any other safety websites.

FIRST AID KIT AND FIRE EXTINGUISHERS

These should be the first on your station equipment list.

Planning is the key to operating safely. A few moments of thought about tools, equipment and PPE may save injury and curtailment of your activity, not to mention long and tedious waits in Emergency Rooms.

REMEMBER TO ALWAYS BE SAFE AND WORK SAFE

License Renewal

Just a quick note: When was the last time you renewed your Amateur License? You may want to check the date on it before it has expired.

Reminders

Membership is open to anyone interested in Amateur Radio. Regular dues are \$20 a year. Other rates are also available. We are having to look for a place to get name badges as our regular place went up quite a bit, so if you know where we can get them, please e-mail me.

ARATS website and Facebook pages are up and running, look at both.

No need for an application anymore just send your check, to:

ARATS

207 Syracuse Street

Tonawanda, NY 14150 – 5429

C/O Robert Allard /Membership Chairman

Meeting Notes

Membership is down a bit, but we are not the only club with low membership, if you know someone who would like to become an ARATS member let me know, they do not need to be an Amateur Radio Operator to join. Some listen to us on the radio, I use to do so for years and so did my son. We are not having meetings in January or February as we find these are the bad snow months and we get low turnouts. Just to let you know an antenna and repeater are on DeGraff Hospital in North Tonawanda, along the TCMH (Twin City Memorial Highway)

*** WANTED ***

Writers *** Picture Takers *** Story Tellers ***

Your editor needs articles and photos for your COHERER Newsletter

Also, I would like Constructive Criticism to help make it better.

What I need all members to do is Email me with suggestions on what do you

want from the ARATS Club, is there a Presentation you want us to give or

Some place to go, and if you can give a presentation that would be Great.

Please email your articles, photos, and comments to Bob at reallard5276@gmail.com

ARATS WEEKLY NETS

2-Meter Net Every Thursday at 8:00 P.M.
146.955Mhz – offset PL 151.4

2 – Meter Net Every Wednesday at 8: 00 P.M.
144.210 SSB

6- Meter Net Every Monday at 8: 00 P.M.
50.200Mhz
Net Controller WB2VUO (this is not an ARATS net)
Anyone can join

10 – Meter Net Every Tuesday at 8:00 P.M.

28.450 USB
Net Controller is

Bulletins: The Bulletins have stopped for now

Join in on one of the many nets, find new friends, and ask questions that you

You may want to get an answer, or maybe you can help someone out with their question. Stop by; we would love to hear from you.

OFFICERS

President - Robert Fleischauer / bobkc2szq@yahoo.com

V-President / Treasurer - Robert Brock / k2led@arrl.net

Secretary - Robert Allard / reallard5276@gmail.com

DIRECTORS

Robert Allard - [/reallard5276@gmail.com](mailto:reallard5276@gmail.com)

Mark Francis - [/ mark12007@outlook.com](mailto:mark12007@outlook.com)

Joe Eberle - [/ n2zdu@aol.com](mailto:n2zdu@aol.com)

John Kasupski - [/ johnkasupski1@gmail.com](mailto:johnkasupski1@gmail.com)

ACTIVITY COORDINATORS

Club Station Trustee - Robert Fleischauer / bobkc2szq@yahoo.com

Club Repeater Trustee - Joe Eberle / n2zdu@aol.com

Membership Chairman - Robert Allard / reallard5276@gmail.com

Webmaster - Robert Fleischauer / bobkc2szq@yahoo.com

Coherer Editor - Robert Allard / reallard5276@gmail.com

Western New York Officials

Assistant Section Manager:
Laura Mueller N2LJM
N2ljm@arrl.net

Section Emergency Coordinator
Assistant Section Manager
Joseph M. Tedesco, KC2DKP

Section Youth Coordinator
Keith P. Oliver, KD2KON

Section Traffic Manager
Assistant Section Manager
Raymond M. Feness, K2RMF

Affiliated Club Coordinator
Luke Calianno, N2GDU

Assistant Section Manager
Richard C. Sparling, K2EY

Section Traffic Manager
Matthew D. Brown, K2EAG

Technical Coordinator
William K. Hibbert, WB2VUO
wb2vuo@arrl.net

Public Info Coordinator
Edward A. Gutowski, W2GUT

Assistant Section Manager
Donald W. Rankins, N2ZWO

Assistant Section Manager
Tom L. Delasin, WA2DAD

Assistant Section Manager, W2LC
Scott J. Bauer, W2LC

Assistant Section Manager
Mike Johnson, N2WKT

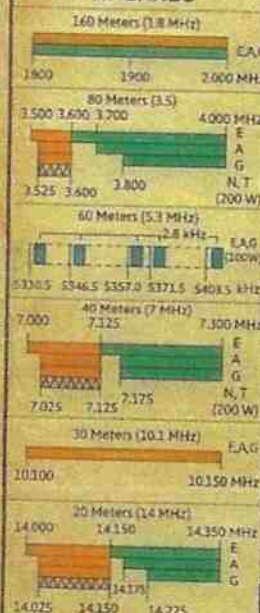
The Amateur's Code

- Considerate: Never knowingly operate in such a way as to lessen the pleasure of
- Loyal: Offering loyalty, encouragement, and support to other amateurs, local club and The American Radio Relay League, through which Amateur Radio in the The United States is Represented Nationally and Internationally
- Progressive: With knowledge abreast of science, a well-built and efficient station and Beyond reproach
- Friendly:
and counsel With slow and patient operation when requesting friendly advice
To the beginner, kindly assistance cooperation and consideration for the Interests of others
- Balanced: Radio is an avocation, never interfering with duties owed to family, job, School, or community
- Patriotic: With station and skill always ready for service to country and community

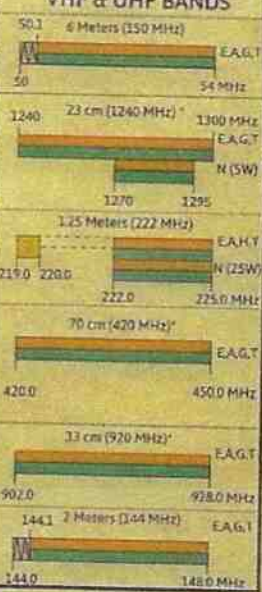
HAM RADIO CRIB NOTES

RTTY & Data CW Only USB Phone, CW, RTTY & Data
 Phone & Image SSB Phone Fixed Digital Message Forwarding
 E. Amateur Extra A. Advanced G. General T. Technician N. Novice

HF BANDS



VHF & UHF BANDS



PHONETIC ALPHABET

CIVILIAN	MILITARY
ADAM	ALPHA
BOB	BRAVO
CHARLES	CHARLIE
DAVID	DELTA
EDWARD	ECHO
FRANK	FOXTROT
GEORGE	GOLF
HENRY	HOTEL
IDA	INDIA
JOHN	JULIETT
KING	KILO
LAWRENCE	LIMA
MARY	MIKE
NOVA	NOVEMBER
OCEAN	OSCAR
PAUL	PAPA
QUEEN	QUEBEC
ROBERT	ROMEO
SAM	SIGMA
TOBY	TANGO
UNION	UNIFORM
VICTOR	VICTOR
WILLIAM	WHISKEY
X-RAY	X-RAY
YELLOW	YANKEE
ZEBRA	ZULU

MORSE CODE

AMERICAN (MORSE)

A	B	C
D	E	F
G	H	I
J	K	L
M	N	O
P	Q	R
S	T	U
V	W	X
Y	Z	

INTERNATIONAL (ITU)

A	B	C
D	E	F
G	H	I
J	K	L
M	N	O
P	Q	R
S	T	U
V	W	X
Y	Z	

PUNCTUATION

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?	~	^
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#	\$	%

Q CODES

Q100	Is the frequency stated the frequency to be used?
Q101	Please do not interfere.
Q102	Abbreviation for interference from other signals.
Q103	Shall I increase power? Increase power.
Q104	Shall I decrease power? Decrease power.
Q105	Shall I send faster? Send faster (faster).
Q106	Shall I send more slowly? Send more slowly (slower).
Q107	Shall I stop sending? Stop sending.
Q108	Have you anything more for me? I have nothing more for you.
Q109	Are you ready? I am ready.
Q110	Standby.
Q111	Who is calling me?
Q112	Abbreviation for signal fading.
Q113	Received and understood.
Q114	Abbreviation for a cancel.
Q115	General call preceding a message addressed to all stations.
Q116	I'm listening on... kHz.
Q117	Change in transmission to another frequency on... kHz.
Q118	What is your location by location.