



HamX - *The Northeast* **HamXposition**
August 21-24, 2025

**August 21 – 24
2025**

Our 42nd Convention



**Best Western Royal Plaza
Hotel & Trade Center
Marlborough, Massachusetts**



Boost Performance with Our Family of Brands

It's fast and easy to shop for time-tested equipment from DX Engineering's family of brands, including Butternut vertical antennas, TW Antenna HF portable antennas, COMTEK vertical antennas and hybrid four-square systems, Cycle 24 saddle clamps, and KD9SV and Hi-Z low-band receiving devices.

Plus, get trusted DXE branded gear produced by our team of hams, including the RT4500HD heavy-duty rotator, Genius clamps, made-to-order coaxial cable assemblies, and much more.

Make the Change to a More Satisfying Ham Radio Purchasing Experience

- Easy ordering by phone or web
- Products from over 180 leading manufacturers
- Friendly customer service from hams with a combined 1,000+ years in amateur radio
- Fastest shipping in the industry
- Responsive and ongoing technical support
- Not 100% happy? We make it right!



Order by Phone

800-777-0703 Country Code: +1
9 am to midnight ET, Monday-Friday
9 am to 5 pm ET, Weekends



Order Online

www.DXEngineering.com
Most orders over \$99 ship free
Request a Free Catalog



Welcome to the Northeast HamXposition 2025

Regeneration. All human activities depend on it, from the small ones, like local radio clubs, the medium sized ones, such as organizations like FEMARA and events like HamXposition, and the large ones, such as entire societies. Sometimes the changes are gradual, sometimes they are jolting, and sometimes things even go backwards for a time. It's evolution. Ham radio itself, and the activities that serve it, such as the Northeast HamXposition, are subject to it. Things change, a few old ideas fade, and new arrangements emerge. The latter is the part that fascinates me the most, the regeneration. For us in Amateur Radio it is both social and technical.



And what better way to see the growth and regeneration of our hobby in action than to come to the HamXposition 2025. On the social side, with the Covid crisis now firmly behind us, gatherings such as ours are growing again. Our attendance last year was decidedly up, and projections for this year are for even more growth. On the technical side, the vendor hall is full and the newest products will be on display. The program, which has always been a point of pride and excellence for us, is full as well with talks focused both on the past and on the future. Speaking of the past, taking a walk around the flea market is a history lesson in itself.

We're glad you have decided to come this year. Stroll around, see what's new, and listen to the chatter. You'll see that there are more young hams. You'll see some new ideas. You'll see some old friends and perhaps make some new ones. Maybe you'll win a prize. Maybe you'll even find a treasure or two in a dusty box in the flea market.

Mike Raisbeck, K1TWF

General Chairman, HamXposition 2025



Algonquin Amateur Radio Club

PO Box 258
Marlborough, MA 01752

www.N1EM.org

N1EM/R 446.675 PL 88.5

Net every Sunday evening at 7:00pm
(September through June)



Since 1976

The club meets the second Thursday of every month
at 7:30pm, except in July and August, at the
1st Lt. Charles W. Whitcomb School
25 Union St, Marlborough, MA

Enter from Agoritsas Drive next to police station
and use Door #1 at rear of building.

HamXposition 2025 Schedule

Thursday, August 21

Comedian Juston McKinney — 8pm

Friday, August 22

Visit to ARRL Headquarters: 10 am—4 pm

Flea Market: 12 noon — 5 pm (setup at 10 am)

Workshops: mini-Contest University, Kit Building, Club Forum, Others

DX/Contest Dinner: 7 — 9:30 pm

Sponsored by DX Engineering

Tim Duffy, K3LR, CEO of DX Engineering will be the featured guest speaker. Tim will discuss contesting history and what the future might hold with a focus on clubs and youth.

Door Prize: Icom IC-7610 HF/6m Transceiver

Saturday, August 23

Flea Market and Exhibit Hall: 9 am — 5 pm

Keynote: Thomas Witherspoon, K4SWL, of QRPer.com: 9 am

Door Prize: 5-band QRP Transceiver and accessories

Tech-in-a-Day 9 am—5 pm | VE Exams: 10 am & 1 pm

EmComm Trailer Exhibits

Forums: 10 am — 5 pm

Convention Banquet: 7 — 9:30 pm

Nathaniel A. Frissell, W2NAF, will discuss the results from a number of recent HamSCI experiments, what's next for HamSCI in the future, and how you can participate in these exciting projects.

Door Prize: FT-710 HF/6m Transceiver

Storytelling starts at ~ 9 pm

Sunday, August 24

Flea Market and Exhibit Hall: 9 am — 1 pm

Forums: 10 am — 1 pm

VE Exam: 10 am

Prize Drawings @ 1 pm

W1XPO GOTA station in Corporate Room, E7

DXCC Card Checking in the exhibits area

Fox Box: Join the fun - bring your DF gear and find the hidden fox.

The MMRA FoxBox will operate on 145.63 MHz, pl 146.2. If you find it, be sure to add your call sign to the "mailbox" on the box.



Your Friends in the **ARRL Connecticut Section**

Welcome **YOU** to

NorthEast HamXposition 2025

And encourage you to take time to:

LOOK,

LEARN,

ASK QUESTIONS,

MEET GREAT PEOPLE,

and

Make Radio Connections 😊

Northeast HamXposition *Through the Years*

Prior to becoming an official convention, FEMARA held a picnic and hamfest. In 1958 it was held at Norumbega Park in Newton and in 1959 at the New Ocean House hotel in Swampscott. In 1960, the hamfest became the official ARRL New England Convention.

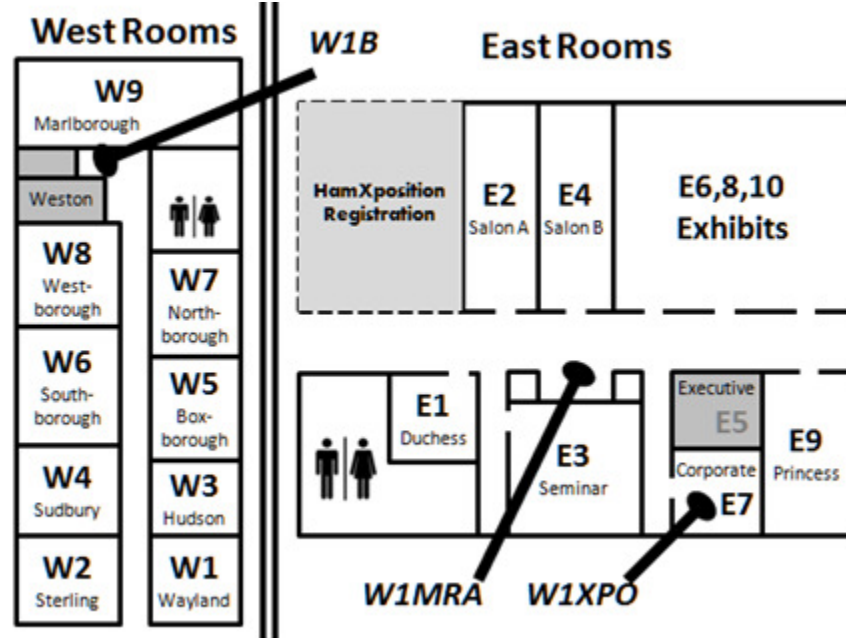
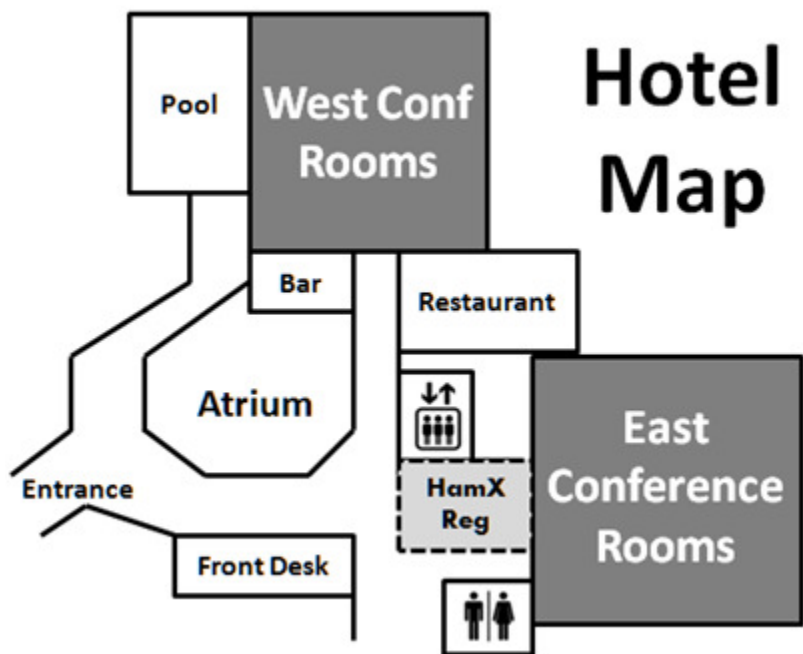
The 1969 event was interesting: Two weeks before the convention, the New Ocean House hotel burned to the ground. The convention staff went into overdrive and managed to move to the Park Plaza hotel in Boston, retaining the original convention dates.

Before FEMARA sponsored the convention various others group did, starting in 1924.

#	Year	Dates	Location	Admission
1	1960	May 1	New Ocean House, Swampscott	\$3 adv / \$4
2	1961	Apr 8,9		
3	1962	Apr 7,8		
4	1963	Apr 27,28		
5	1964	May 9,10		
6	1965	Apr 24,25		
7	1966	Apr 22,23,24	Prudential Center, Boston <i>ARRL National Convention</i>	\$3.50/\$4.50
8	1967	Apr 22,23	New Ocean House, Swampscott	
9	1968	Jun 1,2,3		
10	1969	May 24,25	Park Plaza Hotel, Boston	\$3.50/\$4.50
11	1970	Sep 25,26,27	Statler Hilton, Boston <i>ARRL National Convention</i>	\$3 / \$4
12	1973	Sep 29,30	Dunphy's Resort, Hyannis	
13	1976	Sep 10,11,12	Statler Hilton, Boston	
14	1978	Oct 14,15	Sheraton, W-5 (Boxborough)	\$4 / \$5
15	1980	Oct 3,5		
16	1982	Oct 2,3		
17	1984	Sep 29,30		
18	1986	Oct 18,19		
19	1988	Oct 1,2		
20	1990	Oct 13,14	Host Hotel, W-5 (Boxborough)	\$7 / \$8
21	1992	Oct 3,4		
22	1994	Oct 1,2		
23	1996	Oct 4,5,6	Boxboro Woods Holiday Hotel	\$6 / \$8
24	1998	Aug 29,30	Holiday Inn, Boxboro	
25	2000	Aug 25,26,27		
26	2002	Aug 23,24,25	Boxboro Regency Hotel and Conference Center	\$8 / \$10
27	2004	Aug 13,14,15		\$10 / \$12
28	2006	Aug 25,26,27		\$15
29	2008	Aug 22,23,24		
30	2010	Aug 27,28,29		
31	2012	Aug 24,25,26		
32	2015	Aug 21,22,23		
33	2016	Sep 9,10,11		
34	2017	Sep 8, 9, 10	Boxboro Regency Hotel and Conference Center	\$18
35	2018	Sep 7, 8, 9		
36	2019	Sep 6, 7, 8		
37	2020	Nov 6, 7	Virtual Banquet	Free
38	2021	Sept 10, 11, 12	Best Western, Marlboro	\$18
39	2022	Aug 26, 27, 28		\$18
40	2023	Aug 25— 27		\$18
41	2024	Aug 22—25		\$18
42	2025	Aug 21—24		YOU ARE HERE!

Friday 22 August 2025				
Room:	Atrium Lobby	E1 Duchess	E2 Salon A	E4 Salon B
8:30				
9 AM	ARRL Headquarters & W1AW Tour			
10 AM	Meet BEFORE 0930			
11 AM				
12 noon				
1 PM		Build a \$25 GPS Disciplined NTP server, free class, MUST ORDER PARTS FROM AMAZON IN ADVANCE	2025 Skywarn Spotter Class	mini Contest University 2025 (Registration at 0830)
2 PM	Three Kit Building Workshops - 2-3, 3-4, and 4-5			
3 PM				
4 PM				
5 PM				
6 PM				
7 PM			Contest and DX Dinner Speaker - Tim Duffy, K3LR	
8 PM				
9 PM				

Friday 22 August 2025			
E3 Seminar	E9 Princess	W2 Sterling	W9 Marlborough
Hands-on Demonstration of the Bizarre Effects of Circular Polarization	Club Track	When the Grid Fails: A Field Operator's Guide to Preparedness, Community, and Resilience After Hurricane Helene	Introduction to Impedance, SWR and Transmission Lines
			The End Fed Half Wave Antenna (EFHW) How it works
			NEQRP Friday Night Dinner Get-Together



Sunday 24 August 2025				
Room:	E1	E2	E4	E3
	Duchess	Salon A	Salon B	Seminar
9 AM				
10 AM	QCWA Get-together			HF Contesting with a Moderate Station (reprise)
11 AM	FT8 and JTAlert: An Efficient QSO Generation System (reprise)			Handiham Program: Introduction and Overview (reprise)
12 noon	MMRA Meeting and Raffle			
1 PM		Closing Ceremony & Prize Drawings		
2 PM				

Sunday 24 August 2025		
W1	W2	W8
Wayland	Sterling	Westboro
Military Auxiliary Radio System (MARS) and Shared Resources (SHARES) Awareness for Amateur Radio Operators	Next Generation Emergency Nets	License Testing Session III
MARS Closed Meeting	Configure FLDIGI for Participation in Nets	

FEMARA Scholarships

This is why we hold the convention.

Your donations and all proceeds from the convention go to the FEMARA scholarship fund, which helps students attend a college or trade school of their choice. The ARRL Foundation administers the perpetual fund. Each year the foundation scholarship committee meets to carefully review hundreds of applications received from remarkably talented young men and women. The foundation receives cash and stock donations from hams and their families worldwide which include bequests from living wills and trusts. Please consider helping this great undertaking. When you donate to the foundation, please specify the FEMARA New England Fund!

If you know a worthy student, or are one yourself, you can apply online at:
< <http://www.arrl.org/scholarship-application>. >

See the full list at:

< <https://hamxposition.org/scholarship-recipients.html> >

2025 FEMARA Scholarships

Congratulations to 2025 FEMARA Scholarship recipients:

<i>Krish Desai, KD9RGN</i>	<i>East Walpole, MA</i>
<i>Natalie Gilbert, N1PNK</i>	<i>Redding, CT</i>
<i>Julie Knappik, KB1YTT</i>	<i>Raynham, MA</i>
<i>Lincoln Nichols, KC1PHK</i>	<i>Woodbury, CT</i>

Moonbounce Donations (≥ \$50)

FEMARA thanks the following individuals for their support:

AD2CT	Robert Gill	K1RAU	Dan Rau
K1UAF	John Gotthardt	K5TEC	Bob Phinney
K9FJ	John Facella—QCWA	KB1OIQ	Andy Stewart
KB1RJS	Richard Sisca	KC1KGS	Barbara Irby
KC1LNQ	Yuri Botnar	KW1U	Marcia Forde
N9JBT	Bruce Tinkler	NE1RD	Bruce Anderson
W1DYJ	Larry Banks	W1STR	New England Sci-Tech
W1USN	Michael Rioux	W1XP	Robert Reif
WI1I	Bernie Quartaroli	WJ1U	John Evanson
WO1E	Ron Rothman		

(Our apologies if we missed listing any donations from after 3 August.)

Thursday, 21 August 2024

Thursday Night Comedy Kickoff — 8 PM

Juston McKinney

Friday, 22 August 2024

9:00 AM — 4:00 PM Salon B E4 ~ [8:30 AM Registration]

Mini Contest University

Ed Parish, K1EP & Doug Grant, K1DG

Contesting isn't only for the big guns and highly competitive folks. This will introduce you to getting started in this aspect of our hobby.

9:00 AM — 4:00 PM Atrium Lobby

ARRL Headquarters & W1AW Tour

12:00 noon — 3:50 PM Princess E9

Club Track ~ Bruce Blain, K1BG

The Club Track talks are focused on successful clubs helping clubs by sharing programs that have worked for them. A series of half hour talks to help clubs energize, invigorate, and grow.

1:00 PM — 1:50 PM Duchess E1

Build a \$25 GPS Disciplined NTP server

~ Lupton Bradshaw, K1TE & Dhiru Kholia, VE3CER

Build a no solder GPS Disciplined NTP server with a NEO7 gas chip and an esp8266 single

Friday 22 August 2025

board computer. **MUST ADVANCE ORDER PARTS AMAZON LIST** and bring it with you.
List => https://www.amazon.com/hz/wishlist/ls/IMM7FFGG07RL?ref_=list_d_wl_lfu_nav_1

1:00 PM — 1:50 PM Salon A E2

Skywarn Spotter Class ~ Rob Macedo, KD1CY

This is the traditional SKYWARN training class offered by the WX1BOX Amateur Radio team on behalf of NWS Boston/Norton. This SKYWARN training will go through the traditional SKY-WARN reporting criteria for all weather hazards meaning winter storms, hurricanes and all weather hazards with the usual enhanced focus on severe thunderstorm and tornadic development.

1:00 PM — 3:50 PM Seminar E3

Hands-on Demonstration of the Bizarre Effects of Circular Polarization ~ Stephen Kercel, AA4AK

Vector network analyzer measurements of electrical properties of various 2.4 GHz antennas and of the front end of 2.4 GHz receiver. Laser-based alignment of multiple collinear helix antennas. Measurement of the difference in received signal between matched circular polarization and crossed circular polarization. Real time capture of data into Excel. *This IS NOT a repeat of Steve's August 2024 forum.* This workshop is a hands-on demonstration of microwave hardware, electromagnetic interference hardening, and some bizarre effects of circular polarization.

1:00 PM — 1:50 PM Sterling W2

When the Grid Fails: A Field Operators Guide to Preparedness, Community, and Resilience After Hurricane Helene ~ Thomas Witherspoon, K4SWL

When Hurricane Helene tore through western North Carolina in the fall of 2024, the damage was swift, unexpected, and widespread. In this photo-rich presentation, I'll share my firsthand



**Police Amateur Radio Team
of Westford, Massachusetts
WB1GOF**

An ARRL Special Services Club



- Monthly meetings in-person and online. Monthly breakfasts too.
- Public service events. fox hunts.
- Fantastic Field Day!
- Technical support and mentoring
- Three repeaters, analog and D-Star.
- Over 100 members and growing.

Visit **wb1gof.org** for information



New England's Fusion Network

28 linked repeaters across
Maine, New Hampshire, Mass
Wires-X 62148

YSF: US-XLXUFB

AmComm/SystemX DMR: 31230

<https://ufbnewengland.com>





**An educational amateur radio club
for all ages. Join today!**

Headquartered at New England Sci-Tech
16 Tech Circle, Natick MA

Mission: to encourage people to pursue interests
in amateur radio, electronics, astronomy,
and other STEM activities.

Meetings in person and online, ham radio room,
educational activities and speakers,
weekly radio shop talk, license classes and exams.

www.STARS.radio



Scan me with your
smart phone camera
for more about the
STARS radio club



Friday 22 August 2025

account of the storms aftermath and how amateur radio played a crucial role in staying connected when everything else failed. I'll also offer practical advice for operators-no matter where you live-on how to prepare for natural disasters, build resilient communication setups, and foster stronger local networks. Even if you think you're out of harms way, consider this your wake-up call to be ready.

1:00 PM — 1:50 PM Marlborough W9

**Introduction to Impedance, SWR and Transmission Lines
~ Greg Algieri, WA1JXR**

The presentation will introduce the amateur to what complex Impedance is. How to measure it. How the Impedance is related to my SWR. How this all applies to transmission lines and how the waves and power travel from your transceiver to your antenna.

2:00 PM — 2:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC

Beginners who need soldering instruction and practice are welcome to join us to build an easy beginner kit in under an hour. New England Sci-Tech volunteers will help anyone age 10 and up learn how. Choose from several kits - Morse Code Oscillator, Blinky Name Badge, Night Light, Spinning Top, FM Music Receiver all kits were invented by students! Price per kit is between \$5-\$10, cash only. See our web site for details: <http://nescitech.org/hamx>

2:00 PM — 2:50 PM Marlborough W9

**The End Fed Half Wave Antenna (EFHW) How it works.
~ Greg Algieri, WA1JXR**

This presentation will describe how the End Fed Half Wave Antenna works as a multi-band HF antenna. Greg will show you how and why it works and how it can be a good HF multi-band antenna for home or portable use.

3:00 PM — 3:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see above)

4:00 PM — 4:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see above)

6:00 PM — 10:00 PM Marlborough W9

NEQRP Friday Night Dinner Get-Together

The 'Early Birds meet and greet' night. Join your NEQRP friends for pizza, conversation, and videos on the big screen. Kits for tomorrow's build-a-thon will be displayed.

7:00 — 9:30 PM Salon A/B E-2/4

DX / Contest Dinner

Tim Duffy, K3LR

Tim, the CEO of DX Engineering, will discuss contesting history and what the future might hold with a focus on clubs and youth.

**Door Prize: Icom IC-7610 HF/6m Transceiver
Sponsored by DX Engineering**

NEDECN

New England Digital Emergency Communications Network

- * **DMR repeaters with 2-simultaneous conversations per RF channel**
- * **Interconnecting with over 85 New England area repeaters**
- * **World-wide coverage via the DMR-MARC network**

The New England-Wide, Dual Channel Network
providing communications for routine and special events

www.nedecn.org



CALL SIGN HATS AND
SHIRTS. BADGES.
NOVELTY TEES.
ALL THINGS LOGOED.

HELP YOUR CLUB RAISE SOME MONEY

Refer us to companies who use uniforms and promotional products —
Your club will get a portion of that back!



847-478-0041
info@goldmedalideas.com
www.goldmedalideas.com

Saturday 23 August 2025

9:00 AM E-2 (Salon A)

Keynote Address

Thomas Witherspoon, K4SWL

Thomas will talk about how mentorship ensures amateur radio remains self-sustaining, building lifelong connections that will carry the hobby into the future.

Door Prize: 5-band QRP Transceiver and accessories

9:00 AM — 5:00 PM Hudson W3

Tech-In-A-Day ~ Bill Poulin, WZ1L

Bill Poulin, WZ1L, veteran instructor and volunteer examiner will be conducting a "Tech In A Day" class.

9:00 AM — 11:00 AM Westborough W8

License Testing Session I ~ MMRA

10:00 AM — 11:00 AM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see Friday @ 2pm)

10:00 AM — 10:50 AM Duchess E1

The MARCONI Project - A Road Map to Elmering Low Activity Radio Clubs to Become High Activity Radio Clubs ~ Edward Snyder, W1YSM

The MARCONI-II Project -- Motivating Amateur Radio Clubs to Open New Initiatives, is based on the concept of high activity radio clubs helping low activity clubs to regrow and become stronger - 'Clubs Helping Clubs'. The talk will provide a step-by-step Road Map as to how the MARCONI-II Project is designed and how it can be executed. The talk will discuss the Project in detail and address how to handle complex issues such as approaching the low activity club and gaining its cooperation, recruiting new members for their club, organizing radio-activities and projects, improving the fiscal health of the low activity club and, if feasible, how to consider merging with another club to pool limited resources.

10:00 AM — 10:50 AM Salon A E2

Project "Maple Syrup" ~ Richard Desaulniers, VE2DX

New Product Introduction of an automatic antenna management system.

10:00 AM — 11:50 AM Salon B E4

FEMA Emergency Communications ~ Mike Corey, K11U

An overview of emergency communications capabilities and resources from the FEMA Region 1 Disaster Emergency Communications team. This presentation will cover RF, Satellite, cellular communications, communications planning, and communications support for field teams, and the Regional Emergency Communications Coordination Working Group.

10:00 AM — 10:50 AM Princess E9

A Portable Radio Operator's Pivot to Citizen Science: The Ham Path Less Traveled ~ Mindy Hull, KM1NDY

Using this author's real world example of amateur radio research, 'Effect of Near-Total Solar Eclipse on Radio Propagation of High Frequency, Weak-Signal Propagation Reporter (WSPR) Transmissions', this presentation walks through the steps of the scientific method -- observe, hypothesize, test/experiment, analyze, and draw conclusions -- as it pertains to an individual amateur radio operator's quest to contribute to the scientific body of radiofrequency knowledge.

10:00 AM — 10:50 AM Wayland W1

An Introduction to D-STAR ~ Terry Stader, KA8SCP

An introduction to D-STAR and what is available in New England

10:00 AM — 11:50 AM Sterling W2

Enjoying Success as a POTA Operator ~ Don Dickey, WV1W

Don WV1W will share his experience from over 700 activations and 71,000 POTA QSOs. Don is also the author of the original POTA book 'Successful POTA.' This presentation will help new operators get started with portable operation and POTA, but experienced hams will also pick up new tricks to make their outings more fun and productive. Everyone will come away having learned something useful.

10:00 AM — 10:50 AM Sudbury W4

First 15 Minutes ~ Douglas Sharafanowich, WA1SFH

This fast paced, interactive session is designed to provide a humorous insight as to what you can expect as a Net Control Station (NCS) during a fictional local Emergency/Disaster

situation. IF ABLE: Please read The First 15 Minutes presentation. You can find it at <https://tinyurl.com/yc5erdcm>. Write down your observations and bring them with you. We will be focusing on: The Good, The Bad, and THE UGLY.

10:00 AM — 10:50 AM Southboro W6

Radio on the 1928 Byrd Antarctic Expedition ~ Michael Murphy, WU2D

Mike Murphy of the popular Mikrowave1 YouTube Channel will be presenting a history of Byrd's south pole overflight attempt. The magnitude of Richard Byrd's all-out privately funded effort was going to put it in a class all by itself--perhaps one only bested by the Mars program with Space-X.

10:00 AM — 10:50 AM Northboro W7

Tactical Communications for Amateur Radio ~ Howard Chain, K9NPD

This presentation benefits ARES members and any ham who wants to improve their communications precision, efficiency, and delivery of time critical messages. Having consulted over 30 years with Public safety agencies, Howard will cover tactical communications made relevant to ham radio in a real world practical way.

10:00 AM — 10:50 AM Marlboro W9

Aurora, the Finished Product ~ Michael Walker, VA3MW

Mike VA3MW will present an exclusive overview of the brand-new Aurora transceiver from FlexRadio Systems. The Aurora promises to deliver next-level performance combined with the flexibility and precision that Flex operators expect. Mike will guide us through everything that makes this new product a game-changer for amateur radio enthusiasts.

11:00 AM — 12 noon Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see Friday @ 2pm)

11:00 AM — 11:50 AM Dutchess E1

LICW and Renaissance of Morse Code ~ Greg Algieri, WA1JXR

Morse code is no longer a licensing requirement, yet it's back! With a focus on respect, community-driven leadership, and accessible education, the Long Island CW Club continues to redefine what modern Morse code instruction can be.

11:00 AM — 11:50 AM Salon A E2

Introduction To 3D Printing For The Radio Amateur ~ Jeffrey Bail, NT1K

Interested in 3D printing? This presentation will go over some of the history, different types of 3D printing, typical process, applications for the radio amateur radio, and suggestions to start from.

11:00 AM — 11:50 AM Seminar E3

ARRL Forum ~ Tom Frenaye, K1KI

Tom will host a New England Division forum covering League news and activities.

11:00 AM — 11:50 AM Princess E9

HamClock ~ George Allison, K1IG

HamClock is a ham radio application that integrates propagation forecasts, solar weather, DX spots, DX information, and terrestrial weather into one kiosk-style view that can greatly assist in DX hunting. George, K1IG, will demonstrate the program and show how to install it on your computer, as well as how to use a Raspberry Pi to display it in your shack.

11:00 AM — 11:50 AM Wayland W1

D-STAR in New England ~ Terry Stader, KA8SCP

Terry will present an overview of New England D-STAR, including a quick review of what D-STAR is like here in the New England area. There will be an open Q&A session on topics of interest.

20% Off!

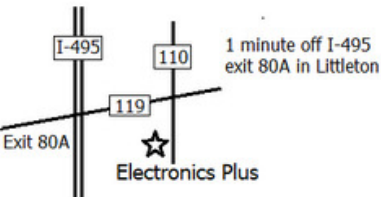
Your Entire Purchase With This Coupon

Offer Valid 8/21/25 through 9/2/25 Only

Limit One Coupon Per Customer

Electronics Plus

"Electronic Accessories for the Home and Hobbyist"



www.electronicsplus.com

480 King Street (Rt. 110)

Littleton, MA 01460

(978) 486-3375

Mon-Fri 9-5, Sat 9-3

sales@electronicsplus.com

NTE Electronics • Philmore • Velleman • Eclipse Tools

Uniden • Cobra • Wilson CB Antennas • Plus Much More!

Saturday 23 August 2025

11:00 AM — 11:50 AM Sudbury W4

Sources and Fixes of IMD in Transmitters ~ Thomas Williams, WA1MBA

You may see on your waterfall (and hear) lots of 'splatter' these days. Most of it is due to the use of solid state amplifiers and our desire to run at maximum power. This presentation will examine the sources of Inter-Modulation Distortion 'IMD' in transmit and other circuits, and show how to remove it by use of Pre-Distortion. The ARRL Clean Signal Initiative is a guideline to help amateurs practice acceptable transmit bandwidth control. IMD is the primary culprit.

11:00 AM — 11:50 AM Boxboro W5

CT-POTA Activators Group ~ Shawn Warren, KC1NQE

The CT-POTA Activators Group was founded by N2YCH, K1PCN, and KC1NQE to bring activators together to share knowledge about our parks, setups, and overall knowledge of POTA. Learn how to organize similar multi-club events and activities to engage all license classes.

11:00 AM — 11:50 AM Southboro W6

2025 Elecraft Update with Q&A ~ Eric Swartz, WA6HHQ

Hear all about the Elecraft K4 transceiver-- its ongoing updates and good things to come-- all from the radio's designer. Eric will also take questions as time allows.

11:00 AM — 11:50 AM Northboro W7

**FT8 and JTAlert: An Efficient QSO Generation System
~ Larry Banks, W1DYJ**

Larry first gave this talk in 2019. Since then a lot has changed and FT8 is now very popular. This talk will review the 2019 talk which discusses some history of WSJT-X, how to use FT8 and JTAlert, and will add some insights that Larry has discovered with the approximately 6000 contacts he has logged on FT8.

11:00 AM — 11:50 AM Marlboro W9

Entry Level Contest Skill Development ~ Mark Pride, K1RX

Radiosport or Contesting Operation for the Beginner- one of the many hobbies within the hobby where multiple aspects come together. For the new amateurs interested in trying out Contesting, this is a must attend. Critical success elements are presented for operating SSB and CW contests. These basic skills will establish an excellent baseline for growth and enjoyment and help advance you to the next level of contesting. Even if your CW speed is not very fast, the techniques explained will help you advance quickly.

12 noon — 12:50 PM Salon A E2

**Antarctica DXpedition: The Adventure of a Lifetime
~ Eric Knight, KB1EHE**

An engaging, multi-media, hands-on (including show-n-tell) presentation by two adventurous amateur radio operators and their experience communicating to hams around the world from the bottom of the world.

12 noon — 12:50 PM Seminar E3

**Antennas for Backyard, Balcony, Attic, or Wherever
~ Robert Glorioso, W1IS**

We have found that many new hams and retiring hams are living in apartments or condos where they have limited ability to get on HF while others have constraints like HOAs or family concerns about the aesthetics of wires, masts or beams hanging on the house. It takes more than reading an add or buying a mobile antenna to get on HF. First, they must understand the basics of antennas or they are stymied. This presentation covers the Principles needed and examples of successful HF antennas in a restricted environment.

ve2dx
ELECTRONICS DESIGN INC.

**HAM
RADIO
INNOVATIONS!**

drop in to see
OUR MAPLE SYROP
prototype!

WWW.VE2DX.COM
450-689-4591

YOUR K3 RADIO SOURCE! WWW.K6RO.COM

K6RO



We buy and sell Elecraft K3 and K3S Transceivers and Accessories

- K3 10 and 100 watt radios
- K3S 10 and 100 watt radios
- KPA500 / KPA1500 Amps
- KPA3 100 Watt Amp Option
- K144XV 2 Meter Module
- MH2 & MH4 Hand Mics
- KRX3 Sub Receivers
- KSYN3A Synthesizer
- CW, Data, and SSB Filters
- KBPF3 Bandpass Filter
- KDRV3 Digital Voice Keyer
- KIO3B USB Soundcard
- KAT3 Tuner
- P3 Panadapters
- VGA Option
- Transmit Monitor Option
- 200W, 2KW Couplers
- PR6 6 Meter Preamps
- W2 Watt Meters
- Knobs / Cables
- KXV3A and B Boards
- K3/O Remote Head
- Remoterig.com
- RRC-1258 Boxes

*Many other parts and options not listed here.
Please ask!*

Larry Shapiro • K6RO54@gmail.com • (310) 710-2869

TRAVELING
WITH
500 WATTS
OF POWER
IN ONE UNIT
HAS NEVER
BEEN EASIER.
ACTUALLY,
IT'S NEVER
BEEN
POSSIBLE.

Welcome to Aurora.

Experience 500 watts of

HF performance - without the clutter.

Aurora is the first of its kind:
a compact, high-efficiency HF radio with
everything built in. With an integrated
antenna tuner, and power supply and over
80% efficiency, it's a complete

HF station in a single 18lb. package.

Whether you are simplifying your shack,
activating parks, or setting up a remote
station, Aurora delivers powerful, quiet
performance - anywhere you go.

No amps. No extras. Just plug in and operate.

Welcome to Aurora - the all-in-one revolution
for every HF operator.

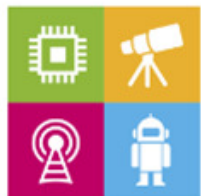
Available Models:

AU-510 / AU-510M / AU-520 / AU-520M

FlexRadio.com/Aurora

AURORA
A NEW DAY FOR THE UNEXPLORED





NEW ENGLAND SCI-TECH

**We do
fun science!**

And Ham Radio!

**For Grades 4-12
and Adults**

**Also Home School,
After-School, Scouts**

**501(c)(3) non-profit
STEM Education Center
and Maker Space**



Ham Radio, Electronics, Robotics, Rocketry,
Public Telescope Nights, Planetarium Shows,
Woodworking, Scout Merit Badge Activities,
Photography, Birthday Parties, Tutoring, Adult Ed.

16 Tech Circle, Natick, MA

Type nescitech.org or scan this →



Saturday 23 August 2025

12 noon — 12:50 PM Salon B E4

YCCC Meeting ~ Ken Caruso, WO1N

Gather with the Yankee Clipper Contest Club for introductions, club business, and information for new members. Stick around for two more talks after this session. Ken is the President of the YCCC and moderator.

12 noon — 12:50 PM Princess E9

Andy's Ham Radio Linux ~ Andy Stewart, KB1OIQ

Andy Stewart created a ham radio software collection called 'Andy's Ham Radio Linux.' This freely downloadable software has over 100,000 downloads to date. It now runs on several flavors of Linux including Raspberry Pi. Andy's talk will be a high level discussion of some of the available software.

12 noon — 12:50 PM Wayland W1

Thermal Imaging for the Radio Amateur ~ Ronald Lucier, W1AAE

The use of thermal imaging for target detection and temperature measurement dates back to the early 1900s. Currently the technology is affordable as the cameras are small, handheld and readily available. This presentation will highlight the use of this technology as it applies to amateur radio: identifying and measuring hot spots on circuit boards, power supplies, connections and terminations. Additional subject matter regarding high power broadcast towers will be presented as will many practical applications.

12 noon — 12:50 PM Sterling W2

**Demystifying Quantum Computing: Application of RF Control System
~ Hisen Zhang, KD2TAI**

Discover how your RF expertise directly connects to quantum computing technology. This talk reveals how radio frequency principles familiar to every ham operator are essential for controlling quantum bits (qubits). Learn why RF engineers are valued in quantum computing and how your amateur radio knowledge translates to this cutting-edge field. No advanced physics required, yet knowing basics of radio circuits helps.

12 noon — 12:50 PM Sudbury W4

SDR Transponder/ Transceiver for AMSAT ~ Ray Roberge, WA1CYB

This talk is designed to give insight into the Software Defined Radio (SDR) that is being built for the Radio Amateur Satellite Corporation (AMSAT). Ray will briefly cover what AMSAT is and the ASCENT group (Advanced Satellite Communications & Exploration of New Technologies) within AMSAT. Most satellites are hardwired to use the 2meter and 70cm bands. These bands are crowded and noisy. Moving up into the microwave bands gives us greater flexibility with all modes. The 2 meter to 6 GHz SDR breadboard card is built and under test. Ray will talk about the high-level design and the status of the card.

12 noon — 12:50 PM Buxboro W5

P.A.C.E. - Levels of Readiness ~ Rory Griffin, W4RJG

P.A.C.E is a well-established pattern for determining the scale of readiness in various emergency and disaster planning. This presentation will have a directed focus for the Emergency Communications community.

12 noon — 12:50 PM Southboro W6

Operating the Ham Radio Satellites ~ Mitch Stern, W1SJ

Ham operators have access to a wide variety of satellites orbiting the earth. These orbiting repeaters allow reliable communications without relying on the ionospheric propagation we require on the HF bands. But there are things you need to know to be able to successfully utilize satellite communications on both the easy FM satellites and the more complicated weak signal satellites. This presentation will go over satellite technology and then focus on

Merrimack Valley Amateur Radio Association



Our current project, in collaboration with NEDECN, ARDC and other organizations, is building out a digital network in New Hampshire and connecting to adjacent states.

All radio amateurs interested in communicating over microwave radio are encouraged to contact us about collaborating and membership.

merrimackvalleyara.org



Saturday 23 August 2025

the equipment and techniques used to make the contacts. There is nothing quite as rewarding as putting all the myriad details together to complete a satellite QSO!

12 noon — 12:50 PM Northboro W7

NESMC Board Meeting (closed) ~ Bob DeMattia, K1IW

Executive session meeting for NESMC officers (closed to general public)

12 noon — 12:50 PM Marlboro W9

NEQRP Luncheon Gathering

1:00 PM — 1:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see Friday @ 2pm)

1:00 PM — 1:50 PM Salon A E2

New England Wireless & Steam Museum: Something for Everyone ~ Kenneth Carr, KE1RI

The New England Wireless & Steam Museum is a place that all hams who want to know where ham radio came from should visit. Free flowing open discussion about our history, exhibits, and how hams can actively participate by offering their expertise to our staff. Some emphasis will be placed on historical ham equipment. We will supplement the discussion with slides and short films that are designed to give a good overview of our collections and our plans for the future.

1:00 PM — 1:50 PM Seminar E3

An Intro to RF PCB Design ~ Max Kendall, W0MXX

RF PCB design is often considered one of the more challenging aspects of electronics engineering due to the high frequencies involved and the sensitivity of signal integrity. In this presentation, Max will dive into the core principles that underpin effective and reliable RF board design. He will explore the importance of using a 4-layer PCB stackup, which allows for better isolation, dedicated ground and power planes, and improved signal performance. Topics will include the role of copper pours in managing return paths and minimizing interference, as well as how to achieve proper impedance matching for critical RF components and transmission lines. Max will also walk through best practices for feedline routing, highlighting techniques for minimizing signal loss, avoiding crosstalk, and ensuring consistent characteristic impedance throughout the board.

1:00 PM — 1:50 PM Salon B E4

An Effective Contest Station without Towers ~ Kenneth Carr, KE1RI

An updated version presentation. Come see how John's continually evolving antenna farm and simple station continues to produce Top-5 scores without using towers. You will be sure to leave this session with a new perspective on antenna possibilities for your own backyard, your vacation spot, Field Day or even your POTA or SOTA activations. (Part of the YCC Meeting.)

1:00 PM — 1:50 PM Princess E9

Running A First Class Field Day Operation ~ Mitch Stern, W1SJ

Many of us take part in Field Day in June. Field Day runs the gamut from large scale operations to those other operations where the dinner menu is of primary importance. Setting up a Field Day operation to serve the interests of a multitude of participants is particularly tricky. In this presentation, we'll discuss the W1NVT Field Day operation, which is a fairly small 2 transmitter effort in Vermont, but which produces large results. Details will include organizational planning, antennas, equipment, housing, safety and other concerns. Attend the forum to learn how to bring up your Field Day game!



NESMC

New England Spectrum Management Council

*is a proud sponsor of the
Northeast HamXposition 2025*

WE INVITE YOU TO ATTEND OUR ANNUAL MEETING

SATURDAY AUGUST 23rd

3:00PM

in the Southborough Room (W6)

NESMC provides frequency coordination for amateur repeaters in
New Hampshire, Maine, Massachusetts and Rhode Island.

Our Meeting is Open to All

You do not need to be a member to attend our meeting.

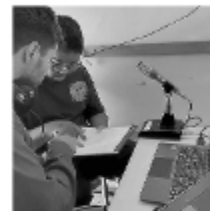
www.nesmc.org



PRA Foundation

Fostering Communications
Technology In Today's
Education Systems

**Radio, Learning, and Community Service
— Made Possible by You!**



The PRA Foundation is a 501(c)(3) — powered by you!

Your support provides equipment, scholarships, and resources for
tomorrow's wireless innovators.

Our Mission:

- Fuel curiosity and hands-on skills through Amateur Radio.
- Keep the spirit of experimentation and lifelong learning alive.
- Help spread the word about amateur radio's role in technology and community service.
- Build community with workshops, meetups, and on-air events.
- Open doors for youth through school partnerships and training.
- Keep the airwaves open. Inspire the next generation!

Visit using the qr-code or
enter our website
address below in your
internet browser.



Many thanks to all those
who have donated and
help to make our mission
possible!

<https://w1op.com/FOUNDATION.htm>

Saturday 23 August 2025

1:00 PM — 1:50 PM Wayland W1

Uses of Blockchain ~ John Schwarz, KE2EAQ

Blockchain is a relatively recent technology. In addition to cryptocurrency, it can be used for timestamping, distributed data logging, cybersecurity, EW and communication proliferation.

1:00 PM — 1:50 PM Sterling W2

Large Scale WiFi Networks using Amateur Radio Emergency Digital Network ~ Benjamin Jackson, N1WBV

This presentation introduces the Amateur Radio Emergency Data Network (AREDN), a system leveraging modified commercial off-the-shelf (COTS) hardware to establish high-speed, self-configuring, and self-healing data networks in amateur bands. AREDN has the capability to deliver critical and redundant Internet Protocol based infrastructure that is independent of traditional Internet infrastructure. This presentation will go over the basics of AREDN, what you can do with it, the status of projects in the New England Area, and how you can contribute by setting up your own node.

1:00 PM — 1:50 PM Sudbury W4

Worked All Bands ~ Brian Justin, WA1ZMS

A review of the equipment and operating steps Brian has used to make QSOs on all--yes, ALL--of the 29 Amateur Radio Bands including two that are no longer Part 97 Allocations.

1:00 PM — 1:50 PM Boxboro W5

Commercial Radiotelegraphy ~ David Ring, N1EA

David's talk will be about being a radio officer in the United States Merchant Marine and about commercial radiotelegraphy, with mentions of the SOS in which David was involved in 1980--the fire and abandoning of passenger cruise ship MS Prinsendam.



**The 33rd Annual
Nutmeg Hamfest
& ARRL Connecticut State Convention**
Sponsored by WINRG, the Meriden Amateur Radio Club
Sunday, October 12, 2025 - 8:00 am- 1:00 pm
Maloney High School
121 Gravel Street, Meriden, CT 06450
Bring your HT- We Will Program it for FREE!
MANY GREAT DOOR PRIZES!
Free Parking - Hot Food - Vendors - Loads of Tailgating
CW Demonstration - Visit the ARRL Booth - and so much more!

SYMPOSIUM TOPICS & FEATURED SPEAKERS

THE ARRL FORUM Tom, K1KI, New England Director & Douglas, WA1SFH, CT Section Manager <i>New this year...</i> TECHNICIAN SYMPOSIUM New ham? Get more from your privileges! SATELLITES - FOX HUNTS - REPEATERS - 10 METERS WOMEN INNOVATORS IN HAM RADIO	<i>Plus...</i> POTA: BE 'RADIO-ACTIVE' IN A PARK INTRO TO DIGITAL MODES: FT4 & FT8 HAM RADIO & THE LAW MARCONI I, II & III Your club as an Elmer! WINLINK & ARES: 2025 & BEYOND
--	--

CT REGIONAL CERT/EMCOMM MEETING

VE SESSION begins at 8:30 AM sharp... Now completely digital & paperless!
Candidates must pre-register at <https://hamstudy.org/sessions>. Contact Jim, N1ZN@arrl.net
No Walk-Ins! - Computer tablets for exams will be provided.

VENDOR CONTACT
John Bee, N1GNV
Quicksilver Radio
jbee@qsradio.com
203-440-4973

ADMISSION INFORMATION
Inside vendor setup begins at 6:00 AM
Building opens to the public at 8:00 AM
Admission: **\$10** Under 18 free!
Tailgating: **\$15** / outdoor space
Indoor Tables: **\$25*** / 6 ft table & chair
*\$20 if paid by 9/10/25

*Please Patronize Our
MAJOR EXHIBITORS*
Quicksilver Radio
KJI Electronics
Hamsource

The Nutmeg Hamfest is *less than 2 hours* from NYC, LI, NJ, NEPA, Boston & Albany
and just minutes away from Interstate 91 & the Merritt Parkway
JOIN US FOR THE TALK IN: WINRG/R, 147.360 MHz + 0.600 / PL 162.2

 For updates & more information, visit the MARC website...
www.winrg.com/activities/nutmeg-hamfest/



ARRL
Rhode Island
Section

Please Join
Our 3RD
Rhode Island
Town Hall
Meet & Greet

Where: HamXposition, Marlborough, MA
When: Saturday August 23, 2025 4 PM
Location: Check Program to Confirm: Sterling, W2

Follow the new
RI Section website
for more information -
<https://RI-ARRL.ORG>



NEW ENGLAND SCI-TECH

SCOUTS HOME SCHOOL AFTER SCHOOL

For students in grades 4-12



FREE wireless electronics courses in Natick

Learn about radio wave propagation, the electromagnetic spectrum, electronic circuits, electrical safety, and much more! Build an FM radio receiver you can keep.

Earn your Amateur Radio *TECHNICIAN* license, and get a free portable transceiver.

For youth, getting a radio license is a gateway into STEM careers such as Electrical Engineering, Space Exploration, Emergency Management, X-ray/MRI technicians.

***Fridays, 7-week sessions
beginning Sept 5, Oct 24, Jan 2, Feb 27.***

***New England Sci-Tech
16 Tech Circle, Natick, MA***

Type nescitech.org/wec or scan→



Saturday 23 August 2025

1:00 PM — 1:50 PM Southboro W6

HF Contesting with a Moderate Station ~ John Webster, NN1SS

This presentation is aimed at a typical ham with station that includes an HF transceiver, tribander, dipole and no amplifier. John focuses on strategy, gaining operating skill, and motivation. He draws from his own experience plus the experience of others. The objective is having fun in a major contest with a moderate station.

1:00 PM — 5:00 PM Westborough W8

License Testing Session II ~ MMRA

1:00 PM — 1:50 PM Westboro W9

Modern QRP Rigs Throughout The Years ~ Dennis Marandos, K1LGQ

2:00 PM — 2:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see Friday @ 2pm)

2:00 PM — 2:50 PM Duchess E1

Cubes In Space - An Awesome Youth Activity for Your Club ~ Bob Phinney, K5TEC

Revitalize the youth participation in your club with an activity that allows students between 11 and 18 to launch a small project on a NASA sounding rocket. Learn from several students who launched their project from Goddard Space Flight Center's Wallops Flight Facility.

2:00 PM — 2:50 PM Salon A E2

Handiham Program: Introduction and Overview ~ Lucinda Moody, AB8WF

Find out about the Handiham Program, who we serve, and many volunteer opportunities. The Handiham Program turns 58 this year, and we have lots of stories to share from over the years along with plans for the future.

2:00 PM — 2:50 PM Salon A E2

Advanced Topics in SKYWARN - Doppler Radar Fundamentals & How You Can Help with Severe Weather Reporting Situational Awareness ~ Rob Macedo, KD1CY

Have you wanted to get more involved in supporting SKYWARN but have rarely seen criteria to report on SKYWARN Nets? Have you wanted to learn more about Doppler Radar analysis during the summer severe weather season? This class will cover both these topics. Very often, particularly for severe thunderstorms and localized flood events along with other weather scenarios, damage can be very localized but significant where the damage or flooding occurs. This seminar is intended to give Amateur Radio operators a way to contribute further by supporting proper public safety radio monitoring via personal scanners and online public safety feeds, proper social media monitoring techniques and monitoring local weather stations in your city or town or a local range of cities and towns to help support reporting into the National Weather Service to protect life and property. We will cover the need for net controls and monitoring of local area repeaters during severe weather situations. We will also cover Doppler Radar fundamentals and go through a few radar scenarios from past severe weather events.

2:00 PM — 2:50 PM Salon B E4

The Journey from the Polar Explorer to Aurora ~ Tony Brock-Fisher, K1KP

Over the past six years, Tony developed a high-efficiency HF transmitter that produces 500W output. The design was adopted by Flex Radio as the basis for their new Aurora transceiver. Hear the fascinating journey in his own words. (Part of the YCC Meeting.)

2:00 PM — 2:50 PM Princess E9

Field Day: Before and After ~ George Allison, K1IG

There's a lot more to Field Day than just throwing wires in trees and making contacts; successful clubs can make it a memorable event for their members and guests with planning, organization, and a post-Field Day recognition event. This presentation will cover goals and objectives for success, advance planning, budgeting, publicity, safety, site surveys and preparations, Post Field Day activities include data reduction and submittal, prizes, awards, and a wrap-up meeting to celebrate the accomplishments. Field Day 2026 is less than a year away, so let's get ready now!

2:00 PM — 2:50 PM Wayland W1

K2K & HAMLOG: A Modern Collaboration Platform for Special Event Success ~ Eugene Glukhov, W1UAA

Discover how K2K, the New Hampshire station of the 13 Colonies Special Event, uses HAMLOG as a powerful collaboration tool for event managers, team operators, and hunters. This session explores how HAMLOG streamlines scheduling, QSL handling, award tracking, and team communication all in one secure, passwordless platform. Whether you manage a special event or participate as a chaser, learn how HAMLOG can enhance efficiency, reduce manual work, and bring your event coordination into the modern era. Perfect for organizers looking to simplify logistics and improve participant engagement.

2:00 PM — 2:50 PM Sterling W2

Transcribing Contest Logs with Generative AI (or trying to) ~ John Pooley, W1JPI

Handwritten logs aren't a thing of the past! Some of our fellow amateur operators, such as those with vision impediments, still record their contest logs on paper but many contests now require digital Cabrillo logs. John will discuss the applicability and merits of AI including Optical Character Recognition and newer technologies like Generative AI for multiple topics within the Amateur Radio hobby, with a focus on log transcription.

2:00 PM — 2:50 PM Sudbury W4

Reducing Insidious Digital Interference and Noise ~ Paul Wade, W1GHZ

Digital signals sound just like noise in our narrowband receivers. You may not realize that some of the noise you hear is caused by DTV and other digital transmitters. This talk will help you identify this insidious noise raising your noise floor and reducing your receiver sensitivity, and what you can do about it.

2:00 PM — 2:50 PM Boxboro W5

4 P's Times 2 for Training Activities ~ Rory Griffin, W4RJG

Getting regular participation for ARES and similar drills can be a lackluster event. Without a good focus going to an exercise participants can have a lackluster attitude. Here are 4 P's for each group to truly make the most of each training event.

2:00 PM — 2:50 PM Southboro W6

AMSAT Golf-TEE Flight Software--How does it work ~ Burns Fisher, WB1FJ

Golf-TEE is an AMSAT Technology Evaluation Environment. As such we have many new pieces of hardware that have not flown before, including a new on-board computer, the RT-IHU. AMSAT wants to ensure that we can still test everything and still operate as an Amateur radio satellite--even if the RT-IHU should now work as we hope so we also have the Legacy IHU (which has flown successfully on 7 satellites) on board. This talk is about the flight software on Golf-TEE including how the multiple processors are coordinated.

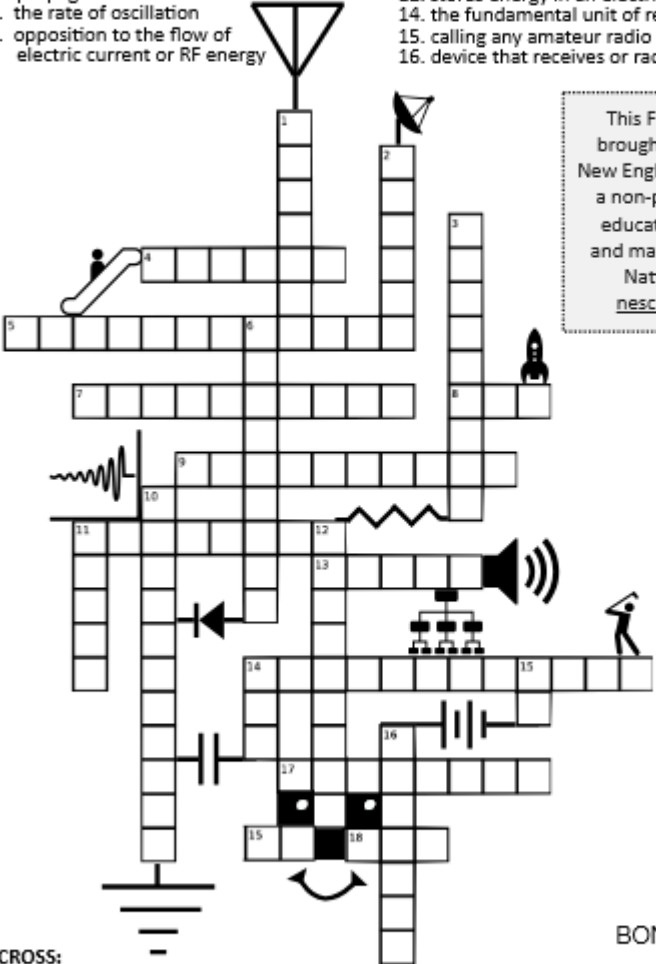


**NEW ENGLAND
SCI-TECH**

Visit our booth in the Atrium for
a large version of the puzzle
and an answer key.

DOWN:

1. a flow of electrons in an electrical circuit
2. transmits one-way signals to determine propagation
3. the rate of oscillation
6. opposition to the flow of electric current or RF energy
10. path that a radio signal travels
11. the standard unit used to measure frequency
12. stores energy in an electric field
14. the fundamental unit of resistance
15. calling any amateur radio station
16. device that receives or radiates RF energy



This Fun Page is brought to you by New England Sci-Tech, a non-profit STEM education center and maker space in Natick, MA. nescitech.org

ACROSS:

4. separation between repeater's input/output
5. best ham radio convention in New England
7. electrically charged region of the atmosphere
8. moon bounce or a signal from Earth to Moon and back
9. a coil's storage of energy in a magnetic field
11. a signal at a multiple of the fundamental frequency
13. Radio Amateur Satellite Corporation
14. instrument used to view wave forms
15. abbreviation for a weather station
17. channel used for satellite-to-earth communications
18. type of diode that emits light

BONUS: In what year did Guglielmo Marconi invent what he called "the wireless telegraph"?

2:00 PM — 2:50 PM Northboro W7

NTS Meet and Greet ~ Marcia Forde, KW1U

This Workshop will introduce you to the TinySA Spectrum Analyzer. We will show you how it works and how to use the instrument for Amateur Radio applications.

2:00 PM — 2:50 PM Marlboro W9

Introduction to the TinySA Workshop ~ Greg Algieri, WA1JXR

This Workshop will introduce you to the TinySA Spectrum Analyzer. We will show you how it works and how to use the instrument for Amateur Radio applications.

3:00 PM — 3:50 PM Atrium Lobby

Kit Building Workshop ~ Bob Phinney, K5TEC (see Friday @ 2pm)

3:00 PM — 4:50 PM Dutchess E1

YL Meet and Greet ~ Barbara Irby, KC1KGS

Barb, KC1KGS, and Anne, WB1ARU, invite you to get together, meet and greet other YLs and discuss common issues.

3:00 PM — 3:50 PM Seminar E3

1DegreeOutside: Their Digital-First Weather Approach One Year Later & Vital Partnership with the WX1BOX Amateur Radio SKYWARN Team ~ Rob Macedo, KD1CY

Join Matt Noyes and Danielle Noyes, co-founders of their digital-first weather company 1DegreeOutside and renowned former TV broadcast meteorologists, as they share their continued exciting journey pioneering a modernized approach to forecasting as a digital weather company. In this engaging presentation, Matt and Danielle will discuss how

their digital platform enhances weather reporting and public safety. They will also highlight their strategic partnership announced earlier this year with the WX1BOX Amateur Radio SKYWARN team and the indispensable contributions of Amateur Radio and non-Amateur Radio SKYWARN Spotters, whose real-time reports are critical during severe weather events. Learn how your dedication and hard work as SKYWARN spotters improve and save lives by providing essential weather updates. Discover new opportunities to strengthen ties with Matt and Danielle's digital venture, enabling more dynamic and immediate interactions that traditional meteorological services may not offer. Don't miss this unique chance to connect with two leading meteorologists and explore the evolving landscape of weather reporting.

3:00 PM — 3:50 PM Salon B E4

Loop Antennas ~ Dale Clement, AF1T

Always popular, entertaining, and informative. Dale, AF1T, will demonstrate the basic properties of Loop Antennas. You will observe the different behaviors of various large and small Loops by means of small lamps which serve as RF detectors. This presentation is the latest in Dale's series about Antennas, Feed Lines, and related topics.

3:00 PM — 3:50 PM Princess E9

StratoScience 2025 - Ham Radio and Education to New Heights ~ Max Kendall, W0MXX

Learn how high altitude balloon programs can be used to inspire and engage youth to push themselves to new heights. As Amateur Radio operators, high altitude balloons offer us a low cost near-space platform for exciting engineering and radio projects. Learn from the New England Weather Balloon Society's successes and failures and see what some of the work students are doing in the StratoScience Lab program this year.

3:00 PM — 3:50 PM Sterling W2

Wideband Wire Antennas ~ Fred Lass, K2TR

This program will show examples of ways to design wire antennas that have low SWR over a wide frequency range. These unique configurations offer significant improvements for contesters, Field Day operations, and POTA activations.

3:00 PM — 3:50 PM Sudbury W4

An Optimized Kilowatt Magnetic Loop Antenna ~ Ted Robinson, K1QAR

Ted says, 'It's discouraging to see all the bad magnetic loop designs on the internet, and all the commercial products that often disappoint.' He will debunk the misconceptions and share some specifics for constructing a tiny kilowatt antenna that hears better and puts out the same signal as a dipole.

3:00 PM — 3:50 PM Southboro W6

New England Spectrum Management - Annual Meeting ~ Bob DeMattia, K1IW

This is the annual meeting of New England Spectrum Management (NESMC), the amateur radio repeater frequency coordinator for Maine, Massachusetts, New Hampshire, and Rhode Island. Repeater owners, users, members, and non members are all invited.

3:00 PM — 3:50 PM Northboro W7

Interactions between Antennas in a 10/15/20m Stack ~ Larry Banks, W1DYJ

Larry homebrewed a 5-element 10m Yagi in 2000 and put it on a roof tower. In 2004 he added a 20m homebrewed Moxon. Finally, in 2010 he added a homebrewed 15m dipole. Recently with the improving sunspot cycle, he now and then heard something he didn't understand. Recent modeling revealed counterintuitive antenna patterns

Framingham Amateur Radio Association

Serving the Greater Framingham MA Area Since 1933



Nets every Sunday and Wednesday

**7:30 pm on the W1FY Repeater
147.150 (PL 100 Hz) or Echolink (W1FY-R)**

All are Welcome

W1FY.ORG

Saturday 23 August 2025

3:00 PM — 3:50 PM Marlboro W9

QRP Kits - The Excitement is Building ~ Rex Harper, W1REX

4:00 PM — 4:50 PM Atrium Lobby

Youth Forum ~ New England Sci-Tech ARS ~ Bob Phinney, K5TEC

What inspires today's youth in the amateur radio hobby? Find out what's on the minds of our youngest hams in this captivating round-table discussion. Great learning opportunity for teachers, scout leaders, or clubs wanting to attract more youth to their local radio clubs.

4:00 PM — 4:50 PM Princess E9

CW Academy ~ Bruce Blain, K1BG

Bruce will talk about CWops' CW Academy. CW Academy has trained thousands of students in the past few years in the art of CW and telegraphy. If learning Morse code or improving your Morse skills is of interest, this talk is for you!

4:00 PM — 4:50 PM Wayland W1

Maine Section Forum ~ Philip Duggan, N1EP

Maine Section Meeting. Come to a 'town hall' meeting with the ARRL Maine Section Manager. Meet other Maine section members and hear updates on what is happening in the Section.

4:00 PM — 4:50 PM Sterling W2

RI Section Town Hall ~ Nancy Austin, KC1NEK

Please join us for our third ARRL Rhode Island Section town hall meet and greet.

4:00 PM — 4:50 PM Boxboro W5

Connecticut Section Meeting ~ Douglas Sharafanowich, WA1SFH

Join Doug for a discussion of Connecticut news and activities.

4:00 PM — 4:50 PM Southboro W6

Eastern Mass Section Meeting ~ Jon McCombie, N1ILZ

Come to a town hall meeting with the ARRL Eastern Mass Section Manager. Meet fellow EMA Section members and hear updates on what's going on in the Section.

5:00 PM — 6:30 PM Atrium Lobby

Board Games and Social Hour ~ Seth Kendall, KC1PZY

Play some games with your fellow hams! We've got everything from party games, to strategy games, to classic games like Chess and Go.

7:00 PM — 10:00 PM Marlboro W9

7:00 — 9:00 PM Salon A/B E-2/4

**Saturday Banquet
Nathaniel A. Frissell, W2NAF**

Nathan will discuss the results from a number of recent HamSCI experiments, what's next for HamSCI in the future, and how you can participate in these exciting projects.

Door Prize: YAESU FT-710 HF/50 MHz 100w Transceiver

Evening Activity

9:00 PM — 11:00 PM Atrium Lobby

Open Mic Storytelling ~ Phil Temples, K9HI

Perhaps ham radio impacted your life in a way you couldn't have imagined? Now's the time to share your ham radio-related story! This event will allow each participant to tell the audience their unique ham radio story.



Visiting Nantucket? Check in to W1TUK/R.
Need Nantucket County, FN42, FN51, NA-046? Contact K2LEK, ND1L, W2JH via QRZ.
Join us on our net, W1TUK/R Monday nights at 7:30PM.

Join Us in Welcoming the NEW QCWA!



Stop by our booth to see what QCWA has been up to!

- Learn about our September "30 in 30" contest, with prizes for both members AND non-members
- Join one of our many weekly (and some daily) nets
- Some 'hints' about the future...
- Join us here at the show at our Sunday "Meet and Great" (details at the booth)
- QCWA has over 200 chapters world-wide. Consider joining one of our New England chapters: Maine Pinetree chapter 134, VT/NH Twin State 146



Sunday 25 August 2025

10:00 — 10:50 AM *Duchess E1*

QCWA Get-together ~ John Facella, K9FJ

Join John for an intro to the Quarter Century Wireless Association or just to meet and greet other members. John is currently a Director of the QSWA.

10:00 — 10:50 AM *Seminar E3*

HF Contesting with a Moderate Station ~ John Webster, NN1SS

This is a reprise of John's Saturday presentation. [See Saturday @ 1 PM]

10:00 — 10:50 AM *Wayland W1*

Military Auxiliary Radio System (MARS) and Shared Resources (SHARES) Awareness for Amateur Radio Operators

~ Tom Kinahan, N1CPE

The Amateur Radio Operator has many outlets to exercise their communications skills. MARS and SHARES are opportunities to work with Federal Government Agencies including the Department of Defense, and Department of Homeland Security and all Federal Government agencies using HF radio.

10:00 — 10:50 AM *Sterling W2*

Next Generation Emergency Nets ~ Don Rolph, AB1PH

Don will explore some experimental efforts in developing next generation emergency nets. He will consider impact of forms based messages and the need to cover large portions of the US using RF only.

10:00 — 10:50 AM *Westboro W8*

License Testing Session III ~ MMRA



Wellesley Amateur Radio Society



Join us Wednesdays
@ 8 p.m. on the
147.03 MHz Repeater
(+600 kHz, PL 123 Hz)



*Welcoming Hams
Since 1950*

The Wellesley Amateur Radio Society
P. O. Box 812223
Wellesley, MA 02482-0015



<https://ema.arrl.org/wellesley-amateur-radio-society>

FEMARA Incorporated

FEMARA Inc. is a Massachusetts non-profit corporation that sponsors and runs the ARRL New England Convention. The group, which has been in existence for over 37 years, began as a consortium of area radio clubs. FEMARA is qualified under IRS 501(c)(3). Donations to FEMARA are deductible as allowed by IRS regulations. Our mission: To support the ARRL Foundation's Scholarship Program by offering the richest and most comprehensive ARRL convention in the country.

73

Bob DeMattia — K1IW

President, FEMARA, Inc.

FEMARA Officers

President	Bob DeMattia - K1IW
Vice President	Phil Temples - K9HI
Treasurer	Joyce DeMattia - K1IWW
Clerk	Barbara Irby - KC1KGS
Directors	Larry Krainson - W1AST
	Mike Raisbeck - K1TWF
	Larry Banks - W1DYJ

Convention Committee

General Chair	Mike Raisbeck - K1TWF
Vice Chair, Operations	Bob DeMattia - K1IW
Flea Market, DXCC Dinner	Ray Lajoie - AS1SE
Program Committee Chair	Skip Youngberg - K1NKR
Volunteer Coordinator	Barbara Irby - KC1KGS
Publication Editor	Larry Banks - W1DYJ
ARRL Exams	Ron Rothman - WO1E
Marketing & Promotions Chair	Larry Krainson - W1AST
GOTA Station (W1XPO)	David "Tess" Tessitore - K1DT
ARRL NE Division Director	Tom Frenaye - K1KI
Youth & Collegiate Chair	Bob Phinney - K5TEC

Program Committee

Chair	Skip Youngberg - K1NKR
-------	------------------------

Marketing and Promotion Committee

Chair	Larry Krainson - W1AST
Phil Temples - K9HI	Bruce Blain - K1BG
Kellye Eversole - K1SOE	Tom Frenaye - K1KI
Barbara Irby - KC1KGS	Bob Phinney - K5TEC
Mike Raisbeck - K1TWF	Marv Turner - W0MET
Eric Williams - KV1J	

Youth & Collegiate Activities Committee

Chair	Bob Phinney - K5TEC
Max Kendall - WØMXX	Charlie Nicholson - KC1SFR
Zachary Sherman - KC1NXX	Bruce Tinkler - N9JBT
Ewoud Van Vooren - K1EVV	Steven Van Vooren - K1SVV

Tower space for rent Hopkinton, MA



Honey Hill

Coverage based on a 25-Watt UHF mobile using a 5db gain antenna during foliage

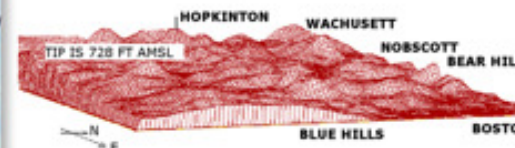
North: Leominster, Mass.

South: Rhode Island Border

West: Worcester plus Sturbridge on Mass Pike

East: Logan Airport, Boston

30-50 MHz coverage extends much farther.



198ft tower, tip is 728ft AMSL

Users include:

Public safety/government

Businesses - Cellular

Land mobile dealers

Hams for shared use

Wireless ISPs

www.metrowestsystems.com

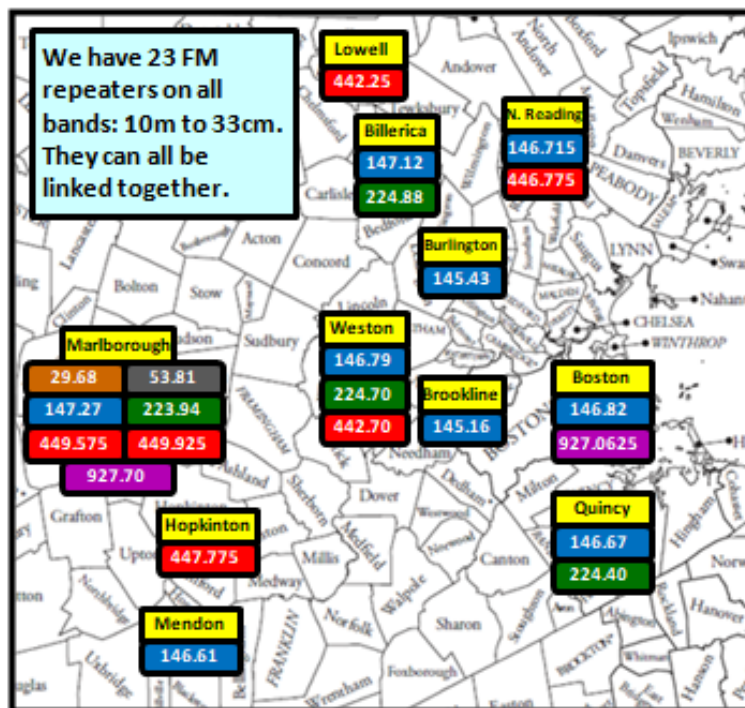
MetroWest Systems, Inc. KK1RZ

603-703-4740 rick @ rickzach.com



Minuteman Repeater Association

Extends a welcome to all
convention attendees!



Official Provider of the
Exam Sessions and
the Talk-In station for

Northeast
HamXposition

Come visit us in the Main Hallway (across from the exhibit hall) where you can meet some of our members, join our club, and enter for a chance to win one of our great door prizes.