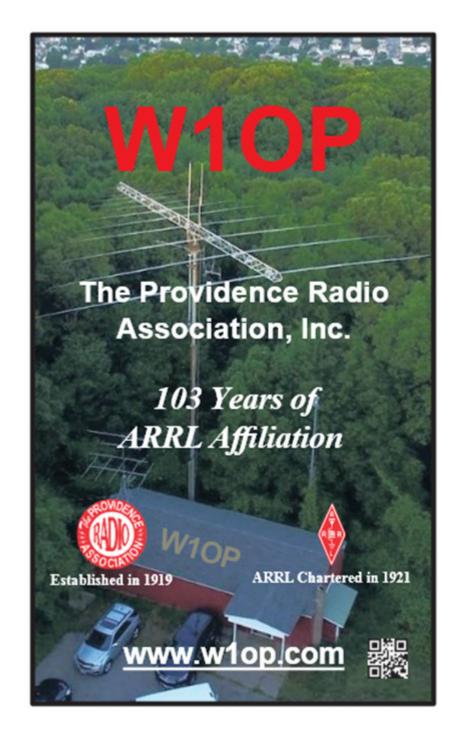
# Northeast HamXposition and ARRL New England Division Convention

# August 22 — 25 2024

### Our 41st Convention



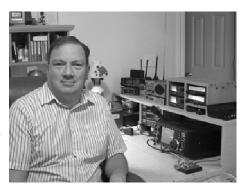
Best Western Royal Plaza Hotel & Trade Center Marlborough, Massachusetts



### **Welcome to** Northeast HamXposition 2024

Welcome!

You've got a flea market to check out, a bursting-at-theseams exhibit hall, and over ninety presentations, workshops and forums to attend, so I'll keep this brief.



A big thanks to our generous

vendor and sponsors for donating over \$3000 in prizes, with \$10,000 in prizes overall! Another big thanks to all the folks listed elsewhere in this brochure that helped put together our biggest program yet! And finally, many thanks to you for coming out to HamXposition. As attendance increases, it will enable us to secure more exhibitors and expand the program further!

73 & enjoy the event!

Bob DeMattia - K1IW

Chairman, HamXposition 2024



# 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)

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 2024 Schedule

### **Thursday, August 22**

Comedian Juston McKinney — 8pm

### Friday, August 23

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

Workshops: mini-Contest University, Kit Building, Others

DX/Contest Dinner: 7 — 9:30 pm

Well-known and international DXer/Contester Yuri Onipko, VE3DZ, recaps his 50 years of DXing and Contesting activities.

Yuri was the 2022 WRTC winner.

Door Prize: \$500 DX Engineering Gift Card

### Saturday, August 26

Flea Market and Exhibit Hall: 9 am — 5 pm

Keynote: ARRL Education Mgr Steve Goodgame, K5ATA: 9 am

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

EmComm Trainer Exhibits Forums: 10 am — 5 pm

Convention Banquet: 7 - 9:30 pm

Featuring Dr. Tamitha Skov, WX6SWW, the "Space Weather Woman." Dr. Skov will show us how space weather impacts

our daily life.

Door Prize: FT-710

Games | Storytelling | Jam Session start at ~9 pm

### Sunday, August 27

Flea Market and Exhibit Hall: 9 am — 1 pm

Forums: 10 am — 1 pm

VE Exam: 10 am

Grand Prize Drawing @ 1 pm: IC-705, X6100, ID-50A, more!

### W1XPO GOTA station in Corporate Room, E7

### **DXCC Card Checking** in the exhibits area

<u>Fox Box</u>: 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.

### **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

### **Northeast HamXposition Through the Years**

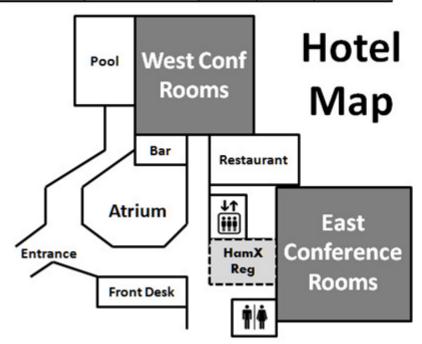
Prior to becoming an official convention, FEMARA held a picnic and hamfest. In 1958 it was held at Norumbega Park in Newton and in 1959 at the New Ocean House hotel in Swampscott. In 1960, the hamfest became the official ARRL New England Convention.

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.

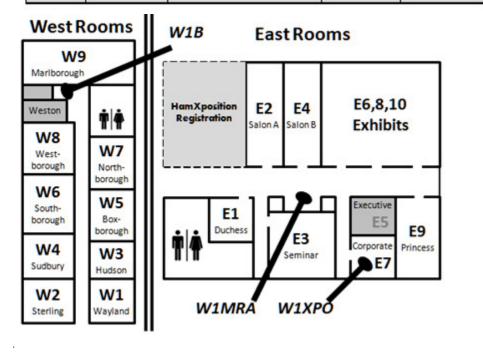
Before FEMARA sponsored the convention various others group did, starting in 1924.

| #  | Year | Dates           | Location  | Admission     |
|----|------|-----------------|---|---------------|
| 1  | 1960 | May 1           | New Ocean House, Swampscott                         |               |
| 2  | 1961 | Apr 8,9         |   |               |
| 3  | 1962 | Apr 7,8         |   |               |
| 4  | 1963 | Apr 27,28       |   |               |
| 5  | 1964 | May 9,10        |   | 42 1 /44      |
| 6  | 1965 | Apr 24,25       |   | \$3 adv / \$4 |
| 7  | 1966 | Apr 22,23,24    | Prudential Center, Boston  ARRL National Convention |               |
| 8  | 1967 | Apr 22,23       | New Ocean House, Swampscott                         | 1             |
| 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                              |               |
|    |      |                 | ARRL National Convention                            | 62.464        |
| 12 | 1973 | Sep 29,30       | Dunphy's Resort, Hyannis                            | \$3 / \$4     |
| 13 | 1976 | Sep 10,11,12    | Statler Hilton, Boston                              | <u> </u>      |
| 14 | 1978 | Oct 14,15       | Sheraton, W-5 (Boxborough)                          |               |
| 15 | 1980 | Oct 3,5         |   | \$4 / \$5     |
| 16 | 1982 | Oct 2,3         |   |               |
| 17 | 1984 | Sep 29,30       |   | \$6           |
| 18 | 1986 | Oct 18,19       |   | \$6           |
| 19 | 1988 | Oct 1,2         |   | \$6 / \$7     |
| 20 | 1990 | Oct 13,14       |   | \$7 / \$8     |
| 21 | 1992 | Oct 3,4         | Host Hotel. W-5 (Boxborough)                        | \$7           |
| 22 | 1994 | Oct 1,2         |   | \$7 / \$8     |
| 23 | 1996 | Oct 4,5,6       | Boxboro Woods Holiday Hotel                         | \$7 / \$8     |
| 24 | 1998 | Aug 29,30       | Holiday Inn, Boxboro                                | ¢c / ¢o       |
| 25 | 2000 | Aug 25,26,27    |   | \$6 / \$8     |
| 26 | 2002 | Aug 23,24,25    |   | \$8 / \$10    |
| 27 | 2004 | Aug 13,14,15    |   | \$10 / \$12   |
| 28 | 2006 | Aug 25,26,27    |   |               |
| 29 | 2008 | Aug 22,23,24    |   |               |
| 30 | 2010 | Aug 27,28,29    |   |               |
| 31 | 2012 | Aug 24,25,26    |   | 615           |
| 32 | 2015 | Aug 21,22,23    |   | \$15          |
| 33 | 2016 | Sep 9,10,11     |   |               |
| 34 | 2017 | Sep 8, 9, 10    | Boxboro Regency Hotel and Confer-                   | ]             |
| 35 | 2018 | Sep 7, 8, 9     | ence Center   |               |
| 36 | 2019 | Sep 6, 7, 8     |   | \$18          |
| 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, 26, 27  |   | \$18          |
| 41 | 2024 | Aug 22—25       | YOU ARE HERE!                                       | \$18          |

|         |  | Friday 23 Augu   | st 2024            |           |                               |  |
|---------|--|--|--------------------|-----------|-------------------------------|--|
|         |  | E1   | E2                 | E4        | E3                            |  |
| Room:   | Atrium Lobby   | Duchess  | Salon A            | Salon B   | Seminar                       |  |
| 8:30    | ř.   |  |                    |           | Registration                  |  |
| 9 AM    | NEQRP Breakfast                                      |  |                    |           |                               |  |
| 10 AM   |  |  |                    |           | 1                             |  |
| 11 AM   |  |  | 1                  |           | ]                             |  |
| 12 noon |  |  |                    | Ĭ.        | ]                             |  |
| 1 PM    | Kit Building<br>Workshop<br>Kit Building<br>Workshop | Introduction to the<br>TinySA Workshop<br>TinySA Measurement<br>Workshop | Winlink Workshop   |           | mini<br>Contest<br>University |  |
| 3 PM    | Kit Building<br>Workshop                             | 2024 Skywarn<br>Spotter Class  |                    |           |                               |  |
| 4 PM    |  | Spotter cluss  | 8                  |           | <u> </u>                      |  |
| 5 PM    |  |  | 0                  |           |                               |  |
| 6 PM    |  |  |                    |           |                               |  |
| 7 PM    |  |  | DX/Contest Banquet |           | l,                            |  |
| 8 PM    |  |  |                    | ko, VE3DZ | r e                           |  |
| 9 PM    |  | CW Pileup  | Turi Onip          | KU, VESUZ |                               |  |
|         |  | Competition  |                    |           |                               |  |



|   |  | Friday 23 August 2024                                  | 1            |  |
|---|--|--|--------------|--|
| E9  | W1   | W2   | W6           | W9   |
| Princess  | Wayland  | Sterling   | Southborough | Marlborough                                  |
|   |  |  |              |  |
| Installation<br>of Andy's<br>Ham Radio<br>Linux | NWS SKYWARN<br>and ARRL ARES:<br>30 Years of<br>Support and<br>Partnership in<br>New England | Embracing the Chill at Winter<br>Field Day 2025        | Club Track   | Zero to Hero -<br>KiCAD Workshop<br>Part 1   |
|   | RadioCraft Mod   | What's Noise?  |              | Part 2                                       |
|   | for MineCraft<br>Workshop  | The Highs and Lows of<br>Aeronautical Mobile Operation |              | Part 3                                       |
|   |  |  |              | NEQRP Friday<br>Night Dinner Get<br>Together |



|               |  |   |  | y 26 Augus  |   |   |   |
|---------------|--|---|--|---|---|---|---|
| Room          | Atrium   | E1  | E2   | E4  | E3  | E9  | W1  |
| 9 AM          |  | Duchess   | Salon A<br>2024 Keynote:<br>STEM and the<br>ARRL Teachers<br>Institute | Salon B   | Seminar   | Princess  | Wayland   |
| 10 AM         | Kit Building<br>Workshop                         |   |  | A Lot Has<br>Changed in<br>10 Years. Are<br>You<br>Considering<br>a New Radio?                        | StratoScience<br>2024 - Ham<br>Radio and<br>Education to<br>New Heights | Building<br>Relationships in<br>EmComm                      | D-STAR<br>Review  |
| 11 AM         | Kit Building<br>Workshop                         | POTA<br>Activations   | Elecraft K4<br>update  | AMSAT<br>Current<br>Projects  | Tiny4FSK - A<br>Cutting-Edge<br>High-Altitude<br>Tracking System        | The Great<br>Springfield<br>Tornado of 2011                 | 13 Colonies<br>Special Even   |
| 12<br>Noon    | Youth<br>Forum New<br>England<br>Sci-Tech<br>ARS | Make Your<br>Next<br>Portable<br>Activation a<br>SUPER<br>Activation!   | ARRL New<br>England<br>Division Forum                                  | Amateur<br>Radio<br>Emergency<br>Data<br>Network - A<br>Tool in the<br>EmComm<br>Messaging<br>Toolbox | Andy's Ham<br>Radio Linux   | RadioCraft: A<br>Ham Radio Mod<br>for Minecraft             | EmComm -<br>What You<br>Need To<br>Know                                 |
| 1 PM          | Kit Building<br>Workshop                         | So You Want<br>to Volunteer<br>as a Ham at<br>the Boston<br>Marathon,<br>What's Next<br>and What to<br>Expect | VHF/UHF<br>Digital Voice   | Radio &<br>Steam<br>Technology<br>at The New<br>England<br>Wireless &<br>Steam<br>Museum              | Low Cost USB-<br>centric RF Test<br>Equipment for<br>Amateur Radio      | "Spy" Radios and<br>Secret<br>Clandestine<br>Communications | Go Kits   |
| 2 PM          | Kit Building<br>Workshop                         |   | 7 years later  | Getting<br>Schools into<br>Ham Radio  | FEMA Disaster<br>Communication  | How to Become a<br>POTA Hunter                              | Emcomm<br>Antennas  |
| 3 PM          | Kit Building<br>Workshop                         | YL Meet and<br>Greet  |  |   | s   | CT-POTA<br>Activators Group                                 | Leasons<br>Learned as a<br>Ham for<br>Broadcast RF<br>and vice<br>versa |
| 4 PM          |  |   |  |   | ARRL Technical<br>Coordinator<br>Program                                |   | RI Section<br>Meeting   |
| 5-6           |  | 100   |  |   |   |   |   |
| 7 PM          |  |   | 0_000  | 01-113-113  |   |   |   |
| 8 PM          |  |   | Grand B  | anquet  | 7   |   |   |
| 9 PM<br>10 PM | Game<br>Night &<br>Ogen-Mic<br>Sorytelling       |   | Ø  |   |   | Informal Music<br>Jam Session                               |   |

| Saturday 26 August 2024                               |  |            |  |  |   |                  |   |
|---|--|------------|--|--|---|------------------|---|
| W2  | W3   | W4         | W5   | W6   | W7  | W8               | W9  |
| Sterling  | Hudson   | Sudbury    | Boxboro  | Southboro  | Northboro   | Westboro         | Mariboro  |
| Embracing<br>the Chill at<br>Winter Field<br>Day 2025 | Ham Shack<br>on Wheels   |            | APRS Secrets   |  | Enjoying<br>Success as a                                | VEC Session<br>I |   |
| How I got<br>into EME                                 | Insights from<br>the Booth:<br>Resurrecting<br>A College<br>Radio Club |            | Introduction<br>to Winlink   | How the<br>MARCONI<br>Program Can<br>Grow Your Club  | POTA<br>Operator  |                  | 2 .   |
| Power Line<br>RFI hunting<br>On the Go                | The Highs<br>and Lows of<br>Aeronautical<br>Mobile<br>Operation        | Tech-In-A- | How to Outfit a Camper for Ham Radio and Still Have a Camper Your Family Will Approve Of | FEMA<br>Community<br>Lifelines for the<br>Radio Amateur  | NESMC<br>Board<br>Meeting<br>(closed)                   |                  | NEQRP<br>Lucheon<br>Gathering                                 |
| PSKReporter<br>Then and<br>Now                        | Open<br>Headset<br>Interface<br>Standard                               | Day        | Advanced<br>Winlink  | 1DegreeOutside:<br>A Digital-First<br>Weather<br>Approach and<br>the Vital Role of<br>SKYWARN<br>Spotters        | Rig Expert<br>Product<br>Overview                       |                  | 25 Years of<br>My QRPme<br>Schtick!                           |
| FlexRadio -<br>Not Your<br>Dad's Old HF<br>Radio      | NTS Meet<br>and Greet  |            | Off Grid and<br>Portable<br>Operations,<br>2023 reprise                                  | Advanced Topics<br>in SKYWARN -<br>Doppler Radar<br>Fundamentals &<br>How You Can<br>Help with Severe<br>Weather | An Effective<br>Contest<br>Station<br>without<br>Towers | VEC Session      | Antenna<br>Phasing  |
| What's<br>Noise?                                      | VarAC - Basic<br>and<br>Advanced<br>Uses                               |            | Off Grid and<br>Portable<br>Operations,<br>2024 Update                                   | New England<br>Spectrum<br>Management -<br>Annual Meeting  | YCCC Forum  |                  | Antenna<br>Matching   |
| NH Section<br>Meeting                                 |  |            |  | Eastern Mass<br>Section Meeting  |   |                  |   |
|   |  |            |  |  |   |                  | NEQRP Meet<br>& Greet,<br>Vendors<br>Night, &<br>Build-a-thon |

|         | Sunday  | 25 August                           | 2023     |   |  |
|---------|---|-------------------------------------|----------|---|--|
| Room:   | E1  | E2                                  | E4       | E3  |  |
| KOOM:   | Duchess                                       | Salon A                             | Salon B  | Seminar   |  |
| 9 AM    | Western Mass<br>Section Membership<br>Meeting |                                     |          |   |  |
| 10 AM   | How to Become a<br>POTA Hunter<br>(repeat)    | Introductory and<br>Advanced FLDIGI |          | The Quirks of<br>Arduino-based 2.4<br>GHz Operating |  |
| 11 AM   | Getting Started in<br>Remote Operations       | Configura<br>Usa                    |          | Helical Antennas<br>and Circular<br>Polarization    |  |
| 12 noon | MMRA Meeting and<br>Raffle                    |                                     |          | Receiving Weak<br>Signals at 2.4 GHz                |  |
| 1 PM    |   | Closing C                           | eremony  |   |  |
| 2 PM    |   | & Prize [                           | Orawings |   |  |

### **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 >

| Princess Wayland Westboro  MARS: How Hams Train with DoD Using HF Communications  The National Traffic System: What is it? Why do We Care? Where Can We Find More Information?  Westboro  MARS: How Hams Train with DoD Using HF Communications  WEC Session III | Sunday  | 25 August 2023             |             |  |
|--|---|----------------------------|-------------|--|
| APRS Secrets (repeat)  MARS: How Hams Train with DoD Using HF Communications  The National Traffic System: What is it? Why do We Care? Where Can We  MARS: How Hams Train with DoD Using HF Communications  WEC Session III                                      | E9  | W1                         | W8          |  |
| APRS Secrets (repeat)  Train with DoD Using HF Communications  The National Traffic System: What is it? Why do We Care? Where Can We  Train with DoD Using HF Communications  WEC Session III  | Princess  | Wayland                    | Westboro    |  |
| The National Traffic System: What is it? Why do We Care? Where Can We Meeting  | APRS Secrets (repeat)                               | Train with DoD<br>Using HF | VEC Session |  |
|  | System: What is it? Why do<br>We Care? Where Can We |                            | Ш           |  |
|  |   |                            |             |  |

### **2024 FEMARA Scholarship**

Congratulations to 2024 FEMARA Scholarship recipient:

Iain Nicol, KQ4BDT, Hampton, NH

### **Moonbounce Donations (≥ \$50)**

FEMARA thanks the following individuals for their support:

| NI1Q          | Emily Clark        | K1DP               | Dominic Padula      |
|---------------|--------------------|--------------------|---------------------|
| K1EHT         | Eric Thayer        | K1EP               | Ed Parish           |
| K1RAU         | Dan Rau            | K1UAF              | John Gotthardt      |
| KB10IQ        | Andy Stewart       | KC1KGS             | Barbara T Irby      |
| KD1FW         | James Cavanaugh    | KD1SM              | Ralph Swick         |
| K5TEC         | <b>Bob Phinney</b> | W1DYJ              | Larry Banks         |
| W1GS          | John Good          | W1MVP              | Michael Pasquale    |
| W1STR         | New Eng SciTech    | W1USN              | Michael Roux        |
| WI1I          | Bernie Quartaroli  | WA1ENO / WB1AR     | U Tony & Anne Manna |
| WO1E          | Ron Rothman        | AD2CT              | Robert Gill         |
| W2APF         | Thaire Bryant      | AA3HD              | Tony Baker          |
| W3TZH         | Chris Dascenzo     | WB8QWQ             | William Klomparens  |
| <b>W0MET</b>  | Marvin Turner (The | Ham Radio Guy Podo | ast)                |
| Andrea Judsor | 1                  |                    |                     |

(Our apologies if we missed listing any donations from after 6 August.)



145.430 (+) D-Star

442.450 (+) D-Star

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

An ARRL Special Services Club

- · Monthly meetings in-person and Repeaters online. Monthly breakfasts too. 146.955 (-) PL 74.4 Public service events. Fox hunts.
  - Fantastic Field Day!
  - Technical support and mentoring.
  - Over 100 members and growing.



Field Day Antenna Team

Visit wb1gof.org for more information or scan this OR



Thursday Night Comedy Kickoff — 8 PM **Juston McKinney** 

### Friday, 23 August 2024

 $9:00 \text{ AM} - 6:00 \text{ PM Seminar E3} \sim [8:30 \text{ AM Registration}]$ 

### Mini Contest University

### Doug Grant, K1DG & Tim Duffy, K3LR

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 — 9:50 PM Atrium Lobby

### **NEQRP Kickoff Breakfast**

9:00 AM — 4:50 PM Southborough W6

### 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 short talks, to help clubs energize, invigorate, and grow.

### 1:00 PM — 1:50 PM Atrium Lobby

### Kit Building Workshop ~ Bob Phinnev. K5TEC

Beginners age 10 and up who need soldering instruction/practice can join us to build an easy kit in under an hour. Choose from several kits - Morse Code Oscillator, Blinky Name Badge, Night Light, Spinning Top, FM Music Receiver. Price per kit is between \$5-\$10, cash only.

### 1:00 PM — 1:50 PM Duchess E1

### Introduction to the TinvSA 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.

### 1:00 PM — 3:50 PM Salon A/B E2/3

### Winlink Workshop ~ Rory Griffin, W4RJG

We will show how to download and install the client version of Winlink, what the initial settings need to be, how to create and send a message, and how to receive messages. The Winlink client only runs on Windows. Please make sure your Wi-Fi connection works.

#### 1:00 PM — 1:50 PM Princess E9

#### Installation of Andv's Ham Radio Linux ~ Andv Stewart . KB10IO

Bring your PC laptop (not Apple), power supply, mouse, etc. Andy will guide you through the installation process, and get you started with your newly configured computer. Computer specs: a fully functioning computer; the hard drive will be erased; 4GB+ of memory; 64GB+ of disk space. Computers older than about 7 years may be problematic. The USB boot software in the BIOS must be able to boot from an 8GB USB memory stick (thumb drive).

#### 1:00 PM — 1:50 PM Wayland W1

#### NWS SKYWARN and ARRL ARES: 30 Years of Support and Partnership in **New England ~ Glenn Field, KB1GHX** Join Glenn as he talks about the

NWS SKYWARN program and ARRL ARES partnership over his tenure from 1993 to 2023. Learn some of the best practices Glenn supported and how he appreciated Amateur Radio support so much that he became a ham. He will discuss his participation in SKYWARN Nets and events over his career. He will also discuss some of the severe weather events where SKYWARN reporting was critical to the warning process to help save lives and property.

### 1:00 PM — 1:50 PM Sterling W2

Embracing the Chill at Winter Field Day 2025 ~ Marvin Turner, WØMET, President of the Winter Field Day Association Winter Field Day is a contest and an experience that challenges operators to set up temporary stations in winter conditions. This will provide a firsthand look into the planning, activities, and the sense of adventure that makes it a highlight on the ham radio calendar.



### Come join the fun @hcra.org



Hampden County Radio Association offers: Monthly newsletter. Share the Knowledge educational videos, kit building, weekly HF nets, social gatherings, Field Day activities, fox hunts, in-person and livestreamed meetings, and much more!

### Friday 23 August 2024

1:00 PM - 3:50 PM Marlboro W9

### Zero to Hero - KiCAD Workshop ~ Max Kendall, WØMXX

Come in without experience; come out ready to finish your board in KiCAD. NOTE: Please come with a laptop downloaded with the most recent version of KiCAD. Parts 1-3 are for those new to KiCad. Parts 2 and 3 are for those who have some KiCad experience.

2:00 PM — 2:50 PM Atrium Lobby

Kit Building Workshop ~ Repeat: see 1 PM

2:00 PM — 2:50 PM Duchess E1

### TinySA Measurement Workshop ~ Greg Algieri, WA1JXR

In the TinySA Measurements Workshop we will demonstrate typical measurements that can be performed with the TinySA Spectrum Analyzer. If you own a TinySA, bring it to the Measurements Workshop and you can participate in the demonstrations.

2:00 PM - 3:50 PM Wayland W1

### RadioCraft Mod for MineCraft Workshop ~ Lucas Elliot, W1BTR

RadioCraft, a ham radio mod for MineCraft, is a full-featured simulation of ham radio, with multi-band transceivers, antennas, solar panels, power supplies, and coax. This workshop will help you load RadioCraft and play the game. Bring a laptop with MineCraft installed.

### 2:00 PM — 2:50 PM Sterling W2

What's Noise? ~ Gregory Bonaguide, WA1VUG Greg will present an introduction to noise--what it is, how it affects us, noise in our equipment--and what we can do about it.

2:00 PM — 3:50 PM Atrium Lobby

Kit Building Workshop ~ Repeat: see 1 PM

3:00 PM - 3:50 PM Duchess E1

### 2024 Skywarn Spotter Class ~ Rob Macedo, KD1CY

This is the traditional SKYWARN training class offered by NWS Boston/Norton.

3:00 PM — 3:50 PM Sterling W2

### The Highs and Lows of Aeronautical Mobile Operation

**Kim O Peck, WA1PBU** A brief description of the details of operation from light aircraft.

5:00 PM — 10:00 PM Marlboro W9

**NEORP Friday Night Dinner Get-Together** The 'Early Birds meet and greet'. Join friends for pizza, conversation, and videos. Kits for the build-a-thon will be displayed.

7:00 — 9:30 PM Salon A/B E-2/4

**DX / Contest Dinner** 

Yuri Onipko, VE3DZ

The DX Dinner will feature well-known international DXer/Contester Yuri Onipko, VE3DZ, as he recaps his 50 years of DXing and Contesting activities and shares his operating experiences from a variety of locations around the world.

**Door Prize: \$500 DX Engineering Gift Certificate** 

**Evening Activity** 

9:00 PM — Midnight Duchess E1

### Kansas City DX Club "CW Pileup Competition" hosted by Ed Parish,

Join your friends for HamXposition's first annual "Kansas City DX Club's CW Pileup Competition." This competition has become a weekend tradition at the Dayton Hamvention<sup>®</sup>. Participants are charged with copying as many calls as possible from a pileup of about 100 calls. The pileup file simulates a possible "on the air" experience, with P.9 Northeast His some calls sent once, some twice, at varying speeds and pitches.



### 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



### Saturday 24 August 2024

### 9:00 AM E-2 (Salon A)

### **Keynote Address**

### **Steve Goodgame, K5ATA**

**ARRL Education and Learning Department** 

### STEM and the ARRL Teachers Institute

9:00 AM — 5:00 PM Sudbury W4

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

9:00 AM — 11:00 AM Westborough W8

**VEC Session I** 

10:00 AM — 10:50 AM Atrium Lobby

Kit Building Workshop ~ Repeat: see Friday @ 1 PM

10:00 AM — 10:50 AM Seminar E3

#### StratoScience 2024 - Ham Radio and Education to New Heights Max Kendall. WØMXX 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.

#### 10:00 AM — 10:50 AM Salon B E4

### A Lot Has Changed in 10 Years. Are You Considering a New Radio? Rob Sherwood, NCØB

Let's demand cleaner transmitters (and better receivers). Rob, an internationally known expert in radio specifications and performance, will use his contesting experience to comment on current popular transceivers.

10:00 AM — 10:50 AM Princess E9

### Building Relationships in EmComm ~ Josh Johnston, KE5MHV

Josh will discuss what we can do to be better communicators and when communications are needed the most.

100:0 AM — 10:50 AM Wayland W1

### **D-STAR Review ~ Terry Stader, KA8SCP**

A review of D-STAR in our region. A chance to ask questions about using D-STAR and its interaction with other digital modes.

10:00 AM - 10:50 AM Sterling W2

### **Embracing the Chill at Winter Field Day 2025**

Encore Presentation: see Friday @ 1 PM

### Saturday 24 August 2024

10:00 AM - 10:50 AM Hudson W3

### Ham Shack on Wheels ~ Chris Knox, KI1P

A solution to living in a valley location with poor radio propagation, Chris turned this former TV news van into a Ham Shack on Wheels, completely outfitted with radio communications from 160 through UHF including onboard repeaters and a satellite station.

### 10:00 AM — 10:50 AM Boxborough W5

### **APRS Secrets ~ Gary Francis Thomas, AA1UE**

Everything You wanted to know about APRS but were afraid to ask. Why APRS is more relevant today than ever. How to make the most of simple equipment on the cheap. Unlocking the hidden features of today's advanced APRS-equipped HTs. How will the new bandwidth regulations impact the future of APRS and its progeny.

### 10:00 AM — 11:50 AM Northborough W7

### Enjoying Success as a POTA Operator ~ Don Dickey, WV1W

This presentation will focus on how to be successful when activating parks. With over 600 activations and 58,000 POTA QSOs logged, Don will share my experiences in a variety of situations to help you avoid the mistakes he learned from. He will also show what's in his POTA kit including high-performance portable antennas you can easily build from components you might have on-hand. You will learn what you need but also what you don't, and that should save you lots of \$\$\$.

### 11:00 AM — 11:50 AM Atrium Lobby

Kit Building Workshop ~ Repeat: see Friday @ 1 PM

11:00 PM — 11:50 PM Duchess E1

### **POTA Activations ~ Brian Horne, N1BAM**

PO Box 583

Meriden CT 06450

A review of the steps to have a successful (and fun) first activation. Signing up with the website, finding parks, different setups, and logging options. There are a lot of ways to POTA, from quick hit mobile to group setups. We will talk about multifunction scalable setups and how to carry only what you need when you need it.

### Meriden Amateur Radio Club

Wallingford Amateur Radio Group 143 Hope Hill Road, Wallingford, CT 06492



www.W1NRG.com postmaster@W1NRG.com W1NRG/r 147.36 PL 162.2

### Saturday 24 August 2024

### 11:00 AM - 11:50 AM Salon A E2

### Elecraft K4 update ~ 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 Salon B E4

AMSAT Current Projects ~ Burns Fisher, WB1FJ A presentation of current satellite projects at AMSAT, as well as a summary of educational initiatives.

#### 11:00 AM — 11:50 AM Seminar E3

### Tiny4FSK - A Cutting-Edge High-Altitude Tracking System

Max Kendall, W0MXX Come and see Tiny4FSK, an ultra compact, low-power tracking system to be flown at high altitudes. It uses modern technology and combines it with the long-lasting amateur radio hobby to provide a reliable, lightweight tracking system. As the first 4FSK tracking system designed for amateurs, Tiny4FSK brings features like high transmit rates, forward error correction, and weak signal propagation in an open source package.

### 11:00 AM — 11:50 AM Salon B E4

### AMSAT Current Projects ~ Burns Fisher, WB1FJ

Presentation of current satellite projects at AMSAT, and a summary of educational initiatives.

### 11:00 AM — 11:50 AM Princess E9

### The Great Springfield Tornado of 2011 ~ Bob Hassett, KB1/VG

An overview of Springfield's response and recovery actions to the EF-3 tornado in June of 2011 by the ham who was the city's Emergency Manager then.

### 11:00 AM — 11:50 AM Wayland W1

### 13 Colonies Special Event ~ Bob Josuweit, WA3PZO

Follow the growth of one of the largest summer special events. Learn what it takes to support a week-long operating event. Co-presenting with Larry, W1AST, Bob will review history and information on what it takes to organize and activate and work the 13 Colonies special event. Thirteen Colonies runs July 1-7 every year.

#### 11:00 AM — 11:50 AM Sterling W2

### How I got into EME ~ George Michael Conrad, N1ABC

George will walk us through an in-depth technical review of his experience getting into EME concentrating on the hardware development required to make a successful QSO. He'll bring along a homebrew dual-polarized Receiver and a KW Linear Amplifier.

#### 11:00 AM — 11:50 AM Hudson W3

### Insights from the Booth: Resurrecting A College Radio Club Hisen Zhang, KD2TAI

College radio clubs are at the forefront of reaching ham radio youth. However, they often face challenges leading to their decline or dissolution. This presentation aims to provide insights and observations from Hisen's past two years' experience in revitalizing his college radio club. He hopes to inspire and empower other student leaders facing similar challenges by debunking common myths and sharing proven strategies.

### 11:00 AM — 11:50 AM Boxborough W5

### Introduction to Winlink ~ Steve Schwarm, W3EVE

Basics of understanding Winlink. What it isn't. What it is. What is needed to get started with Winlink and how to send plain text messages and use basic Winlink forms.

### Saturday 24 August 2024

### 11:00 AM — 11:50 AM Southborough W6

### **How the MARCONI Program Can Grow Your Club Edward Snyder, W1YSM**

Motivating Amateur Radio Clubs to Open New Initiatives (MARCONI) is a program designed to grow your club and help grow less active clubs in your area. It is composed of nine projects that, by providing multiple areas of interest: increase club enthusiasm, recruit new members, and help revitalize clubs that are failing to grow. The presentation will address the nine areas and explain how the whole can be greater than the sum of the parts.

#### 12:00 PM — 12:50 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 round-table discussion. Great learning opportunity for teachers, scout leaders, or clubs wanting to attract more youth to their local radio clubs.

### 12:00 PM — 12:50 PM Duchess E1

### **Make Your Next Portable Activation a SUPER Activation!**

Mitch Stern, W1SJ It seems like everyone is doing a portable activation these days, and that's GREAT! With today's portable equipment, anyone can drag a radio into the field and call CQ. But how many stations will hear you with low power and a minimal antenna? Mitch will focus on the myriad details of setting up a super operation--one which will shoot fire and brimstone across the bands and result in pileups all day long, resulting in a ton of fun. Can you do that with a portable set up? You bet!

### 12:00 PM — 12:50 PM Salon A E2

### ARRL New England Division Forum ~ Fred Kemmerer, AB10C, &

Phil Temples, K9HI Division Director Fred and Vice Director Phil will

host a NE Division forum covering League news and activities.

### .12:00 PM — 12:50 PM Seminar E3

### Andy's Ham Radio Linux ~ Andy Stewart, KB10IQ

This talk will be about Linux and ham radio related software. Andy has created a software collection called 'Andy's Ham Radio Linux' which is freely distributed on Sourceforge. This talk will be a high level overview of the software collection. No Linux expertise is required.

#### 12:00 PM — 12:50 PM Salon B E4

#### **Amateur Radio Emergency Data Network - A Tool in the EmComm Messaging Toolbox** ~ *Jay Taft, K1EHZ* AREDN is one tool in the

EmComm tool box. The AREDN microwave system complements other tools by supporting IP-based messaging and various common applications that run over the Internet.

#### 12:00 PM — 12:50 PM Princess E9

### RadioCraft: A Ham Radio Mod for Minecraft ~ George Allison, K1IG

RadioCraft is a ham radio mod for MineCraft, the most popular online game of all time. This mod enables a full-featured simulation of ham radio, including multi-band transceivers, antennas, solar panels, power supplies, and coax. Game players can experiment with ham radio and communicate with other users in a realistic environment. This presentation demonstrates the mod and describes the history of its development.



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16 Tech Circle, Natick, MA Type nescitech.org or scan this ->





Extends a welcome to all convention attendees!

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.

Membership not required to win, and you don't have to be present to win.

### Winners drawn Sunday at noon

First Prize: YAESU VX-6R 144/220/430 HT

Second Prize: Weller WE1010NA 70W digital soldering station & Digital Multimeter

Third Prize: JUMBOSPOT MMDVM Hotspot







### Find our Fox Box, somewhere on the hotel grounds.

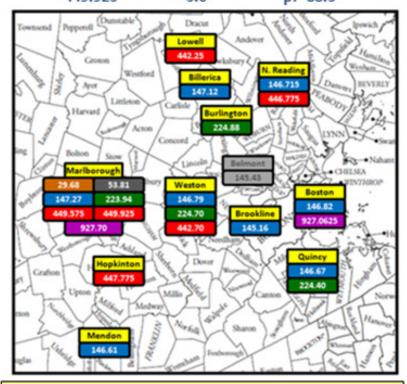
The MMRA Fox Box transmits on 145.63 MHz with a 146.2 Hz PL. Transmissions repeat ~ 165 seconds. It will be moved to a 2<sup>nd</sup> location Friday afternoon and a 3rd on Saturday afternoon.



### Official Provider of Talk-In for the

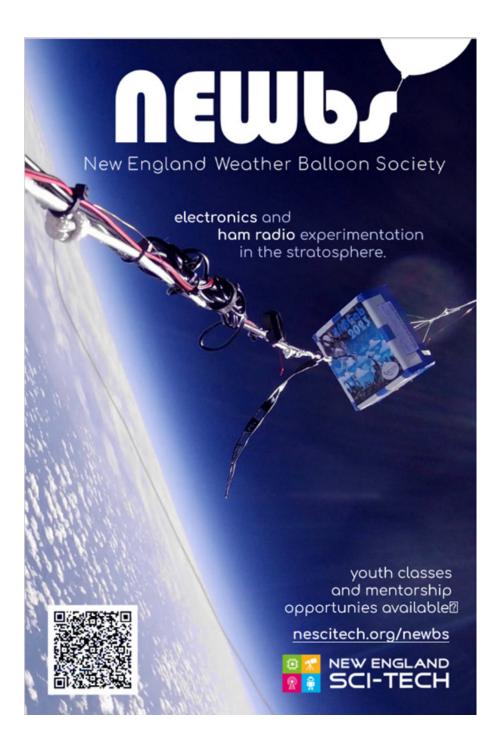
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Across Eastern and Central Massachusetts, we have 23 FM repeaters on all bands - 10M to 33cm

Includes 2 D-STAR repeaters, 2 Yaesu System Fusion capable repeaters, 4 IRLP nodes (two with Echolink), and APRS Digi.



### Saturday 24 August 2024

12:00 PM - 12:50 PM Wayland W1

### EmComm - What You Need To Know ~ Steve Schwarm, W3EVE

Steve will share what he has learned about emergency communications from his years of experience.

<u>12:00 PM — 12:50 PM Sterling W2</u>

### Power Line RFI hunting On the Go ~ Rob Leiden, K1UI

Case studies: finding power line RFI using laptop PCs, an HF transceiver, and an inexpensive GPS unit.

2:00 PM — 2:50 PM Southborough W6

### The Highs and Lows of Aeronautical Mobile Operation

Kim O Peck, WA1PBU Encore Presentation: see Friday @ 3 PM

12:00 PM — 12:50 PM Boxborough W5

### How to Outfit a Camper for Ham Radio and Still Have a Camper Your Family Will Approve Of ~ Steve Davidson, NA1T

Steve bought a camper new in 2018. His priority (per his family) has always been that whatever is done to it, it must be a camper first. With that in mind, the changes he made are mostly hidden and only come out when it is used for Amateur Radio. Looking like any other camper, this platform is able to convert into a 'Go-Box on Wheels.'

12:00 PM — 12:50 PM Southborough W6

### FEMA Community Lifelines for the Radio Amateur ~ Mike Corey, KI1U

The Community Lifelines construct was developed by FEMA to increase effectiveness in disaster operations. Radio amateurs provide an important service by providing situational awareness during a disaster. Understanding Community Lifelines helps the radio amateur focus on critical services and infrastructure to assist emergency managers.

12:00 PM — 12:50 PM Northborough W7

### **NESMC Board Meeting (closed) ~ Bob DeMattia, K1IW**

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

12:00 PM — 12:50 PM Northborough W7

**NEORP Luncheon Gathering** 

1:00 PM — 1:50 PM Atrium Lobby

Kit Building Workshop ~ Repeat: see Friday @ 1 PM

1:00 PM — 1:50 PM Dutchess E1

### So You Want to Volunteer as a Ham at the Boston Marathon. What's Next and What to Expect ~ Philip Lord, K1PRA

Everyone knows of the Boston Marathon. What many people may not know is that there is a significant number of ham radio operators that support event communications. An informal presentation geared for hams that want to volunteer but have questions and who don't know anyone in their club to ask.

1:00 PM — 2:50 PM Salon A E2

### VHF/UHF Digital Voice... 7 years later ~ Rick Zach, KK1RZ

In the past few years DV has gone from "I couldn't find a single club with experience using it" to "I have a hard time finding a club that does not use it." But just what is "it," and how many of those "its" are out there? Join Rick for a review of what's happening in the digital voice



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Welcome YOU to
NorthEast HamXposition 2024

And encourage you to take time to:

LOOK,
LEARN,
ASK QUESTIONS,
MEET GREAT PEOPLE,
and

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### Saturday 24 August 2024

modes. What may seem to be a cacophony of alphabet soup is actually ham radio at its best--exploring the technology and capabilities of numerous modulations and protocols.ons and exhibits. Emphasis will be placed on the contributions of volunteers.

### 1:00 PM — 1:50 PM Seminar E3

### Low Cost USB-centric RF Test Equipment for Amateur Radio Brian D Justin Jr, WA1ZMS

USB-centric RF test equipment is now becoming common for not only hobbyist, but also in the RF Industry. This talk will review the various options for such test equipment that can often fit in a 'ham budget.'

### 1:00 PM — 1:50 PM Salon B E4

### Radio & Steam Technology at The New England Wireless & Steam Museum ~ Kenneth J Carr, KE1RI

This presentation is an overview of the New England Wireless & Steam Museum campus which consists of five main buildings and their respective collections. Both radio and steam technology will be discussed; but the emphasis will be on antique and modern amateur radio collecti

### <u>1:00 PM — 1:50 PM Princess E9</u>

### "Spy" Radios and Secret Clandestine Communications Michael Crestohl, W1RC Tom and Mike will present their ever popu-

lar presentation and discussion about secret radio communications and related equipment used during the Second World War and afterwards. This includes the German Enigma and other forms of mechanical cryptography.

### 1:00 PM — 1:50 PM Wayland W1

### Go Kits ~ Francis M OLaughlin, WQ10

This presentation will go over the creation and usage of a basic field expedient 'Jump Kit' that can be carried by and used by a single operator. It will also go over some self contained portable station kits that are easily transportable.

### <u>1:00 PM — 1:50 PM Sterling W2</u>

### PSKReporter Then and Now ~ Philip Gladstone, N1DQ

Phil's PSKReporter project has been going and growing for over 15 years. This talk will describe what PSKReporter does for the modern ham and how it can best be used. This includes how to configure WSJT-X to report to PSKReporter. For the more adventurous, we will discuss how MQTT can be used to get a real-time filtered feed.

#### 1:00 PM — 1:50 PM Hudson W3

### Open Headset Interface Standard ~ Mark Smith, N6MTS

The Open Headset Interface Standard (https://ohis.org/) is the open standard being proposing to the industry for the interface between a radio and the user. (OHIS is most commonly but not exclusively used for headsets, hence the name.)

#### 1:00 PM — 1:50 PM Boxborough W5

### Advanced Winlink ~ Rory Griffin, W4RJG

This presentation will cover advanced Winklink topics including the many ways Winlink can communicate using RF. Also covered will be features in Winlink to man-



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> Our Meeting is Open to All You do not need to be a member to attend our meeting.

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### Saturday 24 August 2024

age the data you may receive within Winlink messages. This presentation will help prepare you for using Winlink for EmComm purposes.

### 1:00 — 1:50 AM Southborough W6

### 1DegreeOutside: A Digital-First Weather Approach and the Vital Role of SKYWARN Spotters ~ Matt Noyes and Danielle Noyes

Join Matt Noves and Danielle Noves, co-founders of the new, digital-first weather company 1DegreeOutside and renowned former TV broadcast meteorologists, as they share their exciting journey from leading TV weather to pioneering a modernized approach to forecasting. In this engaging presentation, Matt and Danielle will discuss how their new digital platform enhances weather reporting and public safety. They will highlight 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.

### 1:00 PM — 1:50 PM Northborough W7

### Rig Expert Product Overview ~ Yuri Onipko, VE3DZ

Yuri will review the current Rig Expert antenna analyzer and accessory offerings.

<u>1:00 PM — 4:50 PM Westborough W8</u>

**VEC Session II** 

<u>1:00 PM — 1:50 PM Northborough W9</u>

### 25 Years of My QRPme Schtick! ~ Rex Harper, W1REX

Join Rex for a walk down Memory-Lane where he talks about his adventures into the heart of Amateur (QRP) Radio.

2:00 PM — 2:50 PM Atrium Lobby

Kit Building Workshop ~ Repeat: see Friday @ 1 PM

2:00 PM — 3:50 PM Seminar E3

### FEMA Disaster Communications ~ Mike Corey, KI1U

This presentation is an overview of the mission and work of FEMA Disaster Emergency Communications (DEC) in Region 1, New England. DEC staff will go over capabilities, core competencies, the Regional Emergency Communications Coordination Working Group, ESF #2 Communications, and Community Lifelines. We will also have a demonstration of a FEMA deployable communications kit.

2:00 PM - 2:50 PM Salon B E4

### Getting Schools into Ham Radio ~ Cyndi Goodgame, K5CYN

This session will discuss strategies to get into schools. Learn the ins and outs of talking to administrators, teachers, and other education stakeholders.

2:00 PM - 2:50 PM Princess E9

### How to Become a POTA Hunter ~ Harold Kramer, WJ1B

Hunters are essential to the POTA program. Without Hunters, Activators in a park would



### New England Amateur Radio

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New England Amateur Radio is a non-profit 501(c)3 organization to promote education and growth of amateur radio as a STEM activity, as a communications hobby, and as support for emergency preparedness and public service.



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### Saturday 24 August 2024

have no one to work! This presentation will outline the techniques and practices for becoming an effective POTA Hunter.

### 2:00 PM — 2:50 PM Wayland W1

### **Emcomm Antennas ~ Francis OLaughlin, WQ10**

This presentation will cover the basic concepts and use of EmComm antennas that can be utilized in the field during a deployment

### 2:00 PM — 2:50 PM Sterling W2

### FlexRadio - Not Your Dad's Old HF Radio ~ Michael Walker, VA3MW

An insightful and engaging presentation on the advancements in the captivating world of HF radios.

### 2:00 PM — 2:50 PM Hudson W3

### NTS Meet and Greet ~ Marcia Forde, KW1U

Meet with traffic handlers throughout New England and beyond. We welcome seasoned traffic handlers and those just curious what it is all about. Get questions answered here, exchange information, share stories, and pick up a tip or two. Questions about NTS 2.0? We'll have answers for that too.

### 2:00 PM — 2:50 PM Boxborough W5

### Off Grid and Portable Operations, 2023 reprise

**Charles Smith, KC1IKA**This presentation is basically the presentation
Charles did in 2023 for those who didn't see it or for those who would like to see it again. It
will show what he does as a Net Control Station for ARES, SKYWARN, and CERT to stay on
the air and get situation reports out, no matter what the conditions. This information applies to anyone operating portable operations, not just EmComm. To see what he has done
since last year be sure to attend the '2024 Update.'



Please Join Our 2<sub>ND</sub> Rhode Island Town Hall Meet & Greet

Where: HamXposition, Marlborough, MA When: Saturday August 24, 2023, 4 PM

Check Program to Confirm Room Wayland, W1

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



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16 Tech Circle, Natick, MA

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### Saturday 24 August 2024

2:00 PM — 2:50 PM Southborough W6

### 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 Northborough W7

### An Effective Contest Station without Towers ~ John Vogel, N1PGA

An updated version of last year's presentation. Come see how John has built a contest station that produces Top 5 scores without using towers. You might just see the potential in your backyard.

### <u>2:00 PM — 2:50 PM Marlborough W9</u>

### **Antenna Phasing ~ Dale Clement, AF1T**

Dale will present a visual demonstration of how energy reception or transmission is enhanced within various antennas, and when combining two or more antennas. This is a NEQRP-sponsored talk but will be enjoyable (as Dale's presentations always are!) to all HamXposition attendees

3:00 PM — 3:50 PM Atrium Lobby

Kit Building Workshop ~ Repeat: see Friday @ 1 PM.

3:00 PM - 4:50 PM Duchess E1

### YL Meet and Greet ~ Barbara Irby, KC1KGS

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

### 3:00 PM — 3:50 PM Princess E9

### 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.

### <u>3:00 PM − 3</u>:50 PM Wayland W1

### Leasons Learned as a Ham for Broadcast RF and vice versa

Douglas R Evans, K3DRE

From broadcast radio, into ham radio

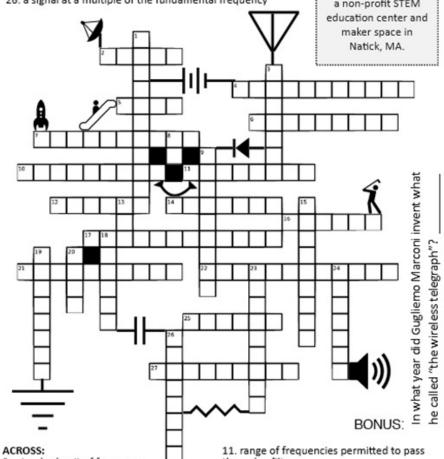
and back. Doug takes a look at lessons learned in professional radio and how they lead him to ham radio. From there, he'll move to the things he learned as a ham that helped



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

#### DOWN:

- 8. calling any amateur radio station
- 9. stores energy in an electric field
- 15. region of radio spectrum above 1 GHz
- 18. basic unit of electrical current
- 19. channel used for satellite-to-earth communications
- 20. center wire surrounded by insulation and a grounded shield
- 23. opposition to the flow of electric current and radio energy
- 24. a flow of electrons in an electrical circuit
- 26. a signal at a multiple of the fundamental frequency



- 2. standard unit of frequency
- 4. a receiver's ability to receive weak signals
- 5. a range of frequencies for a particular use
- 6. a condition where XC = XL, a tuned circuit
- 7. coils storage of energy in a magnetic field 10, theoretical antenna used calculate gain
- 14. a message or messages sent by radio
- 22. instrument used to observe wave forms
- 27. the rate of an oscillation

- 1. path that a radio signal travels
- 3. device that receives or radiates RF energy
- 13, fundamental unit of resistance

This Fun Page is brought to you by New England Sci-Tech. a non-profit STEM

through a filter

12. transmits one-way signals for propagation determination

- 16. many stations calling a DX contest station
- 17. best ham radio convention in New England 21. electrically charged region of the Earth's
- atmosphere
- 25. separation between repeater's input and output frequencies

### Saturday 24 August 2024

his career. Doug's been a lot of places and seen very interesting stuff, but found the basics of RF always apply. Today's modern digital broadcasting owes a lot to early hams.

### 3:00 PM — 3:50 PM Sterling W2

### What's Noise? ~ Gregory Mark Bonaguide, WA1VUG

Encore Presentation: see Friday @ 2 PM

### 3:00 PM — 3:50 PM Hudson W3

### VarAC - Basic and Advanced Uses ~ Rory Griffin, W4RJG

VarAC is a keyboard-to-keyboard communication tool using VARA, a high-performance HF software modem for fast, error free transmission. It is seeing rising acceptance and incorporation as an important new tool for EmComm use. This presentation will get you started with the setup and use of VarAC.

### 3:00 PM — 3:50 PM Boxborough W5

### Off Grid and Portable Operations, 2024 update

**Charles Smith, KC1IKA** Charles will present new information for a Shack-in-a-Stack which he made over last winter that contains three radios, batteries, PWS, Emergency Sat Comms, antennas, a tablet for digital modes, and much more. He

### 3:00 PM — 3:50 PM Southborough W6

### **New England Spectrum Management - Annual Meeting Bob DeMattia. K1IW**

also has information on his stealth install of an Icom IC-4100 in his car.

This is 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 Northborough W7

**YCCC Forum** Gather with the Yankee Clipper Contest Club for introductions, club business, and information for new members.

### 3:00 PM — 3:50 PM Marlborough W9

### **Antenna Matching ~ Dale Clement, AF1T**

This show-and-tell presentation builds on Dale's Antenna Phasing demonstration, with an emphasis on various methods used for maximum energy transfer between an antenna and your radio. This is another NEQRP-sponsored talk intended to enthrall all HamXposition attendees.

#### 4:00 PM — 4:50 PM Seminar E3

### ARRL Technical Coordinator Program ~ Paul Topolski, W1SEX

In existence for many decades, the ARRL Technical Coordinator Program, under the auspices of the ARRL Lab, brings a support network to the amateur radio community that significantly benefits the hobby. Each ARRL Section Manager appoints a Technical Coordinator who then recruits Technical Specialists who work with local radio amateurs as well as clubs to answer questions and help solve hobby-related problems. Technical Specialists range from generalists to subject-specific experts.

#### 4:00 PM — 4:50 PM Wayland W1

### RI Section Meeting ~ Nancy Austin, KC1NEK

Come to a town hall meeting with the ARRL Rhode Island Section Manager.

### 20% Off!

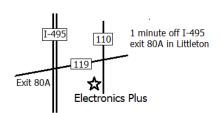
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## Barnstable Amateur Radio Club



Celebrating 67 Years of Service to the Community 1957-2024



2m repeater 146.955, -split, tone 88.5hz 220mhz repeater 224.34, -split, tone 100hz

www.barnstablearc.org

### Saturday 24 August 2024

4:00 PM — 4:50 PM Sterling W2

NH Section Meeting ~ Peter Stohrer, W1FEA

Come to a town hall meeting with the ARRL New Hampshire Section Manager.

4:00 PM — 4:50 PM Southborough W6

EMA Section Meeting ~ Jon W McCombie, N1ILZ

Come to a town hall meeting with the ARRL Eastern Massachusetts Section Manager.

7:00 PM — 10:00 PM Marlborough W9

**NEQRP Meet & Greet, Vendors Night, & Build-a-thon** 

Meet and greet with the NEQRP folks. A highlight is the build-a-thon. Get a kit, build it, and operate it—all with instruction. But be sure to order kits early or purchase in advance.

### 7:00 — 9:00 PM Salon A/B E-2/4

## Saturday Banquet Dr. Tamitha Skov, WX6SWW

Known as "Space Weather Woman" in social media, she forecasts and analyzes space weather processes – in the heliosphere and exosphere.

Dr. Skov will show you in non-science jargon how this new kind of weather impacts your daily life.

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

### **Evening Activities**

9:00 PM — 11:00 PM Atrium Lobby

Game Night ~ Seth Kendall, KC1PZY

Play some games with your fellow hams! We've got everything from quick and easy social word gamesto classic strategy games like Chess and Go. Hosted by Sci-Tech Amateur Radio Society—STARS.

9:00 PM — 11:00 PM Princess E9

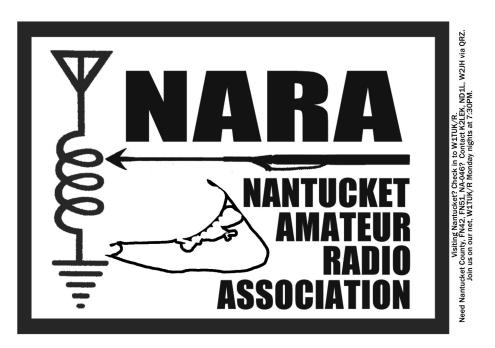
Informal Music Jam Session ~ Steve Nickerson, N1BUS

Back by popular demand. Sing, play, and socialize with other attendees.

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.



### 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

### Sunday 25 August 2024

9:00 — 9:50 AM Duchess E1

### Western Mass Section Membership Meeting ~ Ray Lajoie, AA1SE

The WMA meeting which will be an open forum to provide information on activities and answer questions from you. Our SEC Chuck, WS1L, will also provide an update on ARES. Please see what we are doing to make Western Mass grow and be an active part in it.

10:00 — 10:50 AM Duchess E1

How to Become a POTA Hunter ~ Harold Kramer, WJ1B

Encore Presentation: see Saturday @ 2 PM

10:00 — 11:50 AM Salon A/B E2/4

### Introductory and Advanced FLDIGI Configuration and Usage

**Don Rolph, AB1PH**Don will discuss the motivation to use FLDIGI for emergency communication. He will explore the basic configuration of FLDIGI, FLMSG and FLAMP and points to consider when using FLDIGI in nets. He will then discuss a variety of topics regarding configuring FLDIGI for more advanced net and communications usage.

<u>10:00 — 10:50 AM Seminar E3</u>

### The Quirks of Arduino-based 2.4 GHz Operating ~ Steve Kercel, AA4AK

Using an NRF24L01 transceiver with a microcontroller is an inexpensive way for hams to get on the 13cm band. The NRF24L01 can be programmed for ham frequencies and operated under ham (instead of ISM) regulations. It is fairly tricky to get the controller to communicate with the NRF module and get two transceivers to communicate with each other without excessive time-outs. This session explores the hardware and software issues and the practical solutions to them. It Includes a live demonstration of two transceivers performing two-way communications.

<u>10:00 — 10:50 AM Princess E9</u>

APRS Secrets ~ Gary Francis Thomas, AA1UE

Encore Presentation: see Saturday @ 10 AM

NASHOBA VALLEY AMATEUR RADIO CLUB

N<sub>1</sub>NC

www.n1nc.org https://www.youtube.com/@nvarc

Monthly Meetings – Mentoring – License Classes Newsletter - On-Air-Activities - Social Breakfast

Monthly meetings 7:30 PM the third Thursday of the month - Pepperell Community Center, Pepperell, MA.

NVARC is proud to support HamXposition 2024!

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The Wellesley Amateur Radio Society Wellesley, MA 02482 w1tkz@arrl.net



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

### Sunday 25 August 2024

10:00 - 10:50 AM Wayland W1

### **MARS: How Hams Train with DoD Using HF Communications**

**Tom Kinahan, N1CPE** Ham Radio Operators that have registered with the Military Auxiliary Radio System (MARS) train on US and Allied radio communications procedures and work with the DoD customers to deliver accurate and timely situational awareness. Often this awareness is from personal observation, but they also gather it using Part 97 and Part 90 radio services. Join us as we discuss the excitement and benefits of participating as a MARS member or providing information to MARS operators on ham nets.

10:00 PM — 11:50 PM Westborough W8

**VEC Session III** 

11:00 — 11:50 AM Seminar E3

Getting Started in Remote Operations ~ Michael I Walker, VA3MW

11:00 — 11:50 AM Seminar E3

### Helical Antennas and Circular Polarization ~ Steve Kercel. AA4AK

A straightforward way to send or receive circularly polarized signals is to use a helical antenna. At 2.4 GHz, it is easy to construct helical antennas. This session looks at the design, construction, and performance of homebrew 2.4 GHz helical antennas. It will show the effect of using properly matched polarization modes, the effect of using opposite polarizations for the receiver and transmitter helices, and the effect of using a linearly polarized antenna on one end and a helix on the other end.

### 11:00 - 10:50 AM Princess E9

### The National Traffic System: What is it? Why do We Care? Where Can We Find More Information? ~ Marcia Forde, KW1U

duction to NTS, the importance of NTS and current work being done to improve and enhance it. We'll cover training opportunities, as well as efforts to coordinate the NTS and ARES programs, information about the NTS2 website and its content, and the NTS Letter.





**HamXposition** 

The EMA Section at a glance:

44 ARRL Affiliated Clubs.

including 4 ARRL Special Service Clubs: Barnstable ARC, Cape Ann ARA, Falmouth ARA, PART of Westford

Home of the world-famous Yankee Clipper Contest Club (YCCC) and Minuteman Repeater Association (MMRA)

Almost 2400 ARRL Members

Very active ARES/SKYWARN program (tip o' hat to SEC KD1CY and DEC WQ10)

7 very dynamic NTS nets, some meeting 7 days/week

Many Traffic Handlers active for NTS 2.0

Section Manager Jon McCombie, N1ILZ



### Merrimack Valley **Amateur** Radio Association, Inc.



### merrimackvalleyara.org

We are an ARRL affiliated nonprofit club with a mission to enhance emergency communications.

We welcome hams interested in learning about and deploying digital communications over microwave radio networks.



### SEMARA

We are proud to be part of HamXposition 2024



### About SEMARA

The Southeastern Massachusetts Amateur Radio Association, Inc. (SEMARA) is an ARRL affiliated club that was founded in 1932 by the late Alan Cooper, W1HSR as the New Bedford Shortwave Radio Club (NBSWC). The association owns three acres of land at 54 Donald Street in Dartmouth, Massachusetts, which was acquired in 1955. Business meetings are held on the first Thursday of each month at 7:00 PM. Coffee and donuts are served at an informal "ragchew" each Sunday from 8:00 AM to 11:00 AM. VE exam sessions are held on the first Saturday of each month at 9:00 AM

#### Repeaters

SEMARA owns and operates three analog voice repeaters, plus an APRS digipeater station. These four systems are situated at the rear of club property below a 180 foot multiple tenant communications tower. SEMARA, which has exclusive rights to the top of the tower, has dedicated 1-5/8" Andrews Heliax feedlines for its systems. 147.000 Repeater - 2 Meters (VHF), 224.800 Repeater - 1.25 Meters (VHF), 927.8375 Repeater - 33 Centimeters (UHF), 144,390 APRS Digipeater - 2 Meters (VHF)

Visit our website www.semara.org

### Sunday 25 August 2024

11:00 - 10:50 AM Wayland W1

### MARS Closed Meeting ~ Tom Kinahan, N1CPE

MARS Meeting for current Army or Air Force MARS members only.

#### 12:00 — 11:50 AM Duchess E1

### MMRA Meeting and Raffle ~ Kevin Paetzold, K1KWP

This presentation will cover the MMRA repeater network and history. It will be followed by a raffle.

### 12:00 — 12:50 AM Seminar E3

### Receiving Weak Signals at 2.4 GHz ~ Steve Kercel, AA4AK

This session considers the issue of reliably detecting 2.4 GHz signals over a dynamic range of 70 dB. Considerations include the minimum discernible signal, noise versus bandwidth, ambient noise, cascading low-noise amplifiers, logarithmic detection, using 16-bit analog-to-digital conversion with differential voltage measurement with an Arduino, preventing RF leakage from a 2.4 GHz generator, and the practicalities of using splitter-combiners. It will include a live demonstration of recording of a time-series of voltages from a weak 2.4GHz signal. No guarantees of success on this one! The thing works at home, but the 2.4 GHz background din at the venue might totally blank out the test signal.

### 1:00—2:30 Salon A/B E2/4

### **Closing Ceremony & Prize Drawings**

Closing remarks by the committee, followed by the grand finale door prize drawings. You need not be present to win for the majors, however you must be present to win the many smaller prizes which are also offered.

### **Grand Prizes**

Icom IC-705 ORP all-in-one transceiver 160m to 70cm + D-Star Xiegu X6100 Qrp HF/6m transceiver Icom ID-50A VHF/UHF/D-Star HT

### Thank you for attending!

See you next year: 21-24 August



### **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 36 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 goals are twofold: to offer the richest and most diverse ARRL Convention in the country, and to support the ARRL Foundation's scholarship program.

73 Mike Raisbeck - K1TWF President, FEMARA, Inc.

### **FEMARA Officers**

President Mike Raisbeck - K1TWF Vice President Bob DeMattia - K1IW Treasurer. Joyce DeMattia - K1IWW Clerk . Ken Caruso - WO1N

### **Convention Committee**

General Chair, Operations . Bob DeMattia - K1IW Vice Chair. Exhibitors Mike Raisbeck - K1TWF Flea Market, DXCC Dinner Ken Caruso - WO1N Program Committee Chair Skip Youngberg - K1NKR EmComm/Public Service Coord.. Stu Solomon - W1SHS Volunteer Coordinator Barbara Irby - KC1KGS Larry Banks - W1DYJ Publication Editor . Marketing & Promotions Chair. Phil Temples - K9HI ARRL Exams Ron Rothman - WO1E Web Site Coordinator Joe Grace - W1SK Prizes Committee Chair Larry Krainson - W1AST GOTA Station (W1XPO) David "Tess" Tessitore - K1DT ARRL New England Division Director Fred Kemmerer - AB10C Youth & Collegiate Chair Bob Phinney - K5TEC

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