# Northeast X position

August 25, 26, & 27 2023

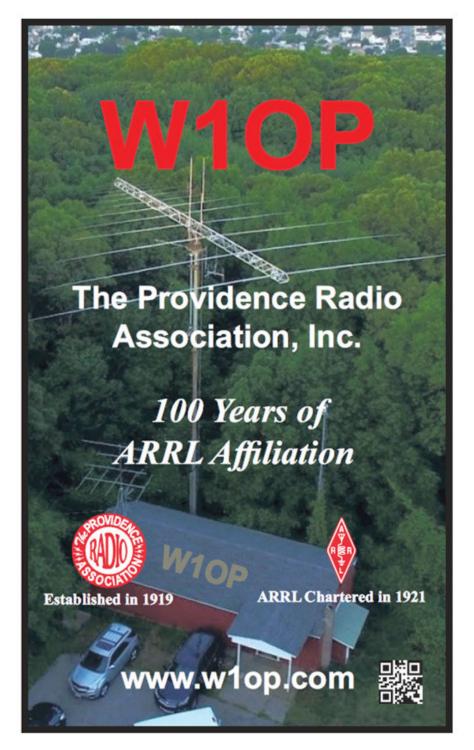


**ARRL Convention New England Division** 

# Our 40th Convention



Best Western Royal Plaza Hotel & Trade Center Marlborough, Massachusetts



# Welcome to **Northeast HamXposition** 2023

A few nights ago as I crawled into bed after a very long day my mind turned to all the New England Division Conventions that I have had the privilege to attend over the years. It was like a montage spanning almost 60 years of radio. My first convention was at the New



Ocean House in Swampscott. 1964 I think it was. I was still a young teen without a driver's license. Ham radio was young, too, barely 50 years old. My dad drove me and a friend to the show and we spent the day marveling at all the technological wonders. Radios were made with hollow state devices, transistors were the new technology, and there were old timers who could talk about the days of spark. Things sure have changed. The ride has been, and continues to be, fun and exciting.

The conventions themselves have changed, too. I remember there were talks and forums like "Getting Started with Single Sideband" and "Cleaning up Chirp on your CW Signal". Now we talk about mesh networks and about all the latest digital modes. Other things have changed as well. Old stalwarts such as the QSL card contest have succumbed to the technology of Logbook of the World, and the Wouff Hong has drifted out of fashion.

Change has come as well to the fabric of our conventions. The nature of the Special Event station has changed with the advent of remote operation. The rise of online presence has changed the way we gather information and the way that radios are sold, and thus the nature and the mix of commercial vendors so that now the concentration is on small and innovative new companies. In fact, this year we will be trying our first vendor remote presence. This could change the way we work.

But, of course, one important fundamental of our convention hasn't changed. The show is, and I hope always will be, a social gathering. A chance for hams to meet up, face to face, to renew old friendships, to make new ones, and follow the progress of the hobby that ties us all together as we march further into the 21st century. Enjoy!!

73, Mike, K1TWF President



# 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.

# The Northeast HamXposition 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!

The wonderful hams listed below are recent recipients of the Northeast HamXposition scholarships. If you know a worthy student, or are one yourself, you can apply online at http://www.arrl.org/scholarshipapplication.

#### 2023 Winner (\$2000)

Corey Dennan, NW1BB of Scarborough, ME

# 2022 Winners (\$2000 each)

Simon Schwart, KC1PYK, of Newton, MA Megan Wagner, KC1FGH, of Westford, MA Elizabeth Hull, N1LIZ, of Hancock, NH Sarah Hull, W1SJH, of Hancock, NH

# 2021 Winners (\$2000 each)

Michael Cullen, K6MAC, Newbury, RI Samuel Gerhard, KC1NWR, North Providence, RI Sarah Hull, W1SJH, Hancock, NH Simon Page, KC1FJD, York, ME

#### See the full list at:

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



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

# Barnstable Amateur Radio Club



Celebrating 66 Years of Service to the Community 1957-2023



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

www.barnstablearc.org

# **HamXposition 2023 Schedule**

#### Friday, August 25

Flea Market 12 noon - 5 pm (setup at 9 am) Workshops: Kit Building | MESH Nodes | Others

DX/Contest Dinner: 7 - 9:30 pm

Well-known and long time ham Don Greenbaum, N1DG, will

entertain us with "DXpeditioning with a RIB"

Door Prize: \$500 DX Engineering Gift Card

#### Saturday, August 26

Flea Market and Exhibit Hall: 9 am — 5 pm

Keynote: ARRL President Rick Roderick, K5UR, 9 am
NEQRP Forum | Tech-in-a-Day | VE Exams: 10 am & 1 pm

Forums: 10 am — 5 pm

Convention Banquet: 7 — 9:30 pm

Chip Cohen, W1YW, inventor, scientist, and retired professor will talk about his amusing background, 'ham-genuity', and some the pitfalls and pleasures along that tortuous path of

invention.

Door Prize: FT-710
Games and Storytelling starts at ~9:30 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-7610, FTM-500DR, more!

# **W1A Special Event Station: Corporate Room**

Friday: 6 pm — midnight Saturday: 9 am — midnight Sunday: 9 am — noon

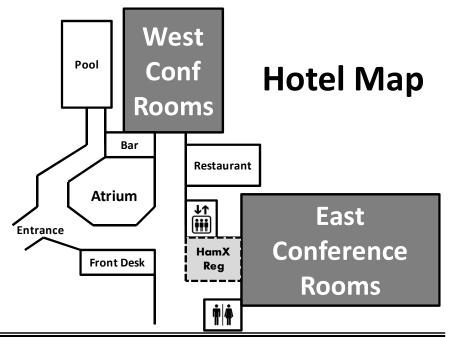
# **DXCC Card Checking**

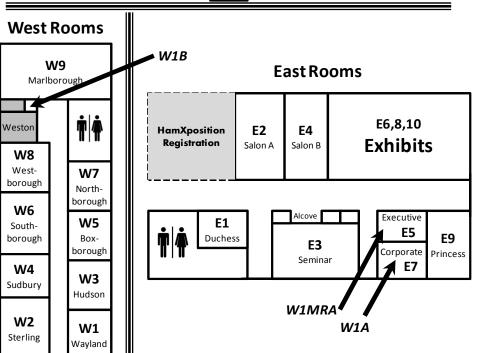
Please use the application and fee process found on the ARRL DXCC web site prior to submitting your cards.

**Fox Boxes:** Join the fun - bring your DF gear and find the hidden foxes.

<u>MMRA</u>: This 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.

<u>HCRA</u>: This FoxBox will operate on 147.55 MHz, pl 151.4. ID and DTMF 1 to activate. If you find it, send the location of the fox to W1AST at 413-348-3289 via text.





	Friday 25 August 2023							
D	Atrium	E2	E4	E3	W6	W9		
Room:	Lobby	Salon A	Salon B	Seminar	Southboro	Marlboro		
12 noon								
1 PM	Kit Build-				Andy's Ham Radio Linux			
2 PM	ing Work-	MESH Node Build	Radiocraft Mod on	NanoVNA Workshop		SKYWARN Spotter		
3 PM	shop	Workshop	Minecraft			Class		
4 PM								
5 PM						NEQRP		
6 PM						Friday		
7 PM						Night Din- ner Get-		
8 PM		Contest/	DX Dinner			Together		
9 PM								
10 PM								

# **Moonbounce Donations (≥\$50)**

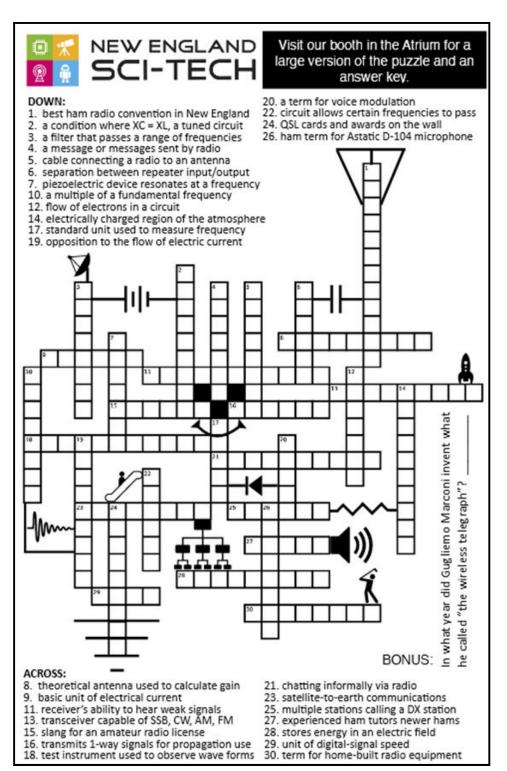
FEMARA thanks the following individuals for their support:

AB1OC	Fred Kemmerer	K1DP	Domenic Padula		
K1TWF	Mike Raisbeck	K1UAF	John Gotthardt		
K5TEC	<b>Bob Phinney</b>	KB10IQ	Andy Stewart		
KC1KGS	Barbara T Irby	KD1CY	Rob Macedo		
KW1U	Marcia K Forde	W1DYJ	Larry Banks		
W1GV	Robert Hatch	W1MVP	Michael Pasquale		
W1USN	Michael Roux	_	<b>Brett Miwa</b>		
WA1ENO & WB1ARU Tony and Anne Manna					

(As of 16 August. Our apologies if we missed listing your name.)

	Saturday 26 August						
		E1	E2	E4	E3	E9	
Room	Atrium						
		Duchess	Salon A	Salon B	Seminar	Princess	
9 AM			Keynote Address				
10 AM	Soldering Workshop	Fox Hunting	EmComm Key- note Address	MAJOR evolution in CAT & CI-V technology: TueTTL!	Radiosonde Hunting and Reprogramming for Ham Radio Use	Remote Ham Radio	
11 AM	Soldering Workshop	Optimized High Power Mag- loop: Physics, Design, & Construction	The Ionosphere and You: Using Science to Pick the Best Operating Band	Andy's Ham Radio Linux	Ham Radio and Youth Engineering on High Altitude Balloons	Introduction to the NEDECN Network in New England	
12 Noon		Youth Forum: New England Sci-Tech ARS	ARRL Forum	AMSAT Current Projects	RFinder and the PortAzEl rotator, Intergalactic Repeater Directory	RFI Hunting for the Radio Amateur	
1 PM	Soldering Workshop	HAM Radio to Improve the Environment	A 6-meter An- tenna System for Contesting and DXing	Microwaves for you	The Nuts & Bolts of Setting Up a Super Portable Station	RFI Team Meeting	
2 PM		Cubes In Space - An Awesome Youth Activity for Your Club	Disappearing Ham Radio His- tory: Hope for the Future	10 GHz - The New Magic Band	Introduction to Contesting	Understanding and Using Propagation to Work the World	
3 PM	Soldering Workshop				An Effective Contest Station without Towers	Off Grid and Portable Operations	
4 PM	Soldering Workshop	YL Meet and Greet			ARDC: Paving the Way for a Bright Future for Amateur Radio	HamSCI Festivals of Eclipse Ionospheric Science	
5-6							
7 PM			Grand Panguet				
8 PM			Grand Banquet				
9 PM	Game Night						
10 PM	Storytelling						

	Saturday 26 August							
W1	W2	W4	W5	W6	W7	W8	W9	
Wayland	Sterling	Sud- bury	Boxboro	Southboro	Northboro	West- boro	Marlboro	
Simple, Inexpensive, high performance wire Antennas	Club Revitalization: Improve It and They Will Come			The Vintage	RF Test Equipment Fundamentals on the Cheap	Simple Small 2 and 6 Meter Yagi Antennas		
Multiband Wire Antennas and Phased Dipole Wire Beams	Radiocraft - Reaching the Next Genera- tion Through Minecraft		Radio & Communications Museum history	EDM : Emergency Direct Messaging	NTS2: NTS Now and into the Future	VEC Session I	New England QRP Forum	
Winlink EmComm Usage	CW DXCC in Six Months	Tech-in-	What's Out There on Digital?	Boston Marathon Bombing and 9-11 Deployment	NTS 101: Compose and Send a Radiogram	NESMC Board Meeting (Closed)	NEQRP Luncheon	
9-Band DXCC On A Cove- nant Re- stricted Lot	CW Academy	a-Day	Today's Packet Radio	Go Kits	ARES Drill Package		NEQRP Antenna Modeling	
Outdoor Gear for the Portable Amateur Radio Operator	Regenerative vs Direct Conversion Receivers - Which is Best?		ARTEN - Amateur Radio Training Experiment Network / Microwave Mesh	EmComm Antennas	Tactical Communica- tions for the Radio Amateur	VEC Session II	How IC and VLSI Chips are Made	
Two Ideas for Skyhooks	NTS Meet and Greet		RF Survey with Raspberry Pi and Icom IC-705	Advanced Topics in SKYWARN - Doppler Radar	New England Spectrum Management Ann. Meeting		How QRP Changed My Life	
AREDN: A New Tool for Emergency Communica- tions	RI Section Town Hall Forum		WSJTX Initial Beaconing and School Challenge	Fundamentals & How You Can Help with Severe Weather Reporting Situational Awareness	The 2023 Big E Project: Presenting Modern Ham Radio to the Public			
							NEQRP Meet & Greet, Vendors Night & Build-a-thon	



	6M	Marlboro	How Hams can support the Department of Defense from their home stations	MARS Meeting (Closed)			
	W8	Westboro		VE Session			
	9/	Southboro	WMA ARES Leadership Team meet- ing	Western Mass Sec- tion Meet- ing	Off Grid and Portable Operations		
	W2	Sterling	Two Ideas for Sky- hooks	An Intro- duction to POTA	An Intro- duction to the MMRA		
ust 2023	W1	Wayland	Radiosonde Hunting and Reprogramming for Ham Radio Use				
Sunday 27 August 2023	63	Princess	Radiosonde Outdoor Gear for Hunting and the Portable Ama- Reprogramming teur Radio Operator for Ham Radio	The MARCONI VoIP Hurricane Net Project - An - Providing surface Approach to reporting, situ- Reinvigorating ational awareness, Less Active disaster intelligence Amateur Radio supporting Clubs WX4NHC	Optimized High Power Magloop: Physics, Design, & Construction		
	E3	Seminar	Hamshack Hot- line	The MARCONI Project - An Approach to Reinvigorating Less Active Amateur Radio Clubs			
	E4	Salon B					riize Didwings
	E2	Salon A					אווגה ח
	E1	Duchess	CW Acad- emy	The state of D-Star	Giant Antennas of the Navy		
		KOOIII:	10 AM	11 AM	12 noon	1 PM	2 PM



# 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



# **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.

#	Year	Dates	Location	Admission
1	1960	May 1	New Ocean House, Swampscott	Admission
2	1961	-	New Ocean House, Swampscott	
3	1962	Apr 8,9	-	
4	1962	Apr 7,8	-	
5	1963	Apr 27,28	-	
_		May 9,10	-	\$3 adv / \$4
6	1965	Apr 24,25	Douglantial Contact Boots	-
7	1966	Apr 22,23,24	Prudential Center, Boston  ARRL National Convention	
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	
			ARRL National Convention	\$3 / \$4
12	1973	Sep 29,30	Dunphy's Resort, Hyannis	35 / 34
13	1976	Sep 10,11,12	Statler Hilton, Boston	
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	7	30
19	1988	Oct 1,2	7	\$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		47.440
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	7	\$6 / \$8
26	2002	Aug 23,24,25		\$8 / \$10
27	2004	Aug 13,14,15	1	\$10 / \$12
28	2006	Aug 25,26,27	1	
29	2008	Aug 22,23,24	1	
30	2010	Aug 27,28,29	1	
31	2012	Aug 24,25,26	1	
32	2015	Aug 21,22,23	1	\$15
33	2016	Sep 9,10,11	1	
34	2017	Sep 8, 9, 10	Boxboro Regency Hotel and Confer-	1
35	2018	Sep 7, 8, 9	ence Center	
36	2019	Sep 6, 7, 8	1	\$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	YOU ARE HERE!	\$18

#### Friday 25 August 2023

#### Friday 25 August 2023

#### 1:00 — 4:00 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, Blink Badge, Night Light, or Blinky Spinning Top – all kits were invented by students! Price per kit is between \$5-\$10, cash only. All tools provided. You must sign up on our web site: http://nescitech.org/hamx.

# 1:00 — 4:00 PM Seminar E3

# NanoVNA Workshop ~ Greg Algieri. WA1JXR

BRING YOUR OWN NANO IF YOU HAVE ONE. Three consecutive presentations on the NanoVNA Vector Network Analyzer, an inexpensive unit used to measure antennas and other RF devices. The first presentation will introduce the NanoVNA. Next will be a NanoVNA Measurements Demo. Finally, a NanoVNA Workshop. For the workshop period, attendees are encouraged to bring in their NanoVNA and/or items they would like to measure.

#### 1:00 — 3:00 PM Southboro W6

# **Installation of Andy's Ham Radio Linux** Andy Stewart, KB10IQ

Bring your PC based laptop (not Apple), power supply, mouse, etc, and a desire to install "Andy's Ham Radio Linux". Andy Stewart, KB1OIQ, the creator of "Andy's Ham Radio Linux" will guide you through the installation process, and then show you how to get started with your newly configured computer. Your computer must be a fully functioning computer where we can entirely erase the hard drive prior to installing Linux. It must have at least 4GB of memory and 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).

# 2:00 — 4:00 PM Salon A E2

# MESH Node Build Workshop ~ Jim Garner, KC1BHD

Build an Amateur Radio Emergency Data Network (AREDN) mesh node. During disasters, Amateur Radio operators set up and operate communication networks independent of internet, land lines or cell phones. A mesh network can now add high-speed data networks as a resource. A great addition to your Go Box.

#### 2:00 — 4:00 PM Salon B E4

# **Installing and Playing the Radiocraft Mod on Minecraft Lucas Elliott, W1BTR**

Minecraft is the world's number one selling online game, and at the Northeast HamXposition, Lucas, W1BTR, will be unveiling the new Radiocraft mod that incorporates a realistic ham radio simulation into Minecraft. At this workshop Lucas will walk through the Radiocraft installation for your computer and demonstrate how to play the game. For the mod installation, bring your gaming laptop, along with its power supply, mouse, and a pair of headphones/earbuds with a microphone. For computer requirements, go to: tinyurl.com/rcspecs. If you don't own Minecraft Java edition we'll walk you through buying an account and setting it up. We'll show you how to get the game and install it, then give you playing instructions.

# 2:00 — 4:00 PM Marlboro W9

#### SKYWARN Spotter Class ~ Rob Macedo, KD1CY

This is the traditional SKYWARN training class offered by NWS Boston/Norton office and can be taught by Amateur Radio coordinators within the Boston/Norton coverage area. With us beyond the emergency phase of the COVID-19 pandemic, paper registration forms will be in use again like pre-pandemic classes and you will obtain your Spotter ID card if you are in/near the NWS Norton MA coverage area of responsibility. For those outside of the NWS Norton coverage area, we will work with the appropriate NWS office if you live within the Northeast region to obtain recognition for completing the class. No pre-registration is required.

# 5:00 — 9:00 PM Marlboro W9

**NEQRP Friday Night Dinner Get-Together** 

# 7:00 — 9:30 PM Salon A/B E-2/4

#### **DX / Contest Dinner Special Guest**

The DX Dinner guest will feature Don Greenbaum, N1DG. Don will present "DXpeditioning with a RIB". Don will describe the genesis of the "Rig in a Box" (RIB) from the 2018 Baker Island expedition to implementation on C6AGU, FO/N1DG and the recently completed **VP6A DXpedition to Ducie Island.** 

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



Please Join Our First Rhode Island Town Hall Meet & Greet

Where: HamXposition, Marlborough, MA
When: Saturday August 26, 2023
Check Program for time and room number!



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



Friday, October 13<sup>th</sup> & Saturday October 14<sup>th</sup> 2023

DEERFIELD NH Fairgrounds.

www.near-fest.com

www.forum.near-fest.com

# TWO GRAND PRIZE DRAWINGS

Yaesu FT-891 HF Mobile Transceiver 160-6m

Friday at 5:00 PM - Must be present to win Saturday at 2:00 PM - Do not need to be present to win.

[Spring 2024 dates: April 26th & 27th]

# Saturday 26 August 2023

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

# **Keynote Address**

# **ARRL president Rick Roderick, K5UR.**

Join Rick for a look at what's happening in the hobby and at the League.

#### 9:00 AM — 4:50 PM Sudbury W4

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

Veteran instructor and volunteer examiner Bill will be holding a "Tech In A Day" class.

### <u> 10:00 — 10:50 AM Atrium Lobby</u>

#### Soldering Workshop ~ Bob Phinney, K5TEC

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, or Spinning Top - all kits were invented by students! Price per kit is between \$5-\$10, cash only. All tools provided. First come, first serve, no signups today. More info on our web site: http://nescitech.org/hamx. (Repeated at 11 AM, 1 PM, 3 PM, 4 PM.)

# 10:00 — 10:50 AM Duchess E1

# Fox Hunting ~ Charles Nelson, NC7R

Charlie will discuss the basics of the hunt and how to successfully find that elusive hidden transmitter! Try your hand after the talk; multiple foxes will be QRV on the convention grounds throughout the weekend.

# <u> 10:00 — 10:50 AM Salon A E2</u>

# EmComm Keynote Address ~ Josh Johnston, KE5MHV

Josh will discuss the current picture of emergency communications and how Amateur Radio still plays a key role.

# <u>10:00 — 10:50 AM Seminar E3</u>

# Radiosonde Hunting and Reprogramming for Ham Radio Use ~ *Max Kendall, WOMXX*

Ever wanted a fun activity to do with your club, or just yourself? Radiosondes are balloons with weather equipment launched by the National Weather Service. Tracking and recovering them, also known as 'sonde hunting,' is like a fox hunt, only you can keep the fox and reuse it for your needs! Max will talk about the equipment in-

volved in tracking and recovering radiosondes, and as a bonus, he will even show how to reuse them for ham radio needs, such as tracking your own high altitude balloons or vehicles. (Repeated on Sunday.)

#### <u>10:00 — 10:50 AM Salon B E4</u>

# MAJOR evolution in CAT and CI-V technology: TrueTTL! Richard Desaulniers, VE2DX

Richard will explain some of the technical processes for his products and technical innovations, like TrueTTL

#### 10:00 — 10:50 AM Princess E9

# Remote Ham Radio ~ Rockwell Schrock, WW1X

Amateurs everywhere now have the ability to experience this exciting hobby like never before with Remote Ham Radio. With a monumental amount of research, engineering, and planning we have made the best remote operating experience on the internet today.

### <u>10:00 — 10:50 AM Wayland W1</u>

# Simple, Inexpensive, high performance wire Antennas Robert Glorioso, W1IS

We will describe antennas that won't take a King's Ransom to build and work well.

# 10:00 - 10:50 AM Sterling W2

# Club Revitalization: Improve It and They Will Come David Tessitore, K1DT

After 100 years, the Providence Radio Association was about to fail. Dave will describe how the remaining PRA members revitalized their slumbering club through improving infrastructure, embracing current trends, and focusing on relevance.

# New for 2023! EmComm Trailer Displays!

# Don't miss this year's EmComm Trailers and Vans on display in the parking area.

New England Clubs and Individuals will be showcasing their trailers and vans outfitted for EmComm Communications.

Come tour their impressive handiwork and bring home ideas for your own club or organization!

#### Saturday 26 August 2023

10:00 — 11:50 AM Boxboro W5

# The Vintage Radio & Communications Museum history John Ellsworth

Often dubbed "The museum that wouldn't quit", this presentations chronicles all of the ups and downs of the museum's existence. Throughout its life it has been totally self supported and run totally by volunteers. It is a great story of persistence by a group of volunteers who developed a world attraction through their love of communications history.

#### <u>10:00 — 10:50 AM Southboro W6</u>

# RF Test Equipment Fundamentals on the Cheap Brian Justin, WA1ZMS

Having enough test equipment to find out what's working and what isn't (and maybe how to fix it) doesn't have to break the bank. Brian shows us how.

#### <u>10:00 — 10:50 AM Northboro W7</u>

### Simple Small 2 and 6 Meter Yagi Antennas ~ Joe Reisert, W1JR

Small especially hand held antennas can be easily built. It is important to have a basic design with good gain and pattern, be easy to duplicate and have a simple matching system. 3 and 4 element designs that meet these goals will be described.

10:00 — 11:50 AM Westboro W8

**VEC Session I** 

10:00 - 11:50 AM Marlboro W9

**New England QRP Forum** 

11:00 — 11:50 AM Atrium Lobby

Soldering Workshop ~ encore: see Saturday @ 10 AM

11:00 — 11:50 AM Duchess E1

# Optimized High Power Magloop: Physics, Design, & Construction Ted Robinson, K1QAR

A kilowatt magloop does not need to cost several kilobucks, or require weeks of labor, machine shop or welding skills. Discussion will include physics, design choices, construction procedures, and parts sources. A demo loop with the described parts will be shown at the talk and operated in the flea area, weather permitting. (Repeated Sunday at 12.)

# <u>11:00 — 11:50 AM Salon A E2</u>

# The Ionosphere and You: Using Science to Pick the Best Operating Band ~ Philip Erickson, W1PJE

Earth's ionosphere provides the means by which HF signals can travel between your radio and another one - across states, or countries, or even the planet. We'll go over some ionospheric basics and then use them to provide tips on which HF bands are optimal as a function of time of day, season, and even solar cycle. Along the way, we'll provide a brief

update on the run-up to solar maximum conditions in Cycle 25, nearing its peak towards the end of 2024. We will also review monitoring tools available to help you make the most of your radio time.

#### 11:00 — 11:50 AM Seminar E3

# **Ham Radio and Youth Engineering on High Altitude** Balloons ~ Max Kendall, WOMXX

This talk will look at the New England Weather Balloon Society's mission, HABGab 2023, to send a DIY high altitude repeater with live video transmission into the Stratosphere. This mission has also allowed for a number of ambitious student projects to be included as part of a freeform engineering class for kids called StratoScience Lab. Max and Seth will introduce the format of the StratoScience program, after which we will hear from the students themselves.

#### 11:00 — 11:50 AM Salon B E4

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

Andy's Ham Radio Linux' has been downloaded over 100,000 times by hams who enjoy using Free Software and Open Source Software. Learn more about this popular software collection and what it contains. Version 25a was recently released (May 2023) with even more software! For more information, go to this website: https://sourceforge.net/projects/kb1oiqandvsham/

# 11:00 — 11:50 AM Princess E9

# **Introduction to the NEDECN Network in New England** Domenic Mallozzi, N1DM

Dom will describe the NEDECN DMR Network in use in New England and how to get on DMR. He will introduce some other DMR networks in New England and also include a very short discussion on hotspots for DMR.

# 11:00 — 11:50 AM Wayland W1

# **Multiband Wire Antennas and Phased Dipole Wire Beams** Robert Glorioso, W1IS

A look at the theory, trade-offs and construction of multiband OCF and endfed antennas as well as phased-dipole beams built with wire and wood.

# 11:00 — 11:50 AM Sterling W2

# **Radiocraft - Reaching the Next Generation Through** Minecraft ~ Lucas Elliott, W1BTR

Minecraft is the world's top-selling video game of all time. Radiocraft is a Minecraft mod that players can add to their Minecraft worlds and servers to bring ham radio into the game. Players craft radios for their desks and create antennas using wire, baluns, and coax to reach other players in the



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# Winners drawn Sunday at noon

First Prize: YAESU VX-6R 144/220/430 HT Second Prize: ADA-1 Antenna Disconnect Actuator Third Prize: Grounding and Bonding for the Radio Amateur







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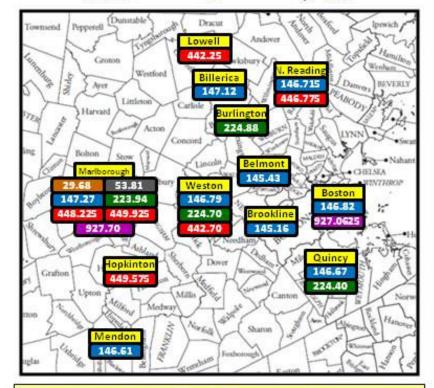
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# Saturday 26 August 2023

same Minecraft world with simulated propagation and solar weather! This presentation will explain and demonstrate the Radiocraft mod and discuss how clubs can use it for youth outreach and training.

#### <u>11:00 — 11:50 AM Southboro W6</u>

#### EDM - Emergency Direct Messaging ~ Rory Griffin, W4RJG

Rory will describe EDM, which was created to concentrate on building a redundant communications channel that could operate independently of any existing infrastructure. He'll cover what EDM is about, the vision behind the effort, the strategy in accomplishing it, and the tactics the EDM project wants team members to have to serve agencies. EDM doesn't depend on the Internet, cellular or satellite services, repeaters, or even commercial power grids.

#### <u>11:00 — 11:50 AM Northboro W7</u>

#### NTS2: NTS Now and into the Future ~ Marcia Forde, KW1U

NTS, the National Traffic System, created in 1949 as an ARRL program, was at the heart of the 'Relay' in American Radio Relay League which peaked the interest of many hams. Yet with the advent of the internet, cell phones, etc. it appeared to have become obsolete in the minds of many. Yet today's world has presented a new set of circumstances warranting a renewed look at the benefits of NTS. Learn more about the ARRL Emergency Communications and Field Services Committee's NTS subcommittee and it's work to modernize and improve this program of training in a structured system with emphasis on greater timeliness and accuracy of message delivery, as well as to expand it's capabilities for emergency communications needs.

# <u>12:00 — 12:50 PM Duchess E1</u>

# 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 or club leaders wanting to attract more youth to their local radio clubs.

# 12:00 — 12:50 PM Salon A E2

# **ARRL Forum ~ Fred Kemmerer, AB10C**

New England Division Director Fred Kemmerer will host the ARRL forum.

# <u> 12:00 — 12:50 PM Seminar E3</u>

# RFinder and the PortAzEI rotator, Intergalactic Repeater Directory~Bob Greenberg, W2CYK

A description of the new developments in the RFinder devices and announcement of the new Satellite features and products!

12:00 - 12:50 PM 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.

#### 12:00 — 12:50 PM Princess E9

# RFI Hunting for the Radio Amateur ~ Rob Leiden, K1UI

A tutorial for the ham who wants to find and correct radio frequency interference in his/her ham shack. The use of the New England Division RFI Troubleshooting Guide and working with the RFI Teams and their equipment will be included.

#### 12:00 — 12:50 PM Wayland W1

# Winlink EmComm Usage ~ Aaron Addison. KF1G

Aaron will be going over Winlink, describing its basic setup, basic usage, the use of forms. Winlink can be used for both EmComm and daily communications.

# 12:00 — 12:50 PM Sterling W2

# CW DXCC in Six Months ~ Larry Banks, W1DYJ

In 2014, after 52 years as a ham and multiple attempts to learn CW, Larry finally decided to learn CW enough to not only use it, but to like it. Starting with some history, this talk describes Larry's "project" to learn CW. It includes a CW training app, rig interfaces, a realization that CONTESTING was the best way to learn CW (and some contesting details), logging software, and finally Larry's results, both short and long term.

# 12:00 — 12:50 PM Boxboro W5

# What's Out There on Digital? ~ Michael Ford, WZOC

There's an alphabet soup of digital modes out there. Some are "PC software modes," some might require modems, some are embedded in your new rig. And they're not just for keyboard-to-keyboard communicating anymore. Michael will take us on a guided tour of today's digital world.

# 12:00 — 12:50 PM Southboro W6

# **Boston Marathon Bombing and 9-11 Deployment** Stephen Schwarm, W3EVE

It's been over a decade since the Boston Marathon bombing. What was the state of EmComm then, and what is it now? Steve will share his perspectives.

# 12:00 — 12:50 PM Northboro W7

# NTS 101: Compose and Send a Radiogram **Peter Doherty KC1HHO**

This talk will cover the basics of composing and sending an NTS radiogram. If you've always wondered what traffic handling and radiograms were about, you won't want to miss this informative and fun training session.

#### Saturday 26 August 2023

12:00 - 12:50 PM Westboro W8

#### **NESMC Board Meeting ~ Robert DeMattia, K1IW**

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

# 12:00 — 12:50 PM Marlboro W9

#### **NEQRP Luncheon Gathering**

# 1:00 — 1:50 PM Atrium Lobby

Soldering Workshop ~ encore: see Saturday @ 10 AM

#### 1:00 — 1:50 PM Duchess E1

# HAM Radio to Improve the Environment ~ Charlie Nicholson. KC1SFR

Imagine a new mesh network - full of sensors, allowing citizen science to go to the next level. Spread out over long distances, these environmental sensors can communicate with the world and each other through APRS, allowing scientists to receive valuable data to solve the climate crisis.

#### 1:00 — 1:50 PM Salon A E2

# A 6-meter Antenna System for Contesting and DXing Fred Kemmerer. AB10C

The design and construction of a high performance 6-meter antenna system for contesting and DXing is described. Topics include antenna system design, antenna selection, and station construction and performance. Presentation includes lots of pictures and links to additional information.

# 1:00 — 1:50 PM Seminar E3

# The Nuts & Bolts of Setting Up a Super Portable Station Mitch Stern, W1SJ

Anyone can drag a radio into the field and call CQ. But will anyone hear you? Our talk today focuses on the details needed to set up a super portable operation - one which will shoot fire and brimstone across the bands and result in pileups. Can you do that with a portable set up? You bet!

# $\underline{1:00-1:50\ PM\ Salon\ B\ E4}$ Microwaves for you ~ Paul Wade, W1GHZ

You can get on microwaves without a wheelbarrow full of \$\$\$ and have fun and discover new challenges.

# <u>1:00 — 1:50 PM Princess E9</u>

# RFI Team Meeting ~ Rob Leiden. K1UI

Meeting to bring teams up to date on lessons learned, process changes, discuss obtaining additional equipment and training and get to know each other.

#### 1:00 — 1:50 PM Wayland W1

#### 9-Band DXCC On A Covenant Restricted Lot ~ Mark Noe, KE1IU

This presentation will cover Mark's journey as a DXer - from lowly beginnings as a teenager with only 4 countries to his name before going off to college - to achieving 9-Band DXCC (which happened last year). He will cover how to set up a very capable DX station with only wire antennas, tips for working common DX and the rare ones, the DX Code of Conduct, how to properly work split without getting frustrated, how to use FT8 to work DXpedtions, how to use a DX Cluster, how to use LoTW to confirm DX, and some automated tools that will make DX collecting easier for you. If you want to learn how to work DX without having a yard full of iron and aluminum, then this talk is for you! As a bonus, your station will also be very capable for ragchewing, WAS (Worked All States) and contesting.

# <u>1:00 — 1:50 PM Sterling W2</u>

# CW Academy ~ Bruce Blain, K1BG

Bruce K1BG, will talk about CWops' "CW Academy." CW Academy has trained an estimated 8,000 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! (This presentation is repeated on Sunday at 10 AM.)

# <u>1:00 — 1:50 PM Boxboro W5</u>

# Today's Packet Radio ~ Michael Ford, WZ0C

Remember packet radio of the 80s? Keyboard to keyboard at 1200 bits per second? Linking digipeaters for DXing? BBSs and clusters? Terminal Node Controllers with 2-digit serial numbers? Packet is a lot more nowadays, and Michael will explore it all for us.

# <u>1:00 — 1:50 PM Southboro W6</u>

# **Go Kits ~ Francis OLaughlin, WQ10**

This is a presentation on various EmComm Go-Kits ranging from a simple Jump-Kit to a more capable type of kit that is housed in a hard case. It will be a hands on type of demonstration showing how they are put together and the types and hardware/equipment involved.

# <u>1:00 — 1:50 PM Northboro W7</u>

# ARES Drill Package ~ Keith Anoe, KE4UCW

The ARES Drill Package presentation provides an overview of how to develop a training drill cycle that is all-inclusive for the drill participants at the individual and collective level. How to develop objectives and time lines, execute the drill and conduct Hotwash and the final After Action Report.

# <u>1:00 — 5:00 PM Westboro W8</u>

#### **VEC Session II**

#### Saturday 26 August 2023

#### 1:00 — 1:50 PM Marlboro W9

#### NEQRP - Antenna Modeling with EZ-NEC ~ Greg Algieri, WA1JXR

Learn antenna modeling with EZ-NEC. What is EZ-NEC. How can I use it for antenna modeling. How will this make my communications BETTER. Learn where to download and learn to use this FANTASTIC software to help your Amateur Radio skills.

#### 2:00 — 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 Wallops AFB.

#### <u>2:00 — 2:50 PM Salon A E2</u>

# Disappearing Ham Radio History: Hope for the Future *Tom Perera, W1TP*

Co-presented with Mike Crestohl, W1RC. A nostalgic trip into our past: Heathkit, Collins, Hallicrafters, surplus military radios, keys, and a look at the people and organizations that are trying to keep Ham Radio alive.

#### 2:00 — 2:50 PM Seminar E3

# Introduction to Contesting ~ Doug Grant, K1DG

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

# <u>2:00 — 2:50 PM Salon B E4</u>

# 10 GHz - The New Magic Band ~ Dale Clement, AF1T

Discover the excitement that awaits you on the 3-centimeter band! Learn about antennas, equipment, propagation, operating techniques, and activities that will contribute to your success.

# <u>2:00 — 2:50 PM Princess E9</u>

# Understanding and Using Propagation to Work the World Anita Kemmerer, AB1Q

Presentation on understanding HF and VHF propagation and how to use it for operating on the air.

# <u>2:00 — 2:50 PM Wayland W1</u>

# Outdoor Gear for the Portable Amateur Radio Operator *Mindy Hull, KM1NDY*

Sorry FT8, portable radio is still the hottest ham rage! But by now, most of us know how to get outside, set up a radio, get on the air, and make contacts out in the field. Sure, we can debate whether we want to use a wire or a vertical antenna,

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#### Saturday 26 August 2023

how many radials, QRP or not... But, many of us are getting to a point of "been there, done that." We talked last year about getting friends and family (yup, including the XYLs!) to go with us. This year, we are focusing on every ham's favorite topic--gear! But not (necessarily) radio gear. Instead, our attention will be on what gear do we bring along on our outdoor radio adventures to have the most amazing ham field experiences we can have. Blue ice fishing tents? Portable fans? Headlamps? Dyneema vs. silnylon? You all know you have your favorites, and I have mine. This talk will go over the finer points of ham radio outdoor gear for newcomers and seasoned veterans alike, and everyone will be welcome to shout out their opinions! (Presentation repeated on Sunday at 12 Noon.)

#### 2:00 — 2:50 PM Sterling W2

# **Regenerative vs Direct Conversion Receivers - Which is Best?** James Surprenant, AB1DQ

Fundamental regen and direct conversion receiver design and history will be presented followed by a deeper dive contrasting and comparing the strengths and weaknesses of each circuit. The intent is to provide a foundational understanding of these two basic receiver designs to the newer radio hobbyist and to help budding scratch builders choose the best circuit for their current projects.

#### 2:00 — 2:50 PM Boxboro W5

# **ARTEN - Amateur Radio Training Experiment Network / Micro**wave Mesh ~ Paul Fredette, K1YB

STEM career engagement in wireless and networking technologies can provide fun and learning for all. ARTEN is an ARRL Foundation Grant project implemented by the Newport County Radio Club (w1sye.org) for reuse in any club setting to provide RF and networking experience by implementing a remote sensor using microwave technology. CO2 variation in a farm field is the target parameter for the initial project but the real fun is experimenting with Antennas, Routers, Very Nice Analyzers (VNAs) and solar power while monitoring the cycle of breathable air. The AREDN software and inexpensive hardware are used encourage youth access and allow the experience of experts to be shared.

# 2:00 — 2:50 PM Southboro W6

# EmComm Antennas ~ Francis OLaughlin, WQ10

This is a presentation on different types of antennas used in EmComm operations. Most are expedient and can be deployed quickly when needed. The presentation will focus on types of antennas and how they are constructed. It will also go over some best practices in their use. It will be a hands on type of presentation.

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#### Saturday 26 August 2023

#### 2:00 — 2:50 PM Northboro W7

# Tactical Communications for Amateur Radio Howard Chain, K9NPD

Howard will guide us through Tactical Communications and why use them. Tactical vs. Formal messages. Tactical Traffic best practices. How to maintain message accuracy and brevity. Should a message be formal or informal with examples. Creating tactical names and how to use them. Questions will be taken throughout and at the end of the presentation.

#### 2:00 — 2:50 PM Marlboro W9

#### How IC and VLSI Chips are Made ~ Dave Robertson, KD1NA

Dave's Presentation/Talk will encompass: What is an IC and VLSI Chip. How are they made, in the past, and today. All the Equipment involved in making an IC (VLSI) Chip. The physics involved, i.e. all the "what's happening" to make it work.

#### <u>3:00 — 3:50 PM Atrium Lobby</u>

Soldering Workshop ~ encore: see Saturday @ 10 AM

#### 3:00 — 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 — 3:50 PM Seminar E3

# An Effective Contest Station without Towers John Vogel, N1PGA

Come see how one ham has built a contest station that produces Top 5 scores without using towers. You might just see the potential in your backyard a little differently.

# <u>3:00 — 3:50 PM Princess E9</u>

# Off Grid and Portable Operations ~ Charles Smith, KC1IKA

This presentation will show what Charles does as a Net Control Station (NCS) for ARES, Skywarn, and CERT to stay on the air and get situational reports out, no matter what the conditions. This will cover radios, batteries, solar charging, situational awareness, what he built for operating off-grid or portable and why he chose certain batteries and solar options as well as multiple ways to be able to stay on the air. This information applies to anyone operating portable operations, not just EmComm. (Repeated on Sunday @ 12 noon.)

# <u>3:00 — 3:50 PM Wayland W1</u>

# Two Ideas for Skyhooks ~ Larry Banks, W1DYJ

In 2008 Larry and his wife Maren bought a second home in Harpswell ME, south of Brunswick. He threw up some simple HF dipoles just to get on the air. By 2013

he was ready to upgrade these: first a 6m Yagi (part I of this talk) and then an HF fan dipole (part II). This is an "ideas" talk with some practical pointers for homebrew construction. [Repeated on Sunday @ 10 AM.]

# <u>3:00 — 3:50 PM Sterling W2</u>

# NTS Meet and Greet ~ Marcia Forde, KW1U

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

#### 3:00 — 3:50 PM Boxboro W5

# RF Survey with Raspberry Pi and Icom IC-705 Najm Choueiry, AB1ZA

Najm will describe the basics of GPS receivers and how to decode a GPS string output. He has used the Python programming language to create a graphical user interface to poll the ICOM IC-705 and display/record RF signal strength, frequency in use and latitude longitude. RF data is saved on a USB drive and imported in Google Earth Pro.

#### 3:00 — 4:50 PM Southboro W6

# Advanced Topics in SKYWARN - Doppler Radar Fundamentals and 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.

#### Saturday 26 August 2023

#### 3:00 — 3:50 PM Northboro W7

### **New England Spectrum Management - Annual Meeting** Robert DeMattia, K1IW

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 — 3:50 PM Marlboro W9

# How QRP Changed My Life ~Rex Harper, W1REX

QRP... How Three little letters changed my life ... And could change yours! Rex's Presentation/Talk will encompass his journey in electronics and life, before Amateur Radio and beyond, till today.

#### 4:00 — 4:50 PM Atrium Lobby

# Soldering Workshop ~ encore: see Saturday @ 10 AM

#### 4:00 — 4:50 PM Seminar E3

# ARDC: Paving the Way for a Bright Future for Amateur Radio ~ Jim Idelson, K1IR

Amateur Radio | Digital Communications (ARDC) is a private foundation that exists to support amateur radio and digital communication science and technology. Jim will provide an overview of the organization and his recent experience as a member of the Grants Advisory Committee.

# 4:00 — 4:50 PM Princess E9

# **HamSCI Festivals of Eclipse Ionospheric Science** Stanley Pozerski, KD1LE

This presentation describes the events and activities that Hams can participate in during the upcoming eclipses in 2023 and 2024. The goal is to generate data on propagation during the eclipses for future scientific studies.

# 4:00 — 4:50 PM Wayland W1

### AREDN: A New Tool for Emergency Communications ~ Jim Garner. KC1BHD

Jim Garner will discuss how AREDN MESH nodes and networks can be deployed for emergency communications.

# 4:00 — 4:50 PM Sterling W2

# RI Section Town Hall Forum ~ Nancy Austin, KC1NEK

Welcome to RI's first Town Hall Forum. Please join our Meet & Greet Town Hall Forum as we introduce the new leadership, share what your RI cabinet has been doing, and hear from other Ocean State radio amateurs. Follow RI-ARRL.org for updates. communications.

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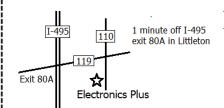
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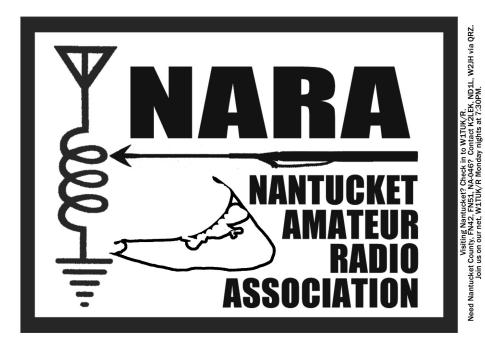


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Saturday 26 August 2023 4:00 — 4:50 PM Boxboro W5

# **WSJTX Initial Beaconing and School Challenge Bradshaw Lupton, K1TE**

K1TE will describe a STEM Radio Project delivering \$12 11mw 20m WSJTX beacons to six cape high schools and three cape colleges. The project is developing a free (non-commercial), new radio internet in historic Marconi territory.

#### 4:00 — 4:50 PM Northboro W7

# The 2023 Big E Project: Presenting Modern Ham Radio to the Public ~ Larry Krainson. W1AST

Presentation and discussion about the 2023 Big E Project and getting the public interested in ham radio enough to sign up for classes. The Big E booth is just a month from the HamXpo and things will be in very good shape for the booth by then. But more volunteers and interested parties are always welcome. commercial), new radio internet in historic Marconi territory.

7:00 — 10:00 PM Marlboro W9

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

# 7:00 — 9:30 PM Salon A/B E-2/4

**Saturday Banquet** Chip Cohen, W1YW

Chip W1YW is an inventor, scientist, and retired professor. Chip will talk about his amusing background, 'ham-genuity', and some the pitfalls and pleasures along that tortuous path of invention.

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

<u>9:30 — 11:00 PM Atrium Lobby</u>

# Game Night ~ Seth Kendal, 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.

# Open Mic Storytelling ~ Phil Temples, K9HI

Have you an amusing encounter with another ham, on or off the air? An antenna experiment that resulted in more sparks than signal? Or perhaps how ham radio impacted your life in a way that you couldn't have imagined? Now's the time to share your ham radio related story.

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#### Sunday 27 August 2023

10:00 — 10:50 AM Duchess E1

# CW Academy ~ Bruce Blain, K1BG

Encore: see Saturday @ 1 PM

# 10:00 — 10:50 AM Seminar E3

#### Hamshack Hotline ~ David Neal, W2DAN

The Hamshack Hotline is a Free VOIP telcom service for the ham radio community. Its purpose is to augment communication in hamshacks, EOC's, and clubs, and among club members. It offers full duplex operation. It also supports FAX.

#### 10:00 — 10:50 AM Princess E9

# **Outdoor Gear for the Portable Amateur Radio Operator** Mindy Hull, KM1NDY

Encore Presentation: see Saturday @ 2 PM

#### 10:00 — 10:50 AM Wayland W1

# Radiosonde Hunting and Reprogramming for Ham Radio Use ~ Max Kendall. W0MXX

Encore Presentation: see Saturday @ 10 AM

10:00 — 10:50 AM Sterling W2

Two Ideas for Skyhooks ~ Larry Banks, W1DYJ

Encore Presentation: see Saturday @ 3 PM

# 10:00 — 10:50 AM Southboro W6

# WMA ARES Leadership Team meetin ~ Charles Chandler. WS1L

This is a meeting of the leadership team (ASEC's, DEC's and EC's) of the Western Massachusetts Amateur Radio Emergency Service.

10:00 — 12:00 AM Westboro W8

**VEC Session III** 

# 10:00 — 10:50 AM Marlboro W9

#### How Hams can support the Department of Defense from their home stations ~ Paul Decker, KG7HF

MARS Operators gather information as requested by the DoD on situational awareness around the country. MARS members depend on reaching out to other hams, on amateur frequencies, to gather this information, often with a short fuse, considering the time a response will take to travel across the country. In this forum, we will discuss the types of information being requested, and practice one specific request that we get with almost every exercise, and is nearly impossible to obtain without reaching out to other ham radio operators that live near a specific airport. We will show how to find and to listen to Airport Weather observations that are intended for pilots in the 120MHz band on AM, practice transcribing some reports, and how to read your transcription back to a MARS operator.



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SATURDAY AUGUST 26th 3:00PM in the Northborough Room (W7)

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



# Sunday 27 August 2023

#### 11:00 — 11:50 AM Duchess E1

# WMA ARES Leadership Team meetin ~ Charles Chandler, WS1L

An overview of what is happening in the D-STAR world. We will address repeaters, hotspots, reflector use and some discussion on transcoding (where D-STAR users can talk to DMR, Fusion and more).

#### 11:00 — 11:50 AM Seminar E3

# The MARCONI Project - An Approach to Reinvigorating Less Active Amateur Radio Clubs ~ Edward Snyder, W1YSM

The MARCONI Grant (Motivating Amateur Radio Clubs to Open New Initiatives) was designed to develop a 'MARCONI' Program to stimulate amateur radio club activity. The presentation describes how an active radio club can assist a less active radio club to increase the less active club's membership and stimulate the latter club's activity. A key aspect is to design the MARCONI Program to be of sufficient interest to the active club so that their members will agree to provide the necessary assistance AND to the less active club so that their members will be receptive to the offer of support.

#### 11:00 — 11:50 AM Princess E9

# **VolP Hurricane Net - Providing surface reporting, situational** awareness, disaster intelligence supporting WX4NHC Rob Macedo, KD1CY

This forum describes an overview of the VoIP Hurricane Net and how it provides support to WX4NHC, the Amateur Radio Station at the National Hurricane Center. The net has been in existence for 20 years. The presentation will go through the VoIP modes utilized on the net, activation procedures, reporting procedures, recent notable net activations and how the net has evolved into a virtual hub of information for landfalling hurricanes supporting WX4NHC, the Amateur Radio Station at the National Hurricane Center and going beyond that support to local NWS Offices, FEMA, Red Cross and other agencies.

# 11:00 — 11:50 AM Sterling W2 An Introduction to POTA ~ Dave Hornbaker, N1DCH

This presentation will help you to get started with POTA. Parks on the Air (POTA) was founded in September 15, 2010. Its purpose is to encourage Amateur Radio Operators who enjoy the outdoors but, may not be interested in or able to take long hikes or climb steep hills, to combine interests by operating from local, state, or national parks around the world. Aspects of POTA to be discussed include Hunting and Activating parks. Portable station setup (rigs, battery, antenna), operation (logging, modes, exchange), log submission, and POTA websites will be covered for both hunters and activators. Additionally, the presenter will review the contents of his POTA Go-Bag.

#### Sunday 27 August 2023

11:00 — 11:50 AM Southboro W6

# Western Mass Section Meeting ~ RAYMOND LAJOIE, AA1SE

A gathering of the Western Mass members to share information and talk about projects and activities, with some Q&A.

11:00 — 11:50 AM Marlboro W9

# MARS Closed Meeting ~ Paul Decker, KG7HF

Closed Meeting for MARS Members Only

12:00 — 12:50 PM Duchess E1

# Giant Antennas of the Navy ~ George Allison, K1IG

With world-wide commitments, the U.S. Navy needs constant and reliable communications with ships, aircraft, and submarines. This presentation shows some of the giant antennas the Navy has used for HF, VLF, and ELF communications and direction-finding, with dimensions measured in miles and power in megawatts. If you have a few thousand acres available, you can build one too!

# 12:00 — 12:50 PM Princess E9

# Optimized High Power Magloop: Physics, Design, & Construction Ted Robinson, K10AR

Encore Presentation: see Saturday @ 11 AM



# Police Amateur Radio Team

of Westford, Massachusetts **WB1GOF** 

An ARRL Special Services Club

Repeaters 146.955 (-) PL 74.4 145.430 (+) D-Star 442.450 (+) D-Star

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- Public service events. Fox hunts.
- Fantastic Field Day!
- Technical support and mentoring.
- Over 100 members and growing.

Visit wb1gof.org for more information!

#### Sunday 27 August 2023

12:00 — 12:50 AM Sterling W2

#### An Introduction to the MMRA ~ 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 Southboro W6

Off Grid and Portable Operations ~ Charles Smith, KC1IKA

Encore Presentation: see Saturday @ 3 PM

#### 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. See the HamXposition home page for a list of the major prizes. 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.

**Door Prizes ICOM 7610 HF / 50MHz Transceiver** Yaesu FTM-500DR 50w C4FM/FM 144/430 Xcvr **Many More!** 

# Thank you for attending



# **FEMARA** Incorporated

**FEMARA Inc.** is a Massachusetts non-profit corporation that sponsors and runs the ARRL New England and Hudson Division 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

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Gerry Hull - W1VE

# **Program Committee**

Special Event Station (W1A)

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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 Meetings, Club Web Page, and many more activities.

