

Northeast HamXposition

**August 26, 27, & 28
2022**



ARRL Convention
***New England and
Hudson Divisions***

Our 39th Convention

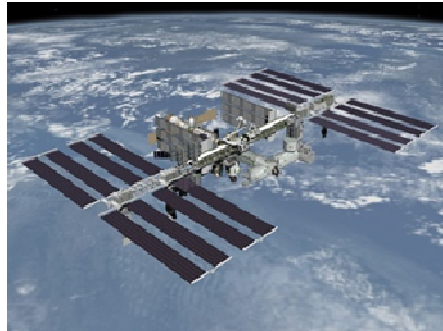


**Best Western Royal Plaza Hotel & Trade Center
Marlborough, Massachusetts**

**SPACE STATION CONTACT @ THE BIG E!
WEST SPRINGFIELD, MA
SEPT. 26-SEPT. 29**

**BIG News from
The BIG E!**

Amateur radio operators and up to three guests will be given free admission to The BIG E on Space Chat Day when you present an official copy of your FCC license!

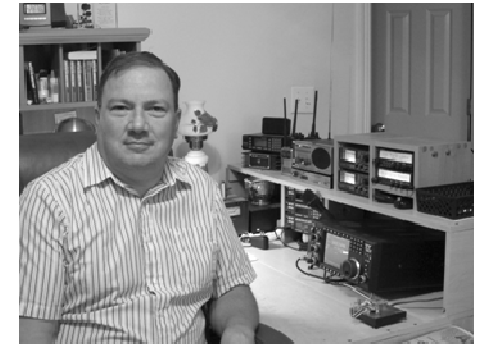


Check out the Ham Radio Booth (#103 in Better Living) along with all the other fabulous exhibits at The BIG E; then, witness the exciting, live ARISS space station contact in The BIG E Arena.

The exact date and time are subject to astronaut scheduling and will be determined approximately 10 days in advance. For the latest information and free admission details, scan the QR-code, or visit <https://nediv.arrl.org/big-e-space-chat>.



**Welcome to
Northeast
HamXposition
2022**



Welcome to Northeast HamXposition 2022. I'm happy you were able to make it! In this bustling world of business trips, family gatherings, and Zoom meetings, it's good to see that so many are still able to set aside one or a few weekend days for face to face contact with fellow hams. This year is a first for Northeast HamXposition - our first year as a joint convention for both the ARRL New England and Hudson Divisions. New England division of course encompasses the six New England states. Hudson division begins north of Albany in Warren and Washington counties and goes south, covering the two counties closest to the Mass border down to Westchester. It then continues to include New York City, Long Island, and Northern New Jersey. So our "official" reach is greatly extended.

The entire committee is working hard to bring you the best program possible - with activities that cover as many aspects of the hobby as we can. You will find our forum program, put together by Phil, K9HI, is one of the best in the country. Joe Eisenberg travelled here from Lincoln, Nebraska to run his kit-building workshop on Friday and to be our keynote speaker at the Saturday Grand Banquet. Dan Romanchik came from Ann Arbor, Michigan to run his 1-Day Tech Program. Joe Reiser, W1JR, will entertain us with "Untold DX Stories" at the Friday night DX Dinner. Finally, countless hams from all over New England, New York, and further out are here to enjoy the festivities and perhaps bring home a few new trinkets for the shack.

Enjoy your time here. If you do, please tell your friends or perhaps bring one along next year. Larger conventions bring in more exhibitors which only makes things even better for all.

73,
Bob - K1IW



NESMC

New England Spectrum Management Council

*is a proud sponsor of the
Northeast HamXposition 2022*

WE INVITE YOU TO ATTEND OUR ANNUAL MEETING

SATURDAY AUGUST 27th
2:00PM
in room E-4 (Salon B)

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



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/scholarship-application>.

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

2020 Winners (\$2000 each)

Yettive S. Crestohl, K1YTV, Marblehead, MA
Joseph F. Murray, KC1EGK, Braintree, MA
Edward G. Rifolfi, KC1CMF, Kittery, ME
Bahnou Hazel Upton, KB1OIS, Mont Vernon, NH

See the full list at:

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

20% Off!

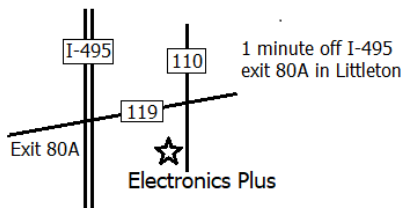
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Friday, October 14th & Saturday October 15th 2022

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 2023 dates: May 5th & 6th]

HamXposition 2022 Schedule

Friday, August 26

Flea Market 12 noon — 5 pm (setup at 9 am)

Kit Building with Joe, K0NEB: 1 — 4 pm

DX/Contest Dinner: Cocktails 6, Dinner 7 — 9:30 pm

Well-known and long time ham Joe Reisert, W1JR, will entertain us with "Untold DX Stories."

Door Prize: \$500 HRO Gift Certificate

Saturday, August 27

Flea Market and Exhibit Hall: 9 am — 5 pm

Keynote: ARRL CEO David Minster, NA2AA 9 am

NEQRP Forum | 1-Day Tech | VE Exams: 10 am & 1 pm

Forums: 10 am — 5 pm

Convention Banquet: Cocktails 6, Dinner 7 — 9:30 pm

Kit-building guru Joe Eisenberg, K0NEB, will discuss how he got into kit-building and his experiences with the hobby.

Door Prize: Yaesu FT-891

Storytelling: starts at 10 pm

Informal Musical Jam Session: starts at 10 pm

Sunday, August 28

Flea Market and Exhibit Hall: 9 am — 1 pm

Forums: 10 am — 1 pm

VE Exam: 10 am

Grand Prize Drawing @ 1 pm: ICOM ID-5100, ICOM IC-705, Flex 6400

W1A Special Event Station: Corporate Room

Friday: 6 pm — midnight

Saturday: 9 am — midnight

Sunday: 9 am — noon

Three operating positions (two remote)

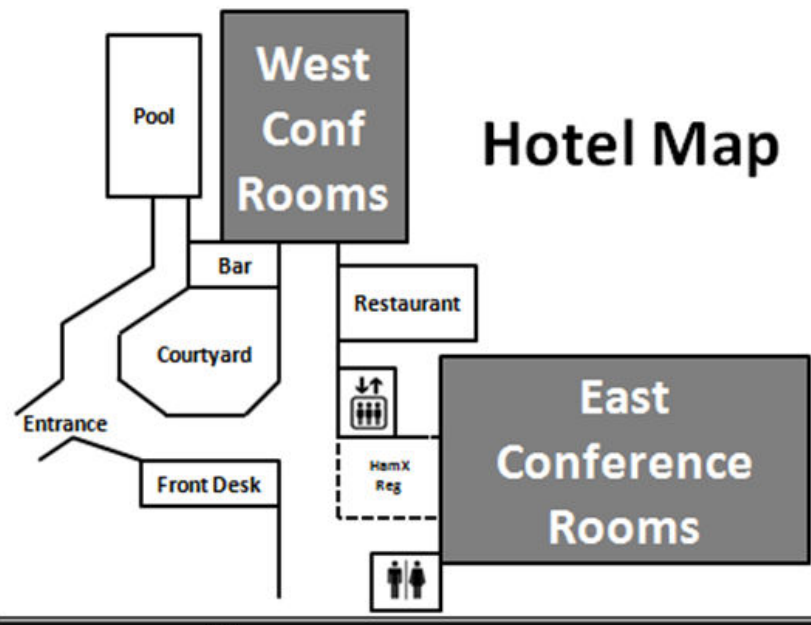
ICOM has loaned an IC-7851 for this special event.

DXCC Card Checking

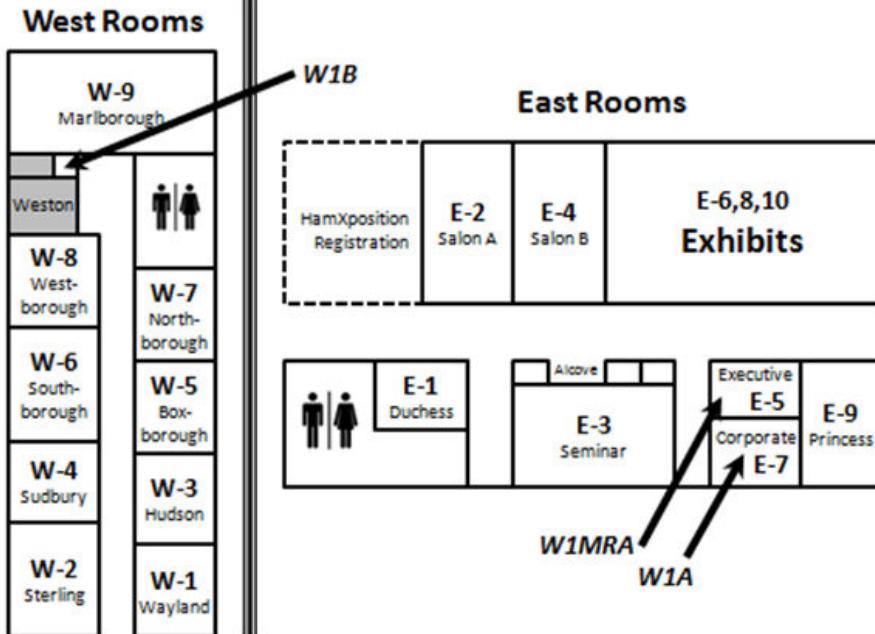
Please use the application and fee process found on the ARRL DXCC web site prior to submitting your cards.

FoxBox

Join the fun - bring your DF gear and find the two meter fox hidden nearby. The transmitter will operate on 145.63 MHz. If you find it, be sure to add your call sign to the "mailbox" on the box.



Friday 26 August					
Room:	E-2	E-4	E-3	W-9	
	Salon A	Salon B	Seminar	Marlboro	
9:00					
10:00					
11:00					
12:00					
13:00				SKYWARN Spotter Class KD1CY	Kit Building with Joe K0NEB
14:00					
15:00					
16:00					
17:00					
18:00				NEQRP Friday Night	Dinner Get- Together
18:30	Cocktails				
19:00	Contest/DX Dinner				
20:00					
21:00					
21:30					



FEMARA thanks the following individuals for their support:

Moonbounce Donations (≥ \$50)

- | | | |
|--------------------------|--------|--------|
| AA3HD | AB1DQ | AF1R |
| K1DP | K1RAU | K1UAF |
| K5TEC (x2) | KB1DJ | KB1OIQ |
| KC1KGS | KC1PWB | KD1CY |
| KD5HWA | W1DYJ | W1USN |
| W3EVE | WO1E | |
| WA1ENO&WB1ARU | | |

Our apologies if we missed listing your name.



NEW ENGLAND SCI-TECH



Ham Radio Education for All Ages!

Non-Profit STEM Education Center, Amateur Radio Training Center, and Maker Space.

Fully-equipped radio room, meeting rooms, science labs, kitchenette.

Host of the radio club Sci-Tech Amateur Radio Society (STARS).

Courses, workshops, maker space, public telescope nights, rocketry.

Conveniently located at 16 Tech Circle, Natick, near rt. 9, 30, and 27.



www.NESciTech.org

Saturday 27 August AM												
Room:	E-2	E-4	E-1	E-3	E-9	W-1	W-2	W-3	W-4	W-6	W-8	W-9
	Salon A	Salon B	Duchess	Seminar	Princess	Wayland	Sterling	Hudson	Sudbury	Southboro	Westboro	Marlboro
9:00	Keynote address: David Minster ARRL CEO											
10:00	The How and Why of Engaging Youth in Amateur Radio <i>K5ATA</i>	Fox Hunting <i>KB1CNB</i>	AMSAT <i>WB1FJ</i>	LoRA Project <i>KC1FSZ</i>	CW Academy <i>K1BG</i>	Getting Started with Winlink RMS Express <i>KW1U</i>	HF Basics for EmComm <i>AB1GL</i>	Advanced Topics in SKYWARN: How You Can Help with Severe Weather Reporting Situational Awareness	1-Day Tech Class ↓ ↓ ↓	ARES Bootcamp <i>W1FEA</i>	Message Forms for Disaster Ops <i>W1FEA</i>	VE Session I <i>W1LLUS</i>
11:00		Cigar Box Radio: Thinking INSIDE the Box <i>AB1DQ</i>	Cubes in Space: Awesome Youth Activity for your Club <i>New England SciTech</i>	Electcraft K4 Update <i>W46HHQ</i>	Summits on the Air <i>KA1YBS</i>			NESMC: Private Meeting <i>K1JW</i>				
12:00	ARRL Forum <i>AB10, N2RJ, K9HI, NP4H</i>	History of Vacuum Tube Radio <i>KA1HIH</i>	Youth Forum <i>K5TEC</i>	Working HF DX <i>W1JR</i>	ARDC - Intro & Update <i>K7VE</i>							New England QRP Forum



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

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



Saturday 27 August PM

Room:	E-2	E-4	E-1	E-3	E-9	W-1	W-2	W-4	W-6	W-8	W-9
13:00	Salon A Intro to the Big E W1A5T	Salon B How to Fail at Running a Radio Club KF1G	Duchess Practical Portable Radio Operation KM1NDY	Seminar YCCC Forum Business Mtg Contest Station without Towers ARRLSS	Princess RFI Team Meeting K1UI	Wayland Getting Started with NEBMS AB1PH	Sterling Lessons from the Big Ones W1PJS	Sudbury 1-Day Tech continued KB6NU	Southboro Tactical Message Handling WA1ZCN	Westboro Go Kit Strategies AB1GL	Marlboro New England QRP Forum continued
14:00	Hedy Lemarr and Her Inventions KD2FOU	New England Spectrum Mgmt Council K1IW	NTS and NE-ECAPS Meet and Greet KW1U & KU1U	YCCC Forum Business Mtg Contest Station without Towers ARRLSS	RFI Locating - A Partnership KA1RFI, K1UI	Brief Training Ideas for ARES Staff WA1ZCN			SEC Presentations & Panel Discussion KD1CY	VE Session II W1LUS	
15:00			YL Gathering, sponsored by YRLR and WRONE WBIARU, KCIKGS	Intro to Spy Radios W1RC, W1TP	High powered magloop construction & theory K1QAR						
16:00			AM Forum WA1HLR								
17:00											
19:00		Grand Banquet Joe Eisenberg, KØNEB									
20:00											
21:00						Atrium					
22:00			Music Jam Session			Open Mic					
23:00						Story Telling					
											NE QRP Meet & Greet, Vendors Night & Build-A-Thon



New England Amateur Radio

Public Service • Education • Radio Communications

www.ne1ar.org

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.



NEAR provides educational assistance, exam services, and license classes to clubs, scouts, public service, and schools.

Are you a teacher or have had teaching experience?
 Would you be interested in learning to teach
 amateur radio classes and activities?
 Consider joining the NEAR Educational Team.

You can also help by making a tax-deductible donation to help our mission. Send PayPal donation to: info@ne1ar.org

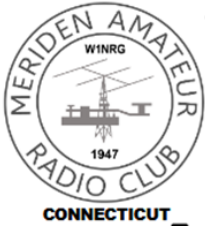


Scan me with your smart phone to go to www.ne1ar.org



		Sunday 28 August						
Room:		E-2	E-4	E-1	E-3	E-9	W-8	W-9
		Salon A	Salon B	Duchess	Seminar	Princess	Westboro	Marlboro
10:00		Introduction to Microcontrollers <i>N1JEO</i>	Linux in Your Hamshack: <i>KB1OIQ</i>	A Little Bit About Forest Fires <i>N1NS</i>	Transmitter Testing using Low-Cost Gear <i>KE1L</i>	Cybersecurity for the Radio Amateur <i>WA1KLI</i>	VE Session III <i>W1LUS</i>	Military Auxiliary Radio System: How Amateurs Support the Department of Defense <i>N1CPE</i>
11:00		CW Academy <i>K1BG</i>	The "New" FCC RF Exposure Rules: A Practical Methodology <i>W1DYJ</i>	Fox Hunters Meeting: <i>K1IG</i>	Growing Your Club Through Mentoring and New Ham Development <i>AB1QB</i>	Signals on the Hill A brief history of radio at Blue Hill Observatory <i>K1FVK</i>		MARS Member Meeting (closed) <i>N1CPE</i>
12:00		Multi-Band End Feds - Theory and Design <i>W1IS, KC1DSQ</i>	Introduction to the Minuteman Repeater Association <i>K1KWP</i>	APRS, Golden Packet, & the DIY APRS Appliance <i>WA1KLI, AB1PH, KA1YBS</i>	DIY Electronics and APRS for High Altitude Balloon Payloads <i>W0MXX</i>	Cape Cod's Fabulous Radio History <i>K1GGI</i>		The Progression and Combination of Drones and HAM radio <i>KC1PBG</i>
13:00		Prize Drawings						
14:00								

MERIDEN AMATEUR RADIO CLUB



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75TH



SINCE 1948

ANNIVERSARY

1947-2022

WWW.W1NRG.COM



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

Friday August 26**AFTERNOON (1:00 PM—4:00 PM) W-9 (Marlborough)****Kit building Workshop ~ Joe Eisenberg, K0NEB**

Join kit building guru Joe Eisenberg, K0NEB, in this workshop. With Joe's guidance, you will be building a high-quality FM receiver. Joe will supply the kit, batteries, and stereo ear buds. It has one surface mount part on the bottom of the board. Joe will offer two different methods to solder it in place and use this part to teach how to deal with surface mount parts. The rest of the parts are conventional through-hole components. Joe will go over some methods to make the best solder connections. Joe will also supply 63/37 solder to show why this type of solder is best for hand soldering. **Total cost for each builder will be \$10. If you have the proper tools, please bring them.**

AFTERNOON (1:00 PM—4:00 PM) E-3 (Seminar)**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 changes due to COVID: to get your Spotter ID a basic 20-question online quiz can be taken anytime after class completion, and once passed you will receive a spotter ID card over email from the NWS Forecast office. This class and passing of the online quiz also serves as retraining as a SKYWARN Spotter which is requested to be done every 5 years.

EVENING (6:30 PM - 9:30 PM) E-2/4 (Salon A/B)**DX / Contest Dinner****Special Guest**

Well-known and long time ham Joe Reisert, W1JR, will entertain us with "Untold DX Stories"

Door Prize: \$500 HRO Gift Certificate



NEW ENGLAND SCI-TECH

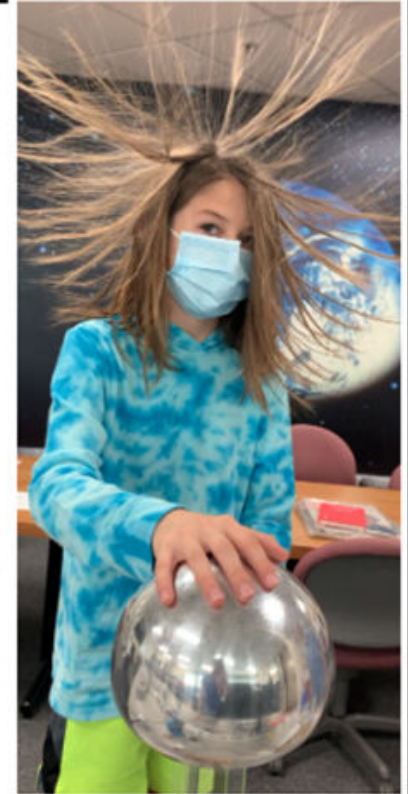
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Ham Radio, Electronics, Robotics, Rocketry,
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Woodworking, Scout Merit Badge Activities,
Photography, Birthday Parties, Tutoring, Adult Ed.

16 Tech Circle, Natick, MA

Type nescitech.org or scan this →





Minuteman Repeater Association

Extends a welcome to all convention attendees!

Come visit us in the Executive Room (down the aisle from the exhibit hall) where you can meet some of our members, join our club, and enter 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: ICOM IC-2300H
- Second Prize: YAESU FT-4XR
- Third Prize: DIAMOND X-30A



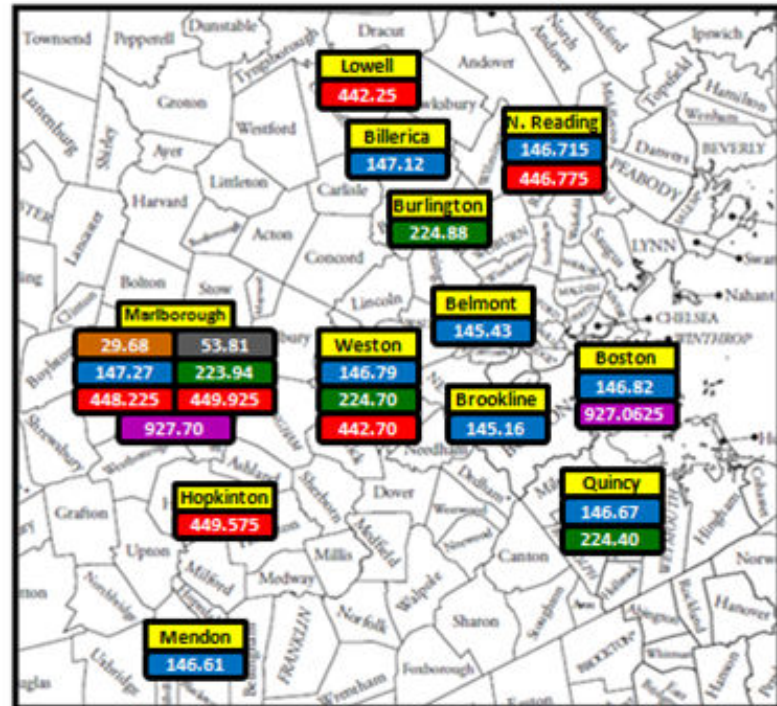
Find our Fox Box, somewhere on the hotel grounds.

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 2nd location Saturday afternoon.



Official Provider of Talk-In for Northeast HamXposition

147.270	+ 0.6	pl 146.2
223.940	- 1.6	pl 103.5
449.925	- 5.0	pl 88.5



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 August 27

BVARC Wishes to
Congratulate the
2022 HamXposition
Committee on Another
Successful Event and
Extend Greetings
to All Attendees.



**Blackstone Valley
Amateur Radio Club**

KEYNOTE ADDRESS 9:00 AM – 9:50 AM E-2 (Salon A)**David Minster, NA2AA ~ ARRL CEO**

In his keynote, David will highlight current ARRL initiatives to engage and inspire this current generation of hams:

- Accelerating ARRL's **digital transformation**
- Ensuring ARRL is a focal point for **Amateur Radio learning**
- Developing experiences that motivate licensees to become (more) **radio active**
- Improving **training and tools** for radio clubs, emergency communication volunteers, and students

ALL DAY (10:00 AM – 5:00 PM) W-4 (Sudbury)**1-Day Tech ~ Dan Romanchik, KB6NU**

Dan will be teaching this 1-day Tech class. The class is free. The text for the class is Dan's *No Nonsense Technician Class Study Guide*, available for free at < <https://kb6nu.com/study-guides> >. At the end of the class, there will be a special VE Exam for course attendees beginning at 5:15 PM in the classroom. There is an ARRL VEC-established \$15 exam fee for the optional VE session.

NOTE: ATTENDANCE IN THIS CLASS REQUIRES PREREGISTRATION

Afternoon (12:00 – 4:00 PM) W-9 (Marlborough)**New England QRP Forum**

- Noon – Lunch
- 1 PM – Dale Clement, AF1T – An Illuminating Introduction to Antennas
- 2 PM – Dale Clement, AF1T – Classic Antennas
- 3 PM – Rex Harper, W1REX – Quintessential Things You Need to Know About Kit-Building

BOTH DAYS (10:00 AM – 5:00 PM) W-8 (Westborough)**VE Testing ~ Bruce Anderson, W1LUS**

(No appointment necessary)

- | | |
|--------------------|-----------------------------|
| Session I | 10 am – 1 pm |
| Session II | 1 pm – 5 pm |
| Session III | Sunday: 10 am – 1 pm |

NEDECN

New England Digital Emergency Communications Network

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

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

www.nedecn.org

Stratford Amateur Radio Club



Service to the community since 1946

Stratford CT
<http://www.qsl.net/w1ors/>



Schedule Details

SATURDAY, August 27

Saturday 10 AM Sessions

10:00 AM — 10:50 AM E-1 (Duchess)

AMSAT Update ~ Burnes Fisher, WB1FJ

An overview of current activities at AMSAT, including current AMSAT Engineering Projects as well as the status of both old and new AMSAT-related satellites.

10:00 AM — 10:50 AM E-2 (Salon A)

The How and Why of Engaging Youth in Amateur Radio Steve Goodgame, K5ATA

This presentation will share methods and techniques for engaging youth and tools and tips for approaching schools about inclusion of Amateur Radio in their programs and curriculum. Steve leads ARRL's Education and Learning programs.

10:00 AM — 10:50 AM E-3 (Seminar)

Low Power Mesh Networking Using LoRa Bruce MacKinnon, KC1FSZ

LoRa is a long-range, low-power digital modulation method originally developed for industrial applications such as water/gas/power meter reading. The Wellesley Amateur Radio Society has been using LoRa radios to construct an experimental mesh.

10:00 AM — 10:50 AM E-4 (Salon B)

Fox Hunting 101 ~ Skip Denault, KB1CNB

How-to suggestions about fox hunting: equipment and methods for the fox and the hunters, tips and tricks, and time for Q & A.

10:00 AM — 10:50 AM E-9 (Princess)

CW Academy ~ Bruce Blaine, K1BG

Bruce will talk about CWops' CW Academy. CW Academy has trained an estimated 6,000 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!

10:00 AM — 11:50 AM W-1 (Wayland)

Getting Started with Winlink RMS Express Marcia Forde, KW1U

The Winlink world-wide radio email system is one of two powerful digital message handling tools widely used by ARES. It's fairly simple to get up and running, but this two-hour workshop will save you time. It will also help you become a proficient user very quickly. Marsha will be your capable guide. She has long years with the ARRL National Traffic System (NTS), and is a big user of the Winlink system.

Framingham Amateur Radio Association

Serving the Greater Framingham MA Area
Since 1933



Nets on Sundays and Wednesdays on the W1FY Repeater
147.150, no pl, Echolink enabled, 7:30pm

All are Welcome

WWW.W1FY.ORG

Barnstable Amateur Radio Club



Celebrating
65 Years of
Service to the
Community
1957-2022



2m repeater 146.955, -split, tone 88.5hz

www.barnstablearc.org

10:00 AM — 10:50 AM W-2 (Sterling)

Basics for EmComm ~ George Lillenstein, AB1GL

Many folks get into ARES public service work with a Technician Class FCC license, and soon upgrade to a General or Extra Class license in order to be a more versatile member. This class, presented by the Connecticut Section Emergency Coordinator, will provide some EmComm-specific HF knowledge and techniques for those just getting started with home and field HF operation, including “rules of thumb” to simplify operations.

10:00 AM — 11:50 AM W-3 (Hudson)

Advanced Topics in SKYWARN: 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? Very often, particularly for severe thunderstorm 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 also cover the need for net controls and monitoring of local area repeaters during severe weather situations.

10:00 AM — 10:50 AM W-6 (Southborough)

ARES Bootcamp ~ Pete Stohrer, W1FEA

If you’re just getting started with ARES, this class is a great place to begin. Long-time broadcast engineer Pete, the NH Section Manager and ARES Assistant Section Emergency Coordinator for Operations, will be the presenter. This class touches on all the basics to give you a good overview of the ARES program and the skills and knowledge needed to be an effective emergency communicator.

Saturday 11 AM Sessions

11:00 — 11:50 E-1 (Duchess)

Cubes In Space - Awesome Youth Activity for Your Club Bob Phinney, K5TEC and Max Kendall, W0MMX

Your club can host 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 this past July.

11:00 — 12:50 E-3 (Seminar)

Elecraft K4 Update ~ Eric Swartz, WA6HHQ

Hear all about the Elecraft K4 transceiver, ongoing updates and good things to come. Eric will also take questions as time allows.

11:00 AM — 11:50 AM E-4 (Salon B)**Cigar Box Radio: Thinking INSIDE the Box****James Surprenant, AB1DQ**

Cigar boxes are easy to cut and drill into; these boxes can be the chassis for many electronics projects. This presentation will showcase some of James' recent cigar box projects including his take on the Bob Heil Pine Board Project and other various QRP radios and accessories including both assembled kits and scratch builds. James will share tips and tricks on modifying kits for cigar box housing, planning parts layout and how to best work with the oftentimes fragile cigar box wood.

11:00 — 11:50 E-9 (Princess)**Summits On The Air - All skill levels, All seasons****Tim Dapice, KA1YBS**

Join Tim for a fun talk about SOTA — Summits On The Air. Tim will share his experiences as a SOTA enthusiast and encourage you to activate your first or hundredth summit! You will learn beginner to advanced concepts. The discussion will focus on personal safety, essential hiking gear, radio equipment, and best practices for ALL seasons. The talk will cover operating techniques using HF, VHF and APRS to get the desired necessary points for activation credit. The discussion will also highlight how ANYONE with an Amateur Radio license can participate in the fun — from a hilltop or the shack! Don't miss this fun and very informative talk!

11:00 — 11:50 W-2 (Sterling)**So You're a New EC—What Now? ~ Dave Colter, WA1ZCN**

For new ARES Emergency Coordinators, the job can seem daunting. Dave is the Emergency Coordinator for West Central NH, the NH ARES Assistant Section Emergency Coordinator (ASEC) for Training, and a former SEC and emergency management director. Dave will give you a great starting place. We'll cover all aspects of the job from recruiting and agency relationships to training and operations.

11:00 — 11:50 W-6 (Southborough)**Message Forms for Disaster Operations****Pete Stohrer, W1FEA**

Hams have long used a number of standard message forms to move messages across town and around the country. Knowing how it's done is critical to our success. Pete, NH Section Manager, NH ARES Section Emergency Coordinator for Operations and a "forms expert" will be the presenter.

Saturday 12 Noon Sessions12:00 — 12:50 E-1 (Duchess)**Youth Forum ~ Bob Phinney, K5TEC**

What inspires today's youth in the Amateur Radio hobby? Come and find out what's on the minds of our youngest hams in this captivating panel discussion

12:00 — 12:50 E-2 (Salon A)**ARRL Forum**

Fred Kemmerer, AB1OC, New England Division Director; Ria Jairam, Hudson Division Director; Phil Temples, K9HI, New England Division Vice Director; and Nomar Vizcarrondo, NP4H, Hudson Division Vice Director will discuss current affairs at the ARRL Board of Directors, followed by a Q&A session. Bring your questions!

12:00 — 12:50 E-3 (Seminar)**Working HF DX ~ Joe Reisert, W1JR**

Many new hams and lots of old timers often just work the locals and FM repeaters, etc. The high frequency bands are a great resource for fun and challenge in your spare time. On HF it's another world working and meeting hams from all over the world. This talk will tell you how to do it.

12:00 — 12:50 E-4 (Salon B)**The History of Vacuum Tube Radio ~ Louis Tramontozzi, KA1HIH**

This presentation reviews the history of vacuum tube radio, from its beginnings with tube type diode detectors up to the development of the TRF (Tuned Radio Frequency) and superheterodyne circuit configurations. This talk covers from the early 1920s to the 1970s. .

12:00 — 12:50 E-9 (Princess)

ARDC - Introduction and Update ~ John Hays, K7VE

This presentation will review ARDC Foundation activities and processes for making grants and managing the AMPRnet/44Net.

12:00 — 12:50 W-3 (Hudson)

NESMC Board Meeting (Private) ~ Bob DeMattia, K1IW

This is a meeting for NESMC board members.

Saturday 1 PM Sessions1:00 — 1:50 E-1 (Duchess)**Playing Radio Outside: So Creative And Fun Even Your Spouse Will Want To Join You! ~ Mindy Hull, KM1NDY**

Portable Amateur Radio is arguably the trendiest version of ham radio to come along in a long time! This year's talk focuses on the many creative ways you can enjoy portable radio. Even better, bring your non-ham spouses, partners, kids, friends, and better halves... we portable operators are all learning that this is a way you can get your loved ones to go play radio with you, too!

1:00 — 1:50 E-2 (Salon A)**The BIG E Project: Presenting Modern Ham Radio to the Public Larry Krainson, W1AST**

Presentation and discussion about the 2022 Project Big E and educating the public in ham radio enough to sign up for classes. The BIG E booth is just a month from the HamXposition and things will be in very good shape for the booth by then.

1:00 — 4:00 E-3 (Seminar)**YCCC Forum ~ Ken Caruso, WO1N, Moderator**

Yankee Clipper Contest Club meeting and presentations.

- Intros, Business Meeting, and welcoming new members
- **John Vogel, N1PGA** - ARRL Sweepstakes - The Oldest and Most Challenging Contest
- **Mitch Stern, W1SJ** - An Effective Contest Station without Towers

1:00 — 1:50 E-4 (Salon B)**How to Fail at Running a Radio Club ~ Aaron Addison, KF1G**

The counterpoint to the wonderful presentations on having a growing and healthy club. This presentation will focus on the pitfalls and roadblocks I have found in trying to keep a club active and relevant in the 21st century.

1:00 — 1:50 E-9 (Princess)**RFI Team Meeting ~ Rob Leiden, K1UI**

The forum will demonstrate the equipment included in a grant request for distribution to each section for RFI team use as well as some of the equipment available on loan from the ARRL Lab if needed.

1:00 — 2:50 W-1 (Wayland)**Getting Started with NBEMS ~ Don Rolph, AB1PH**

The Narrow Band Emergency Messaging Software is one of the two most popular digital messaging platforms used by ARES. It doesn't rely on any sort of infrastructure, making it the perfect tool for local and regional text-based message handling. This workshop with NBEMS expert Don will help you get started both with equipment setup and operations.

1:00 — 1:50 W-2 (Sterling)**Lessons From the Big Ones ~ Paul Silverzweig, W1PJS**

Paul was part of the ARES Puerto Rico hurricane deployment along with many others. His experiences, good and bad, are food for thought. Paul is the Rhode Island Section Emergency Coordinator. We're sure you'll find Paul's commentary and opinions stimulating.

1:00 — 1:50 W-6 (Southborough)**Tactical Message Handling ~ Dave Colter WA1ZCN**

In ARES, we move two types of messages: those sent on a form or those using a technique called "tactical voice." ARRL research shows that approximately 95% of all real messages during disasters are handled by voice. This new class will teach you how to send and deliver tactical voice messages quickly and accurately. You'll even learn why it's called "tactical voice."

Saturday 2 PM Sessions2:00 — 2:50 E-1 (Duchess)**NTS Traffic Handlers and NE-ECAPS Meet and Greet Marcia Forde, KW1U and Cory Golob, KU1U**

An opportunity to meet traffic handlers, EmComm, and other public service-minded amateurs from around the New England and Hudson Divisions and talk about current happenings and topics of interest.

2:00 — 2:50 E-2 (Salon A)**Hedy Lamarr and Her Inventions including Spread Spectrum Jules Hojnowski, KD2FOU**

Hedy was an actress, but also was brilliant and invented many things.

2:00 — 2:50 E-4 (Salon B)**New England Spectrum Management Council — Annual Meeting Bob Demattia, K1IW**

This is annual meeting of New England Spectrum Management Council (NESMC), the repeater frequency coordinator for ME, MA, NH, and RI. Repeater owners, users, members, and non members are invited.

2:00 — 2:50 E-9 (Princess)**RFI Locating - A Partnership****Rob Leiden, K1UI and Annette Conticchio, KA1RFI**

This presentation will outline a partnership between the ARRL and local utilities to locate and assist with RFI issues experiences by ham operators.

2:00 — 2:50 W-2 (Sterling)**Brief Training Ideas for ARES Staff ~ Dave Colter, WA1ZCN**

From the guy who wrote ARRL's ARECC training courses, here's a trove of education and training ideas that will simplify the process for Emergency Coordinators and Assistant Emergency Coordinators. Both classroom and field training is covered for a wide range of subjects. This is the toolkit that every training officer needs.

2:00 — 2:50 W-6 (Southborough)**Go Kit Strategies ~ George Lillenstein, AB1GL**

There's a lot more to building a functional Go Kit than simply throwing items into a storage container. This course takes a slightly different approach to designing kits that work for all the situations you might find yourself in – without going broke. This class can benefit both new and experienced ARES members.

Saturday 3 PM Sessions3:00 — 4:50 E-1 (Duchess)**YL Gathering Sponsored by YLRL & WRONE****Anne Manna, WB1ARU and Barbara Irby, KC1KGS**

This presentation will be an opportunity for women who are hams, interested in becoming hams, or curious about what women hams do, to learn more and meet one another. Available opportunities and resources will be shared. Come with your questions and suggestions!

3:00 — 3:50 E-9 (Princess)**Spy Radios ~ Mike Crestohl, W1RC and Tom Perera, W1TP**

A look at covert radio and cryptographic equipment

3:00 — 3:50 W-3 (Wayland)**High powered magloop construction & theory****Ted Robinson, K1QAR**

A practical under-\$1000 kilowatt magloop will be demonstrated on stage. (Most web designs are overly complicated). Discussion will include physics, design choices, construction procedures, and parts sources.

3:00 — 4:50 W-6 (Southborough)**SEC Presentation and Panel Discussion ~ Rob Macedo, KD1CY**

This two-hour session is a forum to learn what the different Sections in the New England Division have been up to for the last year from an ARES and public service perspective, and their plans for the future. It's also a forum for solving common problems within ARES and public service and to give an overview of what each section is doing from an ARES perspective.

Saturday 4 PM Session4:00 — 4:50 E-9 (Princess)**AM Forum~ Tim Smith, WA1HLR**

Tim is known throughout New England (and the country) as "Mister AM." He is active on most HF bands on the AM mode of transmission. He also operates from Monticello, Maine, which is the location of WBCQ, an international shortwave broadcast station, and makes use of their antennas when they are not on the air. His interests include radio, of course, music, and off-the-wall technologies.

Saturday Evening Sessions**6:30 PM- ~9:30 PM E-2 (Salon A/B)****GRAND BANQUET ~ Special Guest Speaker: Joe Eisenberg, K0NEB**

Kit-building guru K0NEB will discuss how he got into kit-building and his experiences with the hobby.

Door Prize: Yaesu FT-8917:00 — 11:30 W-9 (Marlborough)**New England QRP Meet and Greet, Vendor's Night & Build-a-thon**10:00 — 11:30 Atrium**Open Mic Storytelling ~ Phil Temples, K9HI, MC**10:00 — 11:30 E-1 (Duchess)**Music Jam Session — Informal, Just come and join in!**

SUNDAY September 12**Sunday 10 AM Sessions**10:00 — 10:50 E-1 (Duchess)**A Little Bit About Forest Fires ~ Barbara Dougan, N1NS**

This presentation is a glimpse of the vast knowledge, skills, equipment and technology involved in wildland fire management. Review how the Incident Command System (ICS) structure works at forest fires, including the communications unit and how qualified people from across the country are deployed to incidents.

10:00 — 10:50 E-2 (Salon A)**Introduction to Microcontrollers ~ Joel Curneal, K1JEO**

An introduction to Arduino and PIC microcontrollers and some sample programming to do simple tasks.

10:00 — 10:50 E-3 (Seminar)**Transmitter Testing using Low-Cost Gear
Shirley Dulcey, KE1L**

The FCC has requirements for the spectral purity of ham radio transmitters — they have to meet requirements for harmonic and spurious radiation. There are additional things like in-band spurs and broadband noise that are not covered by FCC regulations, but best amateur practice calls for minimizing them. It is now possible to test your transmitters for these issues without a lab full of expensive gear. This presentation shows how to perform tests using the tinySA, one of a number of inexpensive software defined receivers, and no-cost software.

10:00 — 10:50 E-4 (Salon B)**Linux in Your Hamshack ~ Andy Stewart**

"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. For more information, go to this website: < <https://sourceforge.net/projects/kb1oiq-andysham/> >.

10:00 — 10:50 E-9 (Princess)**Cybersecurity for the Radio Amateur ~ John Tarbox, WA1KLI**

Cybersecurity is a hot topic with many companies being hacked and personal data being exposed. Hams can help protect themselves by taking simple precautions and being diligent. Particular concerns for hams are radios that they put on the internet for remote operation and Wi-Fi enabled devices. The unique needs of hams will be addressed.

10:00 — 1:00 W-8 (Westborough)**VE Session III ~ W1LUS**10:00 — 10:50 W-9 (Marlborough)**Military Auxiliary Radio System: How Amateurs Support the
Department of Defense ~ Tom Kinahan, N1CPE**

The Army MARS Region Director and Air Force MARS Wing Commander for New England will present how individual Amateur Radio operators can support the Department of Defense as MARS members, but also as individual Amateur Radio operators. We'll talk about how all hams can play a role.

Sunday 11 AM Sessions11:00 — 11:50 E-1 (Duchess)**Fox Hunters Meeting ~ George Allison, K1IG**

Fox hunters from around New England and Eastern New York are invited to attend this meeting to discuss fox hunts of the past year and compare equipment and techniques. We'll look at fox deployment, fox hunt announcements and web sites, and possible competitions. Bring your gear (antennas and foxes).

11:00 — 11:50 E-2 (Salon A)**CW Academy ~ Bruce Blain, K1BG**

Bruce will talk about CWops' CW Academy. CW Academy has trained an estimated 6,000 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!

11:00 — 11:50 E-3 (Seminar)**Growing Your Club Through Mentoring and New Ham Development
Anita Kemmerer, AB1QB**

Anita will share some success stories showing how a focus on mentoring and skills development for new and inactive hams can bring new energy to your club and help to grow ham radio. She will share programs that have proven successful. Bring your own mentoring success stories to share so we can use this forum as a place to exchange ideas on ham development projects that are working.

11:00 — 11:50 E-4 (Salon B)**The "New" FCC RF Exposure Rules: A Practical Methodology
Larry Banks, W1DYJ**

The FCC recently changed the "rules" about RF Exposure for all of us. The exposure criterion have not changed, but the rules about assessing our personal station's exposure have: there is no longer a simple exemption and we are required to do this assessment. I recently assessed my station here in Woburn MA -- and it turned out to be much less an issue than I expected. This talk describes the process I used; it could be a model for your own station assessment. And as I was doing this, I learned some other interesting stuff!

11:00 — 11:50 E-9 (Princess)**Signals on the Hill: A brief history of radio at Blue Hill Observatory ~ Rusty Moore, K1FVK**

Beginning in 1899 the Blue Hill Meteorological Observatory in Milton, MA contributed to the advancement of radio science. Learn how scientists and Amateur Radio operators used kites, airplanes, and balloons in the development of both radio and atmospheric studies.

11:00 — 11:50 W-9 (Marlborough)**MARS Member Meeting (Closed) ~ Tom Kinahan, N1CPE**

Closed Meeting for MARS Members Only.

Sunday Noon Sessions12:00 — 12:50 E-1 (Duchess)**APRS, Golden Packet, & the Do-It-Yourself APRS Appliance
John Tarbox, WA1KLI; Don Rolph, AB1PH and
Tim DApice, KA1YBS**

With Kenwood not currently offering any APRS capable radios, we felt the need to develop a simple, low-cost Raspberry-PI based solution that could be used with many standard VHF/UHF mobile radios. Don led this effort, and these devices were tested during this year's Appalachian Trail Golden Packet event. This session will present the appliance, the results of this year's ATGP event as well as the future of APRS.

12:00 — 12:50 E-2 (Salon A)**Multi-Band End Feds—Theory and Design
Robert Glorioso, W1IS and Robert Rose, KC1DSQ**

Short history followed by theory of multi-band antenna design, theory of end feds, design constraints, RF feedback (why and management) and, of course, how to build one.

12:00 — 12:50 E-3 (Seminar)**DIY Electronics and APRS for High Altitude Balloon (HAB)
Payloads ~ Max Kendall, W0MXX**

Many think that only professionals can launch weather balloons, or you need a costly kit to fabricate a payload. This presentation aims to show the fun learning of making your own HAB systems, including the use of Amateur Radio for tracking. This is a continuation of last year's presentation about using APRS on weather balloons, updated to discuss the recent systems in my latest HAB launch.

12:00 — 12:50 E-4 (Salon B)**Introduction to Minuteman Repeater Association and
Raffle drawing ~ Kevin Paetzold, K1KWP**

An overview of the MMRA will be presented followed by the annual MMRA raffle.

12:00 — 12:50 E-9 (Princess)**Cape Cod's Fabulous Radio History - Facts to Remember, Fictions to Forget ~ Edwin Moxon, K1GGI**

The Cape has some truly interesting radio history that has been told and retold, sometimes getting better or worse in the process. We'll take a look at some local radio lore and sort out a few myth conceptions that have become common knowledge thanks to some imaginative contributors.

12:00 — 12:50 W-9 (Marlborough)**The Progression and Combination of Drones and Amateur Radio
Richard Bruce, KC1PBG**

This will be a talk on the crossover of ham radio and the progression of drone technology. It will cover a wide array of topics from the crystal days to Global Positioning Systems.

1:00—2:00 E-2 (Salon A)**Prize Drawing & Convention Wrap-up****Door Prizes:****ICOM ID-5100 ICOM IC-705 Flex 6400**

Northeast HamXposition

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.

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