

MODERNIZING & GROWING YOUR CLUB

THE NASHUA AREA RADIO SOCIETY STORY

FRED KEMMERER, AB1OC – PRESIDENT
DAVE MERCHANT, K1DLM – VICE PRESIDENT
ANITA KEMMERER, AB1QB – MEMBERSHIP
SCOTT ANDERSEN, NE1RD – PROGRAMS
JAMEY FINCHUM, AC1DC - ACTIVITIES
ABBY FINCHUM, AB1BY – YOUTH ADVISOR



Topics

- Our 4 year journey
- What do you want to be?
- Great Advisors
- Try New Things and Learn to Fail Fast...
- Building a strong brand to attract new Hams...
- Licensing and Mentoring - Focusing On the New Ham and Building member skills
- Activities, Activities, Activities...
- Invest in Development through Amateur Radio
- It All Comes Down To...



Nashua Area Radio Club's Journey

Its been about 4 Years of Change and Modernization

- Starting Point (2015)

- Approximately 40 members, with 10 - 15 at meetings
- Field Day was only major activity
- Little growth



- Today

- 225+ members, with 50 - 60 at meetings
- Many new members are younger people; some middle and high-school age – 25% of the club is licensed < 3 years
- Field Day is still important but we have added many new activities
- We have added a major focus on STEM learning, education & licensing activities, and youth outreach

Decide What You Want to Become

And Walk Your Talk..

- Our Mission

- *Encourage and help people to become licensed and active in Amateur Radio*
- *Spark Interest among Young People in STEM Education and Careers through Ham Radio*
- Provide training and mentoring to enable our members to improve their technical and operating skills and to be prepared to assist in times of emergency
- Sponsor on-air operating activities so that our members may practice and fully develop their operating skills and have fun with Ham Radio!



- Commit yourself and your team - Walk The Talk...

- Adjust your leadership team to match goals

- 7 board members plus a fourteen year old youth advisor
- > ½ of our initial leadership team was licensed for < 5 years

Not sure what goals to pursue? Begin with a serious focus
on operating as an ARRL Special Service Club



You'll Need Great Advisors

Here are some of ours...



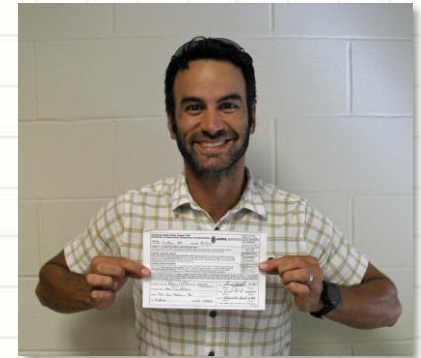
Eleni Floras
MHS Physics Teacher



Karen Crivac, KC1KBW
BGHS Biology Teacher



Dan Pooler, AC1EN
HMS Mathematics Head



Adam Goldstein, KC1KBZ
HMS Science Head



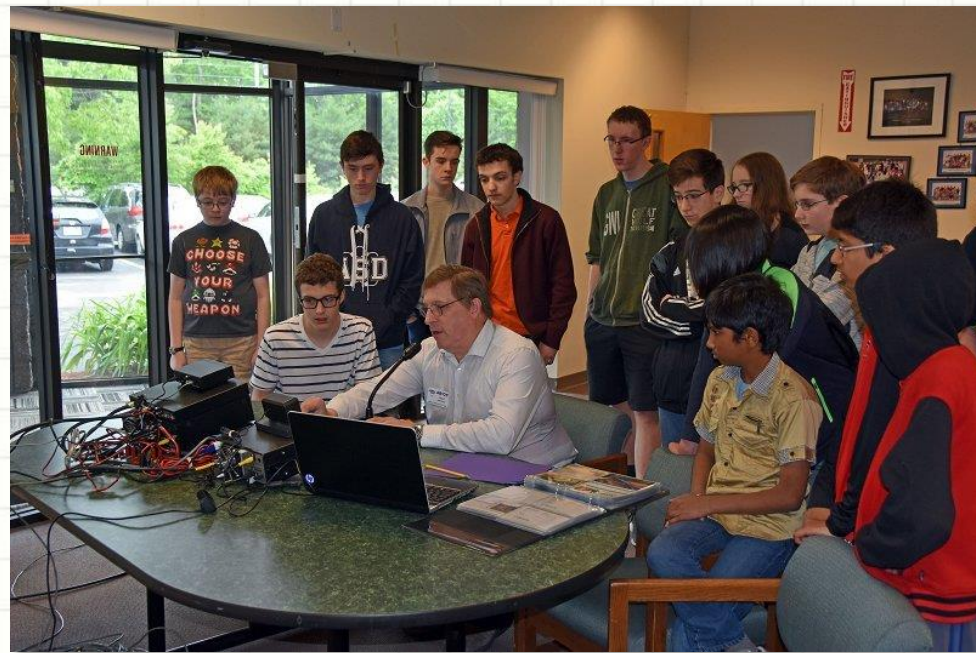
Abby Finchum, AB1BY
Youth Advisor & EC Member

- Focus on Natural Leaders and Influencers for young people
- Understand how to relate to and teach young people
- Guide development of quality STEM learning material
- Folks who truly believe in and want to invest in the future of young people
- Encourage and help your advisors to get licensed and active in Amateur Radio
- Enable young people to lead the way

Try New Things

And Learn to Fail Fast

- Nashua ARS Youth Outreach Example
- We tried –
 - Youth activities day...
 - Youth days on the air...
 - GOTA station at soccer practice...
 - Ham radio day at local maker organization...
 - Sponsoring youth participation in ARRL Rookie Roundup and 13 Colonies Spec. Event – getting close, a keeper...
 - Working with schools on STEM learning projects – **success!**
 - ***Youth Expos, Kits Builds, license classes for young people...***



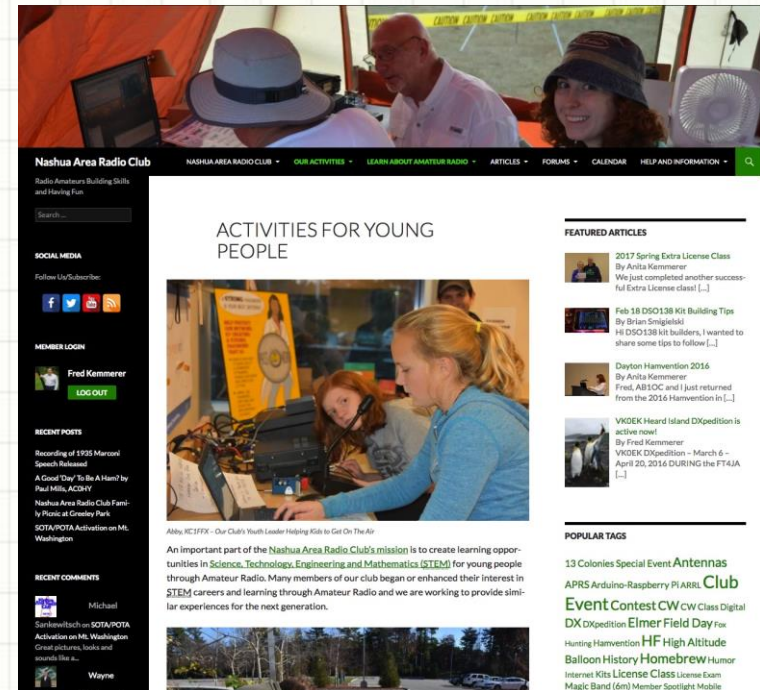
Our learnings –

- Stay focused on your goals and try new ideas as soon as you can.
- If you fail, learn, improve, and move on to another idea.
- Don't stop until you are getting great results!

Build a Strong, Modern Brand

To Attract New and Younger Hams...

- Where does your target audience spend their time?
- Make your first impression count
 - Facebook, Twitter, and YouTube presence
 - Is your website modern and “cool”?
 - Dynamic, constantly changing content keeps ‘em coming back...
 - Center around video and photos
 - Create a social following by linking your Internet properties
- Modernize Your Communications
 - Utilize Livestream Video – Nets, Contests, Field day, ...
 - Try switching your newsletter to Blog approach to encourage participation
- Partner with school and other social media sites
 - Encourage members to post, Blog, and Like on social media

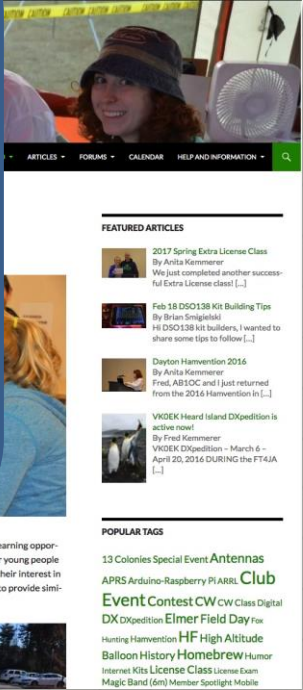


Build a Strong, Modern Brand

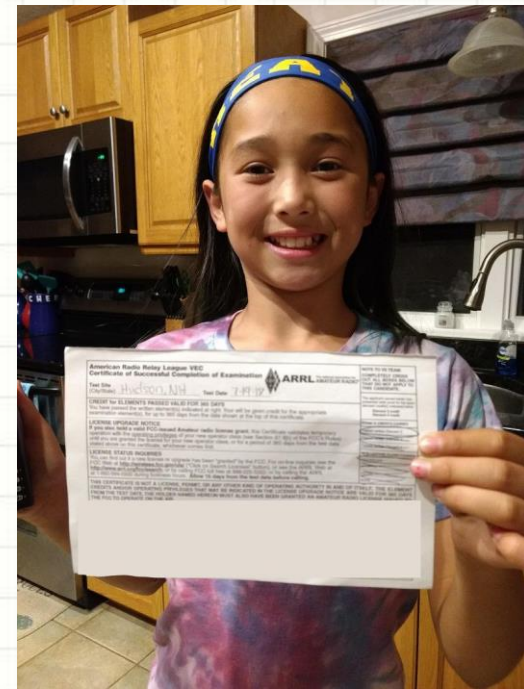
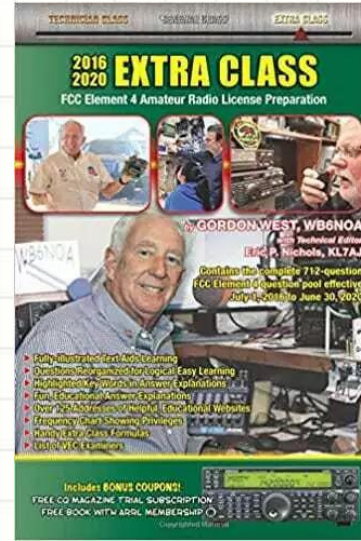
To Attract New and Younger Hams...

- Where does your target audience spend their time?
- Make your first impression count
 - Facebook
 - Is your website mobile friendly?
 - Dynamic content
 - Centralized content
 - Create a consistent voice
- Modernize your website
 - Utilize social media
 - Contests, Field day, ...
 - Try switching your newsletter to Blog approach to encourage participation
- Partner with school and other social media sites
 - Encourage members to post, Blog, and Like on social media

- 400+ media-rich articles written by members
 - WW Ham Radio Resource 300-400 views/day
- Monthly Newsletter contain 10-15 new articles each month
- Over 2,480 forum posts enable member engagement and mentoring
- Regular Livestream video from NARS nets and events encourages community engagement



Licensing - Our Lifeblood



We provide license classes for all 3 levels – Technician, General and Extra – twice per year . We have helped over 230 students earn a license or an upgrade. Our Classes Include Numerous Demos and Hands-On Activities.

New Ham Bootcamp

Getting Hams On The Air

- What percentage of newly licensed Hams get on the air?
 - You can help!
- Host a New Ham Bootcamp with multiple sessions, most held at a member's station
 - Session 1: Repeater net, HT Programming, EchoLink, Station/Antenna Farm Tour
 - Session 2: HF Operating, Digital Operating, Satellite Operating, Ground Plane Antenna Kit
 - Session 3: Trip to local Ham Radio store with mentors
 - Session 4: How to setup 1st station, 6 meters, Use your HF Transceiver
 - Session 5: Operate in the ARRL Rookie Roundup SSB Contest – N1FD team placed # 1 in Multi-Op Area 1 and had highest score in contest
 - Session 6: Building and Tuning up HF Wire Antennas



Develop Skills and Help Hams Learn

Our Tech Night Program

One of my top 5 choices!

- Antenna design and analysis with EZNEC
- Software defined radios - selection and use
- Surface mount soldering how to - equipment and techniques
- How to select and build a first HF Antenna system
- PC Board design and layout using Eagle
- Advanced Repeaters: DMR, DSTAR, Echolink, etc.
- Basic Arduino programming to create a simple Ham radio project (example a Tx)
- HF operating techniques (using filters, running and busting pileups, operating split,
- How to setup an EME station and make contacts
- QSLing 101 - cards and online including setting up and using LoTW, eQSL and Clublog
- Software: LT Spice, QUCS (RF Simulation)
- Test equipment use (Oscilloscope, frequency generator, spectrum analyzer, multi-
- How to test coax Performance
- Finding and working DX
- Smith Chart Use and Tools
- Building a J-pole antenna for the 2M band
- How to align a receiver
- Electronics: Use Ward Silver "Hands on Radio" books to teach radio theory and
- Cool smart phone apps for ham radio
- How to install Linux on and setup a raspberry pi computer
- Basic ways to setup a ham shack with attention to layout, electrical needs and safety
- How to setup and operate using JT65 and WSPR on the HF bands
- Operating your station remotely
- Low cost test equipment
- How a Yagi works
- APRS
- A chapter from the ARRL Handbook or Antenna Book with "show & tells" and
- How to program in Python
- Basic contesting how to including setup and use of N1MM
- Setting up an using DXLab - a hands on session
- How to setup a Digital HF system and operate using popular digital modes (RTTY and
- How to install connectors on coax cables
- Use other resources like NEETS and "All About Circuits"
- How to setup a station and operate using LEO satellites
- How to setup and use CW Skimmer and a CW Keyer
- Available operating awards and how to earn them

0 2 4 6 8 10 12 14 16



Member Prioritized and Delivered Material. Recorded and Archived on n1fd.org to build a Reference Library of ~35 training videos.

Mentoring On Our Website N1FD.org



EDUCATION AND TRAINING, FEATURED, GENERAL, NEWSLETTER, ON THE AIR

CONTESTING JARGON EXPLAINED

OCTOBER 1, 2018 SCOTT ANDERSEN EDIT

Contesting, as per my [last post](#), is an on-air activity where many (often thousands) of people get on the air and exchange small pieces of information for fun and bragging rights. This little corner of our hobby has its own nomenclature. I'm here to help decode some of this and help you get ready for your first contest.

The Cabrillo File Format

It might be helpful to work backwards a bit through this problem. At the end of this endeavor, you'll want to submit your log to the contest sponsor. This will be your official entry into the contest. Since the vast majority of contests are all the same or at least the data demanded by the sponsors is the same, folks got together and made a common computer file format to do this work. That file format is called *Cabrillo* (pronounced Cab-Re-Oh).

The [Cabrillo file format](#) is important not just because it is the standard way to submit your entry to a contest sponsor, but because the common definitions for concepts in contesting are defined in this standard. This article will walk through some of the most common and most important of these concepts. (I'll use the Cabrillo 3.0 specification for this discussion.)

ELMERING FORUM

[Nashua Area Radio Society](#) > [Topics In All Forums](#) > Elmering Forum

MARK ALL TOPICS AS READ

[Unsubscribe](#)

This forum contains 95 topics and 236 replies, and was last updated by Aron Insinga 1 day, 1 hour ago.

Viewing 10 topics - 11 through 20 (of 95 total)

← 1 2 3 ... 10 →

Topic	Voices	Posts	Freshness
Putting Up a Tower – Grounding and Bonding Started by: Fred Kemmerer	2	4	6 months, 2 weeks ago Burns FISHER
Logging Programs Started by: Robert Shields	3	3	6 months, 3 weeks ago Fred Kemmerer
Base Station – C4FM or Not? Started by: Scott Chapman	2	3	6 months, 4 weeks ago Scott Chapman
Putting Up a Tower Started by: Fred Kemmerer	1	3	7 months ago Fred Kemmerer
Working on Satellite Station Today Started by: Fred Kemmerer	1	1	7 months, 1 week ago Fred Kemmerer
Decoding Component Markings Started by: Aron Insinga	1	1	7 months, 2 weeks ago Aron Insinga
Getting On The Air, Getting Started with the IC-	1	1	7 months, 3 weeks ago Fred Kemmerer

Our interactive website allows members to write articles to teach others about their area of expertise. Our forums allow members to ask questions and get answers from mentors.

Focusing On The Young Ham

Its different today...

- Consider this...
 - Young people have more activities to choose from than ever before
 - Their calendars are busier than ours
 - Young families have to work harder and have very limited time beyond work and family
 - Social activities, learning valuable life skills, and self improvement are still top priorities
- Provide for entry into Amateur Radio in reasonable steps
 - Provide activities to allow new and young prospective Hams to try out and experience Amateur Radio in small, time limited steps
 - Encourage a simple path to get licensed or upgraded
 - ***It's a huge mistake to treat licensing as a hurdle to be jumped over***
 - Elmering, training, and help getting on the air are your club's most critical assets – ***you must get your members actively involved***
- Make Amateur Radio Fun! Embrace Digital and Computer Tech.



GOTA Activities for Young People

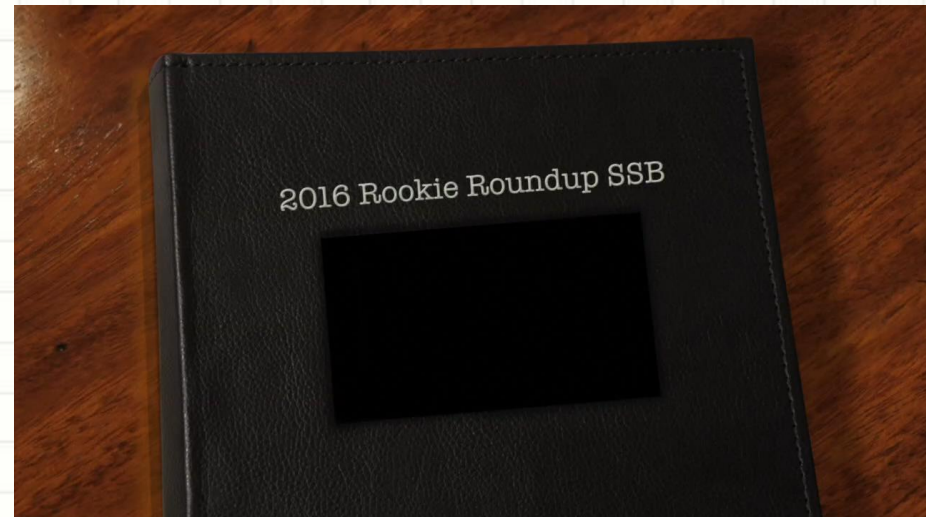


ARRL Kids Day

- “Kids Day is designed to give on-the-air experience to young people”
- Make it fun for young people. Consider including –
 - A Fox Hunt
 - Morse Code activities
 - Satellite Operating
 - Antenna Building
 - ...
- Great opportunity to livestream to Facebook...

ARRL Rookie Roundup – SSB, RTTY, CW

- Beginners contests provide a chance to compete and have fun on the air
- Contests are held Three Times a year
- Open your station, provide training and coaching
- Provide recognition awards
 - Social Media
 - Certificates



[Video on Vimeo](#)

Programs in Local Schools

STEM Education through Amateur Radio

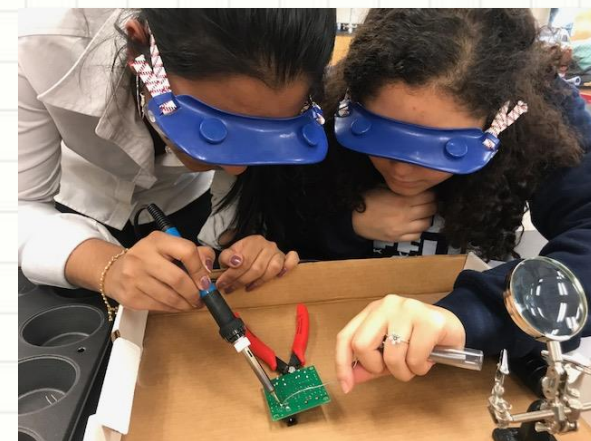


High-Altitude Balloon Projects

- ***Its about education first*** – develop and deliver a quality STEM learning experience
- Good mix of classroom education and Amateur Radio activities for fun is essential
- Participation in school clubs, STEM nights, and other school projects
- Something special – [an ISS Contact](#)



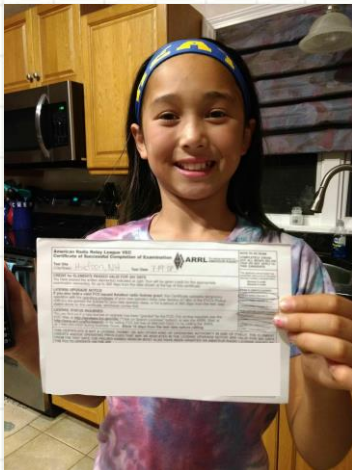
Morse Code Competitions



School Kit Builds

Licensing Young People

Creating Effective License Training



New Ham with
Her CSCE



Summer Youth
Tech License Class

- Interest in earning a license is high!
- A mix of classroom material and hands-on activities is very important
 - Incorporate demonstrations and on-air experiences
 - Be flexible, adjust balance to match age group
- Effective license class delivery will result in high percentage of young people earning licenses
- ***Please support ARRL efforts to modernize the band plan for Technicians!***



AB1BY License Class Instructor



Antenna Building Activity



Classroom GOTA

Activities, Activities, Activities...

Keeping it Fresh and Fun is the Lifeblood of your Club's Energy



- Gotta have OTA's - NPOTAs, SOTAs, POTAs, IOTAs, GOTAs, ...
- Club Projects
- Rookie and other hosted contests
- Hold Kit Builds
- Family activities (ex. Club Picnic)
- Host a young person or prospective Ham at your members' stations
- Hold Fox Hunts
- Keep the lineup **changing and fresh!**

Field Day As A Learning Tool

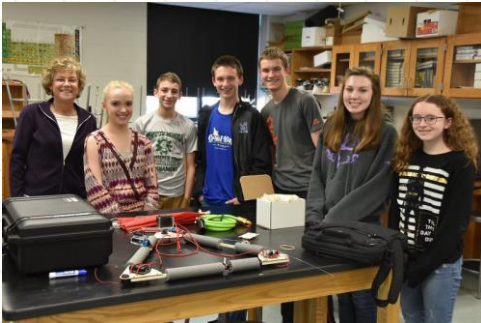
Focus Activity Around New Hams & The Public



- Help young and inexperienced Hams to be your “star” operators
- Embrace new Technology & make it the central part of your operation
 - Satellites, SDRs, Networking, Video
- What does Amateur Radio look like to your public visitors? [Be engaging.](#)

Learning and Development through Amateur Radio

Investing in your community and in our future...



- Contribute to the future via education for young people in your community
 - Provide for STEM learning through Amateur Radio
 - Create fun learning activities at local schools, libraries, Boy's/Girl's clubs, ...
 - Engage with Scouting organizations
- Make our hobby stronger by becoming a driver for modernization & growth
 - Help adapt and evolve our hobby to maintain and grow its relevance
 - Embrace new technology and today's Internet and Digital platforms
 - Modernize – Online Elmering, Embrace New Modes, Enhance the Band Plan...

What's Next for the Nashua Area Radio Society?



- To expand our youth outreach and training work, we've become a 501c(3) non-profit organization
 - We have raised over \$8,500 to support our Mentoring, Training, & Youth Outreach projects
- We have added an [Amateur Radio Youth Exposition program](#)
 - Delivered at regional Ham Fest, Public Libraries, School STEM Nights, ...

World Class Amateur Radio Training

NARS Internet Subscription



Tech Night Presentations (Present - 2016)



We have two ways that you can become part of the Nashua Area Radio Society:

- Join as a **Regular Member** – open to everyone in the United States of America. (You can join as an **Associate Member** if you do not yet hold an Amateur Radio License and we have a **Family Membership** available as well).
- Join as an **Internet Subscriber** – open to anyone *whose permanent address is in the United States of America and outside the states of New Hampshire and Massachusetts*.

Regular (and Associate or Family) Members can participate in all Nashua Radio Society activities including our [Membership Meetings](#) and [Tech Nights](#), our [Field Day](#) and other [Operating Activities](#), and all of the Forums on our website. Members can also post articles which will appear in our Newsletters and can vote in our officer elections.

Internet Subscribers benefit from all of the training materials on our website including our [extensive online Tech Night Video training library](#). We also provide mentoring for our Internet Subscribers via their posting questions and receiving answers in several of our online forums:

- [Emerging Forum](#)
- [Homebrew Forum](#)
- [CW & QRP Forum](#)

Internet Subscribers are also encouraged to join one or both of our [weekly on-air nets](#) via [EchoLink](#) (our repeater net) or via the 10m band (our HF net). **Internet Subscribers** are not eligible to hold office in NARS or vote in our elections.

More info via QR code at left or
<https://www.n1fd.org/join-us>



Our Internet Subscription makes our Mentoring Materials available outside our local area including our extensive Tech Night Video Library along with Q&A in our most popular forums for a small donation.

It All Comes Down To...

- Being ***Focused*** on a few, important goals
- Being ***Committed to Modernizing*** your club and our hobby
- Being ***Passionate*** about promoting Amateur Radio
- Being ***Willing to Teach, Coach, and Help Others*** to learn and enjoy AR



[Video on Vimeo](#)



- And it takes...
 - ✓ Some hard work
 - ✓ Commitment to modernization and new ideas
 - ✓ Creativity plus a willingness to try new things, and the ability to ***fail fast***
 - ✓ Focus on getting your team members engaged
 - ✓ Lots of new and constantly improving activities & learning opportunities
 - ***If you're not evolving and adding new things, you're declining***
 - ✓ More than one or two things – its the mindset that makes the difference

Thank You!



Some Final Fun!
[N1FD – A Number 1
Field Day](#)

Contact Information:

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Much more information, pictures,
and video are available on The
Nashua Area Radio Society's website at:

www.n1fd.org

