



THE ROAD TO CLUB OF THE YEAR

THE NASHUA AREA RADIO SOCIETY STORY

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PRESIDENT

Hamvention® 2019
Club Of The Year



Topics

- Our 4 year journey
- What do you want to be?
- Try new things
- Great advisors
- 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

- 230+ members, with 50 - 60 at meetings
- Many new members are younger people; some middle and high-school age – 60% of the club is licensed < 5 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



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, these are keepers...
 - 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!

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



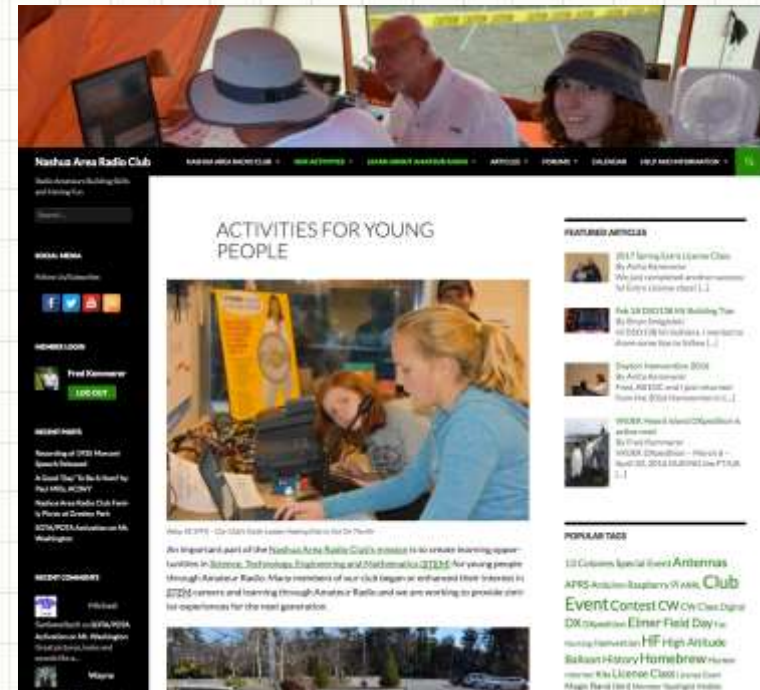
Abby Finchum, AB1BY
Youth Advisor & EC Member

- 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

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
 - Content
 - Create your own content
- Model
 - Utilize social media
 - 440+ media-rich articles written by members
 - WW Ham Radio Resource 300-400 views/day
 - Monthly Newsletters contain 10-15 new articles each month
 - Over 2,600 forum posts enable member engagement and mentoring
 - Regular Livestream video from NARS nets and events encourages community engagement
 - Contests, Field day, ...
 - Try switching your newsletter to Blog approach to encourage participation
- Partner with school and other social media sites
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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.

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

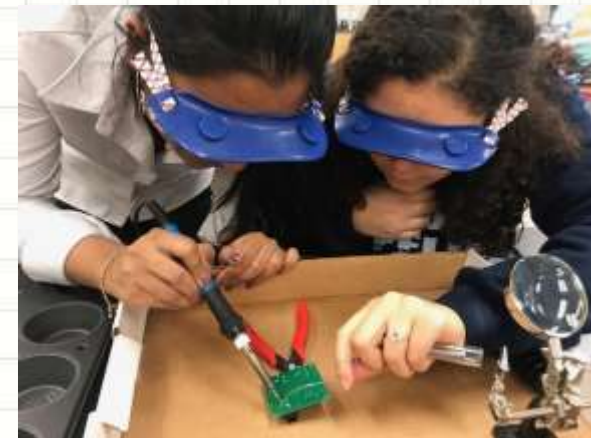


High-Altitude Balloon Projects

- ***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](#)



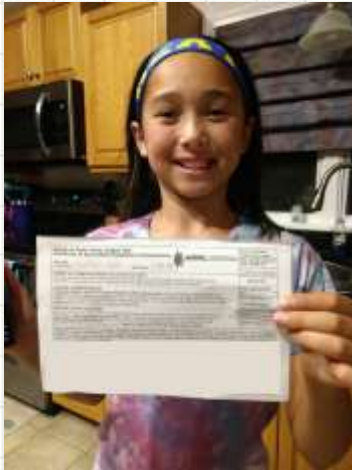
Morse Code Competitions



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

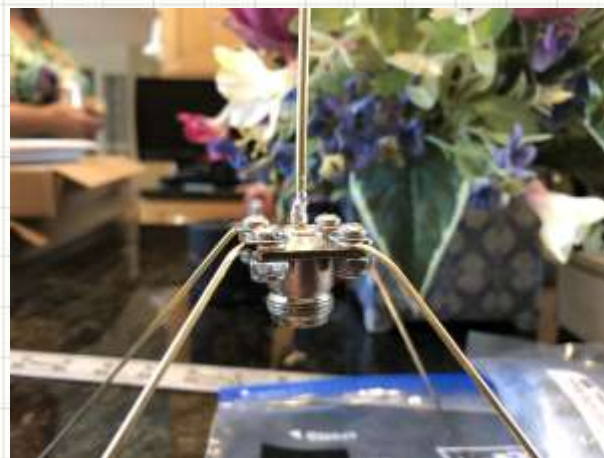


Classroom GOTA

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



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.](#)

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 \$12,000 to support our Mentoring, Training, Youth Outreach & EMCOM projects
- We've added [Youth Exposition](#) and [Ham Bootcamp](#) programs
 - Delivered at regional Ham Fest, Public Libraries, School STEM Nights, ...

World Class Amateur Radio Training

Internet Subscription



Tech Night Presentations (Present - 2016)



Training Videos Include:

- Building Your First Station and Getting On The Air
- Getting On The Air 2.0
- Popular Loggers – Ham Radio Deluxe and DXLab Suite
- Fox Hunting including including Tape Measure Yagi Build
- Advanced Repeaters (DMR, EchoLink, DMR, and D-STAR)
- DMR Radios and Programming
- WSJT-X: FT8, WSPR, MSK144 and More
- DX'ing and QSL'ing
- All About Field Day
- Building and Operating a Satellite Ground Station
- Putting up a Tower
- Bonding and Grounding
- Operating Your Station Remotely
- Getting the Most from your HF Transceiver
- Antenna Modeling with EZNEC
- Software-Defined Radios
- Getting Started with Raspberry Pi Computers
- Building and Operating a Mobile HF Station
- Weak Signal VHF and UHF Stations
- Surface Mount Soldering/Desoldering, a Hands-On Demonstration
- Low-Band Antennas
- Directional Antennas
- And more – new content almost every month

More info via QR code or

<https://www.n1fd.org/join-us>



Our Internet Subscription makes our Learning Materials available outside our local area including an 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

A Final Word About Club Of The Year



- The recognition that comes with the Hamvention® Club Of The Year Award is amazing!
- The real value in receiving this award comes from the path that you walk to get there
- If you focus on building a well rounded, world-class Amateur Radio Club that is focused on benefitting your community and modernizing the Amateur Radio Service, the award will come
- The return for building a club like this is ***FAR GREATER*** than receiving any award...

Thank You!



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

