

Hudson Memorial Students  
about to contact the ISS



## **PROGRAMS HELPING HAMS AND YOUNG PEOPLE TO DEVELOP NEW SKILLS AND GET ON THE AIR**

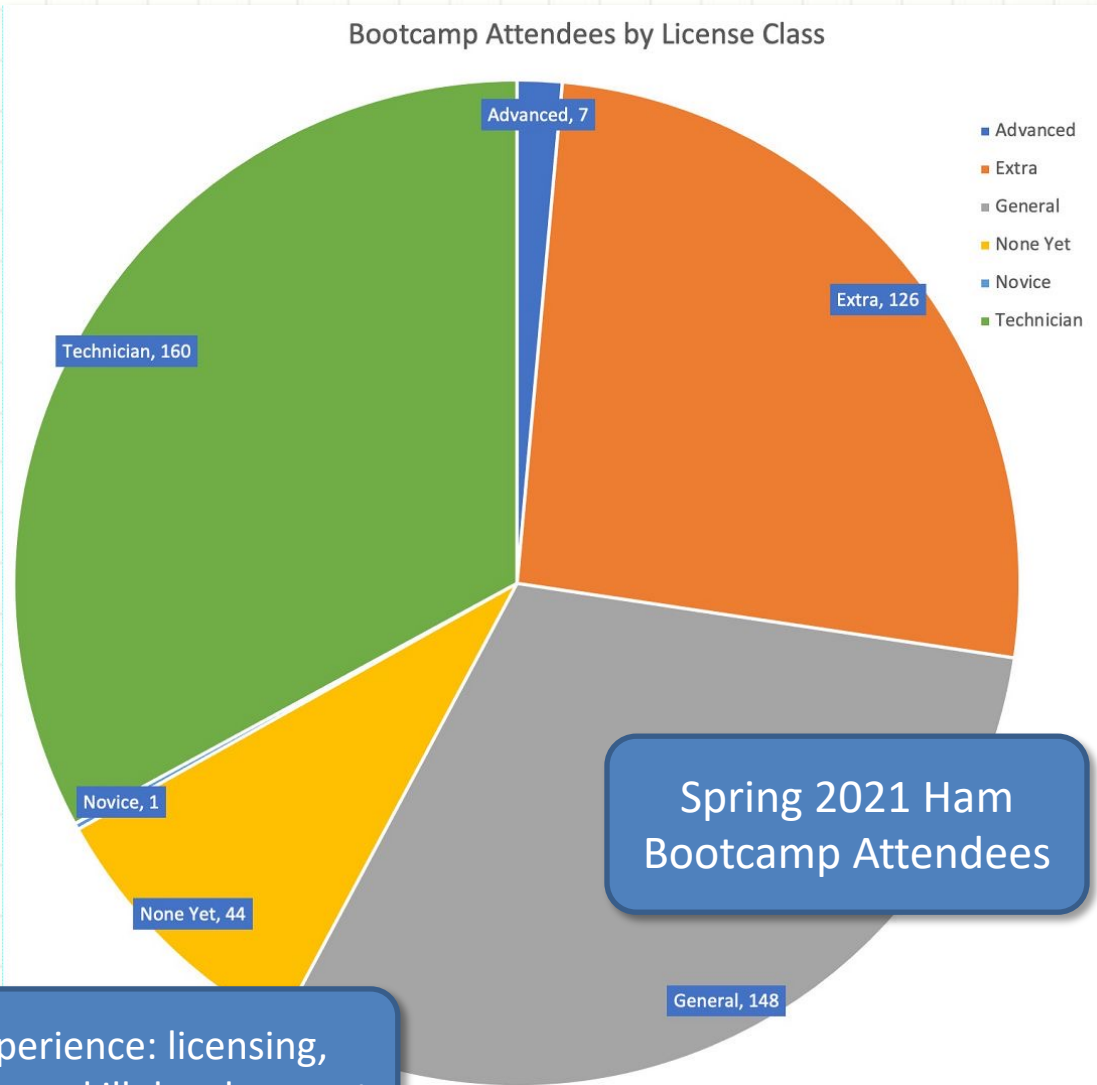
**FRED KEMMERER, AB1OC**

**PRESIDENT, NASHUA AREA RADIO SOCIETY  
ARISS MENTOR AND GROUND STATION**

# Hams are looking for Mentoring

## Stats from Licensing Classes & Ham Bootcamp

- Less than 25% of the folks who earn a Technician License are active on the air after 1 year
  - Based upon successful license NARS class grads
- Hams with General Class licenses and higher are looking for Mentoring and Skills Development help
  - ~60% at last Bootcamp had a General or higher license
- Its important to include folks who don't have a license yet
  - ~10% of Boot Campers did not have a license yet

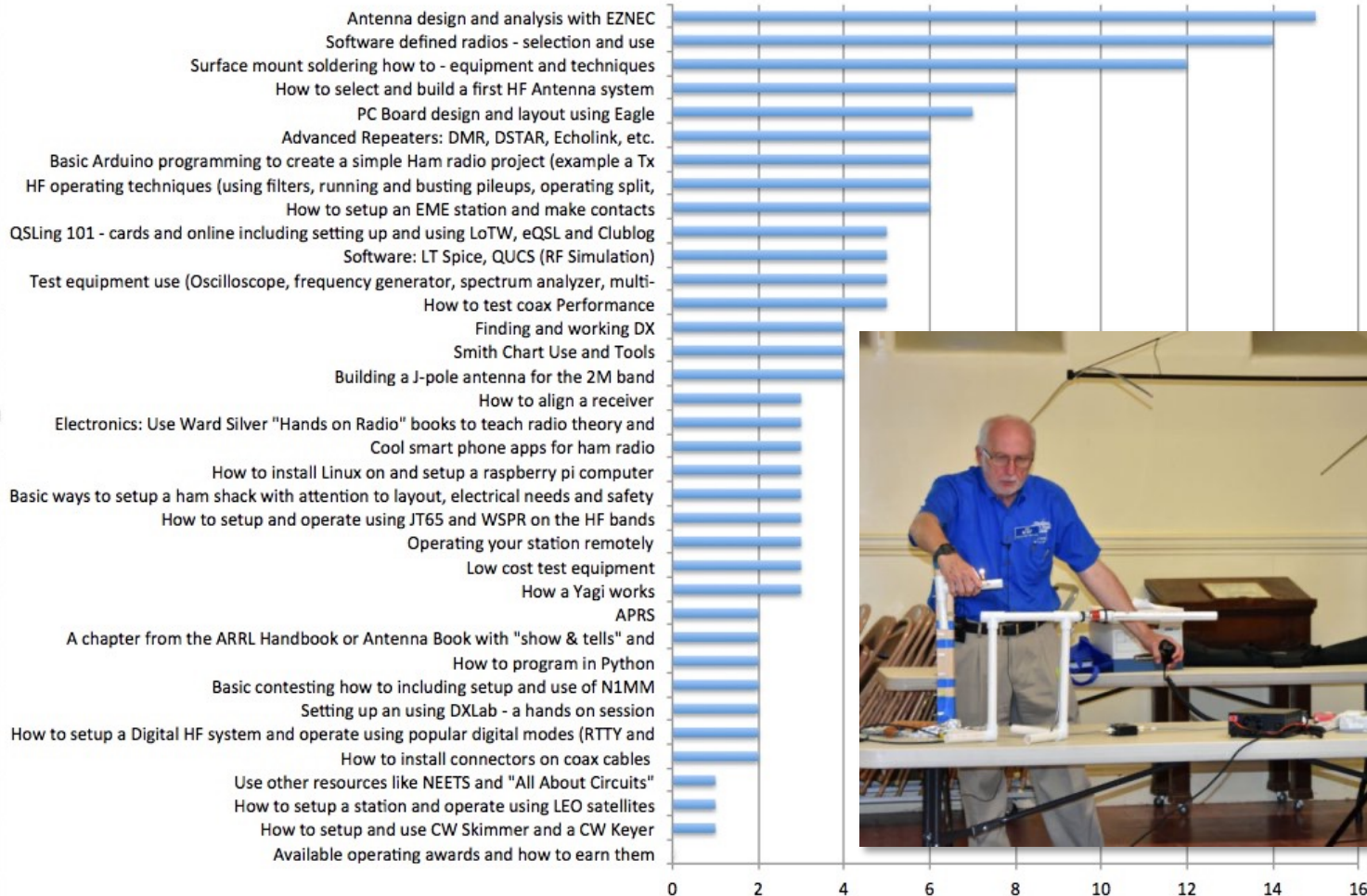


Need to focus on the full ham experience: licensing, getting on the air, and continuous new skill development

# Develop Skills and Help Hams Learn

## Hams Mentoring Hams - Tech Night Program Example

### One of my top 5 choices!



Member Prioritized and Delivered Training and Mentoring. Highly interactive sessions are recorded and archived online.



# Ham Bootcamp

## Hams Mentoring Hams to Get On The Air



Bootcamp at 2019 New England Ham Exposition in Boxboro, MA

- An activity to help you build a station and get on the air
- A chance to learn about what you can do with your license (and why you might want to have one)
- An opportunity to ask questions of experienced Hams and learn about Amateur Radio
- A great place to have some fun with Amateur Radio!
- In-person and online formats



# Ham Bootcamp

## Mentoring to help Hams Get On The Air



### Ham Bootcamp Sessions

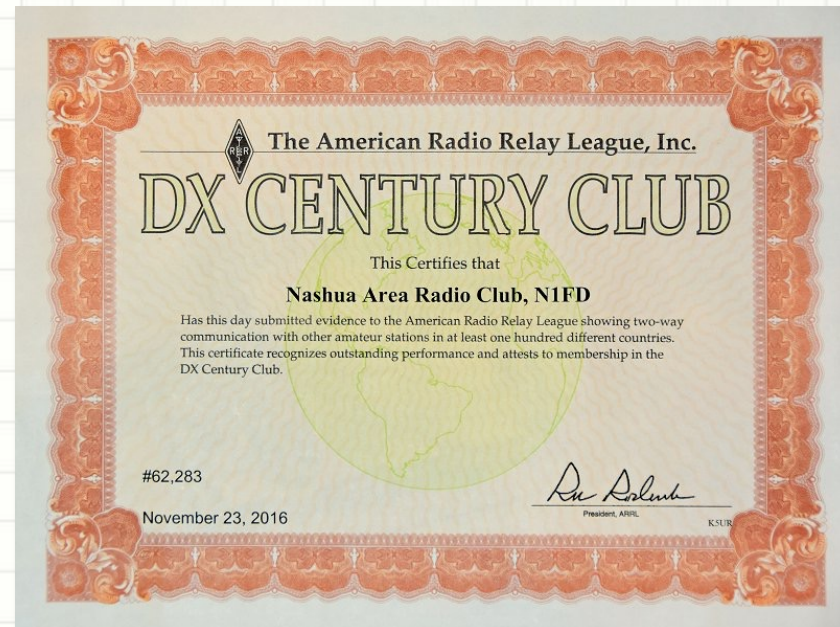
TRACK	SESSION	HOST
Repeaters and VHF/UHF	Bootcamp Introduction	Fred, AB1OC
	Putting together a Station for Repeaters - How to pick a Radio and an Antenna	Fred, AB1OC
	Making Contacts and Joining a repeater Net	Fred, AB1OC Aron, W1AKI
	Radio Programming Tutorial	Fred, AB1OC
	Getting started with EchoLink	Anita, AB1QB
	Getting started with Amateur Radio Satellites	Burns, WB1FJ
	Getting started with Fox Hunting	Abby, AB1BY
HF Activities	Putting together an HF Station for SSB, CW, and Digital	Jamey, AC1DC
	Picking and Putting up an HF Antenna, Feedline, and Ground	Fred, AB1OC
	Operating on the HF bands using SSB Voice	Fred, AB1OC
	Software and setup for Logging Contacts via your computer	Anita, AB1QB
	Setting up WSJT-X and FT8 Digital	Fred, AB1OC
	CW - Learning the Language of Morse Code	Fred, AB1OC
	Finding DX and QSL'ing - Getting them in the log and confirmed	Anita, AB1QB
	Bootcamp Conclusion - Where to learn more and online Ham Radio Shopping Trip	Fred, AB1OC

Our next online Ham Bootcamp is scheduled for Saturday November 13<sup>th</sup>. You can register online and get more information at <http://n1fd.org/bootcamp>

# Invite a Less Experienced Ham to Operate



- Invite a new or inexperienced ham to operate with you at your station
- Form a small group and enter a DX contest
- Help a new ham to operate in a special event
- 13 Colonies Station: Coach a new special event op towards the end of the event
- Provide a tour of your station and explain how-to put-up antennas, etc.





# Field Day as a Learning Tool

Focus Activity On New Hams & Young People



- Help young Hams to become 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 young visitors? Be engaging.

# Help People To Try Out Ham Radio

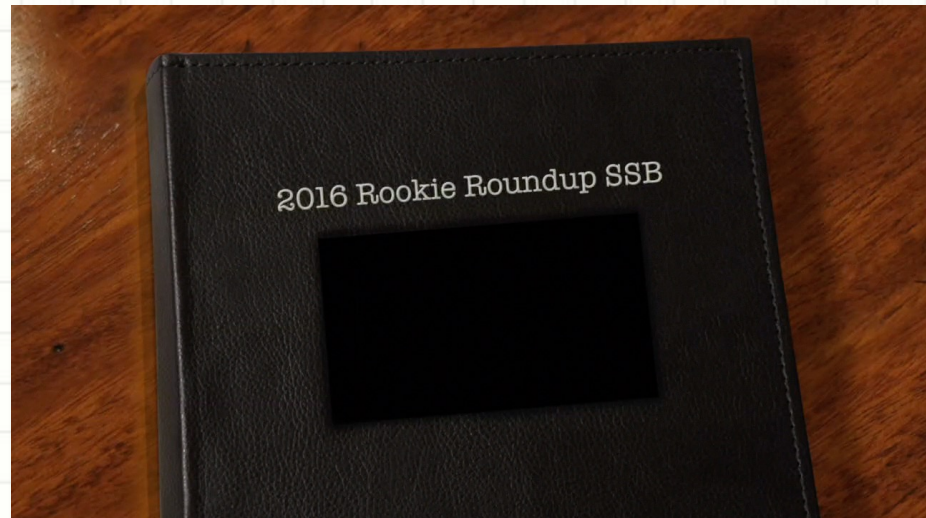


## ARRL Kids Day – two times each year

- Kids Day provides a chance for you to get on the air and talk with other young people
- Activities include some additional fun such as -
  - A Fox Hunt (find a hidden transmitter)
  - Make contacts using satellites in space
  - Morse Code activities
  - ...
- We livestream video during your operation to Facebook

## ARRL Rookie Roundup – SSB, RTTY, CW

- These contests provide a chance to compete and have fun on the air
- They are held three times a year
- We open a member's station for you to use and provide training and coaching
- Earn a contest certificate for your wall!





# Programs in Local Schools

## STEM Education through Amateur Radio

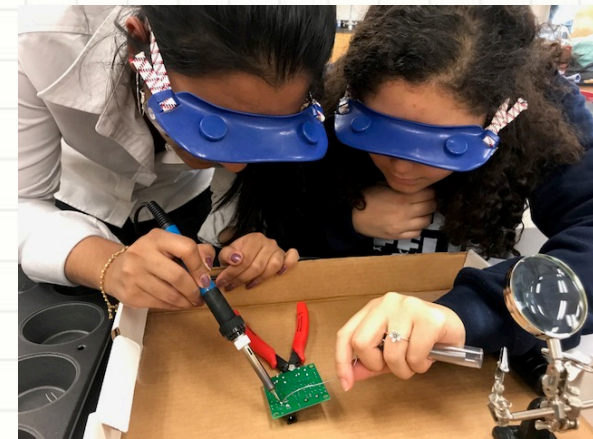


### High-Altitude Balloon Projects

- ***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](#)



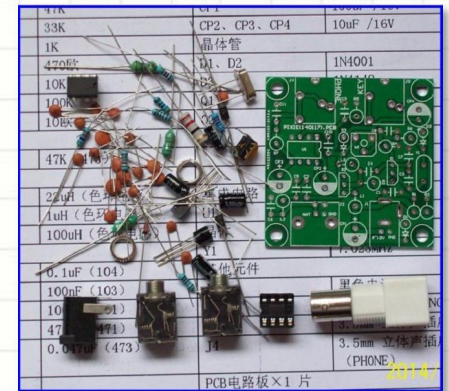
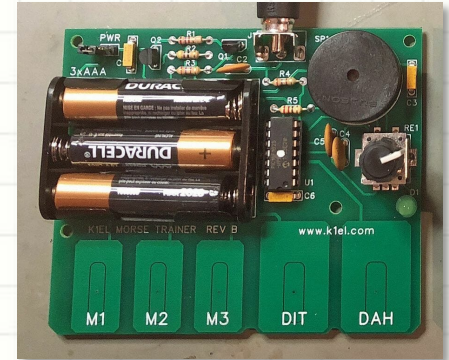
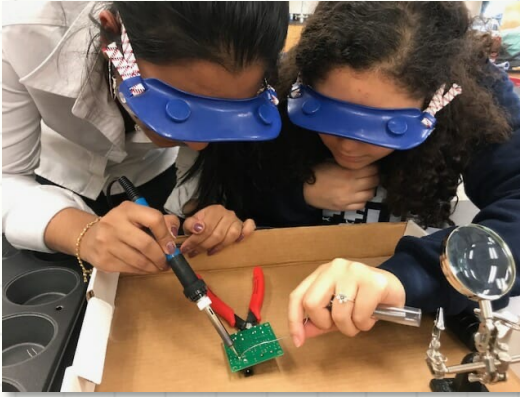
Morse Code Competitions



School Kit Builds



# Sponsor a Kit Build Activity in a School



**Ham Radio Kit Builds at School or at a Hamfest**

**Code Practice Key (above)  
40m CW Transceiver Kit (below)**

- Build an electronic kit that students can use to have fun with Ham Radio
  - Morse Code Practice Keys and devices
  - Simple CW (Morse Code) Transceivers
- Students learn about how electronic circuits work and how they are constructed
- Students work as part of a team to build and use their kits



# An ISS Crew Contact

## An Experience of a Lifetime!

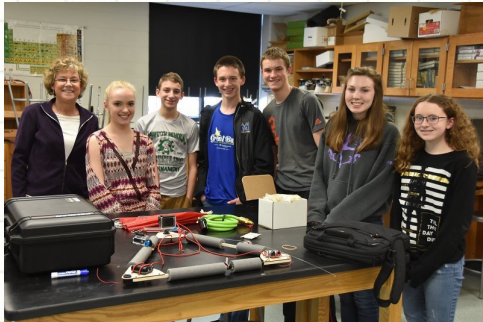
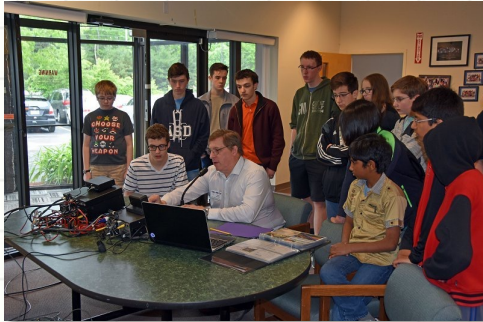


Highlights from a Contact Video



# Learning and Development Through Amateur Radio

Investing in young people, 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
  - ***Improve public awareness and perception of the value of Amateur Radio***
- 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



# Thank You!



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