

The Nashua Area Radio Society (NARS) is an ARRL Special Service club and a 501(c3) non-profit organization with a focus on mentoring and youth outreach. Our programs focus on bringing new amateurs into the hobby and helping them to get on the air, STEM learning through Amateur Radio in schools, and enhancing the knowledge and skills of our members. Over 190 club members contribute to our activities which are described below. Our purpose is to educate our members and the public in the areas of radio communications and related technical skills to advance and grow the Amateur Radio Service. We have raised over \$8,000 to enable our mentoring, EmComm, and youth outreach programs.

- [Amateur Radio License Classes](#) – NARS is committed to bringing new people, young and old into the amateur radio service through license classes. Technician, General and Extra classes are each taught twice yearly. We have helped over 200 students earn a license or an upgrade in the past 3 years with a success rate exceeding 90%. Our classes include hands-on training and demos to help the students not only pass their exam but build interest and become active in the hobby.
- [Youth Expos](#) – We have held Youth Expos at local events including the Boxboro ARRL New England Convention and NEAR-Fest. We have developed a large-scale display which includes three GOTA stations to engage interest from young and old in Amateur Radio including Field Day, Fox Hunting, Home Brewing and Raspberry Pi Computers, Satellite Communications, and Morse Code. We partnered with Steve Elliott, K1EL to create a low-cost keyer, the Morse Tutor, for young and old to build and use to learn Morse Code at our youth expos and kit builds.
- [Field Day](#) - Our Field Day operations (which feature three towers and a satellite station) provide our members with ample opportunity to gain practical EmComm skill development, station building, and an opportunity to get on the air. WMUR TV of Manchester, NH produced a segment for their 6 PM [news program highlighting the NARS 2018 Field Day activities](#).
- [High-Altitude Balloon \(HAB\) Projects](#) – We have partnered with four local high schools and middle schools on four HAB projects in the past 2 years. Working with local educators, we have developed a 20-hour STEM classroom instruction program on the science behind the HAB Flights and associated Amateur Radio technology and space communications. The program culminates with the launch of a High-Altitude Balloon carrying Amateur Radio to the edge of space. We have provided follow-on programs at several school STEM clubs including Kit Builds, Portable Operations, Fox Hunts, Get-On-The-Air, Morse Code training, a youth technician class and one-on-one mentoring for students. In 2018 we helped over 60 students learn about STEM and amateur radio through these programs.
- [ISS Crew Contact](#) – We partnered with Hudson Memorial School, a local middle school, to help students to contact Astronaut Dr. Serena Aunon-Chancellor on the International Space Station using Amateur Radio. This was a once in a lifetime activity for all involved. Our work, including the associated Amateur Radio Programs in the school, have helped to inspire students to pursue STEM related education. Over 1,000 students in the school and associated district directly participated or viewed the contact live and over 7,000 people participated via the Internet. NARS members put in over 750 hours to make the contact possible.
- [Tech Nights](#) – In addition to our monthly membership meetings, each month we hold a “Tech Night” where members present hands-on training to help new and experienced Amateurs learn to build stations, develop technical skills, and try new activities. Our Tech Night topics have featured satellite communications, antenna modeling, surface mount device techniques, kit builds, and many other topics. Knowledge transfer is a key goal for the club. We video record and professionally produce all tech nights to provide a library of over 30 2-hour training videos as a resource for our members.
- [Website/Blog](#) – Our website, [N1FD.org](#), provides a world-wide Amateur Radio resource and engages our membership by enabling all members to contribute through forums and blog articles. Hams worldwide follow the blog which includes over 480 multimedia articles about Amateur Radio which receives 300-400 views per day. Our Elmering and other interactive forums allow members to ask questions about Ham Radio and get answers from other members.
- [SOTAs](#) - In order to develop our members operating and Emergency Communications skills, we hold Summits on the Air/Parks on the Air activities for our membership at Mount Washington, NH and other summits in NH where any member can bring their portable station and operate on emergency power.
- [On the Air Operating Activities](#) - NARS provides many operating activities to help our members improve their operating skills and try new modes or technologies. NARS teams have won their categories in the NHQP, June VHF contest and ARRL Rookie Roundup events and we operate as the K2K NH station in the 13 Colonies Special Event.