Fred Kemmerer, AB1OC

Clubs have always been instrumental in bringing in new hams, but many clubs are experiencing difficulties doing so. Four years ago, the Nashua Area Radio Society (NARS) was sharing in this struggle, so we decided to focus on new ham licensing and development. Today, we have over 230 members and we're growing by three to five new members a month. Over 60% of current NARS members have been licensed less than 5 years.

A Licensing Program that Works

NARS began by creating an effective licensing program. The first time we tried this, we taught a Technician class over seven Saturdays. At the beginning, we had about 10 people, including younger students. By the end, we had four students left, and only two passed their Technician exam. Eventually, we realized that we didn't understand working families. They don't have the time to spend seven weekends in a class, and they couldn't retain the material well without having a license to use it.

Bringing Amateur Radio to Students

It can be challenging to bring amateur radio into schools. We've had success with middle and high schools by supporting STEM clubs, Pi Nights, and other extracurricular activities with amateur radio demos and hands-on activities. We hold our Field Day operations at local schools and publicize them to the students.

Activities like kit builds, Get On The Air (GOTA) stations, foxhunts, Morse code activities, and satellite demonstrations make great activities for school students. These are effective ways to have fun with amateur radio and will often lead to strong interest in licensing from students and their teachers.

As you gain traction in local schools, you can consider activities like a high-altitude balloon (HAB) project or an International Space Station contact. These projects usually include classroom time to teach STEM topics that include amateur radio. For example, our HAB program consists of six 2½-hour classroom sessions where we work with educators to teach material on balloon physics, atmospheric science, amateur radio and space communications, and more. Each session includes a hands-on activity, such as a foxhunt, an HF GOTA experience, a satellite contact, or a Morse code activity.



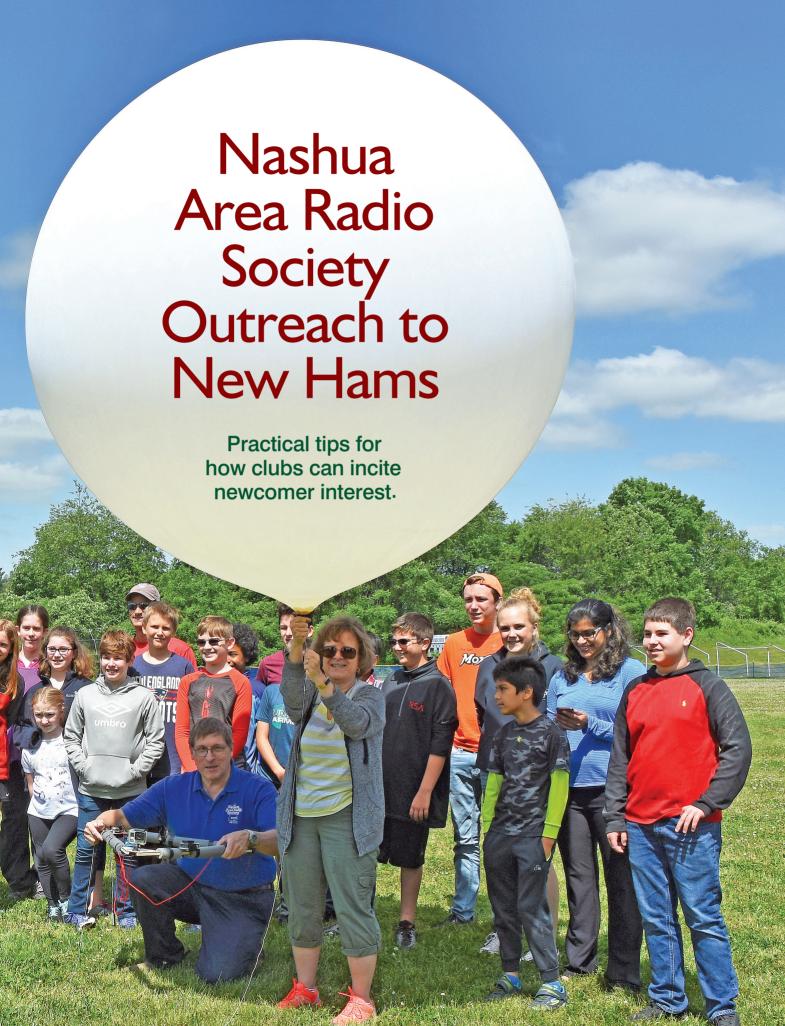




Figure 1 — A low-Earth orbit satellite demonstration during a Technician license class.

We adopted a single-weekend format, and as a result, we have since licensed or upgraded over 230 people. Our licensing effort has grown to include seven classes a year. We offer Technician, General, and Amateur Extra classes twice a year, as well as a summer Technician class for middle- and high-school students.

We view the licensing process as an opportunity to share our enthusiasm while getting to know the students. We include many hands-on activities in our classes (see Figure 1), and hold our Amateur Extra license classes at a well-equipped member station, allowing students to try more advanced activities and to get excited about what they can do with their new license or upgrade.

A Training Program that Gets People on the Air

We follow our classes with training and get-on-the-air programs to help our students become active. Without a focus on delivering quality training programs and the associated mentoring, we find that only a small percentage of newly licensed hams will get on the air and become active. Some of our most successful training programs include the ones described here.

Ham Bootcamp

We developed this program as a first step for Technicians and Generals (see Figure 2). We enable them to get a station together, learn to make contacts, get over mic fright, explore ham radio activities, and have fun with their license.

Tech Night

We hold monthly technical programs that provide how-to training on a broad range of amateur radio topics. Popular topics include getting started with repeaters, digital, and EchoLink; building a first HF station; getting started with FT8; practicing computer logging; learning about and preparing for Field Day; putting up a tower; building a satellite

station, and more. We include a mix of basic and more advanced topics to provide great learning opportunities that appeal to both new hams and more experienced members. We video-record Tech Night sessions, and we have created a library of over 70 hours of high-quality training materials that our members use.

Contest and Special Event Mentoring

Many new hams, particularly young ones, love to compete. We routinely sponsor participation in the ARRL Rookie Roundup contests or for Kids Day operations at a member's station. We begin these activities with a basic tutorial on how to operate in the contest, followed by some hands-on training on the station gear. We've also provided pileup operation training for new hams as part of our operations in the 13 Colonies Special Event.

ARRL Field Day

NARS has a long history with ARRL Field Day operations, and recently, we've approached the day as an opportunity for our newer members to take the lead. Under the guidance of more experienced members, our newer hams plan the construction and are the first to get on the air. As a result, we've been first or second in the 7A, 10A, and 11A categories over the last several years, and we've provided some great learning opportunities for new hams.

Basics for Success

People often ask us what it takes to bring new members to amateur radio and get them active. It comes down to the application of three basic principles.

✓ Deliver programs that fit the needs of younger families.

In younger families with children, both parents often work, and have a difficult time balancing work with the demands of raising children. This means that our approach has to be delivered in bite-sized chunks of time, presenting activities that are fun, build interest, and foster skill development as we go.

✓ Modernize your club and the hobby in general.

It's important to take a modern approach to ham radio. An effective online presence on Facebook and Twitter, along with a modern website, will go a long way toward attracting new people to amateur radio and your club. Make sure to update your online resources with fresh content regularly — at least every few days, if not more often.

Replace your newsletter with a blog that your members can use to post media-rich articles about their projects and activities. Tools like WordPress make it easy to share your blog posts to Facebook and Twitter. When you do an activity, livestream video of the activity to Facebook. See www.facebook.com/NashuaAreaRadioSociety/ for examples.

Embrace new technologies like SDR and computer-assisted operating, and new modes like FT8. Young people have good computer skills, and these can be an excellent gateway into amateur radio for them.

✓ Learn to "fail fast" until you succeed.

It's unlikely that most of the new programs and activities you try will be an instant success. We've been able to create many successful new programs by learning from early failed attempts and improving the elements that worked until we got the results we were looking for.

By using an approach that embraces new technology and engages potential new hams in ways that fit well into their busy lives, we've found that it's not difficult to interest new folks and young people in Amateur Radio. Failing fast while working to create new programs and activities geared toward new hams has produced good results and a steady stream of new, active hams.



Figure 2 — Jamey, AC1DC, explains building HF stations at Ham Bootcamp.

Embracing the New

We are developing some great young operators. For example, Abby, AB1BY, who earned her Amateur Extra-class license at age 13, operated our digital station's SO3R during 2019 ARRL Field Day. She enabled our digital team to match our top CW operator's score with digital contacts.

It's important to embrace new modes and gear at ARRL Field Day to bring out new hams who want to learn. We've had success with networked SDRs, computer-controlled satellite stations, FT8, and livestreamed video at our Field Day operations.

NARS members are committed to bringing new people into amateur radio, as well as assisting other clubs in developing programs to do the same. For more details about our ongoing projects, check out our website at **www.n1fd.org**. As we continue to grow, we hope other clubs might find the same success that we have enjoyed.

Fred Kemmerer, AB1OC, is an Amateur Extra-class operator, licensed since 2010. He is an electrical engineer and has held positions as a Technology and Business Executive in the tele-communications industry. He enjoys building stations and space communications, and he has a blog dedicated to these interests, which can be found at https://stationproject.blog. Fred also serves as president of the Nashua Area Radio Society.

For updates to this article, see the QST Feedback page at www.arrl.org/feedback.

