

The Spark ⚡ Gap

Newsletter of the Wellesley Amateur Radio Society
Founded in 1950

January 2026



PRESIDENT'S MESSAGE

Happy New Year to all in 2026! It's the start of a big year in WARS history as we celebrate our 75th anniversary. Dan Brown and Scott Nacey have been doing an *outstanding* job of writing about our founding and early history, and putting previous documents, Spark Gaps, and related material into an archive.

Rob, our program chair, is hard at work with his committee on lining up some good technical talks this winter and spring. And our Board of Directors is actively planning good events for keeping our radio skills sharp!

Our first meeting of the year will be Zoom only, as the police station room isn't available and we weren't able to find another spot. Hope you will join us – the Zoom link will be sent separately to all members.

- Charlie, WA3ITR

THIS MONTH'S EVENTS

- **January 20, 7:30 pm**

Monthly meeting - Zoom only!

"The Emerging 'Technification' of Amateur Radio"

by Steve Stroh N8GNJ

- **January 24, 11 am to 2 pm**

Winter Field Day

Elm Bank Reservation

EDITOR'S NOTE

Happy New Year to all! Since I haven't been a member of our club for very long (this time), I thought I'd introduce myself. I was first licensed in 1974 as WN1TEW while I was an electrical engineering student at Worcester Polytechnic Institute. I still remember sitting in the room in the Custom House in Boston to take my exam, and doing my first QSO in CW on a Heathkit transceiver from my dorm room at WPI using a wire antenna out the window to a nearby tree.

While working at Prime Computer, I met Tom Kinahan N1CPE and Vern Valero (whose callsign I forget) who also worked there, and they invited me to join WARS in the late 80s. WARS brought me from Novice to Technician (N1GJQ) to Advanced (KC1ST) to Extra (WO1G). I remained active in the club for close to ten years, doing lots of 8A Field Days and being a part of our resurgent June VHF Contest team on Mount Equinox in Vermont. As my life changed, I became less active in ham radio resulting in dropping out of the club and most ham radio activities, but still maintained a background interest in our hobby. Somehow I got to know Dan Brown a few years ago, realized he was president of WARS, and I decided I'd join again. It was soon time to renew my license and I decided to change to the post-Novice version of my original callsign and now I'm WA1TEW.

I lived in an apartment in North Cambridge for fifteen years that had a tiny yard that wasn't too amenable to a wire antenna or even a vertical like the club's Cushcraft R-5, so I wasn't on the air. Now I actually have a yard at my new apartment near Cambridge's Porter Square where I *could* put up a wire antenna or a vertical. I've got the winter to think about it.

Being a newsletter editor isn't new to me. I've done that for a few groups I've been in over the years. This means that I have experience in gently pestering folks to write articles and/or send me photos!

So, on with this month's *Spark Gap*!

73 de Scott Sminkey WA1TEW, Editor

(Send articles, photos, comments, questions, etc. to the editor at ssminkey@alum.wpi.edu.)



Scott WA1TEW at WARS Field Day sometime in the '90s.

You can work a January VHF contest rover!

Steve K1STK and Scott KA1QAS are heading out roving as KA1QAS/R in FN51, FN41, and FN42 for the ARRL VHF Contest from January 17 to 19. They plan on being in FN51av on Saturday from 2:00 pm ET until 8:00 pm ET or so. Sunday morning they will be in FN41, and in the afternoon they'll land closer to their homes in FN42. Each grid square change allows them to work stations again from their new location.

They will be operating on 6m, 2m, 70cm, and 23cm all modes. They will also be on 220 MHz and 900 MHz with FM. Throughout the contest they will be listening to 146.52, 446.00, and 927.50 FM simplex. Give them a shout! They're eager to test the mobile station they have been building, so they hope to hear from anyone, anywhere, from all the grids. Hopefully you can also track them on APRS at K1STK-7 and KA1QAS. They welcome skeds: e-mail Scott KA1QAS at ka1qasradio@gmail.com.

Reported by N1WBV on the Eastern Mass. ARRL web page



Hmmm... A bunch of suspicious characters gathered at a Panera Bread restaurant at an undisclosed location on December 27, 2025.

Clockwise from front left: Steve H. W1NIV, Steve K. K1STK, Joe W1HAI, Dan W1DAN, Peter W1OR, Leandra AF1R, Dom N1DM, Barbara KC1KGS, Patti N1FOG, Andy N1FOD.

Photo of the quarterly Natick ham gathering by Jim WB4EJR.

Short Transmissions...

This column will present brief news items about our club, events, and other things of interest to our members. If you have something to share, please contact the editor.



- We have a new 75th anniversary club logo! **Dan Brown W1DAN** reports that the logo we have used for the last 25 years or so was derived from a poster that some unknown club member created, and was found at Arline W1LIO's QTH in 2009. Way back then, Dan used a DSLR to photograph the poster, then used Corel to edit the photo, and created the logo for our newsletter from that work. It's the logo you have seen for many years.

As part of our 75th anniversary, Dan's work colleague Joe Pugliesi N1FQZ used Photoshop to mask out the white and yellow, replacing it with solid colors. He painstakingly remanufactured the lightning bolt and recreated the text with a unique font called Eurostile-bold which Joe widened by 50 percent to match our logo. Thanks, Joe! The new logo can be seen on the first page of this newsletter.

- **Dan W1DAN** informs us that the ARRL has created an event to celebrate the 250th anniversary of the birth of the United States. The **2026 ARRL Celebration of the USA 250 Semiquincentennial Special Operating Event** will offer Massachusetts hams the chance to operate as W1AW/1 between February 11 and 18, according to Larry Krainson W1AST, the state manager of the event for Massachusetts. He is looking for individuals and clubs who would like to participate and will coordinate all the volunteers. Clubs would take one or more four-hour shifts during the event period. Sounds like fun! Should WARS do this?
- **Dan W1DAN** forwarded a letter from Ralph KD1SM announcing that **amateur radio volunteer recruiting for the 2026 Boston Marathon on April 20th is underway**. Ralph reminds us that the Boston Marathon is one of the highest visibility public service events for the amateur radio community. So far he has about half of the total number of operators needed and needs more!

The Boston Marathon Radio Communications Committee has prepared [a short tutorial on navigating the BAA volunteer sign-up](#) and notes that if you haven't previously volunteered, go to the [Volunteer Registration page](#) and follow the instructions for new volunteers. Almost all amateur radio positions are single person assignments, but the Committee will try to accommodate which segment you are assigned to if you're in a group, in order to allow for similar start/end times.

If you have questions about volunteering, you can email contact@hamradioboston.org.

The editor would like to thank Dan for being such a font of information this month.

STATION REPORTS

Compiled by David Fox WA1QGC. Send reports to fox.david@verizon.net.

- Scott KK6IK added an AllStarLink node to his home station and can now access AllStar connected repeaters across the world. Scott is having "lots of fun."
- Derek AK1WI and Charlie WA3ITR have recently fired up their WSPR (Weak Signal Propagation Reporter) units. Derek kindly fixed Charlie's unit, which had a bad output connector. Both are using Derek's WSPR units and battling to see who has more unique spots on 20m. In early January, they were each getting 425+ spots on a typical day using two watts to an EFHW (End-Fed Half-Wave) antenna.

WINTER FIELD DAY – SATURDAY, JANUARY 24

By Leandra MacLennan AF1R

WARS will be participating in Winter Field Day. Here are the details:

Date: Saturday, January 24, 2026

Time: Setup at 11:00 am, operation starts at noon, pack up by 2:00 pm

Location: Elm Bank Reservation, access road is at 900 Washington St, Wellesley, Mass.

Talk-in frequency: 146.58 MHz simplex

We will set up at the first parking lot at the top of the hill.

There are no porta-potties on site.

We will be using the club callsign W1TKZ.

We will have a radio and antenna available for anyone to use.

You are welcome to bring your own radio and antenna.

Elm Bank Reservation is also a POTA park, so during our contest exchange we can also give out the park number **US-8408**.

Bring your cold weather gear.

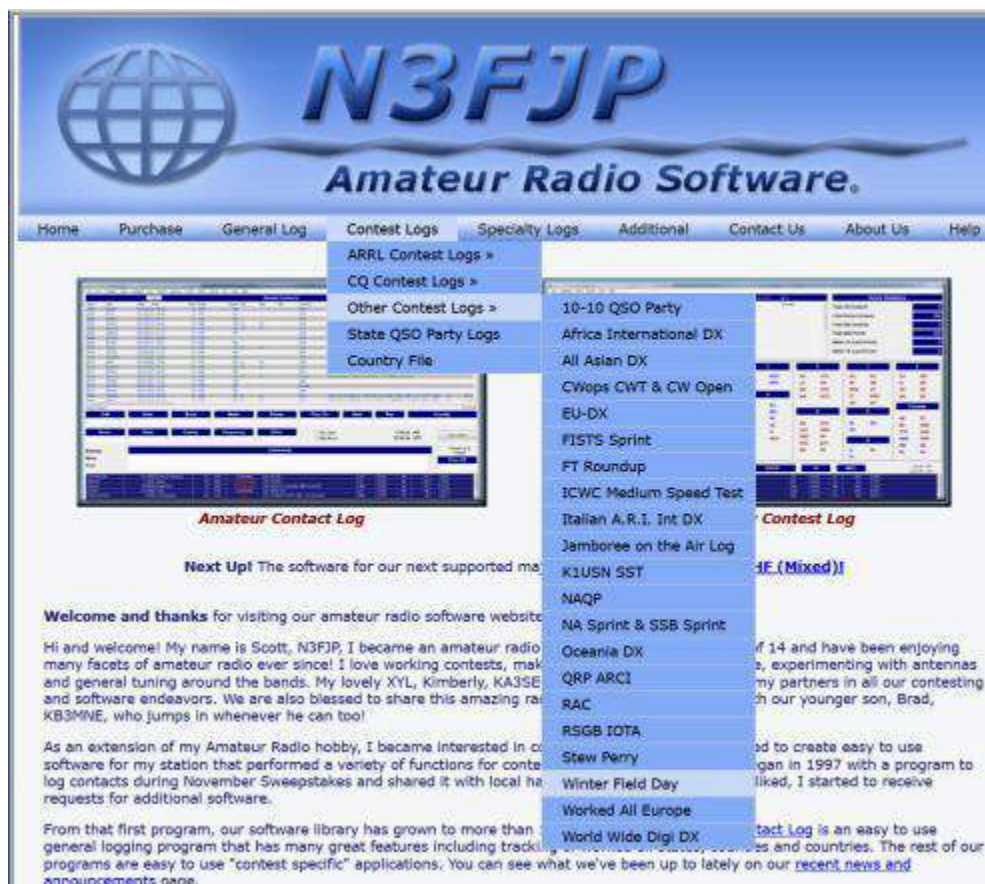
We will be there if the weather is sunny, snowy, or a light drizzle. Heavy rain or wind will take the fun out of the event, so we will not participate if it's pouring rain and we cannot erect antennas. If we cancel the event, we will make an announcement on the club repeater, 147.03.

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Formal teardown will be at 2:00 pm, but members may stay at the site to operate until dusk. The reservation closes at sunset.

All logging must be done in electronic format. N3FJP has a Winter Field Day log for PCs.

Go to N3FJP.com and follow the menu shown in the picture below to find the logging software.



I will collect the logs and submit the club entry.

Send your log to AF1R@arrl.net

I suggest reading through the rules before the event.

Rules: <https://winterfieldday.org/sop.php>



UPCOMING EVENT DETAILS

January 20, 7:30 pm – General meeting (on Zoom only)

Topic: The Emerging 'Technification' of Amateur Radio

Speaker: Steve Stroh N8GNJ

Steve will talk about technological innovation in amateur radio and how amateur radio is (literally) a license to experiment with and learn about radio technology.

Steve was first licensed in the mid-1980s to get involved with amateur radio packet radio on VHF and UHF. Data communications on amateur radio has been his primary interest over his entire amateur radio career.

Steve created his website Zero Retries (zeroretries.radio) in 1981 out of frustration that the amazing amount of technological innovation that was occurring in amateur radio wasn't being widely reported in most amateur radio media. He publishes "usually weekly" and has more than 3400 email subscribers.

January 24, setup at 11 am, operate noon to 2 pm – Winter Field Day

Location: Elm Bank Reservation, 900 Washington St, Wellesley, Mass.

This will be a small but fun outdoor operation from our favorite POTA location. There will be a club station available for use. You can bring your own station too! See Leandra AF1R's article in this issue for more information.



BOARD OF DIRECTORS MEETING MINUTES

JANUARY 14, 2026

Attendees: Charlie WA3ITR, Dan W1DAN, Rob WA1UMU, Leandra AF1R, Bill N1WEN, Scott WA1TEW, Steve K1STK, Dave WA1QGC and Bruce KC1FSZ.

Start Time: 19:03 EST

1. Charlie opened the meeting. Our next club meeting on Tuesday, January 20th will be Zoom only due to the room at the police station not being available. Our presenter that evening will be remote anyway. Our club's primary focus for the beginning of this year will be celebrating our 75th anniversary.
2. Rob gave the meeting program report. For the January meeting, we will have Steve Stroh N8GNJ talk about "Emerging Topics in Ham Radio." For February, we will have John Webster NN1SS talking about contesting with 100 watts and simple antennas. In March we are supposed to have Hisen Zhang KD2TAI but, since he will present on Zoom, Rob may look for another presenter who could give an in-person presentation. In April we will have a 75th anniversary discussion.
3. Leandra gave the treasurer's report. Our bank balance is \$4840.97 and all bills have been paid.
4. Scott gave a report on the upcoming issue of Spark Gap. The newsletter is almost done. He is waiting for an article about Winter Field Day and some meeting minutes. An article that Nels wrote about club history is long so this issue will run about 50 pages.
5. Bruce talked about his new digital repeater controller and whether people thought it was reliable enough to leave in place for use during the Boston Marathon. The board said that they thought it was. Bruce also wondered when he should stop making tweaks to the software before the Marathon. It was generally agreed that he should leave it alone about a month before the Marathon.
6. Dan mentioned that he would like the club to consider entering the ARRL club newsletter contest. A 500-word article about the newsletter needs to be submitted. Dan will write the article to submit along with six consecutive months of newsletters.
7. Dan talked about the 75th anniversary plans. Nels and Tom K. have both written club history for the newsletter. Barb and Scott will collaborate on writing an article about the club's more recent history. Dan submitted an article about our club's 75th anniversary to the ARRL but has not received anything back yet. A friend of Dan's reworked our club logo to include our 75th anniversary. Elaine sent Dan a spreadsheet of past club members and Dan will trim it down to a list of people to invite to our May party. Dan asked if someone would be willing to work on a display at the Wellesley Library about the club and its history.
8. The ARRL is asking for volunteers to operate special event stations around the country to commemorate our country's 250th. There will be stations in eastern Massachusetts.
9. Charlie talked about the 75th anniversary party plans. He is planning to send out "save the date" notices in February. He would like to start working on a printed program for the party.
10. Leandra talked about club plans for Winter Field Day. It will take place at our usual location at Elm Bank on Saturday, January 28th from 12 to 2.

Meeting adjourned at 19:59.

Bill Nicholson N1WEN, Secretary

WARS CLUB HISTORY SERIES

The Wellesley Amateur Radio Society: 1980 - 1984

By Nels Anderson K1UR

Some current WARS members may not know me, but I was very active in the club during the 1970s and 1980s and was even club president from 1983 to 1985.

The 1980s were a great time to be an amateur radio operator. The hobby was very active in many ways, new hams were regularly becoming licensed and lots of interesting things were going on in the realms of technology and regulations. As a very large and active club, the Wellesley Amateur Radio Society was a part of all this.

During this period, consider some of the things that were going on. After WARC '79 hams were getting several new bands, which were gradually being released for use during this period. Radio technology was improving, as we moved from the era of tube equipment, to hybrid radios and then fully solid state equipment with features not previously available and no need to tune up the transmitter when changing bands. Computers were just becoming available for home use, and hams being technology leaders, started finding new uses for them. WARS members adapted computers to send and receive CW and also for packet radio, a whole new way for hams to communicate with each other. In 1983 Owen Garriott W5LFL became the first ham in space, operating on 2 meters during the STS-9 space shuttle mission. Several WARS members listened to him.

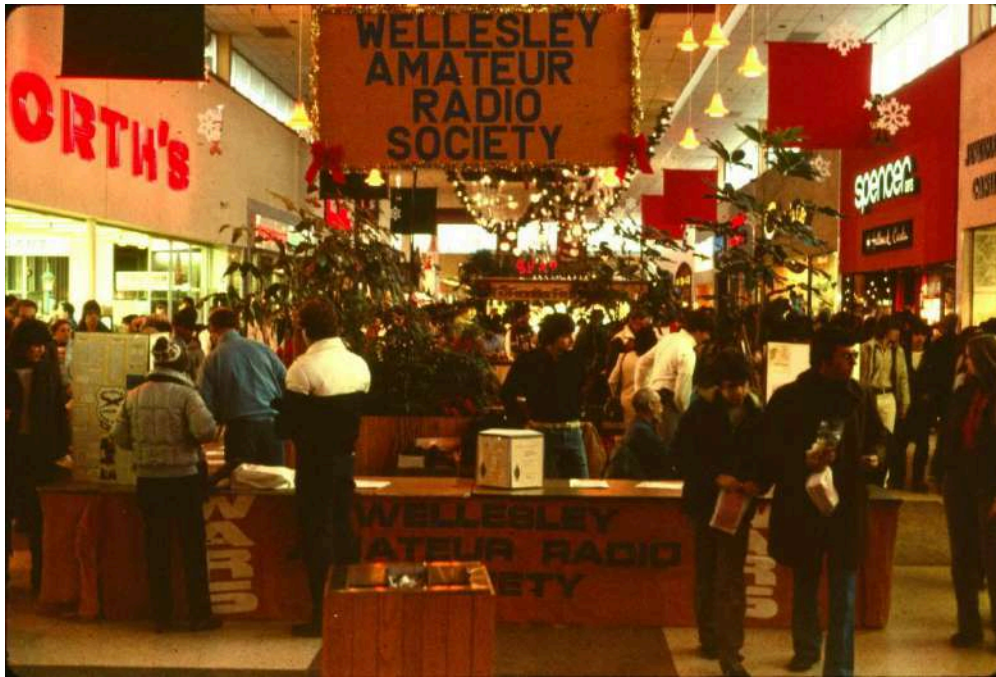
So, remembering all that was going on in those days, let's take a look at the many activities that WARS was involved in.

MESSAGE FAIR

Amateur radio has long had a public service aspect to it, and as part of that, WARS conducted annual message fairs, usually during the Christmas holiday season, and offered a free service to the public of sending holiday greetings by radio much like a telegram.

These events also served to raise awareness of amateur radio in general, and to recruit new club members and participants in our many licensing classes.

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Natick Mall Display; K1OGF, WA1YOJ, WB1BUM



Natick Mall exterior showing antennas

The best of these events, at least as I remember them, were the ones held at the old Natick Mall (before it was rebuilt in 1994). WARS had a premier location on the main aisle, with a lot of room to set up equipment and displays, and full access to the roof to set up antennas. For some years, the mall

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folks were very cooperative, doing things like installing conduits by the upper windows that gave us an easy way to run our coax from the rooftop antennas to our display area. These days the malls sell all that space to small vendors with carts or other small displays, but the early 80s were different.

WARS took full advantage of this opportunity. Each year multiple stations would be set up to relay traffic, on both HF and VHF. Several years included a radio teletype setup, as RTTY was an ideal way of sending written messages. But this was not a digital mode as we think of it today, running a sound card and a computer. This was real RTTY, with a huge Model 15 teletype machine clanking away fed by a terminal unit to an HF transceiver. In addition to being quite useful, the machine was a great attention getter. This was made even better when we contacted a fellow who had recorded carols (on punched paper tape!) that would play using the TTY bell. Even though this allowed for only one note, “Jingle Bells” was quite recognizable due to the accurate timing of the dings, and the bell was loud enough to be heard all up and down the mall center court! This attracted a lot of people.

In addition to the radios, we had satellite models hanging from the ceiling, a slide show of club events, various posters showing ham radio activities, and so on. In 1983 we added SSTV thanks to Mort Cohen KA1IU who brought his equipment to the mall.



KA1IU with SSTV setup



K1OGF helping customers

Our message fair was popular enough that we made the TV news several times. In 1981 we were on WCVB Channel 5 on Friday evening, and Channel 5 came again in 1982. About 90% of households watched TV news back then. Boston news had between 300,000 and 600,000 viewers, so being on TV was an event for us!

Good things don't last forever, unfortunately, and in 1983 the Natick Mall was no longer interested in hosting the message fair. Fortunately, the Framingham Mall (what today is mostly Target) was willing and though we got a less than ideal location and some restrictions that had to be dealt with, the event went on. Fewer messages were generated, but we made both the Channel 7 (WNEV, now WHDH) and Channel 5 news on different days.

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Framingham Mall crew: N1CPE, K1OGF, WA1YHV



We're on TV! K1OGF, WB1BUM, KA1IKW

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Unfortunately, this proved to be a one-time event and no Christmas message fair was held in 1984. As an alternative we were eventually able to set up at Shopper's World for Valentine's Day in 1985 but that's part of a different story.

So, how big was this event message wise? About 800 messages in 1980, 650 in 1981, 925 in 1982 and around 300 in 1983.

FIELD DAY

Field Day is a long-time ham radio tradition. Intended as an emergency preparedness practice, in reality it's so much more, as anyone who has participated surely knows.

For a while WARS had a tradition of doing pretty adventurous Field Days. The one I remember best is operating from Martha's Vineyard, which was done in 1979 and 1981. As I recall, this was done without a lot of initial planning, just one of those “wouldn't it be fun if...” type of ideas. Research would have been easier today, with easy access to online maps and more via the Internet. But in these bygone days that wasn't possible, so being young and adventurous, a group of us hopped in a car and took the ferry across to the island and started looking around. At some point we managed to connect with a ham who lived on the island and his response was “how about using the old radio station site?” Peaked Hill in Chilmark is the highest spot on the island, and came with a 200 foot tower so yeah, we thought that would be a great place!



Martha's Vineyard Field Day setup in 1981

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KA1IU enjoys the sun

For the 1981 operation, two 30-foot towers were set up with tri-banders, plus another tower for 6m and 2m and the setup also included an 80m dipole and 40m 4-element wire beam. The 1981 event resulted in 738 contacts, including one via satellite and five on solar power.



WB1BUM running 2 meters

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WA1PQY takes the late shift

Other Field Days during this period were more traditional. The Martha's Vineyard site was not available again so locations closer to home were chosen. In 1980 Wellesley College was the location, while from 1982 through 1984 it was on the nice lawn at Wellesley Town Hall.



Field Day 1983 setup with Fire Department assistance

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KA1JWE operates his first Field Day

In those days, WARS had a very good and close relationship with the town, due to the club's origins as a Civil Defense participant. As a result, we had the help of the town Fire Department in raising antennas. This was a learning process, though, as in 1982 the FD helped raise a 60-foot tower, but somehow arrangements were not made for them to come back and help take it down! Some ham ingenuity did get it down but in 1983, a 70-foot tower was raised and this time we had FD help taking it down.



Field 1984 antenna assembly



Field Day crew: WA1PQY, WB1BUM, K1TK, K1OGF

By 1984 interest seemed to be dwindling somewhat, and Field Day was a smaller operation with only a 40-foot tower (and no Fire Department help) and a lower score. Scores over the years were as follows:

Year – Class – QSO total

- 1980 – 5A – 668
- 1981 -- ?? -- 738
- 1982 – 2A --1137
- 1983 – 2A – 547
- 1984 – 2A – 482

VHF CONTESTS

While many hams are familiar with 2m and perhaps other VHF/UHF bands through the use of FM and repeaters, serious weak signal VHF operation is a real niche within the hobby. Though I don't remember how it initially started, this was a niche that WARS embraced in a big way, starting in 1978.

The big event was the ARRL VHF Contest of which there are actually two each year, one in June and one in September. Finding a site to operate from was key and most years WARS operated from Mount Equinox in southern Vermont. This was an ideal location for a number of reasons, including that it had a road to the top and even a hotel and restaurant at the top too, plus Vermont is a tough state to

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get so lots of hams want to work it and when the contest changed to using grids as multipliers Equinox was also in a rare grid. The 3,840-foot summit offered plenty of clear space to set up, and clear views all around from a nice high location.



Mount Equinox setup in 1981; W1GCI, N1CPE, WA1YOJ, WB1BUM, K1TK, WA1ZLQ, N2AWG



N1CPE operates 6 meters

WARS operated the June and September contests each year from 1980 through 1984 with the exception of June 1980 when we operated from Mount Wachusett instead.

Actually, WARS was conducting two events simultaneously, since on the same weekend as the contest, the mountain also hosted the Vintage Sports Car Club of America (VSCCA) Mt. Equinox Hill Climb

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and the club provided communications for that event even while the contest was going on. Part of the contest experience also included the sound of loud engines roaring up the mountain, along the roughly six-mile long access road. This activity continues to this day, with 2025 being the 75th running.

What's special about this event is that WARS is a general interest club and most of the people involved were not VHF experts. Despite this, the group's enthusiasm resulted in ever increasing success on the trips to the mountain. The group had started going to Equinox in June in 1978 and in 1980 started going in September as well.



W1GCI setting up 2 meters

By June 1983 the effort was starting to really pay off, with a 6th place nationwide finish and in September of that same year a 3rd place finish. In September 1984 WARS placed 4th. Getting any higher was pretty much impossible given the massive efforts put out by the groups we'd have to beat.

Being on a high mountain makes VHF operating so different with greatly enhanced range even without a band opening. During several contests we did get some really exciting openings. In September 1984 WARS did a personal best of 1173 contacts due to extraordinary openings on 2M and above. In June 1981 6M was the hot band, with 40 states being worked.

Over the years equipment kept getting better. Getting on 6M and 2M was pretty easy but higher bands were more of a challenge. In June 1981 we added 10 GHz Gunnplexers and in other years there was constantly changing equipment on 432, 1296 and even 2304 MHz. Antennas kept getting bigger too,

including things like four antenna arrays mounted on an H-frame.



Antenna setup with FAA towers in the background

The contest itself was changing during this time too. When we started, multipliers were based on ARRL sections, but starting September 1983 the grid system that is still used to this day was first put into use.

I have lots of personal memories of these VHF contests. I remember hearing about the “very large raccoon” standing on its back legs going through the contents of a trash barrel. There was also the attack rabbit one year...it came running out from the woods at us during the contest set up, charged at several individuals, then ran back into the woods, leaving us scratching our heads on what that was all about. Given some time, some exploration was possible, such as a visit to Mr. Barbo's grave (a dog who lived on the mountain) and the abandoned FAA towers. The hotel bar was also a pleasant place to spend some time when it wasn't your turn to operate. It was also nice to have a room at the inn, which as I recall quite a few of us, who didn't care to sleep outside, shared.

Those FAA towers provided another service to us, in that in 1984 we got our own AC power drop installed from there, so our trusty WWII surplus generator was no longer needed to power the operation.



Equinox Inn and car race participants

MORE VHF CONTESTS

Though the June and September ARRL contests at Mount Equinox were the “big events”, WARS also participated in two other similar contests during this period: the ARRL UHF Contest in August and the VHF Sweepstakes in January.

In 1980 the UHF contest effort was fairly minimal, with just four contacts made from Mount Wachusett. Other years involved the long trip to Mount Equinox and were usually used to test new improved equipment before the bigger contests.

In 1981 a bay of four 17-element Yagis for 432 MHz was the test piece, along with a new 30-inch dish for the 10 GHz station. In 1982 the test piece was a 432 MHz GaAs FET preamp, which worked quite well and resulted in contacts out to Ohio and Virginia.

1983 brought some changes too, with the addition of a 1296 MHz station which netted a dozen contacts, and a total of 101 contacts on four bands, the first real contest effort versus just primarily testing new equipment. This was also the first contest to use the grid system we are now so familiar with for multipliers.

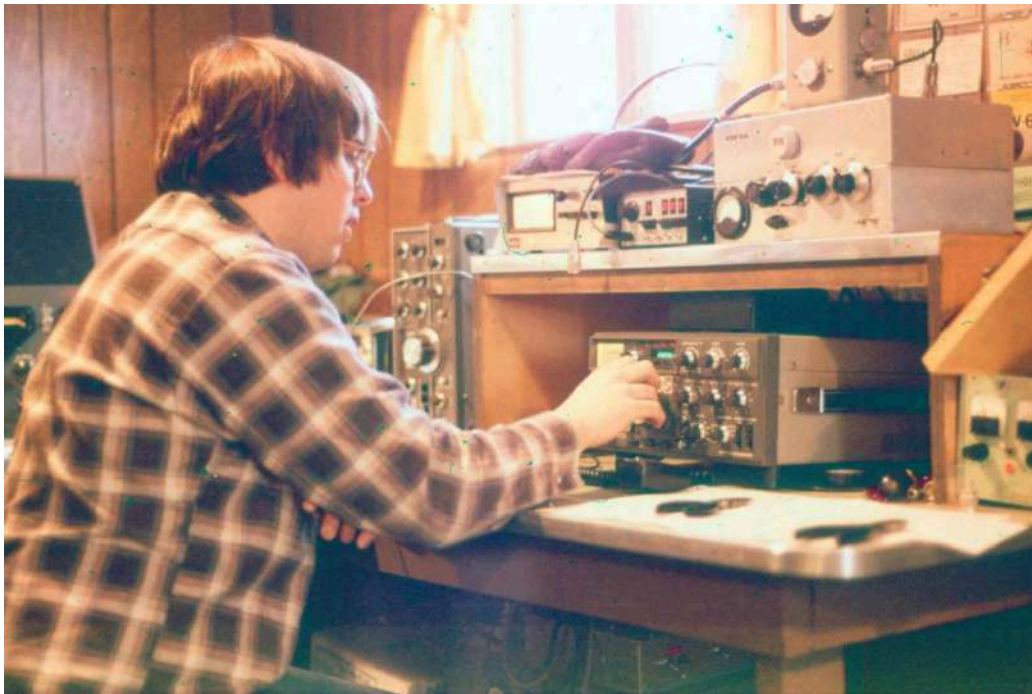
VHF Sweepstakes offers a different sort of challenge in that it's held in the winter, and so access to the usual mountain location is not possible. For a few years, though, an alternative site was available. During that time, WARS had a close association with WPI (Worcester Polytechnic Institute) as quite a few WARS members were students there. This provided access to the WPI Wireless Association's station W1YK, located in the penthouse on top of a four story building with a 60 foot tower on the

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roof. Having spent many hours in that penthouse, I can tell you it's a great place to operate from!



VHF SS crew at Worcester Polytechnic Institute: WA1PQY, K1OGF, K1UR, N2AWG, K1TK



K1TK operates 432 MHz

A somewhat different approach was taken to this contest. As there was no chance of being the individual winner, instead an effort was made starting in 1981 to win the local club category. With the addition of the WARS VHF and UHF gear W1YK became the primary station in the effort, but in 1981

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W1TKZ was also operated as a multi-op from Snow Hill in Dover on three bands. Several other individual club members managed to submit scores as well.

The same effort was made in 1982, with improved equipment really increasing the contacts on 432 MHz and a couple of people submitting individual scores towards the club entry.



N2AWG takes the night shift



WA1ZLQ operates 2 meters

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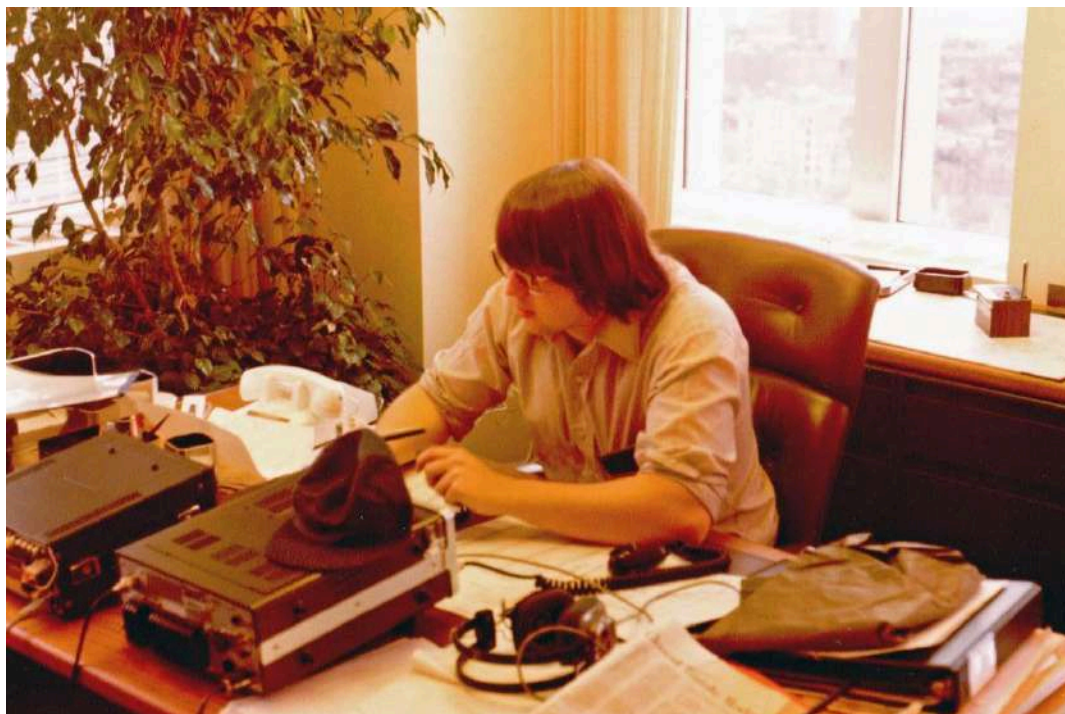
By 1983, access to W1YK was lost as the last WARS member graduated from WPI! This led to an increased effort in entering the club category. WARS equipment was shared among several people and a club multi-op station was on the air at the house of David Curry K1TK. Despite a blizzard that lasted the entire weekend, preventing the usual mobile mountain-topping, five club members entered. In 1984 an even bigger effort was put forth, with no blizzard to impede things and seven members entering.

SWEEPSTAKES

One final note on contests was the tradition of activating W1TKZ as a multi-op entry in the ARRL Phone Sweepstakes contest. This was kind of an on-and-off thing, but a good effort was put forth in 1980, 1983, and 1984. The 1980 event required an antenna work party before operating at the Intermediate Building location. In 1983, now at the Red Cross, a variety of antennas needed to be set up, as the only permanent antenna at the station at that time was an 80 meter dipole. In 1984 things started with no antennas in place, requiring a Field Day type setup before the contest could begin.

BOSTON MARATHON

In this era, public service events took up a large part of the WARS yearly calendar, with the biggest of these being the famous Boston Marathon, run each year along a 26-mile route from Hopkinton to Boston. Most years the event was organized by Dick Paret WA1ZLQ. The operation first took place in 1978 and amateur radio is still a big part of the race to this day, though no longer organized by WARS.



K1TK at Marathon net control



Finish line view from net control

Today, amateur radio participation is all about health and welfare, but in the early days WARS was directly involved in the running of the race, working with BAA officials. One of our main duties involved race timing of the lead runners. Today this happens almost automatically, but it was quite different years ago and things that now seem odd were based on years long traditions. Timing in those days was done with a race official who was the official timer and a stopwatch that he held. Timing required his physical presence. He had to be there at the starting line and finish line, as well as some checkpoints along the way.

The “traditional checkpoints” were at seemingly odd distances, until you understand how they came to be. In the olden days, that guy with the stopwatch rode a train along the race course. The checkpoints were at the locations where the train stopped. He'd hop off, time the lead runner and then hop back on the train, heading towards the next checkpoint.



The Author, Nels K1UR, at a marathon

By the 1980s the trains were no longer involved, but the long held tradition of these odd checkpoints was still in place. I was assigned to ride with this timer, with my job being to relay the official times to the rest of the world. Other WARS radio ops were with other BAA officials and with the press so these people were kept up to date on the race progress.

Things were not as well organized back then. The first year I rode with the timer, the bus was a full size city bus, a rather huge thing to try and get down the course when after each timing event this meant speeding up and passing the runners who were on the same road. Crowd control was not much of a thing back then either. I can remember at one time when the width of the course between the crowds on each side was actually less than the size of the bus! The bus sort of plowed the people out of the way. Somehow it worked and timings were made. I did note that each year the bus involved seemed to get smaller and smaller, a very good idea indeed!



Hopkinton; WARS manned the vehicles lined up on the left



WA1TBY with race officials and some of the vehicles WARS operated from; I think that is Jock Semple on the right

Another interesting point in the race timing is how the race is started. The tradition in those days was to start right at noon with the firing of a starter's pistol. At some point the BAA officials asked us if there was a technical way to get the exact time. Well sure, as all hams know, listen to WWV! So an HF receiver tuned to WWV was set up at net control in the Prudential building and the race was actually started based on a command from the net control op, Dave Curry K1TK most years. So in effect, it was WARS starting the race, not so much that guy with the gun in Hopkinton.

In 1980 operating involved nets on two repeaters, plus direct comms around the finish line. Two nets were required as there was enough info being passed from each checkpoint that the runners would be at the next one before all info was passed.

Also in 1980, an experiment was done with WARS actually taking the leader times via radio. Net control was given an official stopwatch and noted the times runners passed each checkpoint, as called in by the on-course operators. All recorded times were within one second of the official time so this was deemed a success.

As a result of this experiment, in 1981 WARS took over taking the official lead times at each checkpoint, probably a first in major running events. Another big change also took place due to the infamous Rosie Ruiz incident the previous year. In order to prevent another person jumping into the race mid-course, WARS was assigned to record the top 100 runners and top 25 women runners at each checkpoint. To relay all this additional traffic four nets on various repeaters were now needed. All of this worked out quite well with BAA officials being pleased with the efforts of the some 50 hams involved.

The 1982 event was run in a similar manner, though with lead runner times now coming from Dick Paret WA1ZLQ riding in the pace car. The club's 440 MHz repeater was added to the mix for the first time and performed well.



Boston Marathon Memorabilia (from WA1ZLQ)

By 1983, our sixth time being involved, marathon work was almost routine and everything went very smoothly. Official lead times were now being provided every mile, every 5 km, and at the half marathon point, along with continuing to send lead runners lists at each 5-mile checkpoint. A new net was set up to coordinate movement of vehicles on the course. Riding among the runners was the pace car, TV van, camera truck, and press van. Radio coordination was provided to this group so that the different vehicles could take turns getting close to the runners.

The 1984 event was little different from the previous year, but with the challenge of heavy rain leading up to the race start. Those setting up vehicles in Hopkinton or roadside along the course were probably getting wet.

The Spark ⚡ Gap



Bill Rodgers warming up in Hopkinton



Race finish line

One of my personal memories – I'm not sure what year it was – involved another rainy race start. After setting up and while waiting for the start of the race in the nice dry bus as it rained outside, I was joined by a runner looking for a place to stay dry. So I spent the next hour or so alone with Bill Rodgers who I think then went on to win the race. My other Bill Rodgers memory is from one of the early days of WARS participation, using one of the big buses, where our bus was stuck behind the lead runners looking for an opening to pass and get to the next checkpoint. For seemingly miles on end there was Bill Rodgers, only a few feet away in front of the bus running and running.

PUBLIC SERVICE

The amateur radio hobby has a long history of providing public service, and WARS certainly did its part during this era. Unlike the Boston Marathon, these events mostly involved health and safety issues, checking the course for participants needing help, staffing water and first aid stations, and so on. Some of the events were

- Shamrock Classic road race; held in Boston, sponsored by the Celtics
- Boston 350 Parade; one time event in 1980
- Wellesley Centennial Cake Parade; 1980
- American Legion walk-a-thon
- Wellesley Teachers Association bike-a-thon
- Charles River Run
- Wellesley Veteran's Parade
- Wellesley Centennial Celebration 1980
- Hunnewell Estate car race
- Corporate Cup Road Race
- Wellesley Recreation Department road race
- Tinman Triathlon

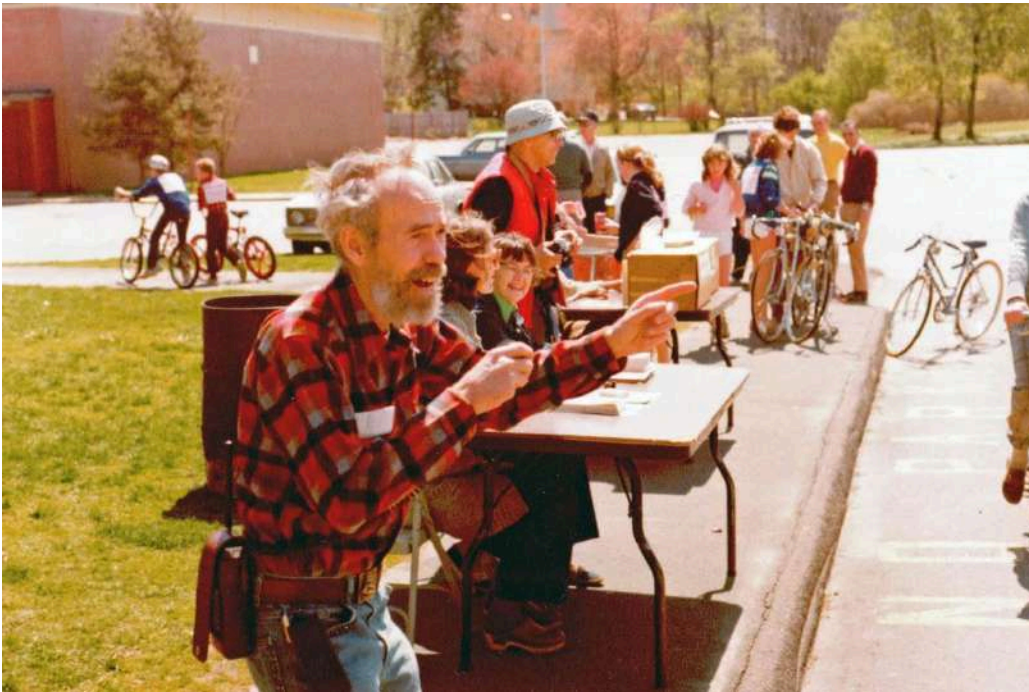
Quite a busy schedule! Some of these, like anniversary celebrations, were one time events, but many of them were held year after year. In some instances, e.g., May of 1982, WARS even covered two events on the same day, the Charles River Run and the Wellesley Teachers bike-a-thon.

From a ham's point of view, these were good excuses to use our radios for a good cause. It was also exciting to be involved in some major events. One of my memories of this era is that we did so many events that my casual shirt wardrobe was made up entirely of souvenir event tee-shirts!

The Spark ⚡ Gap



Charles River Run; WA1ZLQ



Wellesley Teachers bike-a-thon; WB1BUM

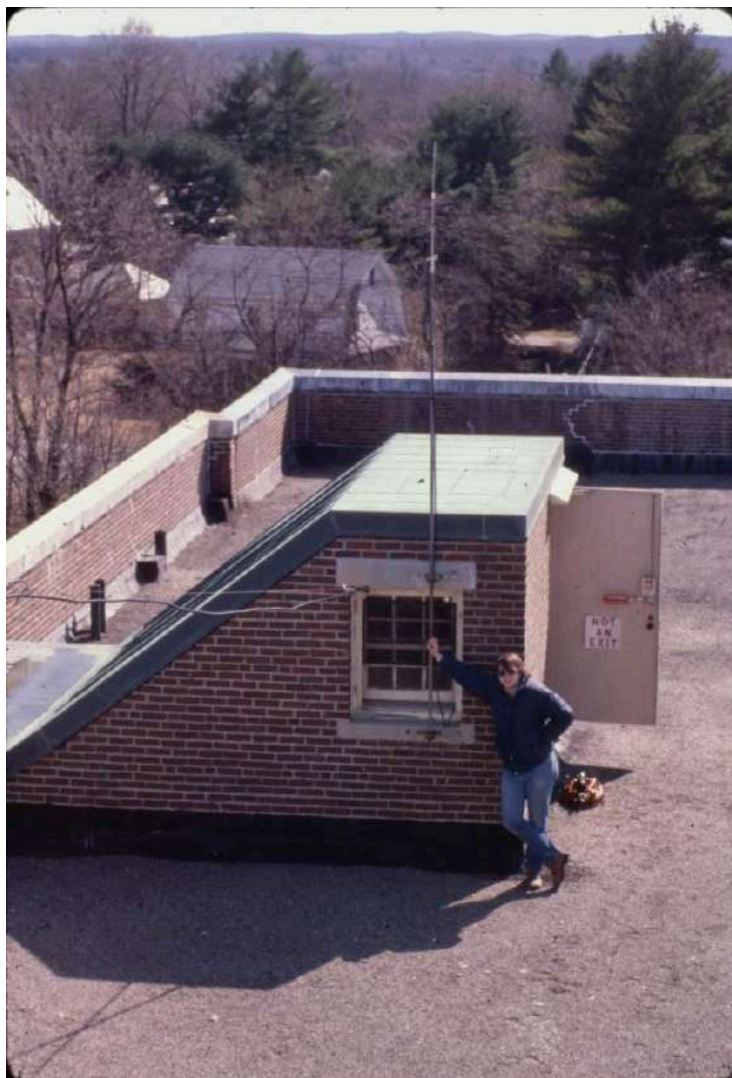
REPEATER

Starting in the 1970s, VHF repeaters were becoming a mainstream part of amateur radio. It seemed like every club was putting up a repeater, mostly on 2 meters, and of course WARS wanted to do this too, although a bit late. To avoid complete chaos, repeater frequencies are coordinated and through that system WARS eventually got 147.63/03. Rules on repeaters were still evolving so for a while a unique repeater callsign was required (WR1AHC) but eventually the normal W1TKZ callsign was allowed.

Then there was the matter of equipment, but on a limited budget. Commercial interests could spend the thousands of dollars it took to simply buy a repeater along with its associated antenna and duplexers, but for a local club this expense was out of the question. So during this period there was a whole lot of effort being put into making a working system. We cobbled together a rack of surplus tube VHF gear that included a General Electric power amp.



**Our first repeater system in March of 1981. Note the WBCN-FM bumper sticker.
Yes we were Rock-n-Roll!**



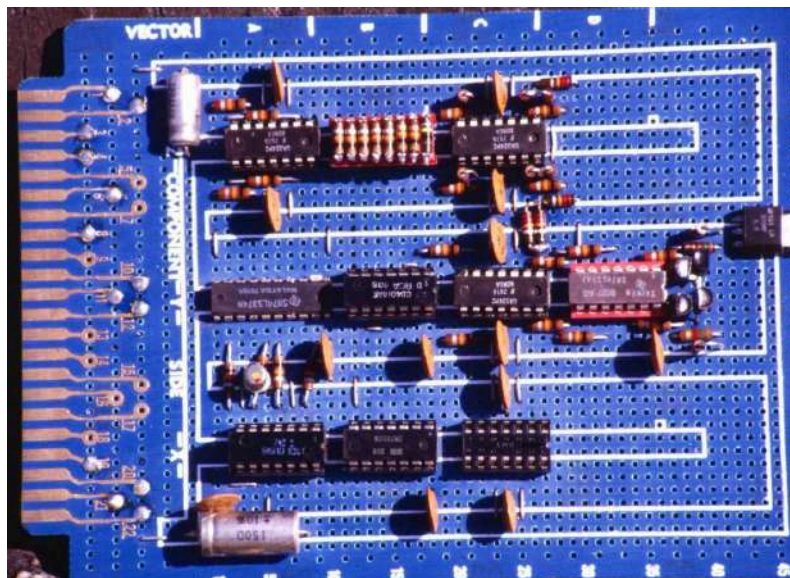
Our first repeater antenna atop the Newton-Wellesley Hospital

By 1980 a repeater was on the air, but with fairly poor coverage. In September 1980 a major upgrade was made. The town allowed the use of an existing telephone pole on top of Maugus Hill, one of the highest points in Wellesley. The upgrade involved a brand new commercial antenna plus our home brew receiver, mounted in a weatherproof box on the pole. This receive site then linked on a 440 MHz band frequency to the transmit site at the Newton-Wellesley Hospital. Having a remote receiver eliminated the need for an expensive set of duplexers and the high location improved the coverage area.



The Maugus Hill remote receiver and UHF link in 1981.

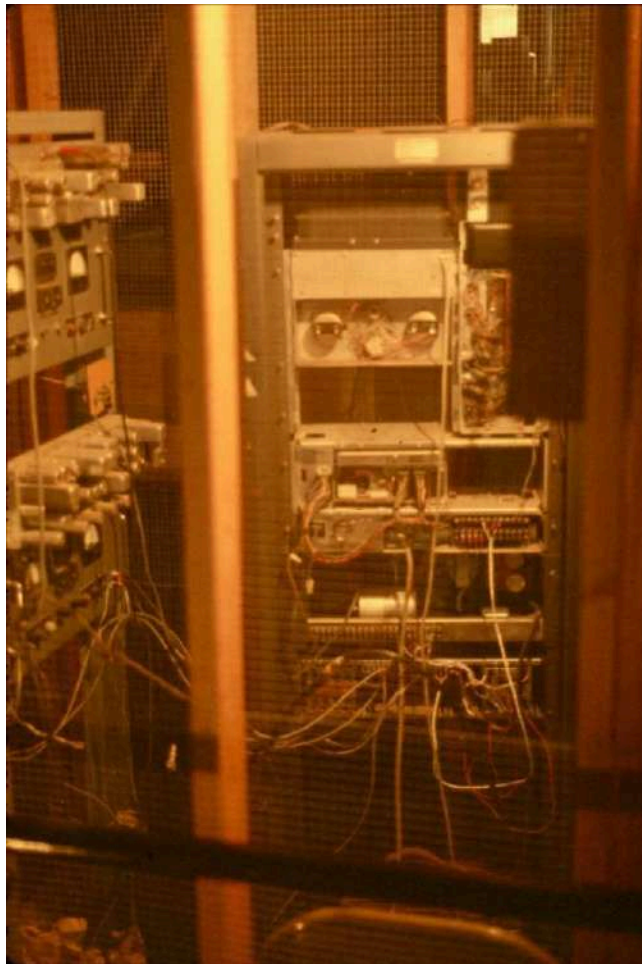
On February 1, 1981 the W1TKZ/R repeater got a major upgrade with the addition of a microprocessor controller. Rather than buying something off the shelf, this was designed and built by Dave Curry K1TK and programmed by Nels Anderson K1UR. It was a pretty sophisticated controller offering a variety of functions controlled by Touch-Tone sequences.



The Spark ⚡ Gap

A home-made control card, hand-wired onto a plug-in Vector board.

By 1984 though the equipment, specifically the transmitter, was showing its age. I don't remember exactly what it was, but it was an old relic with vacuum tubes in the final amplifier. With no planning in the budget, discussion was begun on what to do.



Old repeater; lots of tubes!

Months of discussion followed, with the end result being the decision to purchase a brand new Kendecom Inc. Mark 3CR, a 75-watt repeater with full control functions and the ability for expansion for such things as autopatch. This was a big expense and so a fund raising effort was started, with the club soliciting donations to cover what the budget would not allow.

The repeater, described at the time of installation as a Micro Control Specialties repeater, arrived just

The Spark ⚡ Gap

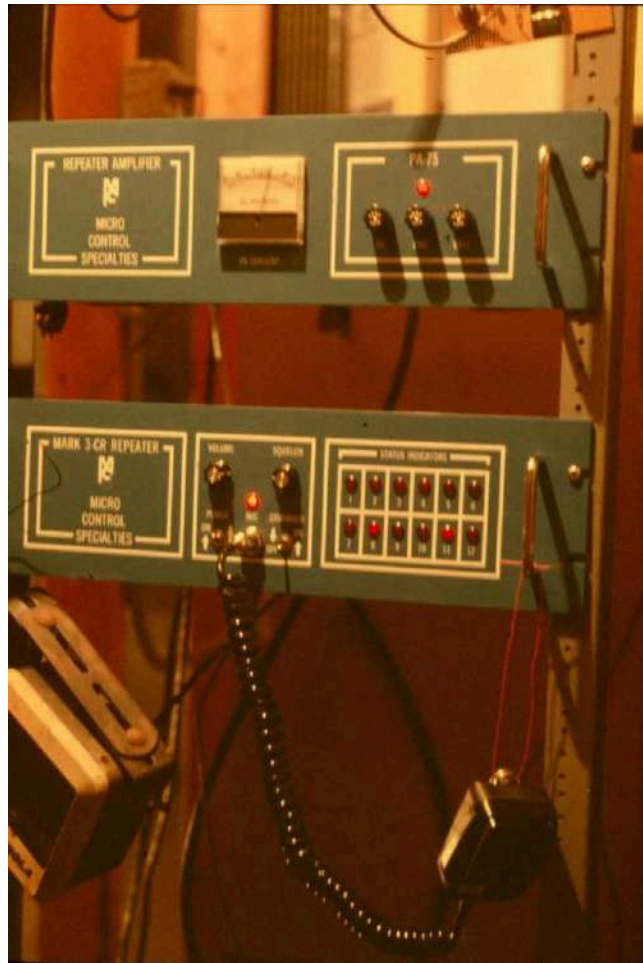
before the end of the year and was installed at the hospital on December 26, 1984. This was now a stand-alone system no longer requiring the remote receive site.



The new 2-meter repeater and duplexer filters being unloaded on December 26, 1984



Tom N1CPE making final adjustments



The new Mark 3 repeater and power amplifier in place, December 1984.

One might wonder why the Newton-Wellesley Hospital was willing to host the club's repeater. At least part of the reason is the service the club provided. On December 6, 1981 the region was hit by the biggest blizzard since the infamous Blizzard of '78. The hospital requested our aid, as was done during that previous blizzard, in running what was essentially a radio-dispatched taxi service to transport nurses to and from the hospital. Organized by Dick Paret WA1ZLQ on short notice, this involved getting radio operators and drivers together (with help from the Wellesley Red Cross) and dispatching them. This was done twice, for two shift changes, and transported over 100 nurses.

This was a tough winter, as on April 6, 1982 another big storm hit and another call for help from the hospital. During this storm some 60 hospital staff were transported from around 11:00 am through 2:00 am the next day.

The repeater was used for other things too, like the weekly WARS 2 meter FM net, which had its first

session in September 1983, hosted by Erik Thoresen K1OGF.

SPECIAL SERVICE CLUB

In 1983 the ARRL announced a new Special Service Club (SSC) program. The program recognizes clubs that go above and beyond in training, public outreach, community service and technical projects. These clubs are leaders that mentor new hams, run tech programs, offer public event safety support and so on. Clubs that qualify get recognition and support from Affiliated Club Coordinators.

The requirements to qualify were pretty steep, but an analysis revealed that WARS with its many activities already qualified without any additional effort. Application was made and by October 1983 WARS had been confirmed as one of the first Special Service Clubs.

EDUCATION

One of the big parts of the SSC program just mentioned is training, and during this era WARS was certainly very active in this area.

During this era, the Novice class license was still the entry point for most new hams. Most years the club offered a Novice course and each one graduated quite a few new hams. Most years also included a General class course for those people wanting to upgrade to a more permanent mainstream license. There were even several offerings of an Extra class course for those wanting the top license. Year after year this program was coordinated by Art Thompson KA1ENP.

Novice exams were given by fellow hams, much like today's volunteer examiner program. But higher class license exams required a visit to the FCC, usually at the Custom House in Boston. Many of these class participants reported successful visits there.

But on September 1, 1984 a big change took place, with the beginning of the Volunteer Examiner (VE) program we still use to this day. WARS did not immediately jump into offering exams but they soon became readily available nearby.

AUCTION AND FLEA MARKET

Though I haven't been to one in years, back in this era, ham radio auctions were quite popular. I remember going to the Honeywell auction many times (a place I once worked) and WARS also for many years held a popular auction. These were rather fun and usually attracted a good crowd and interesting equipment.

From 1980 through 1982 the spring auction was held at the Wellesley High School cafeteria. As an example, the 1982 event ran about four hours and in addition to the auction included a bargain table for under \$5 items and soda and sandwiches for sale, made by several club members.



The author, Nels K1UR, at our auction in 1983

Unfortunately, the rental for the school became too expensive so in April 1983 the auction moved to the Wellesley Hills Congregational Church. Though a somewhat smaller room, it worked well as the auction was a success. Since at that time the club was also in the process of moving, a bunch of surplus gear was offered and by the end of the day all these items had been sold. The event returned to the same location in 1984 with similar good results.

As if that weren't enough, the club also had a tradition of a fall flea market. The first one of these was held in 1979 and all were held at the Wellesley High School parking lot. These were held yearly at least through 1983. Expenses for running these were low and operations were pretty simple: just collect admission from each person as they arrived. By today's standards, this was a real bargain, \$1 per person whether buying or selling! Typical attendance was around 250.

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OCT. 23**

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WITKZ



Admission:
**\$1 for buyers
and sellers**

Talk-in 147.03

INFO: Nels Anderson, K1UR,
872-5259

JUST OFF RTE. 1A, TURN SOUTH AT STATE ST. OR RICE ST.



A WARS Flea-Market Flyer



Flea Market at Wellesley High School

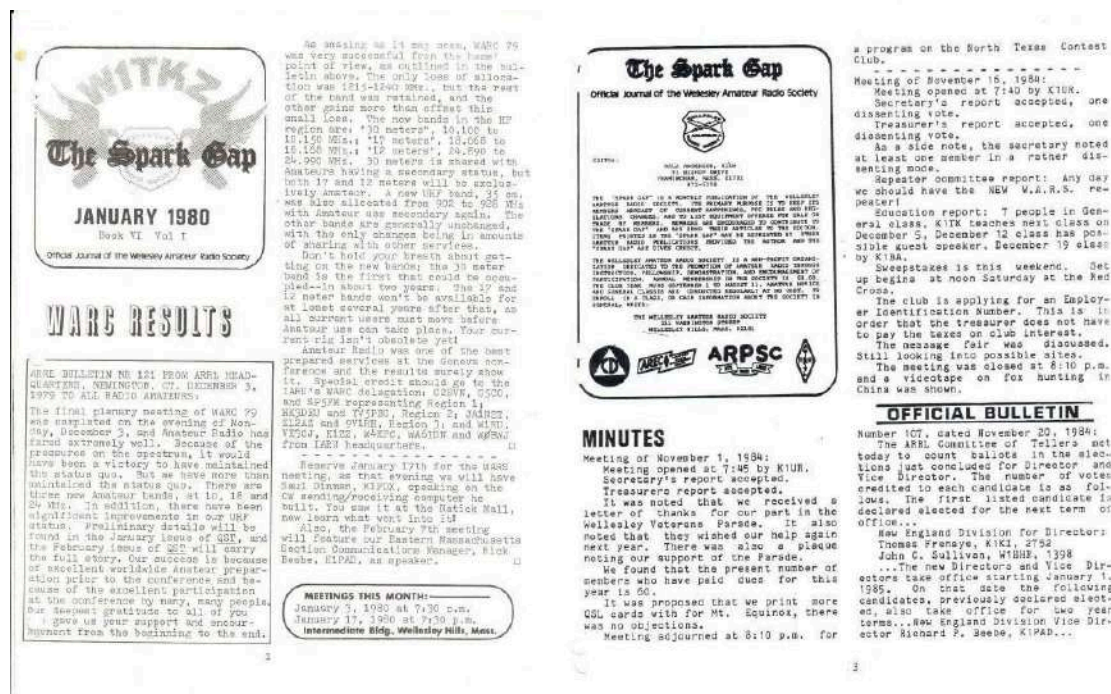


Flea Market club table

THE SPARK GAP

Today we count on easy and immediate communication via our cellphones or the Internet but in the 1980s this was not yet available. For radio clubs, a club newsletter was an important means of communicating with members, keeping them up to date on club happenings and more general amateur radio news.

The WARS newsletter *The Spark Gap* was started in 1976 with Jim Hatherley WA1TBY as editor. The early editions were a bit crude but rather quickly the format used for many years was adopted. In November 1978 I took over as editor and continued with the same format.



Typical 1980s Spark Gap front page and inside layouts

In this era the Spark Gap was full of club news, as there was some event being organized or reported on in every issue. In addition, there were frequent editorial, technical articles, humor, for sale, and lots of news on the radio world in general.

WARS members were fortunate to have literally the best ham radio club newsletter around. Not my opinion, but that of the judges at an annual contest that was part of the ARRL New England Convention. Jim Hatherley as editor won this at least once and I remember being told when I took over that I better keep up the high standards he set! No pressure! During my term, I was pleased to win the award twice.

Creating a newsletter in those days before computers required literally pasting up the various parts. Someone before my time had created a set of headlines for the various columns and I was given sheets

of these to use. In the early days I was creating the text on a typewriter but later had access to a computer and printer at work that even allowed text to be right justified. The printed text and headlines were then cut out and pasted onto standard 8.5 x 11 inch sheets to make up the pages and sent off to the printer. Fun fact: I still have (and occasionally use) the very large container of rubber cement I bought back in the '70s for assembling the newsletter.

MEETINGS

Radio clubs typically have monthly meetings, often with gaps during the summer or winter holiday seasons. Being the ambitious club it was during the 1980s, WARS actually held two meetings per month. Often this was one business meeting and one meeting with a presentation of some sort, but the schedule was flexible to meet immediate needs. In theory the club took the summer off, which actually meant just having one meeting per month instead of two and not publishing the Spark Gap for two months.



Club meeting at Intermediate Building; WB1BUM



Club meeting at Intermediate Building

Meeting programs were really quite good, with interesting speakers and a wide variety of technical topics.

As for business, the annual election of officers was an important meeting topic once a year. A typical club has four elected positions but WARS actually had seven! Perhaps more surprising is that the positions were often contested. For the 1979/1980 club year every position was contested, with as many as four people running for one position.

WRAPPING UP

Looking back, the early 1980s was really an exciting and fun time to be a ham and a WARS member. I have lots of great memories of those days when the group was just super active all year long. Whether you were a member then or not I hope you've found this look back at WARS history interesting and maybe even inspirational as to radio activities you'd like to be doing today.

73,
Nels, K1UR

Club Dues

Club membership runs from September 1 to August 31.

Your membership dues support the operation of the 147.03 and 444.600 repeaters, the club insurance, and supplies for Field Day and other activities.

To join or renew, print the membership page, fill it in, and either bring it and your dues to one of the in-person meetings in Wellesley or mail the form and the dues to the address at the bottom of the form.

WARS Executive Team

Officers:

President – Charlie Bures WA3ITR
Vice President – Jabus Tyerman KC1SMY
Treasurer – Leandra MacLennan AF1R
Secretary – Bill Nicholson N1WEN

Board of Directors:

Dan Brown W1DAN
David Fox WA1QGC
Rob Jaczko WA1UMU
Steve Kondo K1STK
Scott Sminkey WA1TEW
Scott Nacey KK6IK
Frank Ventura N1FMV

Wellesley Amateur Radio Society website

w1tkz.org

Wellesley ARS Repeaters

The club repeaters are located at the Newton-Wellesley Hospital and are cross-linked.

Receive frequency	Transmit frequency	Transmit tone
147.03 MHz	+600 KHz	123 Hz
444.600 MHz	+5 MHz	88.5 Hz

Club Net

Wednesday	8:00 pm	Wellesley 147.03/444.600 repeaters
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Wellesley Amateur Radio Society Membership Application/Renewal Form

Please print this page, fill it out and include this form with your dues

We need your email address to send you the Spark Gap

We only use your information for informing you about WARS club information

The other optional information helps us plan club events.

Name	Call Sign
Address	Day Phone
Address 2	Evening Phone
Town and State	Zip Code

Email address (please print clearly)

License Class (Novice, Technician, Advanced, Extra or Not Yet a Ham)	ARRL member? (Yes or No)
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Circle your interests (optional)

CW SSB FT8 Keyboard chat via Digital Modes SSTV JS8 Call VarAC Winlink
FreeDV(HF) DSTAR Fusion DMR M17
SOTA POTA Ragchewing DX Contesting Satellites
Kit Building Homebrew/experimentation ARES/RACES Public Service

Membership Category/Dues: For the year beginning September 1, thru August of the following year

	Individual	\$40.00
	2nd Household member	\$5.00
	Legally blind	\$5.00

Please make check payable to: *Wellesley Amateur Radio Society*. Bring this form and dues to any WARS meeting or mail to the WARS treasurer:

The Wellesley Amateur Radio Society, P.O. Box 812223, Wellesley, MA 02482-0015

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