

The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950



January 2024



PRESIDENT'S MESSAGE

Happy New Year!

After a very enjoyable holiday party (Thanks Charlie for organizing it!), I took a break from club duties to do a lot of shopping and to have family over. After they left I worked on Norm W1GYG's LDMOS amp and got 200 watts out, and learned a lot! I also enjoyed some QSO's on HF.

During our holiday break Don and Elaine worked on our insurance, which became something of a mess due to changes in carriers; and Elaine sent out final dues reminder emails. Derek and Bruce had good progress on SCAMP radios as our lively Groups.io board attests.

Let's have F-U-N in '24! - Dan, W1DAN

**JANUARY
MEETING**

Jan 16, 7:30 P.M.

***Scamp digital
mode***

**Wellesley
Police Station**

EDITOR'S NOTES

Season of Parties!

We had a great time last month with our Social at Panera in November and our Christmas Luncheon in December at the Chateau and there are pictures to prove we were there!

For our January meeting Derek has prepared a talk to tell us all about the new SCAMP digital text mode and give a demonstration to show how well it works.

Let's take advantage of the sunspot cycle and the low noise level on 160, 80 and 40 to make some contacts on these bands.

Find your heavy jacket and gloves and join the club activity on Winter Field Day on January 27.

-Leandra AF1R



The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950

GENERAL AND SOCIAL MEETINGS

January 16, 7:30 P.M., General Meeting
Wellesley Police Station

The SCAMP Digital-Mode Proposal
Derek Rowell, AK1WI

2024 MEETING SCHEDULE

Board of Directors	General Meeting
Wed, Feb 14	Tues, Feb 20
Wed, Mar 13	Tues, Mar 19
Wed, Apr 10	Tues, Apr 16
Wed, May 15	Tues, May 21
Wed, June 13	Tues, June 18

Wellesley Police Station	485 Washington St. (Route 16) Wellesley, MA Please park on the street, not in the police station parking lot
--------------------------	--

THE SCAMP DIGITAL-MODE PROPOSAL: *A PEEK UNDER THE HOOD*

Derek Rowell, AK1WI

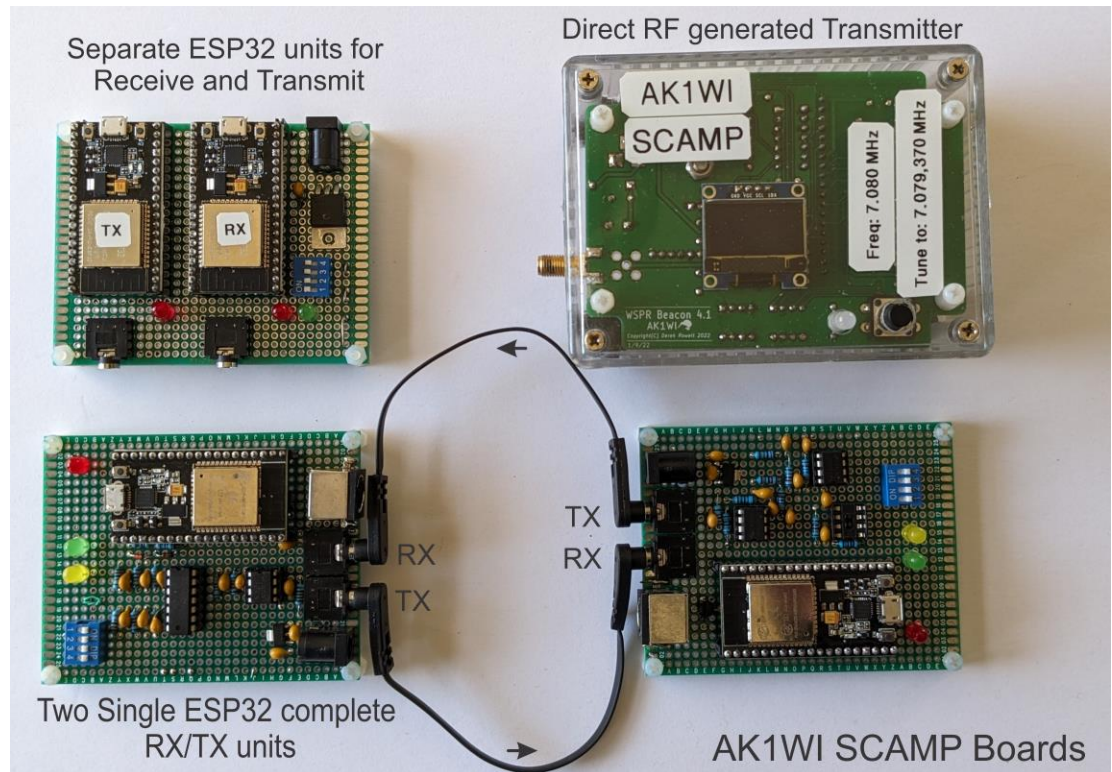
SCAMP (Simple Conversational Amateur Messaging Protocol) is a new digital (keyboard to screen) mode suggested by Daniel Marks, KW4TI, as a companion mode for his RFBitBanger transceiver: a direct-conversion kit designed around commonly available parts. SCAMP is presented as a system that might be implemented on a simple 8-bit micro-controller such as the

ATmega328 (which is now obsolete), but I can find no reference to any hardware implementation.

In this talk I will take a “shallow deep-dive” into the SCAMP protocol and how it might be implemented on a modern microcontroller such as the ESP32 or Teensy. I will discuss the SCAMP FEC (forward-error-correction) method (Golay encoding), the structure of the transmission signal (both direct RF generation and baseband AFSK), and the processing in baseband AFSK demodulation, decoding, and error correction.

I will also show several working SCAMP hardware evaluation units that I have designed around the ESP32 NodeMCU-32S development board and implemented under the Arduino IDE, for on-the-air testing/evaluation. I will discuss the hardware/software issues associated with SCAMP implementation, and the few on-air one-way tests we have made with this ESP32 hardware to date.

To conclude the talk, I will make some suggestions that might improve the efficiency, speed, and performance of SCAMP in a noisy environment, and seek suggestions from club members as to future work and collaboration.



FROM THE BOARDROOM - JAN MEETING

Charlie WA3ITR (Secretary)

Dan attended the New England Division ARRL Town Hall Zoom meeting discussing the proposed changes to the Directors' responsibilities. (see <https://nediv.arrl.org/> for a recap). Elaine said the treasury is healthy; Don moved our insurance to a new company since the previous company stopped coverage. We will add coverage for car transportation during club activities.

Derek is talking about SCAMP in January. The Speaker line-up for the spring is in good shape.

Dan bought a used Apogee HypMic microphone for our monthly meetings. We will try it at Tuesday's meeting, along with the laptop Don is donating to the club.

The club will be active during ARRL Winter Field Day, details to be discussed at the general meeting.



WINTER FIELD DAY

January 27, 1900 UTC to January 28 1859 UTC

<https://winterfieldday.org/>

From the Winter Field Day website:

We passionately believe that ham radio operators should practice portable emergency communications in winter environments as the potential for freezing temperatures, snow, ice, and other hazards present unique operational concerns. WFD is formatted to help increase your level of preparedness for disasters and improve your operational skills in subpar conditions.

The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950

STATION REPORTS

David Fox, WA1QGC

Station Reports is a new column for our newsletter. The idea for this column is taken from Station Reports that used to be published in QST, the monthly magazine of the ARRL (American Radio Relay League). A station report can be amateur radio news or personal news. People can send me their station reports by email at fox.david@verizon.net

I will collect them and once a month send them to the editor to be included in The Spark Gap. Please include your callsign as part of your report.

Here are a couple of station reports to get the column started.

Over the holidays, Charlie, WA3ITR, visited his college roommate, Ora W9DJ, in Mt. Vernon, OH. One afternoon on 10 meters, Charlie, WA3ITR, worked his first Argentina SSB QSO to LU8FBT, followed by Chile, Uruguay, and Alaska. This week, those fierce winds and rains blew down WA3ITR's 80 meter dipole, leaving him with just a 40 meter EFHW (End Fed Half Wave) antenna.

David, WA1QGC, reports that during a recent storm, a very tall tree that fell in back of his house just missed his 20 meter loop antenna.

Leandra, AF1R, worked 43 states + DC + 23 countries during RTTY Roundup on January 6-7. During the Olivia QSO party between Christmas and New Year's Day Leandra had very long Olivia keyboard-to-keyboard conversations (most were longer than 30 minutes) with 9 US & Canada and 3 European stations.

MONITOR THE CLUB REPEATER

If you are working at home, or working around the house, turn on your radio and listen on the Wellesley Repeater frequency, 147.03. You may hear a club member looking for conversation while commuting or running out for an errand!

NATICK PRE-HOLIDAY IN-PERSON SOCIAL

Dan W1DAN

Joe W1HAI organized the seasonal Natick area ham Panera bread get together at the 9/27 shopping center in Natick on Saturday morning November 18th. The attendees were: Andy N1FOD, Patti N1FOG, Ralph N1LAH, Joe W1HAI, Dan W1DAN, Bill N1WEN, Dom N1DM, Steve K1DNZ, Greg WA1VIL, Jim WB4EJR, and Barbara KC1KGS.

We had breakfast treats, good chat and a quick meeting about the Natick repeater (447.675MHz, PL 203.5Hz). At the meeting I discovered that I was a member (no dues!), but I tried to have myself impeached with no one voting. Barbara gave us all some tasty dessert treats at the end of the meeting.

Thanks to Jim WB4EJR for the photos, and Barbara KC1KGS for the attendees list and treats!



Clockwise left to right

Andy N1FOD, Patti N1FOG, Ralph N1LAH (hidden), Joe W1HAI, Dan W1DAN, Barb, KC1KGS, Bill N1WEN, Dom N1DM, Steve K1DNZ, Greg WA1VIL

CLUB HOLIDAY FUN!

Dan W1DAN

On a rainy Sunday December 10th many of us visited the Chateau restaurant in Waltham for a fine meal and good laughs.

In attendance were Don KB1OTQ and YL Odette, Elaine KB1IBF, Barb N1ICQ and OM Doug, Dave WA1QGC and harmonic Lilli, Barbara KC1KGS and Jim WB4EJR, Bill N1WEN, Leandra AF1R, Charlie WA3ITR, Stu W1SHS, Steve Ciavarini NQ1F, Jabus KC1SMY, Steve KC1QAY, Bob KC1OXG, and of course myself (did I miss anyone?).

Charlie WA3ITR spent a lot of time planning the event and as a result we enjoyed the fine food, consisting of salad, toasted ravioli, chicken parm, baked stuffed haddock and finally cannoli for dessert.

In previous years I enjoyed wearing a cheap ugly sweater to our holiday get togethers, often purchased from the local grocery store after Christmas for under \$15; however last year at TJ Max I found a cheap jacket for \$15, and it was LOUD. I HAD to buy it and waited to wear it at the next WARS holiday party. A friend suggested I wear a bow-tie (not bow-tie pasta or antennas!) and gosh, I think I last wore one in 1995. So I bought some holiday bow-ties from Amazon, and at the party I made a “cheap ham” statement!

With full tummies, we left a heartwarming get together where we all enjoyed good company and heard about member’s radio plans.

On to 2024!



The Spark⚡Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950



Clockwise, left to right
Charlie WA3ITR, Doug, Elaine KB1BF, Barb N1CQ,
Steve KC1QAY, Bob KC1OXG, Jabus KC1SMY, Stu W1SHS



Rear, Elaine KB1BF, Barbara KC1KGS, Steve KC1QAY, Bob KC1OXG, Dave WA1QGC, Steve NQ1F,
Leandra AF1R, Bill N1WEN
Middle, Jim WB4EJR, Jabus KC1SMY, Dan W1DAN, Don KB1OTQ, Charlie WA3ITR, Doug
Front, Barb N1CQ, Odette, Lilli, Stu W1SHS

The Spark⚡Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950



The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950

Club Dues

Your membership dues support the operation of the 147.03 repeater, the club insurance, the food for our group meetings and supplies for Field Day.

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 – Dan Brown W1DAN
Vice-Pres – Don Bumpus KB1OTQ
Treasurer – Elaine Kile KB1IBF
Secretary - Charlie Bures WA3ITR

Board of Directors:

Bruce MacKinnon KC1FSZ
Rob Jaczko WA1UMU
Leandra MacLennan AF1R
Derek Rowell AK1WI
Dave Fox WA1QGC
Scott Nacey W1MVY

Wellesley Amateur Radio Society website

<https://ema.arrl.org/wellesley-amateur-radio-society>

Wellesley Repeater

The club repeater is located on the Newton/Wellesley Hospital

Receive frequency	Transmit frequency	Transmit tone
147.03 MHz	+600 KHz	123 Hz

Club Nets

Wednesday	8:00 P.M.	Wellesley 2 meter repeater (147.03)
Thursday	8:00 P.M.	28.333.33 MHz USB

Photo credits

Dan Brown, W1DAN: Cover page, Holiday Party

Barbara Irby, KC1KGS: AF1R holding a microphone, HNY, November Social, Holiday Party

Leandra MacLennan, Holiday Party

The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950

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

License Class (Novice, Technician, Advanced, Extra or Not Yet a Ham)	ARRL member? (Yes or No)
--	--------------------------

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 Sep. 1, 2023 thru Aug. 31, 2024.

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:

Elaine Kile KB1IBF, 342 Hunnewell St., Needham, MA 02494-1330

The Spark Gap

Newsletter of the Wellesley Amateur Radio Society

Founded in 1950

Want MORE Ham Radio FUN?

WELLESLEY



WANTS YOU!

Now Welcoming New Applications!



- Serving Amateur Radio Since 1950
- Monthly Programs
- VHF and UHF Repeaters
- Experimentation
- Ham Radio Fun

The Wellesley Amateur Radio Society
Wellesley, MA 02482
w1tkz@arrl.org



<https://ema.arrl.org/wellesley-amateur-radio-society>