

# The Framingham Circuit

Newsletter of the Framingham Amateur Radio Association March, 2022 Vol. 89, No. 2

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**PRESIDENT'S MESSAGE:** Springtime is just around the corner which means the leaves will be filling out the trees soon, so check out your wire antennas now while you can follow the wire and ropes to see if you need any adjustments or repairs. While you are at that, start thinking about how we can gather outside for a radio activity, maybe a practice session before Field Day. We hope to gather at a restaurant for the May meeting, Let's hope the situation in Ukraine calms down soon. The pandemic seems to be calming down at least for now, although I am still wearing a mask when shopping and am required to use one at work. See Sumner's article below on building your own J-pole. Please submit material for the odds and ends section or an article if you have one. We had a board meeting and came up with suggestions for speakers from the EMA.ARRL.ORG speakers list.

**Minutes:** The minutes of past meetings are available for members on our website. You will have to do a search for "minutes". Thanks to Andy, KC1DMM, for writing them up.

## Recent Meetings:

- February 3, 2022: On February 3, 2022 two interesting ham radio videos were shown. The first was "The Storied History of the Ham Radio Callsign" by Mike Ritz W7VO. The second was "Learn and Have Fun with Morse Code" from the Long Island CW Club.
- March 3, 2022. Dr. Edison Fong talked about his UHF and VHF J-Pole antennas. The recording is on our website. Some of us will be joining a group order for them.

**Odds and Ends.** This was a regular section of the old Circuits. Feel free to submit materials.

## Upcoming meetings:

- April 7, 2022: Tom Freneye, K1KI on New England QSO Party and other topics.
- May 5, 2022: Open, considering restaurant meeting.
- June 2, 2022: Field Day discussion and elections.
- June 25, 2022: FARA Field Day. See ARRL Field Day <http://www.arrl.org/field-day>.
- September 1, 2022: Adrian Zeffert, AB2IX, on the test bench.
- October 6, 2022: Ron Rothman, WO1E, on contesting with FT4 and FT8.
- November 3, 2022: Don Rolph, AB1PH, on Winlink.

## Upcoming Hamfests

- NEAR-FEST XXXI APRIL 29 & 30, 2022 in Deerfield, NH, opens 9 am Friday, open 7 am Saturday to 2 pm Saturday. <https://near-fest.com>
- Northeast Ham Expo, August 26-28, 2022, Marlboro, MA. <https://nescitech.org/northeast-hamxposition/>

## Upcoming contests and radio events: (contests selected from WA7BNM calendar)

Oklahoma QSO Party	1500Z, Mar 12 to 0200Z, Mar 13 and 1500Z-2100Z, Mar 13
Idaho QSO Party	1900Z, Mar 12 to 1900Z, Mar 13
Wisconsin QSO Party	1800Z, Mar 13 to 0100Z, Mar 14
VHF-UHF FT8 Activity Contest	1700Z-2000Z, Mar 16

Virginia QSO Party	1400Z, Mar 19 to 0400Z, Mar 20 and 1200Z-2400Z, Mar 20
Missouri QSO Party	1400Z, Apr 2 to 0400Z, Apr 3 and 1400Z-2000Z, Apr 3
Florida State Parks on the Air	1400Z-2200Z, Apr 2 and 1400Z-2200Z, Apr 3
Mississippi QSO Party	1400Z, Apr 2 to 0200Z, Apr 3
Louisiana QSO Party	1400Z, Apr 2 to 0200Z, Apr 3
Nebraska QSO Party	1300Z, Apr 9 to 0100Z, Apr 10 and 1300Z-2200Z, Apr 10
Texas State Parks on the Air	1400Z, Apr 9 to 0200Z, Apr 10 and 1400Z-2000Z, Apr 10
New Mexico QSO Party	1400Z, Apr 9 to 0200Z, Apr 10
Georgia QSO Party	1800Z, Apr 9 to 0359Z, Apr 10 and 1400Z-2359Z, Apr 10
North Dakota QSO Party	1800Z, Apr 9 to 1800Z, Apr 10
Michigan QSO Party	1600Z, Apr 16 to 0400Z, Apr 17
Florida QSO Party	1600Z, Apr 30 to 0159Z, May 1 and 1200Z-2159Z, May 1
7th Call Area QSO Party	1300Z, May 7 to 0700Z, May 8
Indiana QSO Party	1500Z, May 7 to 0300Z, May 8
Delaware QSO Party	1700Z, May 7 to 2359Z, May 8
<b><u>New England QSO Party</u></b>	2000Z, May 7 to 0500Z, May 8 and 1300Z-2400Z, May 8
Arkansas QSO Party	1400Z, May 21 to 0200Z, May 22
Kentucky QSO Party	1400Z, June 4 to 0200Z, Jun 5
West Virginia QSO Party	1600Z, Jun 18 to 0400Z, Jun 19
Marconi Memorial HF Contest	1400Z, Jul 2 to 1400Z, Jul 3

**Article:** [Make Your Own J-Pole Antenna](#), by Sumner Weisman, W1VIV

Dr. Ed Fong presented an excellent talk to the club on his J-Pole antennas recently. The next day I emailed him with a few questions, which he quickly answered. I have a small roll of high quality foam-insulated 300 ohm twin lead, and decided to make my own J-Pole, using the dimensions I found in his original February 2003 QST article. See Figure 1. I followed the diagram closely, and had no problems. I attached a 1 foot long piece of RG-58/U coaxial cable with a PL-259 connector at the end. In order to keep it straight, I attached it to a thin strip of wood, knowing that the wood might affect the antenna impedance slightly. Figure 2 shows the completed antenna, hanging from my garage ceiling.

A little history: A couple of years ago, my 2 meter antenna was an MFJ ground plane mounted to the peak of the porch roof. Several times I got rain in my coax. Each time I cut back the coax and attached a new connector, and taped it up well, but soon the problem would reappear. Finally, out of frustration, I made a new ground plane and hung it from my garage ceiling, about 10 feet above the floor. This worked well, and I had a full-quieting signal to the FARA repeater. Let it rain – who cares? Figure 3 shows the ground plane antenna hanging in the garage.

It made sense that the J-Pole, a half wave antenna, would perform better than the ground plane, which is a one quarter wave antenna. In order to find out, I ran some on-the-air tests with Steve, N4NIV. He has a Kenwood transceiver with a well calibrated S-meter. The results were gratifying.

When I transmitted on 146.580 MHz simplex, running 5 watts, his S-meter showed S-6.8 with my ground plane. I then switched over to the new J-Pole, and Steve reported a reading of 10 dB over S-9. A difference of one S-unit corresponds to an increase of 6 dB, so I had over a 22 dB increase in my 2 meter signal, and was obviously very happy.

As I do with all my antennas, I plotted VSWR graphs for both antennas. These are shown in Figure 4. If I were to build another J-Pole, I would make it a little longer so that it dips in the middle of the 2 meter band. Still, it is only a little over 1.1 to 1 at 147.150/147.750 MHz, the FARA repeater frequency.

I have some high quality polyfoam-dielectric 300 ohm twin lead left, and will be happy to give FARA members enough to make their own J-Pole. In addition, for an indoor 2 meter antenna installation, I will be happy to give my 2 meter ground plane antenna to a FARA member. It would make a good omnidirectional attic or garage antenna.

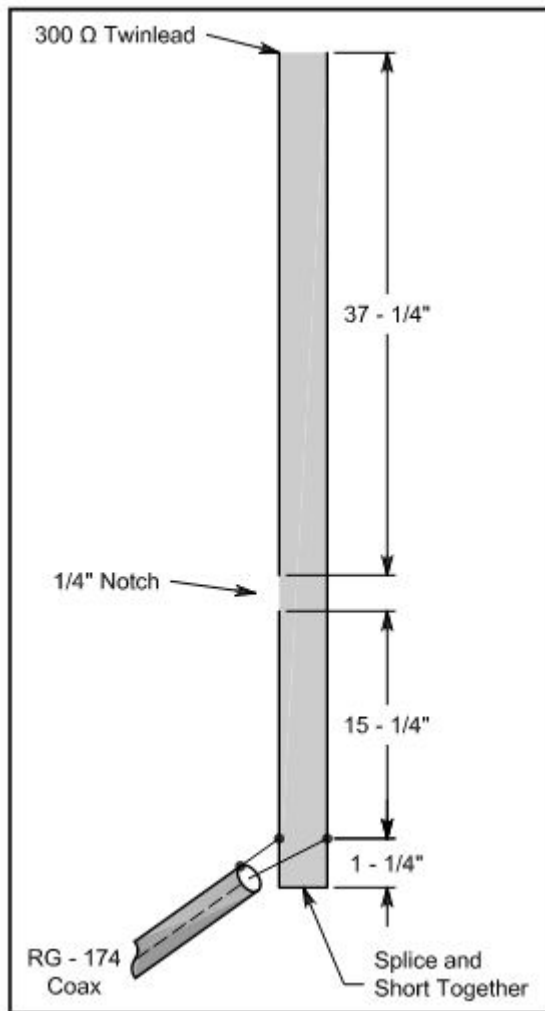


Figure 1. J-Pole dimensions



Figure 2. The completed J-Pole antenna





Figure 3. The ground plane antenna

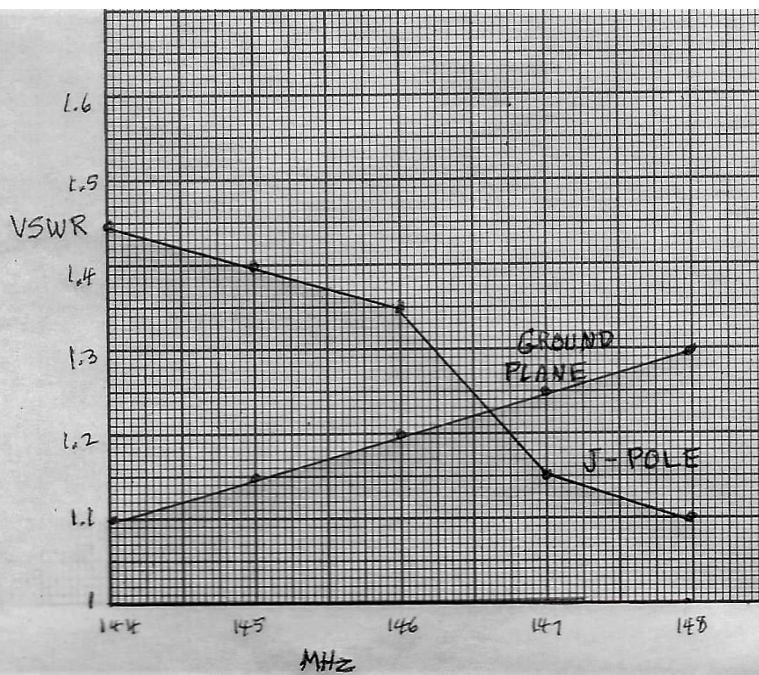


Figure 4. VSWR graph of both antennas

#### **FARA Officers:**

- **President:** John Iwuc, KB1VXY
- **Vice President:** Ron Rothman, WO1E
- **Treasurer:** Steve Moro, N1MH
- **Acting Clerk Secretary:** Andy Boughton, KC1DMM
- **Director:** Sumner Weisman, W1VIV

**Meetings:** Club meetings are held on the 1st Thursday of each month at 7:30 PM and will be on ZOOM. Members will get an email invitation before the meeting. **Members should be sure that they opted in for email notifications and that their email on record is accurate!** Non-members may request an invitation from [president@w1fy.org](mailto:president@w1fy.org)

#### **Club Nets:**

- FARA Net: Sunday, 7:30PM, output frequency 147.15 / input frequency 147.75, optional output PL of 100 - social/chat, emergency preparedness, amateur radio questions, Echolink enabled. W1FY-R
- Informal Health and Wellness Check-in Net: Wednesday 7:30 pm, Echolink enabled, W1FY-R.
- Scanner listeners are invited to let us know you follow the nets by sending an email to [contact@W1FY.org](mailto:contact@W1FY.org)

**Club Web Site:** [W1FY.org](http://W1FY.org)

#### **Social Media:**

- <https://www.facebook.com/FARAW1FY/>
- [https://twitter.com/fara\\_w1fy](https://twitter.com/fara_w1fy)

**Dues:** Flat rate of \$20 per year per person or family, and no separate repeater fee. Paid members will be posted on the web page. You can join/renew/pay online at <http://w1fy.org/membership-form>

**Testing:** **Exams on hold while town offices are unavailable.**

**Mail Address:** Framingham Amateur Radio Association, 330 Cochituate Road, #5123 Framingham, MA 01701 -9998