

March 2021 Our 102th Year Volume 59, Issue 3

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Website:

http://www.mvara.org/

The Voice Coil
Newsletter of the Mahoning
Valley Amateur Radio
Association
Established 1919

The Voice Coil

Prez Sez

(This space unintentially left blank)

That blank space you see above is courtesy of Scott's computer, which crashed before deadline. He plans to return next month.

In the meantime, here are some ham phone apps you can check out, courtesy of *Postscript*, the Ohio Section Newsletter.



Next Meeting:

March 11,2021, 7pm

Online Zoom Meeting.

Phone Apps – There are hundreds of phones apps that pertain to Ham radio, here are a few:

<u>App</u>	Comment
Compass 360 Pro	Very useful for headings and direction
NKCCluster	On the phone DX Cluster – Watch the data charges!
QRZ Assistant	Useful for looking up callsigns
DX Pocket	DX Cluster monitor with a few more options
HamClock	Easy to use worldwide clock
Voice Recorder	I use this when operating Mobile as my logbook.
Music Player	I listen to CW Audio files to keep my speed up!
NCDXF Beacon	This is great to show what beacons are transmitting. You can then listen to quickly determine what band(s) are open.
Grid Square Locator	This is a great tool if you are travelling and operating.

2021 Officers

President: Scott Wilton, KE4UHC **Vice President:** Mike McCleery,

K8PRR

Secretary: Ray Bishop, W8CSM, **Treasurer:** Dean DeMain, W8YSU

Trustees:

Mark Haverstock, K8MSH Joe Vasco, N8SEJ Andy Brinco, WA8ZLK John DeGutis, N8LVA

Newsletter Editor: Mark Haverstock, K8MSH

Awards Manager: Dave Fairbanks, N8NB, 330.759.6993, 4770 Logan Ave. Youngstown, OH 44505

The Mahoning Valley Amateur Radio Association, Inc, meets the second Thursday of every month. Location and time are subject to change. Dues are \$20.00 per year, \$10.00 each for additional family member. Contact Dean, wsysu@arrl.net for membership details.

The club call is **W8QLY**; equipment operated under this call includes a two meter voice repeater at 146.745 (-600, 110.9 PL). Club email: mvara.w8qly@gmail.com

MONDAY NIGHT NET operates every Monday at 9:00. PM on 146.745 MHz.

SKYWARN NET - First Wednesday of the month at 8:30 PM on 146.745 MHz as weather warrants.

ARES NET- First and third Mondays of each month at 8:30 PM on 146.745 MHz; prior to the Monday Night Net.

April Meeting: Pitcairn 2019

Rising sharply out of the immense blue waters of the South Pacific, halfway between New Zealand and South America, lies a small jut of a volcanic rock known as Pitcairn Island. Pitcairn offers a rugged and rocky coastline ascending upward to its apex at 1138 feet (347 meters) at Pawala Valley Ridge.

Pitcairn has a place in history as the island settled by survivors of the Mutiny on the Bounty. It also has a place in history as the location of the 2019 Pitcairn DXpedition. Starting with 14 operators, 12 actually made it to the island on October 17th, 2019 and by the time they left had racked up over 82,000 contacts.

One of the members of the team, Amateur Radio Rockstar Craig Thompson, K9CT, will be speaking to MVARA via Zoom on April 13th on his experiences on Pitcairn and the ten other DXpeditions he has participated in.

More details to come as we get closer – mark your calendar now to meet with Craig.



March Meeting Zoom Link

https://us02web.zoom.us/j/87645500888?pwd=L0I1 dWpxdE1aaHZaR01qSENTVTZ2QT09

Current Activities

March 1: Spring antenna build begins (see this issue for details)

Mar. 11: Monthly meeting, 7pm via Zoom. Topic: Setting up your ham shack.

Mar. 23: Online Tech license class begins, 7pm (6 wks. via Zoom)

Contact Us:

Email: mvara.W8QLY@gmail.com Snail-mail: MVARA, P.O. Box 14141, Poland, OH 44514

Meeting ideas/ suggestions? Contact Dave, KD8NZF, KD8NZF@zoominternet.net

Swap and Shop

1--W2NAN: True-Talk G5RV Jr. [51-ft]

(company assembled w/17-ft 300-ohm and 70-ft cable & conn)

2--ALPHA DELTA: dx-40 3--HY POWER: (two) fsd40

4--HY POWER: triwarc (only 30 & 17m/NO 12m)

5--HY POWER: tri1020

6--HY POWER: 2b4080l (90-ft, greatest bandwidth)

7--PAR ELECTRONIC: ef-30, ef-20 & ef-17

8--ARROW: osj-144/440 j-pole

9--MFJ: mfj-1724B vhf/uhf mag. mnt. (dual band, 144/440)

10-MFJ: mfj-259c analyzer

11-YAESU: sp-101b speaker (6-in H/8-in W/11-in D)

12--ICOM: ic-7300 xcvr w/accessories 13--ICOM: sm-50 desktop microphone 14--PALSTAR: at-500 antenna tuner 15--PALSTAR: dl-1500 dummy load 16—ASTRON: rs-35a power supply

Contact Ken, KC8Y, by email: cct66000@gmail.com

Jetstream JTWXVHF Watt/SWR Meter

Excellent condition, includes original box and 12v cable for backlight. Large dual needle meter covers 1.6-200MHz, power scales 20, 200, and 2000 watts. Selectable avg/peak power readings. \$110 new retail, yours for \$50.

Contact Mark, K8MSH: mh@zoominternet.net



Trending Topics on the MVARA 24/7 Club Connection

- 1. *NN8B Repeater Columbiana County:* Everyone is welcome to use this high profile C4FM fusion repeater.
- 2. *Winter Field Day:* Find out who participated and how they did.
- 3. *Online Membership Form:* Thanks to a suggestion from Bill KE8KZI we now have a fillable pdf form on the web site. See which operating systems and browsers have trouble using it.
- 4. Winter Storm: What frequencies to monitor and where to submit storm reports.

Rich KB8GAE

Mahoning Valley Two-Meter Contest

The MVARA is pleased to announce the second annual Mahoning Valley Two Meter Contest Saturday March 27, 2021 from 1:00 to 4:00 pm. We thought it would be fun to see if valley hams would enjoy shaking off the winter doldrums by getting on the air for a local contest. It will be an opportunity to talk to old friends and make new ones.

The MV 2 Meter Contest is a two-meter FM simplex contest. Stations will simply exchange grid squares as defined in the contest rules. The contest format will allow participants to evaluate their stations simplex capabilities. This information could be valuable in an emergency.

No 100-watt base station? No problem. There will be a low power category of 5 watts or less and a high-power category of greater than 5 watts so everyone will have a level playing field. Awards will be given for the highest scoring Low Power Fixed, High Power Fixed, Low Power Rover, and High-Power Rover stations at the May 13, 2021 MVARA meeting.

For contest rules and a list of rover stations and the grids they plan to activate go to www.mvara.org/Mv2mc.html

The second Mahoning Valley 2 Meter Contest is dedicated to the memory of Becky Albrecht, KD8SCF SK. Although a member of MVARA for too short a time, she had a big impact on the club. Even before becoming a member, she spearheaded a special Technican License class by the MVARA that saw a dozen new hams get licensed. As a member she was always willing to help such as taking on the duties of PIO for Field Day and serving as our Club Secretary.

We hope to hear you on the air!

Rich KB8GAE

Amazon to require FCC certification



BY DAN KB6NU

Here's an interesting notice from Amazon: <u>Action required for radio frequency device listings on</u> Amazon.com

As part of our ongoing efforts to protect our customers and enhance the customer experience, Amazon is updating the requirements to offer radio frequency devices. This will affect some products you offer or have previously offered.

Starting in Q2 2021, in order to create new listings or update existing listings of radio frequency devices you will need to fill in the FCC Radio Frequency Emission Compliance attribute. In the attribute, you must do one of the following:

Provide evidence of Federal Communications Commission (FCC) authorization – either an FCC certification number or contact information for the Responsible Party, as defined by the FCC. Certify that the product is exempt from FCC requirements.

As a reminder, per Amazon policy, all radio frequency devices must comply with FCC regulations and all applicable state and local laws, including registration and labeling requirements. Amazon also requires you to provide accurate information about your products on the product detail page.

You may not be aware that you are selling products the FCC considers radio frequency devices. The FCC broadly classifies as radio frequency devices any electronic or electrical product that is capable of emitting radio frequency energy. According to the FCC, almost all electronic or electrical products are capable of emitting radio frequency energy. Examples of products that are regulated by the FCC as radio frequency devices include, but are not limited to: Wi-Fi devices, Bluetooth devices, radios, broadcast transmitters, signal boosters, and devices with cellular technology. FCC guidance on what is considered a radio frequency device can be found on the Equipment Authorization - RF Device page on the FCC website.

We will follow-up with additional information, including a help page, closer to attribute launch.

For more information, see <u>Amazon's Radio Frequency Devices policy</u>. You can also bookmark this article for future reference.

Some are saying that this is an effort to control the sales of Baofengs. Others point to other radiators, such as LED lights and solar charge controllers. The <u>reddit discussion</u> of this new policy pretty much dismisses this new policy. One comment notes, "This has nothing at all to do with buying radios, it's just Amazon trying to cover their @\$\$es over the likes of 'Rugged radio'(and others) selling uncertified radios as something they're not."

I think that this could be interesting if Amazon really got serious about this. I'm not sure that even Amazon has the wherewithal to really do this kind of policing, though.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com).

HAM HUMOR: JUNIPER VALLEY RADIO CLUB ANNOUNCES HAMFEST LINEUP



By WBØRUR, on the scene

TRUTH OR CONSEQUENCES, New Mexico – A local group of radio experimenters and tinkerers known as the "Juniper Valley Amateur Radio Club" has announced the organization's hamfest plans for the upcoming season.

"We're going to begin the season big and finish even bigger!" says club president Mortimer Booker, who had been in charge of the radio club since 1974. The club has 12 active members.

"On April 13, we'll start the day with the 'Grand Slam' breakfast at Denny's. Then we'll head over to Petaluma for the big Ham-Spectacular! Afterwards, we'll stop at Golden Corral for lunch. Last year, club member Jerry Davis got his Extra ticket over there. We won't have anyone testing this year, though, since Bob (Thompson) moved into the care center."

In late May, the JVARC will travel to nearby Santa Fe for the famous "Native American Art Show and Hamfest" on the historic town square. While strolling through the ancient adobe downtown buildings, patrons can select from a fine variety of colorful handmade scarves, locally produced rugs and renovated Hallicrafters gear. Lunch will include beans, rice and Indian tortillas from Jim's Quick Foods at 2384 Metro Street.

"We've got a real treat for August," says Booker. "The club will travel via rail to the radio swap meet-up in Pueblo. We're working out details, but we think we'll be able to operate a special event station from the "Cliff Dwellers 3-D Diorama" set up at the Three Pines Shopping Mall. It should be a blast!"

For more information on joining the Juniper Valley Amateur Radio Club on their hamfest travels, call club President Mortimer Booker or contact "Golden Years Travel Agency" in downtown Truth or Consequences. Ask for information on travel package number 78-A.

www.hamhijinks.com

Amateur License Refresher

Dave, KD8NZF



Amateur License Refresher

It's probably been a while since you took your Amateur License exam. Here are a few sample questions from the current question pools just to keep those synapses firing.

Extra Pool

E2A01

What is the direction of an ascending pass for an amateur satellite?

- A. From west to east
- B. From east to west
- C. From south to north
- D. From north to south

E2A02

Which of the following occurs when a satellite is using an inverting linear transponder?

- A. Doppler shift is reduced because the uplink and downlink shifts are in opposite directions
- B. Signal position in the band is reversed
- C. Upper sideband on the uplink becomes lower sideband on the downlink, and vice versa
- D. All these choices are correct

General Pool

G4E01

What is the purpose of a capacitance hat on a mobile antenna?

- A. To increase the power handling capacity of a whip antenna
- B. To allow automatic band changing
- C. To electrically lengthen a physically short antenna
- D. To allow remote tuning

G4E02

What is the purpose of a corona ball on an HF mobile antenna?

- A. To narrow the operating bandwidth of the antenna
- B. To increase the "Q" of the antenna
- C. To reduce the chance of damage if the antenna should strike an object
- D. To reduce RF voltage discharge from the tip of the antenna while transmitting

Contest and Special Event Operating Information Dave Fairbanks N8NB

Data below as well as more information courtesy of the following website: http://www.hornucopia.com/contestcal/index.html.

March 2021	
- K1USN Slow Speed Test	0000Z-0100Z, Mar 1
OK1WC Memorial	1630Z-1729Z, Mar 1
RSGB 80m Club Championship, Data	2000Z-2130Z, Mar 1
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 2
ARS Spartan Sprint	0200Z-0400Z, Mar 2
RTTYOPS Weeksprint	1700Z-1900Z, Mar 2
AGCW YL-CW Party	1900Z-2100Z, Mar 2
QRP Fox Hunt	0200Z-0330Z, Mar 3
Phone Weekly Test - Fray	0230Z-0300Z, Mar 3
CWops Mini-CWT Test	1300Z-1400Z, Mar 3
VHF-UHF FT8 Activity Contest	1700Z-2000Z, Mar 3
CWops Mini-CWT Test	1900Z-2000Z, Mar 3
UKEICC 80m Contest	2000Z-2100Z, Mar 3
CWops Mini-CWT Test	0300Z-0400Z, Mar 4
RTTYOPS Weeksprint	1700Z-1900Z, Mar 4
NRAU 10m Activity Contest	1800Z-1900Z, Mar 4 (CW) and 1900Z-2000Z, Mar 4 (SSB) and 2000Z-2100Z, Mar 4 (FM) and 2100Z-2200Z, Mar 4 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Mar 4
■ NCCC RTTY Sprint	0145Z-0215Z, Mar 5
■ QRP Fox Hunt	0200Z-0330Z, Mar 5
	0230Z-0300Z, Mar 5
	2000Z-2100Z, Mar 5
■ Novice Rig Roundup	0000Z, Mar 6 to 2359Z, Mar 14
ARRL Inter. DX Contest, SSB	0000Z, Mar 6 to 2400Z, Mar 7
	0600Z-0629Z, Mar 6 and 0630Z-0659Z, Mar 6 and 0700Z-0729Z, Mar 6 and 0730Z-0800Z, Mar 6
■ Open Ukraine RTTY Championship	1800Z-2059Z, Mar 6 (Low Band) and 2100Z-2359Z, Mar 6 (Low Band) and 0800Z-1059Z, Mar 7 (High Band) and 1100Z-1359Z, Mar 7 (High Band)
	0700Z-1100Z, Mar 7
■ NSARA Contest	1200Z-1600Z, Mar 7 and 1800Z-2200Z, Mar 7
	1200Z-1400Z, Mar 7
₩AB 3.5 MHz Phone	1800Z-2200Z, Mar 7
	0000Z-0100Z, Mar 8
OK1WC Memorial	1630Z-1729Z, Mar 8
■ Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 9
RTTYOPS Weeksprint	1700Z-1900Z, Mar 9

ODD For Hunt	00007 00007 Mar 40
QRP Fox Hunt	0200Z-0330Z, Mar 10
Phone Weekly Test - Fray	0230Z-0300Z, Mar 10
CWops Mini-CWT Test	1300Z-1400Z, Mar 10
	1700Z-2000Z, Mar 10
CWops Mini-CWT Test	1900Z-2000Z, Mar 10
RSGB 80m Club Championship, CW	2000Z-2130Z, Mar 10
AWA John Rollins Memorial DX Contest	2300Z, Mar 10 to 2300Z, Mar 11 and 2300Z, Mar 13 to 2300Z, Mar 14
CWops Mini-CWT Test	0300Z-0400Z, Mar 11
RTTYOPS Weeksprint	1700Z-1900Z, Mar 11
NCCC RTTY Sprint	0145Z-0215Z, Mar 12
<u> ■</u> QRP Fox Hunt	0200Z-0330Z, Mar 12
	0230Z-0300Z, Mar 12
	2000Z-2100Z, Mar 12
YB DX RTTY Contest	0000Z-2359Z, Mar 13
± SARL VHF/UHF Analogue Contest	0500Z-0700Z, Mar 13 (6m) and 0700Z-0900Z, Mar 13 (2m) and 0900Z-1100Z, Mar 13 (70cm) and 0500Z-0700Z, Mar 14 (6m) and 0700Z-0900Z, Mar 14 (2m) and 0900Z-1100Z, Mar 14 (70cm)
SARL Field Day Contest	0800Z, Mar 13 to 0800Z, Mar 14
RSGB Commonwealth	1000Z, Mar 13 to 1000Z, Mar 14
DIG QSO Party, SSB	1200Z-1700Z, Mar 13 (20m-10m) and 0700Z-0900Z, Mar 14 (80m) and 0900Z-1100Z, Mar 14 (40m)
■ South America 10 Meter Contest	1200Z, Mar 13 to 1200Z, Mar 14
SKCC Weekend Sprintathon	1200Z, Mar 13 to 2400Z, Mar 14
F9AA Cup, SSB	1200Z, Mar 13 to 1200Z, Mar 14
Oklahoma QSO Party	1400Z, Mar 13 to 0200Z, Mar 14 and 1500Z-2200Z, Mar 14
■ AGCW QRP Contest	1400Z-2000Z, Mar 13
■ Stew Perry Topband Challenge	1500Z, Mar 13 to 1500Z, Mar 14
EA PSK63 Contest	1600Z, Mar 13 to 1600Z, Mar 14
TESLA Memorial HF CW Contest	1800Z, Mar 13 to 0559Z, Mar 14
QCWA QSO Party	1800Z, Mar 13 to 1800Z, Mar 14
Idaho QSO Party	1900Z, Mar 13 to 1900Z, Mar 14
QRP ARCI Spring Thaw SSB Shootout	2200Z-2300Z, Mar 13
North American Sprint, RTTY	2300Z, Mar 13 to 0300Z, Mar 14
UBA Spring Contest, 2m	0700Z-1100Z, Mar 14
Classic Exchange, Phone Classic Exchange Phone Classic Phone Class	1400Z, Mar 14 to 0800Z, Mar 15 and 1400Z, Mar 16 to 0800Z, Mar 17
₩isconsin QSO Party	1800Z, Mar 14 to 0100Z, Mar 15
K1USN Slow Speed Test	0000Z-0100Z, Mar 15
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Mar 15
OK1WC Memorial	1630Z-1729Z, Mar 15
Bucharest Digital Contest	1800Z-2059Z, Mar 15
RSGB FT4 Contest Series	2000Z-2130Z, Mar 15
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 16
CLARA Chatter Party	1700Z, Mar 16 to 1700Z, Mar 17 and
=	1700Z, Mar 20 to 1700Z, Mar 21

■ RTTYOPS Weeksprint	1700Z-1900Z, Mar 16
■ QRP Fox Hunt	0100Z-0230Z, Mar 17
Phone Weekly Test - Fray	0230Z-0300Z, Mar 17
CWops Mini-CWT Test	1300Z-1400Z, Mar 17
CWops Mini-CWT Test	1900Z-2000Z, Mar 17
NAQCC CW Sprint	0030Z-0230Z, Mar 18
CWops Mini-CWT Test	0300Z-0400Z, Mar 18
RTTYOPS Weeksprint	1700Z-1900Z, Mar 18
BCC QSO Party	1930Z-2059Z, Mar 18
QRP Fox Hunt	0100Z-0230Z, Mar 19
NCCC RTTY Sprint	0145Z-0215Z, Mar 19
NCCC Sprint	0230Z-0300Z, Mar 19
K1USN Slow Speed Test	2000Z-2100Z, Mar 19
BARTG HF RTTY Contest	0200Z, Mar 20 to 0159Z, Mar 22
Russian DX Contest	1200Z, Mar 20 to 1200Z, Mar 21
AGCW VHF/UHF Contest	1400Z-1700Z, Mar 20 (144) and
The second secon	1700Z-1800Z, Mar 20 (432)
	1400Z, Mar 20 to 0400Z, Mar 21 and 1200Z-2400Z, Mar 21
Feld Hell Sprint	2000Z-2159Z, Mar 20
UBA Spring Contest, SSB	0700Z-1100Z, Mar 21
Run for the Bacon QRP Contest	2300Z, Mar 21 to 0100Z, Mar 22
K1USN Slow Speed Test	0000Z-0100Z, Mar 22
OK1WC Memorial	1630Z-1729Z, Mar 22
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 23
RTTYOPS Weeksprint	1700Z-1900Z, Mar 23
SKCC Sprint	0000Z-0200Z, Mar 24
QRP Fox Hunt	0100Z-0230Z, Mar 24
Phone Weekly Test - Fray	0230Z-0300Z, Mar 24
CWops Mini-CWT Test	1300Z-1400Z, Mar 24
CWops Mini-CWT Test	1900Z-1900Z, Mar 24
CWops Mini-CWT Test	0300Z-0400Z, Mar 25
RTTYOPS Weeksprint	1700Z-1900Z, Mar 25
RSGB 80m Club Championship, SSB	2000Z-2130Z, Mar 25
QRP Fox Hunt	0100Z-0230Z, Mar 26
NCCC RTTY Sprint	0145Z-0215Z, Mar 26
NCCC Sprint	0230Z-0300Z, Mar 26
K1USN Slow Speed Test	2000Z-2100Z, Mar 26
FOC QSO Party	0000Z-2100Z, Wai 20 0000Z-2359Z, Mar 27
CQ WW WPX Contest, SSB	0000Z-2339Z, War 27 0000Z, Mar 27 to 2359Z, Mar 28
UBA Spring Contest, 6m	0600Z-1000Z, Mar 28
K1USN Slow Speed Test	·
-	0000Z-0100Z, Mar 29
	1300Z-1400Z, Mar 29
	1630Z-1729Z, Mar 29
QCX Challenge Worldwide Sideband Activity Contact	1900Z-2000Z, Mar 29
Worldwide Sideband Activity Contest	0100Z-0159Z, Mar 30
QCX Challenge DTTVORS Weakenrint	0300Z-0400Z, Mar 30
RTTYOPS Weeksprint	1700Z-1900Z. Mar 30

QRP Fox Hunt	0100Z-0230Z, Mar 31
■ Phone Weekly Test - Fray	0230Z-0300Z, Mar 31
	1300Z-1400Z, Mar 31
■ CWops Mini-CWT Test	1900Z-2000Z, Mar 31
■ UKEICC 80m Contest	2000Z-2100Z, Mar 31

DX Operating Information Dave Fairbanks N8NB

Credit for the below information and further information on these operations and others can be found at the following website: http://www.ng3k.com

Ma	rch					
ARRL International DX Contest, Phone (Mar 6-7, 2021) Check here for pericontest activity too.						
2021 Mar10	2021 Mar31	Minami Torishima	JD1	JA8CJY Direct	TDDX 20210216	By JG8NQJ as JG8NQJ/JD1 fm Marcus I (IOTA OC-073, QL64xg); 40 30m; CW; 50W; spare time operation; operation to continue for about 3 months
2021 Mar04	2021 Mar23	Curacao	PJ2	LoTW	DK5ON 20210131	By DK5ON as PJ2/DK5ON; 80- 6m, perhaps 160m; SSB CW FT4 FT8 RTTY; QSL via Club Lob OQRS or DK5ON (B/d)
2021 Mar16	2021 Mar23	Cocos Keeling	VK9CE	LoTW	DXW.Net 20210215	By 10 ops; 80-6m; SSB CW FT8; QSL OK via eQSL; logs to be uploaded to Club Log
CQ WW WPX Contest, SSB (Mar 27-28, 2021) Check here for pericontest activity too.						



Spring Antenna Project March-May Pt. 1- W2DU Balun/Choke

This is part one of a three part project—you can build all, or just the ones you choose. Part one is the center insulator with a built-in 1:1 balun which will handle 1.5 KW power. Part two is the addition of wire and insulators to build a 40 meter dipole antenna. Part three involves building two antenna traps and extending the antenna. When completed, the antenna will cover 80-10 meters using a tuner.

You can provide your own parts for the first project (listed below) or obtain a complete kit. All balun parts are pre-drilled and ready to assemble.

Tools needed: screwdriver, open end wrenches, nut driver, needle nose pliers, drills- 5/8, 11/64 & 3/16 bits, soldering iron and solder, wire cutters, crimper, wire stripper, glue or bathroom caulk, electrical tape, heat gun or hair dryer. Tweezers or forceps may be helpful for several steps.

Parts list:

12 in. of 1" PVC pipe

2- 1" pipe caps (these are pre-drilled in kit)

1-panel mount so-239 connector

2-#6 screws, 1/2"

4-#6 tooth washers

2-#6 nuts

3-#8 ring connector (for 14-16 ga. Wire)

3- 3/16" x 1 1/2" eye bolts

3- #10-24 nuts

6-#10 tooth washers

6 #10 flat washers

2-#10 ring connectors (for 14-16 ga. Wire)

2 #8-32 3/4" screw

2 #8-32 nuts

4 #8 flat washers

2 #8 split washers

50- FB73-2401 ferrite beads

12 in. RG-303 or RG-142 teflon coax

2-3" zip ties

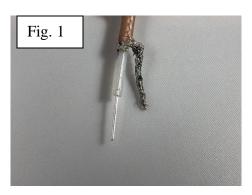
3/8" and 3/16" heat shrink tubing

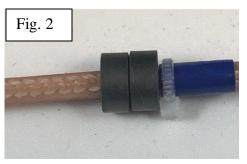
12 inches #16 or 14 ga. stranded wire

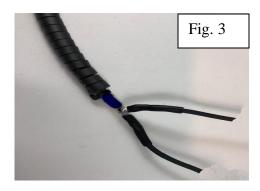
All hardware and PVC available at Home Depot. Ferrite beads available from https://www.kitsandparts.com/ Teflon coax/SO-239 connector available on ebay.

This project requires soldering skills and the ability to strip and prepare coax.









Instructions:

(Fig. 1) Strip 1 inch of Teflon jacket on one end of coax to expose shield and center conductor. Separate braid from center conductor and strip 1/4 inch of insulator from center conductor to expose wire. Twist the shield together and tin lightly with solder.

(Fig. 2) Measure ½ inch above the exposed wires, wrap tightly with a narrow strip of electrical tape and attach a zip tie. Pull tightly. This will act as a "stop" for the beads. Place beads in a bowl—they tend to get away from you if left loose on a table. Slide beads individually down the coax until all 50 are placed. If you happen to lose one or two during the process, it will not significantly affect performance.

Adjust beads so they are compressed together. Put second strip of electrical tape and zip tie at the top of the stack, and tighten. Place a piece of shrink tube at the top and bottom of the stack and heat until it is tight against the beads. You may choose to cover all beads with heat shrink (optional).

Strip 1 inch of Teflon jacket on remaining end of coax to expose shield and center conductor. Separate braid from center conductor; strip 3/8 inch of insulator from center conductor to expose wire. (see Fig. 1)

(Fig. 3) Cut two 2" pieces of stranded wire and remove 3/8" of insulation from each end. Splice one wire to coax center conductor, one to the shield. Be careful not to short the connections. Solder the connections. Slide a piece of shrink tubing over each wire to cover the connection and heat to shrink.

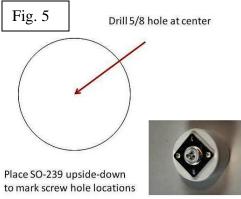
(Fig. 4) On the remaining ends, trim wire to fit and attach the #8 ring connectors. Soldering the connectors will improve contact and stability.

(Fig. 5) Drill the bottom end cap as shown in diagram, 5/8" at center, two 11/64" holes to fasten connector—use SO-239 connector as template to mark holes.

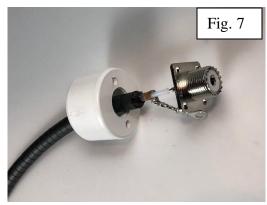
(Fig. 6) Find the bottom end of the coax (shown in Fig. 1). Attach a ring connector to the shield and solder. Solder center conductor of coax to center pin of SO-239 connector.

(Fig. 7) Pull coax/bead assembly through the large hole. To make weather resistant seal, put glue or caulk on back of metal frame on SO-239 connector.









(Fig. 8) Attach connector as shown with two #6 screws, tooth washers, and bolts. Slide the shield/ring connector over one of the screws, followed by the tooth washer and nut. Tighten both screws.

If you have a multimeter, do a continuity check between these wires and the SO-239 connector at the other end to make sure there are no shorts between the shield and center conductor of the coax connections. If there are none, put a small bead of glue around the bottom ¼ inch of the 12 inch pipe and attach the bottom cap.

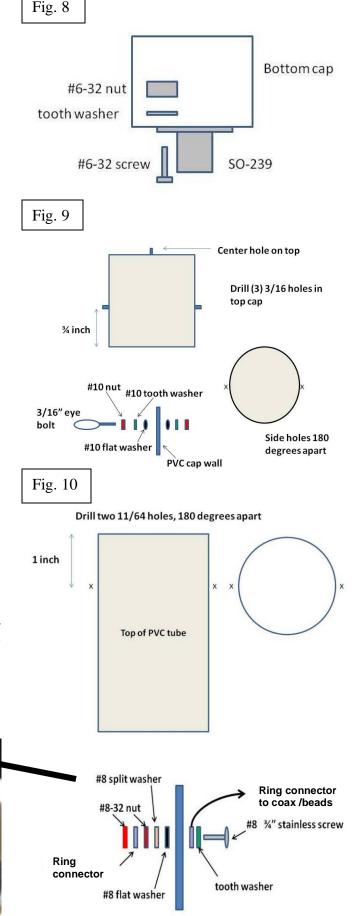
(Fig. 9) Prepare top PVC cap as shown in diagram. Drill the 3 holes with 3/16 in. drill. Assemble the hanger support using eye bolt, #10 nut, #10 washer (top), #10 washer, tooth washer, #10 nut (inside.) Side supports use eye bolt, #10 nut, #10 tooth washer, #10 flat washer (outside), #10 flat washer, #10 tooth washer and #10 nut (inside.)

(Fig. 10) Drill two 3/16" holes near the top of the pipe, 1 inch from the top edge and 180 degrees apart.

Install wire connections on side as shown. Use two #8-32 3/4"screws, washers, and bolts and tighten. Add flat washer, crimp connector and a second bolt.

Tuck in wires, install the top cap to the tube using a small bead of glue or caulking at the top of the pipe, tucking in any extra wire. Set aside to dry.

The next project is making a 40m dipole using the balun you just built. Project 2 kit has 66 ft. of antenna wire, two nylon insulators, and hardware to fasten the wire to the insulators and balun. The wire has been ordered and is on the way. If you want to save a trip, you can also pick up these materials at the same time. Contact me via email for details.



Project Photos-- Closeups













QSO Today Virtual Ham Expo March 13-14

QSO Expo Announces Integration of GroundBreaking Video Technology

The QSO Today Virtual Ham Radio Expo (https://www.qsotodayhamexpo.com) scheduled for March 13-14, 2021 is proud to announce that it is partnering with Airmeet, a groundbreaking conference technology company, to dramatically improve the virtual interaction and networking experience for all attendees.

By integrating Airmeet's technology into the Expo, attendees will take advantage of live round table video chat to interact with each other, with exhibitors, and speakers. This includes:

- The outside of each virtual speaker auditorium will now feature a virtual lounge with tables and chairs to facilitate live video "hallway meetups", similar to what is found at an in-person event. Attendees can now pull up a chair and meet face to face using live video chat for a real "eyeball QSO" with friends and new friends.
- Exhibitor booths will now incorporate virtual tables where small groups of booth visitors can virtually sit with exhibit staff to share product demos, answer questions, schmooze, and take orders all done with live video chat technology.
- The Expo team will leverage Airmeet's technology to create virtual lounges throughout the Expo to enable high quality video networking and discussion. This includes tables on specific subject areas such as HOA Antennas and Software Defined Radio, so that amateur radio operators can discuss specific topics of interest with each other.
- Attendees can now easily search for people they want to meet up with at the Expo using their call sign and then make a plan to meet at one of the lounges.

Said Eric Guth, 4Z1UG, QSO Today host, "we are committed to improving every Expo to ensure that our attendees continue to get a world-class user experience. Based on the extensive feedback we received at our last Expo, we recognized that we had to dramatically improve the way that attendees, exhibitors, and speakers interact and engage with each other. Airmeet provides us with the technology to take our Expo to the next level."

"Airmeet is thrilled to be chosen to partner with the QSO Today Virtual Ham Radio Expo. With Airmeet's technology the Expo will provide a virtual experience that feels much closer to a physical event. The Expo community can now come together and engage in a powerful way that fosters more meaningful and high quality conversations with each other" said Airmeet's Co-Founder Manoj Singh.

Early bird registration for the Expo can be found at https://www.qsotodayhamexpo.com

About the QSO Today Ham Radio Expo: The QSO Today Expo offers the opportunity to learn from many great speakers, meet with exhibitors to see the latest technology, and engage with fellow ham radio operators without leaving their home ham shack. And attendees save thousands of dollars since there are no travel, food, or lodging expenses!

About Alrmeet: Airmeet is the fastest growing platform for hosting a rich variety of virtual events. From Hackathons to ice-breakers, panel discussion to workshops, Airmeet's intuitive experience delivers on organisers' expectations for a wide range of events. Every event on Airmeet takes place in a virtual "ballroom" which is customized in appearance and seating arrangements to deliver a specific experience and highly relevant interactions among the participants.

Mahoning Valley Amateur Radio Association-2021 Membership

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THE LAST WORD

"I knew I was an unwanted baby when I saw that my bath toys were a toaster and a radio." Joan Rivers



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The *VOICE COIL* is the monthly publication of the Mahoning Valley Amateur Radio Association, Inc. (MVARA) and is intended to present news, issues and opinions of interest to MVARA members and the Amateur Radio Community. We encourage contributions of articles, letters to the editor, etc. and welcome newsletter exchanges with other clubs from around the country and around the world. Permission is granted to reprint material contained herein as long as proper credit is given to this newsletter and the author. Ideas for and contributions to the VOICE COIL should be submitted to: MVARAVoiceCoil@gmail.com

Submissions must be received **no later than the 24th** of the month prior to the month of issue, unless otherwise specified. **Submissions should be in MS Word format or ASCII text—no PDF, please!** Material received after the deadline will be used in the next month's VOICE COIL if it is still current and /or newsworthy.

Swap and Shop Policies

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