



August 2018  
Volume 56, Issue 8

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*The Voice Coil*  
**Award-Winning Newsletter**  
*of the Mahoning Valley*  
**Amateur Radio**  
**Association**  
*Established 1919*

# The Voice Coil

## Prez Sez

Hello again--I hope everybody is doing fine. Last meeting we successfully completed the audit. I want you to remember that the board meeting is also open to members. Be sure to check the website or our Facebook page for time and place.

The corn roast is on the 9th of August, and members attending are asked to bring a dessert or side dish to share. The roast starts about 6:30 at the Boardman Park.

To the many new and seasoned operators, what is your plan to use your ticket? Do you just want to contest, rag chew or just take whatever comes your way. Do you want to work for any of the awards; WAS, WAC, DXCC or grid squares? There are a lot of roads to take. Do you like to collect QSL cards?

As you grow in the hobby, things will always be changing. Some hams are very serious, others just enjoy getting on the air now and again.

How about equipment--what is the best equipment for you? There are some great radios on the market. Some are basic get started radios under \$1,000 that will serve you well, or do you want the latest greatest you can afford. Want to operate HF, VHF,UHF, CW,SSB, and digital? There are great radios that cover these bands and modes in one box. If you're looking



for answers, ask one of the club members for suggestions. Also, you can check into our Elmer Q & A after the Monday night net.

Antennas are the most important piece of equipment you can have, they are your "ears" on the air, picking up those weak signals. If you can't hear them, you can't work them. The best piece of gear in the world doesn't work well without a good antenna. Even a simple dipole can be a great choice if built and installed properly. Be sure to check local zoning and CC&Rs for any restrictions.

So for now 73 & good DX  
Jim WB8UJS

### Next Meeting:

Thur. August 9, 6:30 PM  
Corn Roast at Masters  
Pavilion, Boardman Park  
Boardman, OH

# Corn Roast

## 2018 Officers

President: Jim Stiffler, WB8UJS

Vice President: Andy Brincko,  
WA8ZLK

Secretary: Becky Albrecht,  
KD8SCF

Treasurer: Nancy Brett, KD8QNY

Trustees: Dean DeMain, W8YSU

Doug Sage, KB8TPG

Gene A. Boccia, WQ8H

Jerry Goddard, KC8EFO

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 members. A pro-rata discount for first time membership is available as well as special student and military discounts. Contact Nancy, [kd8qny@zoominternet.net](mailto:kd8qny@zoominternet.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](mailto:mvara.w8qly@gmail.com)

For License Classes and VE testing, Contact Wes Boyd, W8IZC, [W8IZC@yahoo.com](mailto:W8IZC@yahoo.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.



The MVARA annual Corn Roast will be Thursday August 9<sup>th</sup> in Boardman Twp. Park, It will take place at the Master's Pavilion. This is located on the west side of the park off of Southern Blvd. All members, non-members and their families are encouraged to attend! There is a playground for the kids to use right next to the pavilion!

We will eat dinner at about 6:30 pm, but you can arrive anytime after 5:30 pm to help shuck the corn. As in the past the club will provide the hamburgers, hotdogs, corn, beverages, and table settings. Those attending are asked to bring a covered dish or dessert to share (DON'T FORGET TO BRING A SERVING SPOON OR FORK FOR YOUR DISH!!). If you have any questions please contact Dean DeMain (W8YSU) @ 330-788-4271 or E-mail [w8ysu@arrrl.net](mailto:w8ysu@arrrl.net)

Directions will be available on W8QLY 146.745/R beginning @ 5:00 pm. Hope to see you all there,

Dean DeMain, W8YSU  
CORN ROAST CHAIRMAN

Don't forget the chips and DIP



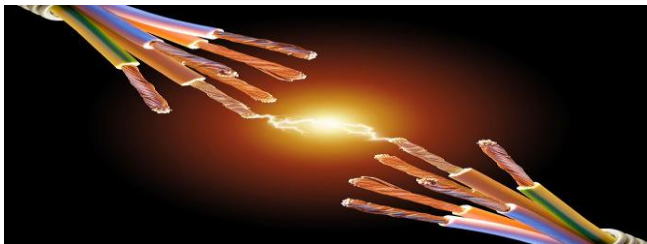
**License Refresher (pg. 10)** Answers: E2A01 (C), E2A02 (A), G2B01 (C), G2B02 (B)

## Contact Us:

Email: [mvara.w8qly@gmail.com](mailto:mvara.w8qly@gmail.com)

Snail-mail: MVARA, P.O. Box 1414,  
Poland, OH 44514

Meeting ideas/ suggestions? Contact Dave,  
KD8NZF, [KD8NZF@zoominternet.net](mailto:KD8NZF@zoominternet.net)



## Current Activities

**August Meeting:** Annual Corn Roast at Boardman Park.

### Centennial Committee:

The August centennial committee meeting has been cancelled. Look for information about the next meeting on the club website or in the Voice Coil.



## Hamfest Calendar



**08/04/2018 - 2018 Columbus Hamfest / Ohio Section Conference** - Location: Aladdin Shrine Center - 1801 Gateway Circle - Grove City, OH 43123 - Website: <http://columbushamfest.com> - Sponsor: Voice of Aladdin Amateur Radio Club (W8FEZ) - Contact: John Lehman, K8PJ- 7415 Hagerty Road Ashville, OH 43103 Phone: 614-571-5179 - Email: [voiceofaladdin@gmail.com](mailto:voiceofaladdin@gmail.com)

**08/12/2018 - Cuyahoga Falls ARC's 10th Annual Tailgate Hamfest** - Location: Robert Pinn Armory - 4630 Allen Road - Stow, OH 44224 - Website: <http://www.cfarc.org/tailgate.php> - Sponsor: The Cuyahoga Falls Amateur Radio Club - Contact: Frank Tompkins, W8EZT - PO Box 614 Cuyahoga Falls, OH 44222 - Phone: 330-928-4048 - Email: [tailgate2018@cfarc.org](mailto:tailgate2018@cfarc.org)

**08/26/2018 - Skyview Radio Society 2018 Annual Hamfest** - Location: Skyview Radio Society Clubhouse Grounds - 2335 Turkey Ridge Road - New Kensington, PA 15068 - Website: <http://www.skyviewradio.net> - Sponsor: Skyview Radio Society - Contact: John Cancro, NK3P - 3525 Milligantown Road - New Kensington, PA 15068 - Phone: 724-339-4945 - Email: [jpc2@psu.edu](mailto:jpc2@psu.edu)

**09/09/2018 - Findlay Hamfest** - Location: Hancock County Fairgrounds - 1017 East Sandusky Street - Findlay, OH 45839 - Website: <http://www.findlayradioclub.org> - Sponsor: Findlay Radio Club - Contact: Adam Hemmerly, KE8FLJ - 628 Hull Avenue Findlay, OH 45840 - Phone: 419-423-3402 - Email: [hamfest@findlayradioclub.org](mailto:hamfest@findlayradioclub.org)



## Ham radio technology used in Thailand cave rescue

UK radio amateur **John Hey G3TDZ** (SK) designed the special low frequency radio equipment, the **Heyphone**, used in the recent cave rescue in Thailand

On Facebook **Phil Karn KA9Q** posted:

*Naturally I got interested in the technical aspects of the cave rescue in Thailand, particularly communications. They used the "Heyphone", a voice radio designed by a UK radio ham, John Hey, G3TDZ, as open-source hardware specifically for cave rescues. It uses upper (single) sideband voice on 87 kilohertz in the VLF (very low frequency) band. (That's what it says -- 87 kHz is actually LF).*

*The "antenna" consists of two stakes driven into the ground about 20m apart. Enough of the current between them fringes outward to couple to another antenna up to a few hundred meters away (or down).*

*John Hey passed away in 2016 so he didn't get to see his work used here. But ham radio should get some of the credit.*

Phil Karn KA9Q

<https://facebook.com/phil.karn.98/posts/10155276627256486>

<https://twitter.com/ka9q>

John Hey G3TDZ Heyphone Cave Rescue Communication System <http://bcra.org.uk/creg/heyphone/>

Al Williams WD5GNR has written an article on Hackaday about the cave equipment <https://hackaday.com/2018/07/11/ham-designed-gear-used-in-thailand-cave-rescue/>

--Southgate Amateur Radio News <http://www.southgatearc.org/>

# HAM HUMOR: LOCAL HAM UPSET FIELD DAY HAS LOST ITS SPIRIT

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By [K5PO](#), on the scene

**LEAVENWORTH, KANSAS** — Billy Putnam is a ham radio purist. And he feels his club has lost their way and it's ruining their annual Field Day event.

Putnam is a senior member of the Hopeless Flats Radio Club from Leavenworth County, Kansas. The largest amateur radio club in the area has hosted a highly successful Field Day event for the last 27 years, but Putman says success is in the eye of the beholder. "So many of the new guys... they just seem to love nothing more than to operate."

"They arrive bright and early and slave and sweat over raising the antennas and then promptly sit down and laugh and operate for hours. They talk to visiting elected officials about the value of emergency communication, and then they offer to Elmer some youngsters. These guys *just don't get it!*" said Putman.

Putman notes that "back in his day" Field Day was about far more than operating and ham radio.

"I remember in 1991, we had three potluck tables under the big tent we rent from Ed's Tentery," said Putman. "It was amazing, with ribs, brisket, baked beans, lasagna, deep fried chicken, and mounds of mashed potatoes. *That* was how Field Day was done. This year they wanted to set up the radios under the tent and the only food these guys brought was two bags of Tostitos corn chips!"

"A bunch of unlicensed youngsters showed up around Noon and ate all fried chicken I brought, he said. "They all built dipoles for the band of their choice and then operated on Martin's old Collins. They didn't even have them take turns flipping burgers on the grill! Heck, they didn't even *bring* the grill!"

"If things don't change next year," threatened Putman, "I'm just not going to bring my famous Mystery Jell-O anymore!"

Field Day notes from the past seven years indicated literally no one had ever eaten any of Bill Putman's Jell-O, citing an odd "fuzziness" that all felt was unwelcome in a gelatin product.     ### [hamhijinks.com](#)

## HIGH EMOTIONS AT QRP CLUB MEETING

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*QRP Club president Butch Johnson recalls the feisty meeting, while checking the QRP forum on Usenet.*

By [WBØRUR](#), on the scene

**KERRVILLE, South Carolina** — Arguing and fisticuffs marked the monthly meeting of the Kerrville QRP Ham Radio Club this past weekend. Gathered at the local Denny’s Restaurant to discuss club business and enjoy the “Early Bird” special, the mood turned sour quickly when it was discovered that none of the members have ever been able to make a QSO.

“It’s that darn low power!” yelled club president “Butch” Johnson, a ham since 1995. Johnson has tried to make a QRP contact for the last 5 years with no success. “It’s like making a QSO with static electricity! 500 milliwatts!? One watt!? There’s just no way!”

Johnson’s outburst came as the club was having a rowdy debate over long wire antennas, commercial QRP equipment, logging software and upcoming Field Day plans.

“It’s all moot! It doesn’t matter!” shouted the club’s chief executive. “No one can work anyone else! We might as well be using tin cans!”

The club participates in a number of contests, special events and on-the-air operating activities.

To date, there are no QSOs in any of the member’s logbooks.

Tempers flared briefly when club member John Hartsberg reportedly took a swing at Johnson. For his part, Hartsberg says he was reaching for the Tabasco sauce and lost his footing. “I’ve had a case of vertigo the past few days from my sinus condition,” says 74-year old Hartsberg.

“Sure, I’m a little frustrated,” says one club member who asked to remain anonymous. “I was promised freedom and mobility! Work the world on 1-watt! Oh sure, I can throw the QRP rig in a backpack and hike into the woods.

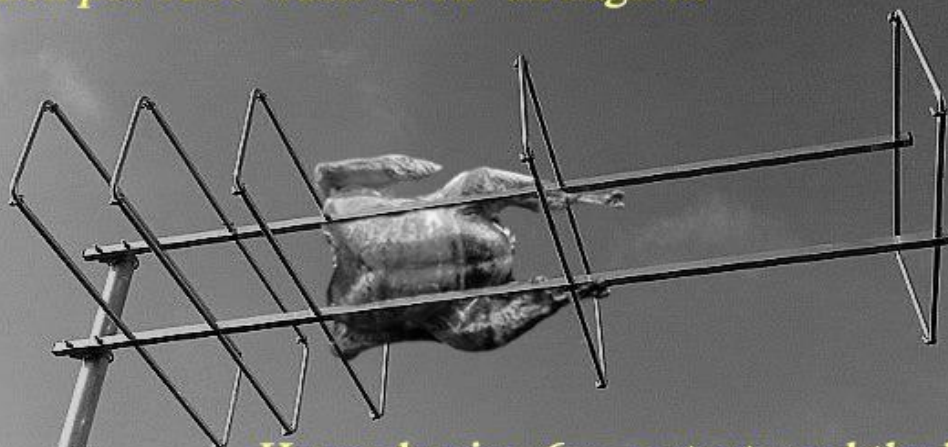
The Club members' mood softened as the waitress brought the "pork chop and applesauce dinner" specials to those in attendance.

The next meeting of the Kerrville QRP Ham Radio Club is scheduled for March 3 at the Kerrville Public Library.

Those interested in learning more about the exciting world of QRP operating are invited to attend.

### [hamhijinks.com](http://hamhijinks.com)

*In 1992, Ernest Cassidy put his turkey on his quad, then put 1200 watts of RF through it.*

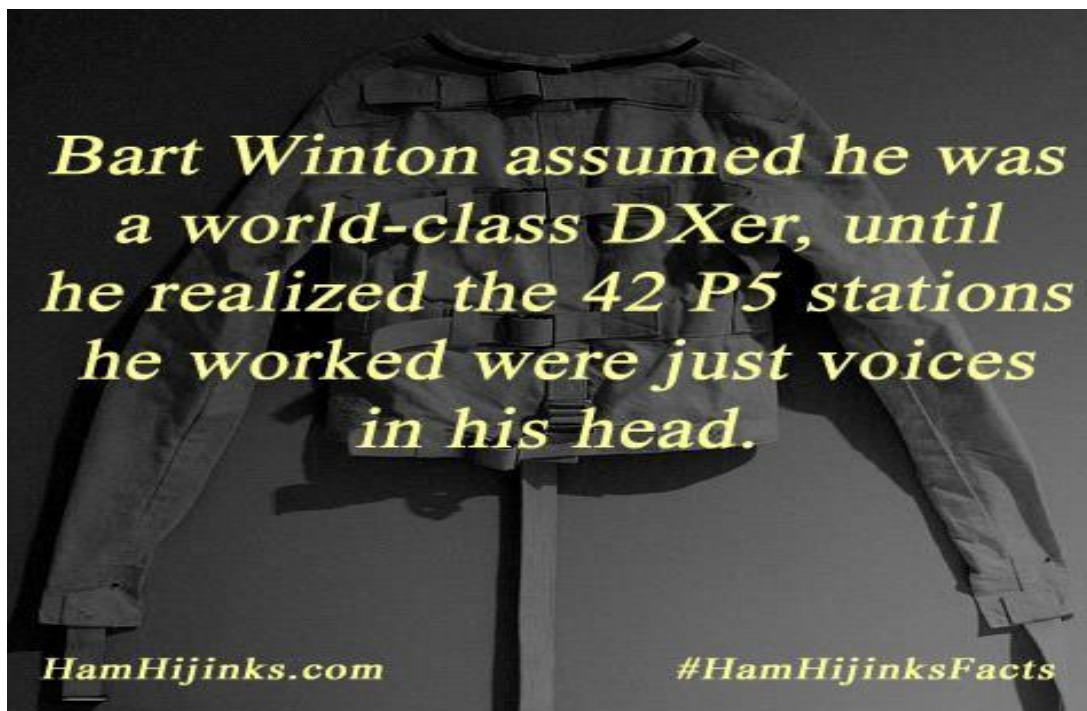


*He made nine 6m contacts and the bird was cooked eight minutes faster.*

[HamHijinks.com](http://HamHijinks.com)

[#HamHijinksFacts](https://twitter.com/HamHijinksFacts)

*Bart Winton assumed he was a world-class DXer, until he realized the 42 P5 stations he worked were just voices in his head.*



[HamHijinks.com](http://HamHijinks.com)

[#HamHijinksFacts](https://twitter.com/HamHijinksFacts)

# Avoid Equipment Scams

*We all like a good bargain and hams tend to be cheaper (more thrifty) than the general population. Here are some tips suggested by K4ICL (SK) when it comes to shopping for or selling equipment on sites such as eBay, QRZ, QTH, and other popular sale/swap sites.*



PLEASE use extreme caution swapping and/or buying from people who:

- **Have NO callsign.** After all, it is not that tough for people to be legally licensed if really interested in ham radio.
- **Has an address that does not MATCH the FCC callsign database.** Perhaps the person just made up the callsign so you would think he/she is a ham. Use the QTH.com or QRZ.com callsign lookup to verify the address you are sending the check or equipment to is the same as the what the FCC has on file for that callsign. Also, avoid sending money or merchandise to a buyer's work address, relative, girlfriend, etc.
- **Has a freebie email address like [xxxx@gmail.com](mailto:xxxx@gmail.com) or [xxxx@hotmail.com](mailto:xxxx@hotmail.com).** Scammers have ruined this for honest people who want to take advantage of these services.
- **Has no phone number or an untraceable phone number** Search for the number using Google--no hits? Time to wonder why...
- **Has negative feedback on the feedback forums.** Negative feedback rarely "just happens." Usually there is a reason for it.
- **Has to sell the item "ASAP" or "Right Away."** There are many reasons for needing to sell something in a rush but there is NO reason for you to rush into buying it.
- **Does not give his/her first and last name in the ad.** How are you going to find "Jim" in Denver where thousands of "Jim's" live?
- **Wants you to send money right away or the deal will go to another who is waiting to buy it.** This in an old very time worn ploy and probably needs no further comment--but it still happens.



- **Has no callsign, is not a legitimate dealer, and wants to sell you a transmitter of any kind.** Ask yourself what an unlicensed person is doing with a transmitter or amplifier that requires a proper FCC license to legally use.
- **Wants to send you a CASHIERS CHECK for MORE than the agreed upon sale amount, then wants you to send the balance to a third party.** This is a well known scam. The cashiers check will turn out to be fraudulent and may come back to you weeks later from the bank. Meanwhile, you are out the money you sent to the third party.
- **Use caution when dealing with hams from outside USA/Canada.** There are a number of sophisticated scammers that pose as foreign hams. They answer Wanted To Buy ads, offering non-existent equipment, using other people's photos of the equipment

If any one of the above fits a prospective seller, your resources could be at risk, so start asking serious, direct questions. If you don't hear the right answers, look somewhere else. After all, there are thousands of good solid honest sellers out there. Remember the old saying, if it sounds too good to be true, it probably is.



## **RadioShack® is Back---RadioShack “Express Stores” Opening in HobbyTown USA Locations**

According to a July 13 **article** in the *New York Post*, **RadioShack** is planning to open “express stores” within **HobbyTown USA** locations. The nearly century-old, twice-bankrupt retailer has signed a deal with HobbyTown USA to put a mini-RadioShack outlet in some 50 HobbyTown USA stores across the country that would sell items that might appeal to radio amateurs and experimenters. Those locations will be identified with RadioShack signage. HobbyTown markets remote-controlled cars and boats as well as drones and other hobby-related merchandise.

RadioShack shuttered all of its company-owned retail outlets. Its last unsuccessful effort to bail itself out of debt involved a deal with cellular provider Sprint. HobbyTown USA has 140 retail outlets, and, according to the *Post* article, RadioShack eventually could carve out a presence — on the order of 500 square feet — in all of them. HobbyTown USA stores in Parker, Colorado, and Mooresville, North Carolina, will be among the first to host RadioShack express stores.

“HobbyTown is purchasing the RadioShack merchandise and offering it to its hobbyist customers who need the tools, wires, and other accessories that RadioShack makes,” the *Post* article said. The article quoted Steve Moroneso, chief executive of General Wireless Operations Inc. — an affiliate of hedge fund Standard General which acquired RadioShack in 2015 — as saying that RadioShack's strategy now is not to own brick-and-mortar stores. RadioShack came out of bankruptcy in January with 400 dealers, an online retail presence, and a distribution center. General Wireless acquired the 1,743 retail outlets that survived RadioShack's 2015 bankruptcy.

Moroneso also told the *Post* that there is “plenty of interest from dealers who want to open a full-line Radio Shack.”

-ARRL

# Amateur License Refresher

Dave, KD8NZF



It's probably been awhile 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

What is the direction of a descending pass for an amateur satellite?

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

## General Pool

G2B01

Which of the following is true concerning access to frequencies in non-emergency situations?

- A. Nets always have priority
- B. QSOs in progress always have priority
- C. Except during FCC declared emergencies, no one has priority access to frequencies
- D. Contest operations must always yield to non-contest use of frequencies

G2B02

What is the first thing you should do if you are communicating with another amateur station and hear a station in distress break in?

- A. Continue your communication because you were on the frequency first
- B. Acknowledge the station in distress and determine what assistance may be needed
- C. Change to a different frequency
- D. Immediately cease all transmissions

(Answers pg. 2)

# Field Day 2018

Friday setup set the tone for 2018 Field Day. It was tons of fun without stress and drama. Predicted showers held off for the most part and all of the CW, and most of the SSB antennas were completed by dark. Mark, K8MSH brought out an extension ladder which he used as a mast for an OCF dipole. To me this is an example of Field Day at its finest. You never know when you might need to improvise in an emergency and learning how to guy a ladder for a mast could prove invaluable.



18 MVARA members wound up showing up to help and we were able to have all stations on the air at 2:00 pm Saturday. It was great to see such a high level of participation by the club.

The ARRL encourages certain Field Day activities by awarding bonus points for them. The MVARA was able to qualify for many of them. I would like to recognize and thank the following members, for their work in this area, with apologies to anyone I may overlook. 100 points for setup in a public location Wes W8IZC, Frank WB8YHD; 100 points for media publicity Frank WB8YHD; 100 points for an information booth Rich KD8ZUN, Becky KD8SCF, with help from Nancy KD8QNY on the sign in sheet, 100 points for a message to the section manager Dave KD8NZF; Roy KD8JMO, 100 points for originating 10 message from the Field Day site Nancy KD8QNY; Roy KD8JMO, 100 points for a copy of the W1AW field day message Dave KD8NZF, 100 points for 5 natural power qso's Frank WB8YHD, 100 points for a visit from a government official Nancy KD8QNY, and 100 points for a visit by a served agency Nancy KD8QNY, 100 points for an educational activity Rich KB8GAE (FT8 Demo), 20 points youth participation Anthony DeMain, 100 points for a Safety Officer Joe N8SEJ, 100 points for social media Mike K8PRR, and 50 points for submitting our score via the web Rich KB8GAE. That adds up to 1270 points. Way to go MVARA!

If we only worked a single QSO, Field Day would still be fabulous because the food is so good. Dean somehow out does himself every year. The hamburgers, hot dogs, chicken tenders, lasagna, and salad were all delicious. My favorite meal was Sunday breakfast of French toast, sausage, and hash browns. Yum! Thanks to Dean, W8YSU, Joe N8SEJ, Mike K8PRR, Chick-fil-A, Olive Garden, and everyone else who contributed.

Thanks to Joe N8SEJ, Mike K8PRR, and everyone who help with infrastructure. It is easy to overlook the great job they do such as keeping the generators full of gas and running.

Band conditions were really dicey Saturday. There was a lot of noise (QRN) and signals fading in and out (QSB), which made every QSO a struggle. Sunday morning was better and there was a nice 15 meter opening to end the day. Thanks to all who operated under some challenging band conditions.

The good news is there for the first time in the barn there was no RFI from the digital station. The bad news is we had RFI between SSB and CW and between bands on SSB. We have some things to work on before next year.

The information booth with Rich KD8ZUN and Becky KD8SCF was extra busy. We had 32 visitors this year and many of them mentioned hearing Frank WB8YHD on WKBN's Dan Rivers show, others Facebook updated by Mike K8PRR. There is no better way to showcase Amateur radios capabilities than Field Day and the MVARA put most of them on display. *(continued pg. 13)*

The 80 meter Ohio Single Sideband Net on field day is overwhelmed with traffic making it difficult to get messages out. Nancy KD8QNY and Dave KD8NZF came up with a different plan to “Git-R-Done”. Nancy contacted Roy KD8JMO on 2 meters who copied 10 messages and later passed them on to the Sunday night Tri County Traffic Net on the 147.015 Newbury repeater. For the first time in years we got 100 bonus points for originating 10 messages. Dave worked with Roy the same way to get a message to the Section Manager worth another 100 points. In the process Roy, Dave, and Nancy honed their traffic skills which are critical for emergency communications. Well played!

There were quite a few new faces operating SSB this year. It is good to see so many new people at Field Day and our monthly club meetings. Going into our second century the MVARA is definitely on a roll!

80 meter CW ran on the very unique and highly acclaimed Horse Fence Antenna. So how did it play? Well, we had 170khz of bandwidth with a less than 2:1 SWR and did 154 qso’s in spite of difficult band conditions. The “fence” was doing fine business (FB) I must say!

Here are the numbers:

Band	CW	Phone	Dig	Total	%
80	161	58	8	227	14
40	388	312	3	703	45
20	190	221	24	435	28
15	58	54	0	112	7
10	15	16	0	31	2
6	0	63	0	63	4
<b>Total</b>	<b>812</b>	<b>724</b>	<b>35</b>	<b>1,571</b>	<b>100</b>

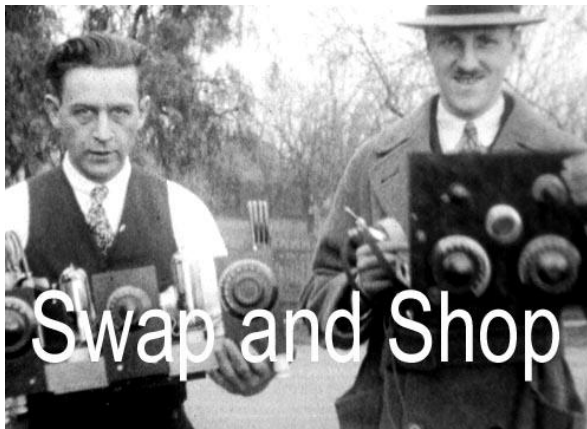


31 members attended field day and 18 different operators made 1,571 QSOs for 4836 points. Add that to 600 points for running 6 transmitters and 1270 bonus points and our claimed score is 6674. Well done MVARA!

Last year our score was a higher at 7634. We placed 6th out of 11 stations in the 8a class and 103<sup>rd</sup> over all out of 2,965 entries. We will know in December how we rank this year. 2018 Field Day is history and it on to 2019. Hope to see you all there!

Rich KB8GAE





### 40-6m OCF Antenna—New

This is the same design that was used at Field Day this year on 40m and 10m SSB. Handles 150w PEP power, 66 ft. long. Does 40-20-10-6m without tuner, 15m and WARC bands with tuner. Quality construction with stainless steel hardware and premium 18ga Davis Polystealth antenna wire w/nylon insulators. \$50 (includes discount for local hams—listed on eBay for \$56.95)

Contact Mark, K8MSH, [mh@zoominternet.net](mailto:mh@zoominternet.net)

### *Swap and Shop Policies*

MVARA assumes no responsibility for transactions made or inaccuracies in ads. You are responsible for checking your ad and notifying us of any corrections. Swap and Shop listings are open to licensed Mahoning Valley Hams, based on space available. Please submit your list to [mvara.w8qly@gmail.com](mailto:mvara.w8qly@gmail.com) AND [mvaravoiccoil@gmail.com](mailto:mvaravoiccoil@gmail.com) for placement in both *Voice Coil* and website.



### Station Loaner Program

If you're a new ham/newly upgraded and want to get on the HF bands, MVARA has a loaner program for club members. The club has two complete stations with radio, power supply, microphone, CW key, and antenna tuner. All you need to do is supply your own coax, antenna, and keep the equipment in good condition while you have it.

Loan period is up to 6 months. However, you will be responsible for returning the station temporarily for use during Field Day weekend in June.

With the new ARRL proposal, it looks like even Tech class amateurs may soon be able to operate phone on some of the HF bands. Contact Mark, [k8msh@arrrl.net](mailto:k8msh@arrrl.net) or Frank, [wb8yhd@arrrl.net](mailto:wb8yhd@arrrl.net).



# Get your free copy of *A Field Guide to Simple HF Dipoles*

by Dan Romanchik, KB6NU

A link to *A Field Guide to Simple HF Dipoles* (<http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf>) was posted to reddit recently, and I liked this document so much that I thought I would share it with you. It was originally written for the military, but is now available for free from the Defense Technical Information Center.

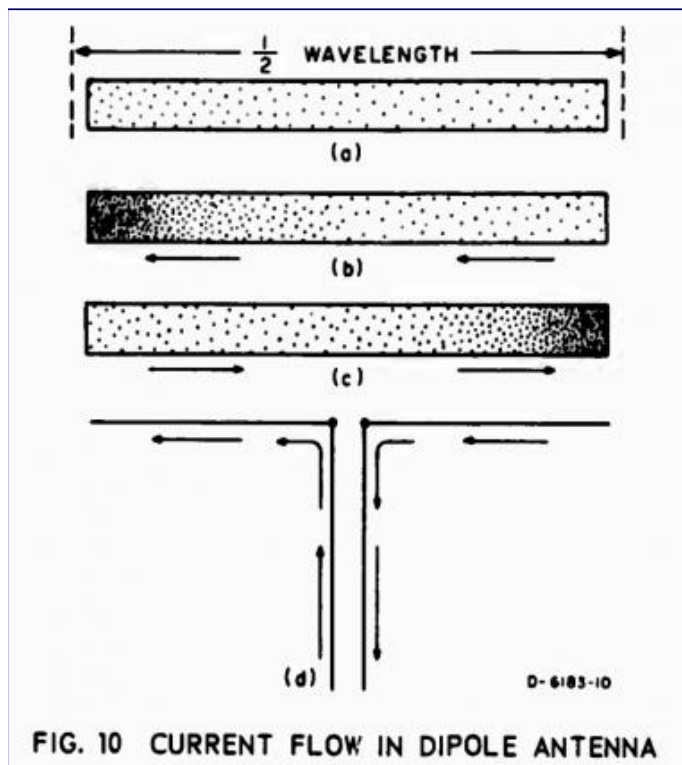


The preface to this document reads:

For example, below is Figure 10. It's used to describe current flow in a dipole antenna "Under project Agile, Stanford Research Institute has supplied several teams to assist operating personnel in improving the performance of field radio networks. In this work, it has been observed that U.S. military and civilian antenna manuals often contain misleading information regarding the operation of field antennas and tend to be overly complex. Consequently, this guide has been prepared to assist in training personnel concerned with the construction of simple HF antennas in the field."

I must say that *A Field Guide to Simple HF Dipoles* does this very well. It not only explains how dipole antennas work, it also does a very good job of describing the basics of radio waves and propagation. And it does this without getting overly technical.

For example, below is Figure 10. It's used to describe current flow in a dipole antenna.



The *Field Guide* reads:

“Electric current in a conductor consists of the flow of small particles called electrons. Figure 10(a) represents a dipole with electrons in it. When the transmitter is turned off, the electrons distribute themselves evenly throughout the dipole, as shown. All electrons repel each other and try to get as far from each other as possible; that is how they achieve the uniform distribution shown in Figure 10(a). When the transmitter is turned on, the electrons flow back and forth from end to end as shown in Figures 10(b) and 10(c). First the electrons flow to the left and crowd at one end as shown in Figure 10(b). Second, since the electrons repel each other, they push off to the right and get crowded together at the other end, as in Figure 10(c).”

It then uses this description to talk about voltage and current distribution along a dipole antenna:

“The difference between voltage (volts) and current (amperes) in a dipole is also illustrated by Figs. 10(b) and 10(c). You can see that the maximum flow of current is going to be in the middle of the dipole. An observer at the center of the dipole would see the electrons rush past, first one way and then the other. The center is the maximum current point. Very little current flows near the end of the dipole; in fact, at the extreme ends there is no current at all for there is no place for it to go. However, at the ends of the dipole, there is a great change of voltage; when the electrons are densely packed, this represents a negative voltage, and when there is a scarcity of electrons, it represents a positive voltage. Thus you can see that the voltage at each end swings alternately positive and negative. An end of the dipole is a maximum voltage point.”

A *Field Guide to Simple HF Dipoles* is packed with all kinds of goodies like this. Download it (<http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf>) right now.

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*When he's not building dipoles or teaching ham radio classes, Dan blogs about amateur radio, writes exam study guides ([www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)), and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him about your experiences with simple HF dipoles at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).*

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## HAARP Campaign to Use WSPR on 80 Meters

Alaska's super-power High-Frequency Active Auroral Research Program (**HAARP**) transmitters in Gakona, Alaska, will take advantage of the WSPR digital protocol and the Weak Signal Propagation Reporter Network (**WSPRnet**) during a short experimental campaign, July 30 through August 1. University of Alaska Fairbanks (UAF) Space Physics Group researcher and HAARP Chief Scientist Chris Fallen, KL3WX, told ARRL that he'll be conducting research into ionospheric irregularities, but hardly with a weak signal.

Fallen said the WSPR experimental periods are tentatively planned to last about 30 minutes per day and occur between approximately 2300 and 2400 hours UTC on all 3 days, which would put the operations during daylight hours in US time zones. Most transmissions will be at the WSPR 80-meter default frequency of 3.592.6 MHz, Fallen said. HAARP will use full-carrier AM, since it's not equipped to transmit SSB. The call sign will be WI2XFX. The HAARP transmitters can generate megawatts of RF.

“We will conduct a short test each day — admittedly not QRP, but the test will be short — transmitting on even numbered minutes, and then later collecting from the database the spots reported by each station that received HAARP,” Fallen explained. point source in the subarctic.”

--ARRL

# 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>.

## August 2018

+ Phone Fray	0230Z-0300Z, Aug 1
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 1 and 1900Z-2000Z, Aug 1 and 0300Z-0400Z, Aug 2
+ NRAU 10m Activity Contest	1700Z-1800Z, Aug 2 (CW) and 1800Z-1900Z, Aug 2 (SSB) and 1900Z-2000Z, Aug 2 (FM) and 2000Z-2100Z, Aug 2 (Dig)
+ SKCC Sprint Europe	1900Z-2100Z, Aug 2
+ QRP Fox Hunt	0100Z-0230Z, Aug 3
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 3
+ NCCC Sprint	0230Z-0300Z, Aug 3
+ 10-10 Int. Summer Contest, SSB	0001Z, Aug 4 to 2359Z, Aug 5
+ European HF Championship	1200Z-2359Z, Aug 4
+ WAB 144 MHz Low Power Phone	1400Z-1800Z, Aug 4
+ ARRL 222 MHz and Up Distance Contest	1800Z, Aug 4 to 1800Z, Aug 5
+ North American QSO Party, CW	1800Z, Aug 4 to 0559Z, Aug 5
+ SARL HF Phone Contest	1400Z-1700Z, Aug 5
+ ARS Spartan Sprint	0100Z-0300Z, Aug 7
+ Phone Fray	0230Z-0300Z, Aug 8
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 8 and 1900Z-2000Z, Aug 8 and 0300Z-0400Z, Aug 9
+ QRP Fox Hunt	0100Z-0230Z, Aug 10
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 10
+ NCCC Sprint	0230Z-0300Z, Aug 10
+ WAE DX Contest, CW	0000Z, Aug 11 to 2359Z, Aug 12
+ SKCC Weekend Sprintathon	1200Z, Aug 11 to 2400Z, Aug 12
+ Maryland-DC QSO Party	1600Z, Aug 11 to 0400Z, Aug 12
+ MMonVHF/DUBUS 144 MHz Meteorscatter Sprint Contest	2200Z, Aug 11 to 2200Z, Aug 13
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Aug 13
+ NAQCC CW Sprint	0030Z-0230Z, Aug 15
+ Phone Fray	0230Z-0300Z, Aug 15
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 15 and 1900Z-2000Z, Aug 15 and 0300Z-0400Z, Aug 16
+ QRP Fox Hunt	0100Z-0230Z, Aug 17
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 17
+ NCCC Sprint	0230Z-0300Z, Aug 17
+ SARTG WW RTTY Contest	0000Z-0800Z, Aug 18 and 1600Z-2400Z, Aug 18 and 0800Z-1600Z, Aug 19
+ ARRL 10 GHz and Up Contest	0600 local, Aug 18 to 2400 local, Aug 19



+ Russian District Award Contest	0800Z, Aug 18 to 0800Z, Aug 19
+ Keyman's Club of Japan Contest	1200Z, Aug 18 to 1200Z, Aug 19
+ Feld Hell Sprint	1600Z-1759Z, Aug 18
+ North American QSO Party, SSB	1800Z, Aug 18 to 0559Z, Aug 19
+ CVA DX Contest, CW	2100Z, Aug 18 to 2100Z, Aug 19
+ SARL HF Digital Contest	1400Z-1700Z, Aug 19
+ ARRL Rookie Roundup, RTTY	1800Z-2359Z, Aug 19
+ Run for the Bacon QRP Contest	0100Z-0300Z, Aug 20
+ SKCC Sprint	0000Z-0200Z, Aug 22
+ Phone Fray	0230Z-0300Z, Aug 22
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 22 and 1900Z-2000Z, Aug 22 and 0300Z-0400Z, Aug 23
+ QRP Fox Hunt	0100Z-0230Z, Aug 24
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 24
+ NCCC Sprint	0230Z-0300Z, Aug 24
+ Hawaii QSO Party	0400Z, Aug 25 to 0400Z, Aug 26
+ ALARA Contest	0600Z Aug 25 to 0559Z, Aug 26
+ SCC RTTY Championship	1200Z, Aug 25 to 1159Z, Aug 26
+ W/VE Islands QSO Party	1200Z, Aug 25 to 0300Z, Aug 26
+ YO DX HF Contest	1200Z, Aug 25 to 1200Z, Aug 26
+ Kansas QSO Party	1400Z, Aug 25 to 0200Z, Aug 26 and 1400Z-2000Z, Aug 26
+ Ohio QSO Party	1600Z, Aug 25 to 0400Z, Aug 26
+ CVA DX Contest, SSB	2100Z, Aug 25 to 2100Z, Aug 26
+ 50 MHz Fall Sprint	2300Z, Aug 25 to 0300Z, Aug 26
+ SARL HF CW Contest	1400Z-1700Z, Aug 26
+ Phone Fray	0230Z-0300Z, Aug 29
+ CWops Mini-CWT Test	1300Z-1400Z, Aug 29 and 1900Z-2000Z, Aug 29 and 0300Z-0400Z, Aug 30
+ QRP Fox Hunt	0100Z-0230Z, Aug 31
+ NCCC RTTY Sprint	0145Z-0215Z, Aug 31
+ NCCC Sprint	0230Z-0300Z, Aug 31
+ G3ZQS Memorial Straight Key Contest	2300Z, Aug 31 to 2300Z, Sep 2

## 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>

August						
2018 Aug05	2018 Aug11	<b>Guernsey</b>	<a href="#">GU</a>	LotW	<a href="#">TDDX</a> 20180705	By SP7VC SQ7OYL as MU/SP7VC; 160-12m, 6m 4m 2m; SSB FT8 MSK144 JT65A
2018 Aug05	2018 Aug12	<b>Albania</b>	<a href="#">ZA</a>	LotW	<a href="#">TDDX</a> 20180509	By SP7IDX as ZA/SP7IDX fm Vlore (JN90rk); 40-10m; SSB + digital; QSL also OK via SP7IDX
2018 Aug06	2018 Aug14	<b>Sri Lanka</b>	<b>4S7DMG</b>	SP9DLM	<a href="#">DXW.Net</a> 20180713	By SP9DLM fm Kalkudah (NJ07sw); 40 20 15 10m; 100w; end-fed wire

2018 Aug11	2018 Aug14	<b>Jersey</b>	<a href="#">GJ</a>	LotW	<a href="#">TDDX</a> 20180705	By SP7VC SQ7OYL as MJ/SP7VC; 160-12m, 6m 4m 2m; SSB FT8 MSK144 JT65A
2018 Aug12	2018 Aug19	<b>Antigua</b>	<b>V26NF</b>	EA4NF	<a href="#">DXW.Net</a> 20180625	By EA4NF; 40-10m; QSL OK via Buro or direct
2018 Aug15	2018 Aug21	<b>Austral Is</b>	<a href="#">TX5T</a>	M0URX	<a href="#">TDDX</a> 20180704	By W5RF W5MJ VE7KW K5PI W5SJ K4UEE as KH8/W5MJ fm Raivavae I (IOTA OC-114); 40-6m, perhaps 160 80m; CW SSB RTTY FT8; 3 stations
2018 Aug15	2018 Aug29	<b>Tonga</b>	<b>A35RR</b> <small>NEW</small>	ZL1BQD	<a href="#">DXW.Net</a> 20180716	By ZL1BQD; mainly FT8 and JT65
2018 Aug18	2018 Aug25	<b>St Kitts &amp; Nevis</b>	<b>V47FWX</b> <small>NEW</small>	M0URX	<a href="#">DXW.Net</a> 20180718	By G0FWX fm St Kitts; holiday style operation
2018 Aug20	2018 Aug26	<b>Kosovo</b>	<b>Z6</b>	LotW	<a href="#">DXW.Net</a> 20180518	By IZ5YHD as Z6/IZ5YHD; 80-10m; SSB; 100w; inverted vee; QSL also OK via IZ5YHD (Buro or direct w/ 2 Euros) and Club Log





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](mailto: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. Material received after the deadline will be used in the next month's VOICE COIL if it is still current and /or newsworthy.

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