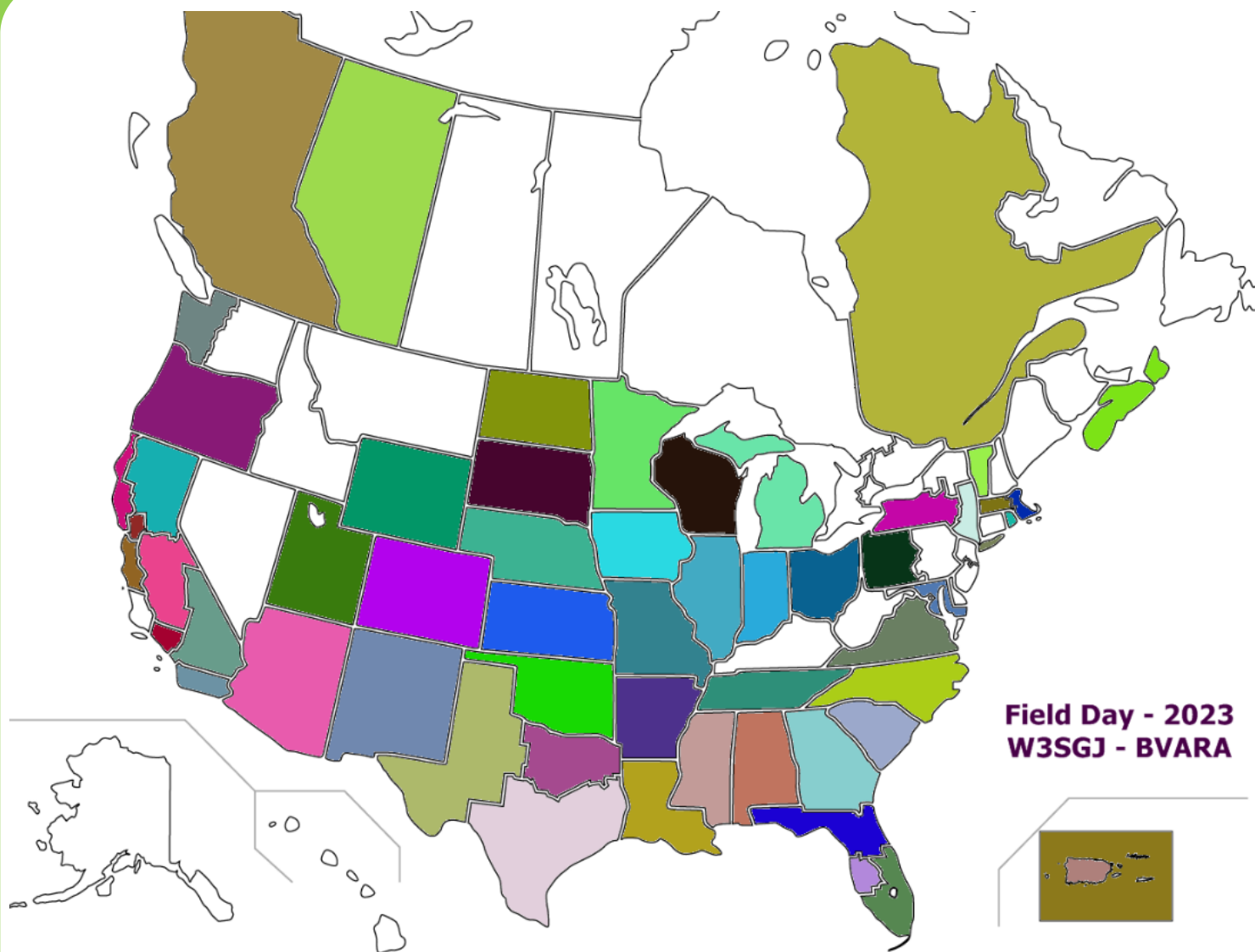


THE eQRM

JULY 2023



The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

2M Repeater

145.310

PL 131.8



On the Cover: Our Field Day Contacts Map...the colored-in places are where we made contacts during our operating time. More about our activities start on page 14.

Inside this edition

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Check into our nets

Wednesday 2 Meter

8:30PM on 145.310 MHz PL 131.8

Wednesday 10 Meter

9:00PM on 28.470 MHz

The eQRM is a publication of the Beaver Valley Amateur Radio Association (BVARA) and is Copyright 2010 - 2023. All material presented in this publication is not necessarily the views of the American Radio Relay League (ARRL), BVARA, or members of the said organizations. If you would like to contact the editor of the eQRM, please email David at kc3bxc.73@gmail.com. Please visit us online at www.W3SGJ.org. To subscribe to our newsletter, please visit W3SGJ.org/newsletter.php

Who We Are

2023 BVARA OFFICERS

President: Jack Spencer, KZ3Z

Vice President: Dan Grazulis, KB3VSP

2nd Vice Pres.: Doug Lawrence, K3GTX

Treasurer: Pam Spencer, W3PMS

Secretary: Tom Stoops N3XC

Director: Tony Pavilonis, K3AHP

Director: Jim Allen, KC3IXE

Trustee: Doug Hanna, N4YKQ



MONTHLY MEETINGS

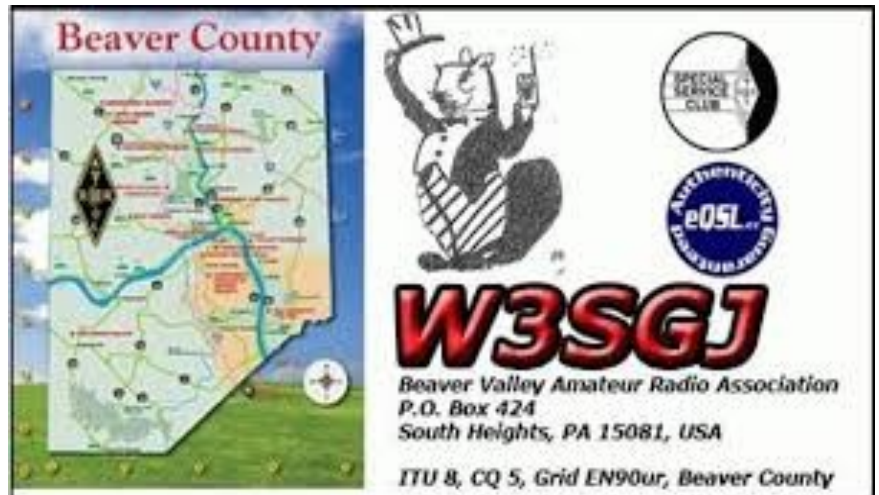
E-Board meetings are now held the Saturday before the monthly club meeting.

VE testing begins at 5:00 PM.

Regular meetings are at 6:30 PM

All meetings are held at the
Beaver County Emergency Services
Center (A.K.A. THE 911 Center)
351 14th Street
Ambridge, PA 15003
on the second Thursday of every month
(unless otherwise stated).

2023
Jul 13
Aug 12 Corn Roast
Sep 14
Oct 12
Nov 09
Dec 09 Christmas Party
2024
Jan 11
Feb 08
Mar 14
Apr 11
May 09



This Month

This Month:

Speaker:

Rich Soltesz
K3SOM

Topic:

Newly Licensed Ham! Now What?

Including:

Continuing with our BVARA Presentation Series this year, our topic this month describes a situation that most newly licensed hams are facing. Now that they have their license, where do they go from here? With so many possible paths to take, which path is the ‘yellow brick road’ that can lead to fun and enjoyment and possibly personal fulfillment?

First, we’ll look to the new Technician-Class ham and examine some possible paths they may wish to take. Some questions should be asked and personally answered first to help provide some guidance to these new ‘rookie’ hams. Even before equipment and antennas are considered, these questions really become helpful in the many selection processes and decisions that will first be needed for this ‘journey’. There are no ‘right’ or ‘wrong’ answers here, a different path can easily be chosen or an old path revisited with little repercussions. Have no fear, ‘Elmer’ is here!

Few barriers exist – including age, sex, education, or handicaps just to name a few. After all, you passed that Technician test and the door is now wide open for you to explore.

If you’ve just upgraded with the General-Class exam, you probably are much more focused on new areas that you want to pursue now that your privileges have increased. POTA looks very interesting. It’s time to take aim on that new direction that you want to take.

But wait, there’s more! What equipment should I buy and what about a good antenna? This can be almost overwhelming. Whether you are a beginner or a veteran ham, bring your questions and/or experience to the meeting because this is one exciting presentation that you won’t want to miss.

Rich’s Background:

Extra Class Ham, Licensed since 1962, VE,
B.S. Electrical Engineering

More this Month

Weekly

The Freedom Square Diner in Monaca has a great wait staff. Come let them take your order.

Thursday Morning Breakfast
(or you can have lunch)

Come join us!



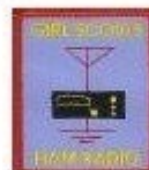
The BVARA meets every Thursday at the Freedom Square Diner in Center Township, just to the right of the Cinemark Center Township Marketplace at 09:30 AM. All radio amateurs and those interested in amateur radio are encouraged to come join us at our Thursday morning breakfast.

**See you
Thursday at**



RACES / ARES

The eQRM Urges All County Hams to Participate.



Get your License or Upgrade

If you are interested in getting your first FCC license or upgrading your current amateur radio license, the Beaver Valley Amateur Radio Association holds VE Test sessions (Volunteer Examinations) the second Thursday of each month at the Beaver County Emergency Services Center in Ambridge Pennsylvania prior to our BVARA Club meeting. If there is no meeting there is no test session. Please come take your test with us!

For more information, contact :
Rich Soltesz, K3SOM
(724) 847-0610
k3som@arrl.net



VE TEST SESSIONS

Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003.
Tests begin promptly at 5 pm on the same day as BVARA Club Meetings
(the second Thursday of the month).
All classes of amateur radio license tests are administered.



ALL candidates MUST bring ALL of the following:

1. 2 forms of I.D. - one MUST be a photo I.D.
2. A pencil AND a pen with blue or black ink.
3. The original AND a photocopy of any valid ham license.
4. The original AND a photocopy of any C.S.C.E.
5. The test fee of \$15 - cash only.
6. Your FRN Number. (free from the FCC, call for details)



New License and Upgrades

BVARA VE Testing

Testing this Month :



June 2023 VE Test Session Results

Our May VE Test Session had one successful candidate, with his achievement of obtaining his new Amateur Radio license. Our electronic filing system once again worked superbly.

Our testing was conducted at our normal location at the Beaver County Emergency Services Center in Ambridge, PA. Our next VE Test Session will be on June 8th, 2023.

Congratulations to:

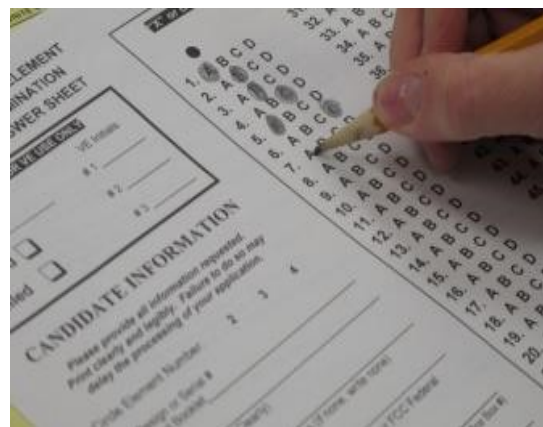
Dijon Henderson, KC3VXS, Extra, Monaca, PA

All of our BVARA testing would not be possible without the help of the following Extra-Class VE Team members:

A huge thank you to our Volunteer Examiners :

Reg Genola – W3REG,
Tony Pavilonis – K3AHP,
Mick Pyzoha – N3OJP,
Bart Stack – KB3NFM
Bob Winkle – N3AZZ
Frank Witkowski - W3FJW

Rich Soltesz - K3SOM, VE Liaison



Membership Information

By becoming a BVARA member you help secure the future of Amateur Radio in Beaver County. Additionally, the BVARA receives a portion of each ARRL membership you purchase!

Join the BVARA and ARRL

Sign up for:	Price	
<input type="radio"/> BVARA full membership	25.00	_____
<input type="radio"/> BVARA student membership	15.00	_____
<input type="radio"/> BVARA associate membership	10.00	_____
<input type="radio"/> BVARA Child under 21 at home membership	5.00	_____
One year ARRL membership	49.00	_____
A Club Donation		_____
ARRL Member? Yes No	Total Enclosed	_____

Your License Class (If you have one.)

<input type="radio"/> Technician	Name _____
<input type="radio"/> General	Address _____
<input type="radio"/> Advanced	_____
<input type="radio"/> Extra Class	Email _____
	Phone _____
	Your Call sign _____
	Your Signature _____

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424
South Heights, Pa 15081

Hamfests & General Announcements



ARRL STATE CONVENTION

CUMBERLAND VALLEY HAMFEST



General Admission

(16 yrs. & Under Free)

\$ 7.00 Donation

Tailgating

\$ 10.00 Donation

VE Testing Available

Register on

W3ACH.com

8-2 P.M Saturday
July 29, 2023

Large Show Grounds

Tailgating Area

Indoor Table Spaces

Computer & Craft Vendors Welcome



Hourly Door Prizes

Main Prizes: 1:00 P.M

(Must be present to win.)



VE Testing

Food will be available for purchase!



Walk-ins Welcome

VENDORS NEEDED

Vendors Info

Indoor Tables:

\$ 15.00 each

(\$ 10.00 each
5th and up)

(Set up starts
at 6:00 A.M)

Special request set up
maybe
available

Fri. 6:00 P.M- 9:00

Contact: Cvarcw3ach@gmail.com
Reserve your table Now!

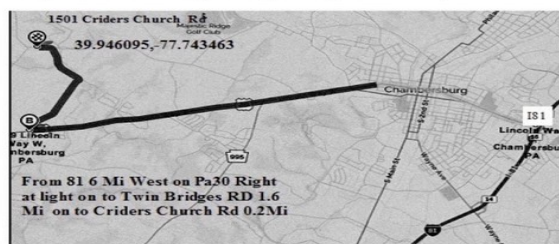


ARRL Atlantic
Division WPA
Ver cvareflyr1.2

Talk-In 147.120+100pl

Location:

**Cumberland Valley
Engine &
Machinery
Association
(CVEMA)
Show Grounds**



**1501 Criders Church Rd.
Chambersburg, PA 17202**



WACOM HAMFEST

July 30

8am-1pm

**FREE TO ENTER
FREE TO SELL
TAILGATING**

WASHINGTON CROWNE CENTER
MALL (REAR PARKING AREA
NEAR BONTON ENTRANCE)
1500 W CHESTNUT ST,
WASHINGTON, PA 15301

*Ham radio or electronics related

Raffle

- | | |
|-----------------------------|---------------|
| 1. Yaesu FT-710 - Base | \$2 each |
| 2. Yaesu FTM-300DR - Mobile | \$5 for 3 |
| 3. Yaesu FT5DR - Handheld | \$10 for 7 |
| *Drawing at Noon | \$20 for 15 |
| *Winner need not be present | \$50 for 40 |
| | \$100 for 100 |



Tune to 147.54 simplex for on-site announcements



Talk-In on the K3PSP Repeater System

- 146.790- No Tone, Washington
- 147.285+ 131.8 Tone, Scenery Hill
- 145.250- 131.8 Tone, West Alexander
- 147.390+ 131.8 Tone, Smith Twp
- 147.315+ 131.8 Tone, Waynesburg

Contact Info

Hamfest Chairman:

Tom Wright, N3WS;

tom.n3ws@protonmail.com

Of Interest to All

BVARA Coming Attractions



July

More POTA Activations

Enon Valley Days, Saturday July 15th around 9:00 AM, next to the Amish Doughnuts

August

Corn Roast, Economy County Park, Shelter 1, around or just before 5:30 PM, August 12th

September

Trip to GBRT to operate their Radio Telescope for 24 hours, Cass Railway, POTA in WV, Overnight stay, early to mid-September

More POTA Activations



100 Years Ago in *QST Magazine*

Continuing, this issue of our *eQRM Newsletter* and in celebration of our 100th Anniversary of the BVARA, two issues of the 1923 *QST Magazine* will be featured. A photo of the cover of each issue will be shown as well as a description of two articles within each issue of the magazine.

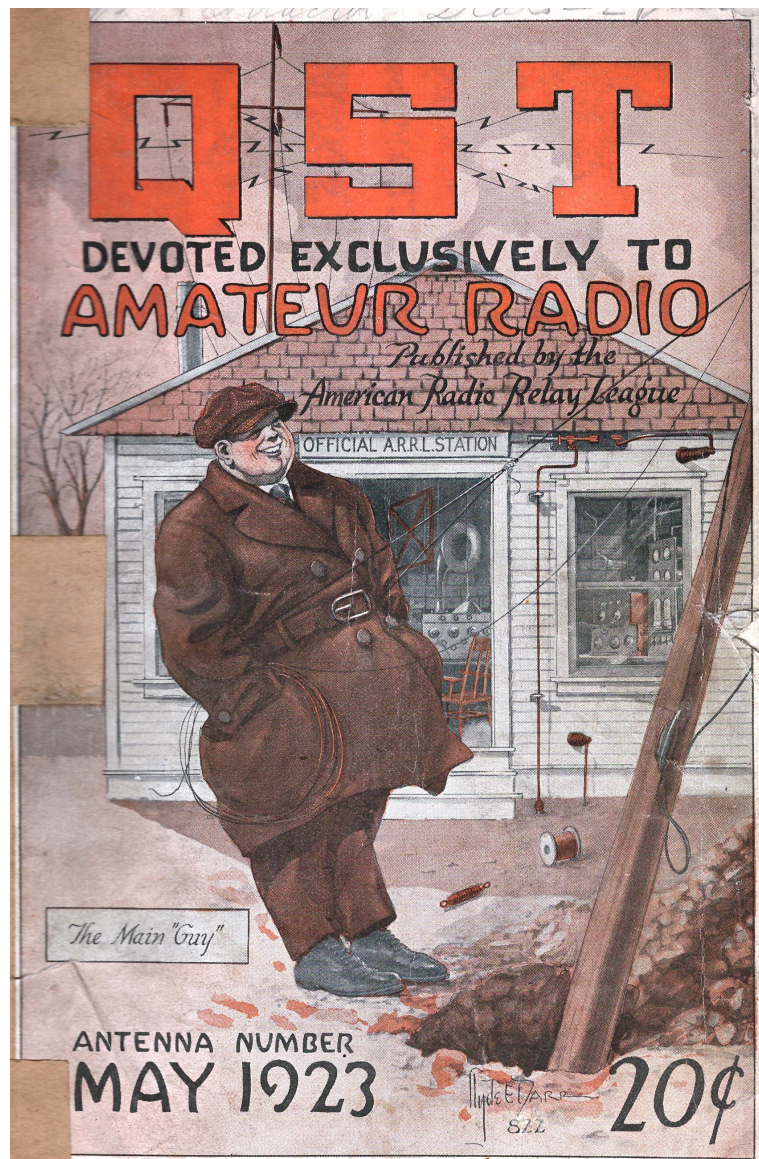
The cover of the **May 1923** issue of *QST Magazine* by Clyde Darr, 8ZZ shows a rather rotund ham on a gusty, cold day who is leaning against the guy wire holding up a mast that is being planted in the ground. Perhaps that was the beginnings of the belief that the worse the weather is when putting up a new antenna, the better the antenna will work!

This issue of *QST Magazine* specifically covers many issues about aerials and related matters. Topics include technical results on over 20 different insulators by subjecting each one of them to increasing levels of RF voltage and current at 200 meters (1.5 MHz) and recording the levels where breakdown failures occurred.

A feature article by Albert F. Murray described *How to Measure Antenna Resistance and Capacity* to enable the amateur to be able to determine his power output and efficiency.

Many other well-written articles on various aspects of antennas and feed lines made for excellent reading.

Writers were on the verge of understanding the effect of increasing frequency on changes in antenna measurements, knowledge that today is readily apparent if one is familiar with using antenna modelling tools such as EZNEC.



Of Interest to All

But the article by M. Adaire Garmhausen, 3BCK entitled *The Perfect Aerial* highlights antenna parameters and their effect on many other radio characteristics by wildly varying wire characteristics. For example, generously applying 3-in-1 oil to the wire slightly improves sensitivity but significantly improves the signal's ability to slide in easier. This would be a great April 1st article even today.

The cover of the **June 1923** issue titled *Local QRM* shows a restless amateur dreaming of purchasing ham equipment while wrestling with having so many bills to pay.

Melville Eastham's article on *Radio Filters* describes six different LC configurations to satisfy a wide range of needs and configurations that amateurs of the day could easily implement.

In *Arctic Explorer to Communicate with Amateurs* by J.K. Bolles, Dr. Donald MacMillan begins to plan his next arctic expedition, which will include two-way communication and an operator supplied by ARRL to assist. Their call sign to use was WNP.

A Pome (poem) simply titled: "DX" by W.S.C. appears on Page 22. Starting out with the "Knights of the Midnight Key," the poem finishes with "... someday we will read in *QST* of "The First Trans-Planetary Test with Mars."



Rich – K3SOM

Of Interest to All

Field Day '23 has come and gone and I want to thank everyone who helped with the event. We did not set any records this year for number of contacts, attendance seemed to be a bit low, and I never did get my station on the air, but it was still a successful Field Day.

Our picnic Friday was attended by about 25 people including Beaver County Commissioner Tony Amadio. The food and fellowship were both excellent.

After the picnic we held an auction to liquidate the remainder of a silent key estate. There were some great deals to be had and the bidding was interesting to watch.

Saturday we worked on setting up the Spider Beam antenna amid intermittent rain showers that, at times, slowed our progress on the antenna to a crawl. The antenna was complete and the mast was in the process of being raised when someone noticed one of the fiberglass mast sections was cracked. Rich, KC3TOO, went home and retrieved a hose clamp kit and small ladder so we could make a field-expedient repair and avoid having to disassemble the mast to remove that section. We also saw some computer network problems that were solved by Dan, KB3VSP.

As 2 PM approached and we were still working on completing the Spider Beam, Tony, K3AHP, set up his Wolf River Coil antenna and QRP rig and began making CW contacts on 40 meters. Once the Spider Beam was finished, we pointed it west and Jim, KC3IXE, started working 20 meter phone.

Saturday also saw visits from Beaver County Commissioner Jack Manning, Sheriff Tony Guy, and Rich, KC3TOO, who was representing the American Red Cross. Commissioner Manning and Sheriff Guy both had several other commitments to attend on Saturday, so their making time to visit our event shows their support of our club and the mission of amateur radio.

On Sunday the last contact was completed at 2 PM and we began clean up. By about 3:30 PM we had everything packed and we were ready to go.



Of Interest to All



The weekend finished with a little under 200 contacts. We covered most of the United States, three Canadian provinces, Puerto Rico, and the Virgin Islands.

Again, I give a huge thank you to all who helped make Field Day '23 a success. If I miss anyone on this list it is purely unintentional.

Dave, KC3BXC
Doug, K3GTX
Jim, KC3IXE
Dan, KB3VSP
Tony, K3AHP
Rich, KC3TOO
Jack, KZ3Z
Pam, W3PMS
Rich, K3SOM
Keith, KC3TMC
Larry, KC3ROS

Thank you,
Doug, N4YKQ



Field Day 2023 Results and Photos

Background

The BVARA Field Day event was quite different from previous recent Field Day efforts. Weather was a primary factor in that temperatures in the low 90s were expected with high humidity and the threat of severe thunderstorms. As a result, participation was much lower than previous years. Fewer operators were available or willing to operate, even though radios were available. The BVARA operated W3SGJ with Class 3A and WPA Section from the Old Economy County Park. Tom, N3XC was on vacation in Georgia and was successful in operating N3XC with Class 1B and GA Section. His 17 CW contacts on 20 meters will be automatically added by the ARRL to W3SGJ results because of new rule changes. Tom was even able to check into the BVARA 10-meter net on Wednesday evening with a good signal into WPA.

The club was forced to reserve Shelter 4 instead of Shelter 1 because it had been booked for Saturday by another group, probably a graduation event. Although both Shelters have good altitude, fewer trees are available at Shelter 4 for wire antennas for 40 and 80 meters.

The new SpiderBeam Yagi for 10, 15, and 20 meters had been successfully used for the 100th Anniversary Event back in April. Expectations were met with the newly-gained expertise by club members in putting the Yagi together and up at the expected height. However, a fiberglass mast section began to crack but repairs were made with only a loss of about an hour to make the repairs. A thicker mast to boom plate unit bent a bit and stronger plates are being ordered and will alleviate that issue in the future. But that is what Field Day is all about; the event tests the ability of a club to overcome adverse situations and find ways to fix the problems and continue with the task, whether it be Field Day or a disaster situation. It is also an excellent venue for trying out new equipment and antennas while ‘showing the ropes’ to new hams.

Propagation conditions could have been better than what was experienced. At times, stations would simply fade out, only to return after one or two tries to finish the contest exchange. Then periods of very good conditions would prevail and callers were lining up to make contact with us on 20 meters on Saturday and on 15 meters on Sunday.

Approximately 25 members and significant others actively participated in the Pot Luck Dinner on Friday evening. Quite a variety of foods enabled an enjoyable dinner and good conversations, as usually happens at these events.

Of Interest to All

Site Field Day Preparations, Activities, Visitors, and Cleanup

Following safety practices in generator placement, grounding, antenna locations and caution markings, preparations moved smoothly except as noted above and with several breaks to wait for the rains to subside. With less participants, external shelters were not used.

One problem was noted at one station with erratic WIFI connectivity. Dan, KB3VSP successfully deployed a spare WIFI USB dongle at the laptop and the issue was resolved. Beyond that event, the Field Day Server accurately collected all of the contacts after that with only one contact that had to be added while the Server was not yet active



Here is a photo of the site showing the Shelter 4 and the Yagi.



Jim, KC3IXE is shown making contacts on 20 meters with SSB.

Of Interest to All



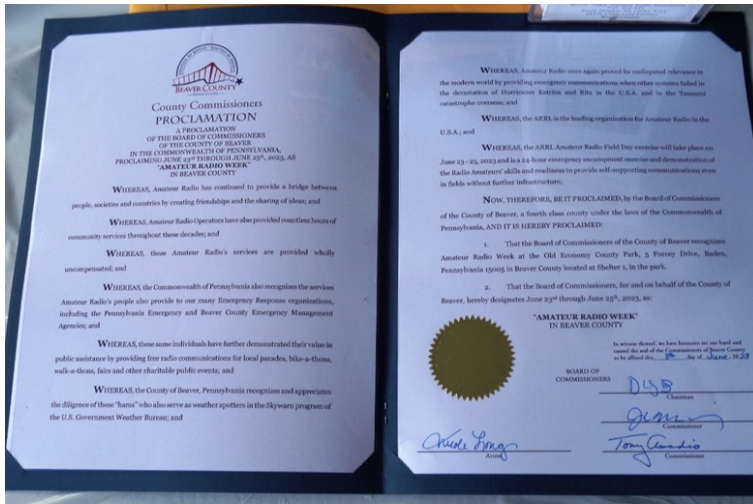
Dan, KB3VSP and David, KC3BXC easily rotate the Yagi with only two ropes to its new direction.

Our Visitor Center was a convenient tool for providing a descriptive flier for visitors that described our club, what activities we do, and how we interact with the community for local events and possible disaster events.



County Sheriff Tony Guy in a black polo shirt, front row on the left side. Also shown in a red shirt and hat is Richard Kulbicki, KC3TOO who is employed by the Red Cross in Beaver County with his Red Cross identification badge. Also shown is County Commissioner Jack Manning in a black polo shirt, front row, on the right side. Commissioners Jack Manning and Tony Amadio (not shown, but arrived later) presented the club with a Proclamation declaring Ham Radio Week in Beaver County, PA.

Of Interest to All



2023 W3SGJ FD Proclamation
Amateur Radio Week in Beaver
County – This recognition
was a direct result of our request
and letter to each of the County
officials, press, radio stations,
and other organizations.

Our BVARA members
always help to take down
antennas and restore the
shelter for use as custom-
arily expected by the next
user. Here the Yagi is al-
most down to the required
height for easy packing
for travel. With enough
people, this task becomes
much easier.



Even with the high temperatures and humidity,
we had many passers by who stopped to find out
what we were doing. We took time to inform
them and answer their questions. That interac-
tion is something that we always enjoy.



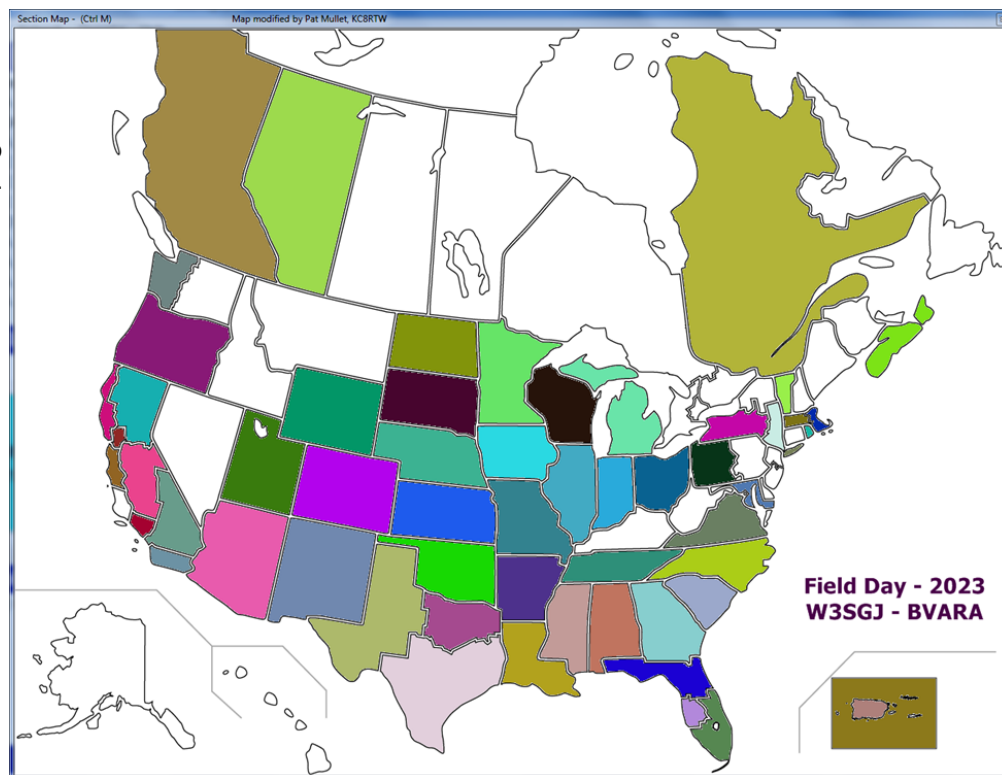
The BVARA
Always Has a Great
Field Day

But we did have several unexpected visitors that
required us to be careful in packing up our gear.
His comment was readily available and we are
sure that he will be back for next year's Field
Day.

Of Interest to All

Results

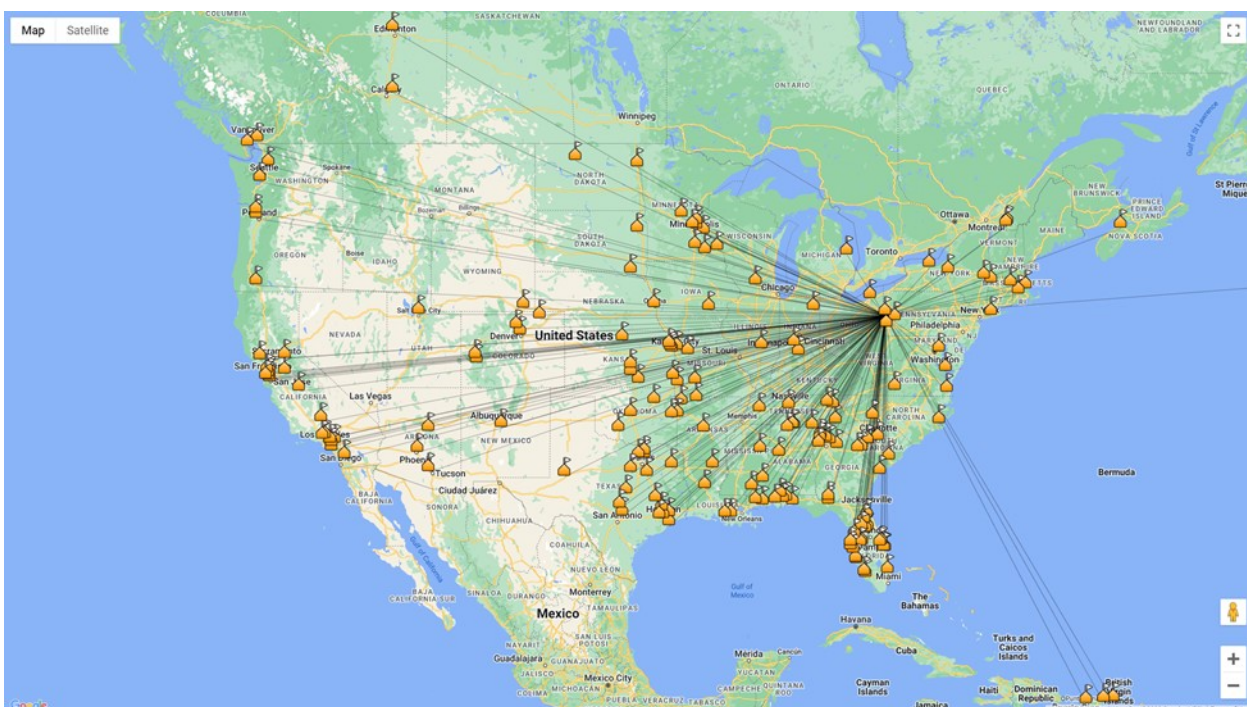
Our Activity Map reflects band conditions and little activity on 40 meters and no evening activity on 80 meters.



Total Contacts by Band and Mode					
Band	CW	Phone	Dig	Total	Pct
40	17	0	0	17	9.0%
20	0	107	0	107	56.9%
15	0	53	0	53	28.2%
10	0	11	0	11	5.9%
Total	17	171	0	188	100.0%

Total contacts by band and mode are shown below. Results for Tom, N3XC are not included and would add an additional 17 CW contacts on 20 meters.

Of Interest to All

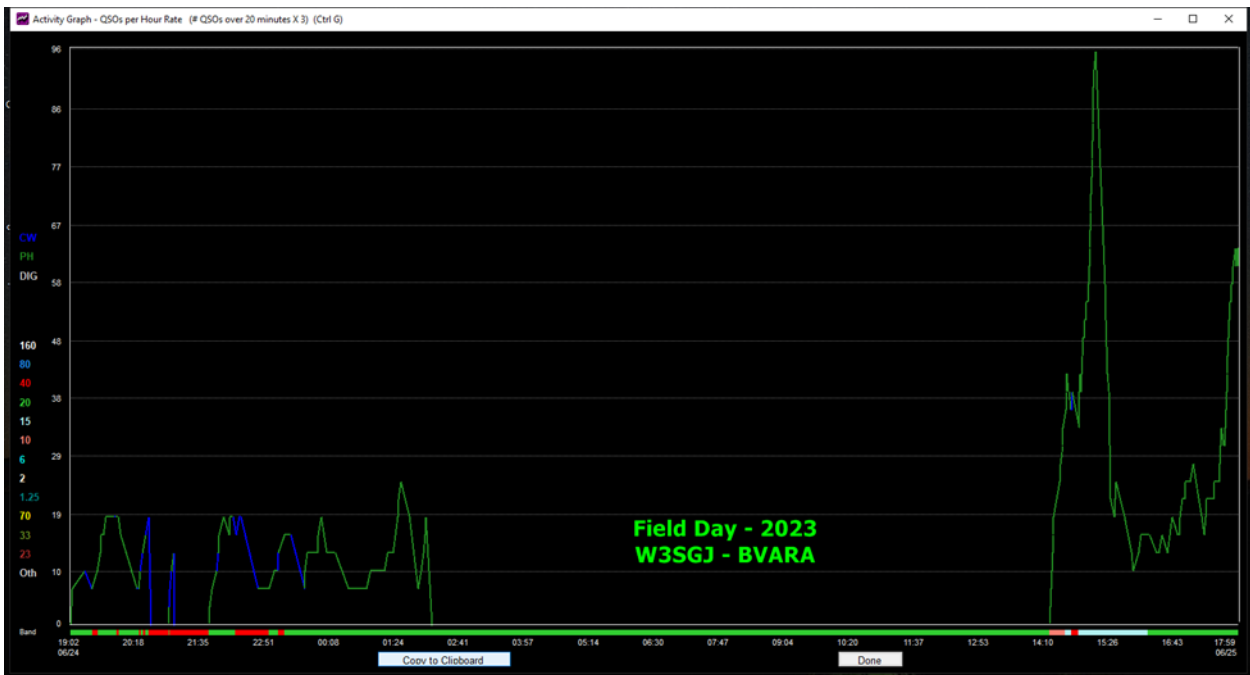


By using the six-character grid square for each contact the results are shown here. Potential contacts on 40 meters SSB would mostly fill in the missing states East of the Mississippi River.

Total Contacts by Initials		
Initials	Contacts	Pct
JNA	72	38.3%
TW	51	27.1%
RGS	48	25.5%
AMP	17	9.0%
Total	188	100.0%

A breakdown of contacts by individuals is shown here.

Of Interest to All



The activity graph shows a few good runs of contacts on Sunday but too much time of inactivity.

Wrap Up

All results have been electronically sent to the ARRL and have gained preliminary acceptance. The results from Tom, N3XC have also been electronically sent and will be added in later by the ARRL to the BVARA totals for publication in their December 2023 issue.

Weather conditions kept many potential participants away. The recent weather conditions held no promise for anything except for high temperatures and humidity levels with the possibility of rain and thunderstorms. The weather gods did not disappoint with their forecast for Saturday.

The Pot Luck Dinner had 25 attendees but recent years have attracted upwards of 40 people just for that activity. The quality and quantity of foods did not disappoint those who came. Rumor has it that the Lemon Squares were exceptionally good.

With the availability of three radios, only two transmitters were ever used at the same time. Large time gaps with no activity are clearly visible in the Activity Graph.

Of Interest to All

The Yagi performed very well with most calls only requiring one call. QRN was minimal with the Yagi. Propagation was much better on Sunday than Saturday. Good antennas on 40 and 80 meters in the evening hours would have added significantly to our results. The bands never 'went long' as shown by the maps showing where contacts were not made.

The responses of our public officials continue to reflect a healthy bond that is developing with our elected representatives and, in general, the public image that we put forth continues to trend upward.

The rule changes appear to have attempted to level out the playing field by limiting the power of home stations who traditionally dominated a frequency for calling only. The limitation on robotic calling was interesting, perhaps a little lacking in cutting too deep. It helps the voice last longer for automatic calling, but some operators last year had everything pre-programmed. I believe this may have been aimed at that operating activity. Time will tell.

The experience of BVARA members quickly tackled issues and resolved them in minimum time. With a year to plan for next year, we know now that propagation has the potential to significantly surpass the last cycle of peak activity. We have the capability to make a good run at all 88 Sections with more operators and some more activity on the air. The food will always be good, there is plenty of coffee, we should be back at Shelter 1, and maybe the Earwigs will not be as prevalent at the other Shelter.

Rich, K3SOM



Bits and Pieces

Hello everyone,

This may have been my favorite Field Day so far! Why? Well, because I just had a wonderful time with all the radio activity, setting up everything and the camaraderie of all the people that attended our event. I was so excited the night before I could hardly sleep. The weatherman said it was going to be very hot and there were severe thunder storms coming. I didn't care! I was determined to be at Field Day!

The heat and rain didn't get us down. We had a few delays but I was not disappointed with our field day events. I got to help with many of the activities. I helped put up the Spider Beam antenna, logging computers, welcome pamphlets, food & drinks. I even got to personally speak to many of our guests and attending members of the BVARA Club. I encouraged our guests by introducing them to the Ham Radio hobby, I look forward to them getting their first FCC license.

We had some technical difficulties to overcome, I am so proud of our group. They didn't despair! They have the technical expertise and "want" to just simply overcome the challenge. I am honored to be a part of such a great, great Ham club.

If you missed this years Field Day, you should kick yourself in the shin. This was a great event! The food was excellent and the fellowship was fun. Despite a smaller number of participants, we still made a commendable showing. I am already looking forward to next year's Field Day. Shoot, I can hardly wait for the next upcoming Club outing event. You should come and join us!

As always please be safe and enjoy our radio hobby.

Clear on your final, but I will be monitoring.

73 KC3BXC



Radio Sport

Contest Corral

July 2023

Check for updates and a downloadable PDF version online at www.arrl.org/contest-calendar.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

	Start - Finish Date-Time Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000 1 2359	1.8-28, 50,144	RAC Canada Day Contest	CW,Ph	RS(T), VE province/territory or serial	www.rac.ca
1	0000 1 2359	1.8-28	Venezuelan Ind. Day Contest	CW,Ph,Dig	RS(T), serial	radioclubvenezolano.org
1	0800 2 1100	3.5	NZART Memorial Contest	CW,Ph	RS(T), serial	www.nzart.org.nz/activities/
1	1400 2 1400	1.8-28	Marconi Memorial HF Contest	CW	RST, serial	www.arifano.it
1	1500 2 1500	3.5-14	Original QRP Contest	CW,Ph	RST, serial, pwr	www.qrpcc.de
3	1900 3 2030	3.5	RSGB 80m Club Champ, CW	CW	RST, serial	www.rsgbcc.org
4	0100 4 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, pwr	arsqrp.blogspot.com
5	1700 5 2100	144	VHF-UHF FT8 Activity Contest	FT8	4-char grid	www.ft8activity.eu
6	0000 7 0300	7	Walk for the Bacon QRP Contest	CW	RST, SPC, name, mbr or pwr; 13 WPM max	qrptest.com/pigwalk40
6	1700 6 2100	28	NRAU 10m Activity Contest	CW,Ph,Dig	RS(T), 6-char grid	nrau.net
6	2000 6 2200	1.8-28,50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
7	0145 7 0215	see rules	NCCC RTTY Sprint	Dig	Serial, name, QTH	ncccsprint.com/rttyns.html
7	0230 7 0300	see rules	NCCC Sprint	CW	Serial, name, QTH	ncccsprint.com/rules.html
8	1200 9 1200	1.8-28	IARU HF World Championship	CW,Ph	RS(T), IARU HQ soc or ITU zone	www.arrl.org/iaru-hf-world-championship
8	1200 9 2359	1.8-28,50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
8	2000 9 2000	7	PODXS 070 Club 40m Firecracker Sprint	Dig	RST, SPC	www.podxs070.com
9	2000 9 2300	1.8-28	QRP ARCI Summer Homebrew Sprint	CW	RST, SPC, mbr or pwr	qrparci.org
10	0000 10 0200	1.8-28	4 States QRP Group 2nd Sunday Sprint	CW,Ph	RS(T), SPC, mbr or pwr	www.4sqrp.com
12	1700 12 2100	432	VHF-UHF FT8 Activity Contest	FT8	4-char grid	www.ft8activity.eu
12	1900 12 2030	3.5	RSGB 80m Club Champ, SSB	Ph	RS, serial	www.rsgbcc.org
13	1900 13 2000	3.5,7	EACW Meeting	CW	RST, mbr, nickname; EA province or DXCC prefix	www.eacwspain.es
14	0145 14 0215	see rules	NCCC RTTY Sprint	Dig	Serial, name, QTH	ncccsprint.com/rttyns.html
14	0230 14 0300	see rules	NCCC Sprint	CW	Serial, name, QTH	ncccsprint.com/rules.html
15	0700 15 1459	7,14,21,28	Russian Radio Team Championship	CW,Ph	RS(T), mbr code or ITU zone	srr.ru
15	0800 15 1400	1.8-7	Trans-Tasman Low-Bands Challenge	CW,Ph,Dig	RS(T), serial	www.wia.org.au
15	1400 16 1400	70	IARU Region 1 70 MHz Contest	CW,Ph	RS(T), serial, 6-char grid	www.iaru-r1.org
15	1800 16 0559	3.5-28	North American QSO Party, RTTY	Dig	Name, SPC	www.ncjweb.com/NAQP-Rules.pdf
15	1800 16 2100	50,144	CQ Worldwide VHF Contest	CW,Ph,Dig	4-char grid	www.cqww-vhf.com
16	0900 16 1600	3.5-14	RSGB Int'l Low Power Contest	CW	RST, serial, pwr	www.rsgbcc.org
16	2000 16 2159	14	CQC Great Colorado Gold Rush	CW	RST, SPC	www.coloradoqrpcub.org
16	2300 17 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	qrptest.com/pigrun
17	1900 17 2030	3.5-14	RSGB FT4 Contest	FT4	Signal report, 4-char grid	www.rsgbcc.org
19	1700 19 2100	1.2G	VHF-UHF FT8 Activity Contest	FT8	4-char grid	www.ft8activity.eu
20	0030 20 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or pwr	naqcc.info
20	1900 20 2000	3.5-14	NTC QSO Party	CW	RST, mbr, or "NM"; 25 WPM max	pi4ntc.nl
21	0145 21 0215	see rules	NCCC RTTY Sprint	Dig	Serial, name, QTH	ncccsprint.com/rttyns.html
21	0230 21 0300	see rules	NCCC Sprint	CW	Serial, name, QTH	ncccsprint.com/rules.html
22	0000 22 2359	50	ARAM 50 MHz Contest	CW,Ph	RS(T), serial, 6-char grid	www.aram.pt
22	0000 30 2359	1.8-28	Maidenhead Mayhem Contest	CW,Ph,Dig	2-char grid	w9et.com/rules.html
22	1000 22 2159	3.5-28	YOTA Contest	CW,Ph	RS(T), age	www.ham-yota.com/contest
26	0000 26 0200	1.8-28,50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
27	1900 27 2030	3.5	RSGB 80m Club Champ, Data	Dig	RST, serial	www.rsgbcc.org
28	0145 28 0215	see rules	NCCC RTTY Sprint	Dig	Serial, name, QTH	ncccsprint.com/rttyns.html
28	0230 28 0300	see rules	NCCC Sprint	CW	Serial, name, QTH	ncccsprint.com/rules.html
29	0000 30 2359	1.8-28, 50,144	MARAC US Counties QSO Party	CW,Ph	RS(T), SC or "DX"	www.marac.org
29	1200 30 1200	3.5-28	RSGB IOTA Contest	CW,Ph	RS(T), serial, IOTA no	www.rsgbcc.org
29	1400 29 1800	144	WAB 144 MHz Low Power Phone	Ph	RS, serial, WAB square, or country	wab.intermip.net
30	1700 30 2100	7,14,21,28	ARS Flight of the Bumblebees	CW	RST, SPC, pwr, or Bumblebee number	www.arsqrp.blogspot.com
31	1300 31 1400	1.8-28	QCX Challenge	CW	RST, name, SPC, rig	www.qrp-labs.com/party.html
31	1900 31 2000	1.8-28	QCX Challenge	CW	RST, name, SPC, rig	www.qrp-labs.com/party.html