

THE eQRM

APRIL 2024



The BVARA in Beaver County Pennsylvania



Beaver Valley Amateur Radio Association

W3SGJ

2M Repeater

145.310

PL 131.8



On the Cover: April showers bring May... It has been raining so hard here in Western Pennsylvania that the birds are using umbrellas !

Photo Courtesy of : April Lopez

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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

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Who We Are

2024 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).

2024

Apr 11

May 09

Jun 13

Jul 11

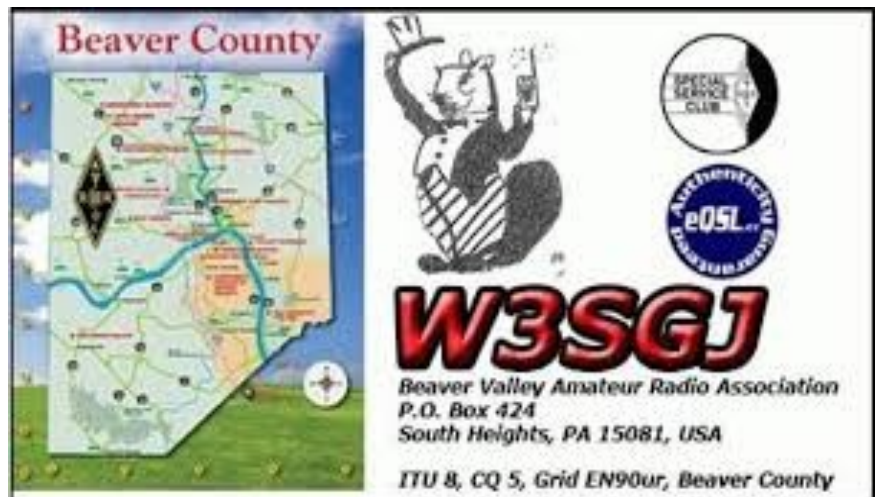
Aug Club Corn Roast

Sep 12

Oct 10

Nov 14

Dec Club Christmas Party



April Fools

This Month

This Month:

Speaker:

Rich Soltesz, K3SOM

Topic:

Wolf River Coil Antenna System – Last Measurements

Including:

Continuing with our BVARA Presentation Series this year, our topic this month concludes our analysis of a very popular, portable-base vertical antenna called the *Wolf River Coil Antenna System (WRC)*.

In Part 1, we started with an examination of vertical and mobile antenna configurations that utilize a radiator that is less than a quarter wavelength high. These antennas typically use a loading coil to make the antenna appear to be electrically longer than its physical length. Based on the coil placed at the base or higher, we examined the effect on SWR, bandwidth, and on efficiency. We also looked at the ‘textbook’ effect of ground losses and loading coil losses on bandwidth and efficiency as well as how to conveniently measure the ‘Q’ for our WRC.

Part 2 was delayed by the weather, but some partial interesting results were presented. We investigated different types of ground configurations and materials that can reduce ground losses, thus improving power losses and efficiency of our antenna system. As a bonus, some of those materials save considerable time in both setup and breakdown time.

Our last measurements finished the actual results achieved for various ground configurations with both some expected and a few unexpected results. If you are thinking about doing some POTA operating, this is one exciting presentation that you won’t want to miss. As a bonus, some excellent POTA and YouTube URLs will be included from AC3IE, Paul’s recent ZOOM talk.

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!



BREAKFAST

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

RACES / ARES
The eQRM Urges All County Hams to Participate.

The eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs. Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the WW3AAA 146.850 MHz repeater (131.8 PL)



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 :

March 2024 VE Test Session Results



Our March VE Test Session had two candidates, with both achieving upgrades of their license class. 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 April 11th, 2024.

Congratulations to:

Larry Homich, KC3ROS, Extra Class, Economy Boro, PA
Bob Morrison, N3DBM, General Class, Beaver Falls, PA

If you hear them on the air, please congratulate them on their achievement!

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

Keith Custard – KC3TMC
Reg Genola – W3REG
Tony Pavilonis – K3AHP
Scott Pelkofer - KC3KYZ
Mick Pyzoha – N3OJP
Bart Stack – KB3NFM
Ron Victorelli – KC3TZT
Bob Winkle – N3AZZ and
Frank Witkowski – W3FJW



73 from 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



TWO RIVERS AMATEUR RADIO CLUB

52nd ANNUAL AMATEUR RADIO / COMPUTER SHOW

SUNDAY APRIL 7th, 2024 - 8am to Noon

Elizabeth VFD Bingo Hall – 101 South 1st Ave – Elizabeth, PA 15037
Elizabeth VFD Bingo Hall is located off PA Rt 51 in the city of Elizabeth, PA

Directions and Mobile Check-in: 147.12 Repeater (PL Tone 131.8)
(Mobile Check-In prize will be awarded. Must be present to win)

Main Prizes: **Yaesu FT-710 EASS HF Transceiver (or \$1000 Cash!)**
 Yaesu FT-70DR Dual Band Digital Handheld (or \$180 Cash!)
 Portable Generator

Advanced ticket sales are available to the public and club members at significant savings. Advanced ticket sales form is available the TRARC website <http://www.trarc.net>.

Admission \$5.00

**Tables Rentals: \$15 for a single table,
\$12 each for 2 or more tables**

Table Reservations: Please fill out the Exhibitors Application form on the TRARC website at <http://www.trarc.net>

Information: Contact John Moskala K3CRO (Hamfest Chairman) at 412-951-1332
Or Bill Powers KB3WP (Assistant Hamfest Chairman) at 412-260-5699
Or email: hamfestchairman@trarc.net

Overnight parking is available

Amateur Radio Exam Testing is Available
Exam Registration: 412-751-9657 email: veteam@trarc.net

Breakfast Available
This is an ARRL sanctioned hamfest

Of Interest to All

Remember back when you could communicate by “Pay Phone” for ten cents? This page is for anyone who wants to communicate with the BVARA community and beyond.

Please send me your article that you would like posted on this page. Please, only topics and language in good taste. As the editor I reserve the option to post it or ignore it. Send your dime to me at: kc3bxc.73@gmail.com



ARRL *Worked All States* Award – A Little Help

Whether you're a new ham or not, contacting a ham in all 50 states can be a daunting task. Some states have plenty of hams on the air, while other, far less populated states have considerably fewer hams. Let's look at the populations of the top and bottom states, ranked by estimated 2024 population and the corresponding number of hams in that state:

Rank	Name	Population (millions)	Hams (thousands)
1	California	38.9	106
2	Texas	31.0	53
3	Florida	23.0	42
4	New York	19.5	27
5	Pennsylvania	12.9	24
...			
46	South Dakota	0.93	1.9
47	North Dakota	0.79	1.6
48	Alaska	0.73	3.5
49	Vermont	0.65	2.1
50	Wyoming	0.59	2.0
Other	Hawaii	1.43	3.9

ARRL's most popular award is the Worked All States Award. The WAS (Worked All States) Award is available to all amateurs worldwide who submit proof with written confirmation of contacts with each of the 50 states of the United States of America. Amateurs in the U.S. and possessions must be members of ARRL to apply for a WAS.

Contacts must be confirmed in writing, preferably in the form of QSL cards, or electronically via Logbook of the World (LoTW). Confirmations must show the applicant's call sign, band, mode, date and time, and indicate that the QSO was two-way.

Thousands upon thousands of awards have been issued to hams around the world. In ARRL's 101st year, the WAS certificates and the program award were redesigned in hopes of streamlining and improving the award program. The WAS program has many options which are listed at this ARRL web site along with more detailed information on qualifications and submittal requirements. Here is the URL for additional information about the WAS award:

<https://www.arrl.org/was>

Of Interest to All



As an aid to anyone attempting to make contact with all 50 states, an opportunity is available in the form of a contest by state each year. These are called State QSO Parties and begin on Saturday and extend to Sunday on the specified starting dates listed below. If you check with the Contest Corral on the last page of our *eQRM Newsletter* each month, additional information is available. Nine of the 50 State QSO Parties are scheduled in April 2024. Good Luck!

April 6 th	Louisiana
April 6 th	Mississippi
April 6 th	Missouri
April 13 th	New Mexico
April 13 th	Georgia
April 20 th	Nebraska
April 20 th	Michigan
April 20 th	North Dakota
April 27 th	Florida

Breaking news; this just in: April 8th Solar Eclipse QSO Party Details at 11:00!

Rich – K3SOM

Of Interest to All

2024 Tri-State Radio Fest !!

SUNDAY, April 21st

8:30Am – 4PM

Center Stage Banquet Hall, 1495 Old Brodhead Road, Monaca, PA 15061

\$7 General Admission

Flea Market Tables!

200-Lot Auction!

Contest: Foreign Tube Radios!



The Tri-State Radio Fest is PARS largest annual event with a large flea market in the morning followed by a 200-lot auction starting about noon. TSRF also features a radio contest with cash prizes for 1st, 2nd and 3rd place! The 2024 edition of TSRF will be the 18th time we have brought this event to Western Pennsylvania. Connect with all your antique radio friends once again at TSRF 2024 !!

NOTE that this is a SUNDAY event.



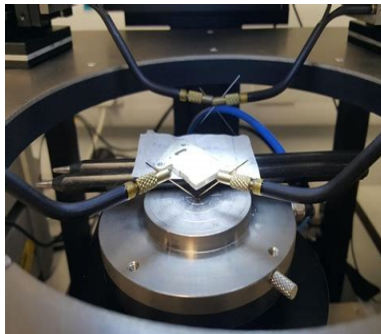
Of Interest to All

Latest inventions to think about.

So I was talking to a very good friend of mine Josh, he is in the know when it comes to the latest inventions in nuclear energy. He and I were taking about how things technology wise change so much. He talked about how the steam engine (steam power) was so huge, heavy and took constant adjusting, maintenance and repair when it came into our tech world. We got smarter and designed more efficient steam power. It also ran longer, required less maintenance and was more reliable. As time has passed that idea has gotten smaller and smaller. The technology of power went to the internal combustion engine. It too was physically huge in the beginning. It was large, took a great deal of maintenance and had little horse power. Then it got smaller, required less adjusting, was more efficient and more reliable. The push lawn mower got a small internal combustion engine. Just ponder how far we have come. And now, now it is light to carry and is the size of a weed eater! We have even figured out how to make it run on batteries.



This battery thing is what we discussed next. We talked about electric cars and the short comings. It needs constant re-charging; it is heavy and can be prone to fire. We also discussed the relatively short travel distance before needing a re-charge.



Well, something interesting is in the works. Josh said there is an invention in the way of a nuclear-powered battery. The first prototype models are the size of a V-8 engine. They can power a car for years. The draw back is that they are heavy, require in-depth maintenance and are rather cumbersome. The plan is to make them smaller and put out more energy.

The talk is that the next model will be the size of a lawn mower engine and weigh the same as four regular sized car batteries! The life expectancy is well over 30 years without any maintenance. This is so interesting to me! What about you? But in the end just know who I was talking to... He was Josh Eing me. I hope your April has been as good as mine has been.



Of Interest to All



The BVARA will be welcoming Bob Nu3Q to speak at our March Club Meeting for approximately fifteen minutes. He will be informing us about the event and recruiting volunteers to provide radio communication during the event.



**2024 DICK'S Sporting Goods Pittsburgh
Marathon**

May 5, 2024

Of Interest to All

BVARA



April

TRARC 52nd Hamfest/Computer Show, April 7th, Elizabeth

Nine State QSO Parties this month – Opportunity to work new states for WAS Award

Tri-State Radio Fest, Sunday, April 21st 2024, Center Stage, Monaca, 8:30 AM

POTA, POTA

May

Dayton Hamvention, ARRL National Convention, May 17th – 19th, Xenia, OH

Indianapolis Motor Speedway, W9IMS Special Events:

May 5 - 11: Grand Prix - Operator Schedule

May 20 - 26: Indianapolis 500 - Operator Schedule

July 15 - 21: NASCAR 200 at the Brickyard - Operator Schedule

POTA, POTA

June

BreezeShooters Hamfest, Butler Farm Show Grounds, June 9th

July

The Annual 13 Colonies Special Event, July 1st – 7th

Bits and Pieces

Hello All,

I am sorry I didn't get this newsletter out at the beginning of this month. Please give me some dispensation. Life happens and mine has been overwhelmingly busy with things I could not control! I am hoping things get less busy for next month and the following months. My co-writer and proof reader had all the information to me on time, I just didn't have time. Today is Sunday April 14, I took the day off to rest. I decided my rest would include the writing of this newsletter. So here we go...



I normally include an April Fools article in the newsletter around this time. I haven't had time to get to that either. I did however get to talk to an interesting fellow named Josh Eing. He is in the know when it comes to nuclear energy. You will have to read about the latest inventions he and I talked about in the pages of this newsletter. It is exciting!

I hope some of you get to go to the "Antique Radio Show" at Center Stage on the twenty first. Did anyone attend the hamfest at the Two Rivers Ham Club? I have been busy so I didn't get to even attend the regular BVARA Club Meeting this month. Things will slow down. I can't keep up this pace! I can't wait to live life a bit slower.

The weather is warming nicely and I think of all the ham projects that will be in the works. Please think things through, plan ahead, be safe, ask for help before you need it and have fun with our radio hobby!

Till next month, happy radioing and be safe in your hobby activities.



Clear on your final, but I will be monitoring.

73 KC3BXC



Radio Sport

Contest Corral

April 2024

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	Finish Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	1500	1 1729	3.5,7	DARC Easter Contest	CW Ph	RS(T), DOK or serial	www.darc.de
1	1900	1 2300	144	144 MHz Spring Sprint	CW Ph Dig	4-char grid	sites.google.com/site/springvhfupsprints
4	0000	5 0300	7	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrptest.com/pigwalk40
4	1700	4 2000	3.5	SARL 80m QSO Party	Ph	RS, serial, grid locator or QTH	www.sarl.org.za
4	1800	4 2200	28	NRAU 10m Activity Contest	CW Ph Dig	RS(T), 6-char grid	nrau.net/nrau-contests-in-general
6	1000	7 0400	14	PODXS 070 Club PSK 31 Flavors Contest	Dig	SPC, mbr or name	www.podxs070.com
6	1200	7 1200	3.5-28	EA RTTY Contest	Dig	RSQ, province or serial	concursos.ure.es
6	1200	7 1200	1.8-28	RSGB FT4 International Activity Day	FT4	Signal report	www.rsgbcc.org
6	1200	7 2359	No WARC	Georgia State Parks on the Air	CW Ph Dig	RS(T), park nbr or SPC	gaparks.org/forms-rules-register
6	1400	7 0200	1.8-28, 50,144	Louisiana QSO Party	CW Ph Dig	RS(T), LA parish or SPC	laqp.louisianacontestclub.org
6	1400	7 0200	1.8-28, 50,144	Mississippi QSO Party	CW Ph Dig	RS(T), MS parish or SPC	www.arrlmiss.org
6	1400	7 2000	1.8-28, VHF/UHF	Missouri QSO Party	CW Ph Dig	RS(T), MO county or SPC	www.w0ma.org/index.php
6	1400	7 2200	3.5-28	Florida State Parks on the Air	CW Ph Dig	Park nbr or SP	fspota.org/rules
6	1500	7 1500	1.8-28	SP DX Contest	CW Ph	RS(T), SP province or serial	spdxcontest.pzk.org.pl
7	1000	7 2100	3.5-14	WAB 3.5/7/14 MHz Data Modes	Dig	RS, serial, WAB square or country	wab.intermip.net/Contests.php
8	1400	8 2359	1.8-28,50	Solar Eclipse QSO Party	CW Ph Dig	RS(T), 4-char grid	hamsci.org/seqp-rules
8	1900	8 2030	3.5	RSGB 80m Club Championship, CW	CW	RST, serial	www.rsgbcc.org
9	1800	9 1929	3.5,7	DARC RTTY Sprint	Dig	RST, DOK or serial	www.darc.de
13	0000	13 0600	1.8-28	QRP ARCI Spring QSO Party	CW	RS, SPC, mbr or pwr	qrparci.org
13	0700	14 1300	1.8-28	JIDX CW Contest	CW	RST, JS prefecture or CQ zone	www.jidx.org/jidxrule-e.html
13	1200	14 1200	1.8-28	OK/OM DX Contest, SSB	Ph	RS, OK/MO county code or serial	okomdx.crk.cz
13	1200	14 1800	3.5-28	IG-RY World Wide RTTY Contest	Dig	RST, 4-dig yr first licensed	www.ig-ry.de
13	1400	14 0200	1.8-28, 50,144	New Mexico QSO Party	CW Ph Dig	Name, NM county or SPC	www.newmexicoqsoparty.org
13	1500	13 1900	3.5-14	Africa FT4 DX Contest	FT4	Signal report, 4-char grid	www.sarl.org.za
13	1800	14 2359	1.8-28,50	Georgia QSO Party	CW Ph	RST, GA county or SPC	gaqsoparty.com
13	2100	14 2059	1.8-28, sat	Yuri Gagarin International DX Contest	CW Ph	RST, ITU zone	gcontest.ru
16	1900	16 2300	222	222 MHz Spring Sprint	CW Ph Dig	4-char grid	sites.google.com/site/springvhfupsprints
17	1900	17 2030	3.5	RSGB 80m Club Championship, SSB	Ph	RS, serial	www.rsgbcc.org
18	0000	19 0300	14	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrptest.com/pigwalk20
20	0500	20 0859	3.5,7	ES Open HF Championship	CW Ph	RS(T), serial	www.erau.ee
20	0600	21 0559	3.5-28	Worked All Provinces of China DX Contest	Ph	RS(T), BY province or serial	www.muilandxc.com
20	0700	21 0659	3.5-28	YU DX Contest	CW Ph	RS(T), YU/YT county or serial	www.yudx.yu1srs.org.rs
20	0900	21 2359	3.5-28	CQMM DX Contest	CW	RST, continent abbr, mbr code (if any)	www.cqmmx.com/rules
20	1100	21 0059	1.8-28, VHF/UHF	Nebraska QSO Party	CW Ph Dig	NE county or SPC (FT8: grid)	nebraskaqsoparty.com
20	1400	21 2000	No WARC	Texas State Parks on the Air	CW Ph Dig	RST, park nbr or SPC	www.tspota.org
20	1600	21 0400	3.5-28	Michigan QSO Party	CW Ph	RST, MI county or SPC	miqp.org/index.php/rules
20	1700	21 1200	3.5-28	EA-QRP CW Contest	CW	RST, category, "M" if mbr	www.eaqrp.com
20	1800	21 1800	1.8-28, 50,144	Ontario QSO Party	CW Ph	RS(T), ON county or SPC	www.va3cco.com/oqp/rules.htm
20	1800	21 1800	1.8-28, 50,144	North Dakota QSO Party	CW Ph Dig	RS(T), ND county or SPC	www.ndarrisection.com
21	0700	21 1900	3.5,7	International Vintage Contest HF	CW Ph	RS(T), 6-char grid	vintagecontest.webnode.it
21	1200	21 2200	1.8-28, 50,144	Quebec QSO Party	CW Ph	RS(T), QC zone or SPC	wp1.quebecqsoparty.org
21	1800	21 2359	3.5-28	ARRL Rookie Roundup, SSB	Ph	Name, 2-dig yr first licensed, state/province/XE area/DX	www.arrl.org/rookie-roundup
21	2300	22 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	qrptest.com/pigrun
24	1900	24 2300	432	432 MHz Spring Sprint	CW Ph Dig	4-char grid	sites.google.com/site/springvhfupsprints
25	1900	25 2030	3.5	RSGB 80m Club Championship, Data	Dig	RST, serial	www.rsgbcc.org
27	0001	28 2359	28	10-10 Int'l Spring Contest, Digital	Dig	Name, mbr or "0," SPC	www.ten-ten.org
27	1200	28 1200	3.5-28	SP DX RTTY Contest	Dig	RST, SP 2-letter province or serial	www.pkrvg.org
27	1200	28 1200	3.5-28	UK/EI DX Contest, CW	CW	RST, UK/EI district code, serial	www.ukeicc.com
27	1600	28 2159	7,14,21,28	Florida QSO Party	CW Ph	RS(T), FL county or SPC	floridaqsoparty.org
28	1300	28 1859	3.5-28	UA1DZ Memorial Cup	CW Ph	RS(T), RDA district or 4-char grid	ua1dz.ru
28	1700	28 2059	3.5-28	BARTG Sprint 75	Dig	Serial	bartg.org.uk