

N.E.W.S. LETTER

The Official Publication of the North East Weak Signal Group – <http://www.newsvhf.com/>

July 2016

Volume 25

Issue 4

NEWS Group Annual Picnic!

Saturday July 9, 2016

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Apply to John Crawford, N2OY. E-mail: n2oy.vhf@gmail.com.
You may download an application from our web page: <http://www.newsvhf.com>

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Send articles by e-mail to George Collins, KC1V at kc1v@arrl.net

N.E.W.S. Group PICNIC-Rain or Shine

July 9, 2016 at the Knights of Columbus, Pavilion and Picnic Area,
371 Washington Rd., (aka George Washington Road) Enfield, CT 06082
(20 mi North of Hartford, 8 miles South of Springfield)

Social Gathering! Food! Swap-Sell-Tailgate

Everyone is Welcome!

MDS Testing for 10, 24, 47 and 78 GHz!

See Page 3 for Directions and More Details

President's Report

Picnic Fun and MD Tests

The summer season is upon us, and that is a good thing. But of course this is a very busy time for Hams interested in VHF, UHF and above. First of all, just a quick look back. This spring we had our first-ever VHF Super Conference. Kudos to the conference committee for a really GREAT EVENT. More than 220 people showed up from all over the east coast. I even met some guys from Texas! There were lots of good presentations and lots of side conversations, just for fun. And we had a pretty interesting indoor as well as outdoor flea market. We even heard Dave Sumner from the ARRL speak at dinner. Good luck Dave.

Then there was the Dayton Hamvention in May. It is not as large as it once was, but it is still the biggest in the world and a neat place to shop for fleas or to look at new gear introduced by the manufacturers.

As I write this, the ARRL June VHF QSO Party is just 1 week away. I sure hope everyone got on the air. After all, "Use it or Lose it" is a mantra so far as keeping our bands is concerned. And the contest is a great time to find lots of activity often from unusual grid squares. More people are on more bands than at any other time of the year. This year, we (at W2SZ) will be encouraging everyone to "Move to 902" again to reduce the interference from part 15 devices. 902.1 MHz is about 10-20 dB quieter than 903.1 MHz on Mt. Greylock in most directions. That is a really big difference! Here's hoping the weather is decent!

The summer is shaping up to be just as busy as this spring. First of all, COME ONE, COME ALL to the NEWS picnic. There will be good food and good fun to be had by all. Elections have been moved to the end of the year so we won't have to sit through those at the picnic anymore! Yay! In a related item, Jim, K2LM informed me the K2DLL beacon near Saratoga will soon be moved, so if it disappears for a while, don't be dismayed. In 2013, NEWS voted to donate \$300 to their club to help defray the cost of moving the beacons.

As in the past, W1FKF will supervise the weak signal tests for 10 and 24 GHz with help from John – N2OY this year (the latest from W1FKF is that we will have 47 and 78 GHz also: Ed.). Thanks very much guys. Contact Don for more details. Keep in mind the CQ World Wide VHF Contest is scheduled for the weekend after the Picnic.

This contest is only held on 6 and 2 meters so lots of us have commercial radios for those bands, and the contest is early enough so there just might be some E-Skip on 6 meters. Finally don't forget the (now independently sponsored) UHF contest, the 10 GHz and up contest and the ARRL September VHF QSO Party. Like I said, there is LOTS to do.

Remember; please E-mail me about specific topics or speakers you would like to hear give a presentation at some upcoming NEWS meeting... Even better, if you have a topic YOU would like to speak about, please let me know. More ideas are always better than not enough. Please keep them coming. My E-mail is: rffbauer@gmail.com Thanks in advance for your help.

R. L. Frey – WA2AAU

Secretary's Report

NEWS meeting 4/16/2016 at VHF Super Conference, Sterling, VA.

Meeting called to order at 1732 by President WA2AAU

NEW BUSINESS

- MDS testing at NEWS Picnic will be conducted by W1FKF and W1GHZ. Testing on 10 and 24 GHz.
- 47-GHz Problem – Threat from commercial interests.
A beacon might demonstrate more usage than just contest operation. WA1MBA has several sources. Possible locations are W1FKF and W1GHZ QTHs. KB1VC volunteered to make Arduino keyers for ID.

Meeting adjourned 1805

Paul Wade – W1GHZ

Western Pacific 6m EME Dxpediton

AN OPERATION CELEBRATING

50 YEARS OF VHF DXING!

T8GJ in PJ77hq

August 18 to August 25, 2016

V6M in PK90va

August 29 to September 3, 2016

**See all the information about this remarkable
Dxpediton at Lance's, W7GJ, Web site:**

<http://www.bigskyspaces.com/w7gj/Palau%20and%20Yap%202016.htm>

N.E.W.S. Group PICNIC-Rain or Shine Saturday July 9, 2016

Knights of Columbus, Picnic Area and Pavilion,
371 Washington Rd., (aka George Washington Road) Enfield, CT 06082
(20 mi North of Hartford, 8 miles South of Springfield)

Social Gathering! Food! Swap-Sell-Tailgate

Everyone is Welcome!

MDS Testing for 10, 24, 47 and 78 GHz!!!

BARBECUE - Noon to 1:00pm

The club will be providing the burgers, hot dogs, chips, and cold drinks.
If anyone would like to bring a side dish, like a salad or dessert, please do!
(Please e-mail me what you are bringing--if possible)

Please bring any items of VHF+ interest that you would like to sell, swap, or just show off.
Your stories and experiences - True or Not - are all welcome.

Show-Off Items with No VHF+ interest, but with Entertainment Value,
may also be appreciated or ridiculed - take your chances!

All members, spouses, guests and anyone interested in VHF+ operation,
are welcome to attend.

Here are the Directions

Knights of Columbus, Picnic Area
371 Washington Rd, Enfield, CT 06082
42.016N, 72.559W

From the South or North:

I-91 Exit 48 onto Rt 220 East (Elm St), then 9 lights.
Keep Left at light before Walgreens.
Left at 9th traffic light from Exit 48, on to Washington Rd.
K of C is 1 mile on left.

Lost going that way? Try this:

I-91 Exit 49, go south on Enfield St Rt.5
Drive 1/2 mile, take left on Brainard Rd.
(at North Thompsonville Fire Station)
Drive 2 miles, take right on Washington Rd.
K of C will be less than 1/2 mile on the right.

N.E.W.S. Picnic MDS / ERP Testing

At the annual N.E.W.S. picnic, we usually have MDS (Minimum Discernable Signal) and ERP testing on 10 GHz, 24 GHz, 47 GHz and 78 GHz. To test for MDS, we set up a distant signal source. After everyone has a chance to peak up on the signal, the signal level is reduced one dB at a time - when you can no longer hear it, then you have found the MDS for your system. You decide how well it works, and whether you can hear as well as Don and Dale.

As a double check, the frequency is moved a few kHz, then the signal level is increased one dB at a time. If you weren't kidding yourself, you should be able to find it at the same level as before. Finally, we also check relative ERP, transmitting one at a time and recording the relative power received at the distant point. Tune up your rigs now, then bring them to the picnic to check out so you will be ready for upcoming contests and activity.

W1FKF & GROUP

MDS / ERP Equipment Setup

IF TPI Signal Generator

This synthesizer utilizes the Analog Devices PLL integrated circuit ADF4351.

ADF4351 FEATURES

Output frequency range: 35 MHz to 4400 MHz

Fractional-N synthesizer and integer-N synthesizer



Transmit Equipment

10 GHz

IF = 144.800 MHz
LO = 10.2233 MHz

24 GHz

IF = 432.1 MHz
LO = 23.760/2 GHz
(11.880 GHz)

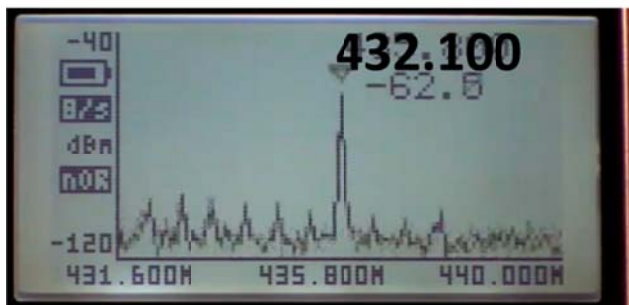
47 GHz

11970K HP
Converter
DB6NT 47-GHz Filter
IF = 144.800 MHz
LO = 10.2233 MHz

RX Detector

RF Explorer Spectrum Analyzer
3G Combo

15 – 2700 MHz



August UHF Contest News

Mike, N1JEZ, has forwarded the following information from the Packrats reflector for us. The original posts were made to the Packrat's reflector on Saturday, May 28, 2016. Thanks Mike and the original authors. And be sure to look for the latest information on the August UHF Contest at <http://www.uhfcontest.org>.

From Rick, K1DS, and Wayne, N6NB:

John Kalenowsky, K9JK, has arranged a log submission procedure for the contest that is identical to what we've had for years, except that logs will be sent directly to K5KO's contest robot, not via ARRL. This year's cabrillo logs go to augustuhf@kkn.net. It will work exactly as it did before. You'll get a reply to the email address from which you sent the log. The robot will tell you if the log is okay or if you need to make changes. You can resubmit as often as you like (until the log deadline) and only the last log will be saved.

"JK" has also agreed to handle all of the administrative chores of log processing, including what the paid staff at ARRL has been doing. He has set up a new online help desk (uhfcontesthelp@gmail.com). He is willing to handle any and all problems related to log submission and even to type logs for people who can't use a computer, (for example, a well-known contester whose eyesight doesn't permit him to use a computer). It turns out JK has been doing this all along as well as writing the results article (which he has also offered to handle again). I really appreciate JK's assistance. Yes, he says he knows how much work he's getting himself into.

We need to publicize the log submission procedure as soon as possible. I put a page on the website (uhfcontest.org) yesterday explaining it. To get the UHF contest off the ground as an independently sponsored event, we need to have everyone know not only that the contest is happening but also that there's a familiar way to submit logs. I know some would prefer to say goodbye to the logging "robot" forever. Perhaps we can come up with a new way to handle log submission next year. But for now, I think the best way to go is to send cabrillo logs to augustuhf@kkn.net. As the website explains, those submitting handwritten logs can mail them to K9JK.

As for me, I never intended to do more than help keep the August UHF Contest running when ARRL dropped it. I don't want to be any kind of contest manager, but K9JK is willing to do all of the chores that go with that responsibility. Is it okay with everyone if he steps in and does that job?

Also, I want to raise one other question. I don't think we should be changing the rules of the UHF contest this year, with one small exception. JK thinks (and I agree) that we should fix one loophole that has been a problem for years. There's no place for mobile stations in ARRL VHF-UHF contests, including the UHF Contest. You're not eligible to be a rover unless you activate two or more grid squares. You're not eligible for a fixed category if you move more than 500 meters during the contest. Mobiles are left out. ARRL is now working to fix that loophole by allowing anyone who moves to be a rover even without visiting two grid squares.

Does anyone object if we also allow mobiles who don't activate a second grid square to submit logs as rovers?

Comments? Other ideas? Suggestions?

73, Wayne Overbeck, N6NBwoverbeck@Exchange.FULLERTON.EDU

From Phil, K3TUF:

Hi Folks,

The August UHF Contest is in full swing as far as preparations. We now have a contest robot to submit scores to. Please check the website: <http://www.augustuhf.com/> for updates periodically. We look forward to a very active Contest on the first weekend in August. Get your station ready.

73, Phil K3TUF

And again from Rick, K1DS:

Logs go to: augustuhf@kkn.net <<mailto:augustuhf@kkn.net>>

Help desk at: uhfcontesthelp@gmail.com <<mailto:uhfcontesthelp@gmail.com>>

2016 VHF Super Conference Noise Figure / Gain Measurement Results

Lab Equipment and Measurements Courtesy of Rohde & Schwarz and Greg Bonaguide

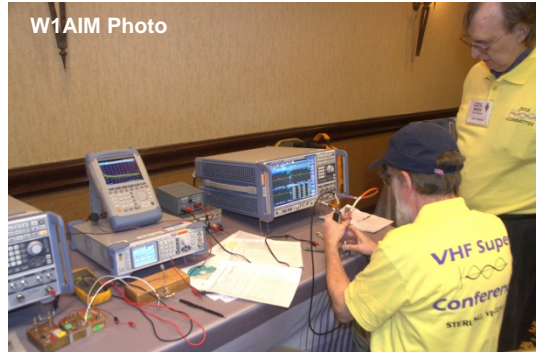
Item	Call Sign	Name	Device	Frequency	NF	Gain
1	W3TMZ	Jack Colson	Preamp	50 MHz	3.83	20.16
2	W3TMZ	Jack Colson	Preamp	144 MHz	0.48	37.10
3	W3TMZ	Jack Colson	Preamp	432 MHz	1.20	19.95
4	KF8QL	David DeVos	Preamp	Not Tested		
5	KF8QL	David DeVos	Preamp	Not Tested		
6	KF8QL	David DeVos	ARR P432VD6	432 MHz	0.60	18.90
7	KF8QL	David DeVos	ARR P432VD6	432 MHz	0.60	18.90
8	KF8QL	David DeVos	SuperAmp SP7000	432 MHz	1.22	20.23
9	KF8QL	David DeVos	Homebrew Preamp	1296 MHz	0.32	34.33
10	KF8QL	David DeVos	DEMI	50 MHz	0.79	12.37
11	KF8QL	David DeVos	WA2ODO	222 MHz	0.07	23.58
12	KF8QL	David DeVos	WA2ODO	432 MHz	0.10	23.70
13	KF8QL	David DeVos	WA2ODO	144 MHz	0.13	23.15
14	KF8QL	David DeVos	Homebrew Preamp	2304 MHz	0.59	17.63
15	KL6M	Mike Melum	36077	5 GHz	1.13	12.22
16	KL6M	Mike Melum	36077	5 GHz	1.25	10.92
17	KL6M	Mike Melum	36077	5 GHz	1.49	6.98
18	KL6M	Mike Melum	MGF4919	3 GHz	0.49	16.12
19	KL6M	Mike Melum	36077	3 GHz	0.72	14.02
20	KL6M	Mike Melum	NE334501	3 GHz	0.67	14.77
21	KL6M	Mike Melum	36077	3 GHz	0.84	10.83
22	KL6M	Mike Melum	36077	3 GHz	0.81	11.20
23	KL6M	Mike Melum	MGF4919	2.3GHz	0.39	19.11
24	KL6M	Mike Melum	NE334501	2.3GHz	0.48	18.42
25	KL6M	Mike Melum	36077	2.3GHz	0.45	16.61
26	KL6M	Mike Melum	36077	2.3GHz	0.49	15.54
27	KL6M	Mike Melum	36077	2.3GHz	0.50	18.86
28	KL6M	Mike Melum	MGF1302 w/relay	144 MHz	0.60	16.18
29	WA1T	Al Cerniauskas	Preamp	1296 MHz	0.72	18.89
30						
31	K2VXO	Dave Utter	Preamp	1296 MHz	1.55	16.66
32	W2ZV	Gary Greene	Preamp	multiple	x	x
33	W2ZV	Gary Greene	Preamp	multilple	x	x
34	N4HN	Tom Wright	SP2000	144 MHz	0.97	21.35
35	N4HN	Tom Wright	ARR432	432 MHz	0.83	18.70
36	VE3AX	Randy Nordlund	noise sources	x	x	x
37	K1OR	John Swiniarski	Preamp	1296 MHz	0.29	39.61
38	K1OR	John Swiniarski	Preamp	10 GHz	1.52	11.59
39	NT4RT	Bruce Randall	Preamp	432 MHz	0.65	12.19
47	WD5AGO	Tommy Henderson	Preamp	432 MHz	0.30	20.30
48	WD5AGO	Tommy Henderson	Preamp	432 MHz	0.49	46.80
49	WD5AGO	Tommy Henderson	Preamp	1296 MHz	0.24	40.00
50	WD5AGO	Tommy Henderson	Preamp	1296 MHz	0.35	35.99
51	WD5AGO	Tommy Henderson	Preamp	1296 MHz	0.33	37.62
52	WD5AGO	Tommy Henderson	Preamp	2304 MHz	0.42	33.55
53	WD5AGO	Tommy Henderson	Preamp	2304 MHz	0.43	27.24
54	WD5AGO	Tommy Henderson	Preamp	3 GHz	0.67	27.27
55	WD5AGO	Tommy Henderson	Preamp	5 GHz	1.45	33.06
56	W5VY	Pat Patterson	Preamp	1296 MHz	x	x
57	K1CA	Larry Blouin	WA2ODO	144 MHz	0.15	28.50
58	K1CA	Larry Blouin	DEMI Preamp	144 MHz	0.56	18.50
145	WB4UIV	Glenn Little	ZHL-0812HLN	IF OL	IF OL	
146	WA3GPX	Paul Domanski	MHP145	145 MHz	0.64	22.41
147	K6PFA	Paul Alexander	Preamp	1-2 GHz	x	x
148	K6PFA	Paul Alexander	Preamp	1-2 GHz	x	x
149	KA3WXV	George Altemus	Osc phase noise	x	x	x
150	KC2TN	Joe Fisher	Filter, Notch	144 MHz	x	x
151	W3IP	Mike Cresap	Osc Phase Noise	x	x	x
152	KA2LIM	Ken Kent	Preamp	2304 MHz	0.75	16.35
153	W5VY	Pat Patterson	Power Meter	x	x	x

Photos from the VHF Super Conference



W1AIM Photo

W1CSO making VNA measurements



W1AIM Photo

Test equipment was provided by R&S



W1AIM Photo

This is the antenna range setup on the lawn in front of the motel.



KC1V Photo

K1WHS making antenna measurements with the network analyzer. The poster board shields the screen from the bright sunshine.



W1GHZ Photo

This exception rover van was on display in flea market area.



W1AIM Photo

The weather Sunday morning was great for browsing the flea market.



KC1V Photo

It wasn't hard for me to find a few things I really needed.

Photos from the VHF Super Conference



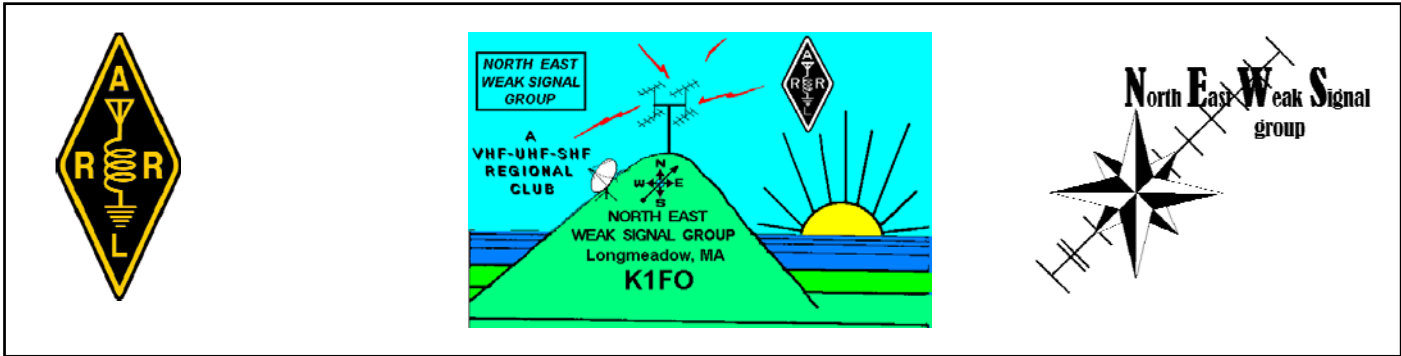
Dave Sumner, K1ZZ, the recently retired CEO of the ARRL, delivered the Banquet keynote address. He talked about the challenges facing Amateur Radio and his plans to remain involved, at many levels, including internationally, for the wellbeing of our hobby.



There were lots of door prizes give out after the dinner. There was even a special table of gifts chosen to appeal the non-Hams attending. I'm sure many of those items appealed to many of the Hams also!

DON'T FORGET

**The North East Weak Signal Group
2 Meter VHF and Above Net
Every Thursday at 8:30 PM local 144.250 MHz.
W1COT, WZ1V or K1PXE Net Control**



MEMBERSHIP APPLICATION

Name: _____

Call sign: _____ Grid: _____

Street: _____

City: _____ State: _____ Zip: _____

Phone (home) _____ Optional (work) _____

Email _____

ARRL member: Y N

Electronic Newsletter Delivery: Y N

Operational Bands (circle)	50 MHz	144 MHz	222 MHz	432 MHz	903 MHz	1.2 GHz
	2.3 GHz	3.4 GHz	5.6 GHz	10 GHz	24 GHz	47 GHz
	76 GHz	Light	Other (list)			

The North East Weak Signal [N.E.W.S.] Group is being established to form a camaraderie among fellow VHF-UHF-SHF enthusiasts and support a convenient means to exchange technical information. We currently have six meetings per year, held at a centrally located facility and provide a "NEWSLETTER" that is distributed two weeks prior to each meeting. Any contributions to this publication are appreciated and can be sent to: George Collins, KC1V by e-mail to kc1v@arrl.net. Dues are \$15/year. Remember, this group is formed by VHF'ers for VHF'ers.

Mail to:

North East Weak Signal Group
 c/o N2OY, John Crawford
 PO Box 1112
 Latham, NY 12110

North East Weak Signal Group

c/o N2OY John Crawford, PO Box 1112, Latham, NY 12110

Check your membership
Expiration date on your mailing label!