



N.E.W.S. LETTER

The Official Publication of the North East Weak Signal Group – [N.E.W.S. - Home \(newsvhf.com\)](http://newsvhf.com)

July 2025

Volume 34

Issue 4

July Picnic July 12, 2025

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DON'T FORGET

**The North East Weak Signal Group 2 Meter Net
Every Thursday at 8:30 PM local 144.250 MHz**

MEMBERSHIP in the N.E.W.S Group is \$10 per 2 years.

Apply to George Collins, KC1V. E-mail: news.kc1v@gmail.com.

You may download an application from our web page: <http://www.newsvhf.com>

The N.E.W.S. LETTER is the publication of the North East Weak Signal Group.

Articles may be reprinted with proper credit given to the author and the N.E.W.S. LETTER.

Send articles by e-mail to Don W1FKF at donw1fkf-news@yahoo.com.

REMINDER: 222 MHz Activity Night Tuesdays 7 to 11 PM

**Wed Nights 8:30 pm - 432MHz K1FMS (N1DPM)
8:00 - 432.100 8:30 - 432.150 MHz**

Weekly Calendar

Mon. Packrats Nets start at 7:30pm on 6 meters, 8 pm on 144.150, etc. Philadelphia area.
Tues. Mud Toads Net FM 17, Virginia 8 pm 144.250
Tues. Activity Night 7:00pm 222.100 K1WHS +
Weds Activity Night 8:30pm 432 150 K1FMS (N1DPM) +
Thurs. NEWS net, 8:30pm 144.250
Sat. Chesapeake Net 144.205 W3BFC FM28 9 pm
144.205 Mornings 8:30-9:30 AM -- 144.205 , 144.190, ME, Canada to NC and out to OH, WV

Officers:

President Dick Frey, WA2AAU, Delanson, NY
Vice Pres. Eric Mazur, KA1SUN, Savoy, MA

Treasurer George Collins, KC1V, Somers, CT
Secretary Paul Wade, W1GHZ, Cabot, VT

Board Of Directors:

Tom Cefalo W1EX N Reading MA

Tom Williams WA1MBA Orleans, MA
Bob Bownes KI2L, Troy, NY
Mark Casey K1MAP, Hampden, MA

. . Treasurer's Report June 4, 2025

Balance, Last Report 3-4-2025: \$2814.36

Income:

Dues: \$60.00

Expenses:

PayPal Fees: (\$1.68)

Park Permit Fees: (\$92.34)

Current Balance 6-4-2025: \$2780.34

Current Paid Members:

We had 4 renewals during this reporting period:

There were two new members: Wayne KA1CXD and Emily NI1Q

The membership totals are:

109 Regular
3 Life
11 Permanent
1 Courtesy

An update on the Park Permits:

Tom, WA1MBA, applied for and has received the permit for Mt. Wachusett for the 222-MHz and Up weekend and the two 10-GHz and Up weekends. Anyone interested in operating from Mt. Wachusett should contact Tom (tomw@wa1mba.org) for more information and a copy of the permit.

Mark, K1MAP, and KC1V, applied for the Mt. Greylock permit for the same weekends. We have not received the permit yet. We had several requests for additional information from the site management which has delayed the application process. We hope to have the permit very soon. Anyone interested in operating at Mt. Greylock should contact K1MAP (map92map@gmail.com) or KC1V (george.kc1v@gmail.com) for more information.

If anyone wants to apply for permits for other Massachusetts parks, I can provide the Certificate of Insurance that the DCR requires and the links to the DCR Permit Application Website. The club will reimburse the \$47 application fee.

George, KC1V Treasure, North East Weak Signal Group

The next Northeast Weak Signal Group (NEWS) meeting

Rain or Shine

N.E.W.S Picnic

MDS and ERP Testing

10 GHz to 78 GHz

Bring your Microwave gear

Saturday, July 12, 2025

10 am-all day Swap 'n Sell from your tailgate or pick a table under pavilion

Knights of Columbus Pavilion & Grounds

371 Washington Rd., (aka George Washington Road) Enfield, CT 06082

(22 mi N of Hartford, 8 miles S of Springfield)

42.016N., 72.559W, FN32ra (yes-this part of FN32 is in Connecticut)

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

Schedule (about):

Noon -1 pm -- Lunch

1 pm -- Short NEWS meeting

MDS testing of your Microwave Equipment 10 GHz & up
10 GHz before Lunch (11:00 am set up)

If you would like to bring a side dish like a potato salad, or
dessert, or whatever, Please Do!. Then, if possible, but not
Necessary, please let me know what you are bringing

Mark K1MAP map92map@gmail.com

DIRECTIONS:

>From the South or North:

I-91 exit 48 onto Rt 220 East (Elm St & Shaker Rd)

Left At 9th traffic light, (GiGi's vegetable stand on your right)

On to 371 Washington Rd., K of C is 1 mile on left.

>or, from the North:

I-91 exit 9, go south 1/2 mile on Enfield St Rt.5

At the traffic light (North Thompsonville Fire Station), take a left on Brainard Rd.

Drive 2 miles, take right on Washington Rd.

K of C will be less than 1/2 mile on the right

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Conference AWARDS

Photos courtesy of Andrea K2EZ



Bruce Wood Award W1MKY



Tom Kirby Award AF1T



ARRL Technical Excellence Award
K1KI W1GHZ



Mickie and Dale

- **48th Eastern VHF/UHF/Microwave Conference**

Presentation Papers

Using the W3SZ-K1RZ Database & Map

[Powerpoint Slides](#)

by Dave Petke, K1RZ

[Simple and Cheap Preamps for 10 GHz](#)

and [5760 MHz Preamp](#)

[+ Powerpoint Slides](#)

by Paul Wade, W1GHZ

[KI2L-Arduino_Networking_with_Ethernet](#)

[Powerpoint Slides](#)

by Bob Bownes, KI2L

[Simple Synthesizer Signal Generator](#)

[+ Powerpoint Slides](#) by Mike Seguin, N1JEZ

Understanding Frequency Synthesizers

[Powerpoint Slides](#) by Tom Williams, WA1MBA

ARRL Contest Program 2025 Update

[Powerpoint Slides](#)

by Bart Jahnke, W9JJ & Paul Bourque, N1SFE

Basic Light Communications

[Powerpoint Slides](#) NOTE: Click on slide to hear audio

by Paul CianCiolo, W1VLF

940 nm or 319 THz

[Powerpoint Slides](#)

by Fred Stefanik, K1FMS

SDR Phased Array Radar

[Powerpoint Slides](#) by Jack Carrozzo, NA1C

Microwaves in Quantum Computing

[Powerpoint Slides](#) by Hisen Zhang, KD2TAI

[Looking at Loop Antennas](#)

[+ Powerpoint Slides](#)

by Dale Clement, AF1T



Central States VHF Society

Exploring the World Above 50 MHz Since 1965

2025 Conference

Country Inn & Suites by Radisson, Lincoln
North Hotel

and Conference Center, NE

July 24 through 27, 2025

[INFO](#)

Microwave Update

October 17-18, 2025

Casino Del Sol

Conference Center

Tucson AZ.

[INFO](#)

[EME Conference 2026](#)

[Tenerife - Canary Islands](#)

Puerto de la Cruz, Tenerife

May 28th-31st,

[INFO](#)

Contributed Papers

Larcen TV SSPA Conversion to 432 MHz

by Mike Seguin, N1JEZ

Getting on 222 MHz? - an Inexpensive 222 Beam

by Chris Fagan, WB2VVV

GaAsFET_LNA_Bias-Simple_Cheap_and_Fool-resistant

by Paul Wade, W1GHZ

MMIC Amplifiers for 10GHz

by Paul Wade, W1GHZ

Large W2IMU Feedhorns for Improved G/T on Offset Dishes

by Paul Wade, W1GHZ

Verifying Microwave Receiver Performance using TotalPower

by Paul Wade, W1GHZ

**Support The ARRL
Spectrum Defense
Fund**



INFO

Workshops

Sun, Sky, & Ground Noise Workshop **Sun, Sky, & Ground Noise Workshop Slides**

Verifying Microwave Receiver Performance using TotalPower

by Paul Wade, W1GHZ

1296 MHz EME Dish and Sun Noise

+ Powerpoint Slides

by Don Twombly, W1FKF

For Sale:

“Hangar Queen” Yaesu FT-736R

Set up for 144/222/432/1296. Includes 220MHz Module, 1.2GHz Module, Internal Keyer, 600Hz Narrow CW Filter, Tone Squelch Unit, Hand Microphone, manual and service manual.

Best for parts, subassemblies, add-ins

1. Power supply needs re-capping.
2. Basic 144/432 rig in unknown condition.
3. 222MHz unit receives but has no power out.
4. 1.2GHz unit seems OK. Not recently checked. \$500, negotiable

Contact Skip, K1NKR via QRZ address

Includes VS-1 Voice Synthesizer Unit, TU-7 Tone Unit, MB-10 Mobile Mount, MC-48 Hand Microphone, DC Cable, manual and service manual.

Contact Skip, K1NKR via QRZ address

Raytheon Company has given me several antennas and parts. My plan is to sell them and donate money to a local clubs kit fund. Attached is the list and the "picnic price" per unit. I can't fit all of it in my SUV, so if anyone is interested in seeing a specific item, please email me the item # (and possible quantity if big) at rayroberge@yahoo.com with the SUBJECT LINE: N.E.W.S Picnic .

Ray WA1CYB rayroberge@yahoo.com

Item #	Quantity	Item Description	Estimated NEW Price per unit	July \$ per unit
1	3	ADSB Co-linear antenna	\$170	\$40
2	6	A-INFO SZ-2001800/P 2-18GHz Bi-Conical Antenna	\$3,000	\$300
3	13	AL-6-nmnfbw-9 L-Com Lightning Protector used	\$64	\$15
4	10	Avenger LNBS	\$10	\$5
5	6	BTY-UHF-BB Item SK#4875 (BLONDER TONGUE UHF ANTENNA-CH, 14-83)	\$260	\$40
6	4	Diamond D-130J Ground Plane 25-1300MHz	\$130	\$50
7	1	Diamond D-220 Ground Plane 100-1600MHz	\$110	\$50
8	3	DX Engineering loops (DXE-RF-PRO-1B) DXE-PRO-LOOP	\$400	\$150
9	4	KP-3DP655-45 antenna 3.3-4.2GHz 65° ± 45	\$306	\$50

10	1	L-Com C-Band 20" mesh dish with feed	\$128	\$40
11	9	L-Com HG2404CU-NF (800 MHz to 3.0 GHz 3.5 dBi Ceiling Mount Wireless LAN Antenna	\$50	\$15
12	3	L-Com HG-2458-14-p-090, one w/o a bottom cover	\$394	\$50
13	6	L-Com HG5829EG 02 reflectors 34x24" mesh, no feed	\$64	\$50
14	4	L-Com HG2458-09U-pro in tubes	\$210	\$60
15	5	L-Com HG2458-09U-pro weathered	\$210	\$30
16	3	L-Com HG2458-14P-090 antenna	\$394	\$50
17	2	L-Com mesh Dish 16"x12" w/feeds	\$128	\$50
18	5	Tripods from On-Stage	\$59	\$25
19	2	Tripods with crank up built in	\$85	\$30
20	15	WA5VJB Log Periodic w/ connector (400-1,000MHz)	\$53	\$15
21	10	Wilson Electronics 314411 700-2700MHz w/ N Female	\$90	\$25
22	7	MSP2TA-18XL DC-18GHz Mech. SWITCH 24V	\$447	\$60
23	3	VBF-2555+ 2500 to 2610 MHz	\$44	\$10
24	3	VBF-2900+ 2700 to 3100 MHz	\$44	\$10
25	13	VLM-63-2W-S+ LIMITER	\$66	\$15
26	3	ZADC-10-17-S+ Coupler 1000-1700 MHz	\$63	\$10
27	4	ZADC-10-63-S+ 11.7dB COUPLER 2.5-6GHz	\$63	\$15
28	7	ZAPD-30-S+ Power Splitter 20-3000 MHz	\$111	\$20
29	9	ZASW-2-50DR DC-5GHz 1X2	\$156	\$50
30	11	ZASWA-2-50DR+ switch 1x2 used	\$156	\$30
31	2	ZN2PD-9G-S+ POWER SPLITTER 1X2 1700-9000MHz	\$88	\$20

32	15	ZSW2-63 DR+ 5-6000MHz (DB-9 Female connector)SPDT 1x2	\$168	\$50
33	5	ZSW2-63DR+ 5MHz-6GHz SWITCH	\$168	\$50
34	2	ZSWA2-63DR+ 0.5-6GHz x2 switch	\$168	\$40
35	6	ZSWB-4-30DR SWITCH DC-3GHz	\$250	\$40
36	1	ZVE-3W-83 Minickts +3W Power Amplifier 2-8 GHz w/ Heat Sink and Power supply	\$2,257	\$1,000
37	5	ZX47-60LN-S+ 10-8000MHz POWER Detector	\$117	\$20
38	10	ZX60-83LN-S+ 500-8000 AMPLIFIER NF=0.5 to 8 GHz Noise Figure: 1.4 dB @ 2 GHz, 2.2 @ 8GHz	\$209	\$50
39	18	ZX60-V62+ 0.05-6GHz	\$88	\$20
40	7	ZX75BP-1280-S+ 1170-1390 filter	\$101	\$20
41	6	Vaunix technology Corp. 2-4GHz Phase Shifter LPS-402 USB	\$755	\$200
42	6	Vaunix technology Corp. 6MHz-6GHz LDA-602 USB	\$499	\$100
43	7	BUD Industries F18 AN-1304A 4.5"x3.5x2 1/8" metal box	\$14	\$10
44	2	Pamona Adapter Kit	\$466	\$130
45	3	Xilinx Vertex 6 Dev. Board w/Pwr supply, Blk enclosure	\$399	\$50
46	4	Digilent Cmod S6 , Breadboardable Spartan-6 FPGA Module	\$90	\$20
47	1	1500 Watt Power Inverter (+12V in)	\$150	\$50

Calendar:

July 12, Sat., 10 am to ? --NEWS Picnic & Microwave Testing. K of C Grounds,
371 George Washington RD., Enfield, CT

Aug. 2-3 Sat/Sun 2 pm - 222 & UP ARRL Contest

Aug. 16-18 Sat/Sun – ARRL 10GHz and UP first weekend

Sept 13-15 2 pm Sat/Sun. — ARRL VHF Contest

Sept 20-22 Sat/Sun — ARRL 10 GHz and up--second weekend

Sept 27, Sat. 1 pm, NEWS Meeting, Storrs Library, 693 Longmeadow St,
Longmeadow, MA, Premeeting lunch 11 am at Lulu's Rest., Rt 190, Enfield, CT.

October 17-18, 2025 Microwave Update

Oct. 3-4 Friday & Sat -- Nearfest , New Boston, NH , Hillsborough County 4H Fairgrounds

Nov. 22 , Sat. 1 pm --- NEWS Meeting, Storrs Library, 693 Longmeadow St,
Longmeadow, MA, Premeeting lunch 11 am at Lulu's Rest. Rt. 190, Enfield, CT

Jan. 3, 2026, Sat 1 pm — NEWS Meeting, Storrs Library, 693 Longmeadow St,
Longmeadow, MA, Premeeting lunch 11 am at Lulu's Rest. Rt. 190, Enfield, CT

Mark K1MAP

Affiliated Club Competition

In recognition of achieving a winning club score by working fellow amateurs on designated amateur radio frequencies during the contest period. This award is presented to:



**North East Weak Signal Group
1st Place - Medium Club Category**

in the

2025 January VHF Contest

Score: 208,852 points

Pat Aschub KSUR
ARRL President



ARRL The National Association for
Amateur Radio

Paul Eggert W2KX
Contest Manager



Cheese Bits

Mt Airy VHF Radio Club

2024 Fall Sprints Review

and

2025 Sprints Planning

INFO

Picnic MDS and ERP Testing 2025

The July Picnic/ Annual Meeting will again feature relative (human and radio as a system) Minimum Discernable Signal and (relative) ERP testing on 10, 24, 47 and 78 GHz. Some call it the “Shoot Out”.

Just as in previous years, to test for MDS, we set up a distant signal source with a keyer. After everyone has a chance to peak up on the signal, the signal level is reduced until you can no longer hear it, then you have found the MDS for your system (compared to others). The difference is recorded in dB. It's all relative because the equipment and range are not calibrated. You decide how well your reception works, noting that some might be better because of larger dishes or better noise figures and stronger PAs. You can use your waterfall display or whatever tools for whatever purposes, but to be fair you must copy the CW signal by ear. Once you can no longer copy it (or basically cannot tell that it is there and keying through your ears) you have reached your minimum.

Finally, we also check relative ERP, each station transmitting one at a time and recording the relative power received at the distant point. We complete one band (MDS and ERP) and then move on to another.

This isn't a competition. It's a chance to check out the gear with friends around to help. Most folks have 10 GHz stations that work pretty well, while a few will find problems and fix before the 10 GHz & Up contest in August. Not only do we all know whether our equipment functions, and about how well, but also that there will be some other good stations to work. Unless something goes wrong, all signals will be within 1 kHz of the calling frequency.

I intend to have the MDS system operational by 10:30 or so, keying on 10368.100 CW. If you arrive early you can tune up. This year I will try to start the 10 GHz MDS test by 11 AM but will wait a bit if anyone is having trouble getting their rigs sorted. If you arrive late, then you might miss testing on 10 GHz.

If you are brining 24, 47 GHz or 78 GHz radios we will do those in that order after 10 GHz is done. We hope to get 10 GHz done and maybe start on 24 before the club meeting, but we will see how it goes. We can stay a little later than last year, so we can adapt a bit as we go. When 78 is done, I will go back to other bands if anyone has fixed a problem or needs a re-test.

We always need some help for setup and to run tests – thanks for the help!

Tom WA1MBA
tomw@wa1mba.org





Q5 SIGNAL



OnlineMetals.com



Directive Systems & Engineering
Directive Systems & Engineering VHF, UHF, Microwave Antennas and related products



MEMBERSHIP APPLICATION

Date: _____

Name: _____

Call sign: _____ Grid: _____

Street: _____

City: _____ State: _____ Zip: _____

Phone (home) _____ Optional (work) _____

Email: _____

ARR 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 Eight
 Other (list)

The North East Weak Signal [N.E.W.S.] Group was established in 1993 to form a camaraderie among fellow VHF-UHF-Microwave enthusiasts and support a convenient means to exchange technical information. We currently have six meetings per year, 4 are held on at the Storrs Library on Rt. 5 in Longmeadow, Mass., 1 at our annual Conference in April, and 1 at our Annual Picnic in July. We provide a "NEWSLETTER" that is distributed via email two weeks prior to each meeting. Any contributions to this publication are appreciated and can be sent to: Don, W1FKF by e-mail to donw1fkf-news@yahoo.com

Dues are \$10 for 2 years. Please contact or mail application to: NEWS Treasurer, George Collins, KC1V, 105 Ninth District Rd., Somers, CT 06071 or E-mail: news.kc1v@gmail.com

Mail to

Treasurer

North East Weak Signal Group

c/o George Collins
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 Somers, CT 06071

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News Letter

North East Weak Signal Group

Don Twombly, W1FKF

donw1fkf-news@yahoo.com