

# N.E.W.S. LETTER

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

September 2017

Volume 26

Issue 5

## Next Meeting: September 23, 2017

# Rovers!

**Dick, WA2AAU is putting together a program on Rovers for us. Watch for his posting to the NEWS Group Reflector for more details.**

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**BOARD MEETING - 11:00 AM at Lulu's, 151 Hazard Ave. Enfield, CT**  
Phone: (860) 763-2377 I-91 Exit 47 Rt. 190E 1 Mile on Left  
<http://luluspizzeria.com>

**GENERAL MEETING - STORRS LIBRARY - from 1 PM to approximately 3:45 PM.**  
693 Longmeadow St, Longmeadow, MA 01106  
<http://longmeadowlibrary.wordpress.com>

### DON'T FORGET

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

MEMBERSHIP in the N.E.W.S Group is \$15 per year.  
Apply to John Crawford, N2OY. E-mail: [n2oy.vhf@gmail.com](mailto:n2oy.vhf@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.  
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Send articles by e-mail to George Collins, KC1V at [news.kc1v@gmail.com](mailto:news.kc1v@gmail.com).



*The newlyweds 1 hour before tying the knot!*

*Congratulations and Best Wishes to  
Don, W1FKF and Lanette, KA1NKD  
from all of us in the NEWS Group*

# N.E.W.S. Picnic MDS/ERP Testing 2017

Don W1FKF

[donw1fkf-news@yahoo.com](mailto:donw1fkf-news@yahoo.com)

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. At the point when you can no longer hear it, 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.

We also check relative ERP, transmitting one at a time and recording the relative power received at the distant point using a spectrum analyzer.

The ERP results for the 10 GHz test are inaccurate, caused by not having enough attenuation between the feed and converter, skewing the data. This was realized after reviewing the results, and will be rectified for the next picnic.



NEWS Picnic MDS/ERP 2017														
10 GHz MDS							10 GHz ERP							
Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	
AF1T	Prime	24	10W	-75	-42.8	0	WB2BYP	OFFset	18	20W	-72	-42.4	0	
Ka1OJ	OFFset	24	6W	-72	-47	3	AF1T	Prime	24	10W	-75	-42.75	0.35	
W1FKF	OFFset	18	7W	-72	42.82	3	W1FKF	OFFset	18	7W	-72	-42.82	0.42	
W1GHZ	OFFset	18	3W	-72	-47.9	3	KC1SJ	Prime	24	3.5W	-71	-43.78	1.38	
WB2BYP	OFFset	18	20W	-72	-42.4	3	Ka1OJ	OFFset	24	6W	-72	-47	4.6	
KC1SJ	Prime	24	3.5W	-71	-43.8	4	W1GHZ	OFFset	18	3W	-72	-47.86	5.46	
K2AEP	OFFset	22	.2W	-68	-82.8	7	Wa1MBA	OFFset	18	2W	-64	-49.86	7.46	
Wa1MBA	OFFset	18	2W	-64	-49.8	11	W1FKF	Panel	12	.35W	-58	-61.76	19.36	
W1FKF	Panel	12	.35W	-58	-61.8	17	WW1Z	Horn	23 dB	1W	-55	-67.73	25.43	
WW1Z	Horn	23 dB	1W	-55	-67.7	20	K2AEP	OFFset	22	.2W	-68	-82.8	40.4	
24 GHz MDS							24 GHz ERP							
Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	
AF1T	Prime	12 inch	2 W	-31	-96.6	0	Ka1OJ	OFFset	18 inch	4 W	-29	-79	0	
Ka1OJ	OFFset	24 inch		-31		0	N1JEZ	Prime	20 inch	1.75W	-31	-84	5	
N1JEZ	Prime	20 inch	1.75W	-31		0	Wa1MBA	OFFset	18 inch	2 W	-20	-84.5	5.5	
W1FKF	OFFset	18 inch	.5W	-31	-93	0	W1FKF	OFFset	18 inch	.5W	-31	-93	14	
Ka1OJ	OFFset	18 inch	4 W	-29	-79	2	AF1T	Prime	12 inch	2 W	-31	-96.6	17.7	
W1EX	Prime	12 inch	.75W	-26	-101	6	W1EX	Prime	12 inch	.75W	-26	-101.3	22.3	
Wa1MBA	OFFset	18 inch	2 W	-20	-84.5	11	K2CBA	Prime	16 inch	0.125			-	
K2CBA	Prime	16 inch	0.125			-	Ka1OJ	OFFset	24 inch		-31		-	
W1GHZ	OFFset	18 inch	.5 W			-	W1GHZ	OFFset	18 inch	.5 W				
47 GHz MDS							47 GHz ERP							
Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	Call	Dish Type	Dish size	Power	MDS	TX	Difference From best	
VE2UG	Prime	12 Inch	700 mw	-48	-82.2	0	VE2UG	Prime	12 Inch	700 mw	-48	-82.16	0	
WB2BYP	Prime	12 Inch	40 mw	-47	-89.7	1	Ka1OJ	Prime	10 inch	30 mw	-46	-87	4.84	
Ka1OJ	Prime	10 inch	30 mw	-46	-87	2	W1FKF	Prime	12 inch	40 mw	-46	-87.76	5,16	
W1FKF	Prime	12 inch	40 mw	-46	-87.8	2	WB2BYP	Prime	12 Inch	40 mw	-47	-89.72	7.56	
N1JEZ	Prime	10 inch	30 mw	-46		2	WA1MBA	Prime	15 ich	40 mw	-39	-94.5	12.34	
WA1MBA	Prime	15 ich	40 mw	-39	-94.5	9	W1GHZ	Horn	Horn 23 dB	30 mw	-30	-97	14.4	
AF1T	Prime	12 inch	30 mw	-37	-101	11	AF1T	Prime	12 inch	30 mw	-37	-100.6	18.44	
W1GHZ	Horn	Horn 23 dB	30 mw	-30	-97	18	N1JEZ	Prime	10 inch	30 mw	-46			
W1EX	Prime	12 Inch	10 mw	-25		23	W1EX	Prime	12 Inch	10 mw	-25			
78 GHz MDS														
Call	Dish Type	Dish size	Power	MDS	TX	Difference From best								
N1JEZ	8 inch	prime	0 DBm	-31		0								
Wa1MBA	10 Inch	Lens	0 dBm	-29		2								
W1FKF	12 Inch	prime	0 dBm	-29		2								
Ka1oj	8 inch	prime	mixer	-18		13								
WB2BYP	13 inch	prime	mixer											
Ve2UG	12 inch	prime	Mixer											



# Mid Atlantic States VHF Conference

ARRL Sanctioned

## Mid-Atlantic States VHF Conference and Mini-Fest

Hosted by The Mt. Airy VHF Radio Club (Pack Rats)

**Friday, Saturday, Sunday October 6-7-8, 2017**

**Holiday Inn Bensalem-Philadelphia  
3327 Street Road  
Bensalem, PA 19020  
215-639-9100**

**(215) 639-9100 Early Bird rooms \$99+tax**

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**Register on-line at [www.packratvhf.com](http://www.packratvhf.com)**

**Conference Early Bird\*\* Registration only \$40  
Saturday Evening Early Bird Banquet \$40**

Friday Afternoon seminar "Station Automation"  
Friday evening hospitality and table-top selling  
Saturday conference presentations & auctions  
Registration includes pizza lunch and snacks  
Rohde & Schwarz Technical Testing Room

**Saturday evening Banquet buffet dinner with door prizes\*  
Sunday morning free outdoor mini-flea market**

**\*\* Early Bird price good through Sept 20.  
\*You must be registered and paid for conference  
and banquet to be eligible for door prizes**

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## Mid-Atlantic States VHF Conference and Mini-Fest

### Tentative Speakers and Topics:

|                      |                                                |
|----------------------|------------------------------------------------|
| Roger Rehr W3SZ      | Station Automation Seminar (+K3TUF & WA3DRC)   |
| Phil Theis           | K3TUF Automation for VHF/UHF/uW Contesting     |
| Jerome Byrd K3GNC    | "Apartmentyrinous Station Rex"                 |
| Steve Gross N4PZ     | Yagis: Tales, Tricks and Truths                |
| Russ Lamm NN3Q       | Building and Operating the NN3Q Rover (+K3WGR) |
| Gary Hitchner WA2OMY | The GPS Project and Packrat Beacon Update      |
| Joe Jesson W2JEJ     | Dongle Developments                            |
| Al Katz K2UYH        | Getting started on microwave EME (+K1DS)       |
| Joe Horanzy AA3JH    | Talking on 440 THz– Easy LASER! (+AC2CL)       |
| Michael Davis KB1JEY | Enhancing your Test Bench Capabilities         |
| Ray Golley N3RG      | Practical Solutions for Station Automation     |
| Steve Simons W1SMS   | RF Tower Safety and Construction               |
| Pete Kobak K0BAK     | Rover Adventures and Automation                |

Details and Updates [www.packratvhf.com](http://www.packratvhf.com)

**\*\* Early Bird price good through Sept 20.**

**\*You must be registered and paid for conference  
and banquet to be eligible for door prizes**

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## Calendar of Upcoming Events

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### 2017 Events

|            |                                                                         |
|------------|-------------------------------------------------------------------------|
| Aug        | EME Conference - Texas                                                  |
| Aug 5-6    | ARRL 222 MHz & Up Distance Contest - 2pm EDT Sat. to 11pm EDT Sun.      |
| Aug 19-20  | ARRL 10 GHz & Up Contest Weekend #1 - 8am EDT Sat. to Midnight EDT Sun. |
| Sept 8-10  | ARRL EME Weekend #1 – 8pm EDT Fri. to 8pm EDT Sun. (2.3GHz & Up)        |
| Sept 9-10  | ARRL Sept. VHF QSO Party - 2pm EDT Sat. to 11pm EDT Sun.                |
| Sept 16-17 | ARRL 10 GHz & Up Contest Weekend #2 - 8am EDT Sat. to Midnight EDT Sun. |
| Sept 23    | NEWS Lunch and BOD meeting, Lulu's, Rt.190 Enfield, CT, 11:15am         |
| Sept 23    | NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm               |
| Oct 7-8    | ARRL EME Weekend #2 – 8pm EDT Fri. to 8pm EDT Sun. (50MHz – 1296MHz)    |
| Nov 4-5    | ARRL EME Weekend #3 – 8pm EDT Fri. to 8pm EDT Sun. (50MHz – 1296MHz)    |
| Dec 1-3    | ARRL 160-Meter Contest                                                  |

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## Calendar of Upcoming Events (cont.)

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### 2018 Events

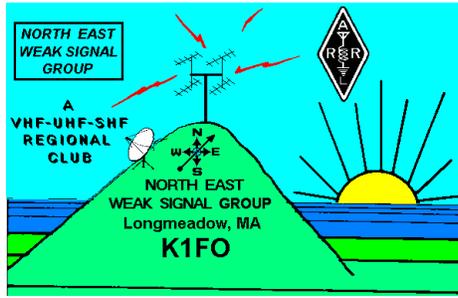
(\*Tentative)

|            |                                                                   |
|------------|-------------------------------------------------------------------|
| Jan 6*     | NEWS Lunch and Board Meeting - Lulu's, Enfield, CT - 11:15am      |
| Jan 6*     | NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm         |
| Jan        | 20-22 ARRL VHF Contest                                            |
| Feb 8-11   | Hamcation, Central Florida Fairgrounds, Orlando, FL               |
| Mar 17*    | NEWS Lunch and Board Meeting, Lulu's, Enfield, CT, 11:15am        |
| Mar 17*    | NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm         |
| Apr 16*    | Spring Sprint - 144MHz                                            |
| Apr 20-22* | Eastern VHF Conference                                            |
| Apr 24*    | Spring Sprint - 222MHz, Tues 7-11pm local                         |
| May 2*     | Spring Sprint - 432MHz Weds 7-11pm local                          |
| May 4-5*   | NEAR-fest - Deerfield, NH                                         |
| May 5*     | Spring Sprint 902MHz & Up                                         |
| May 12*    | Spring Sprint 50MHz                                               |
| May 5*     | SBMS 2.3 GHz & up contest                                         |
| May 18-20  | ARRL Hamvention, Xenia, Ohio                                      |
| May 28     | Memorial Day                                                      |
| June 9-11  | ARRL June VHF Contest                                             |
| June 23-24 | ARRL Field Day                                                    |
| July 14*   | NEWS Picnic and Meeting, K of C, Washington Rd, Enfield, CT, 11am |
| July*      | CQ WW VHF Contest                                                 |
| July*      | Central States VHF Society Conference                             |
| Aug*       | EME Conference                                                    |
| Aug 4-5    | ARRL 222MHz & Up Distance Contest                                 |
| Aug 18-19  | ARRL 10 GHz & Up Contest Weekend #1                               |
| Sept 7-9*  | ARRL EME Weekend #1                                               |
| Sept 8-10  | ARRL Sept. Contest                                                |
| Sept 15-16 | ARRL 10 GHz & Up Contest Weekend #2                               |
| Sept 29*   | NEWS Lunch and Board Meeting, Lulu's, Enfield, CT, 11:15am        |
| Sept 29*   | NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm         |
| Oct 5-7*   | ARRL EME Weekend #2                                               |
| Oct 12-13* | NEAR-fest - Deerfield, NH                                         |
| Oct*       | Microwave Update                                                  |
| Nov 3-4*   | ARRL EME Weekend #3                                               |
| Nov 17*    | NEWS Lunch and Board Meeting, Lulu's, Enfield, CT, 11:15am        |
| Nov 17*    | NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm         |
| Dec*       | ARRL 160-Meter Contest                                            |

# N.E.W.S. Group Supporters



QRPme PO Box 160 Limerick, Maine 04048 <http://www.qrpme.com/?p=contact>



**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!