

N.E.W.S. LETTER

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

January 2017

Volume 26

Issue 1

NEXT MEETING: January 7, 2017

Meeting Activities

Small Project Show and Tell Reports

Let Us See What You've Been Doing

Laboratory Test Session

Bring Equipment You Would Like To Test

In This Issue

Officer's Reports:	page 2-3
Conference Information:	page 4
Conference Call for Paper & Presentations:	page 4
Equipment for Sale – WA1HHN Estate:	page 5
Upcoming Events:	page 5
K1IIG Beacon Update:	page 6

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.
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.

President's Report

I hope everyone had a good time with family over the past few weeks. Happy New Year! Thankfully, this year the meeting isn't on New Year's Day weekend, so NO EXCUSES. Come to the meeting! Several members have mentioned that our test sessions have been useful. Also most of us love hearing about little tips and tricks and new stuff on the market so let's combine the 2 activities like we did last year.

So this meeting let's have some "small project" "Show and Tell" reports... please tell us about something you have been working on in the last several months that you can describe in 5-15 minutes. More than one project is perfectly fine... the more the merrier. Please bring a couple of photos, and/or some presentation "slides" to describe what you have been working on. It doesn't need to be complicated, or high science, just tell us about what you did. Also, bring some show and tell models of the stuff so we can see the finished project if that makes sense.

I know Mike – N1JEZ had some stuff to show and tell last meeting that we didn't get to, so he will be loaded for bear this time. Bring it on, Mike. You always seem to have some neat stuff to share.

With regard to the lab test equipment session, what KI2L and I have available is certainly not as impressive as the Rhode & Swartz equipment Greg often brings to our conferences, but it should give a lot of good information nevertheless.

I will bring an HP-8970B noise figure meter for testing preamps or receive converters. The noise figure meter operates up through the 1296 MHz band without a converter in front of it. It would be great if someone could bring a low-ENR noise source. VERY IMPORTANT NOTE... If you want to test preamps on 2304 MHz or above, please bring a receive converter or transverter to facilitate testing. Almost any converter will work so long as the IF is on the 1296 MHz band or below.

We plan to bring 2 vector-network analyzers for general-purpose measurements up to 3 GHz. The HP8753B Network Analyzer also works up to 6 GHz with precision external directional couplers, rather than the typical HP S-Parameter Test Set that normally accompanies the unit. Bob will also have a scalar network analyzer that will work up beyond 18 GHz with directional couplers to make magnitude S-Parameter measurements up through the 10 GHz band.

We will also have some older style power meters and spectrum analyzers on hand for trouble shooting some problems your equipment may have up through 10.5 GHz. I will have calibrated stable weak signal sources available up through the 5760 MHz band to trace signals through equipment. We will be able to accurately measure power up to 100 watts at frequencies up to 10.5 GHz.

If you want to test a transmitter with more than 10 watts output, or that runs on a voltage other than 13.8 VDC, plan to bring a power supply to run your equipment. We will have low current bench supplies available for testing small signal circuits.

Partial Test Equipment List

- HP 8752C 3G Network Analyzer (Internal Reflection Bridge)
- HP8753B Network Analyzer 300 kHz – 6 GHz
- HP85046A S-Param. Test Set 300 kHz – 3 GHz
- Home Made N.A Frequency Doubler and External
- Precision Directional Couplers Comprising 3-6 GHz Test Set
- HP8756 Scalar Network Analyzer with Sweeper good to beyond 18 GHz
- HP8555A Spectrum Analyzer to 18 GHz +
- (2) HP8640B Signal Generators. One good to 1100 M
- Weak Signal Up Converters for 2G, 3G, 5G
- 12 G Automatic Microwave Frequency Counter
- Several HP432 Power Meters & Attenuators
- 100 Watt Coax load good to 10 GHz
- HP8970B Noise Figure Meter with 18G noise head
- Many directional couplers

With this equipment we can measure virtually all characteristics of any RF device, assembly, or complete transmitter or receiver on frequencies up to 6 GHz and most characteristics up through 10.5 GHz.

We can measure the following:

Gain, Loss, Noise Figure, Receiver Sensitivity, Frequency Response, Selectivity, Power Output, Frequency, Spectrum, Harmonic and Spurious Levels, Input and Output Match, VSWR, etc. If you think you have something unusual to measure, please send me

an E-Mail at: rffbauer@gmail.com. Maybe I can bring the right equipment to do the test you need.

Finally, remember the January VHF sweepstakes will be here on January 21-23, 2017 this year. Please get ON THE AIR on as many bands as you can. Be prepared to tell the group what bands you will be active on, and any new bands you will be on for the first time. If you plan to do some roving, tell us about the route you might take. ETC, Etc, etc.

R. L. Frey – WA2AAU
rffbauer@gmail.com

Secretary's Report

Our secretary, Paul, W1GHZ, was unable to attend the November meeting; in his absence George, KC1V, recorded the meeting minutes.

- NEWS Meeting 19 November 2016 at Storrs Library, Longmeadow, MA.
- Called to Order by President, WA2AAU, at 1320 EDT.
- K1MAP: Correction to the minutes from the September meeting: He will contact W1GHZ.

TREASURERS REPORT – N2OY

- Balance \$4490.20
- 100 paid up members, 116 total

OLD BUSINESS

- MOTION by K1MAP: No dues for current or new members for 2017. At the end of 2017 dues will automatically revert to the current amount. A second free year will be considered at that time.
APPROVED unanimously.
- Conference: Returned to Manchester. Needs help for registration, etc. Contact K1MAP. Free meals will be provided for speakers.
- Mt. Washington 10 GHz K1FO beacon status: The beacon is back on the air from its former location. The building it is in is unheated.

NEW BUSINESS

- 2017 Meeting Dates: K1MAP presented next year's tentative meeting dates (see page 5 for dates).
APPROVED unanimously.
- K1MAP: Cape Hatteras beacon was off the air for four days. There is a possibility of a

2-meter beacon at the same site. Contact K1MAP if interested.

- K2DLL beacon is still going to be moved, but will stay on the air as long as the county is still paying for electricity in the building where it is currently located.

ANNOUNCEMENTS

- Insurance renewal of \$200 has been paid.
- Present at the meeting is a new member, Will Rogers, KD4FOV.

Meeting adjourned 1400 EDT

George Collins – KC1V

Treasurer's Report

This would normally be the point in the newsletter where I remind everyone that dues payments are due. However, at the November meeting, the membership in attendance voted for a one-year moratorium on collection of dues. What does this mean for you?

If your membership was set to expire at the end of 2016 and you have not yet sent payment for renewal, your membership is now set to expire at the end of 2017 and no payment of dues is currently required.

If your membership was paid ahead through 2017, 2018, or (in one or two cases) 2019, one year has been added to the expiration date of your membership. Your membership now expires in 2018, 2019, or 2020.

If your membership was set to expire at the end of 2016 and you have already sent payment, your membership will be considered current for whatever period you paid PLUS an additional year.

If you know of anybody who is interested in becoming a NEWS member, they may join for free for a membership that expires December 31, 2017. Please send me a completed membership application and I will add new members to the roster.

To report on the club's treasury, the club's treasury is in very good health. With the dues moratorium, our 2017 expenses will spend down the treasury excess by about one-third.

I hope everyone has (or had, depending on when you're reading this newsletter) a wonderful holiday season, and here's to hoping that 2017 is a better year for everybody than 2016 was!

73, John – N2OY

43rd ANNUAL EASTERN VHF/UHF/MICROWAVE CONFERENCE

Fri./Sat./Sun. April 21-22-23, 2017

BAYMONT INN & SUITES, 20 Taylor St., Manchester, CT 06042

(Just a few miles northeast of Hartford, CT off I-84, at Exit 63)

Sponsored by the North East Weak Signal Group (NEWS)

Registration ONLY \$20!! (\$30 after April 1)

Registration Includes:

Saturday Pizza & Sub Lunch

Thursday & Friday Evening Super Hospitality Room
Proceedings CD

Saturday Evening Banquet Buffet \$30

(Must order banquet before April 10.)

Extra Proceedings CD's -- \$5ea. at Registration Desk

Registration Web Page will be on-line soon

You will be able to reserve rooms soon

Discounted VHF Conference Room Rates:

Thurs, Fri, Sat, & Sun nights \$79 for 2 double beds or
1 king, \$99 for a suite plus CT state tax.

Check: www.newsvhf.com for updates

Bradley International Airport (Hartford, CT), is close
by the site (1/2 hr). The New York, Boston,
Providence, Albany airports are a 2-3 hour drive.
The Hartford Amtrak train station is only about 15
minutes from the hotel.

Questions?

Please contact either Conference Co-Chairmen:

Paul, W1GHZ, (presentations, proceedings) at

w1ghz@arrl.net

Mark K1MAP, (hospitality, hotel, swaps/vendors) at

map92map@gmail.com or 413-566-2445 (home),

413-777-9828 (cell)

Preliminary Schedule of Events

Friday:

7am -- FREE Continental BREAKFAST for those
staying at the Baymont Hotel.

Noon -- Lunch on your own.

Afternoon Session – TBA

6pm to 10pm -- SUPER HOSPITALITY Room, Indoor
Swap & Vendors

Saturday:

7am -- FREE Continental BREAKFAST for
those staying at the Baymont Hotel.

8am to 5pm -- Presentations & Indoor Vendors.

Noon—Pizza, Sub & Beverage LUNCH INCLUDED
with Registration

6pm -- Pre-Banquet Hospitality

7pm -- BANQUET BUFFET, Tom Kirby Award
Presentation, Banquet Speaker, Trivia Quiz, Door
Prizes

Sunday:

7am -- FREE Continental BREAKFAST for
those staying at the Baymont Hotel.

8-11am -- SWAP/TAILGATE in Parking Lot.

There are many nearby Eateries to choose from and
lots of Radio and Non-Radio attractions in the area.

Boston and New York are about 100 miles and the
Connecticut shore (Mystic, New London, New Haven) is
only about 50 miles to the south. There will be plenty of
interesting places and activities for everyone.

Make Your Plans Now!

Call for Papers and Presentations **2017 Eastern VHF/UHF/Microwave Conference**

Papers are sought on all VHF and up activities: Operating, Contests, Propagation, Antennas, Amplifiers,
Low-noise Preamps, Homebrewing, Microwaves, EME or Arduinos: Whatever you've been doing. There
is plenty of time to write up your winter projects - just take some pictures as you go.

Inquiries to: w1ghz@arrl.net

Equipment for sale – WA1HHN Estate

Russ, N3EMF, is helping with the disposition of the radio equipment from the estate of WA1HHN. Ron, WZ1V, asked that the following note from Russ be included the NEWSletter. In addition to e-mailing Russ for a list of the radio gear, we have put the list on the NEWS Web site. You can download the 3-page PDF file at:

<http://www.newsvhf.com/newsletter/wa1hhn.pdf>

Our sincere condolences to Walt's family. Here is Russ's note:

Please email me for a list of radio gear of the estate of Walt Nero, WA1HHN which can be purchased by contacting me for arrangements and payments to Walt's widow Divey. All reasonable offers will be considered; please forward the list to interested parties, these items will be available till sometime in April.

Russ, n3emf@pa.rr.com

2017 Upcoming Events

Jan 7	NEWS Lunch & Board Meeting - Lulu's, Enfield, CT - 11:15am
Jan 7	NEWS General Meeting - Storrs Library, Longmeadow, MA - 1pm
Jan 21-22	ARRL VHF Sweepstakes - 2pm EST Sat. to 11pm EST Sun.
Feb 10-12	Hamcation - Central Florida Fairgrounds, Orlando, FL
Mar 11	NEWS Lunch & Board Meeting - 11:30am, Enfield, CT
Mar 11	NEWS General Meeting - 1pm, Storrs Library, Longmeadow, MA
Apr 17	Spring Sprint - 144MHz, Mon. 7-11 pm local
Apr 20-23	Eastern VHF Conference - Baymont Inn, Manchester, CT
Apr 25	Spring Sprint - 222MHz, Tues 7-11pm local
May 3	Spring Sprint - 432MHz Weds 7-11pm local
May 5-6	NEAR-fest - Deerfield, NH
May 6	Spring Sprint - 902MHz & Up, Sat. 8am-2pm local
May 13	Spring Sprint - 50MHz, 2300Z-0300Z
May	SBMS 2.3 GHz & up contest
May	Dayton
May 29	Memorial Day
June 10-11	ARRL June VHF QSO Party - 2pm EDT Sat. to 11pm EDT Sun.
June 24-25	ARRL Field Day
July 15-17	CQ WW VHF Contest – 10:00pm EDT Sat. to 1:00am EDT Mon.
July 8	NEWS Picnic & Meeting - Knights of Columbus Grounds, Enfield, CT
July	Central States VHF Society Conference
Aug	EME Conference-Texas
Aug 5-6	ARRL 222MHz & 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.
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

Dates will be added as they become available

K1IIG Beacon Update

Ron, WZ1V, posted this note from Steve, K1IIG, regarding his 2-GHz beacon on the NEWS E-mail reflector:

Due to some repairs my 2-GHz beacon on 2304.324 was taken off the air. It is back on with a new frequency and higher power. It is now on 2304.320 with 25W or 150W ERP to a 2x12 Alford slot at 480' HSL in FN31NL. It is not locked but very stable using a custom Apollo32 board by N5AC. New amplifier donated by N1JEZ (Mike, N1JEZ, posted the amplifier was courtesy of Henry, KT1J: Ed.)

I have 2 other beacons running, one on 432.320 and the other 222.060 both with 5W to wheel antennas also at 480' HSL. I am now working on a 10-GHz, 2W beacon which I hope to have on in the spring time.

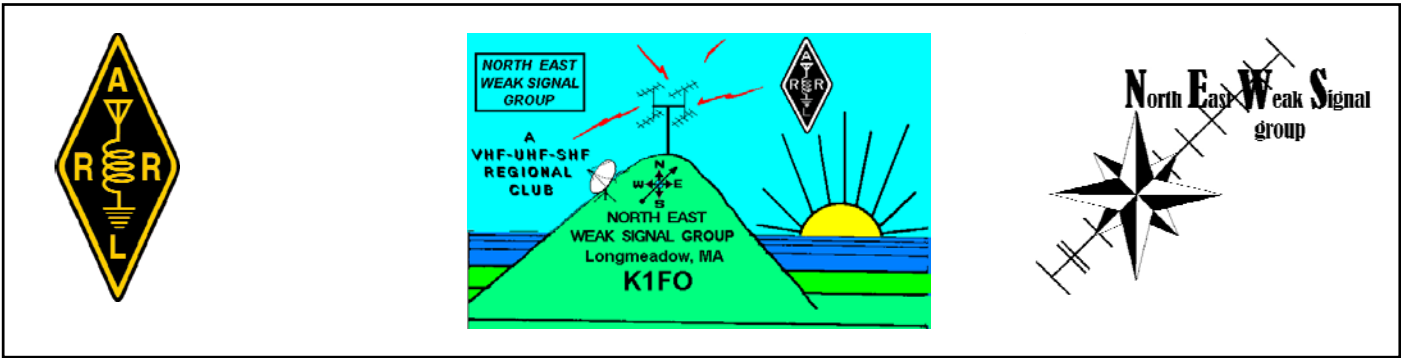
I would appreciate any RST reports and if someone reading this could post on the Packrats site I would appreciate it.

Unfortunately all beacons will be off during contests due to proximity to my station.

73's
Steve, K1IIG

N.E.W.S. Group Supporters





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!