



N.E.W.S. LETTER

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

November 2017 Volume 26 Issue 6

Next Meeting: November 18, 2017

In This Issue

Secretary's and Treasurer's Reports: page 2
Mid-Atlantic States VHF Conference Proceedings CDs: page 2
Synthesized Signal Source from China by W1GHZ: page 3-4
Calendar of Events: page 5

BOARD MEETING - 11:00 AM at Lulu's, 151 Hazard Ave. Enfield, CT All are welcomed

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
Longmeadow Library

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.

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

Send articles by e-mail to George Collins, KC1V at news.kc1v@gmail.com

1

Secretary's Report

- NEWS Meeting 23 September 2017: At Storrs Library, Longmeadow, MA
- WA2AAU convened the meeting at 1340.
- The Secretary's report was approved as published in the newsletter, W1GHZ being absent.
- N2OY reported \$3756 in the treasury and 127 members on the books. The report was approved. John noted that we are doing well despite the dues moratorium. In fact, an additional year's moratorium might be considered (pending consideration of maintaining a holdback for the deductible on the insurance).

OLD BUSINESS

- N1JEZ reported that the Mount Washington beacon is up and running.
- WA2AAU noted a "continuing problem" with the website. It needs maintenance and update. No one could remember who had volunteered to accomplish this, so no action has been taken.
- K1MAP reported that there is over \$11,000 in the conference account. The conference will be held 20/21/22 April 2018 in Manchester, CT—same agenda, same program format. He's working on a contract with the Baymont Motel.

There being no other business, WA2AAU closed the meeting at 1352.

PROGRAM

 Jared Jackson, KF2MR, presented an excellent hour-long talk on "The Never Ending Journey of Building a Rover." WA2AAU, followed Jared's talk with about 25 minutes of rover technique and technology overviews. N1JEZ and KJ1K each presented a photo album (slide show) of rovers.

Respectfully submitted, J.W. "Skip" Youngberg, K1NKR Secretary pro tempore

Treasurer's Report

It's about that time of the year where membership renewals are coming to be due. However, the NEWS treasury is currently still in very good shape, so I will be proposing at the November meeting that we waive membership dues again for one more year. As with the 2017 dues moratorium, anyone who sends payment for renewal will have payment applied and their membership extended by the appropriate length of time – think of the moratorium as an automatic, free, one-year extension of membership (pending approval, of course, of the voting membership at the November meeting).

I intend to have the membership roster with me at the November meeting, so those present can check to see their current membership expiration date (as of the time of printing) and verify that their address and contact information are correct.

73, John - N2OY

Mid-Atlantic States VHF Conference Proceedings CDs Available Now

Synthesized Signal Source from China

Paul Wade, W1GHZ 2017 www.w1ghz.org

A very useful signal source for VHF thru microwaves can be found on eBay. These inexpensive synthesizers cover 137 MHz through 4.4 GHz, with strong harmonics up to at least 24 GHz, generated by an ADF4350 chip. A unit is shown in Figure 1. The frequency is easily set with pushbuttons if you know how, but there are no instructions. Don, W1FKF, figured them out and told me, but to my knowledge no one has written anything down – so here it is.



Figure 1 - Inexpensive ADF4350 signal source from China

When powered up via the USB port, some Chinese characters come up; then the frequency is displayed as shown above, in this case 3456.155 MHz. The second line is the power level, with choices of 0 to 3 (highest).

The unit is programmed with the pushbuttons along the bottom, which change the highlighted digit, one digit at a time. Button S4 increments the highlighted character, while S5 decrements it. Button S2 shifts the highlight one character to the left and S3 shifts the highlight to the right. The unit will remain on this frequency as long as it is powered up.

To save the frequency, press button S6, which also shifts the highlight to the power level. Then the power level can be incremented with S2 or decremented with S3, and saved with S6.

The ads, shown in Figure 2, mention sweep, but I don't know how. Search "ADF4350 display" to find one. There also seem to be versions in a case for around \$100.



ADF4350 Board+ 137Mhz-4.4G RF source Sweep Phase Locked Loop Board+12864 Display

\$65.25 Was: \$68.68 Buy It Now Free Shipping 19 watching 5% off

From China

Figure 2 - Typical eBay ad

The units are reasonably stable and clean, good enough to be the LO for a simple transverter like the 3456-MHz lunchbox transverter shown in Figure 3. The synthesizer output is about 1 dBm at the highest setting, so a small MMIC amplifier is needed. Since it has a cheap crystal, the frequency isn't exact, but easily compensated with the pushbuttons.



Figure 3 – Signal source as LO in simple transverter

A final warning – run it from 5 volts. Putting 12 volts into the DC jack lets some smoke out. For a signal source, I run it from a small USB booster battery.

Calendar of Upcoming Events 2018

(*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 9	Spring Sprint - 144MHz, Mon 7-11pm local
Apr 17	Spring Sprint - 222MHz, Tues 7-11pm local
Apr 20-22	Eastern VHF Conference
Apr 25	Spring Sprint - 432MHz, Weds 7-11pm local
May 4-5*	NEAR-fest - Deerfield, NH
May 5*	SBMS 2.3 GHz & up contest
May 5	Spring Sprint 902MHz & Up, Sat 7-11pm local
May 12-13	Spring Sprint 50MHz, Sat 2300Z – Sun 0300Z
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 8-10	ARRL Sept. VHF 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
Sept 29-30	ARRL EME Weekend #1, 2.3 GHz & Up
Oct 12-13*	NEAR-fest - Deerfield, NH
Oct 27-28	ARRL EME Weekend #2, 50-1296 MHz
Oct*	Microwave Update
Nov 24-25	ARRL EME Weekend #3, 50-1296 MHz
Nov 17*	NEWS Lunch and Board Meeting, Lulu's, Enfield, CT, 11:15am
Nov 17*	NEWS General Meeting, Storrs Library, Longmeadow, MA, 1pm
Nov 30-Dec2	ARRL 160-Meter Contest

N.E.W.S. Group Supporters







































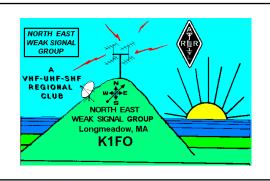






QRPmePO Box 160Limerick, Maine04048 http://www.grpme.com/?p=contact







MEMBERSHIP APPLICATION

Name:					
Call sign:	Gr	id:			
Street:					
City:			State:Zip:		
Phone (home) Optional (work)					
Email					
ARRL member: Y N					
Electronic Newsletter Delive	ry: Y N				
Operational Bands (circle)	1.2 GHz	2.3 GHz	3.4 GHz	5.6 GHz	

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 email 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!