



# N.E.W.S. LETTER

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

March 2017 Volume 26 Issue 2

# **NEXT MEETING: March 11, 2017**

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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: <a href="mailto:n2oy.vhf@gmail.com">n2oy.vhf@gmail.com</a>.

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

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## **Secretary's Report**

- NEWS Meeting 7 January 2017 at Storrs Library, Longmeadow, MA
- Called to Order by President, WA2AAU, at 1316

#### TREASURERS REPORT - N2OY

- Balance \$4286
- 101 paid up members

#### **OLD BUSINESS**

VHF Conference
 Website will be up soon
 Registration help needed
 KI2L volunteered

#### **NEW BUSINESS**

 AF1T suggests club sponsor contest plaque MOTION by W1FKF to sponsor ARRL Contest Plaque for rover or New England, Cost ~ \$75. UNANIMOUS

#### **ANOUNCEMENTS**

- Greylock 10GHz beacon off until reset
- WA2AAU has RF reference CD available \$1

#### Meeting adjourned 1330 EDT

#### **SHOW and TELL**

- W1FKF
   eBay power meter
   Lime SDR case
- W1GHZ
   New 10GHz Transverter
   Programmable Fool-Resistant Sequencer

#### **SHOW and TELL (cont.)**

N1JEZ
 Recording of K1IIG 2304 beacon received at FN44ar
 piHPSDR Raspberry Pi controller for Anan openSDR radio

 KI2L
 WSPR beacon board from QST, good from VLF to 2 meters

#### **TESTING SESSION**

 Test equipment brought by KI2L and WA2AAU: Network Analyzer and Noise Figure Meter

## **Treasurer's Report**

We've had a handful of new members join the club since this year's moratorium on dues took effect, and the club's treasury remains strong.

As voted upon at the January 2017 meeting, NEWS will be sponsoring the plaque for the top New England Division Rover in the June 2017 ARRL VHF Contest.

Registration for the 2017 NEWS VHF Conference is now open. You may register online via PayPal at

http://newsvhf.com/regpayp.html

or print a registration form from

http://newsvhf.com/regmail.html

and mail it to the address on the form to register. I look forward to seeing everyone at the meeting in March and conference in April!

73, John – N2OY



43rd EASTERN VHF/UHF/MICROWAVE CONFERENCE APRIL 21-23, 2017 BAYMONT INN & SUITES (860)-643-5645 20 TAYLOR ST. (OFF I-84 at exit 63) MANCHESTER, CT 06042



## 4/21/17 FRIDAY LODGING

2:30-5pm -- Afternoon Workshop

6:00pm 'til -- SUPER HOSPITALITY ROOM (Food & Refreshments)

& Indoor SWAP/SELL & VENDORS.

(You may want to re-think going out to eat on Fri. Nite!)

## 43rd EASTERN VHF/UHF/MICROWAVE CONFERENCE

# 4/22/17 SATURDAY REGISTRATION, TALKS, AUCTIONS, TEST LAB, VENDORS & MORE

7:30am -- REGISTRATION BEGINS

8:15am -- OPENING ANNOUNCEMENTS

8:30am -- TALKS BEGIN (see SCHEDULE below):

10:00am -- AUCTION/BREAK 10:25am -- TALKS RESUME

12:00pm -- LUNCH (Pizza & Grinders included with Registration)

1:15pm -- TALKS RESUME

1:00 - 5pm -- TEST LAB to 50 GHz: Greg Bonaguide, WA1VUG of Rohde & Schwarz

3:05pm -- BREAK

3:15pm -- TALKS RESUME

4:15pm -- AUCTION

4:20pm -- TALKS RESUME

5:20pm -- NEWS MEETING - WA2AAU 5:30pm -- Pre-Banquet Hospitality Room

7:00pm -- BANQUET BUFFET (7 PM - 8:30 PM)

8:20pm -- Tom Kirby Award Presentation

8:30pm -- VHF - MICROWAVE TRIVIA QUIZ, Dale Clement AF1T

9:00pm -- DOOR PRIZE EXTRAVAGANZA, Michele Clement

W1MKY and Don Twombly W1FKF

There will also be over a dozen additional papers on the Proceedings CD

# Be sure to check the Web site for the latest schedule and speakers at:

http://newsvhf.com/vhfconf.html

## 4/23/17 SUNDAY

8:00 - 11am -- VHF+MW SWAP/SELL & VENDORS - Included with Registration (Please contact Mark Casey K1MAP for details)

EVERY REGISTRANT RECEIVES THE PROCEEDINGS ON CD AND IS ELIGIBLE FOR PRIZE DRAWINGS.

# **DIRECTIONS & RESERVATIONS**

FROM HARTFORD: I-84E TO EXIT 63. LEFT AT FORK, RIGHT ON TAYLOR ST.
FROM WORCESTER: I-90W EXIT 9 TO I-84W EXIT 63, RIGHT OFF RAMP, RIGHT ON TAYLOR ST.

**HOTEL Overnight Rates \$79 DBL or \$99 Suite,** 

by March 20, 2017 MENTION "VHF CONFERENCE"

FREE Continental BREAKFAST for those staying at the Baymont Hotel

CALL (860)-643-5645 for BAYMONT INN RESERVATIONS

## **\*YOU MUST CALL HOTEL TO GET CONFERENCE RATE\***

#### 43rd EASTERN VHF/UHF CONFERENCE REGISTRATION FORM

April 21, 22 & 23, 2017 BAYMONT INN, Manchester, Ct.

### Online Registration at http://newsvhf.com/vhfconf.html#registrationpage

| Please fill out & return with payment:  |
|---|
| • •   |
| Name & Call:  |
| Address:  |
| E-Mail Address:   |
| REGULAR MAIL REGISTRATION @ \$20 =  |
| (Includes Proceedings CD, flea market, Saturday lunch) (Price after April 10 or at the door will be \$30)   |
| DINNER BUFFET (not available at door) @ \$30 =  |
| TOTAL =   |
| **MAKE Checks or M.O. PAYABLE To: North East Weak Signal Group**  |
| Dinner tickets available in advance only through April 10   |
| SUNDAY FLEA MARKET:<br>BUYERS & SELLERS FREE  |
| **MAKE Checks or M.O. PAYABLE To: North East Weak Signal Group** Mail to Registration Chairman Postmarked NO LATER THAN APRIL 10: John Crawford, N2OY PO Box 1112 Latham, NY 12110 treasurer(at)newsvhf.com |

- \* Sponsored by the North East Weak Signal Group
- \* ARRL-Affiliated
- \* Official Webpage: <a href="http://www.newsvhf.com">http://www.newsvhf.com</a>
  For Eastern VHF/UHF Conference latest news updates and Registration forms.

# Building a 2-Meter Horizontally Polarized Liaison Antenna Steve Jones, N1JHJ

I am a very amateur, Amateur Radio operator who enjoys building antennas and is fortunate enough to have Dale, AF1T, as my mentor.

I was working my first 10-Gig Contest on Mt. Kearsarge, NH and there were about four stations operating, including mine. One of the operators was Dave Sumner and his liaison antenna was a small 2-meter HO antenna made by M Square Antenna Systems. Years ago Cushcraft made a similar one called the Squalo. I was intrigued because Dave was getting good results with it.... Obviously not as good as the 4 element beam I use, but good results, and omnidirectional to boot. I decided to build one for myself.

My antenna stands 19-inches or more above the roof of a vehicle. It is mounted on 1/4-20 threaded rod. The rod is screwed into a 3/8-24 threaded stud which screws into a large mag mount made to accept the 3/8-24 thread.

The antenna (Fig. 1) is about 11-1/4" square. The rod is 3/16" aluminum, made in two identical pieces. The prototype (not shown) used a similar diameter solid copper ground wire. It was #6 copper. It was much easier to use for experimentation because you can re-bend the copper and adjust, but you cannot re-bend the aluminum because it will crack.

My design used parts smaller than the manufactured versions; they use 3/8" hollow aluminum tubes. They also use 1/4-20 set screws, but I chose 6-32 set screws which really should be made of stainless steel. The set screws are tapped into each piece of 3/8" thick aluminum stock, cut into little squares, according to the basic design.

The first two blocks (mounted on an acrylic insulator) serve two functions. They provide a place for the coax to attach to the antenna and they slide back and forth to shorten or lengthen the antenna, as needed. Each block has the holes for the rods and two set screws for rigidity. The shortening or lengthening is also done by adjusting the gap between the tips of the rods that face each other. The ideal gap is between 2-



Fig. 1 The N1JHJ 2-Meter Halo



Fig. 2 Feed-point Details

1/4" and 3". This gap must be centered on the previously described acrylic block. The other piece is designed to slide back and forth to adjust the SWR. It also has 2 set screws, tightening on each aluminum rod to prevent unwanted movement and strengthen the design.

The antenna is designed to tune somewhere around 144.2 MHz. The antenna is rather narrow banded. I have used it, sitting on a metal table in the house, and can easily work local repeaters, (cross polarized) but I do not recommend it since the SWR rises to 3:1 or more.

The coax was kept short (6 feet) to reduce variables and a choke was added for the same reason. Likewise, the coax was taped to the rod in a few places also to improve repeatability in tuning.

All in all the antenna was fun to build and tune, but patience is an absolute requirement. It will never be right the first time you try to put it on a meter for adjustment, but a 1:1 match can be obtained.

### New Lunar-Link Amplifier Web Site

Steve Simons, W1SMS, wrote to let us know that there is a new Lunar-Link Amplifier Web site. Steve has added Troubleshooting and Spare Parts pages. The link is:

http://manitousys.com/home/products/communications-amplifiers/series-la-amplifier

You can contact Steve at:

w1sms@manitousys.com

Tel.203.733.2110 Fax.203.746.1459

33 Ball Pond Road Danbury, CT 06811

Mailing Address: PO Box 8066 New Fairfield, CT 06812

# N.E.W.S. Group Supporters































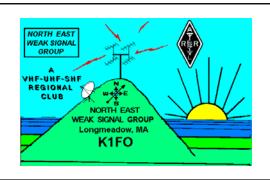














#### **MEMBERSHIP APPLICATION**

| Name:                        |         |         |              |                             |        |
|------------------------------|---------|---------|--------------|-----------------------------|--------|
| Call sign:                   | Gr      | id:     |              |                             |        |
| Street:                      |         |         |              |                             |        |
| City:                        |         |         | State:       | Zip: _                      |        |
| Phone (home)                 |         | Optio   | nal (work) _ |                             |        |
| Email                        |         |         |              |                             |        |
| ARRL member: Y N             |         |         |              |                             |        |
| Electronic Newsletter Delive | ry: Y N |         |              |                             |        |
| Operational Bands (circle)   | 1.2 GHz | 2.3 GHz | 3.4 GHz      | 432 MHz<br>5.6 GHz<br>Light | 10 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!