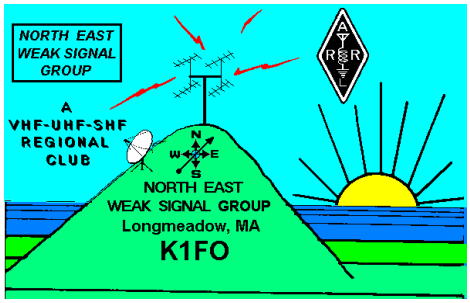

N.E.W.S. LETTER

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

April 2018 | Volume 27 | Issue 3

44th ANNUAL EASTERN VHF/UHF/µW CONFERENCE

APRIL 21-23, 2017

BAYMONT INN & SUITES (860)-643-5645
20 TAYLOR ST. (OFF I-84 at exit 63)
MANCHESTER, CT 06042

Be sure to check http://www.newsvhf.com for the latest conference updates

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Attention! Our Conference is Looking Door Prize Donations – Please See Page 5

GENERAL MEETING

The April NEWS Meeting will be at the Conference.

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 $10 per year.
Apply to John Crawford, N2OY. E-mail: n2oy.vhf@gmail.com (see page 7).

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

44th ANNUAL EASTERN VHF/UHF/MW CONFERENCE

Sponsored by the North East Weak Signal Group

Fri./Sat./Sun. April 20-21-22, 2018

BAYMONT INN & SUITES,

860-643-5645

20 Taylor St., Manchester, CT 06042

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

Registration for this year's Conference is ONLY $20!

The Advance Registration **Deadline is April 15**.

Registration at the door will be $25, so make your reservations NOW!

Registration Includes All Three Days and:

Friday Night *Super Hospitality Room*

Saturday Pizza and Sub Lunch

Conference Proceedings CD

(Extra Proceedings CDs are just $5 each at the Registration Desk)

Saturday Evening Banquet Buffet Tickets are $30.

Banquet Tickets Must be Reserved by April 15

**** On-Line Registration is Available NOW at www.newsvhf.com ****

Schedule Conference of Activities

FRIDAY:

7 am -- FREE Continental BREAKFAST (for those staying at the Baymont Inn)
Noon – Lunch on your own
Afternoon – Station Automation Symposium: Lead by Roger Rehr, W3SZ.
Or Tour of New England Aviation Museum
(see additional information on page 3)
6 pm to 10 pm-- *Super Hospitality Room,* Indoor Swap and Vendors

SATURDAY:

7 am – FREE Continental BREAKFAST (for those staying at the Baymont Inn)
8 am to 5 pm – Presentations and Indoor Vendors
Noon – PIZZA, SUB and Beverage LUNCH (INCLUDED with Registration!)
6pm – Pre-Banquet Hospitality
7pm – BANQUET Buffet, Tom Kirby Award Presentation, Banquet Speaker, Trivia Quiz, Door Prizes

SUNDAY:

7 am -- FREE Continental BREAKFAST (for those staying at the Baymont Inn)
8-11 am -- SWAP/TAILGATE in Parking Lot

TRANSPORTATION:

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

QUESTIONS? Please Contact:

Mark K1MAP, (hospitality, hotel, swaps/vendors) map92map@gmail.com, (cell) 413-777-9828

Paul, W1GHZ, (presentations, proceedings) w1ghz@arrl.net, (home) 802-563-2110

Friday Afternoon Conference Programs:

Friday Symposium, April 20, 1:30 to 5:30 PM

W3SZ -- Station Automation

Roger Rehr, W3SZ, will lead a symposium on Station Automation. In the final part of the symposium, participants will have the opportunity to do some simple programming of an Arduino board and take it home for further experimentation. The Arduino MEGA boards will be available to participants at a cost of $10 (look up current price online), but must be reserved in advance by March 31 so that we can get the quantity price.

Please send email to w1ghz@arrl.net to reserve an Arduino or to indicate participation. If you already have an Arduino board, or just wish to be a spectator, then there is no cost. Participants are asked to bring a Windows laptop if you have one, and to download some software in advance so that we don't overwhelm the hotel Wi-Fi - Roger will guide you through installation.

Details from W3SZ

The Station Automation symposium will focus on the Arduino platform. There will be an emphasis on projects useful to those doing VHF/UHF/microwave work, but many of the projects could be used by any ham. If you plan to attend the seminar please send an email to **Paul Wade at: w1ghz@arrl.net** by March 31, 2018, letting him know you plan to attend. Walk-ins will be welcome, but may miss out on some features of the symposium by virtue of not pre-registering.

The symposium will be organized somewhat like a programming boot camp, with the goal being that each attendee will be able to leave the symposium able to write his/her own Arduino code and create his/her own Arduino-based ham-radio-related projects.

Those who bring their Windows laptops to the symposium will be able to start using the Arduino IDE (Integrated Development Environment) during the symposium, assuming that we can get public Wi-Fi access for the conference room. It would be ideal for those bringing their laptops to pre-install the Arduino IDE from this URL:

https://www.arduino.cc/en/Guide/Windows

The symposium will consist of the following:

- First, a general introduction to microcontrollers (MCUs) and Single Board Computers (SBCs) and why their use may benefit the typical ham station.
- Next, a brief discussion on why the Arduino is the platform of choice and what choices are available within the Arduino product line.
- Third, instructions for downloading and getting started with the Arduino IDE, for those who haven't done this before the symposium.
- Fourth, we will introduce the basics of the Arduino language, which is a subset of C++. [NOTE from W1GHZ: you can hack other people's online code to do stuff without learning the language]
- Fifth, we will discuss some of the online resources available for Arduino users.

The remainder of the symposium will be a series of presentations of individual Arduino-based projects with details of the function and capability of each project and then a review of salient portions of the code for each project, where appropriate. Those who have brought their laptops and who have the Arduino IDE loaded on the laptops can download the code and follow along on their laptops during the presentation. If they have brought an Arduino MEGA or compatible they can even run the code being discussed during the symposium.

Friday Symposium: W3SZ -- Station Automation (cont.)

Projects will likely include (but not be limited to):

- Logging-Program-Based Arduino IF/Bandswitch (can use either an UNO or a MEGA)
- SuperMEGA SO2RDuino - an expansion of Paul Young K1XM's SO2RDuino to fit the needs of VHF and up contesters (requires a Arduino MEGA 2560)
- Arduino Ethernet Device Controller (requires the MEGA 2560)
- Arduino-based Remote RF Power Monitor (requires the MEGA 2560)

In preparation for the seminar, those planning to attend can find the code, videos and slides at:

http://w3sz.x10.mx/StationAutomation87.html

This symposium will not cover the non-Arduino subject matter on that webpage, and will expand on the Arduino subject matter on that page, but the page is a good start for getting up to speed on the topics to be discussed in the symposium.

Having the code snippets loaded on your laptop and available at the seminar will make it easier to understand the code as it is discussed. A pdf file with all of the code to be discussed is at the URL below. Wait until shortly before the symposium to download this file so that you get the most recent code:

http://w3sz.x10.mx/StationAutomationSeminar_Code_Handout_W3SZ.pdf

Again, if you are planning on attending the symposium, please let **Paul Wade (w1ghz@arrl.net)** know by March 31.

73,
Roger Rehr, W3SZ

Alternate Friday Program:
New England Aviation Museum

For those not interested in the Friday Symposium, there will be a self-guided tour of New England Aviation Museum in Windsor Locks, CT. If there are enough folks interested, we might be able to arrange a discount and tour guide. We will be looking for people who can drive and transport other on the 1/2-hour trip to the museum.
Please send email to Mark, K1MAP, at map92map@gmail.com if you would like to participate in the tour.

Conference Speakers:

- W2RMA -- Rover Master Control Box
- W9JJ -- Update - 1st Annual 222 MHz and Up Distance Contest
- N1JEZ & VE2UG -- Experiments on 122 GHz
- VE2UG -- Finding Sites with HeyWhatsThat
- W1GHZ -- New Cheap & Simple Transverters
- WA2AAU -- Noise on our Shared Microwave Bands
- WA1TE -- K1SIG/R Rover
- N6NB -- Obstacle Gain: Reinventing the Wheel in 2018
- W3SZ -- Station Automation Symposium

Secretary's Report – March Meeting:

NEWS Meeting, 24 March 2018, at Storrs Library, Longmeadow, MA

Called to Order by President, WA2AAU, at 1325

TREASURERS REPORT: - N2OY

- Balance $3737
- 98 paid up members

K1MAP: Conference account balance is roughly $11K

ANOUNCEMENTS:

- WA2AAU - Club received three gavels for 2016 and 2017 Contests
- WA1ZMS beacon is back on

OLD BUSINESS: (none)

NEW BUSINESS

- WA1MBA: 78 GHz - ARRL is petitioning for higher ERP
- K1BXE: CT doesn't permit mobile operation by hams
- K1MAP: FWSS putting 2 meter beacon in Cape Hatteras FM25fg
- W1FKF: NEWS considering club area at NEARFEST

Meeting Adjourned at 1333

SPEAKER:

Jeff Millar WA1HCO of Valeo Radar Systems

MICROWAVE UPDATE 2018

Fairborn, Ohio (near Dayton) October 11-14, 2018

Holiday Inn Dayton/Fairborn I-675

An international conference dedicated to microwave equipment design, construction, and operation

Hosted by the **Midwest VHF/UHF Society** Registration & Conference Updates: **www.MicrowaveUpdate.org**

Further info: Tom Holmes (MUD 2018 General Chair) at **n8zm@mvus.org**

Mid-Atlantic States VHF Conference Sept 28-30

Sponsored by the Mt. Airy VHF Radio Club (Packrats)

Papers and presentations solicited!

Send your topic or title to: Rick Rosen, K1DS (**rick1ds@hotmail.com**)

Buy, Sell, Swap or *Donate*

Amplifiers - W1OUN

1 - ICOM PW-1 Solid-State Kilowatt (160-6 meters) in excellent condition; $3K.

2 - A pair, 2-M and 70-CM, of LunarLink amplifiers (personally built by K1FO) with their common 3-kV power supply and the relays, etc. required to put them on the air. They easily deliver 1.5-kW output; $4K for the lot. I prefer to sell the pair together with the power supply, rather than "orphan" one of them without a power supply.

As they are too heavy for me to move into a car, it will be best if anyone interested in them drive up to Concord, MA and view them where they are stored at a local Ham's house. Please contact me, Gordon Pettengill, W1OUN, by e-mail at gpetten@comcast.net for more information.

Conference Door Prizes If you have anything that you would like to donate as a door prize let Mickie, W1MKY, or Don, W1FKF, know. Please no boat anchors!! (dpclement@tds.net donw1fkf-prizes@yahoo.com)

N.E.W.S. Group Supporters

Mini-Circuits®
ISO 9001 ISO 14001 AS9100 Certified

FlexRadio Systems®
Software Defined Radios

Bird Technologies®
You're heard, loud and clear.

DAVIS
ROPE & CABLE ASSEMBLY
DavisRopeAndCable.com

ROGERS CORPORATION

Directive Systems

ELECRAFT

Lunar-Link International

TIMES MICROWAVE SYSTEMS
An Amphenol Company

SSB Electronic USA

DAVIS RF
DIVISION OF ORION WIRE CO., INC.

DOWN EAST MICROWAVE
LIVE OAK, FLORIDA
AMATEUR RADIO EQUIPMENT FOR 50MHZ AND ABOVE

AMERICAN TECHNICAL CERAMICS

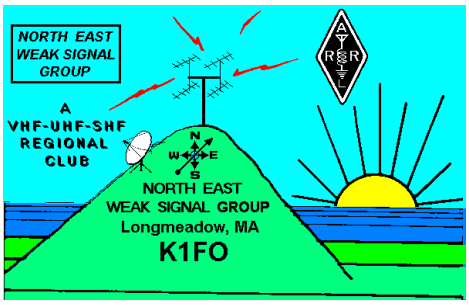
M²
ANTENNA SYSTEMS, INC.
The New American Antenna

DX ENGINEERING

MOUSER ELECTRONICS.

Test Lab Greg Bonaguide, WA1VUG

ROHDE&SCHWARZ



North East Weak Signal group

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 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 $10/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!