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President: N2GZ, Greg Zenger Vice President: N1JFU, Steve Meuse Current Officers NEWS Letter Editor: W1WSO, Tom Filecco Secretary: W1GHZ, Paul Wade Treasurer: WA1MBA, Tom Williams

→→→ Microwave Update 2011 ←←← and

→→→ Eastern States VHF/UHF Conference ←←←

Http://www.microwaveupdate.org/

October 13-16, 2011 Enfield, CT

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Don't forget

The North East Weak Signal Group 2 Meter VHF and Above 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 Tom Williams, WA1MBA. Email tomw(at)wa1mba.org 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 to Tom Filecco W1WSO, 163 Bemis St., Terryville, CT 06786, or preferably via email to <u>w1wso@comcast.net</u>.

President's Corner

First and foremost, I would like to thank everyone for welcoming me aboard to serve as president. Just a little over two years ago I was finishing up degrees in physics and electrical engineering at Clarkson University. At that time I had served as president of the university's club, K2CC, for three semesters. NEWS President Emeritus Dave Olean, K1WHS, has often mentioned the importance of engaging youth in our hobby, and I would like to use the remainder of this column to share with you my experiences as a youth in this hobby and some thoughts on where the hobby might be headed.

When I was little I used to help my grandfather, W2EER, fix broken things. When he was coming over to visit, or before visiting him, it was my job to collect things from the house that needed fixing. Eventually I began attempting to fix my own toys, with an increasing success rate. By high school I had been tinkering with electronics, and picked up an interest in metal working. While at college, I took metalworking classes and spent a lot of time in the machine shops. I also started repairing and calibrating electronic test equipment in my dorm room. Undoubtedly ham radio was an appropriate hobby for me; I just had not discovered it.

At the end of my sophomore year my best friend, John Robinson (then KB1DVO, now K1JR) showed up to class with one of Yaesu's VX-7R handheld transceivers. I thought it was interesting, but I did not fully understand the purpose of the device. He convinced me to attend one of the radio club meetings; and so I did. The clubroom was a mess, but it was a beautiful sort of mess. Shelves were piled high with old magazines and books, workbenches were covered in electronic contraptions and parts bins and rack mount cabinets were overflowing. It was one of the last meetings of the semester and the topic of discussion was a road trip to Dayton. It did not take much persuasion to get me to come along. I was given a copy of the technician question pool and told to read it over. At Dayton not only did I get my ticket, but I fell head over heels in love with the hobby.

I later found out that the school club had recently been dormant, with no activity or members for several years. Some kids had found it (either by breaking in, or perhaps just saw through the door when the facility maintenance staff were changing light bulbs or checking fire extinguishers) and decided to find out what all that stuff was used for. With a bit of guidance from the club's advisor, these kids got their licenses and started the club up again.

I upgraded to General Class that summer, and that

inspired many of the other members of the club to do the same.

It was at a Rochester, NY hamfest that I was first exposed to the microwave bands. Some members of the Rochester VHF Group had a 47GHz demo setup where they were bouncing their signals off a sheet of aluminum foil on a flag pole. I was truly inspired. This is what got me seek out a regional VHF+ club after graduation.

During my tenure as a member and president of a school club I learned a lot about how to capture the interest of my peers. Today we have a robust commercial infrastructure that enables almost everyone to be connected almost anywhere and at almost any time. To today's youth (for the purpose of this article I will refer to the 'youth' demographic as anyone under the age of approximately 25) the global connectivity aspect of amateur radio will not be what captures their interest. Instead I think we need to focus on what amateur radio is doing to push the envelope of technology.

Demos of software defined radios certainly capture a wide audience. Perhaps it is the bright colors or computer-centric nature of SDRs. Contesting also seems to be popular, as it rapidly builds a sense of achievement.

The commercial world is dominated by digital communications and this is what students are being prepared for. With their personal lives dominated by smart phones and texting, most youth will avoid making a phone call when they can simply send a quick text message. I suspect as more youth get involved we may see more digital communications in amateur radio. We have been using advanced digital communications in EME and scatter operations; perhaps the next step is to bring it to contesting and even casual operating.

What does this mean for the future of amateur radio, and VHF+ operating in general? There is change coming. There needs to be. Many of us will resist; this is a hobby with a strong sense of tradition, but the worst thing we can do as elmers is to discourage the 'young blood' from doing nontraditional things and evolving the hobby. Keep an open mind and be prepared to learn as much from them as they will learn from you. If you can think of ways to bring the hobby to the youth, we might be able to bring more youth into the hobby. With that said, I hope to see everyone at our next meeting at Microwave Update October 13-16 at the Holiday Inn in Enfield CT.

Greg Zenger, N2GZ

Treasurer's Report

The treasury is strong, but the renewal of memberships is quite slow as can be the case the first few months after the renewal date of early July. We presently have 56 paid up members, and by January typically have more than 90. I will be sending out reminder messages to everyone soon, and hopefully that will stimulate some membership renewals. See you all at the conference where we will have a short club meeting.

Tom WA1MBA

Secretary's Report

Minutes of NEWS meeting 9 July 2011 (Picnic) at Knights of Columbus, Enfield, CT:

President K1WHS called meeting to order at 1317

Treasurers Report:

- Picnic is membership renewal time
- 106 paid members plus 14 permanent most W need to renew
- FY end balance ~\$4200 before picnic expenses

ELECTION

- W1ZC is only Director with unexpired term •
- Board of Directors: N1DPM, K1WHS, W1COT elected unamimously
- Treasurer WA1MBA re-elected unanimously
- Secretary W1GHZ re-elected unanimously
- Vice-President N1JFU elected unanimously
- President two nominations, WA1HHN and N2GZ.

N2GZ elected 17 to 14.

Newsletter Editor - W1WSO elected unanimously, N1JEZ assistant

ANNOUNCEMENTS

- Round of appreciation for outgoing officers
- VE3CRU is operating in Northern Maine for CQ VHF contest
- Please take video of operations N1JFU will compile a video

Meeting Adjourned

Followed by MDS testing at 10 GHz and 5.76 GHz

MDS Test Results:

North East Weak Signal Group Annual Picnic - 9 July 2011

Test results - 10 GHz and 5.76 GHz

CALL	<u>10 GHz MDS</u>			<u>10 GHz ERP</u>	
	<u>lost</u>	<u>back up</u>			
				_	
W1JHR	-96	-90	dB	-9	dB
K2AEP	-90	-84	dB	-29	dB
WW1Z	-80	-81	dB	-22	dB
W1GHZ	-97	-95	dB	-2.5	dB
W1AIM	-97	-95	dB	-4	dB
N1JFU	-98	-98	dB	0	dB
W1EX	-98	-94	dB	-6	dB
W1FKF	-96	-94	dB	-6	dB
N1JEZ	-96	-95	dB	-5	dB
W1RT	-96	-84	dB	no xmit	dB
Computer	-101		dB		dB
	5.76 G	Hz MDS		5.76 GHz	z ERP

W1AIM N1JEZ WW1Z W1GHZ	-57 -57 -25 -57	-54 -55 -20 -54	dB dB dB dB	0 2 -40 -8	dB dB dB dB
W1GHZ	-57	-54	dB	-8	dB
W1JHR	-54	-53	dB	-30	dB





N.E.W.S. Group Officers

PRESIDENT:

N2GZ, Greg Zenger 72 Plants Dam Rd. East Lyme, CT 06333-1427 - FN31ui Home: 860-373-0073 n2gz @ gregzenger.com

ACTIVE ON: 6, 2, 432, 10 GHz.

VICE PRES: N1JFU, Steve Meuse 80 Walnut St. West Bridgewater, MA 02379 - FN42la Home: 508-345-3742 <u>smeuse @ gmail.com</u> ACTIVE ON: 6, 2, 222, 432, 10 GHz.

SECRETARY: W1GHZ, Paul Wade 161 Center Rd. Shirley, MA 01464 - FN42en Home: 978-425-2564

w1ghz @ arrl.net

ACTIVE ON: 6, 2, 222, 432, 903, 1296, 5760, 10GHz, 24GHz.

TREASURER: WA1MBA, Tom Williams POB 28 Shutesbury, MA 01072 - FN32sl Home: 413-259-1921 tomw @ wa1mba.org

ACTIVE ON: 6, 2, 432, 903, 1296, 2304, 3456, 5760, 10, 24, 47 GHz.

NEWSLETTER EDITOR: W1WSO, Tom Filecco 163 Bemis St. Terryville, CT 06786 - FN31lq Home: 860-506-4289 w1wso @ comcast.net ACTIVE ON: 6, 2. SPECTRUM MGR: K1MAP, Mark Casey 303 Main Street Hampden, MA 01036 - FN32 Home: 413-566-2445 <u>map @ mapinternet.com</u> ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz

BOARD OF DIRECTORS:

K1WHS, Dave Olean (2 yr) 177 Dixon Rd. Lebanon, ME 04027 - FN43mj Home: 207-658-7758 <u>k1whs @ metrocast.net</u> ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz, 24 GHz.

N1DPM, Fred Stefanik (2 yr) 50 Witheridge St. Feeding Hills, MA 01030 – FN32qb Home: 413-786-7943 <u>n1dpm @ verizon.net</u> ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz.

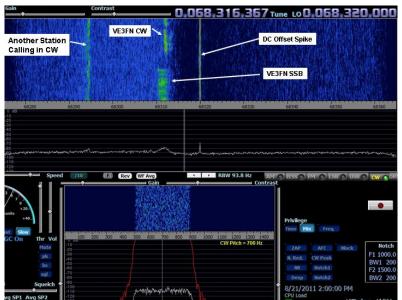
W1COT, Bob Leiper (2 yr) 47 Diane Dr. Vernon, CT 06066 – FN31st Home: 860-649-6690 releiper @ ix.netcom.com ACTIVE ON: 6, 2

W1ZC, Dick Wilborg (1 yr) 791 Brookline Rd. Mason, NH 03048 – FN42dr Home: 603-878-3680 w1zc @ myfairpoint.net ACTIVE ON: 6, 2, 432, 1296

UPDATE on the FT-817 Panadapter

N1JEZ - Mike

Since this original article was written, I've had the chance to utilize the FCD on 10 GHz. On Sunday, during the first weekend of the 10 GHz and Up Cumulative, I was on Mt Mansfield, FN34om during some significant rainscatter propagation. Below is a screen shot of VE3FN in the waterfall display on 10 GHz. Ray was in FN26rf, which was 234km at 325° via direct path. I ended up pointing 150° AZ.



It was very easy to peak up on Ray. I immediately spotted his signal in the waterfall and adjusted AZ/EI for max signal. I then tuned my FT-817 to hear his signal.



W1FKF in CW

Above is a shot of W1FKF during the same event at 265km in CW. You can see the spreading and Doppler shift on his signal in the CW window.

Microwave Update 2011

http://www.microwaveupdate.org/

The North East Weak Signal Group (NEWS) is proud to sponsor the combined Eastern VHF/UHF conference and Microwave Update 2011 Conference in Connecticut October 13-16, and the club is busy making preparations. Our dedicated committee consists of volunteers from NEWS, the Mt. Airy VHF Radio Club (PackRats) and others, and we aim to please.

Your committee this year includes:

Paul Wade, W1GHZ - MUD Program Chairman and Proceedings Editor Dave Olean, K1WHS - VHF Program Co-Chairman Ron Klimas, WZ1V - Facilities Chairman Tom Williams, WA1MBA - Publicity Chairman Steve Simons, W1SMS - Registration Chairman Greg Zenger, N2GZ - Registration Co-Chairman Phil Theis, K3TUF - Registration Webmaster Claire Theis, KA3TUF - Registration Webmistress Mickie Clement, W1MKY - Doorprize Chairwoman Tom Perkins, AC1J - Doorprize Chairman Beth Wade - Ladies Program Chairwoman Bruce Herrick, WW1M - Tour Chairman Mark Casey, K1MAP - Hospitality & Flea Market Chairman, Tour support Art Needham, W1TDS - Hospitality & Flea Market Co-Chairman Matt Reilly, KB1VC - Hospitality Co-Chairman, Lab support Steve Meuse, N1JFU - Audio/Visual Support Don Twombly, W1FKF - Audio/Visual Support John D'Ausilio, W1RT - Audio/Visual Support Webmasters: Ron WZ1V, Phil Theis K3TUF & Claire Theis KA3TUF Emergency Contacts: WZ1V & K1MAP - cell & radio, W1GHZ-cellphone Bruce Wood, N2LIV - Technical Advisor Stan Hilinski, KA1ZE - Technical Advisor

We also wish to thank our Thursday and Friday night Hospitality Room sponsors, Down East Microwave, Inc., and The Mt. Airy VHF Radio Club (Packrats).

Special thanks to Greg Bonaguide, WA1VUG of Rohde & Schwarz America

managing the Testing / Lab Session this year.

Please join us for this premier Conference October 13-16. Thank You!

73, Ron WZ1V, committee volunteer

Preliminary Conference Schedule

Thursday Oct. 13:

11 AM - Leave Enfield for Haystack Tour.

1 PM - Arrive Haystack Observatory for private tour.

6 - 8 PM - Return to Enfield (time dependent on optional dinner stop).

6 PM - 11 PM - Hospitality room (sponsored by Down East Microwave Inc.)

Friday Oct. 14: 8:00 AM - Registration

- 9:15 AM W5LUA Stability and Low Noise Amplifiers
- 10:00 AM W1AUV Contest Planning 10 GHz and Up Roam
- 10:30 AM Break
- 10:45 AM WA1MBA Progress on the 78 GHz LNA
- 11:30 AM W1GHZ 10 MHz Filter for GPS Reference
- Noon: Lunch in ballroom
- 1:15 PM Auction
- 1:30 PM K2UYH Small Station EME
- 2:30 PM W3HMS EME with a 3m dish on 1296 MHz
- 3:15 PM Break
- Afternoon Test Lab to 48 GHz by Greg Bonaguide from Rohde & Schwarz
- 3:30 PM WB2BYP Improvised 28 ft Dish Mount
- 4:30 PM WD5AGO Low Cost Horn Antenna for 23cm EME
- 5:30 PM Dinner on your own
- 6:00 PM 11:00 PM Hospitality Room (sponsored by Packrats)
- 7:00 PM Swap meet

Saturday Oct. 15 (concurrent talks in separate rooms, MUD and VHF):

8:00 AM - Registration

8:30 AM - MUD - WA5VJB - Waveguide Basics

8:30 AM - VHF - Welcome

9:00 AM - MUD - WA4LPR - Tutorial (2 hours) - The Science and Practice of Phase Noise Measurement

9:00 AM - VHF - KA2LIM - Building a portable Multi-Limited VHF Contest Station

10:00 AM - VHF - W1WSO - 6 Meter Beacon

11:00 AM - MUD/VHF - Break

Test Lab to 48 GHz by Greg Bonaguide from Rohde & Schwarz

11:15 AM - MUD - N1JEZ - A Panadapter for the FT-817

11:15 AM - VHF - K4SME - Family Roving

Noon: Lunch - on your own

1:15 PM - MUD/VHF - Auction

1:30 PM - MUD - WA1ZMS - Make More Miles with Your Mixers

- 1:30 PM VHF N1DPM 1 KW Solid-State Amp for 144 MHz
- 2:15 PM MUD VE4MA Preparation for 78 GHz EME
- 2:15 PM VHF VE2DFO 2KW LDMOS amp for 144/222 MHz
- 2:45 PM MUD/VHF Auction (including 2M KW Solid-State amps)
- 3:00 PM MUD/VHF Break

3:15 PM - MUD - MUD - W1RT & ON4IY - W1RT/R Rover LO Automation

- $3{:}15\ \text{PM}$ VHF W2ZV Modifying the W6PQL LNA PCB for 144 through 902 MHz
- 4:00 PM VHF WA1ZMS The 1.5kW water cooled SSPA amp used at W2SZ this year
- 4:15 PM N1JEZ/KT1J Experiments on 122 and 241 GHZ
- 5:00 PM NEWS Group meeting
- 7:00 PM Dinner Banquet
- 8:30 PM Presentation / Door prize drawings

Sunday Oct. 16:

8:00 AM - Outdoor Flea Market, rear parking lot

Note: if anyone has been left out, please notify w1ghz (at) arrl.net

Directions to MUD

From Bradley International Airport:

Take Route 20 East to Interstate 91 North. Take Exit 49, bear right at the end of the ramp, and take your immediate right onto Bright Meadow Blvd. The Hotel will be on your left.

From Springfield:

Take 291 West to Interstate 91 South. Take exit 49 (the first exit in Connecticut). Take a left at the lights at the end of the ramp. Go through one set of lights. Take a right at the next set of lights onto Bright Meadow Blvd. The hotel will be on your left.

From New Hampshire:

Take Interstate 93 South to Interstate 495 South to Interstate 290 to Mass Pike (I-90) West to exit 6. After toll booth, take a left on 291 to Interstate 91 South. Take exit 49 (the first exit in Connecticut). Take a left at the lights at the end of the ramp. Go through one set of lights. Take a right at the next set of lights onto Bright Meadow Blvd. The hotel will be on your left.

From Boston:

Take Mass Pike (I-90) West to exit 6. After toll booth, take a left on 291 To Interstate 91 South. Take exit 49 (the first exit in Connecticut). Take a left at the lights at the end of the ramp. Go through one set of lights. Take a right at the next set of lights onto Bright Meadow Blvd. The hotel will be on your left.

From Rhode Island:

Take Interstate 95 South to exit 69, Route 9 North to Interstate 91 North to exit 49. Bear right at the end of the ramp, take your immediate right onto Bright Meadow Blvd. The hotel will be on your left.

From Vermont:

Take Interstate 91 South. Take exit 49 (first exit in Connecticut). Take a left at the lights at the end of the ramp. Go through one set of lights. Take a right at the next set of lights onto Bright Meadow Blvd. The hotel will be on your left.

FOR SALE

Please email ads to <u>w1wso@comcast.net</u>.

Original owner Icom Pro radio in excellent condition. Original box (with all the original packing), manual, microphone and power cord. Rig has special 'Transverter' mode and the famous multi color bandscope (that has a hold function) that is very useful. All for \$1100. PayPal can be accepted or good old cash. Feel free to ask questions. Other good stuff available as well. Reply to: wa1hhn@aol.com or wa1hhn@yahoo.com.

A failed 10Ghz., 1 Watt portable set-up. can be used as a fixed or Rover setup. This was working and I used it for some 3 years without a problem until one time when Roving where a large wind gust caught the dish and pulled the whole setup over while I was operating. It includes a 10 meter IF radio, 10M to 2M transverter, 2M to 10Ghz transverter and one watt amplifier. The LO uses a Frequency West brick oscillator (very stable). There is even a J 38 hand key mounted next to the IF rig on the transverter box. I had some \$800 invested in this thing at the time and made many nice contacts. Looking for best reasonable offer. Contact me for details - wa1hhn@aol.com or wa1hhn@yahoo.com

Serious Amplifiers For Sale: 432 amp using a pair of 3CX800's 222 amp using a single 8877 Each one has its own rather heavy power supply. Please contact me for details -

wa1hhn@aol.com or wa1hhn@yahoo.com



N.E.W.S. Group

Membership Application

Name:	Ci	all sign:	Grid:
Street:			
City:	State:	Zip:	
Phone (home)	Optional (work)		
Email			
ARRL member? Y N Electronic Newsletter	Delivery? <u>Y</u> <u>N</u>		
Operational Bands (circle) 50 MHz 144 MHz	222 MHz 432 MHz 9	903 MHz	
1.2 GHz 2.3 GHz 3.4 GHz 5.6 GHz 10 G	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 6 meetings per year, held at a centrally located facility, and provide a "NEWSLETTER" that is distributed 2 weeks prior to each meeting. Any contributions to this publication are appreciated and can be sent to: Don Twombly, W 1FKF 23 Maura Dr. Woburn, MA 01801 Email: donw1fkf-news (at) yahoo (dot) com. Dues are \$15/year. Remember, this group is formed by VHF'ers for VHF'ers.

Mail to:

North East Weak Signal Group

c/o WA1MBA Tom Williams PO Box 28

Shutesbury, MA 01072

Email: tomw (at) walmba (dot) org ARRL Affiliated Club

