



N.E.W.S. LETTER



The Publication of the North East Weak Signal Group

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Pres: N1JEZ, Mike Seguin
V P: KA1OJ, Mark Foster

Current Officers

Secretary: W1GHZ, Paul Wade
Treasurer: WA1MBA, Tom Williams

Next Meeting July 12, 2008 The Annual N.E.W.S. Picnic

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2 Meter VHF and Above Net
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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@wa1mba.org
You may download an application from our web page <http://www.newswhf.com>

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Preferably via email with "Newsletter" in the subject line to donw1kf-news@yahoo.com

The President's Corner

Thanks to Mark, KA1OJ for pinch hitting for me at the March meeting. The weather was just dreadful. In Burlington, we had significant ice late in the day that would have made travel nearly impossible. I'm glad I decided to stick close to home!

I enjoyed myself at our annual Eastern VHF Conference again this year. Even though I play 'Mr AV' and run around setting stuff up, it's still fun to see everyone. A big Thanks! to everyone who works so hard to make this event such a success each year.

At the picnic this year, we'll be looking to replace one of our Board of Directors. Mark, K1MAP's term has expired. The term is for 2 years. If you are interested, let me know. The job is pretty easy as far as I can see. The Board shows up before our regular meeting and has lunch. We usually have a short discussion on business for the regular meeting, but it mostly involves food. So if you like to eat, this job is for you.

It's been suggested that we move the date for our September meeting. Right now it's set for September 27th. This conflicts with the Middle Atlantic States VHF Conf. We can discuss this further at the picnic.

The Cross Border MAD was really fun. I was on Mt. Mansfield (FN34om) with AF1T, W1MKY and N1JFU. The weather cooperated with no rain and just enough breeze to keep the bugs down. Mark, K1MAP has a report in this issue.

I had the time this year to operate in the June VHF contest. I was on once again from my camp in FN44ar. It was a hoot this year with 6M opening for most of the day on Sunday! I ended up with 83 grids worked. It was nice to see 6M open during a contest for a change.

As always, we're looking for interesting upcoming meeting topics. It doesn't have to be a full presentation. A simple 'show and tell' is always welcome. If you have any ideas/suggestions please let me know.

Finally, we have a new NEWSLetter Editor. Don, W1FKF has taken over the reigns from Del, K1UHF. Many, many thanks to Del for an outstanding job keeping us all informed of our clubs activities!

73, Mike, N1JEZ

From our Treasurer

Hi - This is your club treasurer, Tom WA1MBA. The July picnic/meeting is the start of the new club year. It's when we have fun, food, elect our officers, and renew our membership. I will bring the database with me, and try to make it easy to pay your dues for the upcoming year. Of course, some of us have paid ahead, and its probably a good time to check that our database has that correct also. Dues are \$15 (per year). Checks are preferred, but I will also be able to take cash. If you can't make the meeting, you can just send your check to me. And, by the way, thanks to those of you who have renewed already. My address is:

Tom Williams
PO Box 28
Shutesbury, MA 01072

Checks should be made out to "NEWS Group" (or you could write the whole thing out "North East Weak Signal Group"), either one works with the bank. There is also a lifetime membership available if you are interested. It costs \$400 for someone under 65 years old, or \$300 for someone 65 or older.

73s, see you at the picnic, Tom, WA1MBA

From our Secretary

NEWS Meeting 8 March 2008, Storrs Library, Longmeadow, MA

Board of Directors meeting convened 1219 at Royal Buffet, Enfield, CT

Agenda for NEWS meeting:

- NEWSletter running late
 - Treasurers report
 - January Contest wrapup
 - 78 GHz in 10 GHz and Up Contest
 - VHF Conference
 - Microwave Activity Days
- Board meeting adjourned

NEWS Meeting, Storrs Library, Longmeadow, MA

Called to order by Vice President, KA1OJ, at 1322

OLD BUSINESS - none

NEW BUSINESS:

- N1EKV - lunch alternatives
- W1ZC - new members signing up via web don't receive acknowledgement or NEWSletter

MOTION - Treasurer to send welcoming email or letter to new members. UNANIMOUS

- WZ1V will add instructions to the web site for joining NEWS email reflector

ANNOUNCEMENTS:

- Conference registration is now available via PayPal
- Microwave Activity Day, June 7, across Canadian border
- WZ1V is still working on January Contest Summary, fixing Rumored Scores page
- KJ1K - need to agree on date for GPS working session. email to kj1k@arrl.net
- KA1OJ - 10 GHz & Up Contest results show no contacts for 78 GHz, but three club mem-

bers made them. ARRL will publish correction.

- WA2AAU - suggests that a multi-op could add more to club aggregate score than same 4 ops individually
- Next meeting at Eastern VHF/UHF Conference
- Club Picnic July 12

TREASURERS REPORT:

Balance is \$1865, projected expenses for rest of year ~\$836

PROGRAM:

WA1MBA described progress on 78 GHz amplifier project. The band 77.5 to 78 GHz is a primary allocation for the amateur service. Most amateur bands are secondary allocations.

April Meeting

Sorry, no notes as the Secretary was AWOL.

73, Paul W1GHZ

Cross-Border Microwave Activity Day (June 7, 2008)

We had a terrific MAD-MAD-MAD weekend. The weather was nearly perfect. Reports are still coming in, but it looks like over 20 stations on both sides of the border participated. Hopefully this version of MAD may have sparked some Microwave interest in this Border area.

Stations operated from Mt. Mansfield, and other peaks in VT, NY, and Quebec. Several long distance stations from Massachusetts and Maine were contacted as well.

Chip Taylor, W1AIM, lent his spare 10 GHz rig to Eric, K1US, and family. Dad, Mom and both young children are all licensed amateurs. The 4 of them easily made several contacts each. Although this family operation, in itself, isn't so

unusual, it is very unusual that the youngest member of the family, Clara, is only 7 years old. We don't know if this is the youngest recorded 10 GHz operator, but, if it isn't, it must be close!

Several of us met for dinner on both Friday and Saturday and a good time was had by all. It is a nice time of year and was a convenient "tune-up" day, the week before the VHF contest. So, we just might do this again next year.

We will be drawing for the DEM Participation Prize (\$50 Gift Certificate) at the NEWS picnic on July 12, 2008. If you participated and wish to enter the drawing, please either mail or e-mail a log to me by July 7. It only needs to show 1 or more contacts within 100 miles of Montreal, Quebec or Burlington, VT on any freq. above 902 MHz on Sat. June 7, 2008.

Thank-You Mark Casey, K1MAP

Eastern VHF Conference Wrapup

The 34th Annual Eastern VHF/UHF Conference was held on April 18, 19, 20 at the Radisson Hotel, in Enfield, Ct. It seems like only yesterday we were planning the 25th event and now we are approaching the 35th, planned to be a special gala event in April of 2009. For those of you that attended we hope you all had a wonderful time and would appreciate your feedback. For those of you that missed it – your loss, but you can purchase a conference proceeding CD and hopefully attend next year. Do to some miss planning we scheduled the event on a major Jewish Holiday and most of our Jewish friends were unable to attend. We will remember to look out for this in the future.

We followed our traditional 3 day schedule. Friday night blasted off with our Hospitality suite at 6 PM to about 11 PM, far from the 2-3AM days in New Hampshire when we were all much

younger. Many of the early comers had an opportunity to rag chew and exchange tales of great DX and the ones that got away, or our new radio projects. We had several visitors from other hotel events and were able to introduce them to Amateur Radio. One woman from the southwest, stopped in for a beer and stayed several hours swapping tales of her family's military days with our members.

Saturday morning began around 7AM with breakfast and more renewal of old friends and registration. Steve, KF6AJ once again headed this up and was well organized with his laptop computer and white registration envelopes. Opening announcements began at 8:30. Art, W1RZF was the first speaker with an *Introduction to Transverter Interfacing* providing some easy adaptable tips for all. Followed by Sean, KX9X our new ARRL Contest Manager with a talk on a new *VHF Contest Award, The Sam Harris Award*. Paul, W1GHZ, a regular speaker and probably one of the most widely published amateurs of late, demonstrated his new *Multi-Band Microwave Transverter*. Hopefully this will become a project for many clubs and introduce new rovers to our contests. Completing the morning presentations was broken arm Stan, KA1ZE. This was a work related injury this time and not as a result of contest preparation as in the past. He related the continuing saga of events at his *Coudersport, Pa contest location* and demonstrated a remote operation live from the conference room. As a follow up he operated the June contest from his living room in Connecticut rather than 10 hours away in Pa., but even this had some eventful points. Also as part of the morning venue we had our famous *band sessions*, hosted by Roger, K2SMN for 6, 2 & 222, Ron, WZ1V for 432, 903 & 1296 and Dale, AF1T for 2.3 GHz & Up. These lively, moderated discussion sessions seem to take on a nature of their own as different topics arise based upon the current band status.

After a lunch break, we were all invigorated by food and drink and we started off with our second auction. Both the morning and afternoon auctions helped to raise a significant amount of money for support of future conferences due to the generous donations of equipment by several members and purchases by our members. Dave, K1WHS led off the afternoon talks with a great presentation of a new 4 bay vertical stack of 6M yagis. This fully, independently rotatable array is a killer! I wish I had one on a mountaintop. It must make its own tropo conditions. Paul, W2PED presented his latest 24 GHz mixer project as he continues to make this band easily accessible to more and more amateurs. Jules, K2KGJ a new attendee this year spoke about a new 5.9 GHz *Dedicated Short Range Communications (DSRC)* system evolving for commercial use and its effect on amateur radio and possible surplus equipment that will become available. Phil, K3TUF spoke about and showed many impressive photos of a new commercial tower he has acquired and moved to a new home and also his remote control plans.

Greg, WA1VUG a local Rhode & Schwarz representative, for several years now has provided us with a complete test equipment setup to 50 GHz. More of us need to take advantage of the higher frequency test equipment. Mike, N1JEZ concluded the afternoon session and presentations with a short NEWS meeting open to all.

Saturday evening we hosted our banquet dinner with a Packrat Man of the Year award presentation to our very own Steve, KF6AJ.



The Tom Kirby award was presented to Stan, KA1ZE for his many years of work putting many grids on the air and mentoring many with his unique solutions to problems.



The Trivia quiz hosted by Dave, K1WHS last years winner was won by Dale AF1T.



Finally the prizes presentations, led by Art, W1RZF, Micky, W1MKY and Dale, AF1T, 3 new comers to this difficult task. All won many great prizes.

Sunday morning at 8 AM, Mark K1MAP opened our flea market. The weather was perfect. This is a small but specialized equipment event providing many goodies to re-stock our junk boxes. Thanks to all who were sellers and buyers.

73, Bruce, N2LIV

N.E.W.S. MDS and ERP Testing

At the annual N.E.W.S. picnic, we will do MDS (Minimum Discernable Signal) and ERP testing on 10 GHz and 24 GHz, and possibly higher bands someday.

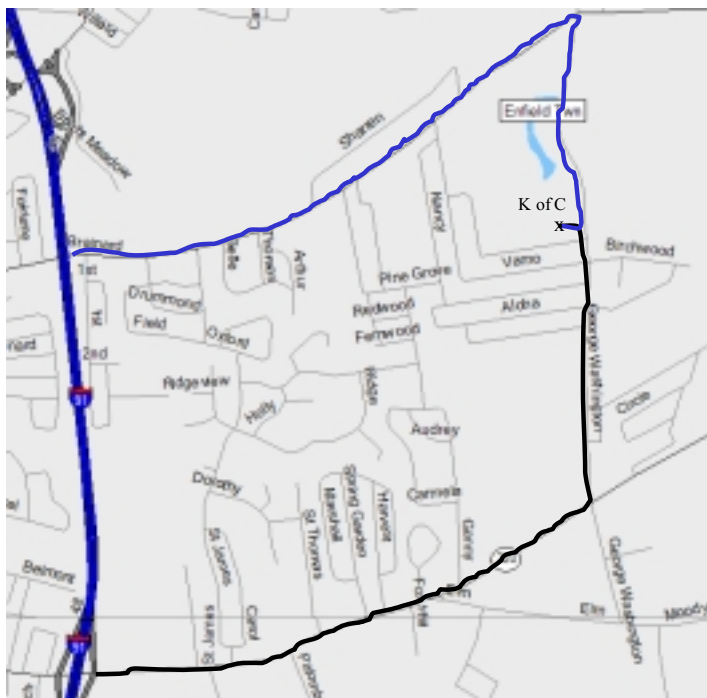


To test for MDS, we set up a distant signal source. After everyone has a chance to peak up on the signal, the signal level is reduced one dB at a time - when you can no longer hear it, then you have found the MDS for your system. You decide how well it works, and whether you can hear as well as Don and Dale. As a doublecheck, the frequency is moved a few KHz, then the signal level is increased one dB at a time (this is the "backup" number). If you weren't kidding yourself, you should be able to find it at the same level as before. Usually, it takes a few more dB to find a signal.

Finally, we also check relative ERP, transmitting one at a time and recording the relative power received at the distant point.

Results in 2007 were pretty good, with 11 participants on 10 GHz and 4 on 24 GHz, plus a couple of higher frequency stations for show. This isn't a competition, just a chance to check out the gear with friends around to help. Most folks had 10 GHz stations that worked pretty well, while a few found problems to fix before the 10 GHz & Up contest in August. Not only do we know our equipment works, but also that there will be some other good stations to work.

Directions to the N.E.W.S. Picnic K of C 371 George Washington Road Enfield, CT



I-91 exit 48 on to Route 220 East (Elm St). Bear left at the fork onto Shaker Rd. At the 9th traffic light from exit 48, turn left on to George Washington Rd., K of C is 1 mile on the left.

Lost going that way? Try this:

I-91 exit 49, go south on Enfield St Rt.5. Drive 1/2 mile, take a left on Brainard Rd. Drive 2 miles, take a right on to George Washington Rd. K of C will be on the right.

N.E.W.S Hats will be available at the picnic! \$12 each - cash (bring some singles please) or check. See Mark, KA10J

GPS: LAT: 42.015805 LON:-72.560183

Two New Beacons!

I just activated a new beacon at my QTH (FN35gs). Basically this is a PLL brick in a waterproof enclosure. Reception reports are welcome! Rene VE2UG FN35gs

Frequency: 1296.305± FSK

Power: 2 W

Antenna: Dual quad facing S-W 35 ft AGL

Message: VVV DE VE2FTR/BCN FN35GS

The North East Weak Signal Group 1296 Beacon is now QRV!

Special thanks to K1WHS for the antenna, N1DPM for the transverter donation and Microwave Update 2002 for a bit of the auction proceeds.

Callsign: W1RJA/B

QTH: FN31th (Southern CT)

Freq: 1296.284±

Emission: CW

Power: 18 watts at feedline (160 ft Cablewave 7/8" hardline)

Antenna: Directive Systems bidirectional LPY pointed NE/SW

Height: 155 feet above base elevation

Signal reports: w1rja1@gmail.com



Mid-Atlantic States VHF Conference 2008
Saturday September 27, 2008
Sponsored by Mt Airy VHF Radio Club
More information at www.packrat.com

HAMARAMA
37th Annual Pack Rat Flea Market
Sunday September 28, 2008
Rain or Shine
Gates Open: Buyers at 0700 Sellers at 0600
Middletown Grange Fair Grounds
Penns Park Road, Wrightstown, PA
Food, Beverages & Facilities on Site
No Overnight Parking

UPCOMING EVENTS



<http://www.boxboro.org/>
W1GHZ will be organizing a VHF and Up session on Sunday morning, August 24, and is looking for speakers. Best are light talks of general interest. If there is something you'd like to present, please email w1ghz@arrl.net

N.E.W.S. Membership Application

Name: _____ Callsign: _____ 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 comradery amongst 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 approximately 2 weeks prior to each meeting. Any contributions to this publication are appreciated and can be sent to: Don Twombly, W1FKF 23 Maura Dr. Woburn, MA 01801 Email donw1fkf-news@yahoo.com Dues are \$15/year. Remember, this group is formed by VHF'ers for VHF'ers.

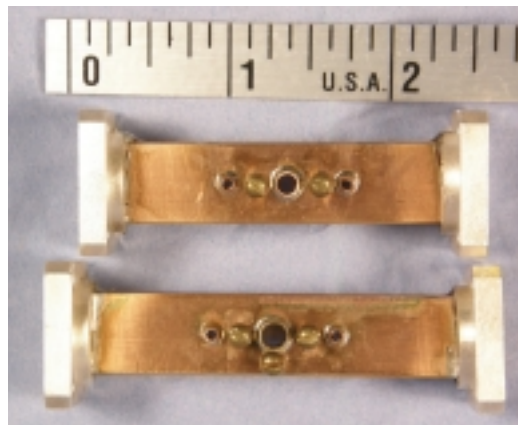
Mail to: **North East Weak Signal Group**
 c/o WA1MBA
 Tom Williams
 PO Box 28
 Shutesbury, MA 01072

WAVEGUIDE FILTER DESIGN

I have used the waveguide filter program WGFIL by Dennis Sweeney, WA4LPR, to design a number of waveguide filters with excellent results. The program has not been readily available, but I have received permission from Dennis to post it on my web site:

<http://www.w1ghz.org/filter/WGFIL.COM>

The photo shows a couple of 24 GHz filters that are fairly easy to build and tune. I've built others for 3456, 5760, and 10368 MHz. I'll be writing up my results in the near future.



Paul, W1GHZ



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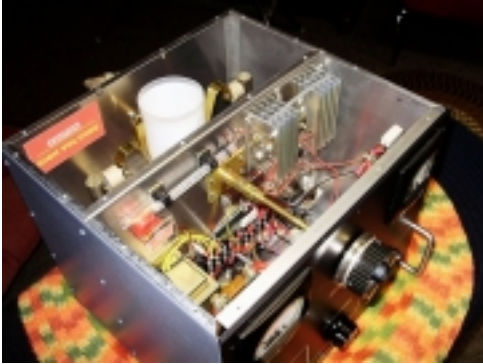
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K of C
371 George Washington Rd
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**Coming this fall...
Building a 500 watt 2 meter amp
using the Russian GI46B tube**

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Check your membership expiration
date on your mailing label!