



N.E.W.S. LETTER

The Publication of the North East Weak Signal Group



November 2009

Volume Eighteen

Issue 6

President: K1WHS, Dave Olean
Vice President: WZ1V, Ron Klimas

Current Officers
NEWSLetter Editor: W1FKF, Don Twombly

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

Next Meeting November 14, 2009

1 PM Storrs Library
Longmeadow MA

K1TR Mountaintop Contesting

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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**

MEMBERSHIP in the N.E.W.S Group is \$15 per year. Apply to Tom Williams, WA1MBA.

Email [mw\(at\)wa1mba.org](mailto:mw(at)wa1mba.org) You may download an application from our web page <http://www.newsvhf.com/>

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The President's Corner

Since our last meeting, it seems that the propagation Gods have not been throwing much our way. The sprints on 222 and 432 could never match what happened on 144 in our wildest dreams I guess, so we should not be surprised that things were normal or below normal for most of the period. Still crazy things can happen into early November, so pay attention.

I missed the Microwave Sprint and NEARfest, the Big New England flea market. It seems I managed to run over my own dog, and spent much of that time period nursing the beagle back to health. All is OK now except for the bank account.

We have a great speaker at this month's meeting in K1TR. Ed will talk about VHF contesting including his latest efforts in the low power category. Ed Parsons has been heavily involved in serious contesting for many years. If you look at contest records, you will note his million point efforts in EPA back in the early 90's. Ed has operated with K8GP a number of times, and lately has been chasing the low power portable category from such places as Mount Washington, NH, and Mt. Wachusett, MA. He has plenty of experience and will let us know just what is needed to pull off a successful effort. I am sure we will all glean a few choice tidbits on what is required these days for a competitive effort. I hope you all can attend the meeting on November 14. Ed's talk promises to be a great one. He may also provide an insight on what it took to work DM98 on 144 MHz in July!!

I hope to get back on track with the Wednesday night 432 activity periods. I missed a few dates with the beagle emergency, but was QRV on October 14 and worked a new station in the New Haven area for his first contact on 432 SSB! He claimed he never heard any activity on the band and was surprised to hear someone calling CQ! The East Coast 432 SSB net (NC) starts at 9 PM. If we can populate the band before that time on Wednesdays, it would be a good activity builder. My "remote" hamshack is operational thru the end of November typically, so I have a few Wednesdays left before winter sets in.

Let's get our unpaid dues all paid up as well. Dues are payable at the July meeting.

Dave K1WHS

From our Secretary

Minutes NEWS meeting 3 October 2009, Storrs Library, Longmeadow, MA

Next meeting Nov 14, Storrs Library, Longmeadow, MA

Board of Directors meeting convened 1230 at Royal Buffet, Enfield, CT

Suggested dates for next year

Jan 9
Mar 6
Apr 16 at Eastern VHF/UHF Conference
Jul 10 (picnic)
Oct 2 or Boxboro
Nov 13

Adjourned 1251Z

NEWS Meeting, Storrs Library, Longmeadow, MA
President K1WHS called meeting to order 1319Z

Treasurers Report: 68 paid members, 31 unpaid
balance 43482, of which \$715 is paid for future
years
projected expenses ~\$1000 for next year

W1FKF - suggested that NEWS make a donation to
Library
Motion \$100 - approved unanimously, WA1MBA to
write letter

Tentative dates for next year above

ANNOUNCEMENTS:

WZ1V - thanks to N1DPM for replacement power
supply & parts for beacon

KA1SUN - Mt. Greylock 900MHz repeater is changing
frequency

WZ1V - WW1DX 432.270 beacon in FN22wb has
increased power

Meeting adjourned 1353Z

Meeting was followed by group discussion of recent
openings and how to increase activity led by K1WHS

Paul W1GHZ

From our Treasurer

Membership renewal is going well as the club continues to receive dues. As of this writing I will be sending out at least one more reminder to those few who have not renewed. If you receive this NEWS Letter by post, and there is a colored mark on your address label, you need to renew your membership. Those who receive email notification of the NEWS Letter and have not renewed will be sent one more reminder message. While at Microwave Update in Dallas, I was impressed at the ability for the sponsor (the North Texas Microwave Society) to pay for the registration of all the speakers, provide space for vendors, organize a good surplus tour, provide spouse activities, along with all the other things we expect at the conference such as great talks, door prizes, antenna and preamp measurement and a good publication. The NEWS Group is in line to host the 2011 Microwave Update, and although its two years away, we should probably begin to think about our organization process and costs before this time next year if we want to have a memorable conference and show the same hospitality to the 146 (or more) attendees the conference will attract.

See you at the meeting.
Tom, WA1MBA

NEWSVHF] 902+ Bandplan 2009

Mon, October 26, 2009 3:13:14 PM

From: [Mark Casey <map@mapinternet.com>](mailto:map@mapinternet.com)

The band edges from 902.000 to 902.400 are used for, and have been coordinated for, weak signal, eme, and beacons. At least 50 NEWS members across New England, operate stations in that segment, and the segment above and below 903.100. The closest channel to the band edge if or repeaters is 902.4125. Although we all realize that no plan will ever please everyone, we worked hard to consider all modes of operation that are expected on the band, with room for future uses also. hopefully, this plan will see CSMA setting the pace in the Eastern US for this band. Among the considerations are: new 25MHz split FM repeaters, existing 12 MHz repeaters, Links, DX, Weak Signal, and General usage, Beacons, Digital usage, ATV, and Experimental uses.

.This plan was based on the current operating stations, their conventions, and proposed future operations, and their conventions. It was also highly influenced by recent plans from SERA, and the Florida Coordination Organization the Regional DX, Weak Signal and Microwave Organizations, and active repeater operators on the East Coast The surrounding Coordination Bodies should consider adoption of this plan. If adopted throughout the Northeastern and Mid-Atlantic states, this would make the 902-928 Band plan quite similar from Maine to Florida. For each segment indicated there is a strong reason for the allocation. Most of the recommendations are based on current users, proposals, existing band plans of coordination bodies throughout the Eastern US, and consideration of competing commercial noise sources within the band. The CSMA is the coordination agency for Connecticut. The North East Weak Signal Group (NEWS) is the coordination body for Weak Signal, EME and Beacons for the New England States. NEWS publishes suggested band plans for the Amateur spectrum from 50MHz and up. Please call me if you have any questions.

Sincerely, Mark Casey, K1MAP Connecticut Spectrum Management Association 902+, Band Coordinator (CSMA) North East Weak Signal Group Spectrum Manager (NEWS) Days 8am to 6pm 413-566-8118

[NEWSVHF] 902+ Band plan 2009

902.0000-902.4000 Weak Signal, SSB, CW, Beacons, EME
902.1000 National Calling Frequency-Weak Signal USB, CW
902.2500 SSB/CW/FM DX Calling Frequency
902.3000-902.3750 CW Propagation Beacons, Simplex, Experimental & Mixed Use
902.4000-902.4875 FM Repeater Inputs, 25kHz channels-11-16kBW, 12.5kHz channels-6-11k BW*
902.5000 FM Simplex Calling Frequency
902.5125-902.8750 FM Repeater Inputs, 25kHz channels-11-16kBW, 12.5kHz channels-6-11k BW*
902.9000-903.4000 Weak Signal, SSB, CW, Beacons, EME.
903.1000 National Calling Frequency-East Coast & Alternate-Weak Signal-USB,
(continued next page)

CW

903.2500 SSB/CW/FM DX Calling Frequency
903.3000-903.3500 CW Propagation Beacons
903.4000-905.0000 Mixed use & Experimental
905.0000-906.000 Digital, Links, Experimental & Mixed Use
906.5000 FM Simplex Calling Frequency
906.0000-910.0000 FM Repeater Inputs, Links, & Coordinated Uses*
910.0000-917.0000 Amateur TV (primary), Experimental & Mixed Use (secondary)*
917.0000-918.0000 Digital, Links, Experimental & Mixed Use
918.5000 FM Simplex Calling Frequency
918.0000-922.0000 FM repeater Outputs, Links, & Coordinated Uses*
922.0000-927.0000 Experimental & Wideband Digital Repeaters*
927.0000-927.4000 FM Simplex & Links
927.4000-927.4875 FM Repeater Outputs, 25kHz channels-11-16kBW, 12.5kHz channels-6-11k BW*
927.5000 FM Simplex Calling Frequency
927.5250-927.8750 FM Repeater Outputs, 25kHz channels-11-16kBW, 12.5kHz channels-6-11k BW*
927.9000-927.9250 CW Propagation Beacons
927.9000-928.0000 Weak Signal, SSB, CW, EME
*Repeaters will be coordinated only in the segments indicated
Bandwidth (6K, 11K, 16K, etc) refers to FCC designated modulation types.

432.370 WW2DX/b

Just an FYI, my beacon in FN22WB has had some upgrades. First off we moved the pair of loops from 15' off the ground to 100' on the tower. Additionally a 30 watt amplifier was added taken the original 100mw to 30 Watts : Thanks to Ron WZ1V for building, donating and shipping a 100mw to 1 watt amplifier! Things seem to be greatly improved so far. I look forward to getting some signal reports! Also I have moved my 6M repeater from FN31 to FN22 as well. 52.77 IN and 53.77 Out PL 88.5. The RXer is in Woodstock, NY and the TX is in Ellenville NY. Both Sites around the 1800' height.
73 CU on the bands,

Lee
WW2DX

2 meter beacon 144.295 MHz

W1JHR FN42em

1.5 watts

Elevation 370' ASL

indoor HO Loop

Any reports on strength and stability would be appreciated.

George "[specrisk\(at\)aol.com](mailto:specrisk(at)aol.com)"

Future beacons for 2304 and 3456 MHz

222 Sprints WZ1V

Stayed the whole 4 hours. Only 1 contact in last hour. Activity waned sharply after 9 pm. Condx pretty flat. Made 45 Q's, 20 grids = 1,800. Best west K8TVD EN91, VE3ZV EN92. Southwest N4MW FM17, K4ZOO FM08, K4QI FM06. North VE2XX FN25. Northeast K1WHS FN43. Many missing grids in the Northeast as usual. Although N2SLN got on from FN22 thanks Lu! And K2ERG had a great signal from FN13! There was no opening to Florida and Nova Scotia this time but had fun anyway. Thanks to all who got on the air and to the Southeastern VHF Society for sponsoring.
-73, Ron WZ1V FN31mp

222 Sprints K1WHS

Hello Sprinters!

It was a slow night, but I had fun. All of the activity was in the first hour, and then it started to dwindle. By 9 PM a new contact was cause for celebration. I missed some stations, like K2ERG. I suspect it was a beam alignment problem. I barely worked my own grid, FN43 when WW1M got on with a loop and gave me a point. Thanks Bruce! No one besides VE2XX to the northwest, north, northeast, and east of

(Continued next page)

me. All my Qs were down the coast with a few to the west like N2SLN, KA2LIM, and VE3ZV in EN92 (on SSB no less) I wish there was activity in these northern grids. I ended up with only 15 grids for the entire evening. I think I win the prize for most antennas used for fewest grids worked. I needed 14 antennas to get those 15 grids! I had 2 x 8 elements aimed NW or NE all night. I used an 8 X 5 el yagi LVA to cover the SW, while the rotatable array filled in the missing spots. I missed a few guys to the SW. I never heard K3CB and my contacts stopped at FM19 with W8ZN, W3ZZ, and K1RZ. Score was 38 Qs in 15 grids. I think my radio is busted as it heard Florida last week, but this week it did not hear diddly squat by comparison. I tested out my just repaired OMNI V. It behaved nicely. I also tried the K3 when things slowed down. The de-noisier on the K3 was helpful. I have had the radio for a year and just remembered that button was there! Thanks to the SEVHF Society for making a great night on 222 MHz.

73,
Dave K1WHS

432 Sprint WZ1V

Worked the first 2.5 hours of last night's 432 Sprint. A bit disappointing condx were flat here and we would not be working N2CEI EM80 like in the 2M Sprint! I only got as far south as K3CB FM18 and K4ZOO FM08. Best DX west was K8TVD EN91. Missed lots of nearby grids like FN41 and FN33/34, but thankfully WA2FGK showed up later to give out FN21, and N2SLN has been doing a great job from FN22. Wound up with 46 Q's, 15 grids = 1,380. Equipment: 500 Watts to a 24 el yagi at 63'. TNX to all who participated Southeastern VHF Society for sponsoring.

73,
Ron WZ1V FN31mp

432 Sprint K1WHS

Hi VHF'ers,
I had fun in the 432 Sprint. The wx conditions were not very good for enhanced conditions. In fact they were awful. Dark clouds scudding across the sky, high winds, and cool temperatures marked the front passage earlier in the day. Conditions were never very good. I never detected any minor enhancement on anyone. K1RZ in FM19 for example, was always S3 or S4 at best, whenever I heard him. I spent a lot of time calling out to the west, but never heard much. I missed a few grids out there that have been easy to work in the past. No FN03, FN02, FN13, FN11 etc. Thanks to KA2LIM and N2SLN for FN12 and FN22!! I heard no one to my north and northeast. Adjacent grids FN53, FN54, and FN44 had no activity. The whole area to my NE provided no contacts. There were missing grids as well down the coast thru RF alley (NY and Philly). At the start of the contest, I heard K3CB working K4QI, but Russ was not audible up here. I never heard K4QI all evening, but I was looking for him. I also spent some time with my antenna peaked on the NC coast looking for K1MAP, but no joy this time. I heard complaints that signals sounded distorted, and I would agree that there was very rapid flutter on many signals. The rate was very high and it imparted an audio artifact to certain signals even when beams were aligned. I heard it on K1PXE and others. If the antennas were not aligned, copy was difficult on many stations due to multipath phase distortion. I heard VE2ZAZ calling CQ and he peaked at 260 degrees. His normal heading is about 315 degrees. His CW sounded like AU buzz due to the multipath reflections. He must have had his beam aimed southwest. Thanks to all who were on to make a fun evening. N1SV gets the persistence award. He was relentless in digging up contacts from a "small" (50 watt) station. I quit a bit before 10PM. I was sorry to miss K1TEO who was getting on late. My last Q was with WA2FGK, who also got on late for my only FN21 QSO. I ended up with 39 QSOs in 15 grids.

73,
Dave K1WHS

Update – Phase Noise and MDS (Sept 2009)

Paul Wade W1GHZ 2009

w1ghz@arrl.net

I've been thinking about a new 10 GHz transverter. After talking to Steve, N2CEI, again, I decided to try one with the A32 synthesizer for the local oscillator and see how it works in the field. Of course, I have my old transverter as backup, on a smaller dish with 24 GHz and the dual-band feed.

Steve promised to have a transverter to me in time for the September weekend of the 10 GHz contest – it arrived about 10 days before. I usually figure three weeks to put a system together properly. However, I ended up with some extra time. My 6 and 2 meter antennas were bent up by the ice storm last December, and we planned to finish the repairs on Saturday morning before the September VHF Contest started at 2 PM. But it rained all day Saturday, so I was off the air and worked on the transverter. The antenna repairs were completed Sunday so I was on the air about 4 PM.

My plan was to integrate the DEMI transverter with two of the eight-watt amplifiers in parallel for some decent power, and to use my new “Even More Fool-Resistant Sequencer” for switching. The amplifiers work fine in parallel, but the transverter doesn't provide enough drive for two, so the pair only put out about 11 watts – not enough to justify the extra 25 watts of DC (2 amps at 12 volts for each amplifier) in a portable station.

Anyway, metalwork takes time, and the sequencer took a little debugging, so I finished up the transverter Thursday night as I was loading the truck for the September weekend on Block Island. As a result, I didn't have time to get the GPS-locked oscillator included, just the 10 MHz TCXO used for the MDS tests.

The TCXO was very stable during tests, but much less stable in the field. I had the worst of both worlds – synthesizer phase noise without accurate frequency control. A few contacts took longer or needed retries as a result, but I did pretty well anyway.

GOOD – I was hearing better than the other two guys on Block Island, one with an identical dish. Made several very weak contacts that they couldn't pull out.

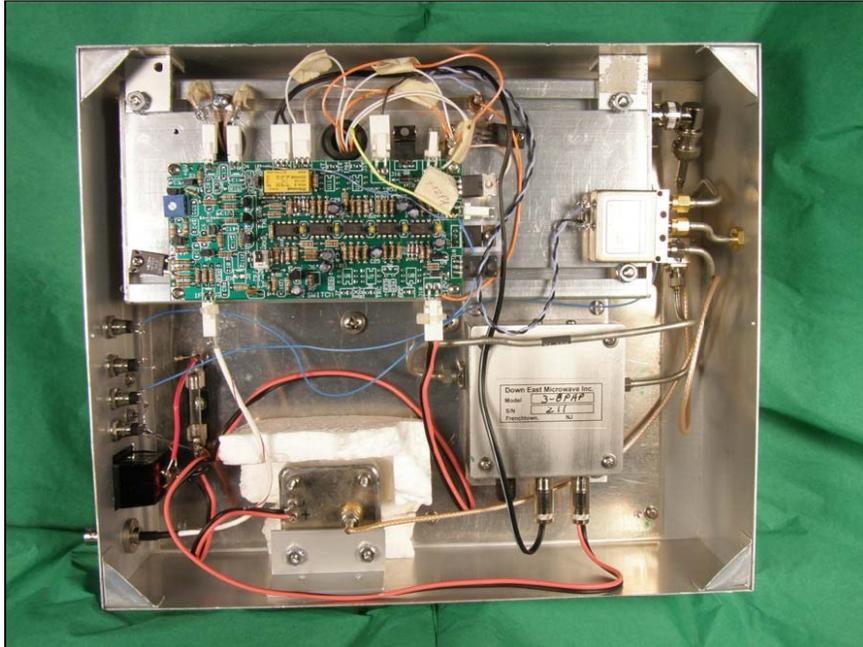
BAD – definite phase noise, especially for each other, making spotting difficult. At times, AF1T, 80 km away, caused spurs near our frequency (we try to stay ~30 KHz apart). Enough birdies to make tuning for stations an adventure.

TBD – when we started out Saturday, my frequency seemed to be significantly off and drifting, slowly settling down. Sometime in the afternoon, I tripped over the power cord and dislodged it. When it came back up, my frequency was closer and drifting less.

Conclusion so far – with the GPS lock, it should make contacts much easier with stations that have good frequency control. The other half will still take lots of tuning.

(Continued next page)

P.S. – conditions got really good Sunday night, after all the roving stations had gone home. We worked a few DX home stations, then tore down. Early Monday morning, my phone rang – K1MAP in North Carolina was hearing beacons near us. We quickly set up again and worked him twice, two new grids at 800 km.



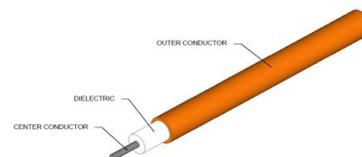
New 10 GHz Transverter with “Even More Fool-resistant Sequencer”

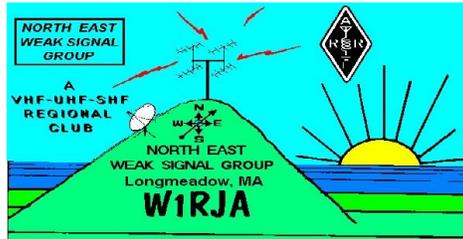
And the new “Even More Fool-resistant Sequencer worked flawlessly – see www.w1ghz.org for details.

**Congratulations
to Paul W1GHZ for
being awarded**

**The Don Hilliard Technical
Achievement Award
Microwave Update 2009
Dallas Texas**

At the last meeting John WW1Z had some .141 hardline for sale. The impedance is not 50 ohms but 25 ohms. He will take it back and refund the money of any one who doesn't feel they will have a use for it at the next meeting.





N.E.W.S. 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 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:

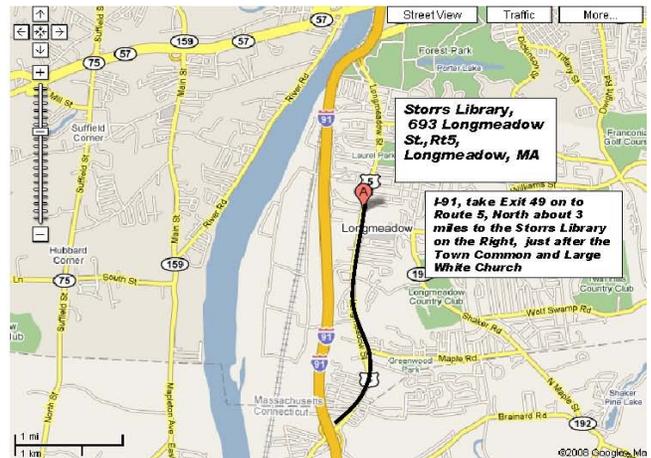
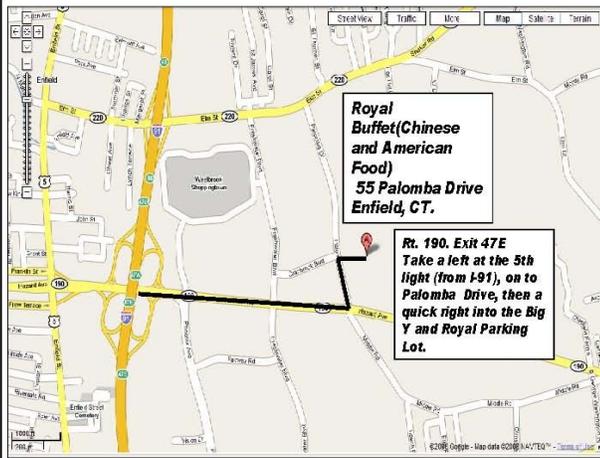
North East Weak Signal Group

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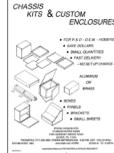


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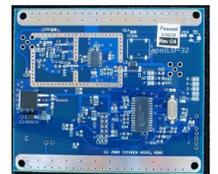
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Next Meeting November 14, 2009

K1TR Mountaintop Contesting

**1 PM at the Storrs Library
693 Longmeadow Street, RT 5
Longmeadow, MA**

**N.E.W.S Hats will be available at the next meeting!
\$12 each - cash (bring some singles please) or check.
See Mark, KA1OJ**

Don't Forget
**The North East Weak Signal Group
2 Meter VHF and Above Net
Every Thursday at 8:30 PM Local 144.250
W1COT, WZ1V or K1PXE Net Control**

North East Weak Signal Group

c/o WA1MBA Tom Williams PO Box 28 Shutesbury, MA 01072



Check your membership
expiration date on your mailing label!