

N.E.W.S. LETTER

The Publication of the North East Weak Signal Group

September, 2012

Volume 21

Issue 5

*****SAVE THE DATE*****

Combined Mid-Atlantic & Northeast VHF Conference Sat Oct 13

Marriott Courtyard Hotel, Bensalem, PA

Friday night table-top flea mart & Hospitality

Saturday: Conference presentations and Banquet dinner + door prizes

Sunday AM: Parking lot tailgate

\$35 Early Bird registration + \$35 for banquet

Check the Packrat website: <http://www.packratvhf.com/>

NEXT MEETING: September 29th., 2012

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](mailto: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, via email to w1wso@comcast.net.

2012 Joint VHF/UHF Conference

The Joint Mid-Atlantic and North East VHF Conference is hosted by The Mt. Airy VHF Radio Club (Pack Rats) and North East Weak Signal Group (NEWS).

Saturday October 13, 2012

Marriott Courtyard Bensalem
3327 Street Road
Bensalem, PA 19020
215-639-9100

Speaker List

- Terry Price , W8ZN , The K8GP contest superstation
- Paul Wade , W1GHZ , Flexible VCO Locking board
- Phil Theis , K3TUF , SDR updates & PIC microcontrollers
- Rick Rosen , K1DS , Portable EME part I
- John Jaminet , W3HMS , Portable EME part II
- Joe Taylor , K1JT , PPMR for JT65
- Dave Olean , K1WHS , 6m Solid State PA
- Kevin Kaufhold, W9GKA , Distance Scoring
- Mark Casey , K1MAP , Microwave band plans
- Gary Hitchner , WA2OMY , 2304 Solid State PA
- Dave Meier, N4MW , Dual band synthesized beacon
- Roger Rehr , W3SZ , Bandsopes
- Stan Helinski , KA1ZE , The 205 Phenomenon and remote station control

Weekend Agenda

1. Special Hotel Room Rate for Attendees
2. Friday Night Hospitality and Table-top Fleamarket 7-10PM at InnPlace Hotel - LIMITED SPACE FOR ATTENDEES ONLY
3. Saturday Conference - 8:15am to 5pm at InnPlace Hotel - Must register in advance or at the door to attend

5. Saturday Pizza & Soft-drink Lunch at InnPlace Hotel for Registered Conference Attendees

6. Saturday Afternoon Snack for Registered Conference Attendees

7. Buffet Banquet Saturday Evening at InnPlace Hotel - Not Included in Registration - Purchase Separately - See below

8. ONE Copy of Proceedings on CD included with registration

9. Door Prize Eligibility - YOU MUST BE A REGISTERED CONFERENCE ATTENDEE AND PURCHASE A BANQUET BUFFET TICKET TO BE ELIGIBLE FOR DOOR PRIZE DRAWING

10. Sunday October 14 - Limited Tailgating at InnPlace Hotel for Registered Conference Attendees only 8-11 AM

For more information:

http://www.packratvhf.com/2012_Conference/vhf%20conf.html

2012 North East Weak Signal Group VHF CALENDAR:

September 29, 1PM - 4PM - [N.E.W.S. Group Meeting](#)

September 30 - [Mt. Airy \(PackRats\) Hamarama](#)

October 3, 1900-2300 Local - [432 MHz Fall Sprint](#)

October 12-13 - [Mid-Atlantic \(PackRats\) / Eastern VHF joint Conference](#)

October 12-13 - [New England Amateur Radio Festival - Deerfield, NH](#)

October 13, 0600-1200 Local - [Microwave Fall Sprint](#)

October 18-21 - [Microwave Update hosted by 50MHZ & UP Group](#)

November 17, 1PM - 4PM - [N.E.W.S. Group Meeting](#)

November 18, 0500Z - Leonids meteor shower

December 13, 0100Z - Geminids meteor shower

President's Report

This is the second column I've written this year just after a VHF contest so I can't help but comment on the activities of the September event. Three items come to mind. First I noticed an Email from Dave – K1WHS about some serious troubles with the guy anchors at his antenna farm in Maine. This reminds us that we should always check the mechanical integrity of our towers, masts, antennas, etc. It's really easy to forget about the tower that has been standing very quietly in the back yard for years and years, only to have it fail when we least expect it. Dave appears to have a unique problem at his site, but we should all take a little time to inspect our "physical plant" from time to time. Good luck with your tower work, Dave.

Second, activity on the bands seemed to be down significantly this September contest. We had a cold front pass through western New England where I operated on Saturday evening with high winds and even some tornado warnings nearby. The cold, clear air mass behind the front did not seem to foster very good VHF+ propagation. I also think that the number of contest participants here in the Northeast seems to be down with contest scores averaging lower over the years. I guess lots of the older hams a moving south. I suggest we all make a more dedicated effort to at least get on the bands during major operating events.

Third, (and I apologize for harping on the topic again), our 900 MHz band is getting more and more noisy as time goes on. I was operating on Mt Greylock during the early morning hours on Sunday and had the time between QSOs make note of the relative noise level on 903.1 MHz vs. 902.1 MHz over the full range of compass angles. The difference was stark and compelling. Over about ¾ of the compass angles the noise was at least 5 dB greater on 903 than on 902 MHz. Over about ½ of the compass angles the noise was 7-10 dB louder on 903 than on 902 MHz, and over about ¼ of the compass bearings, the noise was 10-15 dB louder on 903 than on 902 MHz. If you haven't noticed the noise on 903 at your station, it is only a matter of time before you will be impacted. If you happen to find a license-free user nearby, the noise will be much, much louder than we hear on top of the mountain. The longer we wait to migrate to 902.1 MHz the harder it will be to actually keep a reasonable chunk of spectrum that we can use from a political point of view. My contest group has decided to move to 902.1 MHz as a matter of necessity. We will still keep the option of using 903.1 but only as a last resort if the other station cannot use 902.1. We are even helping various rover stations in the Northeast change crystals to move to 902.1 MHz as their primary

operating frequency. I strongly suggest we make the move to 902.1 MHz a NEWS group policy before we lose that entire spectrum to other users of the band.

73,
Dick, WA2AAU

Secretary's Report

Minutes of NEWS meeting 14 July 2012 (Picnic) at Knights of Columbus, Enfield, CT

President WA1AAU called meeting to order at 1405Z

Treasurers Report

-Dues are due in July - \$15

-Currently 109 paid members plus 14 permanent

-Balance \$3602

OLD BUSINESS

- Liability insurance - estimated cost ARRL plan \$200

- MOTION by W1JR to pursue liability policy up to \$250 cost

- use address of Treasurer and President on policy

NEW BUSINESS

none

ANNOUNCEMENTS

- Registration is open for joint Conference in October

- Show of hand - 17 planning to go

ELECTION

- one opening for board member. W1ZC - reelected for 2 year term

Meeting adjourned 1438

PROGRAM:

MDS testing, 10 and 24 GHz. Results reported separately.

73,
Paul – W1GHZ

Treasurer's Report

The treasury is healthy. The July picnic marked the change of the club year, and so the number of paid-up members naturally drops until all who are going to renew eventually do. For those who are receiving hard copies in the US Post, I color your dues date on your address label if it has expired. At this point everyone

who receives email notification of the NEWS Letter has been notified if they are tardy. The reminder notice I emailed directly to those members prompted 11 dues payments, several of which were multi-year renewals. We now stand at least 20 renewals behind the number we normally receive by January, a typical situation for September. I usually send out one more reminder in November. If you are sending a check, please put your call sign somewhere on the check (the database is organized by call sign). Checks are to be made out to N.E.W.S.Group and sent to me. My postal address is the return address on the last page of the NEWS Letter.

I look forward to seeing folks at the September meeting, and at the conference in October in PA.

73,
Tom - WA1MBA

July Picnic MDS Results

10 GHz.

<u>Call</u>	<u>MDS (dBm)</u>
WA1MBA	-95
KA1OJ	-115
W1GHZ	-115
W1FKF	-110
W1JHR	-116
WW1Z	-952
KA1LEX	-110
AF1T	-116
N1TFU	-115

24 GHz.

<u>Call</u>	<u>MDS (dBm)</u>
WA1MBA	-63
KA1OJ	-71
N1JEZ	-71
W1GHZ	-63/-65
W1FKF	-64/-64
W1EZ	-64/-64

Microwave Update 2012

<http://www.microwaveupdate.org/>

Microwave Update 2012 is October 18-21, 2012 in Santa Clara, California. Microwave Update (MUD) is an annual event held since 1985. The 50 MHz and Up Group of Northern California is pleased to host the 2012 event. MUD is a conference dedicated to microwave equipment design, construction, and operation. It is focused on, but not limited to, amateur radio on the microwave bands. The Biltmore Hotel in Santa Clara will be the location for conference

sessions, activities, and attendee accommodations.

Schedule

Thursday, October 18th

8:00 AM	Organize and plan groups for Dish Tour and other options
8:30 AM	Depart for morning Dish Tour
8:30 - 9 AM	Depart for Surplus or other Tours
9:00 AM	Alternate tour of local interest. [TBD]
12:00 PM (noon)	Organize and plan groups for afternoon Dish Tour and other options
12:30 PM	Depart for afternoon Dish Tour
12:30 - 1 PM	Depart for 2nd phase Surplus or other Tours

Friday, October 19th

7:30 AM +	Registration
8:00 AM to 12:00 Noon	Conference presentations
12:00 to 1:00 PM	Lunch break
1:00 to 6 PM	Conference Presentations
8 PM	Indoor swap meet

Saturday, October 20th

7:30 AM +	Registration
8:00 AM to 12:00 Noon	Conference presentations
12:00 to 1:00 PM	Lunch break
1:00 to 5:00 PM	Conference presentations
7:00 PM to 10:00 PM	Banquet. Speaker Dr. Thomas Lee on History of Radio and Influences of Amateur Radio.

Friday and Saturday, October 19, 20th

A test and measurement area and a vendor area will be available in parallel with the conference sessions.

Sunday, October 21st

7:30 to 10:30 AM	Antenna measurement range
7:30 to 10:30 AM	Outdoor swap meet

G3BVU SK

Charles "John" Beanland, born in Witney, England was 85 years old passed away on September 21, 2012 after a long illness. John enlisted in the UK Navy during WWII. He was first licensed as G3BVU in 1947. He worked for Post Office in Engineering and English Electrical Valve where he worked on Guided Weapons. He later joined Texas Instrument and finally Microwave Associate, UK where he developed VHF solid state power amplifiers all while attending and receiving BS degrees in Electrical Engineering, Radio and Telecommunications.

Microwave Associates transferred him from the UK to Burlington, MA in 1963. In 1966 he joined the MITRE Corporation in Bedford, MA as a Member of the Technical Staff working on microwave systems and Over The Horizon Radar (OTHR) HF direction finding systems until his retirement in 1993. During that time he received his Masters Degree in Electrical Engineering from Northeastern University. In 1972 he acquired Spectrum International, specializing in antennas, filters, VHF transverters and satellite tracking systems which he operated until his passing. He later received his US call sign, AA1YE and taught Amateur Radio licensing courses and HF radio propagation at local radio clubs.

John was married to Dorothy Beanland for over 57 years. They have 3 children and 3 grandchildren. He resided in West Acton, MA. A wake will be held on Monday, September 24th from 5-8 PM at the Acton Funeral Home on Rt. 111 in Acton, MA. A burial service will be held at the Church of the Good Shepherd in Acton, MA at 10 PM, Tuesday, September 25th followed by burial in Acton, MA.

- Joe, W1JR

Mt Wachusett

Don W1FKF

June 1, 2012 I went over to Mt Wachusett to see if I could talk to some one regarding what K1DS had found out..I talked to the you that he talked to and then talked to her supervisor. It is not as bad as you what he indicated. I explained more of what we do in the contest and that over the years we have not had any complaints.

If you were to stay at the top for an extended time like over night they would require a special permit like Ed K1TR has done in the past. As long as you give them some notification of what you are doing she said they have a Recreational Permit that they can give at the base of the MT. (I think she said no charge..) Like

everything else no guarantee they will give you one !!



The kicker is that you can no longer drive to the top like we have done in the past!! The parking lot is all treed in (space for approximately 50 cars), would not be a good spot to make microwave contact from, about a 300 ft walk to the top



They have built a nice observation deck on the summit, it is about 50 ft square and in the middle of it is a new fire tower..The old one will come down at some point.

I am not sure they will let us take our dishes up on the deck or not.. My guess is no, as there is not room between the rail and the benches for tripods and people to walk by.. I will follow up by sending her some picture that have been taken in the past of all the dishes setup and see what she says, I know definitely there will be a problem for the second weekend of the 10 GHz contest as it is hawk migration and the top is covered with bird watchers..



The supervisor has only been there 3 years and she has not had a great deal of exposure to amateurs with the road being closed for 2 years.

I would suggest any one going there to play radio should stop at the bottom and tell them what you are up to.

She said they already told one guy to leave because he had no documentation.

I told her she may get other calls from amateurs regarding access...

Supervisor info:

denise.morrissey@state.ma.gov

Denise 978 464 2987

73,

Don W1FKF

FURTHER INFO FROM MARK, K1MAP:

We walked up the ramp to the observation tower. There were loads of people on Sun afternoon. It would be OK to operate up on the tower except for lots of people traffic. But, if permitted, one could easily bring up a hand truck with your equipment and operate near where we had in the past. I was operating from the west lookout on the way up when the ranger came by. He was nice, but told me I must see his boss in order to operate.

We can talk about this at Sept . 28 meeting.

73

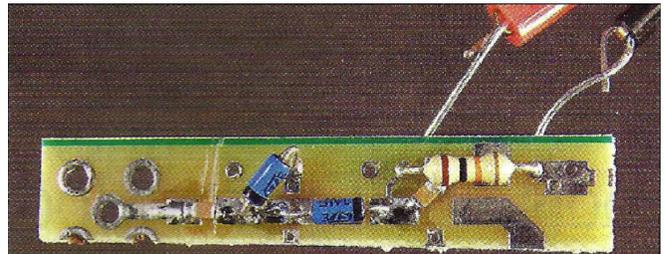
Mark K1MAP

A SIMPLE RF PROBE FOR RECEIVER AND TRANSMITTER ALIGNMENT

Jay, NY2NY

Inspired by a piece in QST in the January 2010 issue (P.94) by W1GHZ, I decided I needed a simple RF Probe for aligning oscillators, amplifiers, etc. in the HF/VHF/UHF regions. After some research, I discovered that WA3IAC had designed and produced a really nice kit on a small PC board that worked great from 160 meters thru 440 mhz. The complete kits are available on E-bay for less than \$4 with postage and include a PC board and all the parts required without a housing.

Go To: http://www.ebay.com/itm/general-RF-detector-kit-HF-50-144-222-432MHz-/110917906857?pt=LH_DefaultDomain_0&hash=item19d338f1a9



I put the kit together in about 10 minutes - careful here, there are 3 surface-mount parts that require a REALLY SMALL soldering iron and some care (and good eyesight) to assemble. After quickly testing out the bread-boarded version, I searched around for a suitable housing for the probe.

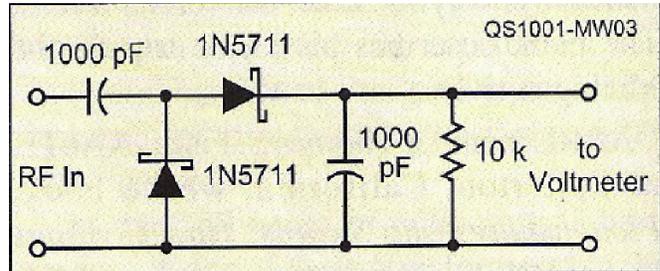
It seemed to me that a old ball-point pen case would suit the need and I was lucky to find an old aluminum-barrel pen given to me as a gift by Teddy, 4Z5JQ, when we met on a business trip in Tel-Aviv some years ago. The ink had long run out but I had kept the pen since it was a memorable gift from a friend in Israel. What better way to retire the pen than to convert it to a useful Ham-Radio-related application !

I packaged the PC board assembly and its DC output leads inside the pen housing and used a Radio-Shack gold-plated audio pin-jack for the probe tip. The DC output leads were terminated in 2 banana plugs which mated with my (would you believe, Radio Shack) digital VOM



stages down to about -10 dBm for maximum performance of the stage.

A great little inexpensive project which you will find quite useful when building or aligning radios in the HF thru UHF range.



NYS License Plate Story

In 2010, I applied to NY State for a Ham Radio License plate with my new call on it, NY2NY. I was informed by NY State that "NY2NY" had already been issued IN ERROR to a NON-HAM as a "Vanity" plate. After several unsuccessful appeals to both the Director of the Motor Vehicle Bureau in NY and the Attorney General of NY State, I decided to apply for 2 "Vanity" plates of my own for my 2 cars - "J-NY2NY" and "NY2NY-J" which were promptly issued by NY State.

So - see the attached pix - more than one way around the bureaucracyhihi

My first test was to measure the output of a small crystal-controlled reference oscillator I had built in the 1970's to calibrate my 432 MHz. receiver - things were a bit tougher in those days to determine what frequency you were ACTUALLY on ...I had measured the output some years ago at around 1 milliwatt (0 dbm) and expected the DC output to be around 0.5 VDC - I was not disappointed, the DC reading was 0.65 VDC - close enough for "government work" as the old proverb goes.



- Jay NY2NY, Laurel, NY

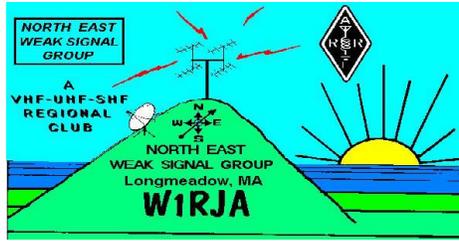
Anyhow, I ran some calibration curves on the device from 160m thru 70cm and it seems to be quite reliable and repeatable. The DC voltage output is higher on the lower frequencies for the same power levels as you might expect, but I did get usable readings up thru 1296 MHz. If you duplicate this device, you will need to run your own calibration curves as the individual diode characteristics and the housing and your DC meter all affect the readings.

This is a great project for home-brewers and/or tuning up commercial radios and will allow you to tune up RF

For Sale

2M 250W output linear PA using BLF278 FET, mounted on oversized heatsink \$200. Includes two 50W input pads for adjusting to drive of 5W to 25W. Specs at <http://stores.ebay.com/RF-Source-Lab>.

Contact WZ1V@ARRL.NET



Name: _____

Call sign: _____ Grid: _____

Street: _____

City: _____ State: _____ Zip: _____

Phone (home) _____ Optional (work) _____

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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: Tom Filecco, W1WSO via email – w1wso@comcast.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 WA1MBA Tom Williams PO Box 28
Shutesbury, MA 01072



<http://www.flex-radio.com/>

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

Check your membership
expiration date on your mailing label!

