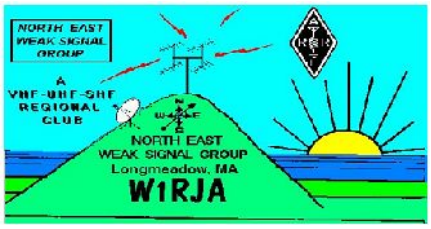


N.E.W.S. LETTER

The Publication of the North East Weak Signal Group

May, 2012 | Volume 21 | Issue 3

*****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

Full details to follow soon.

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

NEXT MEETING: May 12, 2012

BOARD MEETING: 11:30 AM at **Hibachi Grille and Supreme Buffet**,
14 Hazard Ave. Enfield, CT.. I-91 exit 47 Rt.190E. (860)-745-8808
(this is the Old Hometown Buffet location).
http://www.yelp.com/biz/hibachi-grill-and-supreme-buffet-enfield

GENERAL MEETING: STORRS LIBRARY - from 1 PM to approximately 3:45 PM

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 w1wso@comcast.net.

2012 North East Weak Signal Group VHF CALENDAR:

May 4-5 - New England Amateur Radio Festival - Deerfield, NH

May 5, 0600-1300 Local - Microwave Spring Sprint

May 12, 1PM - 4PM - N.E.W.S. Group Meeting

May 12-13, 2300-0300Z - 50 MHz Spring Sprint

May 18-20 - Dayton Hamfest

June 9-11, 1800Z-0300Z - ARRL June VHF QSO Party

June 30 - Rochester NY RARA Hamfest

July 14, 11AM - 4PM - N.E.W.S. Group Picnic

July 21-22, 1800Z - 2100Z - CQ Worldwide VHF Contest

August 4-5, 1800Z - 1800Z - ARRL UHF Contest

August 11, 0300Z - Perseids meteor shower

August 20-21, 6AM - 11:59:59PM - ARRL 10-GHz & up Cumulative Contest

September 8-10, 1800Z-0300Z - ARRL September VHF QSO Party

September 15-16, 6AM - 11:59:59PM - ARRL 10-GHz & up Cumulative Contest

September 17, 1900-2300 Local - 144 MHz Fall Sprint

September 25, 1900-2300 Local - 222 MHz Fall Sprint

September 29, 1PM - 4PM - N.E.W.S. Group Meeting

October ? - 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 20, 0600-1200 Local - Microwave Fall Sprint

October ?-? - Microwave Update hosted by 50MHZ & UP Group

October 27, 2300-0300 UTC - 50 MHz Fall Sprint

November 17, 1PM - 4PM - N.E.W.S. Group Meeting

November 15, ????Z - Leonids meteor shower

December 12, ????Z - Geminids meteor shower

President's Corner

Hello all. Thanks for your vote of confidence in electing me last meeting. Hope I can live up to your expectations. Please be sure to let me know if you think the group has issues we need to deal with so they don't slip through the cracks.

Let me introduce myself: Quite a few of you know me pretty well having seen me around for a bunch of years, but there may be some who don't know me all that well. So let me tell you a bit about what gets me excited in ham radio, and especially on VHF and higher frequencies. I first became a Ham in high school in 1962 when one of my classmates kept bugging me and bugging me to get a license. He was Dick Weber, WA2MYU at the time and is now K5IU. He now lives near Dallas, Texas.

Right from the start, I was more interested in designing and building stuff than in operating. When still in high school, I wasn't good enough to make stuff that worked well even in the higher reaches of the HF spectrum, especially in the really crowded bands like 80, 40 and 15 meters. After all, I was using old shortwave broadcast receivers for ham radio with very marginal selectivity. So I concentrated on 160 meters after I got my General class license. We had LOTS of room on our farm/summer resort in the Catskill Mountains, so a full wave antenna on 160 meters was quite manageable. During the day, 160 meters was very much like a VHF band but without the directional antennas. The QRM was minimal and I could build stuff that worked pretty easily.

When I went to college at RPI in Troy, New York, I pretty much dropped out of Ham Radio for my freshman year. I wanted to do really well in my courses because I came from a very small rural school in Windham, NY. But luckily we had an excellent science teacher, just back from getting his masters degree from Brown, and a really good math teacher as well. Small does not always mean you don't get good teachers. I can still remember my high school physics class offered only every other year with just 4 students. Talk about one-on-one learning! It was just great! I got As in all 4 Physics courses in college after that preparation.

In my last 4 years at RPI (leading to a Master's degree), I became much more active in W2SZ the Ham Radio club and became interested in designing and constructing VHF hardware. I was Equipment Supervisor for the club for a couple of years, keeping all the hardware going on all the various bands. In my graduate year, a bunch of us decided to make a serious effort to compete in the June 1969 VHF contest from Slide Mountain in the Catskills. My job was to build a brand new 1kW 220 MHz station from scratch that could be hauled up the mountain on one guy's back. It worked! We got about 600-700 Watts out of a pair of 4CX250Bs running CW with a compact HV power supply about 10" x 10" x 7". Not bad for a recent college graduate. Yeah… I had to build the antennas too… A pair of 12' long yagis made with 5/8" aluminum booms. Remember they also had to be carried to the top. I also built the 432 PA using a single 4CX250B for that contest effort. Sadly the contest was a disaster, with HORRIBLE weather – Rain for 5 days straight.

After the June 1969 contest, the crew decided that Slide Mountain was not a good idea. It was WAY too much work! We considered a number of other locations and decided to try Mt Greylock in September 1969. We shared the mountain and joined forces with the Berkshire County Hilltoppers, a local club in the western Massachusetts area. The RPI club has been using Mt Greylock for VHF contests ever since. It is a far better deal than Slide Mountain. So that was my baptism by fire into VHF contesting! I've been doing it each and every summer contest since and always try to find new stuff to do. Since 1976, I've been leading the VHF contest effort for W2SZ/1.

Over the years, I have concentrated on various bands from 900 MHz to 24 GHz. These days I specialize in the bands at 2304, 3456 and 5760 MHz. I just LOVE trying to make very long haul con-

tacts on those bands. These are great troposcatter bands as they are low enough so they are not affected much by water vapor in the air, but antennas have lots of gain, but are not too terribly narrow either. Also, pretty high powers can be generated more easily than on higher frequencies. Also, lots of surplus equipment is available to convert to Ham Radio use keeping costs reasonable.

I am more interested on making a long communications path reliably rather than getting the one-time thrill of an opening. I get more of a kick of working a rover EVERY contest in FM27 on 2304 and 3456, than working a guy once in Michigan on 2304 with 1 watt into a looper on a picnic table in his back yard. To that end, I spend LOTS of time looking for good sites that microwave rovers can use on frequencies up to 10 GHz to talk to us at W2SZ. On a pleasant summer weekend, you might find me on some prominent location anywhere between West Virginia and Maine checking the place out to see where a rover could set up.

So that's a thumbnail sketch of what I like about VHF Ham Radio. What about you? How about writing about what YOU like to do? Send it into the NEWS letter and then we will all know a little more about you!

Random Ramblings

Better weather is with us. I guess we didn't have that much of a winter, but still, it's nice to see pleasant weather to work on outdoor projects, especially antennas. Let's get out there and fix up our stations so they work well when we get our summertime openings. Six meters comes to mind as Sporadic E season begins in mid to late May. Tropo on the higher bands will not be far behind with the advent of summer weather. As we approach summer, we have a few sprints left. If you can get on the air, please do it, to increase the overall activity on the VHF and higher bands. Also, the summer contests will be with us before we know it. The ARRL June VHF QSO Party is a big one. It's less than 2 months away now. There is almost always a 6 meter opening during that contest and sometimes the higher bands cooperate as well. Again, plan to operate, and make noise on the bands. One thought about the June and September VHF QSO Parties. I've been active for many years now on the microwave bands and have always been disappointed in the number of stations that have 10 GHz on the air during those contests. Yeah… I know there is the 10 (and 24 GHz) contest in August and September, but it sure would be nice to hear more people on for the June and September VHF events as well.

Treasurer's Report

Membership is at its typically high level for this time of year as the few last stragglers remember to renew. We stand at 107 paid up members, plus our 14 permanent founders. The treasury health meter also shows that we are doing well, continuing to cover expenses with good reserves. I trust you had an excellent meeting on St. Patty's day while I was watching Red Sox Spring Training in 4-land. I see from reflector traffic that the sprints are active but with flat condx. Sorry that my shack is torn apart and will probably stay that way into the Summer as I recover from shoulder surgery. See you all at the May meeting.

73s - Tom WA1MBA

Secretary's Report

NEWS Meeting 17 March 2012, Storrs Library, Longmeadow, MA

Vice-President N1JFU called meeting to order at 1322

Treasurers report - next meeting

Special Election for President (N2GZ has resigned due to business committments)

- WA2AAU elected unanimously

OLD BUSINESS

- Club Insurance - WZ1V to investigate

- NEWS Website update in progress - easy to add

- Microwave bandplan K1MAP committee deadline 12/15

NEW BUSINESS

K1MAP - Update on ARRL Microwave Band Plan Committee

- List of current usage for microwave bands

MOTION by K1MAP: To submit as list as NEWS recommenced band plan. UNANIMOUS

- VHF Conference committee (5): WZ1V, K1MAP, W1GHZ, W1RT

MOTION by K1MAP: Three conference committee chairpersons to be signatory for new bank account. UNANIMOUS

- January contest

- NEWSletter file is too large for dialup - reduce .pdf size

- Club insurance - look into cost

-Transatlantic beacon K1WHS - club should support

-- WA2AAU - should reply or record automatically

- N2GZ has resigned due to business committments

-- special election next meeting

-- Nomination WA2AAU others at election

-- term thru July 2013

-- Secretary to send email

ANNOUNCEMENTS

- SEVHFS converence April 20-21

NEARfest May 4-5

MAD (Microwave Activity Day) May 6

Picnic 7/?

Meeting Adjourned 1347

Presentation by K1WHS on converting LARCAN VHF-TV amplifier to 6 meters, as described in the March 2012 NEWS-LETTER.

- Paul, W1GHZ

Installing the W1GHZ / K1JEZ Panadapter Adapter in the Yaesu FT-2000

Bob Bownes KI2L ©2011,2012 - bownes@seiri.com

A few meetings of the northeast weak signal group ago, Mike, N1JEZ, showed off the FunCube Dongle and discussed the possibility of using it as a panadapter. Paul Wade, W1GHZ took the buffer amp/filter design that Mike later presented and turned it into some great little circuit boards that he makes available from his website, w1ghz.org. Paul and Mike have done a great job of writing up the design as well as the construction and installation of the buffer amp/filter into the original target of the Yaesu FT-817(footnote).

When Paul announced that the mini-boards were available for the FT-817, I sent off an email and asked him to ship me three. One would go into my FT-817 for roving and transverter use, and I thought I might give a go at putting the other two into a few of the other radios used in the shack either to drive transverters or for general Hf/VHF/UHF use.

The primary rig in the KI2L shack at present is a Yaesu FT-2000 with the DMU expansion unit and computer based rig control using MacLoggerDX or TRX-Manager (under Parallels). While the DMU does offer some of the functionality of a panadapter, it's display is nowhere near the resolution of today's LCD displays in terms of XY or bits pr pixel, nor is the processor anything to write home about. Additionally, there is no mouse based tuning functionality or decode capability available in the DMU. It does have a nice bandscope and many other features, but I found the waterfall display to be very disappointing. Numerous users have discussed hacking the DMU firmware to improve the capabilities, however, adding the adapter to the FT-2000 and putting the panadapter display on the desktop with logging and rig control seemed like a pretty good alternative.

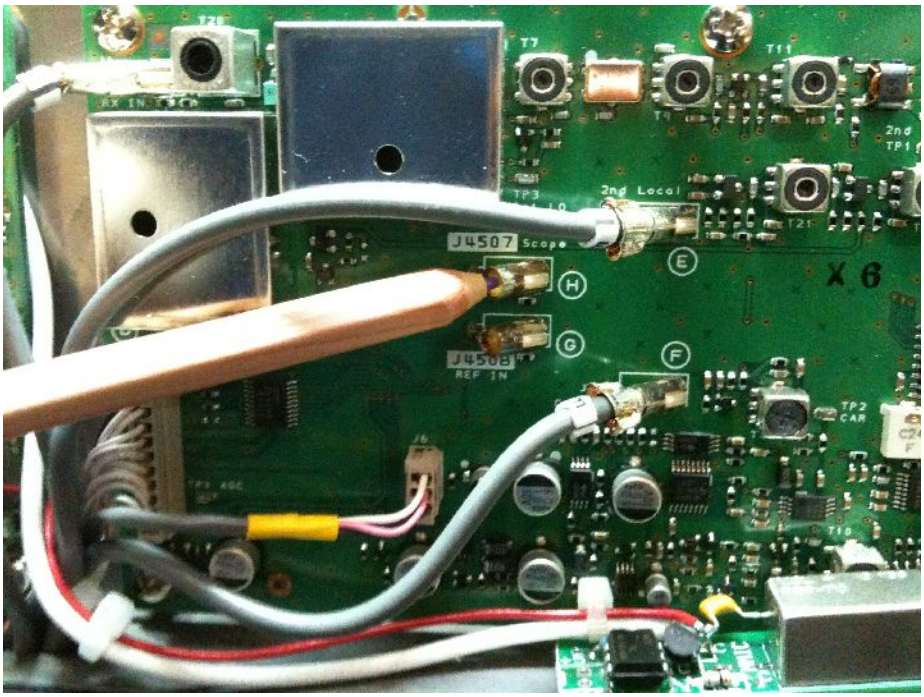
The FT-817's IF is 68.330Mhz, while the IF of the FT-2000 is close by at 69.450Mhz. This should make putting it in rather easy, or so I expected, and was delighted to find it so. Additionally, the decision by Yaesu to use a dedicated board internal to the FT-2000 to preprocess the IF for the DMU leaving the computer functionality outside of the radio made life even easier still. No circuit board modifications are required, the modification is almost the same with or without the DMU board present in the radio, and no wires are cut. If you want, you can drop the connection out ventilation slots or drill the rear panel for an SMA connector.

First build the adapter board as specified by W1GHZ (fig 1). This should take you about 20-30 minutes at the outside. When you are building the board, decide if you are going to solder

your input and output cables to the board or use connectors. I chose to put an SMA on the output to simplify testing and solder the input coax directly.

I modified the board to use 9vdc directly from the connector for the DMU by placing an LM78L08 next to the optocoupler on the end of the 680Solder a wire for +5 in the appropriate place and leave about a 6-8" tail. +9 is picked up as shown in figure 2.

The rf input may be picked up from either the DMU interface board (found in the right front side of the radio, figure 2) or at the cable marked 'H' on the other board on the right side of the radio (figure 3).



Solder up the input, drop the SMA out the back in whatever way you choice (figure 5,6), connect it up to the FunCube Dongle and follow the directions from W1GHZ and N1JEZ substituting 68.330Mhz as the IF.

I used the combination of the FT-2000 and the FCD during the January contest. A plethora of other problems kept me from otherwise making good use of it, but it was of good assistance in spotting a number of 6m contacts that would have otherwise been missed.

This worked out so well, I've picked up filters for putting one into the FT-847 as well. The 847's IF is significantly lower however, so it will probably have to be used with a different SDR as the panadapter.

73's,
Bob

WA1ZMS Trans-Atlantic Transmitter Update

The old tower that was the home for the yagi antenna stack was removed from the site on April 3rd, 2012.

After removal of the WA1ZMS repeater and Trans-Atlantic antennas from the former tower, the tower was removed from the site via crane. Through the kindness and endless courtesy of the US Forest Service who is the site Landlord (and to whom I pay an annual Federal Land Use Permit Fee), they have offered me temporary homes for my 2m and UHF repeater antennas as well as a place to locate a Directive Systems 5-ele yagi. This yagi is now aimed a bit farther to the north than the old yagis had been due to limits of mounting locations, but the good news is that 144.285 is now still QRV although the temporary feed line is now 120ft of LMR-400 and the TX power has been reduced by 3dB as part of this temporary antenna relocation.

A permanent home on the new replacement tower at the site is in the works, but has been delayed due in-part to siting on the new tower and some issues between the US Federal agencies that are co-located at the site. The site is on US Forest Service property, but has always only been open to ONLY US Federal users and one single Amateur Radio permit holder, which I was fortunate to be chosen, as such.

Endless thanks belongs to the USFS for allow me temporary homes for some repeater antennas and a 2m yagi until they can be moved to the new tower that is being populated on-site as a replacement for the tower that came down as is now larger in width to accommodate some new Federal microwave dishes.

I have some very nice new color photo QSL cards for those who copy the WA1ZMS 144.285MHz signal and can be given out with a SASE sent to:

Brian Justin, WA1ZMS/4

1704 Cottontown Road

Forest, VA 24551-3910

73,

-Brian, WA1ZMS/4

Spectrum Management

Weak Signal, EME, and FM Simplex and all amateur licensees:

A few days ago the ARRL UHF/Microwave Band Plan Committee issued its' "Proposed Band Plan for Amateur Band (902-928 MHz)"

The proposal will severely restrict Weak Signal, CW, SSB, Digital, FM Simplex, and EME operation. In the Northeast US, Weak Signal/FM Simplex/EME operators have been operating under a Band Plan that was approved by both the Repeater Coordination Body for the State of Connecticut (CSMA) and the North East Weak Signal Group (NEWS) back in 2005. That plan REALLY WORKS WELL. It is a reasonable plan for Weak Signal and Repeater users, Analog and Digital alike.

The total amount of spectrum allocated to Weak Signal/EME in the NEWS plan is only 1 MHz out of 26 MHz available in the 902-928 band. And, as you know, with the increase of commercial noise on 902-928 MHz, it is absolutely vital that Weak Signal ops have a band segment that is a free of noise as possible. Some of those "less noisy" segments are allocated to Weak Signal in the NEWS Band Plan. And, some of the "less noisy" segments are allocated to Repeaters. While we all wish for a noise free spectrum, the fact is, that Repeaters, whether FM or Digital, can stand a little more noise than Weak Signal. With noise and interference, Weak Signal Amateurs are unable to operate.

The 25 MHz split repeater band, (in the NEWS band plan) which is driven by only one type of surplus commercial gear, which may or may not be available in the future, has 39 repeater pairs, and is located in the least noisy area of the band. Most of those allocations are unused. And many of the "occupied" pairs are very short range or on paper only.

The first commercial ham gear has recently become available. It is the Alinco DJ-G29 handheld, and it handles any repeater split available, whether it is 25MHz, 12 MHz, or any other choice of offset. So, the 25MHz split will not be the only likely choice in the future, and repeater users will be able to use other areas of the band.

As Weak Signal, EME and FM Simplex operators, we need to make our choices known to the ARRL UHF/Microwave Band Plan Committee.

Please endorse the NEWS Band Plan as the Common Sense Plan for 902-928 that gives equal weight to all modes, and leaves room for new modes sure to come in the future.

If you agree with the fair NEWS plan, please email to map1@mapinternet.com, then Please indicate: "Yes to NEWS 902 plan" or just "Yes" and , Your callsign and, OK or Not OK to use your name & callsign.

If you say "Not OK" to use you name & call, then we will count your choice, but will Not identify you in any way.

If you say "OK" to use you name & call, then we will count your choice, and may use your call and name in a list of supporters of the NEWS Band Plan for 902-928.

If you are a member of a Weak Signal Society, or Club, please bring this up at the next meeting. Any clubs that would like to join NEWS in this band plan will be appreciated.

The ARRL UHF/Microwave Band Plan Committee has only allowed until May 7, 2012 for further comments, so we need to make our choices known soon.

Thank-You

Mark Casey, K1MAP, NEWS Spectrum Manager

Here is the NEWS Plan:

On Sept. 25, 2005, after much work, the Connecticut Spectrum Management Association (CSMA), which is the repeater coordination body for Connecticut, and the North East Weak Signal Group (NEWS), which is the weak signal organization of record representing Amateurs in the six New England states and Eastern New York, completed agreement of the following Band Plan for the 902-928 MHz amateur band.

NEWS and CSMA Bandplan 902.000-928.000 MHz

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, 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

The following segments are important to weak signal and contest operators:

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 (primarily used as an FM simplex freq during contests)
902.3000-902.3750 CW Propagation Beacons, Simplex, Experimental & Mixed
902.5000 FM Simplex Calling Frequency (see 927.500 pair)
902.9000-903.4000 Weak Signal, SSB, CW, Beacons, EME.
903.1000 National Calling Frequency-East Coast & Alternate-Weak Signal-USB,CW
903.2500 SSB/CW/FM DX Calling Frequency (primarily used as an FM simplex freq during contests)
903.3000-903.3500 CW Propagation Beacons
906.5000 FM Simplex Calling Frequency (not used very much)
918.5000 FM Simplex Calling Frequency (not used very much)
927.5000 FM Simplex Calling Frequency (used for general FM simplex &contest contacts across the country, note that this pairs with 902.500 as a 25MHz split)
927.9000-927.9250 CW Propagation Beacons
927.9000-928.0000 Weak Signal, SSB, CW, EME

As much as possible, we considered uses in other areas when designing this plan. Many of the bandplan segments were created specifically to agree with those segments created in existing the ARRL bandplan, the SERA coordination plan for the Southeast US, and the Florida Repeater Council. It would be good if each regional weak signal group would consider the NEWS bandplan, and either adopt it, or a version of it, or even create their own bandplan consistent with us-age in their region of the country.

Here is the ARRL UHF/Microwave Band Plan Committee's Proposed ARRL Band Plan for a 902-928 MHz Amateur Band as shown in the April 5, 2012 ARRL Letter and ARRL Website. The proposal pretty much leaves Weak Signal & FM Simplex operators out in the cold. It leaves EME out completely.

ARRL Proposed Band Plan for Amateur 33 cm Band (902-928 MHz)

Frequency Range--Mode--From To --Functional Use--Comment

902.0000-902.0875--FM/other including DV--Repeater inputs

902.0125-902.0750 paired with 927.0125-927.0750 (12.5 kHz channels)
902.1--CW/SSB--Weak signal calling--Regional option
902.1125-903.0000--FM/other including DV--Repeater inputs
902.1250-902.9875 paired with 927.1250-927.9875 (12.5 kHzchannels)
903.0000-903.0875--CW/SSB--Weak signal
903.1--CW/SSB--Weak signal calling--Regional option
903.1125-903.2000--CW/SSB--Weak signal
903.2000-903.4000--CW Beacons
903.4000-909.0000--Mixed modes, Mixed operations including control links
909.0000 915.0000 Analog/digital Multimedia includingATV,DATVand SS
915.0000-921.0000--Analog/digital Multimedia including ATV,DATVand SS
921.0000-927.0000--Analog/digital Multimedia including ATV, DATVand SS
927.0000-927.087--FM/otherincluding DV--Repeater outputs
927.0125-927.0750 paired with 902.0125-902.0750 (12.5 kHz channels)
927.1--FM/other--Simplex calling
927.1125-928.0000--FM/other including DV--Repeater outputs 927.1250-927.9875 paired with 902.1250-902.9875 (12.5 kHz channels)

On the Higher Bands

The North East Weak Signal Group (NEWS) approved the following Band Plans for the Weak Signal and EME segments of the 1.2-47 GHz Amateur Radio Bands at the general meeting held on March 17, 2012 in Longmeadow, Massachusetts. NEWS serves members in the 6 New England States, Eastern New York, nearby areas of Canada, and has members in many other parts of the country.

1296 MHz.

1296.000-1297.000 Weak Signal & EME -- Region 2
1296.000-1296.100 EME, Digital, SSB, CW
1296.060-1296.070 Digital EME Segment
1296.100 Weak Signal-SSB & CW Call Frequency
1296.100-1296.250 Weak Signal-SSB, CW
1296.150 Digital Weak Signal Terrestrial Call Frequency
1296.250 Weak Signal-NBFM & FM Call Frequency
1296.250-1296.300 Weak Signal-All Modes
1296.300-1296.400 Propagation Beacons-- Region 2
1296.400-1296.800 Weak Signal-All Modes
1296.800-1297.000 Propagation Beacons-- Region 2 & Region 1

2304 MHz.

2304.000-2305.000 Weak Signal & EME -- Region 2
2304.000-2304.100 EME, Digital, SSB, CW
2304.060-2304.070 Digital EME Segment
2304.100 Weak Signal-SSB & CW Call Frequency
2304.100-2304.250 Weak Signal-SSB, CW
2304.150 Digital Weak Signal Terrestrial Call Frequency

2304.250 Weak Signal-NBFM & FM Call Frequency
2304.250-2304.300 Weak Signal-All Modes
2304.300-2304.400 Propagation Beacons-- Region 2
2304.400-2304.800 Weak Signal-All Modes
2304.800-2305.000 Propagation Beacons-- Region 2 & Region 1

3400 MHz.

3400.000-3401.000 Weak Signal & EME -- Region 1 & 2
3400.000-3400.150 EME Segment
3400.060-3400.070 Digital EME Segment
3400.100 EME Call Frequency
3400.150 Digital Terrestrial Call Frequency
3400.150-3400.250 Weak Signal-SSB, CW, Digital Terrestrial
3400.200 Weak Signal-SSB & CW Call Frequency
3400.250 Weak Signal-NBFM & FM Call Frequency
3400.250-3400.300 Weak Signal-All Modes
3400.300-3400.400 Propagation Beacons-- Region 2
3400.400-3400.800 Weak Signal-All Modes
3400.800-3401.000 Propagation Beacons-- Region 2 & Region 1

3455 MHz.

3455.500-3457.000 Weak Signal & EME -Region 2
3455.500-3456.100 EME, Digital, SSB, CW
3456.060-3456.070 Digital EME Segment
3456.100 Weak Signal-SSB & CW Call Frequency
3456.100-3400.250 Weak Signal-SSB, CW
3456.150 Digital Weak Signal Terrestrial Call Frequency
3456.250 Weak Signal-NBFM & FM Call Frequency
3456.250-3456.300 Weak Signal-All Modes
3456.300-3400.400 Propagation Beacons-- Region 2
3456.400-3456.800 Weak Signal-All Modes
3456.800-3457.000 Propagation Beacons-- Region 2 & Region 1

5759 MHz.

5759.000-5761.000 Weak Signal & EME - Region 2
5759.000-5760.020 Propagation Beacons
5759.000-5760.100 EME, Digital, SSB, CW
5760.060-5760.070 Digital EME Segment
5760.100 Weak Signal-SSB & CW Call Frequency
5760.100-5760.250 Weak Signal-SSB, CW
5760.150 Digital Weak Signal Terrestrial Call Frequency
5760.250 Weak Signal-NBFM & FM Call Frequency
5760.250-5760.300 Weak Signal-All Modes
5760.300-5760.400 Propagation Beacons
5760.400-5760.800 Weak Signal-All Modes
5760.800-5761.000 Propagation Beacons

10 GHz.

10367.000-10369.000 Weak Signal & EME -- Region 2
10367.000-10368.020 Propagation Beacons
10367.000-10368.100 EME, Digital, SSB, CW
10368.060-10368.070 Digital EME Segment
10368.100 Weak Signal-SSB & CW Call Frequency
10368.100 10368.250 Weak Signal-SSB, CW
10368.150 Digital Weak Signal Terrestrial Call Frequency
10368.250 Weak Signal-NBFM & FM Call Frequency
10368.250-10368.300 Weak Signal-All Modes
10368.300-10368.400 Propagation Beacons
10368.400-10368.800 Weak Signal-All Modes
10368.800-10369.000 Propagation Beacons

24 GHz.

24191.000-24193.000 Weak Signal & EME -- Region 2
24191.000-24192.020 Propagation Beacons
24191.000-24192.100 EME, Digital, SSB, CW
24192.060-24192.070 Digital EME Segment
24192.100 Weak Signal-SSB & CW Call Frequency
24192.100-24192.250 Weak Signal-SSB, CW
24192.150 Digital Weak Signal Terrestrial Call Frequency
24192.250 Weak Signal-NBFM & FM Call Frequency
24192.250-24192.300 Weak Signal-All Modes
24192.300-24192.400 Propagation Beacons
24192.400-24192.800 Weak Signal-All Modes
24192.800-24193.000 Propagation Beacons

47 GHz.

47087.000-47089.000 Weak Signal & EME - Region 2
47087.000-47088.020 Propagation Beacons
47087.000-47088.100 EME, Digital, SSB, CW
47088.060-47088.070 Digital EME Segment
47088.100 Weak Signal-SSB & CW Call Frequency
47088.100-47088.250 Weak Signal-SSB, CW
47088.150 Digital Weak Signal Terrestrial Call Frequency
47088.250 Weak Signal-NBFM & FM Call Frequency
47088.250-47088.300 Weak Signal-All Modes
47088.300-47088.400 Propagation Beacons
47088.400-47088.800 Weak Signal-All Modes
47088.800-47089.000 Propagation Beacons

73,

Mark Casey, K1MAP, FN32sb

NEWS Spectrum Manager

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

Call for Papers

Papers and presentations are being requested. Please submit in electronic format to:

Rich KB3NRL renwright@verizon.net

Paul W1GHZ w1ghz.vt@gmail.com

Rick K1DS rick1ds@hotmail.com

Weekend Agenda

1. Special Hotel Room Rate for Attendees

2. Friday Night Hospitality and Table-top Fleamarket 7-10PM at Marriott Courtyard - LIMITED SPACE FOR ATTENDEES ONLY

3. Saturday Conference - 8:15am to 5pm at Marriott Courtyard - Must register in advance or at the door to attend

5. Saturday Pizza & Soft-drink Lunch at Marriott Courtyard for Registered Conference Attendees

6. Saturday Afternoon Snack for Registered Conference Attendees

7. Buffet Banquet Saturday Evening at Marriott Courtyard - 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 Marriott Courtyard for Registered Conference Attendees only 8-11 AM

For more information:

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

Microwave Update 2012

The Microwave Update 2012 program committee is calling for papers and presentations on the technical and operational aspects of microwave amateur radio communications.

Papers will be published in the conference proceedings (print and CD). Many will also be selected for presentation at the conference. The conference will take place October 18-21, 2012, in Santa Clara, California.

The deadline for paper submissions is **August 25, 2012**. The *Word* file format is preferred. If you are doing a presentation, please try to also provide a paper with more than just outline slides from the presentation. We would like to publish articles in the proceedings that provide full content for people who are not able to attend the conference presentations. Detailed formatting information for authors (margins, photos, other files) is provided here:

http://www.microwaveupdate.org/docs/MUD_guidelines.pdf (PDF version)

http://www.microwaveupdate.org/docs/MUD_guidelines.doc (MS Word version)

The presentation version of selected papers is due **September 22, 2012**; *PowerPoint* file format is preferred. Additional guidelines for presentations are in the same Guidelines document, linked above.

Please e-mail your papers, as well as questions or comments regarding the technical program, to mud2012papers@gmail.com.

Solicited topic areas include:

- Centimeter, millimeter, submillimeter and light wavelengths
- Antenna design, simulation, construction, measurement, application
- Microwave building blocks (LNAs, PAs, LO chains, Mixers, Synthesizers, Filters, etc)
- Transverters (single and multiband)
- Fixed station, Rover and Beacon design, packaging and operation
- Operating techniques, software and other aids
- Weak signal propagation modes and enhancements
- New or unusual emission modes (ATV, digital modulation, wide area packet networks, etc)
- Practical effects and limits of phase noise, antennas, path characteristics on various emission modes
- Microwave components (affordable and available modern commercial components; homebrewed; surplus)
- Repeaters (microwave bands and/or unusual modes like ATV, packet

WAN)

- Construction techniques (SMT, wirebond, microstrip, waveguide, substrates, homebrew)
- Measurement equipment and techniques (tuning amplifiers or filters, optimizing noise figure, measuring phase noise, antenna patterns and gain; professional results on homebrew/shoestring budgets)
- CAD (preferably free or low cost) for circuit, antenna, path and system simulation and design
- Conversion of surplus microwave equipment
- Or – suggest your own topics

Submissions may range from short notes to full length technical papers, original research to hints and tips, new designs to surplus conversions, professionally engineered to hacked on a shoestring budget.

Survey papers that summarize current know-how and tutorials that help and encourage newcomers are also welcome. Some topics may be organized and presented as workshops (for example, construction and measurement techniques).

Looking forward to seeing you and your presentation at MUD 2012,

Mike Lavelle, K6ML

mud2012papers@gmail.com

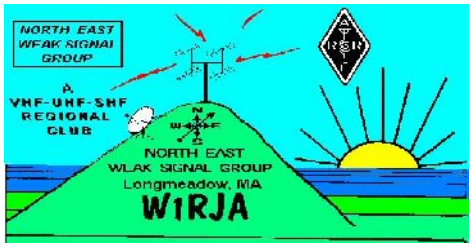
MUD 2012 Technical Program Chair

Classifieds

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

Please send all classified ad submissions to Tom, W1WSO via email to w1wso@comcast.net. Thanks!



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: 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