



# N.E.W.S. LETTER



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V P: WA1MBA, Thomas Williams

### CURRENT OFFICERS

Secretary: N1GJ George Jones  
Treasurer: N1DPM Fred Stefanik

## NEXT MEETING

**OUR NEXT MEETING NOVEMBER 3RD  
AT THE RADDISON HOTEL IN ENFIELD CONNECTICUT**

## IN THIS ISSUE

<b>FROM THE PRESIDENT DE W1GHZ</b>	<b>PAGE 2</b>
<b>SEC. REPORT NEWS BOARD MEETING OF 1 SEPT 2001 DE N1GJ</b>	<b>PAGE 2</b>
<b>ARRL MEMBERSHIP DE N1GJ</b>	<b>PAGE 2</b>
<b>SEC. REPORT NEWS BOARD MEETING OF 21 JULY 2001 DE N1GJ</b>	<b>PAGE 3</b>
<b>SEC. REPORT NEWS MEETING OF 21 JULY 2001 DE N1GJ</b>	<b>PAGE 3</b>
<b>WATER COOLING TIPS FROM ALL OVER THE WORLD DE K6LEW</b>	<b>PAGE 4</b>
<b>W3HMS 10GHZ BEACON DE W3HMS</b>	<b>PAGE 4</b>
<b>NEW SPECTRAN EME PROGRAM DE I2PHD &amp; IK2CZL</b>	<b>PAGE 4</b>
<b>GRIDSQUARE DX MAP PROGRAM DE W1LP</b>	<b>PAGE 5</b>
<b>PUA43 EME MODE COMMENTS DE K1JT</b>	<b>PAGE 5</b>
<b>MORE PUA43 COMMENTS DE SM5BSZ</b>	<b>PAGE 5</b>
<b>FOR SALE OR SWAP</b>	<b>PAGE 6</b>
<b>FOR SALE OR SWAP</b>	<b>PAGE 7</b>

MEMBERSHIP in the N.E.W.S. Group is \$10 per year. Apply to Fred Stefanik, N1DPM, 50 Witheridge St., Feeding Hills, MA 01030 (413) 786-7943 You may download an application from our web page <http://www.newsvhf.com>

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## **FROM THE PRESIDENT**

### **November meeting**

Our next meeting will be back at the Radisson hotel on November 3rd.

At the July meeting, we did MDS (Minimum Discernable Signal) testing on 10 GHz. Our secretary, N1GJ, was recording the results, so look for them in the NEWSletter. We also ate well - kudos to our chefs.

Since then, we've had the VHF Conference and Microwave Update. Next year, we will be hosting Microwave Update and having a joint conference. See the announcement elsewhere in this issue.

One of the most interesting talks at Microwave Update was by Chip Angle, N6CA, showing how to measure the surface accuracy of a dish with a cheap laser pointer. Some of his examples showed that not all dishes are as good as we hope. KB1VC and I will try to demonstrate the technique at the November meeting.

### **September Contest**

I only got to operate a few hours, but propagation seemed good. I hope you all had a good time.

### **10 GHz Contest**

No rain on either weekend, and good activity - what more could we want. I had a good time and a good score, and AF1T did even better.

### **N.E.W.S. webpage**

The NEWS group now has its own domain, with a new URL for the club webpage: [www.newsvhf.com](http://www.newsvhf.com) Ron is doing a great job as webmaster, so check it out.

Paul W1GHZ

## **ARRL MEMBERSHIP**

The ARRL is promoting ARRL Membership through local affiliated clubs. To that end, if any member of the NEWS Group wants to join the ARRL, they will allow the club to keep \$15 of the first year dues. The new member does not get any reductions himself (herself). There are other restrictions, so if interested, check with the NEWS Secretary for details.

## **SECRETARY'S REPORT OF THE NEWS BOARD MEETING OF 1 SEPT 2001**

Secretary's Report of the NEWS Board Meeting of 1 Sept 2001.

Because the NEWS meeting was held in conjunction with the VHF/UHF Conference, no separate Board Meeting was held.

Secretary's Report of the NEWS Meeting of 1 Sept 2001.

The General meeting was called to order by President Paul Wade, W1GHZ, at 4:27 PM. The attendance sheet was passed so that all attendees could register their presence. The meeting was held at the Radisson Hotel in one of the rooms used for the Conference. Paul gave a report on the Microwave Cumulative Contest for 2001. Awards for the 2000 Contest will be presented at the Conference Banquet. Full credit will be given for all contacts at 903 and above. One half credit will be given for any contacts made below 903 MHz. It was moved and seconded that these changes be incorporated. The change passed. A separate category will be set up for satellite contacts so as to encourage such operating but keep the playing field level.

Del, K1UHF, the NEWS Letter Editor, reported that he had completed the software changes for publishing the NEWS Letter and that the cost of the changes were approximately half of the cost he predicted at a previous meeting.

Stan, WA1ECF, reported that he was checking cards for ARRL operating awards such as VUCC. Anyone having cards to check should contact him during the Conference. Stan also recommended that the Club suggest to the ARRL to institute a VUCC Challenge similar to the HF Challenge. Stan will interface with the ARRL. He will try to get them into the upcoming January Directors meeting. Stan also proposed the idea of a VUCC Honor Roll similar to the DX Honor Roll in QST and maybe a VHF and up addition to the WPX Awards in CQ Magazine. See Stan with your ideas! Another possible addition available to VHF operators might be a cumulative contest based on contacts made during the various "Activity Nights" during the course of a year. Del, K1UHF, will make a proposal at the next NEWS meeting.

A discussion followed on the availability of 3456 MHz amplifiers from the surplus market. Dale, AF1T, proposed that the Club purchase a block of these amplifiers so as to be able to take advantage of large purchase discounts available. No further action was taken.

Dave, WB1CMG, suggested that the NEWS Group propose to the ARRL that they push amateur equipment suppliers to provide more 903 MHz rigs. Moved and seconded that Dave draft a letter to ARRL covering this subject. The motion

passed. The draft will be reviewed at the next NEWS meeting.

A discussion was held on the date for the next NEWS meeting. After considering several dates in November, Saturday, 3 November, was selected.

Matt, KB1VC gave a report on Microwave Update 2002, to be held in the New England area next year. Worcester, MA is currently being studied by the Committee as a possible site. Information is being collected on the Crown Plaza as a meeting hotel. The surplus scene is not the best. There is some question on how important a "Surplus Tour" really is. The meeting will start on 2 October 2002. It should be noted that the New England VHF/UHF Society will be the official sponsor of the Microwave Update meeting. They are the sponsors of our annual Conference. More information will be presented at the next NEWS meeting.

The meeting was adjourned at 4:48 PM.

## **SECRETARY'S REPORT OF THE NEWS BOARD MEETING 7-21-2001.**

Because of the nature of the July meeting there was no Board meeting.

## **SECRETARY'S REPORT OF THE NEWS MEETING OF 7-21-2001.**

The cookout / July meeting of NEWS was held at the picnic grounds of the Knights of Columbus Hall in Enfield, CT. This is the same location used last year and everyone agreed that it was an excellent location for our purposes. The cookout was a big success with everyone getting all they wanted of the hot dogs, hamburgers, drinks and chips, etc. Thanks to Ron, WZ1V, for being the chief chef.

After the food, the general meeting was called to order by President Paul Wade, W1GHZ, at 1:47 PM. The sign-in roster was circulated to record the attendees. Activities for the day, in addition to the cookout, included measurements of 10 GHz portable stations brought by club members.

Notices were passed out giving details of the upcoming VHF Conference planned for the end of August. Bruce, N2LIV, answered questions. It does not appear that holding the Conference on the Labor Day weekend will be a big problem. Bruce expects to send out about 300 notices. He asked for pictures of the day's activities be given to him for use at the Conference.

Secretary George Jones, N1GJ, reported on a quotation for

Club liability insurance received from Seabury and Smith. They want \$255 per year for the coverage. Very little detail information was included in the quote. It was moved and seconded that the Club purchase the insurance, when sufficient details are received on extent of coverage. The Secretary will contact Seabury and Smith and report back at the August 31/September 1,2 meeting with further information.

No further information was available on the 10 GHz beacon proposed for Mt. Graylock. Bert, N2YYU, reported that he had the beacon electronics working.

Paul, W1GHZ, passed the hat to cover the cost of food for the day's cookout and then launched into the main activity of the meeting. He proposed measuring receive sensitivity and transmit signal strength. The receive tests would be run first. Before beginning the testing, a raffle was held and Tom, WA1MBA, won the length of LMR-400 and Bob, W1COT, won the 12 GHz feedhorn. The actual receive sensitivity testing went reasonably well, but a test equipment failure prevented the transmit testing from being done. Testing was run by Paul, W1GHZ, Matt, KB1VC and Mike, KA1EKR. A total of 16 rigs were tested. The results are listed below:

Call	Receive Sensitivity	Comments
K1NCO	-60 dBm	Horn / DEM Xvtr
W1GHZ	-75 dBm	20 dB Horn / 100 mW
AF1T	-82 dBm	12" dish / 750 mW
N2YYU	-84 dBm	20dB Horn / 100 mW
K1MAP	-80 dBm	17dB Horn / 200 mW
K1UHF	-85 dBm	Sat Dish / 800 mW (probe pulled out of feed on trip to meeting)
KB1VC	-89 dBm	Sat Dish / 1 W
W1GHZ	-92 dBm	Sat Dish / 2 W
KA1OJ	-93 dBm	Sat Dish / 2 W
N1EKV	-95 dBm	Sat Dish / 300 mW
WA1MBA	-97 dBm	Sat Dish / 200 mW
N1EUX	-98 dBm	Sat Dish / 200 mW
AF1T	-100 dBm	24" Dish / 1 W
WB1FKF	-100 dBm	24" Dish / 3 W
K2CBA	-100 dBm	22" Dish / 1 W / DEM pre
W1RIL	-102 dBm	Sat Dish / 3 W

Formal activities ended at approximately 4:00 PM and the meeting was adjourned.

**DON'T FORGET**  
**THE NORTH EAST WEAK SIGNAL GROUP**  
**2 METER VHF AND ABOVE NET**  
**EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL**  
**144.250**  
**W1COT, K1UHF OR K1PXE NET CONTROL**

## WATER COOLING TIPS FROM ALL OVER THE WORLD

I want to thank all of you that provided your thoughts about our water problem and amp arcing. Our 1.2, 6-tube amp will undergo an extensive water system re-work, here's what we will do based on inputs I received from all over the world:

1. replace all brass fittings in the water system with non-corrosive nipples
2. install a means of measuring water conductivity such as in the ARRL UHF & Microwave Projects Book Vol 1 page 8-83 / 8-84.
3. seek out a new source for truly distilled / de-ionized water
4. inspect all tubes for possible pin holes due to corrosion - loss of vacuum.
5. install a micro-filter in the input line to the amp (bio filter 0.5 micron type)
6. clean all lines and caps thoroughly, flush system prior to and after use and purge using a vacuum source
7. treat entire system with a bleach / water mixture to rid it of any bio materials.

Our pump is already a non-conductive, nonmetallic type, however, thorough cleaning is required.

There seems to be universal consensus that distilled water is not necessarily "distilled / de-ionized water" regardless of how the container is marked. Conductivity tests for results greater than 1megohm would be the final proof. Finally, I don't think those that operate a fixed station amp would have to go to as much trouble - we on the other hand - have got to do all we can to minimize breakdowns as our operations are only during contests, I learned alot via this thread and truly appreciate everyone's time and thoughts.

73,

Owen Wormser, K6LEW / FM181x  
3201 Tennyson St, NW  
Washington, D.C. 20015  
Life Member, CSVHFS, ARRL  
K8GP, the Grid Pirates, <http://www.k8gp.net>  
[owormser@c3iusa.com](mailto:owormser@c3iusa.com), <http://www.c3iusa.com>

## W3HMS 10GHZ BEACON

Hello.....I am pleased to announce that the W3HMS 10 Ghz CW Beacon is on the air continuously since 4 October at the QTH of Fred, W3MMV, York, PA in FM19.

The frequency is 10.368.899 GHZ using a DB6NT beacon at 240 mw out to a slot antenna. The CW keying is F1, NOT like HF keying. The ID includes the call W3HMS and the FM19 grid square plus other data.

Reception reports appreciated by EMAIL to [W3HMS@aol.com](mailto:W3HMS@aol.com), to W3MMV as above, this List or phone to W3HMS at 717-697-3633.

73,  
John, W3HMS

## NEW SPECTRAN EME CW SOUND CARD DSP PROGRAM

We have just uploaded Spectran V1 to the Web site :  
<http://www.weaksignals.com>

It has many improvements wrt the previous beta 4 version, among which :

- dB calibrated display
- Named saving/restoring of the settings
- Timed screen capture (BMP, JPEG or GIF)
- Improved adjustability of the dynamic range
- Selectable palettes
- Preset modes for NDBs and QRSS
- Increased compatibility with more sound cards
- Crash-proof mixer settings handling
- Sampling up to 48 kHz
- A very smooth waterfall scrolling

Please download and test it for bugs and compatibility problems (I am sure there will be a few, but hopefully less than with the previous beta version).

Once you have downloaded and installed this version, please refrain from executing the old version, which will probably fail, and moreover you will be forced to rerun the setup procedure.

Thanks for any reports

73 Alberto I2PHD and Vittorio IK2CZL

## GRIDSQUARE DX MAP PROGRAM

Maybe some of you are already using this but I stumbled across it the other day.....

<http://www.dxatlas.com/>

It is actually a DXCC prefix program but you can overlay gridsquares so it can actually be a fairly detailed grid map (when zoomed in) of the world that gives bearings, distance, and even grayline.....

It looks like a nice tool for 6M DX

73, Clint  
WILP

## PUA43 EME MODE COMMENTS

G0RUZ wrote:

- > It is obvious even to the casual observer that once a PUA43
- > system has been configured and has proven to be operational then the level of operator skill
- > involved is minimum.

That sounds very much like a statement from one who has not tried it. Perhaps I'm wrong. But all of the same needs for a successful QSO exist -- getting the frequency and antenna pointing right, dealing with QRM, QRN, polarization rotation, ground gain, etc. -- whether it's CW or PUA43. In many ways, I suspect that making EME QSOs with 150 Watts and PUA43 will take more operator skill than doing it with 1500 Watts and CW.

- > I have similar feelings about WSJT despite being one of the
- > first people in EU to try it. I see it as "fun" and that is all.

For me, that's the whole point! I do any of these things because they are fun.

- > It is a choice, my choice is to use my ears to decode cw or
- > ssb. I do not wish to read it on a screen it is as simple as that.

No disagreement there, at all. We all make our choices; some of mine may seem weird to you, and vice-versa. But I shall reserve the right to do my best to persuade contest committees, etc., not to outlaw innovative and forward-looking modes of communication.

With best regards,

-- Joe, K1JT

## MORE PUA43 COMMENTS

I think the debate about this mode is interesting. Not technically but for the different attitudes that have been presented.

PUA43 is not developed for 144MHz EME and the improvement one gets is not any threat at all for conventional EME contesting.

I think it should be allowed and encouraged in contests - maybe very good operators with good equipment can get a few extra contacts this way. I find it hard to believe that PUA43 will allow faster contacts between typical 4-yagi stations and as long as PUA43 is not the most common mode anybody looking for a good scoring will have to call CQ using ordinary CW quite a lot for all the stations who use conventional equipment.

There is an alternative mode, coherently averaged CW, that can give an improvement that is of the same magnitude as the PUA43 improvement. This mode is 100% compatible to the old-fashioned CW and it will surely be used in the near future. On the tx side many stations already transmit as required for this mode to give some advantage (6 dB maybe). To get the full advantage the computer generating the morse code has to be left running during the receive periods so the repetition of the morse code message is continuous over the half hour or so required to receive a station that transmits 15 x 1 minute periods during this time interval.

Two years ago I recorded a transmission from KO6RS. This is a test transmission for evaluating coherently averaged CW. At the time my MSDOS dsp software was not well suited to analyse the signal and that was the reason I started to make a new and much more flexible dsp package, linrad, dsp under Linux.

Now, two years later linrad does not yet have all the features included of the MSDOS package but not much remains to reach this level.

linrad will include coherent averaging of CW signals and it is already possible to get an idea what the sensitivity will be. Coherent averaging has a threshold, the level when the phase of the carrier can not be detected even on qsb peaks. This threshold is approximate at the signal level where PUA43 needs an integration time of one hour and the coherent averaged CW will need a similar integration time.

Check this link for details:

<http://ham.te.hik.se/~sm5bsz/linuxdsp/afc/ko6rs.htm>  
mirrors at <http://www.g7rau.co.uk/sm5bsz/index.htm>  
and <http://nitehawk.com/sm5bsz>

73, Leif / SM5BSZ

## **FOR SALE OR SWAP**

**Kenwood TM-255A (2m) and TM-455A (70cm)** all-mode transceivers for sale.

Both is excellent working order, with mic, power cord, etc.

The radios have a great feature set, see:

<http://www.kenwood.co.jp/i/products/info/amateur/tm255455.html>

I have been especially impressed with how well they hold up in high-level RF environments (no intermod problems on receive). \$425 for the TM-255A and \$475 for the TM-455A.

Ed, K1TR Daytime: 978-960-6722, Eve: 603-437-0599

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**Elecraft K2 QRP HF transceiver** (#915) with SSB, 160m, NB options. 1 year old can easily be used with transverters as it has a second receive input.

**TS130s** with CW filter good condition

**Icom PCR1000** computer controlled wideband HF/VHF/UHF receiver 0-1300MHZ all modes

**23cm DEM transverter**

**23cm DEM 3-18 watts brick amp** w M5776 hybrid + coax relais for mast mounting of amp.

**23cm Directive systems loop yagi** (for pick up only)

**70cm DEM transverter** (30watts)

**70cm Mirage D1010** 430-450MHz amp 10W in 100W out

**M2 222MHz 10 el yagi**

**6m TenTec 1208 transverter**

73 Maarten, W1FIG, FN41 Rhode Island, mabu@sprintmail.com

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**Kenwood all mode transceiver Model TM 255A** with DFK-7A Detachable Front Panel Kit (7m), almost new in box \$600.

**Kenwood TS-690**, 160-6M, with additional filters (2.4 kHz) , set up with low power to drive transverters, separate transmit & receive lines, Instruction Manual, very clean \$600.

**2M allmode, 100 watt Icom IC-275H** with High Stability oscillator, Icom PS-55 power supply, matching speaker, Instruction and Service Manual, \$750.

**HF & 6 Meters, 100 Watt, Icom 736** with Service Manual, \$800.

**(4) RIW-19, 432 MHz yagis**, \$75 each, buy 4 get power divider free.

All items in excellent shape, non smoker and drinker (didn't spill a drop). Price Plus shipping.

Need to pay for my new TS-2000 rig and tower. Bruce N2LIV, bdwood@erols.com

## **DON'T FORGET**

**THE NORTH EAST WEAK SIGNAL GROUP**

**2 METER VHF AND ABOVE NET**

**EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL 144.250**

**W1COT, K1UHF OR K1PXE NET CONTROL**

## **FOR SALE OR SWAP**

- 1. Icom 706 Mk2 Transceiver** - HF and 6 Meters ONLY. Amp board for 144/432 is smoked.  
Never transmitted below 50 MHz. asking \$425.
  - 2. Clegg Zeus 6 and 2 meter transmitter.** The Cadillac of AM rigs. BRO
  - 3. Ham Radio Magazine.** complete set. BRO
- W1GHZ w1ghz@arrl.net

**Yeasu FT-920 HF thru 6 Meter Transceiver** 160 thru 6 Meters, 100 Wts all Bands, Seperate 6m Antenna Jack, Can set power level to 10 watts from menu for 28 Mhz. Front Panel panel further adjusts power. Requires External PowerSupply.

Installed Options: Total Value over \$500.00

High Stability TCXO - TCXO-7

International Radio #701-A 400 Hz CW Filter

International Radio #710-A 6 Kc AM Filter

International Radio Filter Switch Board with second SSB filter IR #709 2.1 Khz. Used in cascade with factory 2.4 Khz filter. Switchable in or out.

FM-1 FM Unit

Pristine Condition, Purchased New March 2000, Reason for Selling: Great Radio, but moving up.

Price: \$990.00, Will Ship CONUS UPS Ground for Free.

Ron Whitsel, W3RJW

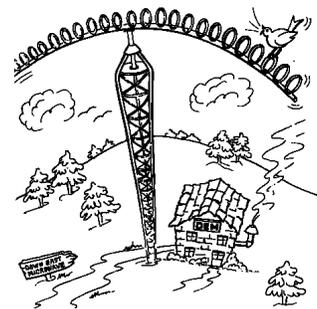
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**SAY YOU SAW IT IN THE NEWSLETTER**

**STEVE KOSTRO, N2CEI, 954 RT. 519, FRENCHTOWN, NJ. 08825 PHONE: 908-996-3584, FAX: 908-996-3702  
WEB PAGE: <http://www.downeastmicrowave.com/>**

## **DIRECTIVE SYSTEMS ANTENNAS AND ACCESSORIES**

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PHONE: 207-658-7758 <http://www.directiveystems.com>**



## THE NEXT MEETING

**OUR NEXT MEETING NOVEMBER 3RD  
AT THE RADDISON HOTEL IN ENFIELD CONNECTICUT**

**YOUR ATTENDANCE IS NEEDED FOR THE CLUB S ARRL COMPETITION!!**

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2 METER VHF AND ABOVE NET  
EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL 144.250**

### **North East Weak Signal Group**

**c/o N1DPM  
Fred Stefanik  
50 Witheridge St.  
Feeding Hills, MA 01030**



**Check your membership expiration date  
on the mailing label!!**