



# N.E.W.S. LETTER

The Official Publication of the North East Weak Signal Group – <a href="http://www.newsvhf.com/">http://www.newsvhf.com/</a>

March 2018 Volume 27 Issue 2

# 44th ANNUAL EASTERN VHF/UHF/MW CONFERENCE

Fri./Sat./Sun. April 20-21-22, 2018 See Page 2 for all the details

# **Next NEWS Group Meeting is March 24**

Jeff Millar, WA1HCO will speak on "mmWave Vehicular RADAR"

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BOARD MEETING - 11:00 AM at Lulu's, 151 Hazard Ave. Enfield, CT Phone: (860) 763-2377 I-91 Exit 47 Rt. 190E 1 Mile on Left http://luluspizzeria.com

GENERAL MEETING - STORRS LIBRARY - from 1 PM to approximately 3:45 PM.
693 Longmeadow St, Longmeadow, MA 01106
<a href="http://longmeadowlibrary.org">http://longmeadowlibrary.org</a>

### DON'T FORGET

The North East Weak Signal Group 2 Meter 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 \$10 per year.

Apply to John Crawford, N2OY. E-mail: <a href="mailto:n2oy.vhf@gmail.com">n2oy.vhf@gmail.com</a> (see page 9).

The N.E.W.S. LETTER is the publication of the North East Weak Signal Group.

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Send articles by e-mail to George Collins, KC1V at <a href="mailto:news.kc1v@gmail.com">news.kc1v@gmail.com</a>

# 44th ANNUAL EASTERN VHF/UHF/MW CONFERENCE

# Sponsored by the North East Weak Signal Group

Fri./Sat./Sun. April 20-21-22, 2018

**BAYMONT INN & SUITES,** 

20 Taylor St., Manchester, CT 06042

(just a few miles northeast of Hartford, CT off I-84, at Exit 63)

# Registration for this year's Conference is ONLY \$20!

The Advance Registration Deadline is April 15.

Registration at the door will be \$25, so make your reservations NOW!

# **Registration Includes All Three Days and:**

Friday Night Super Hospitality Room
Saturday Pizza and Sub Lunch
Conference Proceedings CD

(Extra Proceedings CDs are just \$5 each at the Registration Desk)

## Saturday Evening Banquet Buffet Tickets are \$30.

**Banquet Tickets Must be Reserved by April 15** 

\*\* On-Line Registration is Available NOW at www.newsvhf.com \*\*

### Discounted Room Rate -- Even Lower than Last Year!

The discounted rates are available from Tuesday 4-17 thru Monday 4-23
The Rates are \$74 for 1 King, 1 Queen or 2 Double Beds (+tax)
Rooms Must Reserve by March 16.

\*\* You can make your reserve rooms NOW! Call the Baymont Inn at 860-643-5645 \*\*

The Discounted Rate is Available by Phone-In Only.

Ask for the "VHF Conference" or the "North East Weak Signal Group (NEWS Group)" rate.

# **Schedule Conference of Activities**

### **FRIDAY:**

7 am -- FREE Continental BREAKFAST (for those staying at the Baymont Inn)
Noon -- Lunch on your own
Afternoon Session -- TBA
6 pm to 10 pm-- Super Hospitality Room,

### **SATURDAY:**

7 am – FREE Continental BREAKFAST (for those staying at the Baymont Inn) 8 am to 5 pm – Presentations and Indoor Vendors Noon – PIZZA, SUB and Beverage LUNCH (INCLUDED with Registration!) 6pm -- Pre-Banquet Hospitality

7pm -- BANQUET Buffet, Tom Kirby Award Presentation, Banquet Speaker, Trivia Quiz, Door Prizes

**Indoor Swap and Vendors** 

#### **SUNDAY:**

7 am -- FREE Continental BREAKFAST (for those staying at the Baymont Inn) 8-11 am -- SWAP/TAILGATE in Parking Lot

### **TRANSPORTATION:**

Bradley International Airport (Hartford, CT), is close by the site (1/2 hr). The New York, Boston, Providence, Albany and Manchester, NH airports are a 2-3 hour drive. Amtrak-Hartford station - about 15 minutes to the hotel.

### **QUESTIONS?** Please Contact:

Mark K1MAP, (hospitality, hotel, swaps/vendors) map92map@gmail.com, (cell) 413-777-9828 Paul, W1GHZ, (presentations, proceedings) w1ghz@arrl.net, (home) 802-563-2110

# 44th EASTERN VHF/UHF/MICROWAVE CONFERENCE CALL FOR PAPERS

The aim of the Conference is to share with our fellow VHFer's and above technical achievements in the field of communication and experimentation. You are all invited to participate by presenting a technical paper or submitting one for publication in the Conference Proceedings CD. Just your attendance is also welcome and we have a full program scheduled once again this year. If you are interested in presenting a paper at the conference or submitting one for the Proceedings please contact: Paul Wade, W1GHZ at W1GHZ@arrl.net

For the technical presentations, PowerPoint presentations are preferred, but not required. The conference will provide an LCD projector, screen and wireless microphone for use by its participants. If your presentation requires a different format such as a slide projector, please contact me prior to the conference and I will arrange for it. A Conference Proceedings will be published on CD. You do not need to be a speaker to have your material included in the proceedings, just interested in sharing with your fellow radio enthusiasts, so please send it along before APRIL 1, 2018

73, Conference Chairman and Proceedings Editor: Paul Wade, W1GHZ

Email W1GHZ, 802-563-2110 (home)



# MICROWAVE UPDATE 2018

Fairborn, Ohio (near Dayton) October 11-14, 2018
Holiday Inn Dayton/Fairborn I-675

# An international conference dedicated to microwave equipment design, construction, and operation

The focus is on, but not limited to, amateur radio on the microwave bands. The <u>Midwest VHF/UHF Society</u> is pleased to host this October 2018 event. Registration & Conference Updates: <u>www.MicrowaveUpdate.org</u> (Check the Website periodically for updates.)

Microwave Update is an ARRL technical conference. ARRL publishes the conference proceedings.

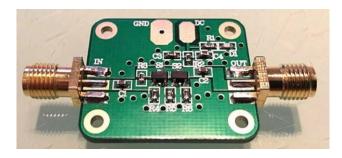
Further info: Tom Holmes (MUD 2018 General Chair) at <a href="mailto:n8zm@mvus.org">n8zm@mvus.org</a>

# A Panadapter for the Yaesu FT-847

Ken Kent, KA2LIM and Mike Seguin, N1JEZ

One of the easiest ways to install a Panadapter in a Yaesu FT-847 is to use a G4HUP 'tap board'. Now, with the sudden passing of G4HUP, these boards are not available.

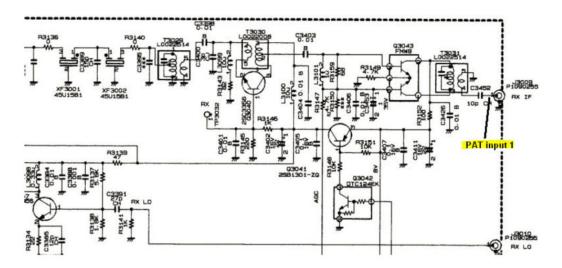
Searching eBay turned up several possibilities. There are LNA boards with 10/20/30 dB of gain available at very reasonable prices. We chose a 10-dB version. Cost was a bit over \$8 delivered.



The board is spec'd at 10-dB gain @ 12 volts. We knew we only needed approximately unity gain, and that there is a convenient point in the radio to source 8 volts, so we tested the board with lower voltage and it worked fine, providing us with about 0-dB gain.

The common IF in an FT-847 is 45.705 MHz. As with other Panadapter boards, we wanted to use an output filter. We chose a Minicircuits PLP-50+. This is \$15 plus shipping.

The choice of tap point in the FT-847 is the same as G4HUP suggests for his tap board, J3009.



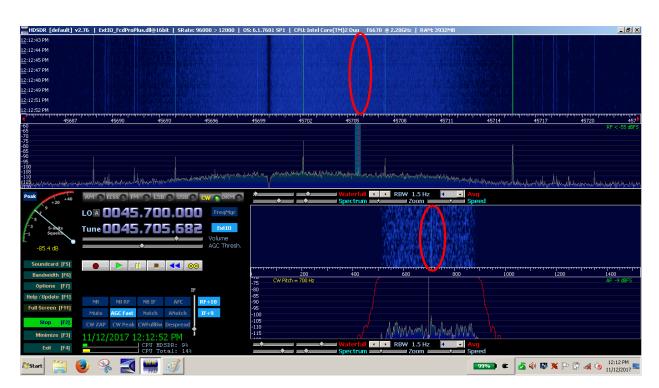
This tap point is well buffered, but it is after the dual crystal filters so the bandwidth that can be displayed is limited. In this case, +/- 20 kHz is the usable range. For Ken's intended use as a microwave Panadapter, it should be sufficient. It might be possible to tap before the crystal filters, but those points are on the bottom side of the RX board and not easy to access.

Installing the board was very straight forward. The SMA's were removed and the filter fitted on the output pads (below, left). The input uses a small wire rather than coax. The coax connects the output to a rear mounted SMA (below, right). The 8 volts to power the board is tapped from L3102.





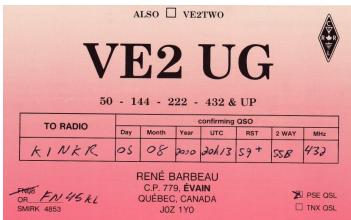
Below is a screen shot from HDSDR, using a FUNcube Pro+ dongle tuned to 45.705 MHz. There are a few spurs present, but they don't appear to affect the weak-signal performance of the tap. On screen, you can see a signal at -151 dBm circled in red.

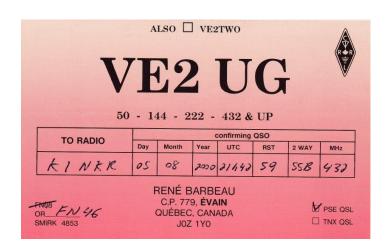


## Lessons Learned - Or Not

J.W. "Skip Youngberg, K1NKR







You know the drill. Old friend Frey "requests" that you go out to an unoccupied grid. And the other drill: "Don't forget to submit your log, no matter what the score".

Back during the UHF contest in 2000, Jim, K1PTF, and I headed out to Mount Megantic (FN45), were we pretty much got skunked. Four Q's on 432 (W1AIM, AL1VE and VE2UG in two grids) and three more on 222 (N1DGF, W2SZ, and AL1VE).

Jim's wife was sick and he didn't want to be away from the Boston area overnight, so the trip turned out to be a 500-mile up-and-back. We came within a few feet of hitting a moose on the drive back down Route 3, then missed every pull-off opportunity for dinner and got home really late. Really, really late.

After everything was over, I submitted a log—for all seven contacts.

The big surprise was that the mini-DXpedition *took Canada*, First Place, Multioperator! I was flabbergasted when the certificate arrived.

Lesson learned? Nope. I'm still sloppy regarding whether I submit a log.

And years later I was looking at badges at the Eastern VHF/UHF Conference. VE2UG. VE2UG?? I've heard that call before! Wonder if he realizes he was a part of history? (Want to know what VE2UG is up to now? Just turn the page. Ed.)

# So, What Has VE2UG Been Doing Lately?

Well, René, VE2UG, has been busy putting in some bench time, preparing for the upcoming Eastern VHF/UHF/µW Conference.

He has been characterizing the performance of a PCOM RX down-converter (photos below), to be used as a source/transverter for 47- and 78-GHz, and possibly other bands. He has plans for an article.





Above - Modified PCOM down-converter

He is also building a 122-GHz station, using a DL2AM transverter from Henry, KT1J.

His 10-GHz rover station is getting refurbished: Bigger antenna and better integration of the existing DEM transverter. The 78-GHz station now has a PA/LNA.

The HeyWhatsThat Website (www.heywhatsthat.com) was put to good use last summer, finding sites LOS to Whiteface, for Henry KT1J, and various sites for 78-GHz tests across the border.

For this summer he plans to be operational on 122 GHz and work some distance with Mike, N1JEZ. A Grid-Expedition to FN47, FN56 and FN57 is in the work too.

He also reports that he has finally completed the 10- and 24-GHz home station.

On the nostalgia front, he has started a collection of old VHF/UHF radios from the 70's (TS-600, FT-620B) and above. IC-x75 will be the upper limit. Stu VE2XX, Don VE2DFO and Randy VE3AX nicknamed it "The Museum" Hi!

# Mid-Atlantic States VHF Conference Sept 28-30

Sponsored by the Mt. Airy VHF Radio Club (Packrats)

Papers and presentations solicited!
Send your topic or title to: Rick Rosen, K1DS (<u>rick1ds@hotmail.com</u>)

## N.E.W.S. GROUP OFFICERS

### PRESIDENT:

WA2AAU, Dick Frey 7262 Skyline Dr. Delanson, NY 12053, FN22vs Home: 518-895-2798 rlfbauer @ gmail.com ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz, 24 GHz.

### **VICE PRES:**

KA1SUN, Eric Mazur 763 Main Road Savoy, MA 01256, FN32nl Cell: 413-743-9975 ka1sun0 @ gmail.com ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz

#### **SECRETARY:**

W1GHZ, Paul Wade 582 Dubray Road Cabot, VT 05647, FN34uj Home: 802-563-2110 Cell: 802-498-4797 w1ghz @ arrl.net ACTIVE ON: 6, 2, 222, 432, 903 1296, 10GHz

#### TREASURER:

N2OY, John Crawford PO Box 1112 Latham, NY 12110, FN32dr Home: 518-708-5500 n2oy.vhf @ gmail.com ACTIVE ON: 6, 2, 432, 903, 1296, 2304, 3456, 5760, 10 GHz, 24 GHz

#### **EDITOR:**

KC1V, George Collins 105 Ninth District Rd. Somers, CT 06071, FN31sx Cell: 860-670-3028 kc1v @ arrl.net ACTIVE ON: 6, 2

### **SPECTRUM MGR:**

K1MAP, Mark Casey 303 Main Street, Hampden, MA. 01036, FN32sb Home: 413-566-2445 map @ mapinternet.com ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz

## **BOARD OF DIRECTORS:**

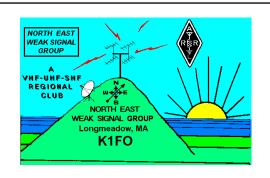
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KI2L, Robert Bownes 8 Ribbon Candy Lane, Troy, NY 12182, FN32et bownes @ seiri.com ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz

W1ZC, Dick Wilborg 791 Brookline Rd, Mason, NH. 03048, FN42dr Home: 603-878-3680 w1zc @ myfairpoint.net ACTIVE ON: 6, 2, 432, 1296

W1FKF, Don Twombly 32 Bumfagon Road Loudon, NH, FN43gi w1fkf @ arrl.net ACTIVE ON: 6, 2, 222, 432, 903, 1296, 2304, 3456, 5760, 10 GHz, 24 GHz, 47 GHz, 78 GHz







### **MEMBERSHIP APPLICATION**

Name:							
Call sign:	Il sign: Grid:						
Street:							
ity: State:Zip:							
Phone (home)	one (home) Optional (work)						
Email							
ARRL member: Y N							
Electronic Newsletter Delive	ry: Y N						
Operational Bands (circle)	1.2 GHz	2.3 GHz	3.4 GHz	5.6 GHz			

The North East Weak Signal [N.E.W.S.] Group is being established to form camaraderie among fellow VHF-UHF-SHF enthusiasts and support a convenient means to exchange technical information. We currently have six meetings per year, held at a centrally located facility and provide a "NEWSLETTER" that is distributed two weeks prior to each meeting. Any contributions to this publication are appreciated and can be sent to: George Collins, KC1V by e-mail to kc1v@arrl.net. Dues are \$10/year. Remember, this group is formed by VHF'ers for VHF'ers.

Mail to:

North East Weak Signal Group c/o N2OY, John Crawford PO Box 1112 Latham, NY 12110

# North East Weak Signal Group

c/o N2OY John Crawford, PO Box 1112, Latham, NY 12110

Check your membership Expiration date on your mailing label!