

## ZERO BEAT

http://hcra.org March 2017

#### Special points of interest:

MTARA HamFest Saturday March 11th Castle of Knights, Chicopee, Ma

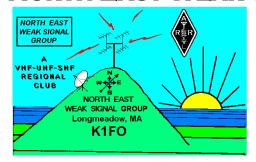
- Visit the HCRA facebook page.
- Don't forget to check out hcra.org
- Visit Summits on the Air
- Visit POTA413 facebook page

GET YOUR
PROJECTS
READY FOR
SHOW N' TELL
April 7th

## **March's Meeting**

Join us Friday March 3rd at 7:30, in the Holyoke Medical Center Auxiliary Conference Center

## NORTH EAST WEAK SIGNAL GROUP



North East Weak Signal Group

The North East Weak Signal [N.E.W.S.] Group was established to form a comradery amongst fellow VHF-UHF-SHF enthusiasts, and support a convenient means to exchange technical information

For directions to The Holyoke Medical Center Auxiliary Conference Center:

http://www.hcra.org/meeting-location/

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# DON'T FORGET THE KX 2 RAFFLE



SEE PAGE #2 FOR DETAILS





with

Elecraft MH3 Hand Microphone
Elecraft KXAT2 Antenna Tuner



Tickets only \$10 - all proceeds to HCRA
Only 250 tickets sold!

Drawing March 11th, 2017 @ MTARA Hamfest

(or at a preceding HCRA meeting if all tickets sold prior to March 11th)

### JIM MULLEN, KK1W, HONORED AT JANUARY MEETING

#### FRANDY JOHNSON N1FJ



HCRA has awarded Jim Mullen, KK1W, the Lifetime Member Award "For your years of Outstanding Dedeication, Support and Leadership to the HCRA Community." It would be hard to find an area ham who has not been helped by Jim, a ham since 1976, when he earned his Novice Class license as WA1ZUH. He passed his General Class the next year, followed by his Advanced, and then Extra in 1990. In 2001 he received the call sign KK1W.

Jim became involved in HCRA early on, serving as Secretary "I don't remember when, " and served as President for many years. He had become a V.E. (Volunteer Examiner) after earning his Extra, and has served at 300 V.E. Sessions!



His interests in ham radio have been many and varied. In fact, there may be one or two ham radio activities he *hasn't* done. I would guess his main current interests are DX, Contesting, Field Day, SOTA, (Summits on the Air), and building things. Jim has also dabbled in mobile, satellite, RTTY, AM, FM, VHF, HF, fox hunting, and digital. What did I leave out? Oh, he's an Elmer, freely giving advice to hams new and old.



Jim's home station in Brimfield, Massachusetts is an Elecraft K3 with a 500 watt amp, and a nice array of antennas, and all kinds of automatic switching, and computer integration. The walls of his shack are covered with "wallpaper" for top finishes in various categories, and awards like DXCC, and WAS (on several bands).





Jim is currently 5th in the
W1 section of
"Summits of The Air".
Here he is shown
"activating"
Mount Mansfield,
in Stowe, VT





Jim has volunteered at so many "Field Days" that it's hard to find a "FD" picture without him in it. Here he is with long time HCRA members Frandy Johnson, (N1FJ) Matt Wilhelm. (W1MSW)



## FROM THE SHACK

#### **JEFFERY BAIL NT1K**



#### March Meeting

This month's guest speaker is Dick Frey (WA2AAU). He will be giving a talk on VHF/UHF long distance communications. With the solar cycle heading into a null, I think we should be exploring other aspects of amateur radio. We've haven't had a meeting in a long time that discussed VHF/UHF. This should be an excellent meeting.

#### MTARA Hamfest

It's almost here. On Saturday March 11<sup>th</sup>, the Mount Tom Amateur Repeater Association is sponsoring it's annual hamfest. They have changed venues and it will be at the Castle Of Knights on memorial drive in Chicopee MA. It's right up the road from the last location. There will be more available parking and a larger floor space. I would claim that this is the biggest amateur radio

event in the valley. As those interested in amateur radio, we should do our best to support it by attending. It's a big fundraiser for MTARA. It's also big fundraiser for HCRA.

#### **KX2** Raffle

The hamfest is a reminder that the elecraft KX2 raffle is ending. This year we went with the KX2 because it's a brand-new radio. Compared to the KX3, it's a smaller, more portable and cheaper. For this raffle we've added the internal antenna tuner and the microphone to bring the package value to around the \$1000 mark. All you would need is a battery and antenna to get on the air and a paddle/key if you wanted to do CW. It's an excellent rig for portable operations.

#### Show and Tell

The show and tell meeting is just a month away. Are your projects ready or close to being ready? Please bring them to the meeting, show it off to the membership. If you are a HCRA member, you could possibly walk away with some prizes. It's an excellent event that many enjoy. Depending on the amount of submissions, we ask that you keep your presentation short in consideration of others.

#### We Need You!

I take great pride in being the president of HCRA. I also consider it a great responsibility considering the shoes that I am filling. Jim Mullen (KK1W) has set the bar high. He is an excellent mentor and I would like to set the bar even higher. There is much potential for this club to improve. However, it cannot be left up to a few people. We need the club to work together as a team. If you want to see this club improve, please volunteer. We need you.

At this moment in time, we are looking for people to help with Field Day. We need operators and those to help setup and tear down the towers and antennas. We are also looking for instructors for both "Share The Knowledge" and for license classes. If you have detail knowledge about a subject and feel that it would benefit the membership, please bring it up at a meeting or to a director.

If we decided to hold or sponsor a special event, we will need people to help make it happen. We have equipment that is used once a year, I think we should make more use of it.

We also need people to write Zero Beat articles. Gary Fields (WA1MOW) puts together excellent publications but he depends on the members for articles. Without you, there is no Zero Beat. It could be on anything that is related to club or amateur radio.

#### **ARRL DX Contest**

We're still in the middle of the contest season, A couple weeks ago, was the ARRL DX CW contest, there were many members on the air. Our club call (W1NY) was also on the air with Jim (KK1W), Matt (W1MSW) and Frandy (N1FJ) at the key. This weekend is the ARRL DX SSB contest (March 4-5). It's an excellent contest for us because we're the wanted station. Take advantage of the propagation and get on the air. DX will become harder and harder to get on the higher frequencies.

In May there will be New England QSO Party (NEQP). HCRA will be entering this contest as a club effort. If you have the operating privileges and the equipment, please consider getting on the air on the weekend of May 6-7. It's usually a fun time and there are also a few other QSO party's going on at the same time. You could Win multiple contests in just one weekend.



#### 30th Annual

# Amateur Radio & Electronics Hamfest



Saturday March 11, 2017

Located at:

## **Castle of Knights**

1599 Memorial Drive, Chicopee, MA 01020

www.castleofknights.com

#### \*\*\*Directions\*\*\*

#### From North:

\*Take I-91 South to the Mass Turnpike. Take exit 5 (Rte. 33) off the Turnpike. After the tollbooth bear to the right to the first traffic light. Turn left onto Memorial Drive and travel north for about 2 miles.

#### From South:

\*Take I-91 North to the Mass. Tumpike. Take exit 5 (Rte. 33) off the Turnpike. After the tollbooth bear to the right to the first traffic light. Turn left onto Memorial Drive and travel north for about two miles.

#### From East:

\*Travel on the Mass. Turnpike toward West. Take exit 5 (Rte. 33) off the Turnpike. After the tollbooth bear right to the first traffic light. Turn left onto Memorial Drive and travel north for about two miles.

#### From West:

\*Travel on Mass. Turnpike toward East. Take exit 5 (Rte. 33) off the Turnpike. After the tollbooth bear to the right to the first traffic light. Turn left onto Memorial Drive and travel north for about two miles.

Castle is on the right for all of the above.

	Mail- in Registration	Form
Name		
Call sign		
Address		
City	State	Zip
Phone (cell p	referred)	
Email Addres	ss:	
# of Tables	x \$20.00 =	
Is 120 VAC No	eeded?	
	to: MTARA fullarney-KC1BDF, mpton, MA 01027	20 Spring Street,

#### \*\*\* The Details \*\*\*

#### Doors Open:

6:30 AM Vendors <u>only</u>; help available for

loading and unloading 8:30 AM General Admission

#### Admission:

Adults: \$5.00

Children: under age12 are FREE!

#### No Tailgating

#### **Handicapped Parking Available**

**Snack Bar** – hot and cold beverages, hotdogs, burgers, etc.

**Raffle Prizes** – six (6) tickets for \$5.00

#### VE Exam -10:30 AM

Bring **two** forms of positive ID; originals and photocopies of any CSCE's you hold; and if licensed, the original of your current license plus a photocopy.

#### Additional Information:

http://www.mtara.org

**Talk–In on** 146.94 (127.3 PL)

#### **Table Registrations contact:**

Brian Mullarney - KC1BDF 20 Spring Street Easthampton, MA 01027 Tel. (860) 478-6790 kc1bdf@arrl.net

## 8 Months After Dayton 2016

#### LARRY KRAINSON WIAST

Not only has it been 8 months since I went to the Dayton Hamvention last year with KC1BDL, NF1G & KC2FEV but it's also been 8 months of using my purchases. Some of which have gotten a lot of use.

I went to Dayton with a shopping list of two main things and accessories to make them work, plus a few maybe things. The major items were a new beam and new rotor and controller. Both would be replacing a beam and rotor & controller that I've had and been using since high school, some 35+ years ago. Sure, I could have taken them down and done some maintenance on the antenna, but I felt it was time to replace it and I've wanted something with the WARC bands for years. And I had the money put aside for them. And I was as active as I've ever been, so the time was right for an antenna improvement.

I started thinking, reading reviews, making a comparison spreadsheet in early spring. I originally was thinking a 3 element Steppir. But the thought of taking it down every 5 years for maintenance had me worried. Steppir says it's like an oil change for your antenna. But to me, it was inconveniencing my friends every 5 years to take it down, do maintenance and then put it back up again. And it was so darn expensive configured the way I wanted it. Nearly \$2500. Yes, very cool technology, but not for me.

So I was thinking replace it with another Mosley unless I saw something more attractive at Dayton. Which I did.

I spoke to and looked at all the antenna manufacturers at Dayton on Friday. I kind of homed in on JK Antennas out of the Danbury area of CT. The antenna I was looking at did 5 bands and could add on 6 meters which was another band I wanted a directional antenna for a long time. The Navassa-5 caught my eye, add in 6m and it looked like the antenna for me.

Friday night I started reading online reviews. There were all very good. Saturday I took another good look at them, talked further with them. I ran into Steve, N1EOE and we found more reviews. All positive. The build quality was excellent. The price was excellent too which was an unexpected surprise as I expected to spend around \$1600 and really spent less than \$1200. That price included the antenna, 6m add on and needed balun for 6 and FREE shipping, which saved a lot.

The Navassa-5 is all aluminum. (see the pictures) Once I had it out of the box, there was aluminum everywhere. It was very over whelming. Big thanks to Dave, WM1B who helped me assemble it over 2 days and approx 12 hours. With Dave's help, the huge load of aluminum became the antenna. We put it together over Wednesday and Thursday afternoons. We did run into 2 problems that JK Antennas assured me the replacement parts would be in my hands the next day and they were. Because on Saturday, the antenna party was to take place. Gradually the antenna took shape. All the aluminum became the antenna and stainless steel hardware held it all together. The directions were excellent too. Any questions we had were answered immediately. No waiting 3 or more days to get a response to an inquiry. We're talking within 5 minutes here. Impeccable tech support!

Saturday came and led by Jeff, NT1K on the roof with Chris; KC1BDL and Tuc; N1QFT and Faye with help from many others on the ground, the old antenna came down and up went the new rotator, cabling and the beam. It all happened much quicker than I expected and I was on the air with it later that day. (see pictures)

The Navassa-5 is like having a 2 element monobander for each of the 6 bands. It looks kind of funky up on the roof with all those different length elements. (https://jkantennas.com/jk-navassa-5.html)

Please see the chart at right Ken at JK Antennas assured me the antenna would perform very well at the 35 foot level I had it at. I have not been disappointed. It performs VERY well.

Since the Navassa-5 was twice as heavy of the old Mosley TA-33, I needed a stronger rotator to rotate it. I had decided on the Yaesu G-1000 ahead of time and planned on purchasing that originally from HRO. But Ken at JK Antennas suggested I look at Green Heron and I liked what I saw very much .

The Green Heron RT-21 paired with the G-1000 purchased as a combo from Green Heron with a 2 year warranty. It was more than I needed for a rotator, but one never knows what the future may hold. The GH RT-21 controller has a USB port and thru the DX View module of DX Labs I can rotate the antenna with a click of the mouse. Plus, I am now running some JT65 and remote in and can rotate the beam, control the radio and my computer from my tablet. The RT-21 is simple to use and performs

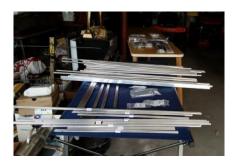
	10M	12M	15M	17M	20M	Optional 6M
Active Elements	2	2	2	2	2	2
Gain at 65ft above ground	12.56 dbi	12.4 dbi	11.79 dbi	11.82 dbi	11.39 dbi	12.44 db
Gain in Freespace	7.0 dBi	6.8 dBi	6.24 dBi	6.36 dBi	6.2 dBi	6.65 dBi
Peak F/B	12 dB	12 dB	12 dB	12 dB	12 dB	16 dB
Peak F/R	12 dB	12 dB	12 dB	12 dB	12 dB	16 dB
2:1 SWR Bandwidth	800 Khz	Less than 1.5:1	450KHz	Less than 1.5:1	Less than 1.5:1	800 KHz
1.5:1 SWR Bandwidth	600 KHz	100 KHz	350 KHz	100KHz	350KHz	600 KHz
Max Element Length	18.7 ft	19.8 ft	24 ft	28.2 ft	36.8 ft	9.4 ft

**CONTINUED NEXT PAGE** 

#### 8 Months After Dayton 2016 (CONTINUED)

great. I can either dial in where I want it to point or use the CW or CCW buttons or control it from software. There is even a wireless module (option) to control it wirelessly. And it's made in Rochester, NY (not to far away). (http://www.greenheronengineering.com/proddetail.php?prod=RT-21)

Pairing the new antenna, rotator and controller plus misc new coax, rotor cable and thrust bearing from HRO and help from all the local hams was perfect. It all works great and I am very appreciative of the local hams that stopped by to help. It would not have gone up with out you! Add one very understanding wife and the my big Dayton purchase and antenna erection was a huge success! A big thank you to all that helped!





Lots of aluminum as the Navassa-5 was unpacked from the shipping box.



Members from the HCRA help with the final assembly on the ground. KD1RV, NO4MM and WA1HFF



6m swr plot while the antenna was on the ground.



Sturdy assembly of all that aluminum = one well put together antenna.





NT1K, KC1BDL, N1QFT and FAYE get the antenna in position



The completed antenna the JK Antennas Navassa-5 plus 6m.



The Green Heron RT-21 rotor controller.

Hands-Only™ CPR



**Call 911** 



Push hard and fast in the center of the chest. Learn more at handsonlycpr.org



## **DOTS & DASHES:**

Things I can't think where to put, but are interesting.

#### WINTER 2017 EDITION OF RADIO WAVES IS NOW AVAILABLE

The <u>winter 2017 issue</u> of *Radio Waves* -- news you can use for license instruction and radio science education -- is now available. In this issue: How to Start a High School Amateur Radio Club in Six Easy Steps; Rhode Island School ARISS Contact Takes Off with the Public; Citizen Scientist Opportunities for Radio Amateurs, and Science Lessons for Solar Week. Plus the Instructor Corner, Update on the Instructor Reporting and Recognition Program, Licensing Updates, Education & Technology Program News, and more. The current issue and all past issues are available on the ARRL website.

#### LEARN ABOUT THE PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS)

The Clay City Amateur Radio Club is hosting an informational meeting discussing the PAVE Phased Array Warning System.

Lieutenants Theodore Kruczek and Meredith Prinz will be visiting from Cape Cod Air Force Station on Tuesday, March 28, 6:30-8:00 pm. They are crew commanders on the Early Warning Radar located there. The site's primary mission is detecting and reporting intercontinental ballistic missiles and sea launched ballistic missiles. The secondary mission is tracking satellites in low earth orbit, including amateur radio satellites utilized by amateur radio operators. They will be discussing radar operations, how that data helps amateur radio operators, and the importance of proper amateur radio use.

Perched high atop Flatrock Hill near the quiet Massachusetts town of Sandwich stands a PAVE PAWS radar station. The pyramid-shaped facility rests on the 100-acre Cape Cod AFS and is home to Air Force Space Command's 6th Missile Warning Squadron. The radar looms 10 stories high against the backdrop of New England's rolling hills. The mission of the approximately 200 people who man the radar, is to date and track sea-launched ballistic missiles heading for North America. They also use the radar to track satellites in orbit, transmitting spacetrack data into the Space Surveillance Center at Cheyenne Mountain.

#### Meeting Location:

Clay Center Amateur Radio Club, 20 Newton Street, Brookline MA 02445

#### INTERESTING HAM RADIO WEB SITE:

Are you a new ham, or have been around for a while, and wondered what all these "Q" codes you've been hearing, and what they mean. Here is a <u>website</u> that can help you with them. http://www.gsl.net/yu2msy/Qcodes.htm

#### AREA SWAP/HAMFESTS:

Mar 5	New England Antique Radio Show	Nashua, NH	http://www.nearc.net/
Mar 11	Mt. Tom ARA HamFest	Chicopee, Ma	http://www.mtara.org/
Mar 31	Androscoggin ARC Convention	Lewiston, Me	http://www.w1npp.org/
Apr 8	Seacoast Amateur Radio Flea Market	Hampton, NH	http://www.w1wgm.org
Apr 15	Portland Amateur Wireless Hamfest	South Portland, Me	http://www.qsl.net/pawa/
Apr 16	Flea at MIT	Cambridge, Ma	http://www.swapfest.us
Apr 22	Radio Association of Norwich Swap	Gales Ferry, Ct	http://www.rason.org/
May 5/6	NEARFest XXI	Deerfield, NH	http://www.near-fest.com/
May 13	East Greenbush ARA Hamfest	East Greenbush, NY	http://www.w2egb.org/
May 20	Southern Berkshire ARC Hamfest	Goshen, Ct	http://www.sberk.org
Jun 10	Vintage Radio & Comm Museum of CT	Windsor, Ct	http://vrcmct.org/
Sep 8/10	New England Convention	Boxborough, Ma	http://www.boxboro.org/

#### **MARCH'S CONTESTS:**

Mar	4	ARRL International SSB DX Contest	www.arrl.org/arrl-dx	Phone
	11	South American 10-Meter Contest	www.sa10m.com.ar	CW, Ph
		SKCC Weekend Sprintathon	www.skccgroup.com	CW
		Oklahoma QSO Party	www.k5cmcom/okqp.htm	CW, Ph, Dig
		Idaho QSO Party	www.idahoarrl.info/qsoparty	CW, Ph, Dig
		QCWA QSO Party	www.qcwa.org	CW, Ph, Dig
	12	North American RTTY Sprint	www.ncjweb.com/Sprint-Rules.pdf	Dig.
		Wisconsin QSO Party	www.warac.org/wqp	CW, Ph, Dig
	18	Louisiana QSO Party	www.laqp.louisianacontestclub.org	CW, Ph, Dig
		Virginia QSO Party	www.qsl.net/sterling	CW, Ph, Dig
	25	CQ WW SSB WPX Contest	www.cqwpx.com/rules.htm	Phone

## **Local happenings**

**Sundays:** 0845: Western Mass Emergency Net 146.94, PL 127.3 - W1TOM/R

First Monday: Southwick Regional RACES Drill, 1845, 146.49 Sim-

plex

Mondays: 1930: HCRA 10m Net 28.375

Tuesdays: 1930-2000: 146.94, PL 127.3 - W1TOM/R - Hampshire

County Emergency Net

Wednesdays: 1930: MTARA Info net 146.94, PL 127.3 - W1TOM/R

- includes NTS Net

2000: MTARA Swap net: 146.94, PL 127.3 - W1TOM/R

2000: MTARA Simplex Net - starts on 146.94 - PL 127.3, then goes to 146.42 direct (simplex) Usually starts immediately following the

swap net.

**Thursdays:** 2100: Weather Net (Roger, K1PAI Net Control), 1st Thursday of every month: 147.090 MHz, All other Thursdays:

147.000, PL 127.3 - W1TOM/R

Fridays: 1200: BB's (Brown Baggers Luncheon)

Munich House 13 Center Street Chicopee, MA 01013

Expect between 6 and 12 attendees every Friday. Good food, great  $\,$ 

company!

## **Club meetings & VE sessions**

**1st Friday of the month** 7:30 PM, HCRA Club Meeting, Holyoke Hospital Auxiliary Conference Center, 575 Beech St. Holyoke MA 01040 (no meetings held in July or August.) <a href="http://www.hcra.org/meeting-location/">http://www.hcra.org/meeting-location/</a>

**3rd Friday of the month** 7:30 PM, MTARA Club meeting, Red Cross building, <u>150 Brookdale Dr. Springfield, Mass</u>. (no meetings held in July or August)

4th Friday of the month 6:00 PM, Technician, General, and Extra Class License Exams, Holyoke Hospital Auxiliary Conference Center, 575 Beech Street, Holyoke, Mass. Hosted by the Western Mass VE Team (WMVET). Contact: David Cote, w1fab@arrl.net

Third Monday of the month 7:00 PM, Franklin County Amateur Radio Club meeting, Greenfield Community College. (no meetings held in July or August) <a href="http://www.fcarc.org/">http://www.fcarc.org/</a>

4th Monday of February, May, August, November 7:00 PM, FCARC VE Exams, Unitarian Church, Main Street, Northfield http://www.fcarc.org/

### Join the ARRL or renew your membership!

ARRL members enjoy:

- QST Magazine
- Members-Only Web Services
- Technical Information Service
- Member Discounts
- Outgoing QSL Service
- Continuing Education
- ARRL as an Advocate
- Regulatory Information Branch
- Public Relations for Amateur Radio
- ARRL Field Organization
- ARRL-sponsored contests
- Operating Awards
- Local Clubs
- Amateur Radio Emergency Service
- Hamfests and Conventions
- Volunteer Examiner Coordinator Program

http://www.arrl.org/membership

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ZERO BEAT March 2017



## Here is your exciting copy of Zero Beat!

Buy your KX2 Raffle Ticket Now...Don't miss your chance!

Hampden County Radio Association P.O. Box 562 Agawam, MA 01030-0562