



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LVII

April 2016

Number 4

PREZ SEZ:

Spring is here, but we're still feeling winter temperatures, so it will be a little while till we have some good antenna weather. This month brings some exciting events; we'll talk about them in a bit.

My focus has been on recovery from the flood that happened while we were away. Have no fear, we will never leave the water on while we are away again. The excuse we used was we needed it on to feed the cat and the plants, but those functions can be served by other means. The cat died (16 years of age) shortly after we returned, but at least the plants are in good shape. Nevertheless most of the damage was to the radio room at K3TUF. Our bedroom, bathroom, laundry room and kitchen on the first floor sustained moderate damage, but the radio room and other rooms in the lower floor were significantly damaged.

Fast forward to today and the drywall is now complete and I am starting to rebuild the radio room. So much for getting on the air for now. My goal is to be back on for August UHF. I am trying to keep progress on my website at k3tuf.com/flood.html.

This is an exciting month with the **VHF Superconference** finally upon us, and **ARRL Night** at our regular meeting the following week. At two weeks before the conference the count was at 215 and counting (a lot of folks register at the last minute). I had hoped we would be well over 200 for a conference of this magnitude. You need to be there.

Many of us are going to the conference on Thursday

morning to enjoy the Udvar-Hazy Smithsonian Air and Space Museum near the conference site. The entire weekend will be a fun packed microwave extravaganza, and there won't be one again like this for a long time.

Shortly after the conference we have our regular meeting, which this month is always ARRL night. With our meeting so soon after the conference, we were unable to obtain a league speaker from HQ, but we do have two local officials coming to the meeting. **K3RF, our Vice Director and W3JY, our EPA Section Manager** will be in attendance. This is a great opportunity to hear of happenings both regionally and nationally. We will host them for "meet the speaker" dinner at our regular meeting place, Giuseppe's Pizza right in front of the Ben Wilson Senior Center in Warminster.

April is Sprint month and Monday the 11th is the **144MHz Sprint**. Don't forget to use assistance to maximize your contact count. Remember, CW is always a great way to make far away contacts. I am doing whatever I can to have a radio going for that event. Fortunately my VHF and above RF gear is out in a separate building and was untouched by the flood here at the house. Maybe I can use my new Maestro Control Console to get on the air; that is my plan.

Two more sprints are in April, 222 MHz on the 19th and 432MHz on the 27th. **Lets make a good showing** from Packrats.

June is just around the corner and so is the Camelback event. This year is lined up to be yet

Pack Rats **CHEESE BITS** is a monthly publication of the
Mt. AIRY VHF RADIO CLUB, INC. -Abington, PA.

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PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 136.5) Hilltown, PA

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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
50.080 ~~144.284~~ 222.062 432.290 903.072 1296.264 ~~2304.043~~
3456.200 ~~5760.195~~ 10,368.034 MHz (as of 1/16)

MONDAY / TUESDAY NIGHT NETS

VHF/UHF Monday:

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:30 PM	50.145 MHz	N3RG FM29ki Ray
8:00 PM	144.150 MHz	K3GNC FN20ja Jerome
8:30 PM	222.125 MHz	KB1JEY FN20je Michael
8:30 PM	224.58R MHz	W3GXB FN20jm Bob
9:00 PM	432.110 MHz	WB2RVX FM29mt Mike

Microwave Tuesday:

7:30 Coordinate QSO's on 144.260 for all Microwave bands you'd like to work. Also setup Q's at w4dex.com/uhfqso or **Packrat Chat**

Page W3SZ.COM

Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

another **fantastic opportunity** to experience the thrill of VHF/UHF activity from one of the best locations in Pennsylvania.

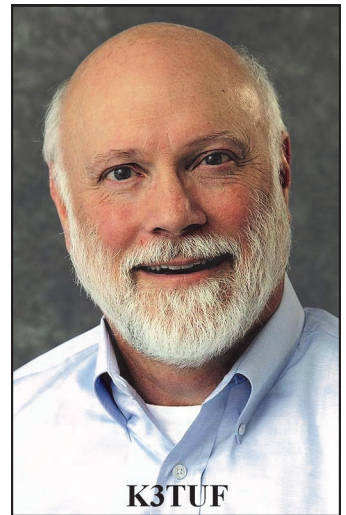
Make sure the weekend of June 10-13 is marked on your calendar and plan to join us from setup to tear down.

We have air conditioned operating modules and a fun time will be had by all.

Before the contest we need to make some modifications to the trailer in preparation for June. I am proposing Saturday May 7 for the event, please let me know if you can come and help out. Work should take a couple of hours, we can start mid morning and be finished by mid afternoon.

It's going to be an exciting month so get ready. Meanwhile I'm getting back to work on my shack so I can get back on the air some day. So when that happens, lets work on lots of bands.

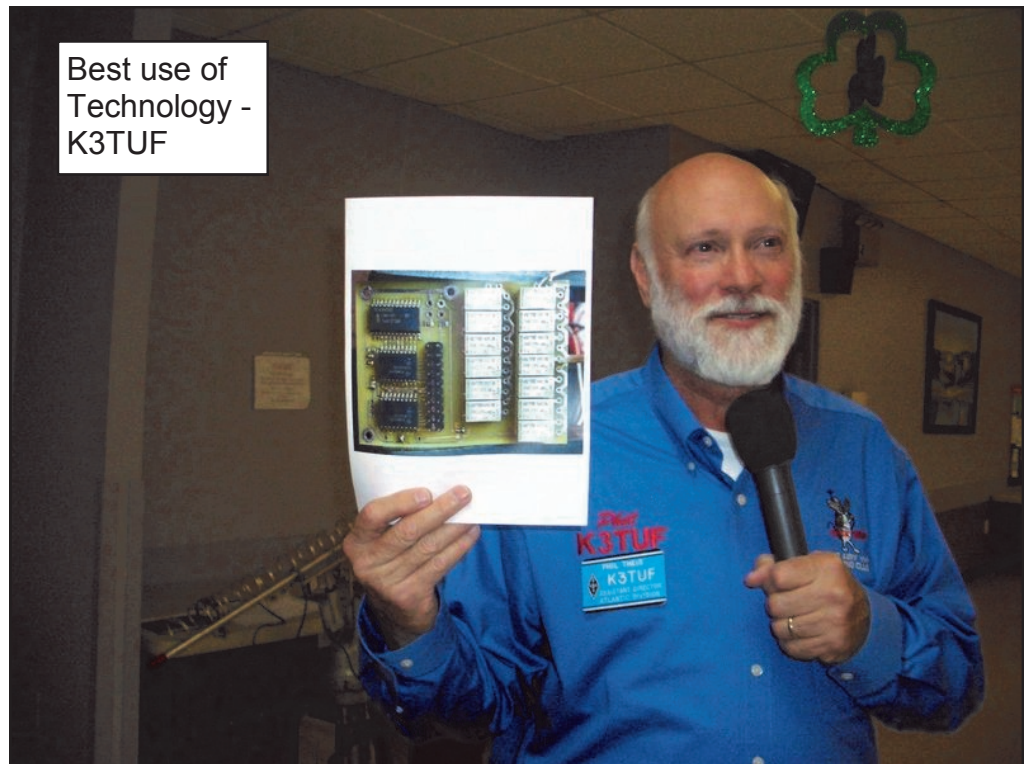
Phil, K3TUF



HOMEBREW NIGHT 2016



Best use of
Technology -
K3TUF



Mechanical
Innovation
1.0 - K2WB



Best
Construction -
W3GAD





K3ZMA showed a simple frequency comparator



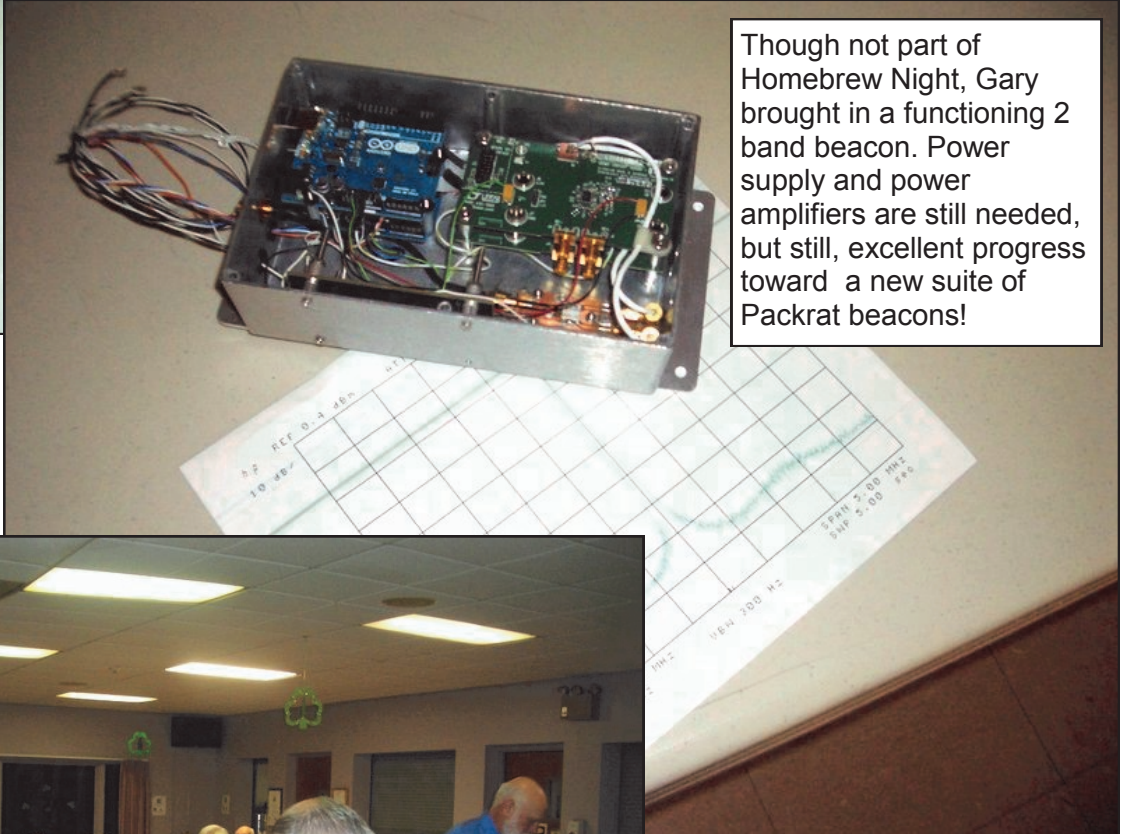
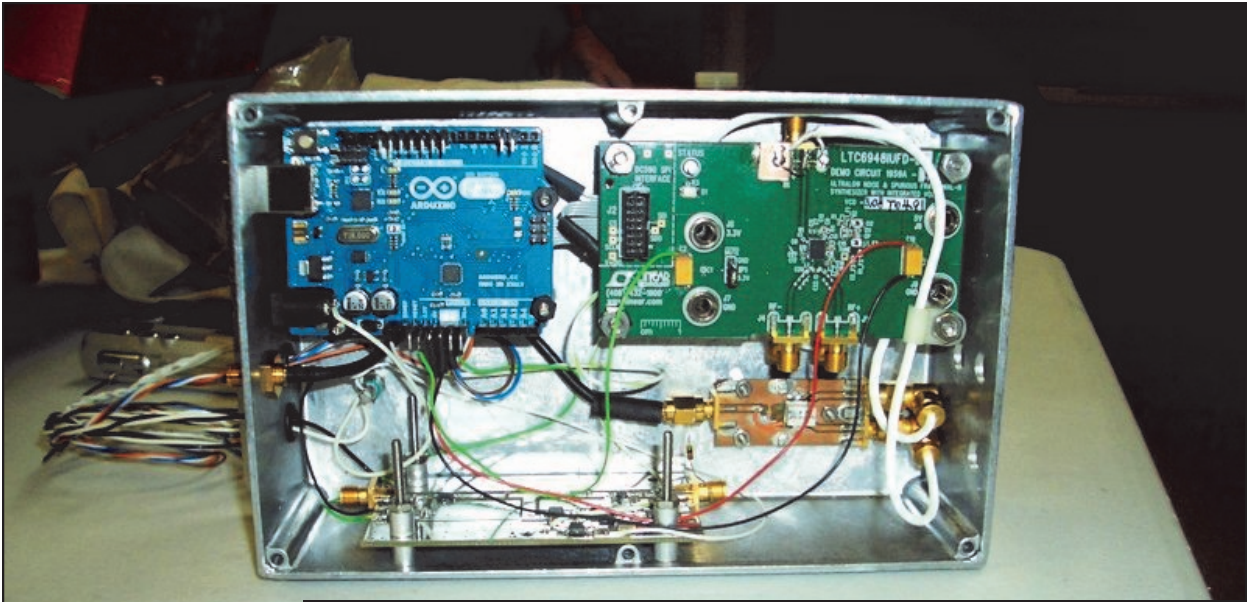
WA3DRC described a logger-to-rig interface using an Arduino board

Our Judges



Gary announces results





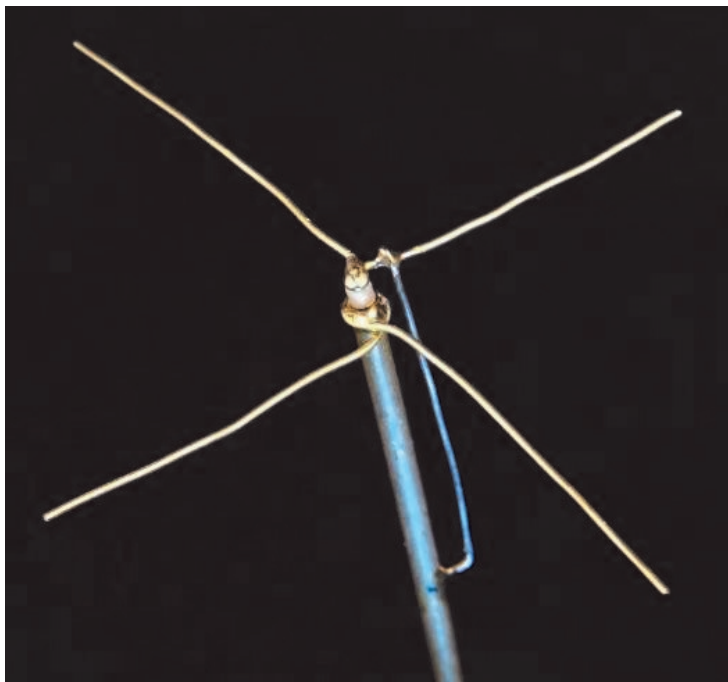
Though not part of Homebrew Night, Gary brought in a functioning 2 band beacon. Power supply and power amplifiers are still needed, but still, excellent progress toward a new suite of Packrat beacons!



George closed out the evening with the Mario Raffle

Cheap (Really Cheap) Omni Antenna for 1296 MHz

Paul W1GHZ has an omni antenna design in the N.E.W.S. Letter for March. To give an idea of how easy it is to make here is a picture from the article:



The complete design and construction article is at:
<http://www.newsvhf.com/newsletter/news1603.pdf>

Clever, fun and easy! -- W2BVH

Just One More dB

VE7SL shows just what it means to get “just one more dB” out of your antenna in his blog at http://www.amateurradio.com/just-one-more-db/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29 ← (just copy & paste this into your browser url entry box.)

It includes sound files of signals at different levels. It'll give you an idea of whether it's worth the effort and \$ for an incremental improvement of your antenna system.

Recommended.

--W2BVH

UHF Contest Dropped (Temporarily?) by ARRL

(See next page for info about new sponsor)

03/11/2016

The ARRL August UHF Contest for 2016 has been cancelled, while the ARRL VHF Contest Revitalization Committee considers alternatives.

The Contest Revitalization Committee fielded dozens of comments from members concerning possible changes to this annual UHF operating event, traditionally held on the first weekend of August each year. Many commenters expressed dissatisfaction with the timing of the contest, occurring as it does at the hottest time of the year, and that it was too close on the calendar to other VHF/UHF events.

In response to this member input, the Contest Revitalization Committee recommended to the Programs and Services Committee (PSC) that the 2016 August UHF Contest be cancelled, and the PSC agreed.

The ARRL VHF Contest Revitalization Committee continues to study the possibility of redesigning or replacing the August UHF Contest with a similar event at another point in the calendar – possibly in the spring – for 2017.

The Committee will solicit member comments in the near future, as it weighs several alternatives.

Tnx WA3EHD for forwarding for this report.

AUGUST UHF CONTEST: NEW SPONSOR

Please save August 6-7 for the 2016 August UHF Contest. It will be held as scheduled this year, but under new sponsorship. We all need to be on for some portion of the weekend and send in logs to prove to the ARRL that this is still a worthwhile and fun event.

After ARRL announced that it would not sponsor the UHF Contest in 2016, a group of radio amateurs from coast to coast came together to make sure that the contest does occur in 2016.

The sponsoring group includes the leaders of several large VHF-oriented clubs, two volunteers who write contest results articles for QST, the editor of the "World Above 50 MHz" column in QST, two people with extensive computer log-checking expertise, and others who are concerned about the future of contesting on the amateur bands above 222 MHz.

This will be the 39th annual August UHF Contest. We believe continuity is important. Even a one-year hiatus is not a good idea for a contest that has shown an upswing in logs submitted for several years in a row.

The new sponsors will try very hard to make the 2016 UHF Contest a good one. There will be gavels awarded to the top-scoring clubs plus certificates for all division leaders. We will try to publish the results promptly and prominently online and in print. In addition, the Northern Lights Radio Society will again sponsor "Rovermania" and the limited (three-band) rover award --both fixtures of the August contest.

We already have a website to promote the UHF Contest. It includes a history of the UHF Contest and a photo gallery of rovers in five different time zones.

<http://augustuhf.org> OR <http://uhfcontest.org> (either domain name will get you there). See you on the bands above 222 MHz on August 6-7, 2016 (1800z Saturday until 1800z Sunday).

73, Wayne Overbeck, N6NB

TRIBAND FM VERTICAL AVAILABLE

Lenny, W2BVH and I were working the Trenton Computer Fest when one of the vendors heard me talking about the need for a tri-band antenna. One of the vendor's Ed Fong - WB6IQN designed and built a tri-band fm base for \$79. The SWR in the FM band is very good for 2/223/446. I have specs and pix if anyone needs them.

73 MichelleKB3MTW



Membership Application

I personally have worked with George and been to his home. Although he has a modest VHF set-up, he is a frequent EME participant at K2UYH. He is also extremely knowledgeable with VHF and up and computing. He is a real pleasant guy and an asset to the club.

Rick K1DS

Mount Airy VHF Radio Club, Inc. Southampton, PA. APPLICATION FOR MEMBERSHIP

Call	NE2U	Class	EXTRA	License Expiration date	Application date
Name	GEORGE D. HOLUBEC		E-mail address	GHOLUBEC@gmail.com	
Address	6 PLEASANT VALLEY WAY		XYL's Name	MARY ANNE	Call _____
City	WEST WINDSOR		Harmonics (1 st names):	ANDREW	
State	NJ	Zip	08550		
Phone	C: 908-307-1714; H: 609-897-0474		ARRL Member?	Y	Life N (circle one)
Business	ATT LABS		Other Radio Clubs	SARNOFF RC	
Bus. Addr.	MIDDLETOWN, NJ 07748		Other Hobbies	CLASSICAL GUITAR, PEER, COMP.	
Bus. Phone	732-420-4980		Grid Locator:	FN20QG	(6 digit if possible)

Station Equipment

Band MHz	Radio	Output power	Antenna
A 50	KENWOOD TS-680 S	~ 20 WATTS	MOXON - 2EL
B 144	FT-736R	~ 80 WATT	YU7EF YAGI 7EL
C 222			
D 432	FT-736R	~ 80 WATT	YU7EF YAGI - 13A
9 903			
E 1296			
F 2304			
G 3456			
H 5760			
10368			

Applicant's reasons for joining this club:

- WEAK SIGNAL WORK IS MY FAVORITE ASPECT OF THE HOBBY, BOTH IN TERMS OF TECHNICAL CHALLENGE, AND EXPERTISE OF AR OPERATORS INVOLVED.
- I'D LIKE TO RETURN TO MY TECHNICAL ROOTS AS RF/MICROWAVE CIRCUIT DESIGNER.
- PERHAPS MOST IMPORTANTLY I ENJOY ^{THE COMPANY OF THE FRIENDS I'VE MADE HERE ALREADY.}

Applicant's signature: *George D. Holubec*

Reasons for Sponsoring

An active ham on VHF + and contests, long time weak signal op. And all around nice guy
W2BVH. *LW*

Active VHF'er, EME operator, homebrewer, etc - motivated member.
K2UYH *AK*

The Wayback Machine **In CHEESE BITS, 50 Years Ago**

Nibbles from April 1966. Vol. IX Nr. 1
de Bert, K3IUUV
(author's comments in italics)

- **“Our Prez Sez”.** Prez K3GAS, Doc notes: 1, Ladies night is nearly here. Featured will be a prize for each lady attending, as well as presentation of awards to the “top dogs” and all members that participated in the contest. Also, an award to be made for the “Packrat of the Year 1965”; 2, The first “Cheese Bits Article Contest” will end in May with an award to the winner in June; 3, Slate of Officer candidates will be given at the May meeting. Voting in June; 4, June contest planning moving smoothly, and 5, The club photographer continues to take “shack” pictures (*Whatever happened to the collection? Maybe in John’s attic?*).
- **ARRL Bulletin Nr.45.** 2/4/1966. The FCC this week dismissed a request for rulemaking RM-562, which would have outlawed on-the-air amateur contests **(!!! wow!!)**.
- **ARRL Bulletin Nr. 46.** 2/10/1966. All amateurs are reminded that New England’s first ARRL National Convention will be held in Boston, 4/22 – 4/24/1966.
- **Meeting Plans.** Speakers for

upcoming meetings were announced, as follows: April, K3UJD, Mario (*of the Mario table fame*) will talk about SSB, and W3LHF (ZD), Dave will discuss tuning errors. May, W1HDQ, Ed (*Mr. VHF*), the technical editor of QST will present the 1965 contest gavel, and also give a talk. June, K3IUUV, Bert (*ye author*) will present a talk on Weather Satellites.

- **Humor.** Two short articles with humorous content, by club members, were published by Helen. By coincidence they were both on the same topic. If you want to read them, check the online edition on the Packrats website (W3CCX.COM). (*A clue to whet your interest. One of the author’s was our frequent humor contributor, K3JJZ, EI.*)
- **Late crying towel input.** K3GAS, Doc, missed the crying towel meeting. He contributed his story for the reader’s amusement. Problems included a drifting VFO (*we’ve all had one of them*). Doc was known for his Theremin fame. (*If you don’t know what that is, Google it*).
- **Ham Clubs meet at Franklin Institute.** The Philmont radio club organized a Delaware Valley get-together of local clubs and Hams. Speakers (*included the Ham President of the Franklin Institute*), door prizes, and a pre-meeting dinner held in Franklin Hall. Tickets \$4.50.

- **Interference reports.** FCC Field Engineers reporting solving several cases of interference. One included an electric fence “formerly used to contain hogs”. Since the hogs had been sold, the owner disabled the fence! (*But not before a local dog bit the Engineer!*). A case of deliberate interference was traced to a transmitter hidden in a tree. It included a photo cell used to turn the xmtr on from dusk to dawn! The perpetrator was not found.
- **Ladies Night last call.** Last chance for tickets. “Dancing ‘til midnight. Cocktails at 6:00, with Roast beef dinner at 7. Ticket price \$7.50 p/p. (*The affair was held at the Buck Hotel, since rebuilt and still available for a Ladies Night event [Hint, hint!]*).
- **In our town.** An interesting article extracted from the Sunday Bulletin (another “thing that isn’t there anymore”). The article listed a number of laments from a John Watson, about life in Philadelphia in 1856. (*Curious thing. Most of them were still applicable in 1966! And as I read them, most still true today in 2016!*).
- **Swap & Shoppe.** The monthly column by W3ZRR. Available from K3KKY was an Ameco TX86 transmitter, 80 to 6 meters, AM/CW, for \$50. Also a combination NC300 receiver and a Viking Valiant 275 watt transmitter. The pair for \$305. (*I think I saw both of them recently in WA2OMY’s collection?*)

- **New Members.** WA3ERQ and WA3CQO were elected to membership.

As in previous editions, many “folksy” comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more detail on the above items, visit www.W3CCX.COM and read the full issue posted there by our Webmaster, Ron, W3RJW).

thirty, de K3IUV



Databook Download Available

I have uploaded 4 GB of data book and other information from the 60’s 70’s and later to my google drive. It is here:

<https://drive.google.com/folderview?id=0BxMD1ibIHfSxNkVITE1rLWhQZ1k&usp=sharing>

Please note that there is a complete listing of the files and folders in the file “0 Sphere Disk Directory.txt”

Please spread the word. **Regards, John. K1AE**

(The data books are old, but still relevant & useful. Downloading it allowed me to clear off 3/4 of a bookshelf of “physical” books. In this day of wideband connections, a 4 GB download is not a burden on the connection or the local storage media. --W2BVH)

Events

For inclusion, please direct event notices to the editor.

2M Spring Sprint - Contest - April 11, 2016, 7 - 11 pm local time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

VHF Super Conference - Conference - April 15 - 17, 2016. See additional details on page 18 and <http://vhfsuperconference.com/> for details.

222 MHz Spring Sprint - Contest - April 19, 2016, 7 - 11 pm local time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

432 MHz Spring Sprint - Contest - April 27, 2016, 7 - 11 pm local time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

WARC Hamfest - Hamfest - May 1, 2016. See <http://www.k3dn.org/hamfest.htm> for details.

902 MHz and up Spring Sprint - Contest - May 7, 2016, 8am - 2pm local time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

50 MHz Spring Sprint - Contest - May 14-15, 2016, 2300Z - 0300Z time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

June VHF - Contest - June 11 - 13, 2016. Details to follow.

UHF Contest - August 6-7, 2016. Details to follow

September VHF - Contest - September 10-12, 2016. Details to follow.

10 GHz and Up (Round 1)- Contest - August 20-21, 2016. Details to follow.

10 GHz and Up (Round 2)- Contest - September

New Email Address for WB2RXM

I am migrating my Verizon account to wb2rxm@gmail.com. I have already changed my address in the reflector. My official change will begin 04/01/2016. Although not active, I enjoy Ham radio vicariously. Cheese Bits always brings a smile to my face. Working with electronics has been both my vocation and avocation; from my time in the Army to my retirement.. Best regards to all, **Carl, WB2RXM**

NY2RF to Succeed K1ZZ as ARRL CEO

Tom Gallagher, NY2RF, of West Palm Beach, Florida, will succeed David Sumner, K1ZZ, as the chief executive officer of ARRL, effective April 18. In that role, he will oversee all activities at ARRL Headquarters in Newington, Connecticut. Meeting in a special webinar session on January 25, all 15 ARRL Directors voted to elect Gallagher as CEO and Secretary, positions that Sumner will relinquish on April 18. Gallagher will join the ARRL staff as CEO-Elect on February 29, and a transition period will follow.

See <http://www.arrl.org/news/tom-gallagher-ny2rf-will-succeed-david-sumner-k1zz-as-arrl-ceo> for additional details

2016 EME Conf Web Page

The conference will be August 19-21, 2016 in Venice Italy. Additional info will be added here as it becomes available.

<http://www.eme2016.org/>

--Info from Rick, K1DS

3456 Power Amps Available

Would you pass on to the membership that I have several extra 3456 MHz Toshiba ~ 60 W PAs (working). I am in need of about a 10 W driver amp. I do not want to sell, but am willing to trade or lend.

73, AI - K2UYH

The First Ever, VHF SUPER Conference

will be held at the **Holiday Inn Washington-Dulles International Airport,**
Sterling, VA, April 14-17, 2016.

If there ever was One VHF Conference to go to –This Is IT!

The Southeastern VHF Society (SVHFS), North East Weak Signal Group (NEWS) and Mt. Airy VHF Radio Club (Packrats) have come together to sponsor this VHF “**Super Conference**”. It is being hosted by the Grid Pirates Contest Group (K8GP) and Directive Systems and Engineering.

FOR FURTHER INFORMATION AND TO REGISTER FOR THE CONFERENCE GO TO VHFSUPERCONFERENCE.COM. THIS IS A RARE OPPORTUNITY TO MEET WITH AND HEAR FROM SOME OF THE TOP OPERATORS AND TECHNICAL MINDS IN VHF AMATEUR RADIO TODAY ALL IN ONE LOCATION. DON'T MISS IT!

Thursday, April 14: 10am-6pm Guided Bus Tour (3 hrs) of Washington DC, and afternoon stop at Smithsonian Area Museums 7pm-Hospitality Suite & Swap

**Friday, April 15: 8am-5pm Presentations, Vendors, Lunch with Speaker, Auctions
9am-4pm Washington DC Bus Transportation to Smithsonian/US Capitol/National Mall/Botanic Gardens area
7pm-Hospitality Suite & Swap**

**Saturday, April 16 8am-5pm Presentations, Vendors, Lunch with Speaker, Auctions
7pm-Banquet, Speaker, Awards, Door prizes**

Sunday, April 17 8am-11am Swap & Vendors

Special \$89+tax Hotel rate includes breakfast on Friday & Saturday. The \$89 rate is available from Tuesday, April 12 through Tuesday, April 19 Must confirm on-line or telephone reservations for “VHF Super Conference” using group code “E06” to get the discounted rate + Fri/Sat Breakfast.

Registration includes Lunch and all day beverages for Friday and Saturday!

Register before March 15 and **save up to \$30 each person**, on Registration, Banquet, and DC bus transportation total!

This is a beautiful time to visit the Washington, DC area with Warm Spring Weather and Cherry Blossoms!

Free Hotel shuttle to and from Dulles Airport & the Udvar-Hazy Air & Space Museum available daily.

Mark, K1MAP

Contacts for the VHF SUPER Conference: SVHFS: N2CEI, W8ZN, K4MEP Mt. Airy/Packrats: K3TUF, K1DS
NEWS: K1MAP, W1GHZ, WZ1V

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MIT Turns Wi-Fi Into Indoor GPS

(From the IEEE Spectrum Web Site. See <http://spectrum.ieee.org/tech-talk/telecom/wireless/mit-turns-wifi-into-indoor-gps> for more (mildly technical) details).

By Mark Harris

Researchers at MIT have developed a way for adjacent Wi-Fi devices, including smart phones, to locate each other within centimeters. The technology, called Chronos, relies on making the devices emulate multigigahertz wideband radios.

Chronos starts by having a transmitter and a receiver hop simultaneously among the 35 frequency bands in the 2.4- to 5.8-gigahertz Wi-Fi range. The transmitter skips between bands every 2 to 3 microseconds, with the receiver comparing the phase differences at each step. Chronos can then calculate the signals' time of flight—and thus the distance and sometimes the angle between the devices.

Tnx K3IUUV for the link

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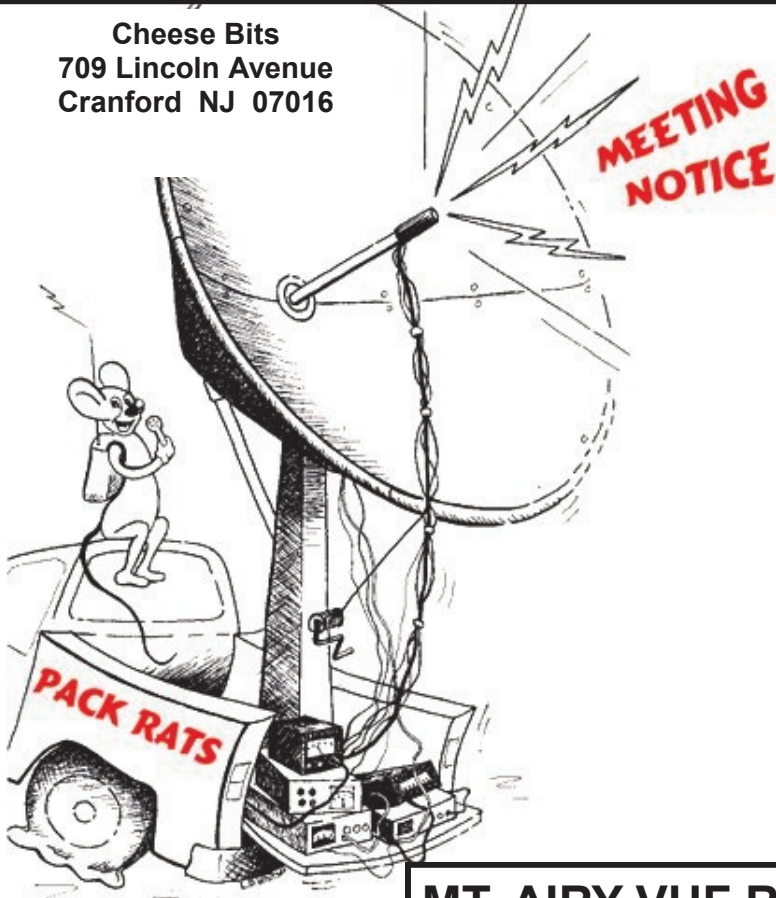
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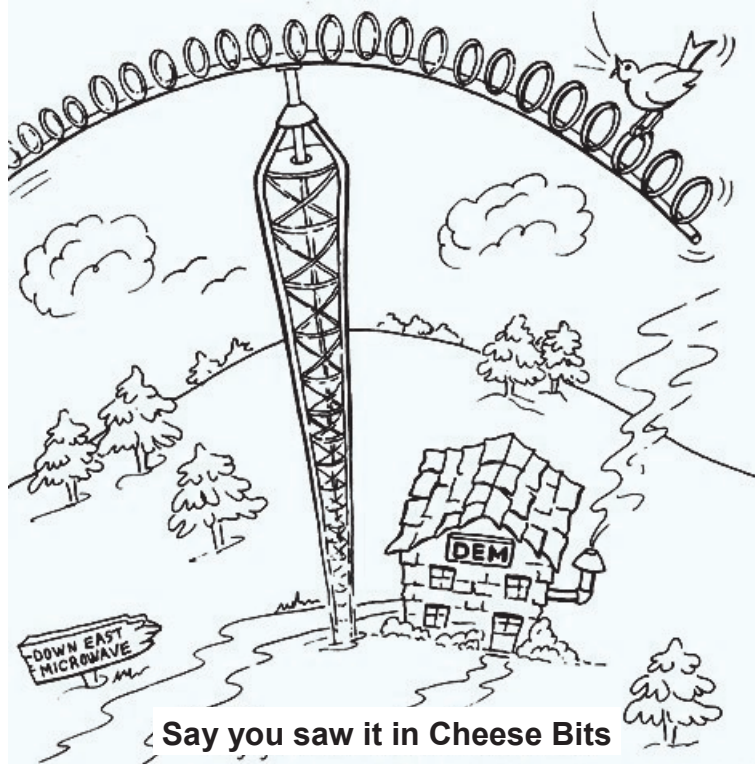
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