## Mt. AIRY V.H.F. RADIO CLUB, INC.



# CHEESE 3173

# W3CCX CLUB MEMORIAL CALL

ARRL Affiliated Club



Volume LXVII May 2024 Number 5

PREZ

May 2024

SEZ: ?

Michael has been in and out of various facilities over the last few weeks. The last communication that I had with him on the subject of the Prez Sez he indicated that he would not be providing any material for a column this month.

Tom KA3FQS

Cheese Bits May 2024

# Packrats CHEESE BITS is a monthly publication of the Mt. AIRY VHF RADIO CLUB, INC. –Abington, PA.

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Pack Rat Web Site: http://www.packratvhf.com

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(609)-743-6643 MGullo3-at-comcast.net

#### **W3CCX QSL CARDS:**

Bill Shaw K3EGE

#### PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 136.5) Hilltown, PA

#### **OFFICERS 2023-2024**

PRESIDENT KB1JEY Michael Davis
VICE PRES: WA2OMY Gary Hitchner
CORR. SEC: WA3EHD Jim Antonacci
REC SEC: KA3WXV George Altemus Secretary-at-packratvhf.com

TREAS: W3KM Dave Mascaro

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K3JJZ El Weisman WA3YUE Bruce Loss KB3MTW Michelle London KC3BVL Jim Huebotter

Honorary Director Bob Fischer W2SJ

#### **COMMITTEE CHAIRMEN**

January Contest Ray N3RG June Contest 2023: OPEN

June Contest Technical Chair Phil K3TUF phil-at-k3tuf.com VHF / MUD Conference: Phil K3TUF / George KA3WXV

Awards Chairman OPEN

Quartermaster: Bert K3IUV bsoltoff-at-comcast.net Membership Chairman: Michael KB1JEY kb1jey-at-arrl.net

#### **PACKRAT BEACONS - W3CCX/B**

144.300 (FN21be), 222.060 (FN20tk), 432.300(FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), 2304.300 (FN20tk), 3400.300 (Not operational), 5760.300 (FN21be), 10,368.017 (Not operational) **Note:** red = temporarily off the air; see https://www.packratvhf.com/index.php/on-air for details)

#### MONDAY / TUESDAY NIGHT NETS

MONDAY / IUESDAY NIGHT NETS			
VHF/UHF Monday:			
FREQUEN	ICY	NET CONTROL	
224.900 M	ИНz	KB3MTW Michelle Even Monda	ays
		K3JJZ El Odd Mondays	-
Packrat Ta	alk Gro	oup KA3WXV George	
See Packratvhf-dot-com ON AIR for details			
50.150	MHz	N3RG FM29ki Ray	
144.150	MHz	W2KV FN20os Dave	
222.125	MHz	KC3BVL FM29jw Jim	
432.110	MHz	WB2RVX FM29mt Mike	
	Monday: FREQUEN 224.900 I Packrat Ta See Pac 50.150 144.150 222.125	Monday: FREQUENCY 224.900 MHz  Packrat Talk Gro See Packratvh 50.150 MHz 144.150 MHz 222.125 MHz	Monday: FREQUENCY 224.900 MHz  RB3MTW Michelle Even Mondays  Fackrat Talk Group See Packratvhf-dot-com ON AIR for details 50.150 MHz N3RG FM29ki Ray 144.150 MHz W2KV FN20os Dave 222.125 MHz KC3BVL FM29jw Jim

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

## **Note From the Editor**

#### Tom KA3FQS

I want to thank all of you who have provided input for this edition of Cheese Bits. I also want to thank my wife Melanie for proofreading and correcting this edition.

# The May Meeting Social Garhering













3 Cheese Bits May 2024

# The May Meeting















Cheese Bits May 2024

# The May Meeting

# **Awards Presentation**

Not all of the recipients were present to receive their awards. Here are pictures of those who were present and received their award certificates from guest presenter K3RF.







## A complete list of awards

Jeff Klein K1TEO ARRL January VHF Contest 2024 First Place Single Operator High Power

Phil Miguelez WA3NUF ARRL January VHF Contest 2024 First Place Single Operator Low Power

Andrea Slack K2EZ/R ARRL January VHF Contest 2024 First Place Rover High Power

Scott Dantis AA2SD/R ARRL January VHF Contest 2024 First Place Rover Low Power

John Golomb N2NC/ ARRL January VHF Contest 2024 First Place Multi Operator High Power Peter Hutter WW2Y

Jim Huebotter KC3BVL 2024 Home Brew Award Most Unique Project (6 Band Pluto Portable Xceiver)

Tom Frederiksen KA3FQS 2024 Home Brew Award Best Workmanship (222 MHz 250 Watt Amplifier)

This award should be shared with George Altemus whose idea it was to

build this project and who contributed to its construction.

Bill McCourt WF1L 2024 Home Brew Award Best Restoration (Ocean Hopper SW Receiver)

Len Martin N3NGE Phil Shaw K3EGE Paul Drexler W2PED

ARRL January VHF Contest 2024 Second Place Multi Operator High Power

Cheese Bits May 2024 5

# The May Meeting

# ARRL Night Presentations



Riley Hollingsworth K4ZDH Volunteer Monitors Program Head/Assistant Section Manager

Bob Famiiglio K3RF Division Director

Bob Wilson W3BIG Section Manager



Bob Famiglio gave a presentation on the ARRL Today emphasizing that it is the members organization and later outlining the challenges facing Amateur Radio going forward.



Riley Hollingsworth gave a presentation on the newly created Volunteer Monitors Program which replaces the Official Observer Program.

# Rats at the 2024 NEWS Conference



Tom WA1MBA conducting a VHF Radio trivia quiz which is why everyone in the photos looks so studious. The white haired dude in the corduroy shirt with his back to the camera is Doc W3GAD.

The main Pacrat table: K3TUF, WB2RVX, KC2TN, W9KXI, K1SMS, W3CMP, KC3BVL, and W3ICC

N3RG and to the right at the next table is K1RZ.

# Rats Offsite at the 2024 NEWS Conference

## Warren WB2ONA



Dinner with the Canadians and my son, Friday night of the conference.

Randy VE3AX, Stu VE2XX, Rene VE2UG, Warren, WB2ONA, Steven KC2QBC

# **Notes from our Editor Emeritus**

## **Lenny W2BVH**

If you haven't seen it, there's a nice article on a hackable HT on the IEEE website. <a href="https://spectrum.ieee.org/quansheng-uv-k5-hacking">https://spectrum.ieee.org/quansheng-uv-k5-hacking</a>

This article has been reprinted in several places. I believe that a few club members have experimented with this radio, perhaps they could write up something for this publication about their experiences.

Simple guide to msk144 https://www.parkerradio.org/community/postid/656/

# Eclipse viewing from the QTH of W2BVH



Wendy Lenny





Construction of a pin hole camera

Image of the Sun

# AA2SD/R Sprint as a Rover During the 2 Mtr Sprint

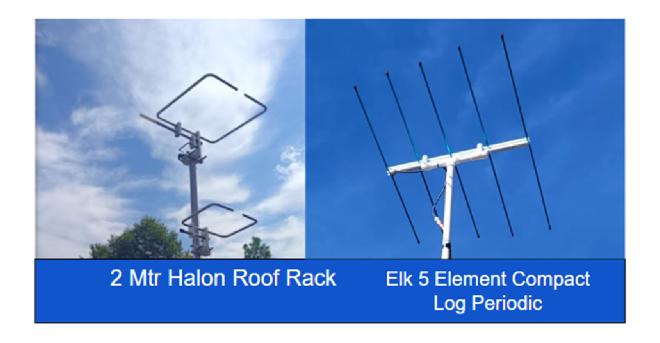
AA2SD-R- 144 MHz VHF Sprint Monday April 1, 2024 - This was my first VHF Sprint as a Rover operating from 2 local grid squares. Very good activity from Pack Rats, I had a total of 62 contacts in 7 grids from FN20 and FM 29. I also worked a number of contacts on the go with a simple Halo antenna with the roof rack. I worked the contest from 7PM to 11PM. All contacts were made on phone, and I tested FT8 from the Rover in the last 15 minutes and made 3 contacts. For this sprint I used an ELK 5 Element Log Periodic antenna and a Halo mounted on my roof rack. I use the ELK, as it assembles very quickly, it's lightweight with good gain, and it can be used with a fiberglass push up pole on location.

Now I know why they call it a Sprint, I had limited time to video, with the driving, QSO's, and antenna set up...Lots of Fun as my First Sprint!

Thanks to all that worked me during the Spring Sprint

62 Total Contacts Phone, 3 FT8
7 Grid Squares
FT991 A 50 Watts using a Elk 2 Mtr Small Beam
On the Go Halo Antenna on the Roof Rack
Lots of Mud in the field!

Quick You Tube of Set up during the Sprint https://www.youtube.com/watch?v=43rpYPzyks4



# Combined Sprint Summary AA2SD/R Sprint as a Rover 222 MHz and 70cm

**AA2SD-R**- 222 Mhz VHF Sprint Monday April 16, 2024 Summary - I participated for the first time in a 222MHz Sprint from 2 open field locations. It was a slow evening for me with the 222Mhz Rove due to a very noisy area I selected to operate from. Stations could hear me calling but I had difficulty receiving due to local QRM. I worked from a school field in FM29, and moved to a Soccer Field in FN20, both locations had very high QRM, and not the best elevations.

I deployed a 20 foot mast with a rotor and 10 element 222 Mhz Beam. I also used a 222Mhz small Halo on the roof rack and made a few "on the go" contacts. Overall for me, the 222 Mhz Sprint was a much slower pace with 14 QSO's working over 3.5 hours, in comparison to over 63 QSO worked in the 2 Mtr Sprint.

Thanks to all of the stations that worked me! Next Sprint I will seek higher ground, I had fun and this was a good learning experience as a new Rover.

I had a total of 14 QSO's all Phone and 4 Grids from 2 Rove Locations 3.5 Hours. 73

14 Total Contacts Phone only4 Grid SquaresFT991 A with a Demi TransvertorOn the Go Halo Antenna on the Roof Rack



AA2SD-R- 70Cm Sprint Weds April 24, 2024 Summary - During this 70CM Sprint I changed up the locations to Fairmount Park in Philadelphia with a good overlook. I operated from (2) Grid Square Locations as a Rover located at the Belmont Plateau in West Fairmount Park. This overlook provides one of the best views of the Philadelphia skyline. It is also a quick 5 minute drive to cross the line to Grid Square FN20JA located at the Chamounix North Field. I tested a new Halo antenna, and AMP set up with (2) different Yagi Antennas.

Antennas deployed included the Directive Systems 11 Element Yagi with 12 dBd gain and a small compact beam from ELK with a 7dBd gain. The rationale for testing the ElK antennas is based on it's extremely small footprint, sets up quickly, and I can use a lightweight PVC mast with no rotor.

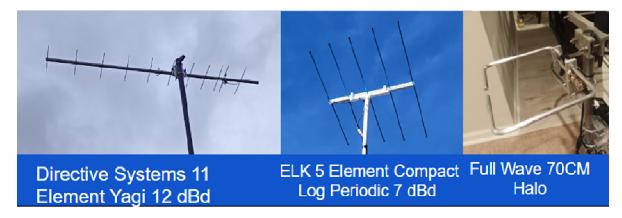
I also changed over my roof rack antenna to a new halo from a US antenna builder called <u>FreqTester</u>. This larger halo claims to have Gain Figures from 1 to 4 dB based on the height and angle.. The build quality of the new Halo is substantial and the Halo is a Full Wave Length element for 70cm.

Watch the Video Here

https://youtu.be/SMjO5QJmMA4?feature=shared

24 Total Contacts Phone only
4 Grid Squares Total Score 74
FT991 A wOn the Go Halo Antenna on the Roof Rack Full Wave
M2 11 Element Yagi and Elk 5 Element
FT991A 50 Watt Output on 70CM
Mirage D1010 100 Watt Brick Amp

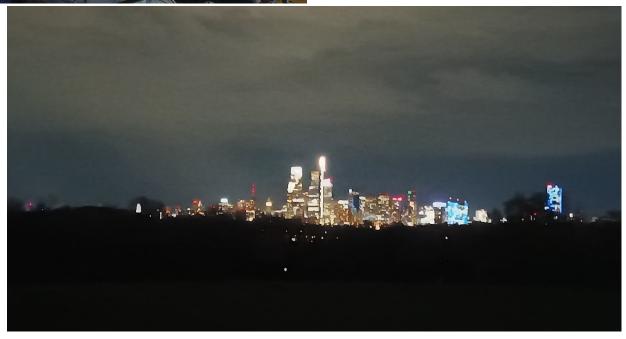
A special thanks to the help from Jim KC3BVL, who also had great success with his 1296 SDR set up.











# A note from Alex KR1ST

Just worked the Dutch counterpart of our club callsign in Holland, PA3CCX, on 160m FT8. :D

```
213730 Tx 973 ~ CQ PA/KR1ST

213745 -5 0.1 2400 ~ <PA/KR1ST> PA3CCX J021

213800 Tx 973 ~ PA3CCX <PA/KR1ST> -05

213815 3 0.1 2400 ~ <PA/KR1ST> PA3CCX R-17

213830 Tx 973 ~ <PA3CCX> PA/KR1ST RR73

213845 -1 0.1 2400 ~ PA/KR1ST <PA3CCX> 73
```

(I'm in JO31, so don't go looking for it right now on 160m. :) )

73,

# For the serious EME Op



We are dismantling a station in CO and have part of it is a 30ft diameter EME dish. This dish is available for the cost of dismantling it or if you dismantle and haul it away, that works too. We can provide the crane as we will have one on site. Serious enquiries only please. This is a LARGE endeavor. We would hate to scrap this super nice dish so we really hope to find some serious EME guys out there who could use this gem. 73 NJ0F@hamestate.com



# The Wayback Machine

In CHEESE BITS, May, 1974. Vol. XVI, # 5

de Bert, **K3IUV** (author's comments in italics)

"Our Prez Sez". Prez Dick Huntzinger, **W3FQD** commented that the recent "Ladies Night" was a great success, with wining, dining and dancing. (Why don't we bring this idea back?) He also noted that Cheese Bits was declared the winner of class A-1 in the Amateur Radio News Service annual contest, with 1st place in Technical Articles, and 2<sup>nd</sup> place in Editorial Content, Club Activities and Member Contributions. He said a good part of the credit belonged to Harry, **W3CL**, the current editor. (*The Amateur* Radio New Service was an organization of editors and others producing amateur radio newsletters. They exchanged ideas and articles throughout the year to foster better publications. Does this group still exist?)

Calendar. May 16, Packrat meeting, with topic **ARRL** night (a Packrat tradition) and nominations for next year officers. Mario raffle and Doc's silent auction to be held. June 8-9, the VHF QSO party, and the club will again operate from Hilltown. Chairman Dave, WA3JUF (now W3KM!) asks for your help and ideas. July 18, 1st outdoor meeting of the year will be the club auction at Dave, W3ZD's QTH. August 11, the annual Packrat picnic at the Ft Washington State Park. And lastly, the Packrat Hamarana has been scheduled for October 6 (another "thing that isn't there anymore.")

#### **New Products of Interest to**

Hams.W3NSI, Lynnsomehow always managed to find at least 3 interesting new items. This issue included:1).VHF Engineering has just introduced the HT-144, a 2-watt, 4-channel two-meter FM kit. The kit includes an aluminum case and pre-drilled pc boards. Price is \$99. 2). Fast Charge NiCads. The new GE series are designed for repetitive fast charge cycles, reaching 90% capacity in 15 minutes. In standard GE cases. No price given. 3).Clegg Hand Held 2 Meter Transceiver. The HT-146 will provide 2-watts out with 5 channels. A small heliflex antenna is included. Priced \$289.

SIX Meter Report. Rich, K3ACR reported increased activity this month, including the Space Net contest honoring Skylab-1. Increased sporadic-E openings have brought back some old friends from the 4 and 5 districts. He predicts a good skip season.

VHF Report. Joe, W2EIF noted improved activity, including both for AM above 145, and SSB/CW at the low end of the band. (AM operators hadn't yet abandoned their mode of activity and SSB was still slowly phasing in as the operating choice.) He reminded members that the club needs your contact in the June QSO Party, and "points are doubled on 220 and up."

Schematic Listing. El, K3JJZ reported on the status of the Packrat Schematic List project. "The response has been weaker than expected, but the current listing contains over 220 schematics and operating manuals." He hopes to eventually list about 2000. He noted "Send me a list of what you have. I will publish a completed list of what

- who has it if you need to borrow it." (El, what ever happened to this project?)
- 220 Repeaters. The calls and frequencies of three nearby repeaters now active on the 220 band were listed as follows:
  WR3ACD, Churchville, 222.98/224.58;
  WR3ACE, New Holland, 223.34/224.94; and WR3ABH, Valley Forge, 222.34/224.94.
- Official Bulletin Nr 474 from ARRL. April 4, 1974. Senator Barry Goldwater (K7UGA, an active Ham and staunch advocate for the hobby) has introduced a Senate resolution to designate June 17-23 as National Amateur Radio Week. Those wishing to support the bill should contact their senators.
- Membership. New member elected at the April meeting was W2HX (BB)
  A.G.Wentzel. 14 visitors were present at the last meeting.
- **Tidbits**. It was noted that a picture of Bill, **K1JDY** (now member **K1DY**, previously **W3HQT**) appeared in the Evening Bulletin (*another "thing that isn't there anymore*") on April 19<sup>th</sup>. No mention of the circumstances.
- **Technical Topics**. Titled "A cheap and easy 220 Repeater Rig," this two-part article was authored by Bert, **K3IUV** (*yes, that's me*). I described in detail a method to take an existing 440 FM carphone (*they were available cheaply as surplus from taxicab companies*) and modify it for operation as a 220-repeater rig. This first article showed how to modify the receiver circuitry, with schematic and modifications described. When completed, it showed 1 microvolt sensitivity to open the squelch. Next month, on to the transmitter.

- Swap Shoppe. By W3ZRR. (Always nostalgia. Now we use the club reflector. For sale by Rich, K3ACR. A Clegg six-meter ssb station including a Venus Transceiver with ac supply, a SS Booster and an Apollo linear. All for \$350. A Clegg six- and two-meter station with a Zeus 175-watt transmitter and an Interceptor receiver. Both for \$450. And a Drake TR-6 ssb transceiver (300-watts) and ac supply for \$500. From Bob, WA3CRX, a National NC183D receiver. Hallicrafters HT40 transmitter and a Vibroflex key. All in good condition, reasonable. From Hy Ecksel, a Swan 250 6-meter rig with power supply, speaker and mike. Mint condition, sacrifice \$250. Lastly, from Frank Simmons, a 40-ft steel tower with an 11-element 2-meter Cushcraft beam, a 5-element 6-meter beam, and a CDR rotator, all for \$100. (what a buy!)
- Ads. This issue included 24 "business card" ads, including many from HAM businesses that are "no longer there." Also included was the half page back cover ad from club member Ham Buerger; however, no sale details were included. I note the current Cheese Bits Ad complement includes only 4 small ads, a 1/4 page from Beko and a 1/2 page from Down East. If you'd like to join them, contact the ad chairman, Bob, W2SJ.
- Miscellany. Postage for this issue was a single8-cent "Flag" stamp. (6double sided, 8-1/2 x 11" sheets). (Don't forget, current postage went to 68-cents in January, and a penny postcard now costs51-cents!) As usual, many other "folksy" comments about members, their families, and activities were included in this edition of Cheese

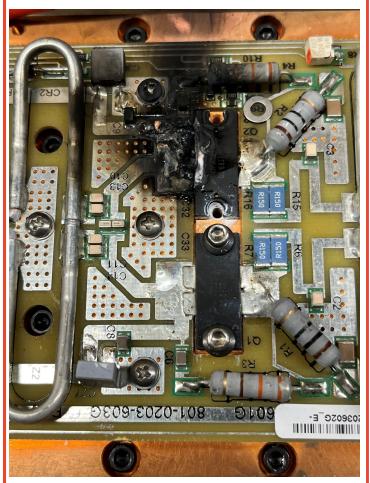
.... Wayback cont'd

Bits. If interested, or for more detail on website (www.W3CCX.COM) and any of the above items, visit our read website the full issue scanned by (me), and posted on the website by K3IUV Bill, WS3O, our webmaster. I have also posted the club Officers history, club Membership history, and Packrat Inventory (updated frequently) on the W3CCX website. These files are password protected, and only accessible to registered members. Are you registered? I hope you enjoyed reading these bits of nostalgia as much as I did in writing the article. If yes, you might let me know. Thanks to those that did.

*thirty*, de **K3IUV** (comments or corrections to: **K3IUV@ARRL.net**)



# Poof!



# Regularly Scheduled On The Air Events

**VHF/UHF Monday** - Every Monday except holidays and contest nights the following nets are held, 224.9 MHz FM Repeater at 6:45, Packrat Talk Group DMR net at 7:00 PM, 50.150 MHz USB NCS N3RG FM29ki at 7:30 PM, 144.150 MHz USB NCS W2KV FN20os at 8:00

**1296 MHz Activity Night**—There's an informal 1296 activity night in the NY/NJ/PA/CT region (and beyond) every Monday night starting around 9:30 pm (or so) on 1296.110. No coordination, just jump in and say hello W2BVH

**222 MHz Activity Night**—There's been an informal 222 activity night in the Northeast (and beyond) every Tuesday night starting around 7 pm (or so) Eastern Time. ON4KST is being used by some to coordinate Q's when direct CQ's are weak. W2BVH

**KC3BVL UHF+ Wednesday Net**—Packrat, Jim KC3BVL conducts a Wednesday night net with schedule as follows: 7:30PM—903.100, 8:00PM—1296.100, 8:30PM—2304.100

KC3BVL VHF Friday Net—Packrat, Jim KC3BVL conducts a Friday night net with schedule as follows: 7:30PM-144.160, 8:00PM-50.160, 8:30PM- 222.150, 9:00PM-432.160

# Links to other Activities

Reminder: there are 3 FT8 VHF / UHF Activity Contests each month. For info see: http://www.ft8activity.eu/index.php/en/

For those interested in an online "Contest Only" event calendar for VHF+, see https://www.qsl.net/n2sln/contestcalendar.html

Here's a Meteor Shower Calendar showing the dates for all the Meteor Showers in 2024. They're correct for our location in the Northeast. https://www.timeanddate.com/astronomy/meteor-shower/list.html

The Packrat web page now has a dedicated tab for the Fall Sprints <a href="https://www.packratvhf.com/index.php/fall-sprints">https://www.packratvhf.com/index.php/fall-sprints</a>. This page will be used for Fall Sprint announcements, Sprint Rules publication, sprint awards recognition and other sprint news of interest. Check back as work progresses.

# Dayton Hamvention 2024

When is the show?

Where is the show?

Friday May 17th 9:00 AM – 5:00 PM Greene County Fair and Expo Center Saturday May 18th 9:00 AM – 5:00 PM 210 Fairground Road, Xenia 45385 Sunday May 19th 9:00 AM – 1:00 PM Coordinates are 39.702 N – 83.9420 W

Hamfest season starting and many Hamfests to attend. Some NJ Hamfests

April 20, 2024 Splitrock ARA Landing, NJ <a href="https://splitrockara.org/hamfest/">https://splitrockara.org/hamfest/</a>

# 45th Annual Sussex Hamfest July 14, 2024

Sussex County Fair Grounds, 37 Plains Road Augusta, NJ 07822 GPS Lat. / Long: 41o 08' 10.2" x 74o 43' 01.9" (decimal 41.136200 x -74.717233)

Indoor sales, Tailgating, VE Session, refreshments and Door Prizes.

- Admission \$8
- Indoor Tables \$25
- Tailgate Space \$25 includes One (\$8) Admission
- Each Additional person \$8

Phone: 973-862-8124 - Email: hamfest@scarcnj.org

International EME 2024 Conference—August 9<sup>th</sup> to 11<sup>th</sup>, 2024 TCNJ Trenton, NJ <a href="https://eme2024trenton.org/">https://eme2024trenton.org/</a>

**EME101** *An Intro to EME*—A full day course Friday August 9<sup>th</sup>, 2024 TCNJ Trenton, NJ <a href="https://eme2024trenton.org/eme101/">https://eme2024trenton.org/eme101/</a>

## PLEASE SEND IN 2024 DUES

Club dues are due as of Jan 1st, 2024. Go to https://www.qsl.net/w3km/ MtAiryRC\_Dues.htm and use the "<u>check here"</u> link to see if you already paid. If not, enter your callsign and click on "PayPal"

Dave W3KM

#### W2DRZ Controllers New Product Announcements

## SEQ-3 Sequencer



Our Sequencers, SEQ1 and SEQ2, have proven quite popular and we have sold almost all that have been made. But we discovered a small problem with the original design that caused a random time delay when activating or releasing the PTT line. The delay is not very noticeable except when using slow sequence rates. But we felt that this required a new design. The new design uses an interrupt driven microprocessor that instantly responds to changes on the PTT input.

Savings on board cost and component reduction have allowed us to reduce the price from the original \$67 to \$59 for the new SEQ3.

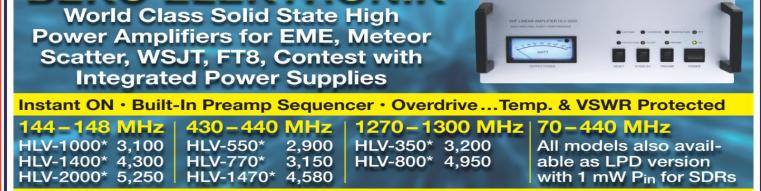
See our web pages for full information about these sequencers: www.w2drzControllers.k2txb.net/NewProducts.htm

### Kenwood TS-2000 services

We are now able to offer some limited repair service for owners of the venerable Kenwood TS-2000 transceiver.

- 1. Repair failed back lighting of the digital display, by installing LED lights (with necessary circuit changes).
- 2. Replace old backup battery.
- 3. Adjust master oscillator to be within 20 Hz of correct frequency on 2 meters. (for higher bands the error will be greater due to increased drift with fan operation).
- 4. Fan Modifications.
- 5. Fix incorrect 1296 MHz output module bias, in early models.
- Fixing other faults, details to be worked out, but on a case-by-case basis.
- 7. See our service page for more details: <a href="www.w2drzControllers.k2txb.net/Services">www.w2drzControllers.k2txb.net/Services</a>

BEKO ELEKTRONIK



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XYL, K3IUV

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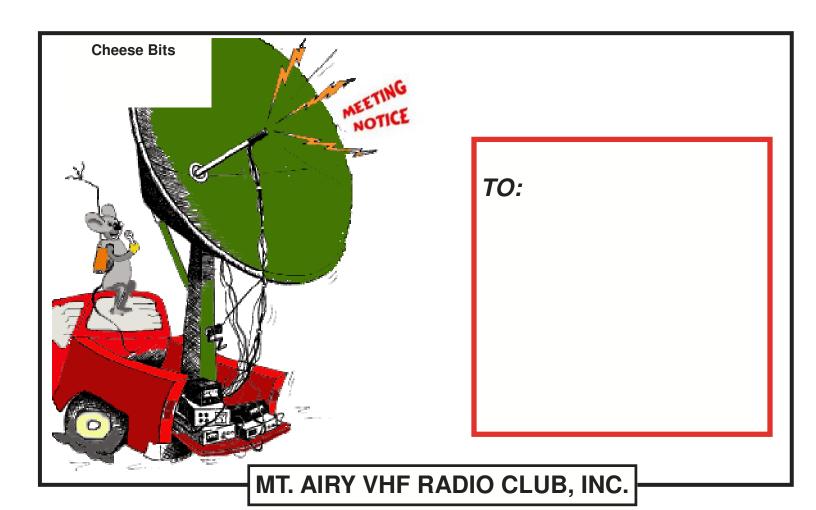
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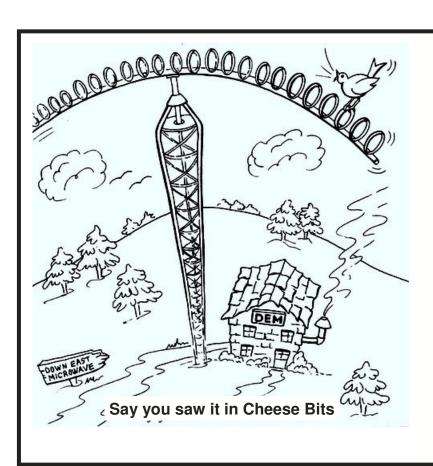
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