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



W3CCX CLUB MEMORIAL CALL

ARRL Affiliated Club



Volume LXVI November 2023 11 Number

PREZ

Gratitude

SEZ: November 2023

It has been a few months since I tapped out my last monthly Prez Sez column. The tor. Thanks to regular visits to my shack main reason is that I spent some time in the hospital attending to some health complaints whose urgency required the services of my local ambulance company. During those hospital visits, I learned that I suffer from new chronic medical conditions that can be treated but probably not cured.

The theme of this column is gratitude. I am grateful to the Abington Memorial Hospital and their staff for the care I received. I am also grateful to the team of doctors I have assembled who have provided thoughtful and kind care. I am also grateful to George KA3WXV and Tom KA3FQS who looked after my cat, Drake, during my hospital visits.

I have often noted to my fellow Packrats that participation in our club is voluntary. Neither I nor other members can compel members to undertake an assignment. I am grateful when members step up.

My list of Packrats to acknowledge is subiective. I am sure to omit Packrats deserving of my public display of gratitude. Any

one whom I omit, please accept my apology in advance.

At the top of my list is George KA3WXV and Tom KA3FQS. Whenever I ask someone to step up, George is there. Tom has consistently contributed to Cheesebits and recently agreed to step into the role of ediby George and Tom, my lower four bands are in great shape.

Bob W2SJ keeps our Monday nets coordinated and handles our Zoom account for general and BOD meetings. He is a great source of club history and advice. Ray N3RG has recently stepped up to chair our contest efforts and to be our membership chairman.

Along with George KA3WXV, Bill WS3O has done a magnificent job creating and maintaining our website. Looking around at other local radio clubs, websites are not an easy thing to manage. Also, when we unexpectedly lost our long-serving Cheese Bits Editor, Lenny W2BVH, Bill stepped in as the interim Cheese Bits Editor.

Nick N3YMS is a constant source of amazement to me with his success in obtaining resources for the Packrats and for the June contest. A bus, "missile launcher" towers, and an improved electrical service are only a few examples. Nick has supplied both DMR repeaters and

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

PACKRAT BEACONS - W3CCX/B

144.300 (FN21be), 222.300 (FN20tk), 432.300(FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), 2304.300 (FN20dh—under repair), 3456.300, 5760.3 (FN21be under repair), 10,368.017 (FM29jw) Note: red = temporarily off the air; see https://www.packratvhf.com/index.php/on-air for details)

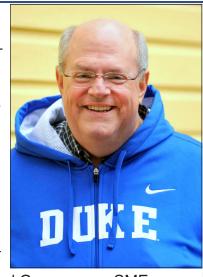
MONDAY NIGHT NETS

VHF/UHF Monday:							
TIME	FREQUENCY	NET CONTROL					
7:00 PM	224.900 MHz	KB3MTW FN20le Michelle / K3JJZ FN20lb					
	`	El Even/Odd Mondays					
7:30 PM	50.150 MHz	N3RG FM29ki Ray					
8:00 PM	144.150 MHz	W2KV FN20ok Dave					
8:30 PM	222.125 MHz	KC3BVL FM29jw Jim					
9:00 PM	432.110 MHz	WB2RVX FM29mt Mike					

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

Nick has supplied both DMR repeaters and DMR HTs to any Packrats needing one. He spends considerable time ahead of contests modifying the bus and making other preparations.

When you have a broken radio or need modifications, Bruce WA3YUE or Gary WA2OMY are your go-



to guys. Both Bruce and Gary are our SMEs on legacy radio equipment. Along with other Packrats, Bruce and Gary are upgrading our beacons. Need a length of hardline or a professional tower climber? Warren WB2ONA is your go-to guy. Before my physical aliment put an end to my amateur tower climbing days, Warren (and Steve W1SMS and Phil K3TUF) were my coaches.

A working 222 MHz FM club repeater was always a sore spot. Leave it to Jeff WN3A to donate and install a new repeater in Roxborough. Jeff frequently donates surplus cables and hardware from his business to deserving Packrats.

Dave W3KM is one of my heroes. I rely on his programs such as *VHFLOG*. He is a great source of advice on RF technical issues. Dave is our long-time treasurer and maintains our club membership and directories.

I have many other Packrats for whom I have gratitude but have run out of space to talk about them. In passing, let me thank Jim KC3BVL, Len N3NGE, Mike N2DEQ, Chris N3PLM, Jim WA3EHD, Rick K1DS and Phil K3TUF, Bert K3IUV, El K3JJZ, and Paul WA3GFZ.

Michael KB1JEY

A note from the editor

I would like to introduce myself as the new editor of the Cheese Bits. My name is Tom Frederiksen, KA3FQS. I have been a ham for about 43 years and a member of the Pack Rats for several years. I am retired after being employed as an electrical engineer for over 40 years mostly designing control, DC to DC converter, and display circuits not RF circuits. I still enjoy puttering around with electronics in my home workshop. My wife and I live in Horsham with our cat, Buster. The horse lives elsewhere.

The club was fortunate enough to have Lenny, W2BVH, as the editor of the Cheese Bits for many years. His work with the news letter was outstanding and I can only hope to grow into an approximation of the level of excellence he brought to this publication. To do this, members of the club must participate by contributing material to be included in our Cheese Bits. This can be photographs of ham activities in which you participated, articles covering what you are doing or plan to do, or news items that you run across that would be of interest to the club.

Ideas for photographs that pertain to the club would be photos taken at the monthly meetings, photos of projects you may be working on, photos of antenna parties, or photos of roving sites. Ideas for articles of interest would be how you plan to improve your score in the next contest or what you did that improved your score in the last contest, stories that can be reprinted without concern of copyright infringement from related organizations such as the ARRL, IEEE, or another club to which you belong, stories of how you got that rare contact, your experience with a new radio and how it works, or stories about projects on which you are working.

This is every club member's newsletter; I can only assemble it from your input so please submit material. I would like to thank Bert K3IUV, Rick K1DS, Dave K1RZ, and Michael KB1JEY for submitting material for this edition of Cheese Bits. Finally I must thank my wife, Melanie, for proof reading this issue.

August 10 GHz & Up Contest Results

By Dave K1RZ

Soapbox

Another great 10 GHz & Up contest, operating only the first weekend, from Rhode Island at FN41EE with friends AF1T, K3WHC and W1MKY. Condx in far eastern New England did not show any special tropospheric enhancement. Mostly the distance contacts were made using Aircraft Scatter. Which takes time and patience, ...and patience. It was good to work all the GHz operators, many of whom expended extra energy to get to more than one location through the weekend. I worked the following stations in multiple () locations: (8) KC0IYT; (4) W1AUV; (3) KA1NKD, W1FKF, N1DPM and AA1I; (2) K2UA, WW2Y, K1MAP, N1JEZ, W1EX, K1ZZ, KB1QV, KA1ZD, W1AIM, and W1GHZ. I appreciate each and every station that got on for the first weekend. Hoping next year it will again be a two weekend event for me.

73, Dave K1RZ

<u>Summary</u>

CallSign Used : K1RZ Operator(s) : K1RZ

Operator Category : SINGLE-OP Assisted Category : ASSISTED

Band : ALL Power : LOW Mode : MIXED

Default Exchange: FN41EE

Gridsquare : FN41EE Name : David Petke

Address: 27020 Ridge Road

City/State/Zip: Damascus MD 20872

Country: UNITED STATES

ARRL Section: RI

Club/Team: Mount Airy VHF Radio Club

Software: N1MM Logger+ 1.0.9937.0

Band	Mode	QSOs	Pts Un	ique Calls	Pt/Q
10000 10000 24000 47000 122000 Light	CW USB USB USB FM AM	37 41 3 2 2 2	14944 7671 84 54 10 90	31 19 3 2 2 2	403.9 187.1 28.0 27.0 5.0 45.0
Total		87	22853	59	262.7

Pictures from the 10 GHz and Up Contest with Packrats in Rhode Island



K3WHC and AF1T on the porch



Using the Antennas as a sun shade



K1RZ, W1MKY,AF1T, and K3WHC Monday morning on the deck.

Reported by Rick Rosen K1DS

I was invited to demonstrate and operate ham radio at the area scout camp for the weekend of JOTA, an annual event for many hams and scouts. Jamboree-on-the-Air, or JOTA, is the largest Scouting event in the world. It is held annually the third full weekend in October. JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community. This jamboree requires no travel, other than to a nearby amateur radio operator's ham shack.

I made a list of the gear I would bring and made sure that the dipole I cut for an inverted-VEE for 40m and 15m was resonant at the proper frequencies. I set up the 16' military mast with the antenna, keeping the ends about 4' off the ground and trimmed 6" from each end of the wire to get it as close to an SWR of 1:1. I packed my Kenwood TS-2000X, my Yaesu FT-100D as back-up, masts, guys, coax, mikes, code keys, walkie-talkies, linear power supply, and a box full of QSTs and AMSAT newsletters as giveaways.

Arriving at the Tanah Keeta at 8:45AM, I got assistance from adult leadership and I had the antenna and rig on the air by 9:30AM. I was the 5 th station on site, on the entrance patio to a cabin with a bathroom, and in the shade all day. AC power was available. Tanah Keeta Scout Reservation is located near Tequesta in Martin County and includes 640 acres along the south edge of Jonathan Dickenson State Park and on the Loxahatchee River – a State of Florida Historic Trail.

I was truly amazed at the participation by the scouts in the amateur radio activity. There were almost 200 scouts camped there for the weekend and the Saturday activity was split into a morning and afternoon session—half of the scouts did radio in the morning and merit badge class in the afternoon while the other half had the reverse schedule. A few young scouts passed by as I started to make some 40M SSB QSOs with northern Florida stations. They easily got into the conversations with the distant hams. I broke out the Baofeng walkies that were on 146.52 and scouts quickly learned how to operate them, contacting the other scout stations around the camp. By lunchtime I had 18 QSOs in the log with 14 scouts that got on the mike to chat with other stations. Some of the highlights included contacts with other JOTA stations including VE5CHS in Saskatchewan. Scouts asked and answered questions of each other over-the-air. We had HP3EFS from Panama join our QSO. As the afternoon progressed, we

Continued

had contacts with an additional 15 states including several POTA stations who took the time to explain to the scouts what their portable stations were doing. I was impressed with all the hams that we contacted who took the time to speak with each and every scout by name, asking them questions about their rank and progress in the scouts and encouraging them to get their ham licenses. I managed to make 2 CW QSOs to show how code was used, and then one of the scouts used my straight key to practice the code and he had great feel and timing of the characters. Our final QSO of the afternoon was with another JOTA station N3MCK and they had 13 of their scouts on the mike chatting with half a dozen at our station.

The four other stations at Tanah Keeta were active, some using DMR, local repeaters, FM simplex the internet and EchoLink. There was even a demonstration of SSTV using the Tequesta repeater. I hope that others in the club will make the effort in future years to host scouts at their stations or to respond to those calling, "CQ JOTA," on the third weekend of October. 73, Rick K1DS

*https://www.scouting.org/international/jota-joti/jota/



The first scout at the radio

Continued



Scout contacted other JOTA stations



My setup at Tanah Keeta Scout Reservation

Continued



More scouts in the afternoon session

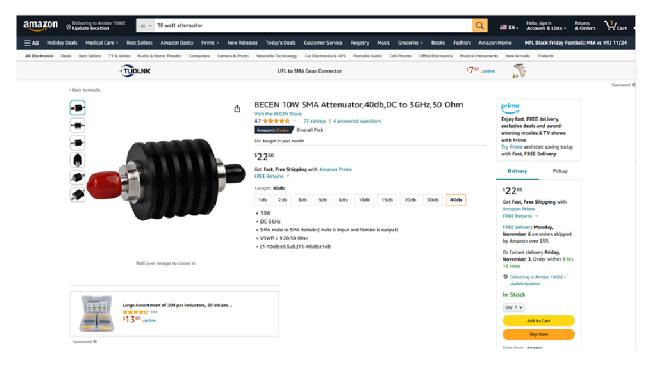


These scouts had the biggest logs

A source of cheap attenuators

Tom Frederiksen KA3FQS

Recently I was rebuilding my station for 902 MHz and needed a 10 Watt 27 dB attenuator to go between the transverter and the power amplifier. The thought of going to the usual RF suppliers and paying a substantial price for this did not appeal to me so I did a google search for 10 W attenuators. The results included this:



There was not a 27 dB part so I ordered 20 dB and 6 dB attenuators. The extra dB could be taken care of with the input attenuator in the transverter.

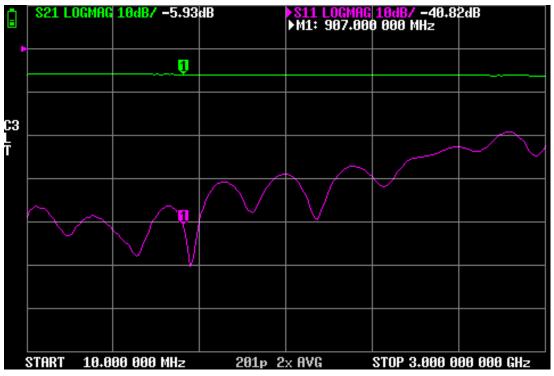
Being Amazon Prime members the parts were delivered in two days. The attenuators arrived in two separate packages and were delivered at two separate times inspite of the fact that they we ordered at the same time. Each was well packed to avoid damage in shipment. No damage was found. The SMA connectors are plated, not the most rugged I have seen.



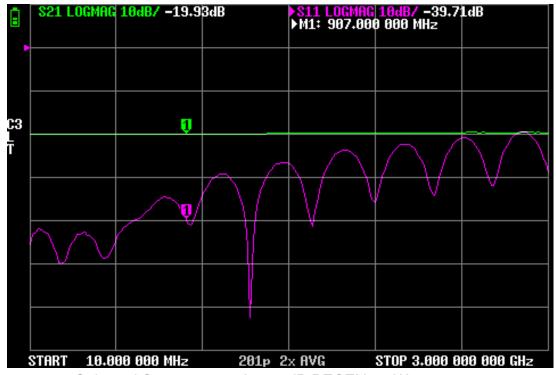
A sources of cheap attenuators

Continued

These attenuators are rated to work to 3 GHz which seems pretty good for something this inexpensive. Being the skeptical sort I measured the S21 and S11 using a LiteVNA.



Selected S parameters for 6 dB BECEN 10 W attenuator



Selected S parameters for 20 dB BECEN 10 W attenuator

A sources of cheap attenuators

Continued

The S21 measured at just above 900 MHz looks to be dead on for both attenuators (Not to quibble about 0.07 dB with instruments in this price range.) I did not do a thorough calibration for S11 but each part looks to be better than 20 dB return loss over the band.

This is only a small random sample of these attenuators but they look to be pretty good for ham use and less than \$23 each.

The Wayback Machine In CHEESE BITS, 50 Years Ago

Nibbles from July1973. Vol. XV Nr 7 de K3IUV Bert (author's comments in italics)

"Our Prez Sez". ". Prez Dick Huntzinger, W3FQD highlighted the outstanding "Hamarama" that the club operated in October. Details are elsewhere, but significantly, 598 paid admissions showed the huge interest in our area. He also reminded the members to complete their "contest questionnaires" for the upcoming January sweepstakes, and return them to the chairman, Rich, K3ACR. (The questionnaires and organized team activities played a big part in the club's approach to winning the contest).

Calendar. November 15th, second meeting at the new location, the Southampton Fire Hall.Refreshments to be served, of course. Guest speaker will be Walt Maxwell, W2DU(Walt was a good friend of the Packrats, and a known expert on the topic of SWR, and all aspects of RF matching.) December 20, Club meeting with topic "January contest preparation." (In "the old days," this was a closed meeting restricted to members only. Club strategy was discussed, and pep talks were given. Have we gotten complacent now??) January 5-6, The VHF sweepstakes. (Always held early in January, it has now migrated to a later date.)

New Products of Interest to Hams.

Lynn's always interesting article offered up the following new items:

1).Exceltronic Research labs introduced a line of low power transmitters for AM

operation. The 6-meter unit provided 15 -watts for \$49.95, while a 2-meter unit offered about 8-watts for \$50.95. Power supplies not included. 2).SBE (Linear Systems) introduced a receiving transmitter converter for FM use on 432 450 MHz. The transmitter relied on a varactor tripler with a lot of filtering, to produce 4-watts out from 10 watts of 146 MHz drive input. The receiving converter was solid-state. No price given. (For several years at that time, I used a varactor multiplier the same way to generate my 1296-MHz signal.) 3). SBE also introduced a line of scanners called the Sentinel series. They covered the 50, 146 and 432 MHz bands. Operation from 110 vac or 12 vdc. Again, no price given.

VHF Report. Joe, W2EIFreported that openings in general were fewer in number this year. There was one good session in October when two meters and higher allowed some good results. Joe worked W4JFU (VA) and W3BSV (MD) on 1296 with signals so strong that "W4JFU relayed my signal to K1SAK in Rhode Island!" Joe also reported that the "exhibit van" that W3HMU, Tony Sousa set up at Hamarama was a big hit. A number of people that reviewed the exhibited Packrat Home-Brew projects have requested information on the projects.

Six-Meter Report. Rich, **K3ACR** summarized activity on six meters. He notes that a number of western New York and Long Island stations are active

.... Wayback cont'd

around 50.110, and are always looking down to our area for contacts. He also noted that several SSB nets operate on Sunday morning on 50.175 starting about 9:30am. These provide good opportunities to check out and get your antennas ready for January. There was a good E-skip opening at the end of the month. It provided contacts from Florida, west to Texas, and up into Canada. Rich worked **W0PFP**, Jim in Ames Iowa and **WA5VEN**, Lee in Oklahoma City. Healso worked several new counties in Missouri.

Official Bulletin Nr 448 from ARRL. This bulletin pointed out that October 15thmarked the first anniversary of the launch of Oscar 6, "the world's first longlife amateur satellite." Since the launch, over 1,500 different stations in all states and at least 70 countries have communicated through this satellite. Three operators have confirmed working all states using the satellite. The success paved the way for future amateur satellite operation. ARRL offered congratulations to AMSAT on this anniversary.

"HAMARAMA 73." Dave Zimmerman, **W3ZD** was the chairman of this great activity. He provided some statistics and comments about the operation. He reported 598 paid admissions, 85 merchants (58 tailgaters and 27 at inside tables), and 3 engravers making nameplates. His check with the food department operated by the ladies auxiliary of the Fire Department showed 70 pounds of hotdogs, 40 pounds of hamburger barbeque and 10 gallons of soup were consumed by the attendees! Our perennial auctioneer, El, K3JJZ presided over a "huge delight of an auction." Mario, K3UJD was the raffle

Director, and a host of other members contributed to make it a huge success. And he closed by stating he was starting to plan next year's event!

Tidbits. Dick, K2EVW (now SK) has been putting in a good 2-meter signal from Atlantic City (Dick used to serve on a number of merchant ships, and operated maritime mobile all around the world). Ed Clegg, W2LOY/3 was hospitalized recently. The club wished him a speedy recovery. Late news flash. The Packrat Repeater license came through. Call letters assigned were WR3ACD (later changed to **W3CCX**). Frequency established as 222.98 MHz in and 224.58 MHz out. (Then located at the QTH of Ron. W3RJW, now relocated to Hilltown and still going strong.)

Swap Shoppe. By W3ZRR. (Always nostalgia. Now we use the club reflector. From Frank, K3GQC, two HA460 rigs "in good shape" with FET frontend, \$75 each. Also, a Hallicrafters SX-62 receiver (covers AM broadcast band through 108 MHz, \$75. A Motorola T-51 (taxicab rig) 60-watt mobile unit crystalled for two channels was offered for \$75 by Carl, WA2MWB. He also listed a Collins 75A2 receiver (with a Central Electronics slicer -who else remembers these?) with calibrator and FM adaptor for \$250. Lastly, he had a Hallicrafters Sky Buddy receiver for \$10. Doc, K3GAS alerted members that he has a large number of goodies for the silent auction at the next meeting. He cautions "bring money!"

.... Wayback cont'd

Ads. This issue included the half page back cover ad from club member Ham Buerger. (An Astatic D-104 microphone with a PTT stand for \$25 and other goodies.) The usual 23 business card ads were included in this issue. (I noticed both Ham Radio and 73 Magazine ads, both sadly that are no longer.) I also 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 single 8-cent "Eisenhower" stamp. 6 double sided, 8-1/2 x 11" sheets).(Don't forget, current postage went to 66-cents in July), and a penny postcard now costs 51-cents!) As usual, many other "folksy" comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more detail on any of the above items, visit our website (www.W3CCX.COM) and read the full issue scanned by K3IUV (me), and posted on the website by Bill, WS30, 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**)



Events

For inclusion, please direct event notices to the editor.

(For contests, see Ray's "2023 VHF and Up Contests.pdf" document at the "Contest Info" tab on the club web site. Many repeated here for convenience)

ARRL EME 50 MHz to 1296 MHz Contest — November 25-26, 2023. Details to follow.

ARRL January VHF Contest— January 20 –22, 2024. Details to follow

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

KC3BVL UHF+ Tuesday Net

Packrat, Jim KC3BVL conducts Tuesday night nets with schedule as follows: 7:30PM—903.100, 8:00PM—1296.100, 8:30PM—2304.100.

KC3BVL VHF Friday Net

Packrat, Jim KC3BVL conducts Friday night nets with schedule as follows: 7:30PM—144.160, 8:00PM—50.160, 8:30PM—222.150

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

Meteor Shower Calendar

Here's a Meteor Shower Calendar showing the dates for all the Meteor Showers in 2023. They're correct for our location in the Northeast. https://www.timeanddate.com/astronomy/meteor-shower/list.html

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

Bob Fischer

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PLEASE SEND IN 2023 DUES

XYL, K3IUV

Club dues are due as of Jan 1st, 2023. Go to https://www.gsl.net/w3km/MtAiryRC Dues.htm and use the "check here" link to see if you already paid. If not, enter your callsign and click on "PayPal"

AS OF 7/10/23 9 DUES REMAIN UNPAID!

Dave W3KM

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All models also available as LPD version with 1 mW Pin for SDRs

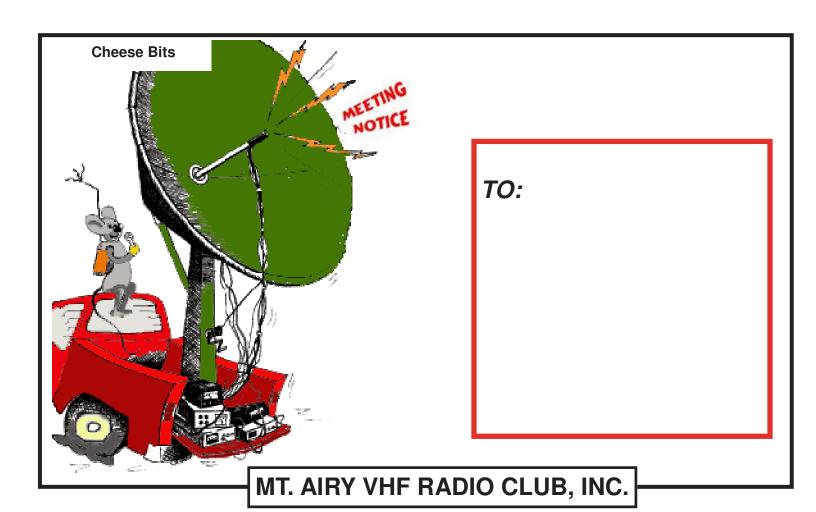
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