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



W3CCX **CLUB MEMORIAL CALL**

ARRL Affiliated Club



Volume LXVI Number January 2023

PREZ

Road to Packrat Prez

In my last column, I related SEZ. some of my pre-ham radio and electronic experiences. While I was celebrating the

Christmas holiday with my in-laws in North Haven. Connecticut, it occurred to me that the Cheese Bits audience might be interested in the follow-up story about how I became a licensed ham, started in weak signal VHF/UHF, and became a Packrat.

About two decades ago, I was an organizer of the American Diabetes Association's Tour de Cure bicycle ride hosted in Middletown, Connecticut. Satisfactory communication along the hilly tour route was not possible using analog cellular phones. So the Middlesex Amateur Radio Society provided a 2 meter net along the tour route. They never had enough operators to for the base was excavated and the requisite cover the route.

I asked someone how to become a licensed ham. Next thing I knew, I was KB1JEY and owned an ICOM IC-T7H dual band hand-held and a Mirage BD-35 amplifier, which I took with me when I moved from North Haven, Connecticut to Lower Gywnedd, Pennsylvania when I started to work for Aetna Informatics in Blue Bell.

While at Aetna, I became friends with one of the medical directors, Dr. Rick Rosen K1DS. That friendship culminated in an invitation to join the Mt. Airy VHF Radio Club (Packrats). Rick gave

me a copy of the application with his sponsorship recommendation completed. He told me that at the next monthly meeting, we would find a second sponsor. I arrived to that meeting before Rick. Dr Joe Taylor greeted me, saw the application and stated that if Rick was sponsoring me, I must be a good candidate and became my second sponsor.

While a Packrat, one of my proudest achievements was the acquisition and installation of a used HyGain HG-54HD. You can read the details in Cheese Bits issues December 2010; January 2011; and April 2011. Rick told me about the availability of the tower. Joe Taylor intervened with the estate to get the price lowered to something I could more easily afford. With the help of several others, the 600 pound tower was transported from Levittown, PA to my backyard. With help, a six-foot deep hole concrete was poured. The tower has now been in use for a decade.

During my Packrat career, I have served as Recording Secretary, Membership Chair, provider of Packrat logowear, coordinator of the test bench at various conferences and meetings. author, presenter, and various other roles that culminated in my election as "Dah Prez" last June.

I have a couple of messages to my Packrat brethren. I (and many other hams) would never have become a weak signal VHF/UHF enthusiast without the personal and technical

1

Cheese Bits January 2023

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

We operate on a .PDF exchange basis with other non-commercial publications. Anything that is printed in CHEESE BITS may be reprinted in a not for profit publication, unless stated otherwise, provided proper credit is given. Deadline for articles and swap-shop is the monthly meeting date. Non-commercial swap-shop items free of charge.

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

SUBSCRIPTION/ADVERTISING MANAGER:

Bob Fischer, W2SJ 23 Morning Glory Circle, Mullica Hill, NJ 08062 (609) 440-2916 bobw2sj-at-gmail.com

EDITOR:

Lenny Wintfeld W2BVH 709 Lincoln Av., Cranford NJ 07016 (908)-272-0559 lennyw-at-comcast.net

TRUSTEE OF CLUB CALL - W3CCX

Mike Gullo WB2RVX

(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 2019-2020

PRESIDENT KB1JEY Michael Davis
VICE PRES: N2DEQ Mike Andrayo
CORR. SEC: WA3EHD Jim Antonacci
REC SEC: KA3WXV George Altemus
TREAS: W3KM Dave Mascaro

president -at-packratvhf.com
vicepresident-at-packratvhf.com
correspondence-at-packratvhf.com
secretary-at-packratvhf.com
W3KM Dave Mascaro

DIRECTORS:

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

Honorary Director Bob Fischer W2SJ

COMMITTEE CHAIRMEN

January Contest OPEN June Contest 2020: 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 (FN2hd), 222.300, 432.300(FN20tk), 903.300, 1296.300 (FN20dh), 2304.300 (FN20dh—reduced power), 3456.300, 5760.3 (FN21be), 10,368.017 (FM29jw—status uncertain). **Note:** red = temporarily off the air; see https://www.packratvhf.com/index.php/on-air for details)

MONDAY / TUESDAY NIGHT NETS

VHF/UHF	VHF/UHF Monday:					
TIME	FREQUEN	CY	NET CONTROL			
7:00 PM	224.58R I	MHz	WR3P FN20kb Ralph			
7:30 PM	50.150	MHz	N3RG FM29ki Ray			
8:00 PM	144.150	MHz	K3GNC FN20ja Jerome			
8:30 PM	222.125	MHz	KC3BVL FM29jw Jim			
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

support of Rick K1DS and Joe K1JT. I cannot thank those two gentlemen too often

The other thought that I share is that when we prospect for new members, we (and me) apply an idealized standard to candidates. We pass over prospects that could grow into



Packrats that would reflect well on our club. I remind my fellow Packrats that at the time they admitted me to the club, I did not even own single-side band capable equipment. A view of my shack and backyard will show that my station's capabilities have grown over last couple of decades. I hope that in the next couple of decades, I repay the debt that I owe K1DS and K1JT by encouraging others to become hams and especially weak-signal VHF/UHF hams.

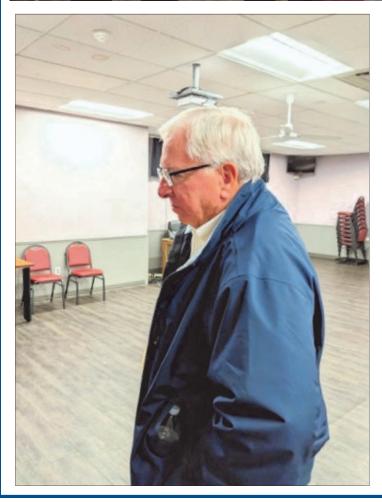
73, Michael **KB1JEY**

I'll second Da Prez' observation on membership requirements. At the time I joined I had nothing but a homebrew 2M transverter (making 8 watts from a power transistor internally matched for 400 MHz) and a homebrew 4 element WA5VJB antenna made out of a stick and 12Ga house wiring. Now I'm on 6 bands with plenty of power and antennae for each. —W2BVH

DECEMBER MEETING PICTURES

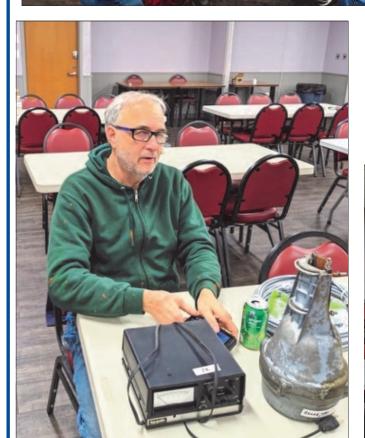










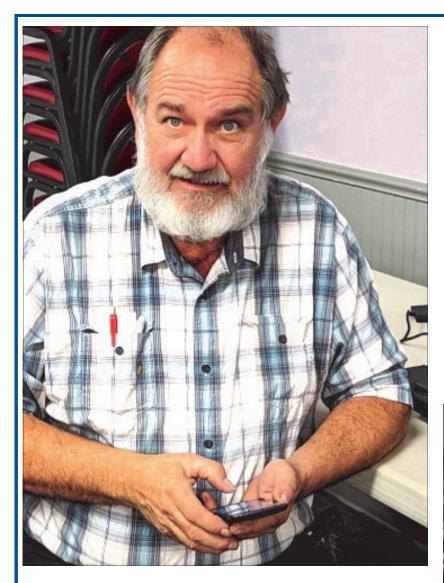


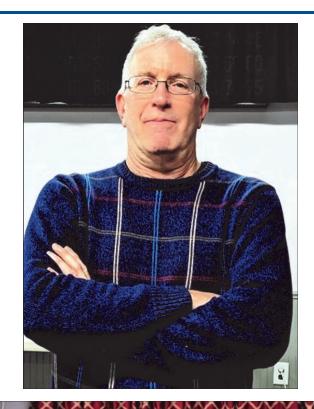




4

Cheese Bits January 2023









I'm often taking pictures, so seldom get into them. So here is a picture of the family from Thanksgiving (in Atlantic City).

Another VA3ELE / VA3TO 47 GHz QSO

From VA3ELE:

Today, Friday December 16, 2022, Hugh (VA3TO) and I set a new 47 GHz rain scatter record at 132 km.

It was another one of those FOAO sessions where the mw bug said we need to try it and since I had to drive east anyways, so what's a little detour? Anyway, I've never been much of a writer and Hugh has that down right, so I'll just get to the gritty details. I landed in Orono, ON - FN03RX (thanks Murray VE3WJ, it's a great spot) and Hugh was in Hamilton, ON - FN03CF right at 0700am as we planned.

Our previous best was 75km via Rain Scatter. Today, on my end, temperature was +1C and 99% RH, not exactly DX conditions on 47GHz.

Here's the url for the video:(Not overly strong, but it's good practice for those EME ears hi). Enjoy. https://youtu.be/xyVbifVs3WY 73, Peter VA3ELE

From VA3TO:

Peter realized through the week that he needed to pick up some items for a job from a supplier that's east of Toronto. Yesterday's weather forecast was calling for rain or snow with temperatures hovering around freezing for Friday morning (today) so we made plans to try and extend our 47GHz rain or snow scatter record. We decided to try it before starting our work days so we set our alarms to get up early. Last night I used Google maps and a surface elevation tool to search for a location for me that would provide a good shot to the east. I settled on going to FN03cf, up on the Niagara escarpment in Hamilton, about 50 minutes SW from my home. Peter drove 90 minutes east to FN03rx near his supplier's location in Oshawa. It turns out that location has some elevation too so our path was pretty clean, most of it over Lake Ontario.

We arrived at our respective sites and set up at around 7:00 am. It was snowing at Peter's end and it had just stopped raining at my end. A look at the weather radar showed that it was raining for the majority of the path in between. We started off on 24 GHz and instantly found each other. Our CW signals were not all that strong, about S2 ~ S3 R/S but an easy copy. After completing on 24 GHz we switched over to 47 GHz and signals were down in the noise. We spent a few minutes dashing back and forth and adjusting the dish Az & El to get something to work with then made the contact. No signal level at either end but the rainscatter CW was readable and good enough to complete!



More winter fun on the mm wave bands to follow. 73. Hugh VA3TO

ARRL Handbook 100th Edition Includes Prominent New England Amateurs Among Its Contributors

[Packrat Rick K1DS sent the following write-up on the 100th edition of the ARRL Handbook. It includes info on current and past members of the Providence RI ARC who contributed to the Handbook including past member of that club K1DS!]

December 29, 2022 by Phil Temples

Dave Tessitore, K1DT, President of the Providence Radio Association (W1OP) writes in a December 27 email:

"...Under our Christmas tree, from my XYL, was the hot-off-the-press 100th Edition ARRL Handbook. After our family and friends had all gone home, I sat at my desk and cracked it open.

"There on the title page, under the impressive words, One-Hundredth Edition, is the list of Contributors. Among them are two PRA Members: Frank Donovan, W3LPL and Rick Rosen, **K1DS**. What an honor to have these two giants in their fields as members of our club!

"I next turned to the middle of the Handbook, to the full-color 100th edition retrospective, and there is a 2-page interview with friend and former PRA member Skip Youngberg, K1NKR, who recently spoke at our 100th anniversary dinner!

"What other radio club has three members contributing to the definitive publication on Amateur Radio?

"But wait, make that four members, for let us not forget our Secretary Domenic Mallozzi, N1DM, who contributed to both the 1986 and 1999 Handbooks!

"Congratulations to Frank, Rick, Skip, and Dom! You make us Proud."

It seems like one-land is well represented.

. As you know, the Handbook is a massive, almost 1300-page encyclopedia of electronics and communications technology that weighs in at 6.2 pounds—a pretty good pennies-per-page investment even if you only spring for a Handbook "every hundred years or so." And if you do, go for the hardcopy version.

Chasing the Satellites Again

Here in Florida, my local club, the Boca Raton ARA participates in Winter Field Day, held this year on the weekend of January 28-29. We operate several bands, both SSB and CW and there are bonus points for a satellite QSO. A few years back, a club member donated his satellite antennas and rotors to the club, but they were put in storage as there was little enthusiasm for them at that time.

In 2019 I looked at the equipment, checked the rotors and got them working: an AR44 for azimuth and a U-100 for elevation. I used my VNA to check the antennas and they were good, except for a few missing elements of the 2m beam which can be easily replaced. The club then dug a hole, poured concrete and laid in a base section for 2 sections of Rohn tower on a tilt-over base.

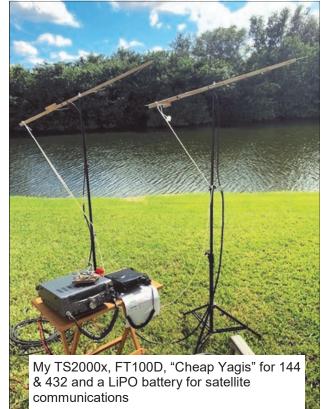
Then, 2 years of Covid and the clubhouse was closed except for maintenance. In the interim, the club board deferred any expenditure for about 140' of LM400 and control cables that we would need to install the rotors and antennas. We also didn't add in the possibility of remote preamps.

Now that the clubhouse is open again and there is a reason to operate satellite, I volunteered to use my portable gear to get the member and board attention for completion of the satellite communication project.

As a Life Member of AMSAT, I operated AO-7 and AO-8 back in the late 70's from Rhode Island using modes A, B, and J. I have my WAS Satellite from that era and certificate number is 90 or so, if I can still locate it. I was also the AMSAT Coordinator for RI, and together with Bob McGwier who was N4HY and a graduate student at Brown University getting his PhD in applied math, we made a tour of the radio

clubs in the state, demonstrating OSCAR satellite communication, and the program that he developed for AMSAT called QuikTrak. It was a huge improvement at that time, as the VIC-64 and the TI-1000 programs took about 30 minutes to calculate the position of a satellite pass. QuikTrak did it in less than a minute. My, how satellite prediction programs have changed along with the growth of computing. You can have an alarm notification when a satellite is in range, control antennas automatically and track multiple satellites simultaneously.

This past week, I assembled my satellite station again. I went to the AMSAT website to get satellite info: frequencies of beacons, in-range passes, uplink and downlink frequencies and modes. I set up a single homebrew short Yagi and used my FT100D to hear the 435MHz beacons. Once I was assured that I was aiming the antenna correctly, on frequency and timing passes correctly, I set up the second rig TS2000x and 144 homebrew 4 element Yagi antenna to transmit about 25 watts. I fulfilled the test mission with a random CW QSO with XE1L and an SSB QSO with YS2CBV in El Salvador using RS-44. I also tried an FM QSO with FO-118, one of the satellites with an FM channel, but faced a crowd of



signals trying to access the same spot. I'm ready to set up my gear at the radio club at the end of January and hope that I can get that 500-point bonus. 73, Rick **K1DS**

The Wayback Machine In CHEESE BITS, 50 Years Ago

Nibbles from January 1973. Vol. XV Nr 1 de K3IUV Bert (author's comments in italics)

"Our Prez Sez". Prez Walt, K3BPP
highlighted some of the Packrat
accomplishments in 1972: Another gavel
in January, some new homebrew ideas at
the meeting, great Ladies Nite event,
Hamarama held in September,
moonbounce project started, and a host
of excellent speakers at the meetings.
The coming year's plans include another
win in January, moonbounce project to be
operational, a club FM repeater
operational and some exciting technical
articles. He closed by encouraging all to
"become a little more involved."

Calendar. January 1st, Dues are due (*Dave's echo this year*!). January 6-7, VHF Sweepstakes. January 17th, the regular club meeting will be the "Crying Towel Session." Come out and tell / hear about all of the sad stories of events during the contest. The best (*saddest?*) story will win the towel. February 21st regular meeting where the topic will be Home Brew Night. Finish up your project to be in the running for an award.

New Products of Interest to Hams. W3NSI, Lyn's always interesting article offered up the following new items: 1) Tempo FMV-2, an FM rig for two-meters with 10 watts output. 11 channels selectable, and a panel meter that displays S units or battery voltage. Price \$199. 2) Heathkit announce a scannermonitor (model GR-110) that can be set to cover any 9 MHz range from 146 to

175 MHz. It will operate on 115 vac or 12 vdc. A digital display is included for the selected channel. Price \$120. Lyn also discussed the magazine "RPT" to which he had subscribed. It apparently failed after one issue and a number of people reported it to the Post Office for mail fraud!

VHF Report. Joe, W2EIF noted a pickup in activity on 6-meters, "perhaps due to the approaching contest, as well as some nice openings." W2TSZ on Long Island worked K7VDZ in Wyoming on December 17th. Particularly strong signals were heard from WA1EXN in Maine, and VE1KO and VE1PL in New Brunswick (Canada). On 2-meters, W8DGF, K8UQA, K8III and K8MMM will be operating in the contest, and can usually be worked from this area at any time. On 220 and 432, Doug, WA2LTM in NNJ can be easily worked for that section.

Membership Report. Sadly, ex Packrat Peter De Conter, **K3EMA** became an SK.

Commentary. ARRL decided to permit the use of OSCAR VI for valid contacts during the January contest. Ron, WA3AXV (now W3RJW) wrote an article condemning this rule, comparing it to allowing the use of normal repeaters which of course was disallowed.

Repeater. Plans are underway for the club repeater. It will be installed at the QTH of Ron, WA3AXV (380 ft altitude). A solid-state FM modulator is being designed for members, as a club project.

Tidbits. The Philmont Blurb carried a summary of WWV broadcast services,

.... Wayback cont'd

submitted by **W3VVS**. That article was reprinted here. A "decoder" for Motorola FM equipment translated the cryptic model numbers to disclose their detailed characteristics. Anyone interested in our moonbounce project should contact Chuck, **WA3LNH**.

Nickel Cadmium Batteries. A nice technical report and construction article, penned by Bob Shriner, WA0UZO. He described the recently developed Ni-Cad replacements for the AA batteries that had been in common use for walkietalkies, and the different methods that may be used to recharge them. (Constant voltage, constant current and control both voltage and current.) He reviewed the advantages and disadvantages of each, and gave a list of caveats. He then included a schematic and construction details for an easy to build charger. (I wonder if one showed up at the Home Brew Nite?)

Swap Shoppe. By W3ZRR. (Always nostalgia. Now we use the club reflector.) For sale by Don Cooper, K3WGK, a Polycom 6-meter transceiver. A bargain at \$75. From Ralph, K3MPZ, a Gonset G76. Covers six, and eighty to 20 meters. With a 100-watt mobile supply, price \$80. From Herm, K3GOZ, a 6-meter Saturn Halo with matching transformer. Includes bumper mount bracket and coil spring. Original cost \$8 (!). Also, a Shakespeare 6-meter whip. Contact Herm for a reasonable deal.

Ads. The January 73 issue included the half page back cover ad from club member Ham Buerger (HAM-M Rotor for \$109.95, Model PP Phone Patch {remember them} for \$14.95.) The usual 27 business card ads were included in

this issue. I note the current Cheese Bits Ad complement includes only 4 small ads, a ¼ page from Beko and a ½ 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. (5 double sided, 8-1/2 x 11" sheets). (Don't forget, current postage went to 63cents on January 1st, and a penny postcard will cost 44-cents!) As usual, many "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 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.

Winterfest - Hamfest - January 14, 2023. Sponsored by HRAC. Harrisburg PA. Details at: http://www.w3uu.org/winterfest/

Winter Heat - Operating Event - Runs the month of January 2023. 2M through 33 cm FM. Information including a hyperlink to the operating guide is available at https://www.hamactive.com/index.php

ARRL January VHF Contest - Contest - January 21—23, 2023. See http://www.arrl.org/january-vhf for rules and details. Also see the ""Contest Info" tab at the Packrat web page (after signing in) for club specific info.

York Hamfest - Hamfest - April 29, 2023. Spring Grove PA. Sponsored by York Hamfest Foundation. See http://yorkhamfest.org for details

Firecracker - Hamfest - July 1, 2023. Sponsored by HRAC. Harrisburg PA. Details at: http://www.w3uu.org/firecracker/

Sussex County (NJ) Hamfest - Hamfest - July 16, 2023. See http://scarcnj.org for details.

2M Spring Sprint -Contest- Date TBA

222 MHz Spring Sprint -Contest - Date TBA.

432 MHz Spring Sprint -Contest- Date TBA

Microwave Spring Sprint -Contest- Date TBA

An End to Private Land Use Restrictions?

Rep. Bill Johnson wants to end private land use restrictions on Ham structures, and has introduced a bill to that end in Congress. Where will it go? No way to know yet. Details are at http://www.arrl.org/member-bulletin?issue=2022-12-23

Call For Papers

Microwave Update 2023 (postponed from 2020, 2021, and 2022) plus Northeast VHF/UHF Conference April 14 & 15, 2023 Hilton Garden Inn @ Bradley Airport, Windsor, CT

Details for registration and hotel coming very soon at microwaveupdate.org

Presentations and papers for PROCEEDINGS needed (you've had three years, so there must be some good stuff out there).

More info, email me: Paul Wade w1ghz@arrl.org

KC3BVL Friday Net

Lately Packrat Jim KC3BVL has been conducting a Friday night net with schedule as follows:

7:30 pm 144.160 8 pm 50.160 8:30 pm 222.150 8:45 pm 1296.160 9 pm 432.160 9:15 pm 2304.100

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

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

PI9CAM Bounces Slow Scan TV Signals Off the Moon on 1296 MHz

PI9CAM used the 25 Meter dish at the Dwingeloo Radio Astronomy Observatory in The Netherlands to bounce good old fashioned analog SSTV signals off the moon. A report and some interesting pictures of the reflected images can be found at https://

ei7gl.blogspot.com/2023/01/pi9cam-bounces-slow-scan-tv-signals-off.html

NASA's solar forecast is turning out to be wrong

And that may be good news. Looks like there's a chance that solar activity in the new Solar Cycle 25 may be much higher than predicted. Such activity will be a source of anxiety for electric power distribution operators but it will be good for shortwave propagation. The story on how the "conventional" forecast may turn out wrong can be found at

https://www.space.com/why-solar-weatherforecast-doesnt-work

Rep. Lesko Introduces Bill to Replace Symbol Rate Limit with Bandwidth Limit

This bill if passed would allow many innovative modulation types to be invented and tried as long as they conformed to a bandwidth limit. This would add flexibility in the signals we transmit and creativity in devising new modulation schemes Details at

http://www.arrl.org/arrlletter/?issue=2022-12-22

Tuckerton Tower

In the middle of a street in Tuckerton NJ stands a huge concrete monolith that was the base of a 825 foot radio tower built before World War I. At the time it was the tallest structure in North America. Here's s short YouTube video describing it :https://www.youtube.com/watch?v=lbffs-k1DAI

W2DRZ Controllers Sequencer Special

I have 6 sequencer kits left here that I will sell at a discount to Packrats Club members. Five of them are completely assembled except for mounting the relays and LED indicators (optional). The other one is a complete kit. All parts are supplied. The picture below only shows one relay mounted, as you have a choice of mounting on top or bottom of the board.



I use 4 of these sequencers in my own station, one for each band, although you can use one sequencer for multiple bands if you desire. See my sequencer article in Cheese Bits of May 2020, and on my personal web at: http://k2txb.net/
SequencingForVHFstations.pdf

For further details about the sequencer, go to: http://www.w2drz.ramcoinc.com/ Sequencers-2.htm

FOR PACKRATS I will sell the kit at \$45, and the assembled sequencers at \$55 (plus shipping if needed). This is a real bargain as future kits will be priced at \$65 or more due to cost increases.

W2DRZ Controllers by Russ K2TXB

To Order, send email to k2txb@comcast.net or call 856-866-6611

AF4NC Application

Mount Airy VHF Radio Club, Inc.

APPLICATION FOR MEMBERSHIP

			3-27-2027 Applica		
Name THOMAS (TOM) Mills		E-mail address RFHNC Q OUTL at Com			
Address 148	go greenmendows Rd	XYL's Name JANET Call N/A			
State PA Zip 19067		Harmonics (1st names):			
State PA	Zip 19067		17000		
111		ARRL Member? Y (Life) N (circle one)			
Phone 3-2-993-1817 Business					
		Other Radio Clubs SOUTH JERSEY MIN TOPPERS FEWN WIRELESS, WARC			
Bus. Addr.	_	Other Hobbies Photos RAPhea - wildlife			
Bus. Phone		Grid Locator: FN 20n.5 (6 digit if possible)			
	Statio	n Equipmen	t	A STATE OF THE STA	
Band MHz Radio			Output power	Antenna	
A 50	yqesq F7991, FT-891 FT 7361	50	VARIOUS		
B 144	FT 991 -736R	50			
222	FT 736R #2	10			
432	FT 7368 FT 991	30			
903	Home brew Need Help No				
E 1296 FT 73CR			10	Loop yagit Vegy	
F 2304 —					
G 3456 -					
H 5760 —					
10368	-				
	Applicant's reason	ons for joinir	ng this club:		
WER AT T	EXPERIMENTING & CONTESTING TO CAMPLEARENT & YEARS WITH I TO High KNOS & YEARS FIRE	FACH ROTS J	TUNE CONTEST W/SOUTH JERS	sey MTN TOPPERS	
0207	to high the a years have		s signature: Thom		
	Reasons	e for Snancari	201		
an delet	several times and he has the	incia I have	Known Top for	a runber of year	
		note, à	participates ad	Comel Bal	
. 0			0	The state of the s	
Webseyk.	nex leving a great VAF/UHF	140 40 00	o excellent and	a come she so	
bethough . oction to in Contist	net leving a great VHF/4HF e les Contributed by aperation as Comellack & High Kath all & initials N3RG Ray Golley	The af	is addition to of	p. and should	

Aver the last few years. Also
Le her checked into the 6 Meter
met on several accusion from home.
He currently hes equip to got on 6
Bands W/ some improvements
I have offered to help him
improve his home station
W/addition of amplifiers of
arterness.

Bob Fischer

Uber / Lyft Services Serving the Tri-State Area From Mullica Hill, New Jersey bobw2sj@gmail.com



609 440 2916

Please call, text, or email

Uber promo code ROBERTF1107UE Lyft promo code FISCHER8865





G AND G ELECTRONICS

OF MARYLAND

JEFF GOLDMAN, K3DUA

PO Box 222

(301)258-7373

Lisbon, MD 21765-0222

EMAIL: k3dua.jeff@gmail.com

Joel Knoblock W3RFC www.therfc.com The R.F.Connection

213 N. Frederick Ave. #11WWW Gaithersburg, MD 20877 USA

World wide shipping via FED-EX or US Post Office

Tech Line 301/840-5477 Order Line 800/783-2666

Fax Line 301/869-3680

Hours: Monday-Friday 9:30am-5:30pm Eastern All major credit cards accepted

DESTINATIONS TRAVEL

A Full Service Travel Agency

HARRIET SOLTOFF

Travel Consultant

229 Fairway Dr Warminster, PA 18974-3797

Phone: 215-957-6084 Fax: 215-957-6085

E-Mail: BSoltoff@Comcast.net



PLEASE SEND IN 2023 DUES

XYL, K3IUV

Club dues are due as of Jan 1st, 2022. 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 1/8/23 33 DUES REMAIN UNPAID!

Dave W3KM

BEKO ELEKTRONIK

World Class Solid State High Power Amplifiers for EME, Meteor Scatter, WSJT, FT8, Contest with **Integrated Power Supplies**



Instant ON · Built-In Preamp Sequencer · Overdrive...Temp. & VSWR Protected

144-148 MHz | 430-440 MHz | 1270-1300 MHz | 70-440 MHz HLV-1000* 3,100

HLV-1400* 4,300 HLV-770* 3,150 HLV-2000* 5,250 HLV-1470* 4,580

HLV-550* 2.900 HLV-350* 3,200 HLV-800* 4,950

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

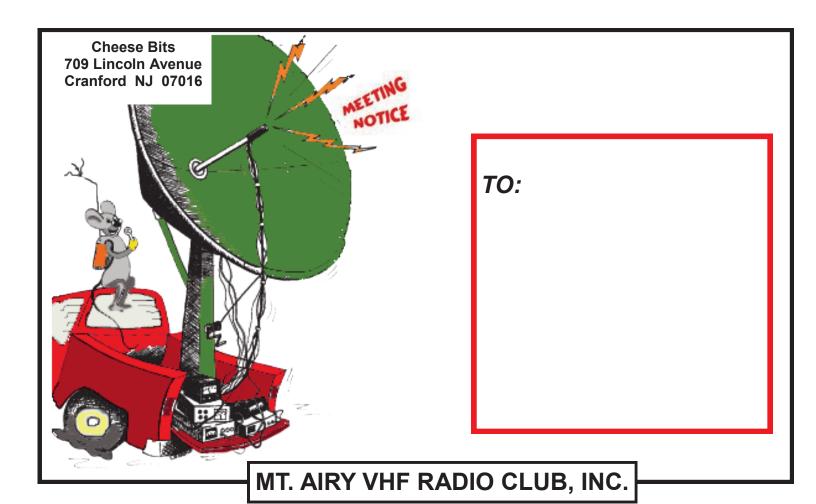
*Pout in Watts · WSJT Full Output Rated · 220 MHz and 70 MHz models on request

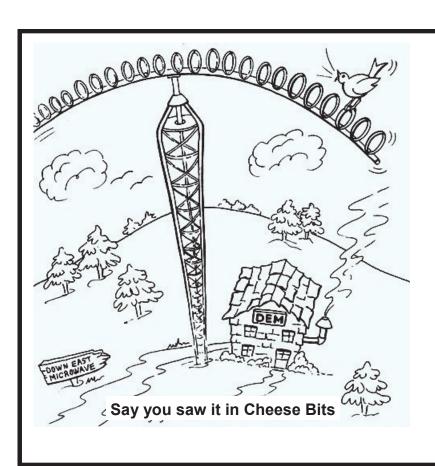
Island Amplifier USA Alpha Service, Panel & Parts

1 714-412-7399 · https://islandamplifier.com Sales/Service: USA · Canada · S. America

Made in Bavaria/Germany

Cheese Bits January 2023 14





DOWN EAST MICROWAVE

Manufacturers and Distributors
Of VHF/UHF/SHF Equipment and Parts
50 to 10,368 MHz

- No-Tune Linear Transverters
- Linear Power Amplifiers
- Low Noise Preamps
- Coax Relays, Coax Cable, Connectors
- Crystals, Chip Capacitors, MMICs, Transistors, RF Modules

For All Equipment Steve Kostro, N2CEI

http://www.downeastmicrowave.com

19519 78th Ter. Live Oak FL 32060 Tel. 386-364-5529 (Voice)