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

CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL Affiliated Club

Volume LXVIII | April 2025 | Number 4

PREZ SEZ:

(April 2025)
The March Home Brew night meeting proved without a doubt that the Pack Rats still build stuff! The wide range and number of projects presented by our members was inspiring. From sequence control modules to a quick connect 6M rover beam, to a 5-band µW transverter control box, to a complete SDR 10 GHz portable station, and many more in between, each presentation was more ambitious than the one before. The real shame was that we could only pick a small number of entrees for HB Awards. Thanks to everyone that presented their latest project and demonstrated that the art of home brewing equipment is alive and well in the club!

The next big event for the Pack Rats is the upcoming ARRL Night meeting on April 17th. We have secured a powerhouse guest list for this year's meeting at the Ben Wilson Senior Center, including:

David Minster NA2AA, CEO and Secretary of ARRL
Bob Famiglio K3RF, Atlantic Division Director
Marty Pittinger KB3MXM, Vice Director Atlantic Div
Bob Wilson W3BIG, EPA Section Manager
Riley Hollingsworth K4ZDH, ARRL/FCC Volunteer Monitor Program

We are inviting a number of local radio clubs to attend the April meeting in order to maximize the attendance for our visiting League officials and to provide access for more radio amateurs to directly ask them questions during an open Q&A session that they have agreed to as part of the meeting schedule. This is a rare opportunity to meet your National and Local League representatives in person. Don't miss out!

I am asking all Pack Rat members to wear their Badges and Logo Wear to the meeting. We want to take this opportunity to have our visitors meet the membership. Please introduce yourself to these attendees and make them feel welcomed. We plan to arrange a meet the speakers pre-meeting dinner on 4/17. Please mark your calendar and plan to arrive at 6 PM to attend the Dutch treat dinner. More info to follow.

Another significant VHF activity in April is the start of the Spring Sprints starting on Monday 4/14. The major change this year is that analog and digital contacts count as separate points for your score. For further information and the complete rules go to: https://sites.google.com/site/springvhfupsprints/2025-information

With the weather getting warmer each week, planning for the June Contest and July Picnic is well underway. These are major undertakings and additional help is always needed to make these activities a success. Please don't wait to be asked! Talk to one of the committee leaders and find out what you can do to help.

Last year as part of the July picnic we initiated our first ever 10 GHz MDS range testing event which was a great success. Gary WA2OMY and Dave K1RZ are now exploring the possibility of adding 24 GHz testing to the schedule. Please contact them to show your support for this activity and let them know your thoughts on this year's plans.

CU in the Sprints – Phil WA3NUF

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N3RG Ray Golley	1 Year Director
WX3K Stephanie Koles	1 Year Director

PACK RAT COMMITTEES

January Contest	N3RG, N2NC, W2SJ, AA2SD
June Contest	N3YMS, WA3YUE, W2SJ
Fall Sprints	WA3NUF, W9KXI, WA3EHD, WS3O
Pack Rat Awards	WA3EHD, W2SJ
Quartermaster	Vacant
Membership:	Ray N3RG, W2SJ, WA3GFZ

PACKRAT BEACONS - W3CCX/B
144.300 (FN21be), 222.060 (FN20tk), 432.300 (FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), 2304.300 (FN20tk), 3400.300 (FN20dh), 5760.300 (FN21be), 10,368.300 (FN20tk) See https://www.packratvhf.com/index.php/on-air for details

MONDAY / TUESDAY NIGHT NETS
VHF/UHF Monday:

TIME	FREQUENCY	NET CONTROL
6:45PM	224.580 MHz	KB3MTW Michelle
7:00 PM	Packrat Talk Group	KA3WXV George
	See Packratvhf.com ON AIR for details	
7:30 PM	50.150 MHz	N3RG FM29ki Ray
8:00 PM	144.245 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

PACKRAT E-MAIL REFLECTORS
The Pack Rats have an E-Mail reflector that is open to Pack Rats and friends of the Pack Rats. The intent of this E-mail reflector is to have a convenient means of reaching list members on subjects of general interest to the VHF/UHF and Microwave community.

Packrats@mailman.qth.net

The Pack Rats also have a **Members Only** reflector. This list consists of, and is for the use of, **only Pack Rat club members**.

Packrats-members@mailman.qth.net

See the W3CCX Web page for specific information on joining.

Packrats on Facebook
Use the browser link "www.facebook.com/PackRatVHF", or within Facebook search for the name "Mt Airy VHF Radio Club".

The March Meeting
Homebrew Night

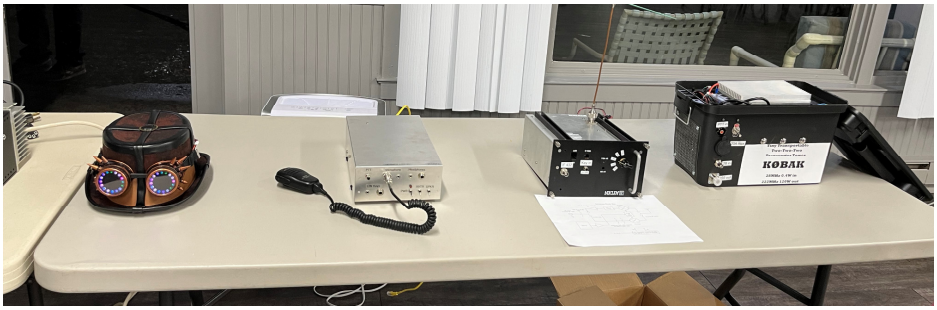
Some of those attending locally examining the Mario Table

Some of those attending from afar

The March Meeting
Homebrew Night

Some local attendees examining the submitted Homebrew projects

WA3YUE explaining his transverter switch that is linked to the W3KM logging program to N3EXA. Also seen to the left is a 500 W 70 cm amp built by KC3BVL

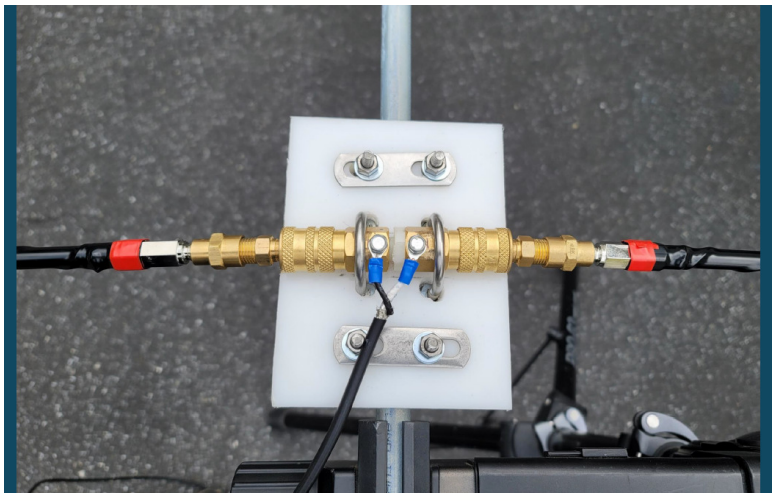


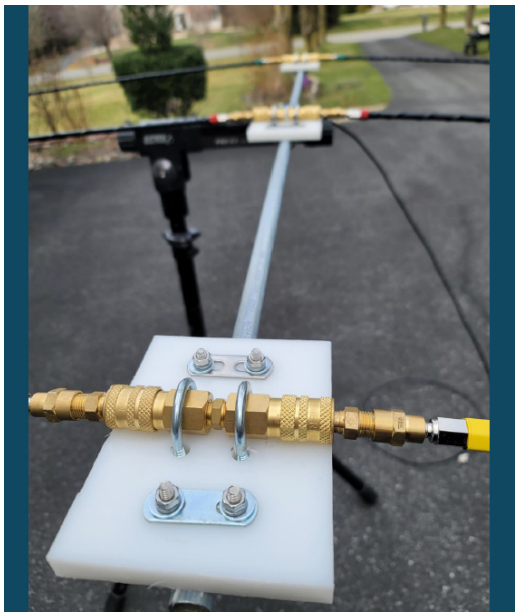
Left to right—W3JG's "You are getting sleepy" hat demonstrating Nano Pixels controlled by an Arduino, WA3GFZ's SDR IF rig for transverters based on the Hermes Lite 2, WA2OMY's 5 band "Driveway Rover" transverter, and K0BAK's "222 in a can" 120 W transverter.

The March Meeting
Homebrew Night

6 Meter Quick Beam

The Quick 6 meter beam was a entry from the remote site in the home brew contest by KE5NJ. The elements are attached to the boom using air chuck fittings for quick assembly and disassembly. It is claimed that after the boom is mounted to the mast the antenna can be assembled in 38 seconds.





The March Meeting
Homebrew Night

Transportable Two-Two-Two Transverter Toolbox

Pete K0BAK

Surplus Milliwatt Transverter

As a baby rover in 2014 I used my first full-power radio, the Icom IC-7100 which supports HF and the lower VHF bands except of course 222. Before I was a PackRat, I found an older (mid-90s?) Downeast 222 transverter and a TE Systems “130w” amp on eBay to then have all 4 lower bands. The next season I upgraded to a Flex 1500 radio and added transverters for bands above 6m. Part of that upgrade to the Flex was to standardize the transverters on 1mW IF input to use the radio’s transverter port, including having the 222 transverter modified from a few watts drive to a nominal milliwatt.

Fast forward through the building and disposal of my TV van station, and the need to use my existing Subaru Forester for roving in health-limited 2024. To save space and have a self-contained SDR with spectrum display, I replaced the 7100 radio with an Icom IC-705, which has the same band coverage but only outputs 10W. My first VHF Limited Rover outings in the Forester supported just the money bands 6m and 2m, which given the realities of FT8 dominance was not as much of a hindrance as it would have been 10 years ago.

In the Fall of last year, I wanted to participate in the Tuesday night 222 activity night, but couldn’t hack together a 222 station because my old transverter was setup for 1mW input. However, the IC-705’s power output can be adjusted in one-percent increments, so I can configure the output from 0.1W to 10W. I bought a Mini-Circuits 30db attenuator with BNC ports and installed it between the radio and transverter. This allowed me to set the 705’s power to 0.4W, sending 0.4mW to the transverter to produce 9W, and finally emitting 120W from the amplifier.

To participate in the activity night, I placed the transverter and amplifier on the floor of my Forester and connected all the components in a temporary setup to test the system on-air. I was happy to make a number of analog and digital contacts through a 20-foot-high halo antenna and got good signal quality reports on SSB. While I met my original goal of having a capability on 222 with my IC-705, the physical arrangement was not practical in terms of reliability, setup time, or floor space used.

Portable 222 in a Toolbox

Originally I considered installing the transverter and amplifier on a rack shelf since I’m most familiar with that construction approach, having made many shelves for the TV van racks. But not having a rack in the Forester (yet), the shelf would take too much floor space in relation to the importance of having the band. An open construction would also provide less protection for the components and connections compared to construction in an enclosure. While considering a few options for enclosures, including a bespoke wooden box, I realized the components might fit in a plastic toolbox. After measuring a couple Harbor Freight toolboxes, I found one that would fit the amplifier and transverter with reasonable space for cabling and air flow. This toolbox appears to be a plastic version of a popular metal military surplus ammo box.
Having never built a ham project in a constrained volume like this, I spent a higher than usual amount of time in design and trial hardware placement. The amplifier, being the heaviest and longest component, would be installed on the bottom of the box; the transverter would be installed above the amplifier by

The March Meeting
Homebrew Night

adding a platform above the amplifier. Placing the transverter as high as possible maximized the space between the amplifier and platform to allow air flow over the amplifier's heat sink. The transverter platform is thin plywood, supported on cut-to-length .75x.5 aluminum right-angle stock, with three horizontal bolts on each side supporting the aluminum. Vertical support using horizontal bolts is not good practice, but there wasn't enough space between the amplifier and the toolbox walls to install proper vertical supports. With only a small volume of air available above the amplifier, and wanting the option to operate the box with the lid closed, forced air cooling would be required for more than a few minutes of digital operation. On other projects I used a particularly powerful 4x4 box fan for high air volume movement in a small package. The fan would be installed on the hinge side of the box, pulling air over the amplifier from a set of holes on the opposite side of the toolbox. Not surprisingly, the fan is distractingly noisy at full speed, so I also planned to incorporate a fan speed control to allow noise versus cooling tradeoffs for different operation scenarios.

Another feature adding complexity was the need to minimize current draw on the PTT keying line. The IC-705 is famously plagued by weak and unprotected current sinking on its output PTT keying line (called "send" by Icom), leading to the risk of destroying the radio's send line output transistor. While offering sufficient current for driving typical modern ham equipment, driving two older components in parallel adds to the risk. While not a high priority, I also wanted to include a PTT indicator light on the outside of the toolbox to aid in rover operation troubleshooting. To meet the requirement to "buffer" the IC-705's incoming PTT signal, I used a small ~2"x.5" opto-isolated relay board I also used on other projects. This small board was mounted on the transverter platform, in the small space available underneath the transverter's connection ports.

Power distribution in the small space was a compromise that used multiple connection techniques. I used a four-position screw-down distribution buss with blade-type fuses; one fuse each for the amplifier and transverter, one fuse for all the lower-current components, and one unused position. The fuse buss was mounted vertically to the side of the transverter using a Velcro sticky back strip. The primary negative buss was provided by a small four-position open grounding bar typically used in circuit breaker boxes; this buss was screwed into the transverter platform. Multiple low current positive and negative power wires were connected using wire nuts, with one wire each going to the positive fuse buss and negative buss. Other "extra" features on the box wall include a dual Power Pole connector to allow daisy-chaining DC power, a power toggle switch, and a power-on indicator light.

Construction and Testing

Wiring the box was challenging for me, never having such a small area to work with before. Without experience, it's not surprising that the wiring looks unorganized but at least not totally chaotic. One connection I hope to improve is to use a shorter and more flexible BNC cable between the transverter output and amplifier input.

After fixing one obvious unconnected cable, I was quite surprised that the initial turn-on, PTT verification, and the RF bench test succeeded the first time. RF power measurements were the same as they were with separate components. While other commitments have prevented me from testing on-air as of now, I consider the bench testing good enough to declare the project complete. Underestimating the amount of time involved (as usual) makes me question whether I should have constructed the same capability in a larger, easier box, but I'm glad I got the experience gained from the compact build.

The March Meeting
Homebrew Night

Pictures showing the various stages of construction of the “Transportable Two-Two-Two Transverter Toolbox”, the test setup, and finally the finished product.

AA2SD/R Rover Tests a Diamond HB9CV Portable Beam Set Up In February After the Contest with Assistance from Pack Rat Members

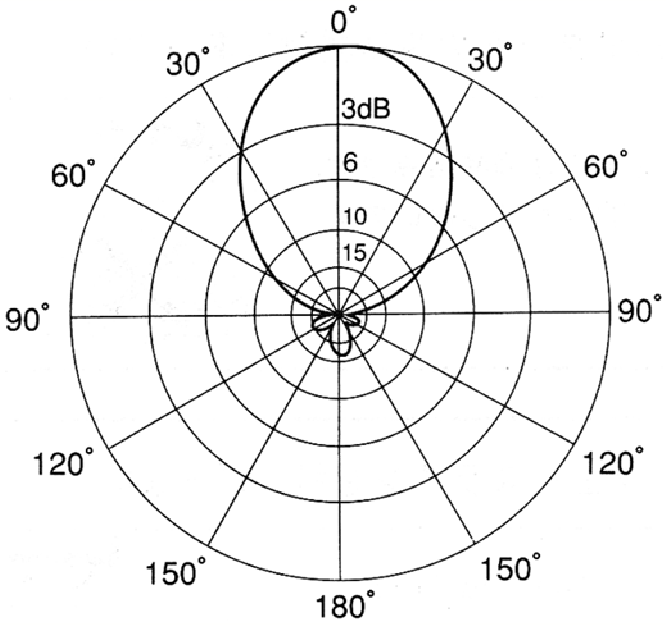
Saturday Feb 09th Cape May Point FM28 - Still recovering from my bent mast incident during the Jan VHF Contest, I tested a new surplus military white aluminum masts set that consist of (4) sections that are sleeved and pinned for safety. These masts are easily fitted together and will also stow in the back compartment of my Subaru Outback. The total height was just over 17 feet with the hitch mount. I was able to build this quickly and have an antenna up in less than 15 minutes total time. As a portable Rover using my everyday daily driver, a Subaru Outback, I focus on simplicity, and speed of set up. The day of operation I was experiencing very strong wind coming off the bay and the masts stood up with no issues. These masts are available from a military surplus seller on Ebay and cost me $64 for a lot of 4 masts, the ebay link is here.

AA2SD/R testing a 2 Element Diamond Beam with a HB9CV Configuration in Cape May NJ

I tested this mast arrangement with a Diamond HB9CV 2-element beam which only weighs 3.75 pounds, and is claimed to have 6.3 dBi Gain. The best thing about this antenna from a Rover's perspective is that it only has a 32 inch boom, and the elements quickly disassemble with wing nuts. This entire kit can be broken down and stored in the back of my Subaru with the rear seats up. This is an ideal lightweight portable antenna, for quick

set up and hill topping. You could easily fit the antenna in a trunk partially assembled or on a roof rack. This antenna utilizes an HB9CV-Beam. The HB9CV-Beam is a 2-Element-Yagi with two driven elements and was introduced by Rudolf Baumgartner, HB9CV, in the 1950's. More information on this HB9CV design can be found here This antenna is relatively low cost, presently priced at $129 from Ham Radio Outlet.

A quick assembly of the Diamond Beam as it leans on a fence post in the parking lot



Radiation pattern of the HB9CV-Beam

For the mast and antenna test, I deployed a portable FT891 Yaesu at 50 watts with no amplifier. I also used very lightweight coax. The beach parking lot operation location based on a recommendation from Ray N3RG was at the Cape May Point Sunset Beach, located behind the Gift and Shell Shop. This location is ideal for saltwater signal lift for HF as you are physically within 100 yards of the ocean.

Thanks to the help from fellow Rats, I was successful with 10 contacts on 6 Mtrs, I also made over 30 contacts on 20 Meters and 40 Mtrs on HF during Sunday, and on Saturday 50 HF contacts deploying a ATAS 120 screwdriver antenna.

Overall this was a successful test and outing, as I re-adjust my Rover Strategy for the June Contest and Spring Sprints. I was able to work Bob W2SJ, Dave W2KV, Alan K3WWT, Jim KC3BVL, Bob N2SCJ, Len

N3NGE, Rick WC2K and several others. I plan to use the Diamond HB9CV 2-element beam while mountain topping in the June 2025 VHF Contest.

Thank you to all of the Pack Rats for your support. I hope to work you in the upcoming Spring Sprints !

A very blustery day at the tip of Cape May as I overlooked the Delaware Bay

AA2SD/R
Scott
www.aa2sd

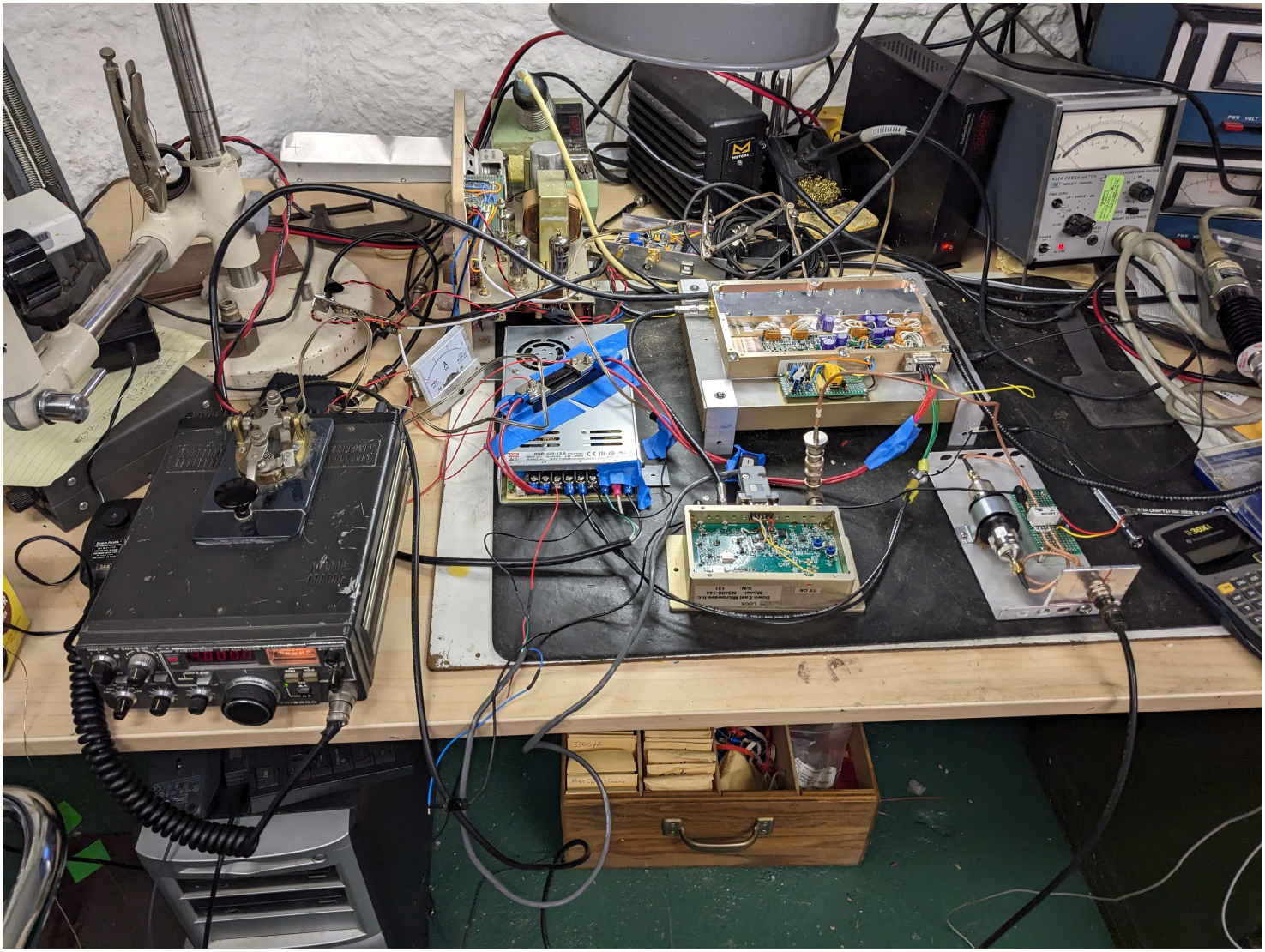
You can see additional images here on my blog page https://www.aa2sd.com/blog/cape-may-pota-activation

Soon another station to look for on 3400

In the works is a 3.4GHz rig. The picture is a bench test setup of the RF components. On the left is the Kenwood TR-9000 I.F. rig ('80s vintage). Next over, is the 12 volt power supply with ammeter shunt taped to the top. In front, is the DEMI Mini 3400 transverter. To its right is the switchable I.F. transmit power attenuator (7.2W to 0.66 watts). Behind the attenuator is a Toshiba 30-40 watt class-A amplifier with modified power regulator. Don't mind the Heathkit Twoer all the way in back; that's a separate project. Plenty of work to go but making good progress. The amp makes over 40 watts, if pushed, but I think I'll run it a bit lower than that. The receive works FB: mds is somewhere below (maybe far below) the noise floor of the spectrum analyzer that I used to measure it (-117 dBm). It has a bit over 16 dB conversion gain.

73,

Lenny W2BVH



This reminds me a little of a photo of Jim Williams' workbench. Ed.

Here is a piece from the N.E.W.S. Group's March news letter that could be of interest to those of you looking to get on the 222 MHz band. Note: There seems to be a typo in the Coaxial cable type designations. They should be RG58 and RG6 respectively. Using RG6 should result in lower feedline loss than RG58 however at 20' the difference is small. Ed.

GETTING ON 222 MHz?

Chris WB2VVV

1. If so, please see the **January 1995 QST** for the article I wrote about modifying a Uniden HR-2510 all mode 10 meter transceiver for use with a 222 MHz transverter. Many other HF rigs can be modified in the same manner to get on this great band with a transverter. Now is always a good time to marry up an older lower value HF rig with a 222 transverter!

2. If you are looking for a modest size inexpensive Yagi-Uda Beam Antenna for 222 - 225 MHz you might want to try out the **VHF Hi Band TV Antenna #30-2475 from Stellar Labs** (I have no relationship with Stellar Labs and I am not selling this antenna): Cost: $41 shipped from Amazon in a 36" long box, and even less from Newark Electronics. Boom Length: 5 feet assembled (breaks down in half via wing nuts to 29" and 32" sections).

Measured Gain (on my Antenna Test Range): 7.67 dB (9.82 d Bi). Measured 3dB Horizontal Beam width: 54 degrees.

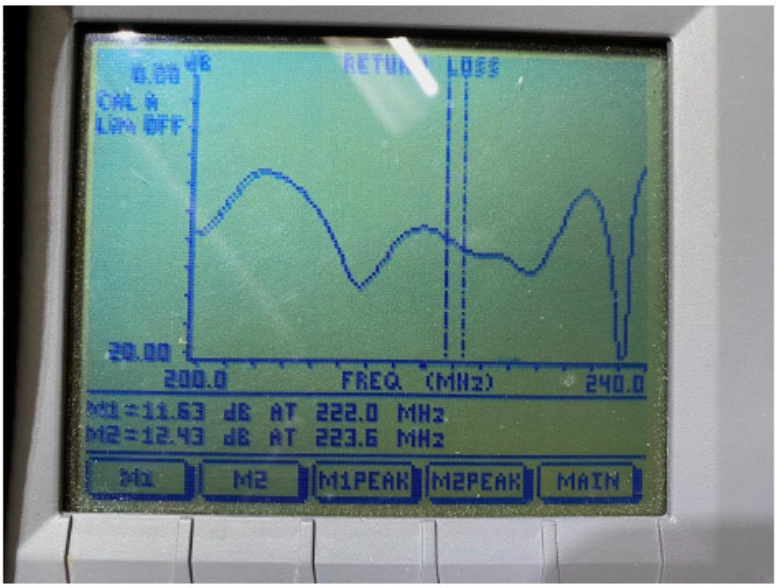
Measured Return Loss at 222.1 MHz: 11.63 dB (the equivalent of 1.7:1 SWR). Measured Front-to-Back Ratio: 20.26 dB.

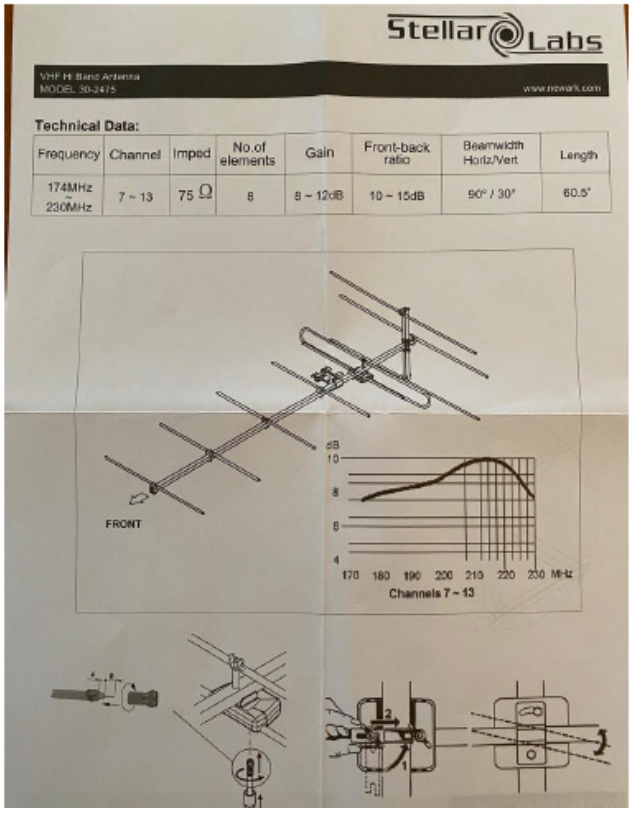
Measured Front-to-Side Ratio: 18.99 dB.

Details: This antenna has a Type F connector feeding a small circuit board inside a black plastic feed point box.

The driven element is a large diameter/spacing folded dipole for broadband 174 - 230 MHz use. The small circuit board has a micro strip hairpin etched on it for matching that looks like it will handle transmitter power kept under 100 Watts.

I used a Type F to UHF coaxial adapter at the feed point for testing, along with a 20' length of GR-58/U Coax terminated in UHF connectors. One could alternatively use 75 ohm GR-6/U (TV type) coaxial cable with F connectors on each end, and adapt to what connector is necessary at the rig end.


dB
RETURN LOSS
CAL A
LOG OFF
20.00
200.0
FREQ (MHz)
240.0
M1=11.63 dB AT 222.0 MHz
M2=12.43 dB AT 223.6 MHz
M1
M2
M1PEAK
M2PEAK
MAIN


Stellar Labs
VHF Hi Band Antenna
MODEL 30-2475
www.newark.com
Technical Data:
Frequency
Channel
Imped
No.of elements
Gain
Front-back ratio
Beamwidth Horiz/Vert
Length
174MHz ~ 230MHz
7 ~ 13
75 Ω
8
8 ~ 12dB
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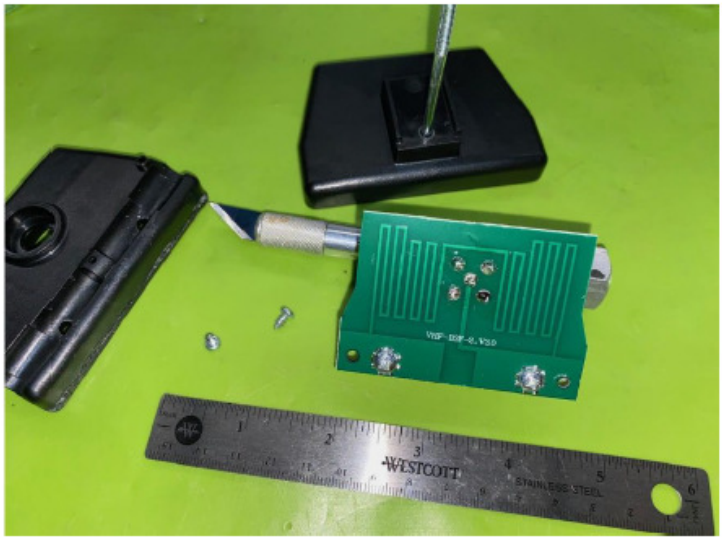
60.5"
FRONT
dB
10
8
6
4
170 180 190 200 210 220 230 MHz
Channels 7 ~ 13



I sincerely hope that easy access to a good performing inexpensive beam antenna helps you get on 222 MHz!

73, Chris WB2VVV wb2vvv@aol.com

Vintage Hallicrafters

Last week, this Hallicrafters SX-101 receiver and HT-32B transmitter showed up at the Boca Raton ARA.I had dreams of the past, sitting at the desk of the biggest ham radio store in Manhattan, playing with the HA-1 keyer and operating those two magnificent pieces of amateur radio equipment. And that's where it ended, in dreams, as now these are being posted for sale at remarkably low prices, together with a bag of tubes that could be used if needed. A week later and it's still sitting there, waiting for a buyer. Alas, I am not 14 years old anymore, and after 65 years of being a ham licensee, whatever could I do with those radios of my dreams, now museum pieces.

Yes, they were the things that dreams were made of, but in today's more modern age, aside from the thrill of saying I used it to make a QSO, we have moved on. But wait, as I sat in the club shack today, working some DX on 6m FT8 and 10m FT8, I reminisced about the days that I would turn that big tuning dial a go across the CW or voice band allocation, picking out stations that I would like to work. Today I scanned the CQ list of 20+ stations that were on 3KHz of the FT8 frequency, picking out a few new prefixes, and even those need a guide as there are so many special and optional call sign headers. I recalled a phrase that was in one of my medical periodicals, "…there's plenty fruit, but no juice." I had a great collection of QSL cards, proudly displayed on my shack wall, now replaced with the numerous "Worked All of the World" on every band and mode, validated by LOTW, all done online. No more filling out a QSL card, applying a stamp, possibly putting it in an envelope with an IRC, or sending it to the outgoing QSL bureau. I was surprised this week with an incoming QSL card from the W1 QSL Bureau and they still have $8 of postage credit.

I've learned a bit about computer control of the radios, the messages, the logging, the tuning of the Stepper, the rotator. I'm taking a back seat to the computer, as it does so many of the functions that I learned entering the world of ham radio. No more tuning the grid, dipping and loading the final, using a J-38 key or a bug to send the Morse code. Just type in a few strokes or click the mouse, and who knows if my call sign will soon be **AI**K1DS with a license covering a fully automated intelligent station. The new virtual assistant, "Jeeves," will know what bands are open, what DX is out there, and just run things and send me a report. 73, (we still use that lingo) Rick K1DS

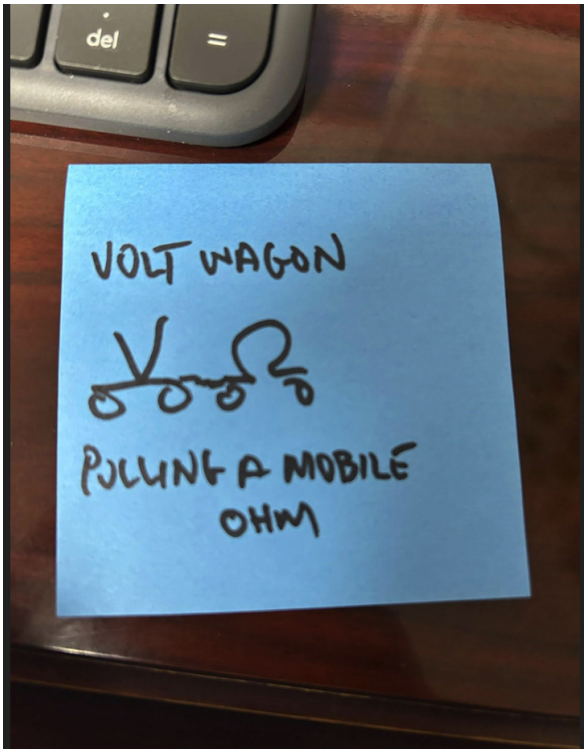
Editor Emeritus Notes

Lenny W2BVH

The search for the missing Maylasia Airlines Boeing 777 has resumed. This is partially due to data extracted from receptions of WSPR transmissions made by hams during the time the plane was still in the air. The WSPR transmissions coincidentally serve as "passive radar" signals which were reflected or diffracted by the plane. Analysis of the signal reception reports provided additional data points on the area where the plane was likely to have gone down. A search is currently under way by a commercial under sea exploration ship contracted by the Malaysian government. See https://youtu.be/HIuXEU4H-XE?si=2g_CHy0Y86N9uHAB for more information

73,

Lenny W2BVH



The Central States VHF Society is proud to sponsor the 2025 Spring Sprints!

Your Central States VHF Society Spring Sprints Committee:

Kent O'Dell, KA2KQM

Mike Metroka, WB8BZK

Jon Platt, W0ZQ

All are welcome and encouraged to participate!

Please see rules at https://sites.google.com/site/springvhfupsprints/2025-information

for updates!

Contest Date and Time:

- 144 MHz Monday April 14, 2025. **2300z (7pm EDT) to 0600z (11pm PDT), operate no more than four hours between your first contact and your last contact.**
- 222 MHz Tuesday April 22, 2025. **2300z (7pm EDT) to 0600z (11pm PDT), operate no more than four hours between your first contact and your last contact.**
- 432 MHz Wednesday April 30, 2025. **2300z (7pm EDT) to 0600z (11pm PDT), operate no more than four hours between your first contact and your last contact.**
- Microwave (902 MHz and up) Saturday May 3, 2025. 0800 AM – 0200 PM Local
- 50 MHz Saturday May 10, 2025. 2300z through Sunday May 11, 2025, 0300z

Modes of Operation:

For all Sprint events other than the Microwave Sprint, a station may be worked once on SSB, CW, FM or AM (i.e. Analog) and *once again* using a digital mode for a total of two times per band. Analog contacts cannot be made on generally recognized digital frequencies while digit contacts must be made on generally recognized digital frequencies (see Operating Hints). For the Microwave Sprint work a station only once per band regardless of mode.


RADIO ELECTRONICS
EXPO
Georgetown Hamfest
SATURDAY
April 26, 2025
Cheer Community Center
20520 Sand Hill Rd.
Georgetown, DE 19947
SUSSEX
SARA
AMATEUR RADIO ASSOCIATION, INC
Sponsored by
Sussex Amateur Radio Association
RadioElectronicsEXPO.com
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ARRL
Jocelyn Quick, KB3RAR

Sussex Amateur Radio Association
- APRIL 26, 2025 -
Delmarva Amateur Radio & Electronics EXPO

Centrally and conveniently located...within 2 to 3 hours of major cities:
Baltimore, Philadelphia, Wilmington, Washington DC, and Virginia Beach as well as Eastern PA and Southern NJ

NO SALES TAX – MORE VALUE FOR VENDORS AND GUESTS - FREE PARKING
Bring The Family And Enjoy A Weekend At The Beach!

Past Vendors & Exhibitors
- ARRL
- Beebe Hospital
- Fisher Cable
- Call Stuff
- Direct Tools
- GnG Electronics
- Satellite Sam
- Hamsource.com
- HRO (Ham Radio Outlet)
- Magnum Electronics
- Quicksilver Radio
- Redicall Communication
- The RF Connection
- Towaco Imaging
- Verizon

Events & Attractions
- ARRL State Convention
- Tail Gating
- Great Food
- Blood Pressure Testing
- Chinese Auction
- Raffle...Big Prizes!
- License Testing
- Guest Speakers/Forums
- QSL Card Bureau/Card Checking
- Door Prizes!

Guests Pay $8 To Enter!
(Under 18 FREE!)
Inside spaces $15.00 - 1st Table
Tailgaters : $10.00 - First Space

Gates open at 6:00 A.M.
Expo begins at 8:00 A.M.

Schedule

6:00 AM	Gates Open
7:30 AM	Tailgating
8:00 AM	Indoor expo venue opens Restaurant available
12:00 PM	FCC testing -No test fee, pre-registration required **Last test seating at 12:30 PM**

Speakers Forums

ARRL Update
Others

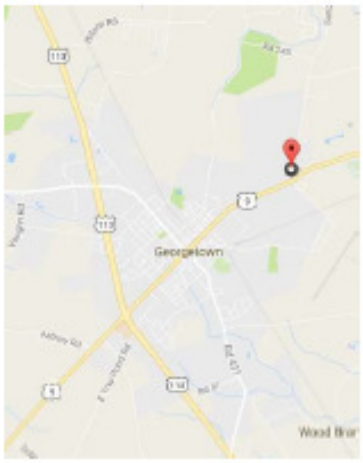
TALK-IN: SARA Repeater

147.090 mHz PL 156.7

Schedule subject to change

For Information
Contact Jamie, W3UC
(410) 202-7690
hamfestdelaware@gmail.com

HAMFEST LOCATION:



Cheer Community Center
20520 Sand Hill Rd.
Georgetown, DE 19947

HOST HOTEL:
Tru Hotel by Hilton
301 College Park Drive
Georgetown, DE 19947
(302) 515-2100
www.hilton.com

JOIN US IN TAX FREE DELAWARE!

The Delmarva Amateur Radio Electronics EXPO is sponsored by **Sussex Amateur Radio Association**

www.radioelectronicsexpo.com
Follow us on Facebook at Delmarva Amateur Radio & Electronics

Registration is now open
48th EASTERN VHF/UHF/MICROWAVE CONFERENCE:
May 9-11, 2025
Hilton Garden Inn (860)-688-6400
555 Corporate Drive, Windsor, CT 06095
(I91 exit 38 to Day Hill Rd.
https://www.newsvhf.com/conference/

The 47th Eastern VHF/UHF/Microwave Conference will be held on May 8-11, 2025, in West Windsor, CT

Papers and presentations on all VHF, UHF, and Microwave topics are solicited and welcome.

Please take this opportunity to share your latest projects with your fellow operators and experimenters. The conference is four months away, so you have time to write it up, or even to start a new project.

If you have an idea or topic, please send to

w1ghz@arrl.net

73
Paul, W1GHZ, and Mark, K1MAP, co-chairs

Regularly Scheduled On The Air Events

VHF/UHF Monday - Every Monday except holidays and contest nights the following nets are held, 224.58 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, 144.245 MHz USB NCS W2KV FN20os at 8:00 PM, 222.125 MHz USB NCS KC3BVL FM29jw at 8:30 PM, 432.110 USB NCS WB2RVX FM29mt at 9:00 PM.

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 .

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.

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

Editor's Notes

As always thanks to all of you who submitted input for this issue of Cheese Bits, it is our Club's newsletter so we should all try to contribute to it. On the subject of contributions, please do not submit your input as a pdf if it is more than one page long because it makes it hard to divide up and place in the news letter. Starting this month there will be a hard deadline for submissions of the last day of the month preceding the month of publication. Submissions received after the end of the month will be saved for the following month's edition.

The usual thanks are due to the Cheese Bits editorial committee, my wife Melanie, for grammar and spelling checks.

Tom KA3FQS

TO:

MT. AIRY VHF RADIO CLUB, INC.