➡THE MANATEE AMATEUR RADIO CLUB, INC.

July 2021

RADIOWAVES



MARCI Newsletter

FROM THE PRESIDENT: Just as the summer gets under way there appears a possible threat via tropical storm (PIA in my book). It seems like we just closed the book on a busy storm season in 2020, took a breath, had a piece of Valentine's candy, and now we are urged to get our evacuation plans in order for the CURRENT season. Geez Louise... But as regular readers of RADIOWAVES know, Geoff Haines N1GY has been keeping us on top of the 'preparedness bandwagon' with tips on what to have on hand around the radio station and on how to get ready should serious weather threaten our area.

As all of you undoubtedly know by now there will not be a General Membership Meeting this month. The Board of Directors during our June Meeting thought to allow you the membership to decide on the method and location of future G/M Meetings. I'm pleased to announce that as a result of the survey emailed to you, we will begin LIVE meetings again on Tuesday August 3rd at the Bible Baptist Church (2113 57th St E, Bradenton, FL 34208) where we have normally conducted our gatherings. I look forward to seeing you all there in August. While the month of July is an 'off' month for our G/M Meetings, some of us are still at work for you. For example, Ed Skalecki, NI4MX has made multiple trips to the 146.820 repeater site making needed adjustments. The BOD is also discussing plans pursuant to meeting presentations and hopefully, a live Christmas Party Meeting which we were forced to cancel in 2020.

The next VE Session is slated for Saturday August 21st at The Church of Bradenton located at 2520 43rd St. West in Bradenton. It is my understanding that the FCC will soon institute their new fees for licenses, upgrades, and vanity call requests. Might be a good idea for you or that friend who was thinking about getting his/her ham license OR that plans to upgrade to 'get cracking'.

I hope to see all of you on Tuesday night August 3rd for our first live General Membership Meeting in over a year. Stay cool, take care all, and PLEASE...tell someone that you love them.

Mike Ryan, K4CVL mryan001@tampabay.rr.com

FROM THE EDITOR: June is over and so is Field Day. The club did not participate as a group lat weekend but several members operated from home as I understand. The purpose of Field Day seems to have been sublimated to its position as a "Contest" but the original purpose of FD was to test your ability to operate without commercial power or massive antenna arrays. This is hurricane season and that knowledge will be required before November is over.

On another note I am still looking for someone who wants a relatively complete library of ARRL publications in return for the infinitesimal amount of work being the club librarian. In all the time I have been in that position, I have loaned out exactly <u>one</u> book. That's right, <u>ONE</u>. Please, someone take the library from me, I am running out of space to place all the other things that I am interested in and something has got to go. It only needs about one smallish book case to contain the entire library.

On yet another note, as Editor of the newsletter, I have repeatedly requested articles, photos and reports from the membership. So far few if any have answered the call. Unless you want this newsletter to be a puzzle book with a want ad section along with the president's message, please start contributing to the make-up of the newsletter.

73

Geoff Haines, N1GY

The Editor

<u>A Flagpole Vertical for West Central Florida</u> By Jim Ebner, N8JE



I recently relocated to Florida and wanted a good HF vertical that I could use on most of the bands. I already have two dual-band VHF/UHF verticals up, but wanted to keep the HF vertical somewhat hidden, even though there are no restrictions in our area.

I had read in a past QST (May, 1993) where Albert Parker, N4AG took a Hustler 4-BTV and covered it with 2-inch thin wall PVC to make a flagpole. I wanted to use a Hustler 6-BTV because it covered most of the HF bands, but could not find anything anywhere on how to cover it to make a flagpole.

After doing some investigating I discovered that 2-inch thin wall PVC is used only for irrigation purposes and could not be readily found, the same with 2-1/2-inch PVC. I wanted to come up with a way to cover a 6-BTV so everyone could use and enjoy this vertical antenna.

Assembling the mount.

I started first by reading all the instructions. The mount calls for a 4-foot, 1-1/4-inch OD pipe for the mast. I am in the west central part of Florida and the ground is very sandy here. I did not think the 4-foot mast would be long enough to hold the antenna and the PVC cover. So, I did a little figuring and used a 7-foot mast, leaving



I wanted to use something to cover the antenna mount at the bottom. After taking some measurements I found that 6-inch PVC would cover it. I cut it long enough that I could bury one foot of the 6-inch PVC in the ground to help stabilize the pole after everything was up.

Page 4

I could not center the mount in the 6-inch PVC. So, I took a 6-inch rounded cap and cut a 2-1/2-inch hole,



off-center for the antenna mount. Then I took a piece of 2-1/2inch PVC and glued it in the cap. It was a little unstable, so I cut a piece of plywood to go inside of the cap to help stabilize the bottom of the 2-1/2-inch piece. The mount was done.

Antenna Assembly

I assembled the antenna according to the instructions and checked the match with an antenna analyzer, and found there was much tuning to be done. I took the antenna

down and removed the traps above the 10-meter trap. Starting with just 10-meters I found I needed to trim some off the main mast before the trap. This is telling me my ground plane is better than average according to the instructions. Note- I am not using any ground radials.

I reassembled the rest of the antenna tuning each band as I went. After completely tuning the antenna I marked each spot on the antenna, measured, writing each measurement down on the instruction sheet. I then disassembled the antenna again. I replaced the screw clamps on each trap with 4-#6 $\frac{1}{2}$ -inch stainless steel sheet metal screws. I then reassembled the antenna replacing the rest of the clamps with 2-#6 $\frac{1}{2}$ -inch stainless steel sheet metal screws, carefully making sure of each measurement of the antenna.



I checked to see if the 75-meter resonator would fit into the 2-inch PVC pipe. It would not. I took it to the local hardware store to see what would accommodate the resonator. I found that it would fit down into a 2inch union, problem solved. I then measured the length of the antenna from the bottom to the top of the 40meter section, cut the 2-inch PVC 1inch shorter, so there would be room for the bottom screw clamp. Three (3) inches down from what would be the top of the flagpole I drilled a



small hole and inserted a stainless steel eye hook with a pulley on it for the rope.

I took the 75-meter resonator and inserted it into the union, sealing it with some silicone. After it set, I put the bottom part of the antenna into the PVC. I screwed the resonator onto the top of the

antenna. Then I forced the union on to the top of the PVC, covering the whole antenna, just leaving the top part of the resonator and the stinger above the union, thus the top of the flagpole.



Taking the antenna assembly to the mount and putting it together was a little tricky. I needed to pull the top cover off the mount and slide it onto the bottom of the flagpole. I then assembled the antenna and tightened the screw clamp to the mast. I put the top of the mounting cover down on to the 6-inch PVC and put two #8 ³/₄-inch stainless steel screws through the 2-1/2-inch PVC, into the 2 PVC, holding it in place. I sealed the gaps on the top with silicone. I than went in to check the antenna. No other adjustments were needed.

For those of you that cannot have any antennas showing at all: You can use the same modification using the stainless steel screws instead of the screw clamps with the 4-BTV, and the 5-BTV without using the capacitance hat. Just cap the top with a rounded PVC cap. If you already have the 6-BTV use it with out the 75meter resonator, the antenna will perform just as well.

Parts List;

1, Hustler 6-BTV Antenna, also can use the Hustler 4-BTV or the 5-BTV

- 32, #6-1/2 inch long Stainless Steel Sheet metal Screws
- 2, $\#8 \frac{3}{4}$ inch long Stainless Steel Sheet metal Screws
- 1, 20-foot length of 2-inch PVC
- 1, 30-inch long 6-inch diameter PVC
- 1, 6-inch PVC cap
- 1, 2-inch PVC union or cap
- 1, 5-inch long piece of 2-1/2-inch PVC
- 1, small tube silicone sealer

If you have any questions please feel free to email me, Jim Ebner at <u>N8JE@earthlink.net</u>!

QST JULY2021

N I A T N U O M T S E W B Z P B T P C V D Z H O M P X C V M F Q L T NURXBKDIDOOWNEKRF Y S J E T Q N Q D M Z Y R M M A A CHSNRGOFIALYANMTR MCOGLRMXV J R P T E Q R C O R L I T V A L K Q M X R B S R E CAUNRMIWYMBIERZUL EFTECIDPOATRCLGSE G T I E N X P C W R R O V N F U D DQORTBMPOMMRIJHCQ IFNIREWNEEBAAHQOT R L S N J G X R T T G C Z Y N F Z BTLGARMINYSXLRJGW P T G W K W C K H B T W Y B M W L X F N C R T N T Z O N I U D R A W TNVRXPRECISERFRFJ

www.WordSearchMaker.com

AMERITRON	DXENGINEERING	KENWOOD
ARDUINO	ELECRAFT	MAXIM
ARRAY	EMCOMM	PRECISE RF
BRIDGECOM	FLEXRADIO	SOLUTIONS
COMET	FOCUS	STEPPIR
CUSHCRAFT	GARMIN	WEST MOUNTAIN
DIAMOND	HYGAIN	YAESU

FOR SALE:

Offer to build: Custom extension cables for any remote-able radio such as the Yaesu FTM-300, 350 etc.

PowerPole Power Distribution Blocks in 4+1, 6+1, and 8+1 sizes \$10, \$15, \$20 each respectively Can custom build to suit.

IN ADDITION: I have more parts and components than I will ever use, so if you need something, a transistor, a plug, a jack, etc etc. call me first, I will give you a great price (as in no charge).

Call Geoff at 941-447-8579 (cell) or 941-752-3696 (home)

From Bill, N9US:



The AEA model VSB-70 is a Fast-Scan Television (FSTV) transceiver that operates on the amateur 420 to 440MHz band. The transmitter features two local oscillator crystalcontrolled channels and an output of one watt PEP on sync peaks. Receive operation can transceive or use variable tuning. In transmit, baseband NTSC video and audio-are converted to Vestigial Sideband (VSB) video with the FM audio subcarrier in the 70 cm band. This is the same format as used by analog broadcast television. Video cameras, Camcorders and video cassette recorders with video and audio output jacks can be used to generate the baseband video and audio for transmission. A separate front panel microphone jack may also be used for audio input. Either color or black and white video may be used. Television channel 3 or4 may be used to monitor your broadcast signal. If you live in an area where channel 3 is used by a commercial television station, your VSB-70 must be configured for channel 4, and vice versa. A standard color or black and white television is used for .reception. The same television is used for monitoring your transmission. The VSB-70 uses a GaAs FET preamplifier which provides for a system noise figure of less than 1.5dB. Either crystal-controlled or VFO receive tuning may be selected. In addition to the video source and television set, a 13.6 volt regulated power supply and 70cm antenna are necessary. AEA also offers the RLA-70 linear amplifier

with MPS-100 power supply and the 430-16 antenna to complete your ATV station. To transmit, an FCC amateur Technician or higher- class license is required.

Bought for \$309 from AEA in 1992. Works great! Best Offer



Page 9

Ameritron 5 Way Antenna Switch RCS-8V

RCS-8V HF to VHF/UHF Remote Coax Switch

Ameritron's Remote Coax Switch lets you remotely switch up to five separate antennas using one inexpensive small control line (like standard telephone wire). Eliminate a tangle of troublesome coax and have a simple and neat installation with just a single feed line. The **RCS-8V** consists of two units, the weatherproof switching box that mountson your tower or mast and the control unit that's placed at your operating station.

VSWR is less than 1.2 from DC to 250 MHz and less than 0.1 dB loss at 150 MHz, great for the HF/VHF/UHF operator.

It handles over 5 kW below 30 MHz and 1 kWatt at 150 MHz. You can ground unused positions or leave them open.

The indoor control unit is all metal to prevent RFI and TVI. It also has LEDs to indicate the antenna you've selected. A Lexan scratch-proof panel has a markable surface for labeling your antenna positions.

RCS-8V operates from a 120 VAC power source. Use any 6 conductor control line (not supplied) and allows safe operation with 14V control voltage.

Specifications

- Number of antennas positions: 5
- Loss at 150 MHz: Less than .1dB
- VSWR: under 1.2 to 1 from DC to 250 MHz.
- Impedance: 50 ohms

- Power Capability: > 5kW Watts below 30 MHz, 1kW at 150MHz.
- Antenna select time: 50 ms.
- Power requirements: 120 VAC @100mA, AC adapter supplied
- Connectors: Teflon® SO-239
- Control Box: 6" x 6 ¹/₈" x 2 ¹/₄"
- Switch Box: 5 ³/₈" x 7" x 3"
- <u>This one modified to add remote-controlled relay to permit</u> <u>switching between unactivated ports to ground or floating.</u> <u>Makes big difference (sometimes) on received noise level.</u> <u>Came off my tower in Illinois</u>
- <u>Current MFJ price \$229.95 Best Offer</u>

Heathkit HA-14 "Mobile Kilowatt" Linear Amplifier

- The **HA-14** amplifier uses two 572B power tubes in parallel in a traditional grounded grid configuration. The matching power supplies are solid state. The amplifier is a small and affordable home KW that works very well in fixed station service. Perhaps more of them are used fixed than mobile. Model: Linear Amplifier HA-14 Heathkit Brand, **Heath** Co.; Material: Metal case : Shape: Tablemodel, Dimensions (WHD) 12.25 x 3.25 x 10 inch / 311 x 83 x 254 mm : Notes: Heathkit HF-Amplifier HA-14. Grounded grid
- linear power-amplifier for 80 to 10 meters HAM bands. Driver power max. 100 watts, output power abt. 600 watts. My friend George Ulm, W9EVT, claims to have run one of these from his MOTORCYCLE! (Crazy as he is, I can believe it!). Check out his radio collection on his QRZ.COM page!



Have 2 of these. Sold 1 for \$350 in 2010. Best Offer

Heathkit MODEL HP-24 AC Power Supply for HA-14 Linear

Material	Metal case		
Shape	Tablemodel,		
Dimensions (WHD)	9 x 4.75 x 6.75 inch / 229 x 121 x 171 mm		
	Heathkit Power-Supply HP-24.		
Notes	Page 11 AC power supply for SSB linear power amplifier <u>HA-14</u> (80 - 10 meters HAM bands). Can be wired for either 120 or 240 VAC input. Output: HV 2500 VDC (no load), Filament 12.6 VAC, Bias -150 VDC.		
Best Offer			
For Sale: IC-74	15 radio		
Astron RS-35M power supply			
SG 231 Smart tuner			

RG213/U Coax cable, approximately 60' Total for everything \$350

Contact <u>rmhooie@yahoo.com</u>

Icom IC-706MKIIG, Standard Mic & DTMF Mic, Filters for SSB & CW, mounting bracket \$625

Tigertronics Signalink, 2 CAB6PM cables (6 pin, for ICOM or Yaesu) \$125

Yaesu FT-1500 2m radio w/Rtsystems programming S/W & cable \$140

Contact Jim email: KD5FQM@arrl.net

CLUB MEETING: To be a ZOOM session via the Internet on June 1, 2021 at 7PM (To join the meeting just go to the MARCI web page and click on the link shown) **Monthly Board Meeting** TBA (may be replaced with a teleconference) **Monthly ARES Meeting** TBA

Club and Other Nets:

MARCI Info Net	Sunday 7:00 PM	146.820 – 100 Hz.		
ARES Net	Monday 7:00PM	146.820 - 100 Hz.		
MARCI Traders Net	Wednesday 7:30 PM	146.820 –100 Hz		
David Flail, W3IK is the NCS for the Traders Net				
Manatee Skywarn Net	Thursday 8:00 PM	146.820 - 100 Hz.		
	Page 11			

PLEASE PARTICIPATE IN ALL THE NETS ANY TIME YOU CAN. The nets on Monday (146.820) and Thursday (146.820) are logged for the Manatee County Emergency Management and create "bill-able" hours of Volunteer Participation which often results in County provided equipment for ARES. And DON'T FORGET about the Regional Nets on NI4CE on 145.430 and 442.950.The Eagle Net, the NTS Traffic Net is on every night at 8:30 PM. The regional Skywarn Net is on Tuesday at 9 PM, The Technical Net is on Every Thursday at 9 PM or immediately after the end of the Eagle Net should that net run a little over. Our Club Net on Sunday night is recently very poorly attended. Our club has over 60 members. Surely at least 15 Or 20 of you can take 20 minutes out of your Sunday evening to check into your own club net! The most common complaint I hear about repeaters of all sorts, local and regional, is that *"there's no one on"*. The old saying about "if you don't use it you will lose it" was never truer than now