

## HAMFEST GUIDE

**February 9**  
Frostfest  
Richmond VA

**February 23**  
Vienna VA

**March 15**  
Charleston WV

**March 29-30**  
Baltimore  
Timonium MD

**April 12**  
Chesapeake  
Norfolk VA

**May 16-18**  
Hamvention  
Dayton OH

**June 1**  
Mannassas VA

## Remember: — VE Exams: February 8

Just wanted to remind everyone that we have a test session Feb 8 in Dayton at the Woodmen of the World Building.

Don't be bashful! Come on out and upgrade!

I am looking forward to the same support that we have had in the past. I can not express the thanks to the volunteers for their unfailing support.

There is a change for the coming year of the charge in test fees. For the coming year the charge will be 12 dollars. To retest at the same session will result in another charge of 12 dollars.

As I understand there will be only one charge for ascending test for the coming year. So you can test for all four elements at the same session for one charge.

If you are a Tech Plus do not forget that your code is only good for 365 days to upgrade to General. It is good for life time as long as you keep your licensee current as a Tech Plus. So don't let the system catch you in a technicality.

Gayle Shull, KU4XN  
VE Testing Coordinator

## Getting It Right

Some people enjoy finding faults in the work of others. We want to please these people as much as we want to please anyone else!

To give these people the same pleasure we want for all readers of the Monitor, we make sure that each issue is chock full of mistakes, typo's, and sometimes plain down **wrong** information.

For example, a recent issue of the Monitor indicated that Cowles Andrus lived in Stuarts Draft.

Now there's nothing wrong with Stuarts Draft. And those who live in Stuarts Draft have to be reminded that there's nothing wrong with Cowles, either. But in reality, Cowles lives in Staunton.

For that, we apologize to all the hams who live in Staunton!

Also, the membership dues renewal form the last three months has given the correct mailing ad-

resses for the club treasurers. However, while it had the correct mailing address for MARA, the caption said VARA. Sorry.

And finally, in last month's issue we said there is a telephone autopatch on the UHF band on the frequency of 444.775. This is the KC4GXI repeater. That repeater is no longer on 444.775, it can now be found on 443.150. It still uses a PL tone of 131.8Hz, and will have the autopatch back up on the mountain as soon as the weather clears and the ice melts up on Laird's Knob. In the meantime, check out the propagation to Keezletown on 443.150!

How many errors can you find in this issue? We don't mind a count! Let us know what you find, and we'll either correct it or tell you to go jump in the lake!



## Highland County ARES Net Now Active

Can you work the Monterey Repeater?

The machine is on 147.180 (up 0.600 MHz offset), and uses a PL tone of 100.0 Hz.

Jerry and Butch want everyone to know they are starting a Highland County ARES Net on the first and third Wednesday of each month.

The net will meet at 8:30 pm, local time, regardless of whether local is Daylight Time or not.

They welcome all hams who can work the repeater.

Give it a try. There might come a time when that repeater might be a lifesaver for someone in Highland County or Monterey or a surrounding community. It would be nice to let Jerry and Butch and the other "Highlanders" know that you are there for them if they need you!

*This is the last reminder you will receive.*

## Okay, That's It! Time's Up!

Yep, that's right.

Time has RUN OUT.

Once this issue is mailed, the mailing list will be purged of all hams who have not renewed their dues by the end of the February club meetings!

Those who do not renew by the end of the February club meeting will probably NOT receive a March Monitor.

And to make matters worse, if they later decide to renew after we take their name off the list, well, to compensate for all the trouble we go to to put them back on, we will personally sneeze on their Monitor before we mail it to them! And that goes double for those who get an email version!

So don't take a chance! Use the form at the end of this issue to SEND IN YOUR RENEWAL RIGHT NOW!

## E.C. Phone Home? No, You Call Him First!

E. C. Showalter, Weyers Cave Resident Extraordinary, is living the high life in sunny Florida these days.

E. C. has HF capability on 20 meters, and can be found on or near 14.290 MHz, sometime around 9:30 am and 9:30 pm, whenever he gets around to it!

If you are in the shack anytime around 9:30, either morning or evening, tune into 14.290, up and down a bit, and then GIVE A CALL.

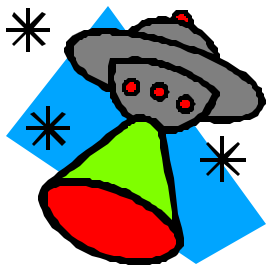
E.C. only has 100 watts of power, and his antenna is a B&W AP-10, so he will listen

rather than call. You won't hear him if you don't call him!

But his station works! He has worked W3HXH and KU4XN, and wants to work more!

One time that EC will be listening is on Monday evenings at 9:30, after the local ARES Net. So fire up and call for him!

His call is KG4KUR. That's Kilo Charley Four, Kilo Uniform Romeo, or King George For Keeping Us Revolutionaries!



## Free to Good Home: C-Band Satellite Dish, Receiver, and Decoder

Free "C"-band satellite dish, approximately 13 feet diameter, in place. You come dismantle, and you can have it for free.

The dish includes a working actuator motor, and a working vertical-horizontal polarization motor. The LNB in the dish may or may not work.

How much would you be willing to pay for this dish? Nothing, you say? But wait, there's more!

Along with the dish, you get a free General Instruments C-Band satellite receiver, with working remote control. The receiver was working fine when it was disconnected a few months ago! (It is the second receiver that went bad! We've thrown the bad one away, this one is guaranteed to work!)

Now how much would you pay? Still nothing, you say? But wait, there's more!

If you call now, you will receive, absolutely free, a working VideoCipher II decoder chip, already programmed to decode the major VideoCipher II broadcasts! This is not a "subscription" type chip, but a real VideoCipher Decoder chip. And the best part is, the chip is already installed in the receiver!

Now how much will you pay for this setup?

Don't pay \$1500 for this setup! Don't even pay three easy payments of \$19.99 apiece! This entire setup can be yours for nothing! Yep, you heard right! Nothing! Notice that this is exactly what you said you'd pay for this setup!!

Just come on over and take the dish down, and carry away the dish, the receiver, remote control, and the decoder chip can all be yours! Call David or Debbie at 540-234-0448!



## New, Easier-To-Use Spreadsheet Available for WN4JMU Weather Station

What's the weather doing at JMU?

Tune your packet station to 145.510 MHz simplex, and capture the packet data from the WN4JMU weather node.

This node is on a different frequency from the normal APRS weather network because it is transmitting a packet which is NOT in the standard APRS weather format.

This node is a special experimental station to gather wind and temperature data for the JMU Wireless Experimenter's student group. One part of the group is analyzing the weather data to determine the feasibility of the site as a possible location for a wind turbine. The other part of the group is running experiments on protocol construction, efficiency, interference and range, as part of a wireless network educational and simulation project.

The station is operated under club license WN4JMU, and broadcasts a packet once every five minutes, at 1 watt power. Because of the antenna location, the signal may be copyable in most of Harrisonburg.

To find out what the weather is doing, download a spreadsheet available at the URL below. Using the Windows clipboard, copy and paste the information part of the packet (starting with the two exclamation points!!) into cell A1 of the spreadsheet.

With the data packet in cell A1, press Ctrl+w to execute a macro. The macro will parse the packet into fields, and convert the hex data to the human-readable weather readings!

To reuse the spreadsheet without closing it, you can hit Ctrl+q to clear the old data. Then paste a new packet and hit Ctrl+w again.

The website has more information on the station, and also allows a download of the field definitions in case you want to build a program to do something else with the data.

The station will be on the air for most of 2003.

<http://cob2.jmu.edu/fordham/wn4jmu/>

## MARA President's Column

Hello to all. Jeanne and I just returned from Pennsylvania last night after a week's vacation in Elysburg.

I operated on 75 m with a dipole I made, and as time permitted, I checked into the VA SSB net, the sunbelt service net, and had a few QSO's.

I got good signal reports in spite of the fact that the dipole was only 15 feet or so off the ground at the middle and I was using 50 watts with a tentec Scout. It was bitterly cold the entire time we were there, around ten degrees at night with winds and never above freezing the entire time we were there. I operated from our host's kitchen table with the coax length I had, a rather crude station but fun nonetheless.

I was so pleasantly surprised at the belated Xmas dinner attendance at Ever's Rest. On the 9<sup>th</sup> of January. There was a total of 51 people who attended and I believe all had a fine time with the good food and fellowship. We have had a good attendance of the club this past year. Keep it up!

We have some good programs coming but if you have any to suggest, please let Chuck, or I know. Thanks.

Looking forward to the next meeting on February 6. See you there, I hope!! 73,

Ellsworth

## Lots of Little Things...

The Blue Ridge Area Soaring Society is a local club of soaring and glider enthusiasts. Fred Atkinson, KG4WNY, would like for everyone to know their webpage. If you are an active ham radio operator and still have time left on your hands, you might be interested in learning more about gliding. Of course, most of us aren't thrilled about being in an airplane that doesn't have a working engine! Check out their page at: <http://adesigner.com/brass/>

The Jeff Reinhardt who was recently named as the ARRL's 2003 Public Relations Chairman is no relation to our very own Jeff Rinehart, W4PJW. The spelling is different, and the ARRL's Reinhardt is from California, the land of fruits, nuts, and flakes, whereas W4PJW only EATS LUNCH with the fruits, nuts, and flakes.

If you work ham satellites, check out the new operating schedule for AO-27. This satellite, a favorite among beginners, has a new operating schedule thanks to its orbit which is bringing it into longer periods of sunlight. The new schedule is on the AMSAT webpage.

Check out the ARRL's webpages for the latest developments on the WRC-2003 conference. Up for discussion is realignment of the 40-meter band.

Harry Dannals, W2HD of Charlottesville, long a proud recipient of the monthly Monitor, was inducted into the CQ Ham Radio Hall of Fame last year, and no one told the Monitor editor! Way to Go, Harry! Harry joins such notables as Harold Beverage W2BML, inventor of the Beverage antenna; Bob Bruninga W4APR, inventor of APRS; Lloyd and Iris Colvin, world famous Dxpeditors; Bill Halligan, founder of Hallicrafters; Tokuzo Inoue, founder of Icom, Loren Windom, inventor of the Windom antenna, James Maxwell, noted physicist and discoverer of the relationship between magnetism and electricity; and Al Kahn, founder of Electrovoice and co-founder of Ten-Tec. As you can see, Harry joins a distinguished bunch of hams on the Hall of Fame!

If you want more information on the "Ham Radio Over the Internet" project, now active on the 147.075 repeater, check out the website for the Internet Radio Linking Project:  
<http://www.ir1p.net/>

Forgot which local ARES net is where or when? Check out the MARA Schedule web page. The nets are listed at the bottom of the schedule page, along with links to individual net pages listing times, schedule, frequencies, and PL tones.

The ARRL's "Logbook of the World" program is in alpha testing. This program is intended to allow on-line verification of contacts, rather than requiring paper mailed QSO cards, to qualify for the League's awards. This program is not intended to replace paper QSL cards, but only allow a low-cost alternative for qualifying for many of the League's awards which formerly required submission of mailed paper QSL cards.

Be sure to renew your dues! Next month's Monitor will include info on the HamTalk system; a whole list of great websites; several pages of neat Skywarn stuff; and another piece of trash from the Opinionated One! But you won't get any of this if you don't get busy and write your check now! No "make-ups" will be sent, period. So use the form on the last page, and get your money in NOW.

## MARA Secretary's Report—January 9 (2003) Meeting

The January meeting and the delayed Christmas dinner of the Massanutten Amateur Radio Association was held at Evers Restaurant in Mt. Crawford, the meeting was opened at 7:30PM by the club president, Ellsworth Neff, K4LXG, there were 46 members and guests present.

Secretary's Report: The secretary's report for the November meeting was accepted as given in the December MARA monitor.

Treasurer's Report: The treasurer's report was accepted as given by Sandy Mullins, K4PZC.

ARES: Dale Showalter, N4DAI reported that Rockingham Memorial Hospital will be purchasing an entire emergency station including HF, VHF, and UHF amateur equipment.

VE Exams: Gayle Shull, KU4XN reported that the 2003 VE exams are going to be held on the 2<sup>nd</sup> Saturday of every even month at the Woodman of the World building in Dayton, and that the test fee will now be \$12 per test.

New Members: Terry Kielbasa, KG4MWI was voted in as a new member, Richard Gunick (KG4WNZ), and Brent Smart's applications were read and will be voted on at the February meeting.

50/50 was won by Nancy, KG4JAZ, \$22.50 went to Nancy and \$22.50 went to the club.

Chuck, KD5KA reported there will be a meeting of the QRP club on Tuesday, January 14<sup>th</sup> at 7:00 PM, also Chuck showed everyone a really neat 2 watt qrp rig built in an Altoid tin.

Ray, K4NRA handed out certificates for those who helped with learning about Amateur Radio at Wilbur Pence Middle School.

Ellsworth, K4LXG gave Phyllis, N4VZC the "Super Secretary Award" for the job she did as the 2002 MARA secretary.

Todd Harrison, K4TMH  
MARA Secretary



## Skywarn Basics I Class: February 10th in Orange County!

Here's a last-minute opportunity! There will be a Skywarn Basics I Course offered in Orange County on February 10th. No prerequisites are necessary except for a desire to serve as a volunteer weather reporter. As a volunteer, you are under no obligation to serve, there are no schedules to keep, etc. Attending the course will train you as an observer and reporter, and you will be assigned a Skywarn ID number to use in submitting reports whenever you are able to.

The class runs from 6:30 to 9:30 pm. For those who don't know, Orange County is just over the mountain from Elkton, VA, over US 33 East from Harrisonburg about half an hour.

To register for this course, email David Starner at [nparec@vt.edu](mailto:nparec@vt.edu), or telephone him at 540-672-2660.

## February Calendar of Events

February 2: Page County ARES Net (8 pm, 146.67 PL 114)  
February 3: R'ham County ARES Net (8 pm, 146.55 simplex)  
February 4: VARA Club Meeting  
February 5: Highland County ARES Net (8:30, 147.18 PL 100)  
February 6: MARA Club Meeting  
February 8: VE Exams in Dayton VA  
February 8-9: CQ WW RTTY WPX Contest  
February 9: Frostfest (Richmond Hamfest)  
February 9: Page County ARES Net (8 pm 146.67 PL 114)  
February 10: Skywarn Basics Class in Orange County VA  
February 10: R'ham ARES Net (8 pm 145.13 PL 88)

February 13: Augusta ARES Net (8 pm 146.85 PL 131)  
February 17-21: ARRL School Roundup  
February 15-16: ARRL International DX Contest CW  
February 16: Page County ARES Net (8 pm 146.67 PL 114)  
February 17: R'ham ARES Net (8 pm 145.13 PL 88)  
February 19: Highland ARES Net (8:30 pm, 147.18 PL 100)  
February 21-22: CQ 160m Contest Phone  
February 23: Vienna VA Hamfest  
February 23: Page County ARES Net (8 pm 146.67 PL 114)  
February 24: R'ham ARES Net (8 pm 145.13 PL 88)

## VARA Secretary's Report – January 7 (2003) Meeting

The Valley Amateur Radio Association met at Shoney's in Staunton on January 7, 2003. The President Benny Cook N4BCC opened the meeting at 7:30pm. There were 23 members present and 8 guests, Bob VanFossen K4DJG, Joshua & Jacob, Sons of Frank Green KE4ASC, Bryan Fordham KG4JOE, Ellsworth Neff N4LXG, & his wife Jeanne, Don Landes WX4C & his wife Carol N4JKX.

I hope everyone had a Merry Christmas and will have a great New Year in 2003. The VARA Christmas Party was held at Western Sizzlin in Waynesboro on December 17<sup>th</sup> in place of our regularly monthly meeting at Shoney's in Staunton. We all had a great meal and enjoyed the fellowship.

### New Officers for 2003 are:

Benny Cook , N4BCC, President  
Ken Harris, KE4GKD, Vice-President  
Jeff Rinehart, W4PJW, Treasurer  
Ray Colvin, KE4HVR, Secretary  
Richard Huttinger, AA4RH, Program Manager

The 50/50 was won by Kay Cook KF4CZL, congratulations Kay!

Clint KB4OLM reported that the recent 10M Contest logged 756 contacts which was down a little from last year but not bad for the conditions during the contest.

Jerry Moats WD4ITN and Butch Washer N5SMQ are starting a Net on the Monterey repeater 147.180+ and tone of 100.0 at 8:30pm on the 1<sup>st</sup> & 3<sup>rd</sup> Wednesday of the month. They would like to welcome everyone that can get into the repeater to check into the Net.

Kay Cook KF4CZL rejoined the Club and Marvin Henderson KF4WDI, Andrew Barbour K4AJB and Terry Kielbasa Jr. KG4MWI was voted into the Club as new members.  
Welcome to the VARA !

DON'T FORGET...The Frostfest in Richmond has been changed to Feb. 9<sup>th</sup> this year.

Since our Club is out growing the room at Shoney's we have a committee of three, Richard Huttinger, Benny Cook and Al Bonck that will be looking for a new location.

The MS Walk is coming up on Sunday April 6<sup>th</sup> in Waynesboro. Mark your calendar now if you plan to help. We should be there by 1:00pm and the walkers will start at 2:00pm. The walk usually last about two or two and a half hours and is a worthwhile community event.

Billy Hooke KG4JOF hopes to have the swap page ready by the end of January and have Bob McCracken N4JGO link it to the VARA Web Page and David Fordham link it to the MARA Web Page. **This will be for Ham related items only.** You can send a list of items you have for sale, swap or something you would like to buy, to Billy Hooke KG4JOF. Billy's e-mail address is: KG4JOF@arri.net Also if you have a digital camera or scanner and can send a picture of the item that would help sell it. **We will let you know when it is up and running.**

**ADDRESSES!!!** If your e-mail address or home address is changed for any reason **YOU** need to notify us so we can make the necessary changes so you will continue to get your newsletter. Also you should update your e-mail address in QRZ and Buckmaster. This is where we look if an e-mail is returned to us.  
You can send your e-mail address to: Benny, bennycjr@ntelos.net Ken, klharris@rica.net  
Jeff, jmrinehart@yahoo.com Ray, colvingr@rica.net David, fordhadr@jmu.edu

### On the sick list:

I talked with Ozzie Dillon KD4RD after New Years and he has been home and on oxygen since our November newsletter came out. Dan James W4DLJ is still taking therapy here in town and getting along well at this time. Lets keep these folks in our thoughts and prayers.

David Tanks AD4TJ Needs HELP with the Augusta County ARES Net. Anyone that is willing to be net control and help David out give him a call. The Net has moved to the 146.850 repeater on the 2<sup>nd</sup> Thursday of the month at 8:00pm. This repeater has a minus offset and a tone of 131.8 when needed. **Mark your calendar and check into the net. Remember without YOU there will be NO ARES NET.**

We would like to get training classes started for the Technician level. Anyone interested in helping teach the classes please contact Benny N4BCC, Alby AD4KZ or Richard KF4QZG. We need to get some young people interested in ham radio. Listen for any hints that someone may like to learn what ham radio is all about.

**PROGRAMS NEEDED...**Richard KF4QZG, our Program Chairman, asks for anyone who would like to do a program at one of our meetings to give him a call and get a date set up to present it. It does not have to be HAM related, it can be anything you think the group would find interesting.

The meeting was adjourned at 8:06pm

Richard Huttinger AA4RH brought his MFJ Tuner in and told us of a problem he found as he was using his MFJ Analyzer to set the tuner for the lowest SWR at a specific frequency. The UHF connectors which were riveted on the back of the tuner were not tight enough to make a good connection to the chassis. This was giving an unstable reading on the analyzer for his SWR. To correct the problem Richard drilled out the rivets and replaced them with bolts and lock washers. HEY.....Now it will tune as it should!  
Check your tuners UHF connectors before they cause you to damage your radio.  
Thanks to Richard for this presentation!

Submitted By:  
VARA Secretary  
Ray Colvin KE4HVR

Have you renewed your dues?

If you haven't, and you fail to get this form into your club treasurer by the February club meeting, you will be dropped from the mailing list, and it will cost you an arm and a leg to get back on!

**Renew TODAY!**



## Membership Renewal Form

NAME: \_\_\_\_\_ Call: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

HOME PHONE: \_\_\_\_\_ WORK PHONE: \_\_\_\_\_

EMAIL ADDRESS: *(print legibly!!)* \_\_\_\_\_

MEMBER OF ARRL (y/n): \_\_\_\_\_ REGISTERED MEMBER OF VA -RACES (y/n): \_\_\_\_\_ RACES TRAINED (y/n): \_\_\_\_\_

SKYWARN ID *(if SkyWarn trained)* \_\_\_\_\_ Are you available for Workday Daytime Emergency Callup? (y/n) \_\_\_\_\_

Do you want to receive the Monitor via PDF Email? Yes/No/I already Do \_\_\_\_\_

**CURRENT ABILITIES & CAPABILITIES:** Do you have the technical ability, knowledge, experience, know-how, and the equipment to **reliably** operate the following modes or activities? Check all that apply.

- |                                                           |                                                   |                                                                   |
|-----------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> HF CW slow-speed                 | <input type="checkbox"/> 50 Mhz FM                | <input type="checkbox"/> APRS, base WX or digipeating             |
| <input type="checkbox"/> HF CW high-speed (15 wpm and up) | <input type="checkbox"/> 50 MHz — other modes     | <input type="checkbox"/> APRS, mobile transmitting                |
| <input type="checkbox"/> HF SSB                           | <input type="checkbox"/> 2m FM                    | <input type="checkbox"/> Simple GPRS positioning capability       |
| <input type="checkbox"/> HF Mobile from vehicle           | <input type="checkbox"/> 2m weak signal, AM, etc. | <input type="checkbox"/> EME or Meteor Scatter or JT44            |
| <input type="checkbox"/> HF Portable or QRP               | <input type="checkbox"/> 220 FM                   | <input type="checkbox"/> Microwave (902 Mhz or higher)            |
| <input type="checkbox"/> NTS HF Message Handling ability  | <input type="checkbox"/> 220 other modes          | <input type="checkbox"/> Satellite Operations (analog modes)      |
| <input type="checkbox"/> HF Slow-Scan TV                  | <input type="checkbox"/> 440 FM                   | <input type="checkbox"/> Satellite Operations (digital modes)     |
| <input type="checkbox"/> Traditional RTTY                 | <input type="checkbox"/> 440 weak signal          | <input type="checkbox"/> RDF — Direction Finding                  |
| <input type="checkbox"/> PSK31                            | <input type="checkbox"/> 440 fast scan television | <input type="checkbox"/> Ham equipment diagnosing/light repairing |
| <input type="checkbox"/> Other HF digital modes           | <input type="checkbox"/> Simple Packet            | <input type="checkbox"/> Tower climbing/antenna installation      |
| <input type="checkbox"/> Weather Station & Monitoring     | <input type="checkbox"/> DX cluster and/or BBS    | <input type="checkbox"/> PIC programming & circuit design         |

Other abilities and capabilities: \_\_\_\_\_

**WHAT TOPICS WOULD YOU LIKE TO SEE ON THE CLUB MEETING PROGRAMS?** (check all that apply or add more.)

- |                                                             |                                                                           |                                                               |
|-------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> HF operating and Etiquette         | <input type="checkbox"/> Weather Stations, Weather Monitoring & Reporting | <input type="checkbox"/> Innovative Mobile Rig Installations  |
| <input type="checkbox"/> HF DXing                           | <input type="checkbox"/> Skywarn: What's it all about?                    | <input type="checkbox"/> Microwaves (902 Mhz or higher)       |
| <input type="checkbox"/> Contesting Etiquette               | <input type="checkbox"/> Ultra-Simple Antenna Designs                     | <input type="checkbox"/> Satellite Operations (analog modes)  |
| <input type="checkbox"/> QSL'ing methods, hints, tips       | <input type="checkbox"/> 2m weak signals                                  | <input type="checkbox"/> Satellite Operations (digital modes) |
| <input type="checkbox"/> Comparisons of Logging Software    | <input type="checkbox"/> 220 or 440 operations                            | <input type="checkbox"/> RDF — Direction Finding              |
| <input type="checkbox"/> Mobile, Portable or QRP operations | <input type="checkbox"/> Fast scan television: How To...                  | <input type="checkbox"/> Emergency Response Kits              |
| <input type="checkbox"/> NTS HF Message Handling skill      | <input type="checkbox"/> Simple Packet: How To...                         | <input type="checkbox"/> Radio Operations in Emergencies      |
| <input type="checkbox"/> HF Slow-Scan TV: How To...         | <input type="checkbox"/> DX cluster and/or BBS                            | <input type="checkbox"/> Ham equipment diagnosing/repairing   |
| <input type="checkbox"/> Traditional RTTY: How To...        | <input type="checkbox"/> APRS: Getting Started                            | <input type="checkbox"/> Tower climbing/antenna installation  |
| <input type="checkbox"/> Other HF digital modes             | <input type="checkbox"/> Simple GPRS introduction                         | <input type="checkbox"/> PIC programming & circuit design     |
| <input type="checkbox"/> What's on 50 Mhz?                  | <input type="checkbox"/> EME or Meteor Scatter                            | <input type="checkbox"/> Traders Day, Homebrew Fair           |
| <input type="checkbox"/> CORES, FRN, ULS: What's it mean?   |                                                                           |                                                               |

Other interesting subjects for meeting programs: \_\_\_\_\_

**VARA Renewals: mail with \$15 to Jeff Rinehart, 1344 Hankey Mtn Highway, Churchville VA 24421**

**MARA Renewals: mail with \$12 to MARA, PO Box 1882, Harrisonburg, VA 22801**

# MARA/VARA

c/o David Fordham  
131 Wayside Drive  
Weyers Cave, VA 24486  
Phone: 540-568-3024  
Email: fordhadr@jmu.edu

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Return Service Requested

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## MASSANUTTEN AMATEUR RADIO ASSOCIATION, Inc.

President: Ellsworth Neff, K4LXG  
Vice President: Chuck Vogan, KD5KA  
Secretary: Phyllis Haxton, N4VZC  
Treasurer: Sandy Mullins, K4PZC  
Board (exp. 02): Bob Tennyson, KG4CHL  
Board (exp 03): Jason Armentrout, N4DSL

<http://mara.ws>

MARA meets the first Thursday of each month  
at Ever's Restaurant on U.S. 11 south of  
Harrisonburg. Meal starts at 6:30 pm.  
Business meeting starts at 7:30 pm.

**Visitors are welcome.**

Dues (\$12 per year) should be mailed to:  
MARA  
PO Box 1882  
Harrisonburg, VA 22801

## VALLEY AMATEUR RADIO ASSOCIATION

President: Ken Harris, KE4GKD  
Vice President: Benny Cook, N4BCC  
Secretary: Ray Colvin, KE4HVR  
Treasurer: Jeff Rinehart, W4PJW  
Program Manager: Richard Huttinger, AA4RH

<http://www.qsl.net/w4mus>

VARA meets the first Tuesday of each month  
At Shoneys Restaurant on U.S. 250 east in  
Staunton. Meal starts at 6:30 pm.  
Business meeting starts at 7:30 pm.

**Visitors are welcome.**

Dues (\$15 per year) should be mailed to:  
Jeff Rinehart, W4PJW  
1344 Hankey Mtn Hwy  
Churchville, VA 24421