

# The MARA-VARA *Monitor*

**AUGUST 1996 -- Volume 96:08**

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This is the web page version of the MARA/VARA *Monitor*.

The *Monitor* is published monthly by the Massanutten Amateur Radio Association, Inc.,  
(a non-profit organization under the IRS regulations),  
for radio amateurs in the central Shenandoah Valley of Virginia.

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## **VARA Ham Saves Residents from Fire**

A member of the Valley Amateur Radio Association is credited with helping rescue a set of Waynesboro residents from a house fire. According to a story printed on the front page of the (Staunton) Daily News Leader on July 7, Sam Pickering, KF4EKV, "and his son Christopher were driving south on Delphine Avenue in Waynesboro when they noticed the front port of the house on fire. Pickering used his handheld amateur radio to call for help, and then warned residents in neighboring houses."

The story continues to say that Pickering and another passerby identified as Kenny Reynolds are credited with preventing serious injury to the residents of the burning house and other surrounding structures. The fire occurred at 2:06 pm on Saturday, July 6, and took 75 firefighters over an hour to control. Units from Waynesboro, Dooms, Augusta County, Stuart Draft, and Fishersville fire departments responded. "The heat was so intense, it melted the vinyl siding on a house 80 feet across the road," according to the News-Leader story. The house was a total loss. The cause of the fire was under investigation.

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## **Upcoming Hamfest: Berryville -- August 4**

The Berryville Hamfest, one of the largest and most popular among the hams in the Shenandoah Valley, will be held August 4, starting at 8:00 am. Sponsored by the Shenandoah Valley ARC, the event is held at the Clarke County Ruritan Fairgrounds. Take I-81 north to Winchester, take Route 7 east for 8 miles. Talk-in will be on 146.82 (-). Admission is \$5.00. For information, call Irvin Barb, KD4BHV, at (540) 955-1745.

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## **September Monitor Deadline: August 20th**

The deadline for the September issue of the Monitor is Tuesday, August 20th. Please have your minutes, articles, announcements, reports, advertisements, complaints, etc. in to David by Tuesday night, August 20th. Thanks.

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## **Big Mountain Repeater Association Annual Picnic: August 18th**

The time is fast approaching. The annual "Bob's Knob Bash", sponsored by the Big Mountain Repeater Association, will be held at the mountaintop retreat of Bob Neimeyer, W3MMC, on August 18th starting at "high noon."

Bring along your lawn chairs, a covered dish, and any friends or family who have nothing better to do! Hot dogs, hamburgers, drinks, and the famous Bar-B-Q Baked Beans will be provided.

The picnic is not limited to supporters of the Big Mountain repeater -- all hams, and their guests, are invited to attend. There is no cost for this event.

To get to the picnic, take Interstate 81 north from Harrisonburg to the Mauzy Exit (Exit 257) and turn left across the Interstate. At the traffic light, turn right onto Route 259. Follow the signs for Route 259 as it turns left in Broadway and heads for the hills. Follow Route 259 past Cootes Store and Fulks Run (about 15 minutes of driving) until you reach Route 820. Turn left onto 820 towards Bergton. Follow the signs for 820 as it turns right in Bergton, past the fairgrounds and firehouse. Take Route 822 to Bob's Knob (the name is on the mailbox).

The July issue of the Monitor carried a full-page map. You can't get lost. When you are on Route 259 about 15 minutes past Broadway, give a call on the talk-in frequency of 146.550 simplex and the crew will give you directions and landmarks so you can arrive safely.

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## **W4JZC Now W3HXX**

Richard Weaver, formerly W4JZC, has applied for, and received, his former callsign W3HXX. Dick held this callsign from the time he was first licensed in 1937 until Virginia was moved from the 3rd call district to the 4th district in 1945, at which time the FCC required him to change to W4JZC. Dick wanted the old call back because it is one of the few original W3 calls assigned to hams in Virginia while the state was in the 3rd call district.

If you have applied for and received a new vanity call sign, please notify the newsletter editor so that our records may be updated. We will try to publish these changes as we learn of them.

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## **ARRL Contest Forms Available via E-mail**

In an effort to make ARRL contest forms more quickly available, the League offers them electronically via the automated information server. This server also contains a wealth of other ham-radio-related files.

You can download the contest forms, summary sheets, and other material by sending an electronic (e-mail) message to "info@arrl.org". Each line of your message should contain a single command. Valid commands are:

- help -- sends a short help file
- index -- sends an index of available forms and files
- send [filename] -- sends a message to you containing the form or data specified by [filename]
- quit -- should be the last line of your message.

Contest rules are found in files with the .RLS suffix. Files with the .FRM suffix are entry summary sheet forms which can be edited with your contest result data. Files are ASCII readable.

*From the ARRL Letter*

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## **Thanks from K4RBZ**

As many of you know, I have experienced an unusual amount of misfortune with radio equipment this summer. But thanks to the generosity and help of numerous of my ham friends, most of it has been corrected and even improved.

I wish to especially thank the following hams for their kind assistance: Jay (W4QDC), and Dick (W3HXH, formerly W4JZC) for helping to troubleshoot a defective amplifier purchased at Dayton; Mark (N4YSA), and Paul (KD4DDI) for climbing my tower and repairing damaged coax; Colin (N4ZDQ) for helping to clean up two rotators, climb the tower, and exchange one rotator for a damaged one; Randy (KN4KB) for repairing my memory keyer and control box damaged by a lightning power surge; Rusty, N4YET, for the gracious loan of equipment during my "down-time"; Bob (W3MMC) for informing me of a rotor service in Frederick, Maryland, which repaired two rotators and two control boxes while I watched! And Jeff (WB4PJW) who generously loaned his Icom 730 to enable me to remain on the air.

Thanks to these kind friends, I can now rotate my beam with no shorts in the coax; I have an amplifier which is in good operating condition; and a memory keyer which again functions well. In the meantime, my Kenwood TS-430S has been repaired (with ARRL insurance), and I have become the proud owner of an Icom 751A.

It really means a lot to have friends who are willing to give of their time and expertise when things go wrong! My thanks to all of you!

*Gerry Brunk, K4RBZ*

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## **Ham Radio Examinations: Saturday, August 10th**

Ham radio license examinations are held the second Saturday of every even-numbered month at Massanutten Vo-Tech Center on Pleasant Hill Road, south of Harrisonburg. The next exam will be held Saturday, August 10th. Registration starts around 9:00 am, and the test begins at 10:00 am sharp. For more information, contact Brown Snyder at (540) 434-3133.

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## **Look! Up in the air! It's a bird...**

If you work the ham satellites, you probably receive the "Keps", or keplerian element sets used to track the birds as they orbit the earth. Many element sets also include many satellites besides the ham birds, such as the weather satellites and transponders carrying facsimile and other images. Most common multi-mode TNC's can decode the imagery and telemetry from these non-ham engineering marvels if you know where to point your receiving antenna.

Some of the satellites can also be seen with the naked eye. By plugging the keps for these birds into the ham tracking software, you can calculate when and where to look in the sky to see these satellites pass overhead at night. Some of them, such as the Hubble Space Telescope, are magnificent and impressive to see, especially through binoculars, as the sun reflects off their shiny surfaces.

The following satellites are generally visible to the naked eye, especially when their overhead passes come shortly after sunset or shortly before sunrise.

- COBE
- Cosmos 1447
- LACE
- Cosmos 1461
- LandSat 4
- Cosmos 1544
- LandSat 5
- Cosmos 1766
- ERBS
- Cosmos 2144
- MOS-1B
- Mir (space station)
- PegSat
- ROSAT
- SeaSat-1
- SPOT-1
- NOAA-7
- SPOT-2
- HST (Hubble Telescope)
- STS (shuttles)

As a rule, the larger Cosmos series are very bright. Also, any satellite with the suffix "RB" or "B" after its name indicates a booster rocket casing. These are also very bright and generally much easier to see than the smaller satellites they help launch. Satellites under 500 miles altitude move very fast, and are quite impressive to see racing across the sky.

*From AMSAT News Services*

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## **FCC Form 610-V Available via "FaxBack"**

The FCC FaxBack number provides FCC forms (including Form 610-V used to apply for vanity call signs) free of charge. To obtain a copy of Form 610-V, call the FCC at (202) 418-0177 and order form number 006108. Leave your fax number, and the computer will fax you a copy of the form, generally within a couple of minutes.

If you have Internet access, you can also obtain the forms via the Web or via FTP (File Transfer Protocol). The URL for Form 610-V is: <http://www.fcc.gov/forms/form610V>.

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## Mir Back on UHF...

The Mir Soviet space station, holding U.S. Astronaut Shannon Lucid, once again has operational UHF ham gear on board, thanks to a re-supply mission by an unmanned Soyuz supply craft. This means that, in addition to the 145.550 frequency used by Shannon for voice contacts, hams can contact the station on the following frequencies:

	Downlink	Uplink
MODE 1 -- REPEATER	437.950	435.750
MODE 2 -- PACKET	437.975	435.775
MODE 3 -- FM QSO	437.925	435.725

*Contributed by  
David Mullenix, N9LTD*

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## KE4LKQ: Icom 271A For Sale

Vic Alger, KE4LKQ, is offering for sale his Icom 271-A, 2-meter all-mode transceiver.

This unit runs on 13.8 volts DC, and generates 25 watts output. Included in the deal is the accompanying desk microphone.

Vic can be reached on the 146.625 repeater most weekday mornings, or you can call him at home at (540) 896-2548. He is willing to consider trades.

As a postscript, Vic also has several surplus computers for sale, if anyone needs a cheap computer to use on packet radio.

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## Sunshades: Some Surprises About the Heat

With the shrinking of modern automobile interiors, and with the intrusion of airbags and their requirement for obstruction-free space on the dashboard, many hams are resorting to placing their ham rigs on top of the dashboard rather than in or under it. While this may be convenient, you need to ask whether your gear can take the tremendous heat from the sun shining through the windshield.

Many hams shield their rig with a homemade shade. Which color shade works best? Most of us know that black gets hotter than white. But what about polished aluminum? You might think that polished aluminum would reflect better than white and therefore keep the equipment cooler.

Think again! Bare aluminum gets 30 times hotter than white paint! The following table shows the numbers.

Surface	Column A	Column B	Column C	Column D
Polished Aluminum	.4	.03	11:1	400
Polished Steel	.6	.4	3:2	150
Black Paint	.9	.9	1:1	110
White Paint	.25	.85	1:3	72

Column A is the Absorption factor at infrared frequencies, the rate at which the material collects heat, with higher numbers indicating quicker absorption of heat. But that is only half the story.

Column B is the Emissivity at infrared frequencies, or the rate at which the surface emits the radiation it has absorbed. The lower the Emissivity, the slower the surface releases its heat, so a low number here indicates a surface which retains heat very well.

Column C is the ratio between column A and B. A ratio of 1:1 indicates a surface which emits the heat it has absorbed at about the same rate as it collects it. A ratio less than 1:1 indicates the surface releases heat faster than it absorbs it, thus staying relatively cool. A high ratio, greater than 1:1, indicates a surface which keeps or retains the heat, so as long as the heat source is present, the material keeps getting hotter and hotter.

Notice that aluminum's ratio is 11:1, indicating it gets 11 times hotter than black paint, and over 30 times hotter than white paint! For comparison, Column D shows the temperature of a surface left in the sun for a base length of time.

The morale of the story should be clear. If it sits in the sun, paint it white!

*Contributed by  
Bob Bruninga, WB4APR*

## **Hurricane Activity Radio Frequencies**

Hams with general coverage receivers and multi-mode digital capability may be interested in the following frequencies of interest during the hurricane season. Transmissions on a few of these frequencies are continuous, but others are intermittent and do not follow a set schedule. However, when a hurricane is near land (especially the U.S. coast) you probably won't have to wait very long for a transmission. All frequencies are in kilohertz unless otherwise noted.

- 4270.0 -- Fax pictures from CFH Halifax
- 4428.7 -- Coast Guard weather from NMN (Portsmouth, VA)
- 6330.0 -- Fax pictures from CFH Halifax
- 6673.0 -- Hurricane Hunter Aircraft
- 7507.0 -- US Navy/Coast Guard Hurricane Net
- 7508.5 -- FAA Caribbean Hurricane Net
- 8080.0 -- FAX pictures from NMN Portsmouth VA
- 8765.4 -- USCG WX from Portsmouth (at 0400 0530 1000 1130 1600 1730 2200 2300)

8993.0 -- Air Force/Coast Guard USB  
10536.0 -- Fax pictures from CFH  
11245.0 -- Hurricane Hunter Aircraft  
11246.0 -- Hurricane Hunter Aircraft  
11249.5 -- Hurricane Hunter Aircraft  
11398.0 -- Hurricane Hunter Aircraft  
13113.2 -- USCG WX from Portsmouth (at 1130 1600 1730 2200 2330)  
13245.0 -- Antigua/Antilles Hurricane Net USB  
13354.0 -- Hurricane Hunter Aircraft  
13510.0 -- Fax pictures from Halifax  
17307.3 -- USCG Weather from Portsmouth 1730  
18019.0 -- Hurricane Hunter Aircraft  
21937.0 -- Hurricane Hunter Aircraft

In addition, the Virginia ham emergency net frequency is 3906, the Tar-Heel (NC) Emergency net is on 7232, and the Caribbean Emergency net is on 14185. The UN Radio Readiness Net is on 14268.

Whenever a hurricane is within 300 miles of land, the Hurricane Watch net is activated on 14325 USB. This net provides reports from radio amateurs to the National Hurricane Center in Miami.

The National Institute of Standards transmits storm warnings on 2.5, 5, 10, 15, and 20 Mhz AM at 8 minutes after each hour (WWV) and 38 minutes after each hour (WWVH).

Station WLO in Mobile, Alabama broadcasts NWS marine forecasts, hurricane locations and tracks, storm advisories and warnings on the following frequencies: 4243, 6416, 8514, 12886, 17022, and 22487, at the following times UTC: 0600, 1200, and 1800 for north Atlantic storms; at 0300, 0900, 1500, and 2100 for central Atlantic storms; at 0400, 1000, 1600, and 2200 for Gulf of Mexico storms; and 0500, 1100, 1700, and 2300 for Caribbean storms. All transmissions are CW at 31 WPM, so you might need to use your multimode digital controller to receive them unless your code speed is up to par.

A more complete list of frequencies used during hurricane emergencies is maintained by Bill Snyder, AA4KC, at 26033 Coronado Ct., Valencia, CA, 91355. You can send a packet message requesting information to Bill at AA4KC@WB6WFH.#SOCA.CA.USA.NOAM

*Contributed by  
Dave Gordon, KC4LCI*

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## Interesting Web Sites

For those of you with Internet access, you might want to try out these hot new sites.

<http://newton.eigen.net/w7fg/index.html> -- this is a fairly comprehensive source of vintage manuals. He has a whole catalog of manuals on-line. This can be useful for people looking for manuals for older ham gear.

<http://www.mindspring.com/~tkelso/> -- this is the Celestial BBS, containing NORAD keps for ham satellites, ham-related software, GPS information, and other related programs and data.

<http://www.switchboard.com/> -- an on-line (and free) version of the popular national telephone directory CD's. The database contains over 90 million residential phone listings, complete with lookup engine.

<http://www.rldrake.com/> -- the R.L. Drake company's home page.

<http://www.amsat.org/amsat/articles/w6shp/w6shp.html> -- an index to reviews and modifications for most VHF and UHF ham radios, including modifications to work on 9600-baud packet.

[http://www.fcc.gov/Bureaus/International/WWW/HF\\_broadcasting/hf.html](http://www.fcc.gov/Bureaus/International/WWW/HF_broadcasting/hf.html) -- a comprehensive listing of all broadcast schedules from all FCC-licensed shortwave radio stations.

<http://www.ns.netmcr.com/~SSTV> maintains a list of links to numerous other sites containing information on Slow Scan Amateur television.

<http://www.tapr.org> -- the Tucson Amateur Packet Association maintains a fantastic collection of files, data, and information on digital amateur communications.

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## **LEO Threat to Ham Bands Slightly Overstated**

As reported in several amateur radio publications (including the editorial in the July issue of QST) some commercial interests have indicated a desire for radio spectrum in which to develop a Low-Earth-Orbit (LEO) satellite-based communication system. This system is envisioned to carry many types of communications, including low-data-rate digital and paging services. Quite a bit of "borderline-hysteria" has been created by the more sensational ham press editors about "ham radio spectrum being taken away" and awarded to commercial interests. It just isn't so. At least not yet.

The truth of the matter is that ham spectrum is not being specifically targeted for takeover by the LEO interests, no matter what you might have heard. By carefully reading the official releases and announcements of the FCC (who governs U.S. civilian spectrum allocation) it becomes clear that amateur bands are not necessarily being singled out as a desirable location for the "LEO system", as it is becoming known.

The controversy stems from the working group which is preparing for the World Radio Conference to be held in 1997 (WRC-97). Since satellites orbit the entire earth, satellite spectrum needs to be coordinated at the world-wide level rather than individual nations. A LEO industry group prepared a recommendation for the concept (including spectrum recommendations) which they presented to the FCC for consideration for inclusion in the United States' business to be brought before the international conference. The recommendation include a list of prospective locations in the spectrum for the new service. Studies are underway to find the best location for the service in the spectrum.

The LEO industry group has simply stated that their study will not hold any current spectrum allocation sacred, but rather they will conduct a careful analysis of all current spectrum to find a suitable place for the LEO system. This includes UHF broadcast bands, the public service bands, the air bands, military bands, and, of course, the ham bands, along with many other bands in the radio spectrum. Contrary to what you might have heard, the likelihood of the 2-meter ham band being awarded to the LEO group is currently no greater than any other band being considered for the system.

The confusion has stemmed from some in the sensational ham press who reported (accurately) that the LEO working group had refused hams' request to specifically exclude the ham bands from consideration. These well-meaning amateurs wanted the ham bands declared "off limits", guaranteeing that the LEO industry group would not even look at any ham band as a possible location. The industry group politely replied that they were going to look at the entire spectrum, and no band would be excluded from their study. As a result, an "alarm" was raised, with a letter-writing campaign initiated, and much fear and trepidation was generated about the potential loss of ham bands, especially the popular (and over-crowded) 2-meter band.

Alas, the hams have accomplished at least a modicum of benefit from this exercise. Thanks to the letters (especially electronic mail) generated from the "alert", there can be no doubt among anyone that the VHF ham bands are populated by a large number of enthusiastic users who are willing to marshal themselves to defend their spectrum.

It is highly unlikely that LEO will usurp the FM broadcast stations for the 88-108 Mhz band. It is now also fairly unlikely that they will be able to lay claim to 144-148 Mhz, either. While the LEO group continues to insist they are studying the entire electro-magnetic spectrum, the real-world situation is that they will most likely respect and avoid densely-populated bands (such as the 2-meter ham band) that are already under high-intensity usage.

The final recommendation has not been drafted, however. And anything can happen. The industry group has submitted their report to the FCC working group who may decide to bring the business before the WRC-97. As with any FCC action, hams do have the opportunity for their voice to be heard in the matter.

In a public notice dated June 6, 1996, entitled, "Procedures for Submitting Comments to the WRC-97 Advisory Committee", the FCC published the method for hams to offer input into not only the LEO issue, but also many other spectrum allocations which are going to come before the World Radio Conference in 1997.

According to the notice, "preliminary WRC proposals developed by the (WRC) advisory committee will be released by the Commission in periodic Public Notices. These Public Notices will allow an opportunity for public comment, and will provide ... filing deadlines... Parties wishing their comments to be considered directly by the appropriate Advisory Committee group and to become part of the Advisory Committee's public record should submit their comments in writing to: Office of the Secretary, Federal Communications Commission, Washington, DC 20554, or by e-mail at "wrc97@fcc.gov". Commenters are requested to submit an original plus one copy.

"The comment should reference the Advisory Committee public record file number "Ref. # ISP-96-005" and the appropriate Advisory Committee Informal Working Group, if known, (\*) in which their submission should be considered. The FCC staff will ensure that comments filed are considered by the appropriate groups.

"For the most expeditious and efficient consideration of their comments, parties should refrain from filing comments directly with the Chair of the WRC-97 Advisory Committee, with the Chairs and Vice-Chairs of the Informal Working Groups, and individual FCC staff members or private sector participants in the Advisory Committee process."

This last sentence contradicts the advice given in some ham radio publications urging hams to write officials directly to complain about the "impending loss of the 2-meter band". Such violations of established FCC protocols slow up the comment process, interfere with the FCC's operations, and overall tend to diminish the ham community in the eyes of the regulators who must put up with the inconvenience caused by hams who ignore the established procedure, especially when the situation has been overstated to the degree it has.

The FCC's public notice concludes with the following: "For additional information, contact Cecily C. Holiday, Federal Officer of the WRC-97 Advisory Committee, or Damon C. Ladson, Alternate Federal Officer, at (202) 418-0749, or consult the WRC-97 homepage on the Internet World Wide Web at URL: <http://www.fcc.gov/ib/wrc97/>

(\*) -- the Working Group considering the LEO proposal is Informal Working Group 2A (IWG-2A)

*Public Notice received via  
Fred Maia via Amsat-bb*

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## **Local Net on the Six Meter Band: 150.200 MHz**

Are you on the six-meter band? Check out the 6m Upper Sideband Net on Saturday mornings at 8:00 am local time on 50.200 Mhz. There are many on there who need our grid square, and would appreciate the contact. As the sunspots return, this hybrid HF/VHF band will offer more and more opportunities for unusual operation.

*Contributed by  
Terry Henderson, KE4SSD*

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## **ARRL Bulletin Summaries**

Bulletin 39, June 11, announced the issuance of the first callsigns under the vanity callsign program.

Bulletin 40, June 21, was the annual Field Day bulletin. It reminded hams that the orbiting Space Shuttle crew was on the air using their SAREX ham radio equipment giving out Field Day points.

Bulletin 41, June 21, announced the opening of Gate 1A of the vanity callsign program. (See the related article in this issue of the Monitor.)

Bulletin 42, June 25, gave the callsign update through June 1.

Bulletin 43, June 26, contained an addendum to Bulletin 42, which inadvertently had omitted the Puerto Rico callsign group.

As of July 19th, no other ARRL bulletins had been posted, although several special bulletins were issued concerning operations related to Hurricane Bertha.

ARRL Bulletins are broadcast daily, seven days a week. Bulletins are transmitted via CW (at 18 words per minute) at 8:00 pm Eastern Daylight Time on 1.818, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, and 28.0675 Mhz. Voice bulletins are transmitted at 9:45 pm EDT on 1.855, 3.99, 7.29, 14.29, 18.16, 21.39, and 28.59 Mhz. On Fridays, a special DX bulletin is transmitted at the above times.

During a national emergency, monitor the above frequencies for special information from W1AW: voice on the hour, CW on the half hour. Bulletins are not transmitted on certain holidays, such as Labor Day, Thanksgiving, Friday after Thanksgiving, and Christmas.

If you have an Internet e-mail address, you can obtain the ARRL bulletins free of charge, automatically. Simply send an e-mail to "w1aw-list-request@arrl.org", with the subject "subscribe user@host" where user@host is your complete e-mail address. You will receive the ARRL bulletins about 1 day after they are first aired by W1AW.

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## **ARES Net Control Operators Still Needed**

Norman, KA4EEN, needs net control operators for the weekly ARES nets. If you can assist, please contact

## **VHF/UHF FREQUENCY LISTING**

### *Shenandoah Valley*

All frequencies are given in MHz.

- 27.065    CB Channel 9
- 27.185    CB Channel 19
- 33.060    Rockingham & Page County Rescue (Dispatch)
- 33.440    Harrisonburg City Fire (Augusta County Backup)
- 33.560    Page County Rescue
- 33.740    Rockingham, Shenandoah, Page, Augusta County Fire
- 33.760    Augusta County Fire On-the-Scene
- 33.800    Augusta County Fire On-the-Scene
- 33.840    Augusta County Fire Aux.
- 39.500    Highland County Sheriff
- 39.540    Statewide S.I.R.S. Channel (Interagency Policy Commun.)
- 39.940    Shenandoah County Sheriff
- 39.960    Local Police (Grottoes, B'water>)
- 45.520    Rockingham County School Buses
- 46.140    Petersburg & Moorefield (WV) Fire Dispatch
- 46.260    Albemarle County Fire
- 46.420    Franklin (WV) Fire
- 46.460    Charlottesville Fire
- 47.220    State Highway Department

48.140 VEPCO

121.500 Aircraft Emergency Channel

122.800 Aircraft (Unicom)

123.000 Aircraft (SHD Airport)

123.050 Aircraft (Waynesboro Airport "Eagles Nest")

123.450 Aircraft (Craft-to-Craft Informal Chatter)

124.250 Aircraft (Washington Control Center)

124.925 Weather Current Conditions (SHD Airport)

127.750 Aircraft (Washington)

129.500 Aircraft

133.275 Aircraft

151.430 Virginia Game Wardens

152.090 Mobile Telephones (Metrocall's Channel 5)

152.180 Security systems, community use

152.210 Mobile Telephones (Metrocall's Channel 13)

153.045 WKCY Remote

154.665 State Police (Appomatox Div., Car-to-Car)

155.395 Stuart's Draft Rescue

155.445 State Police (Culpeper Div., Car-to-Car)

155.460 State Police (Appomatox Di., Car-to-Dispatch)

158.985 State Police (Culpeper Div. Dispatch Channel -  
Rockingham)

159.135 State Police (Appomatox Div. Dispatch Channel)

159.165 State Police (Culpeper Div. Dispatch Channel)

160.230 CSX Railroad (Glasgow Div. Channel 08)

160.320 CSX Railroad (Glasgow Div. Channel 14)

160.830 Norfolk Southern Railroad (Dispatch Channel 48)

160.950 Norfolk Southern Railroad (Road Channel 56)

161.190 Norfolk Southern Railroad (Road Channel 72)

161.250 Norfolk Southern Railroad (Yard Channel 76)

161.670 WSVN/WQPO Remote

161.760 WSVN/WQPO Remote

162.400 NOAA Weather Forecasts (Moorefield WV)

162.550 NOAA Weather Forecasts (Lynchburg VA)

164.575 Shenandoah National Park Rangers

166.325 Shenandoah National Park Rangers

166.900 Shenandoah National Park Rangers

166.925 George Washington National Forest Rangers

167.150 Shenandoah National Park Rangers

167.175 Shenandoah National Park Rangers simplex

170.475 George Washington National Forest Rangers

171.425 George Washington National Forest Rangers

171.525 George Washington National Forest Rangers

166.900 Virginia State Park Rangers

171.525 Virginia Forestry Service

451.025 Augusta County Rescue Downlink

451.075 Augusta County Fire Downlink

453.150 County Fire/Rescue "Tac 3" and Operations 3 (Bergton)

453.200 Harrisonburg City Fire (Operations 2, Channels 3 & 4)

453.275 Shenandoah County Sheriff (Deerhead Mnt Site)

453.300 Shenandoah County Fire/Rescue (Channels 1, 2 & 3)

453.400 Shenandoah County Fire/Rescue (Channel 4)

453.500 Shenandoah County Sheriff (Zep Mtn Site)

453.525 Harrisonburg City Fire (Operations 1, Channels 1 & 2)

453.550 Shenandoah County Sheriff (Ft. Valley Site)

453.550 Staunton City Fire Operations

453.575 Rockingham County Public Works

453.750 Augusta County Govt Operations #2

453.850 Waynesboro Rescue Squad

453.900 JMU University Police

453.925 Augusta County SACOM Ch. 1 (Fire, Rescue, Police)

453.975 Bridgewater Local Govt.

456.450 Highland County Govt

458.075 Harrisonburg City Fire Channel 6

458.100 Harrisonburg City Fire Channel 5

458.137 Harrisonburg City/Rockingham County HAZMAT Ch. 7

458.375 Shenandoah County - County-wide Channel

458.400 Shenandoah County Fire/Rescue Channel 5

460.050 Harrisonburg Police Operations Channel 2

460.100 Harrisonburg Police "Tac 5"

460.100 Waynesboro Police

460.150 Page County Sheriff

460.175 Staunton City Police

460.200 Rockingham County Sheriff

460.300 Augusta County Sheriff

460.350 Harrisonburg City Police

460.375 Staunton City Police Repeater #2

460.400 Augusta County Sheriff

460.425 Bridgewater Local Govt

460.500 Waynesboro City Police Channel 2

460.525 Rockingham County Fire/Rescue Operations 1 "Tac 1/3"

460.550 Staunton Rescue

460.575 Mathias/Baker (WV) Fire/Rescue

460.600 Waynesboro City Fire

460.625 Rockingham County Fire/Rescue Operations 2 "Tac 2/4"

461.100 Rockingham County Fire/Rescue Operations 5 "Tac 5"

461.200 Harrisonburg City Rescue Operations 2

462.150 Harrisonburg City Rescue Operations 1

462.550 Elkton Municipal Services and Police

462.950 Medical Channel 9 (Augusta Medical Center)

462.975 Medical Channel 10 (Rockingham/Page Hospital)

462.975 Medical (Pegasus Contact)

463.000 Medical Channel 1

463.025 Medical Channel 2 (Augusta Medical Center)

463.050 Medical Channel 3

463.075 Medical Channel 4 (Augusta Medical Center)

463.100 Medical Channel 5 (Augusta Medical Center)

463.125 Medical Channel 6

463.150 Medical Channel 7

463.175 Medical Channel 9

The above listing gives many of the non-amateur frequencies currently in use in the Shenandoah Valley. It is provided for those amateurs who assist in emergency communication services. In most cases, FCC rules prohibit the divulging of any communication transmitted on most of the above frequencies. Accuracy not guaranteed. Sources: Moore's Electronics (Bridgewater), Police Call, & individual radio enthusiasts in the Harrisonburg/Staunton area.

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## **You Might Be A Ham If...**

- ...You window shop at Radio Shack.
- ...At Christmas, it is you who is able to find the burnt-out bulb in the string.
- ...You have ever taken the back off of your TV just to see what was inside.
- ...You thought the contraption ET used to phone home was stupid.
- ...You have ever saved the power cord from a broken appliance.
- ...The sales people at Circuit City can't answer any of your questions.
- ...You own a slide rule ... and know how to use it.
- ...You know that Sine, Cosine, and Tangent are not players for the National Baseball League.
- ...You have more toys than your kids do.
- ...You have ever owned a calculator without an "equals" key.
- ...Your wristwatch has more buttons than your telephone.
- ...You thought the real heroes of "Apollo 13" were the mission controllers.
- ...You are surprised that some people are afraid to take the covers off their computers.
- ...You have ever tried to repair a \$5 radio.
- ...Your favorite part of the 6 o'clock News is comparing their latest satellite weather image with yours.
- ...You know the frequency of "Channel 19".
- ...You think of the letter "V" every time you hear Beethoven's Fifth Symphony.
- ...You know Samuel Morse's middle name... both of them.
- ...You are completely confused as to why someone in your wife's Harlequin Romance novel would want to "coax someone into a bedroom" when everyone knows that 450-ohm ladderline is much more efficient.
- ...You are puzzled why the "C-W" tape you won at the church raffle has country-western music on it.
- ...You know how to pronounce "Yagi".
- ...You have no idea where on earth "Sao Tome" is, but you know its prefix is "S9C".

- ...During a 2:00 am bathroom call, you log into the local packet node to check for mail.
- ...So many friends and neighbors call you for help with their electronic gear, you consider putting in a 900 number.
- ...You have chronic lower back pain, knots in your shoulders, a cramp in your mouse finger, a blister on your VFO dial finger, and you can't see more than three feet in front of your face.
- ...You still own several hundred 5.25-inch floppies.
- ...The Radio Shack employees know you on a first name basis.
- ...Your favorite TV show is Bill Nye, the Science Guy, instead of Baywatch.
- ...When your wife is expecting, you are more interested in the ultrasound equipment than the test results.
- ...Your 3-year-old asks what's above the clouds, and you start talking about the D, E, and F1 layers.
- ...You drive 5 hours each way so you can spend 2 hours browsing the tables of junk at a hamfest in a distant city... and then brag about it.
- ...You are willing to spend several hours on the air debating the possible performance of an antenna that would only take you a few minutes to put up and test.
- ...You can understand the morse code sound effects accompanying the introductory music on the 6 o'clock news.
- ...You know what the DCD, DSR, CTS, and DTR LED's stand for on the front panel of a modem. .
- ...You know what "callbook order" is.
- ... You know how to pronounce "Yaesu"
- ... You can honestly say that you've been struck by lightning... twice.

*Condensed and adapted from  
material provided by the AARC club,  
Terry Henderson (KE4SSD), and  
Sam Pickering (KF4EKV)*

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## **1996 Simulated Emergency Test (SET)**

Some call it "Field Day without the Mosquitoes". To others, it is a way to conduct a disaster drill from the comfort of your own home". But regardless of how you see it, its official name is "Simulated Emergency Test", or SET for short.

Scheduled for October 12-13 this year, the event is similar to Field Day in that is an opportunity for hams to test out their gear and operating practices for service in an emergency. But unlike Field Day, this event lets each locality design a special exercise tailor-made to the local conditions. This way, local hams get specialized training in handling emergencies which are likely to arise in their local area. A mock blizzard is pretty ridiculous for a radio club in Florida. And a hurricane mobilization is pretty far-fetched for the Minneapolis-St. Paul Radio Association. Under the SET, local ARES officials (or any other enthusiastic ham, for that matter) can design a special mock situation requiring mobilization of ham radio under simulated emergency conditions.

No official SET plans for your area? Why not make some! Although the SET is an official contest, most hams see it more as a self-test of their ability to respond and react to a particular emergency. Unlike Field Day, which simply involves "operating", most SET exercises are built around a particular emergency likely to hit a specific area. Tallahassee, for example, might design a simulated hurricane situation. Omaha might opt for a simulated tornado. The southside Atlanta club might choose a plane crash, while a New York group might want to stage a wide-spread electrical and telephone outage. Hams must not only respond and make contacts, but their operations must "fit in" with the situation chosen as the drill.

Scoring is fairly complex, as can be seen by the accompanying table. A top club might score over a thousand points, while a good club might score between 100 and 200 points. But even a small group of hams, unaffiliated with any club, can put on a SET exercise and come in with a 3-figure score. Reports on SET activity are replete with tales where a real emergency occurred shortly after a SET exercise, and the hams were prepared and ready to go.

Last year in Virginia, only three groups participated: Newport News ARES, Chesapeake ARES, and Portsmouth ARC. The scores were 192, 116, and 103, respectively. West Virginia likewise had only three entries, with scores ranging from 133 to 169. Most of these groups had only a handful of hams participating.

A good SET requires preparation on the part of the organizer. A simulated emergency scenario must be developed. Some local emergency response agencies are glad to cooperate, and some cities even plan a government mobilization co-incident with the SET to enable the hams to interface with the disaster relief agencies. For example, in Jacksonville, Florida, the Red Cross, Sheriff's Office, County Fire and Rescue division, State Police, local hospitals, and the city Airport Commission combined to stage a mock plane crash involving hundreds of "live" victims, volunteers who smeared themselves with ketchup and wrote "compound fracture" on their arms or legs, or pretended to be unconscious. The hams were assigned to stations at the hospitals, the triage site, morgue, airport headquarters, press stations, and other strategic spots just as they would be in a real emergency.

Other SET exercises have required the hams to act alone, without participation of the other agencies. One practice drill in the Chicago Far-West suburbs simply involved a relay of 2-meter stations, organized into two huge county-wide rings, who raced each other passing a 2-paragraph emergency message around the county on a set of assigned simplex frequencies. Each station had to receive the message, copy it, change frequency to the one being monitored by the next station in the ring, make contact, and pass the traffic correctly, then return to the net frequency. The frequencies themselves were assigned and relayed as part of the exercise. Hams on the winning team won a free dessert at the next club meeting dinner, paid for by the ARES EC. All 30 hams in the exercise had fun, and the group racked up almost 200 points that year.

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## **Upcoming Contests**

ARRL UHF Contest -- August 3-4

North American QSO Party CW -- August 3-4

Maryland/DC QSO Party -- August 10-11

ARRL Microwave Contest -- August 17-18

North American SSB QSO Party -- August 24-25

ARRL VHF QSO Party -- September 14-16

CQ WW RTTY DX Contest -- September 28-29

ARRL Simulated Emergency Test -- October 12-13

Jamboree on the Air -- October 19-20

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## **Note from the MARA Treasurer**

I certainly enjoyed seeing all those who made it to Field Day. All the income and expenses on the attached report (except for the July newsletter expense) were reported at the last VAR meeting, but are repeated here for those who could not attend.

*Respectfully Submitted,  
Charlie Garner, WA4ITY  
VARA Treasurer*

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## **VARA Treasurer's Report**

### **April-July 1996**

**Beginning Balance (April) -- \$1,322.13**

#### **Revenues**

Donations -- \$18.00

May 50/50 Club Portion -- \$8.00

Dues (June) Association -- \$5.00

June 50/50 Club Portion -- \$17.00

July 50/50 -- \$12.50

**Subtotal -- \$1,382.63**

#### **Expenditures**

May newsletter -- \$57.16

Envelopes -- \$1.54

June newsletter -- \$12.87

Field Day Generator -- \$45.98

Field Day Gas -- \$11.00

July newsletter -- \$44.91

**Ending Balance (July 17) -- \$1,209.17**

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## **MARA SECRETARY'S REPORT**

### **July 11, 1996 Meeting**

The MARA club held its July meeting on the 11th, due to the Holiday, at the Golden Corral in Harrisonburg. The meeting began at 7:30 pm, presided over by the president, Dale, KD4DAI. 22 hams were present.

Dick, W3HXH (formerly known as W4JZC) gave the treasurer's report from Field Day expenses. The expenses came to \$189.01, plus the cost of renting the generator, which was \$45.00. The balance in the checking account then was \$978.76.

Norman, KA4EEN, reported on the constant need for net control operators on the ARES nets. Sign up and help him out.

Ray, KD4OXU, is in charge of lining up help for the Bridgewater Lawn Party parades (traffic control) which the club voted at the last meeting to make this a club-sponsored event. Hams are needed Friday night, July 19, at 6:30 pm, and Saturday night at 5:30 pm. Around 7 or 8 hams are needed each night.

Joe, KD4FKT, Field Day Chairman, gave a summary of Field Day this year. Other than generator problems, and a crashed computer, everything went well. Joe thanked the field day committee members for their efforts, and everyone else who participated.

Rusty, N4YET, chairman of the committee on the disposition of the donated equipment from W3FIB, said that after looking at how the tower worked out at Field Day, the club should keep it.

Dale received the renewal of the club's Special Service Club certification.

Rusty ran down the upcoming hamfests: Timonium (MD), Berryville (VA), Gaithersburg (MD), and Virginia Beach.

Paul, WV3J, won the 50/50 drawing of \$11.50, \$23 being put in.

The meeting officially adjourned at 8:09 pm.

The program consisted of Rusty, Dale, and Marshall, N4ZKH, reporting on the trials and tribulations of the 145.130 Mhz 2-meter repeater site and getting another site with improved conditions and possibilities.

David Tanks AD4TJ  
MARA Secretary

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## **VARA SECRETARY'S REPORT**

### **July 10, 1996 Meeting**

The VARA club meeting was held at Kathy's Restaurant in Staunton on July 10, 1996. The meeting was opened by the club president, Ken Harris, KE4GKD, at 7:50 pm. Present were 19 members.

Brown Snyder, N4ZHV, reported on last month's test session at Massanutten Vo-Tech. Twelve (12) people were there to take a test of one form or another, and all of them passed one or more of their attempted tests.

The Secretary's report was accepted as printed in the June newsletter. Dick Waldmuller, WB8GIF made the motion, and Brown Snyder, N4ZHV, seconded.

Charlie Garner, WA4ITY, gave the Treasurer's report. The last balance as of the end of April was \$1,322.13. After some various transactions made since then, the current balance is \$1,254.08. A complete and detailed list of the transactions made up to this month's balance will be in the Treasurer's report in this newsletter. The Treasurer's report was accepted as stated. Dick Waldmuller, WB8GIF, made the motion to accept, and Bob Osterloh, N4ICT, seconded.

David Pickering, KF4JCY, was voted into the club. Welcome, David.

As a general announcement to the club, "Everyone should read the club by-laws and be prepared to discuss them and also form a committee next month in order to get them up to date.

Joe Meeks, KD4FKT, the appointed Field Day chairman, reported on behalf of the committee, and talked about some general happenings as they saw them (or didn't see them!). The committee consisted of these amateurs in addition to Joe: Charlie Garner, WA4ITY; Jeff Rinehart, WB4PJW; Matthew Huffman,

KD4UPL; David Tanks, AD4TJ; and Colin Hester, N4ZFQ. Ken Harris, KE4GKD; was technically not on the committee, but helped out the effort as if he were, and then some.

The main generator was not running smoothly as should be, and Ken and some other amateurs lined up another one to replace it. A computer malfunction due to RF interference caused some 160-170 logged contacts to be lost. Darrle, KD4RXM, took the computer home with him and managed to save the contacts and bring the computer back the next day.

Another event that happened before Field Day but was heard and talked about throughout the Field Day weekend was the story of a certain amateur using Mother Nature's rainwater to take a shower. This did occur outside (and luckily in the middle of the night) and proved to be very refreshing, both mentally and physically for this individual.

So to conclude, other than a few minor hardware glitches and a side effect of uncontrollable shivering (due to the cold shower?) Field Day went very well and was enjoyed by all. Axs Ken Harris, KE4GKD, for more information on this "midnight streaking, cold-water showering, all-night DX'ing kind of ham radio fool!" Also, as a final note, Joe wants everyone to plan to be at next year's Field Day. It is always on the fourth (4th) full weekend in June. "It never rains on the actual Field Day weekend", and it's always a lot of fun.

Jeff Rinehart, WB4PJW, reported on some of Field Day's scoring. The numerical scores are in the newsletter. There was one known correction to make to them, however. Jeff's comment on having five five satellite contacts in 1995 was not correct. During the Field Day 1995, there actually were no satellite contacts. The singled sideband scores on phone usually are slacking, but this year the sideband guys did an excellent job. Part of this was due to Jerry's, K4RBZ, contact rate, which was 140 or more contacts per hour. Jeff's rate was also very helpful at 109 contacts per hour. Another area that was improved upon from last year was the CW in the novice-tech station. Overall the score was slightly higher compared to last year, even though there was a reduced amount of operators.

The 50/50 winner of half the total (or \$12.50) was Ken Harris, KE4GKD.

Upcoming hamfests are Berryvill on August 4th, and Virginia Beach on September 21 and 22. Towards the middle of October, keep in mind that Bike Virginia will be in need of help.

Sam Pickering, KF4EKV, still needs operators for the "Jamboree on the Air", on October 19th. For more information or to volunteer to help, please call Sam.

Possible Christmas Banquet committee members reminded other members of the fact that this year is moving by very quickly and it will be soon time to start considering what to do about the Christmas Banquet.

Sam Pickering, KF4EKV, and his son Christopher, were driving into Waynesboro last Saturday, and they saw a house on fire. They were the first to call the fire department on 2-meters. They and some other people got the occupants out of the burning duplex house. The house was totally destroyed.

Bob Osterloh, N4ICT, reminded everyone to send in their letters to the FCC in order to give them "ammo" to fight the "Little Leo" group. This group is trying to take over some of our frequencies, possibly 2-meters and 70-centimeters. For more information, read page 9 in July's issue of QST.

Bob's Knob picnic is on August 18th, 12:00 pm until... Everyone is invited.

A motion to adjourn the meeting was made. Jeff Rinehart, WB4PJW, made the motion, and David Pickering, KF4JCY, seconded. The meeting was adjourned at 8:40 pm.

*Submitted by  
Doug Zirk, KE4RMD  
MARA Secretary*

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**End of this month's issue.**

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**MASSANUTTEN ARA**

President: Dale Showalter, KD4DAI  
Vice-President: Vic Alger, KE4LKQ  
Secretary: David Tanks, AD4TJ  
Treasurer: Richard Weaver, W4JZC  
Board (exp 96): John Nelson, WA4KQX  
Board (exp 97): Bill Edmundson, W4IMS

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**THE VALLEY ARA**

President: Kenny Harris, KE4GKD  
Vice-President: Jeff Rinehart, WB4PJW  
Secretary: June Waldmuller, KC4PKJ  
Treasurer: Christy Osterloh, KC4PKK

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The Monitor is published monthly by the Massanutten Amateur Radio Association, Inc., a non-profit organization under the Internal Revenue Service regulations. The Monitor is distributed to all full current members of the MARA and the Valley Amateur Radio Association under reciprocal agreements of the two clubs. All articles, comments, and material for the Monitor should be sent to the Editor, David R. Fordham, KD9LA, Route 1 Box 615, Weyers Cave, VA 24486.

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*This web page was prepared from  
an ASCII version of the Monitor,  
by David R. Fordham, KD9LA*

*It does not necessarily contain all information  
which appeared in the paper copy.*

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