

June 2006

# The Monitor

*Published jointly by the Valley Amateur Radio Association and the Massanutten Amateur Radio Association,*

## FIELD DAY ISSUE

### FIELD DAY COMMITTEE

Jason Armentrout, N4DSL,  
Committee Chair

Sandy Mullins, K4PZC  
Cowles Andrus, K4EME  
Bob Van Fossen, K4DJG  
Bryan Daniels, K4RMY  
Bob Steere, N1QEQ  
Doug Tippet, N8ESW  
Lou Joseph W2LYL  
Benny Cook N4BCC

#### Assisted by:

John Nelson, N3JN  
Gayle Shull, KU4XN  
Jeff Rinehart W4PJW

See pages 10 and 11 of this issue for driving directions & the GPS latitude and longitude coordinates of the new Field Day Site.

### Yes, It's That Time of Year Again!

The joint MARA/VARA Field Day operation will commence with a week of family camping at the new Field Day location near Flagpole Knob.

The new site is approximately 1/4 mile beyond the old traditional site, and features less traffic, a better meadow, and little damage from four-wheel hot doggers.

Campers, self-contained camping units, tents, and other camping styles are all permitted and encouraged. There is no cost. A porta-potty is provided, but bring your own water supply.

The Field Day operation itself will begin on Friday morning, June 23, with the transporta-

tion of the radio towers and other club gear. Assembly operations will require many hands.

Friday night will feature the traditional covered-dish banquet. Saturday will see the final assembly of the stations and antennas.

The on-the-air transmissions start Saturday, June 24, at 2:00 pm local time, and run until Sunday at 2:00 pm.

This issue of the Monitor contains all the details of who does what.

Thanks to the Field Day Committee for this wonderful planning.

### N4GLZ: June MARA Program Features Speaker on Digital Radio

The speaker for our June meeting will be Steve Garber from Ntelos Wireless.

Steve will be presenting a program on Digital Wireless Technology, Markets, Devices and Spectrum.

In all probability, our future radios will be using digital communications technologies to a great extent. In the area of digital communications technology, the wireless phone

industry has certainly taken the lead. I think we can learn something from them.

Of course, these same companies will also be our fiercest competitors for spectrum space.

Come out and hear what Steve has to say! The meal starts at 6 on Thursday, June 1. The business meeting at 7, followed by Steve's program.



## W4AZR: Looking for Local Microwave Contacts on 2.3 GHz

Mike McKay, W4AZR, is looking for help testing out a piece of microwave gear he's put together.

Mike is an avid experimenter, building his own 2.3 GHz transmitter, and he would really like to find someone local to help him engage in a QSO to test it out.

The editor of the VHF/UHF column in one of

the ham magazines has volunteered to listen in from Spruce Knob during the summer contest, but Mike would like to have a slightly-more local ham to talk to in the meantime.

If you are on 2.3 GHz, or know of anyone with gear on this band, please contact Mike in Harrisonburg at 540-442-9964.

## The Next Solar Cycle: Smallest Sunspot Maximum in 100 Years?

One of the most successful solar cycle prediction models in existence is saying that the coming solar cycle will have one of the smallest sunspot maximums in over 100 years.

Several teams of international solar researchers, including Dr. Leif Svalgaard of the Netherlands, Dr. Yohsuke Kamide at the Solar Environment Laboratory at Nagoya University in Japan, and Dr. Ed Cliver at the U.S. Air Force Research Laboratory, have independently concluded that the sun will be less active during the next 11 year cycle than it has been in over a century.

Their models include the famous "Precursor model" which has been shown to be the most accurate at predicting long-term trends in solar weather. The Precursor model uses the strength of the magnetic fields which congregate in the polar regions of the sun, and correlates these with observed solar maximums in past cycles. The polar magnet regions provide the "seed" magnetic flux necessary to drive the sunspot activity during the next solar cycle.

The most recent data predicts the next solar maximum will max out at a sunspot number of only 75, with an error of +/- 8. This compares with the last six cycle maximums of 151, 188, 109, 155, 159, and 128.

This and related models all predict that the average sunspot number will be lower than any previous solar cycle since cycle 14,

which peaked at 64 in 1906.

The prediction, if it comes true, is a good-news, bad-news situation for everyone.

Lower solar activity is generally good news for industries like spacecraft, aircraft, commercial communications, and the power grid, but is bad news for HF hams. Lower sunspot numbers mean less worldwide propagation on HF frequencies.

However, cycles of lower sunspot numbers have been associated with more violent, albeit less frequent, outbursts of solar flares and coronal mass ejections. Scientists are quick to point out that some of the most intense space weather storms have occurred during cycles with relatively low sunspot numbers. For example, two of the eight most intense geomagnetic storms in history happened during solar cycle 14, and all but one of the others happened in cycles with maximum numbers under 88.

Solar storms are good news for VHF/UHF hams, for they spawn E-skip openings.

This latest research was published in the Geophysical Research Letters, volume 32, and can be found on the web at:

<http://www.spacew.com/news/05Mar2005/>

(Be sure to include the "w" in "spacew".)

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*"The next solar cycle promises to be one of the mildest, with a maximum sunspot number lower than any cycle in the last 100 years,"*  
 — Dr. Edward W. Cliver of the U.S. Air Force Research Laboratory at Hanscom Air Force Base.

## SkyWarn Training: 48 Attendees, Good Weather, Great Lunch!

Dr. James Brotherton of the National Weather Service conducted a late-starting, but very successful, SkyWarn training session on May 13 at the Community Center in Weyers Cave.

Dr. Brotherton was delayed by traffic on the interstate in his drive from Northern Virginia, but after arriving, found an enthusiastic audience.

Forty-eight people attended, including meteorologists from Channel 3 TV, local emergency officials, school teachers, and interested citizens. Most of the attendees were licensed ham operators.

The morning session began with an explanation of some of the modern technology used by the NWS in detecting, analyzing, and measuring the weather. The class proceeded to an explanation of how the SkyWarn program operates, followed by an outstanding explanation of thunderstorm fundamentals, including photographic slides, animations, and diagrams explaining how lift, moisture, and wind shear combine to form dangerous and even deadly weather phenomena such as hail, tornadoes, downbursts, and straightline damaging winds.

Lunch was served at cost by Debbie and Dianna Fordham, with assistance from Martha Carper. Debbie is the Vice-President and acting secretary of the Weyers Cave Ruritans (in whose building the meeting was held), and is on the board of the Fort Defiance Marching Band Boosters, who were having a chicken barbecue on the same day. Lunch was barbecued chicken, complimented by a variety of vegetables, bread, salad, fruits, drinks, and candy bars.

After lunch, almost all of the Basic I attendees stayed for

a Basics II class, which included among other things, an introduction to other weather phenomena covered under the SkyWarn program, and an explanation of how ham radio communications fits into the program.

By now, all attendees should have received an email or letter mailing providing their new (or renewed) SkyWarn ID number. If you attended the class and have not received such a mailing, contact Nikole Winstead Listemaa, Skywarn Focal Point person for NWS Sterling at 703-260-0107.

## Waynesboro Riverfest Public Service Report

The Waynesboro Repeater Association and VARA jointly provided communication support for the Waynesboro Riverfest on April 29th.

This is one of the most enjoyable events for area hams to participate in.

Helping with the event were: Darrell Little KI4LLA, Kenny Bassett K4KPB, Ron Burch W4ZEE, Ray Colvin KE4HVR, Bob McCracken N4JGO, Mike Solomon KJ4RM, and Marvin Henderson KF4WDI. The 147.075 repeater was used for this event. Thanks to everyone who helped.

Gordon Batey WA4FJC did a great job coordinating the event, but due to an automobile accident involving his son and daughter-in-law was unable to attend. We all wish Gordon's family the best as his son and daughter-in-law recuperate from their injuries. Thanks, Gordon, for all your efforts with this event.

The Riverfest is a Triathlon race. Twenty-five teams participated this year. The race starts with a 3.1 mile (5k) run, followed by a 2 mile kayak race down the South River. The last leg is a 10-mile bike race. It is enjoyable to watch as a spectator.

Information Provided by:  
Marvin Henderson KF4WDI

*From left to right: Ron Burch W4ZEE, Kenny Bassett K4KPB, Bob McCracken N4JGO, Ray Colvin KE4HVR, and Darrell Little KI4LLA*



## Section Report: ARRL Virginia Section: Glen Sage, W4GHS

*Below is the Section report for the ARRL Virginia Section, submitted by Section Manager, Glen Sage W4GHS. Glen was guest speaker at the combined MARA/VARA meeting in May. These monthly reports are online at the ARRL website, and until recently were printed in QST. The section report below is for April, 2006. — Editor*

As Virginia Section Manager, I have continued with my efforts to visit clubs across the section. I had reported on my visits to the Virginia Mountain ARC, and the Franklin County ARC in the March report (the visits took place in April). I visited the Roanoke Valley Amateur Radio Club, the Briarpatch ARC, and a combined meeting with the Massanutten Amateur Radio Club along with the Valley Amateur Radio Association.

Interest was excellent at each of these visits with packed meeting rooms and lots of questions about future plans for the section. We discussed the ARES program, traffic handling, men-

toring, special event stations and an assortment of other interest items.

**I want to thank the Massanutten and Valley clubs for combining their meeting and allowing my travel to be more fruitful.**

**The section is over 609 highway miles from Cumberland Gap, Virginia to the Eastern Shore. In the future, it would be helpful to meet with multi-clubs to conserve on cost and time involved in travel. With this combined meeting we had between 60 and 70 hams present**

Renewed interest in traffic and messages handling has grown from these meetings. I have received a message from one EC following a meeting and he plans to focus on traffic handling in future ARES nets. To arrive on site at a disaster and not have a level of comfort in traffic handling and message passing is a real problem. To be a licensed Amateur Radio Operator is not all the qualifications needed to assist in emergencies. I

have heard people say, "If we ever have a disaster here, we will have plenty of help, people will be coming out of the woodwork to help out." Warm bodies that are untrained can be part of the problem rather than part of the solution.

One major project that is to be a yearlong event is special event stations for the 400th Anniversary of the settlement of Virginia. It is our hope that we can have a special event station at historical sites across the commonwealth throughout 2007. A special event has been planned for Jamestown and Poplar Forest, the second home of Thomas Jefferson. We have enough sites of historical importance that we could operate from a different site every weekend of the year. Our Assistant Section Manager, Woody Thompson, W4TU is coordinating these events. You may contact Woody at 540-254-2770, or Woody-w4tu@ntelos.net if your club or special interest group has an interest in operating. The

section is planning to have certificates for a certain number of sites worked in addition to the QSL or certificates offered by those sponsoring the event. This operation will give Amateur Radio some excellent coverage and will showcase Virginia.

Field Day 2006, June 24-25

This event is one of the most popular in Amateur Radio in the US. It affords us the opportunity to test our ability to setup quickly for an emergency operation. This is an ideal time to insure that our generators, solar panels, batteries and emergency equipment are in good operating order. Field Day provides an opportunity for public awareness through news media coverage and setting up in a public location. Invite a public official to visit your site this year. This provides great exposure for ARES as a working partner in emergency communication with your local agencies. I hope to hear many of you on the air on Field Day!

### MARA: Thanks to Mike, W4AZR

I want to thank Mike, W4AZR, for his presentation at the April meeting. For those that missed his program, he told us what antenna modeling can show about antenna performance, and how changes in antenna height change the pattern, take off angle and gain. If you enjoy making your own antennas, a good modeling program will save you a lot of time and effort.

Gerald Nauman, KN4FM  
MARA President

### Yaesu FT-757-GX2, Freq Counter For Sale

James McDowell, KG4FZY, has a Yaesu FT-757GXII for sale. This is an affordable mid-range HF rig covering 160 to 10 meters, with general coverage receiver, featuring IF shift, notch filter, and noise blanker. James also has a frequency counter for sale.

You can reach James via email at [jmcdiv@msn.com](mailto:jmcdiv@msn.com), or via land line at 540-234-9488.

## KA4EEN: Bouncing Around – Bring Some Dryer Sheets to Field Day

Bounce, those funny-smelling dryer sheets they sell in the grocery on the aisle with the laundry supplies...

If you are bothered with bees and wasps flitting around you, put a sheet of Bounce in your pocket. They'll leave you alone. The U.S. Postal Service is reported to have advised their mail carriers of this handy way to repel the stinging critters.

Supposedly, Bounce also helps repel mosquitoes and gnats, too. Tie a sheet around one of your belt loops. Worth a try at Field Day?

Troubled with static electricity on your computer screen? Wipe it with a sheet of Bounce.

Put one on a coat hanger in your closet to keep your closet smelling fresh. Put one in each of your shoes when you're not

wearing them. Put one under the front seat of your car, or in your RV or camper.

Odor coming from your garbage can even though you've washed it? You guessed it... put a Bounce sheet in the can before you put the plastic liner bag in.

Cleaning up sawdust or drill residue? The anti-static properties of Bounce attract these dust bits like magic.

When you return from Field Day, put a sheet of Bounce in your sleeping bag, and another one in your tent, before you fold them and put them away.

Thanks to Norman Benner, KA4EEN for "bouncing" these tips to us!

## K4EME: Riding for MS June 10-11 – Find Me on APRS!

On June 10 and 11, I will be joining hundreds of other cyclists for the third year, to ride between 150 and 200 miles in the MS 150 Bike Tour, sponsored by the National MS Society, Blue Ridge Chapter. By making a pledge or donation on my behalf, you are supporting research and local services to those affected by this unpredictable disease.

A small donation of \$10 or \$20 will go a long way towards allowing me to raise money for a good cause by riding.

I need a total of \$200 in pledges to qualify to ride in the MS-150. I have a personal goal of \$1000 this year. With your help, I actually came quite close to this number last year.

I am planning to have an APRS transponder on my bike, so if the system works, you can track my progress on the internet on June 10 and 11. The link to this site is:

<http://www.findu.com/cgi-bin/find.cgi?k4eme-4>

The ride starts at 6:30 a.m. from St. Anne's Belfield School in Charlottesville, and will end there both days. We will spend Saturday night camping. There are several rides to choose from if you want to participate. My favorite is the 100-mile ride both days. I am planning to do the longer 100-mile ride if weather and my body permits. I am in fair shape after biking almost 5000 miles last year! I have been riding all winter with 1500 road miles under my belt so far since January 1, 2006.

I want to thank everyone again who helped me out with the MS-150 last year. It is a great cause!

I do not have MS, but I have several close friends who do. MS is the most common neurological disease affecting young adults.

Remember, your contribution is tax deductible.

If you see me in person (say, at a club meeting), you can give it to me then. I'd like to get the donations before June 8 if possible.

Contact me at:

Cowles Andrus  
73 Hundley Mill Road  
Staunton, VA 24401

Phone 540-885-3665

Email: [candrus@rica.net](mailto:candrus@rica.net)

### WX4C: Neat Web Links

Some Cool Links, provided in the Keystone Amateur Radio Newsletter by Don Landes, WX4C.

Some very cool home power homebrew stuff:

[http://www.homepower.com/magazine/downloads\\_homebrews.cfm](http://www.homepower.com/magazine/downloads_homebrews.cfm)

Some really nifty kits, parts, supplies, and other stuff for the electronic enthusiast:

<http://www.vakits.com>

Do you enjoy listening to old radio shows:

<http://www.radiolovers.com/>

## The Opinionated One: Report on Dayton Daze

The annual pilgrimage to the Dayton Hamvention began on Thursday, May 18, at 7:30 am at the Redwood Restaurant. Over a dozen hams ate there and got gas before hitting the road west on I-64. The group traveled in a caravan which resembled the final stretch of the Indianapolis 500.

In the front position for much of the race was Geneva "Leadfoot" Suter, XYL of Jay W4QDC, driving a tidy green Toyota speedster capable of land velocities that would make any NASCAR enthusiast drool.

Jay and Geneva were followed closely (perhaps a little too closely?) by Jason Armentrout N4DSL and Matthew Huffman KD4UPL in a scaled-back Peterbilt wannabee. These two good-looking single guys, with their Oxleys, great hair and wide smiles, appeared as though they were cruising through the chick-infested neighborhoods of Beverly Hills 90210. The popular phrase "babe magnet" would have applied, except that for some reason, babes seemed to be in short supply in West Virginia and Ohio this year. Perhaps it was the mild winter....oh.well...

Next in the line-up came Richard Wilkins KR4V, and his XYL Pamela KC4HYT in their self-contained living apparatus. At the West Virginia welcome station, Richard and Pamela gave free tours of their luxurious mansion-on-wheels, including the marble hot tub, the big-screen TV, the teak patio, and the master-bedroom's walk-in closet equipped with disco-ball lighting.

Bob Gay KE4BOB was driving a sporty little Volkswagen which unfortunately was suffering from Chronic Fatigue Syndrome and had to be pushed by hand up some of the West Virginia hills. He said something about a diesel vacuum, but hey, we've seen

Orecks and Hoovers which ran faster than Bob's Jetta.

Bob Van Fossen K4DJG and his XYL Laura were in his mobile intelligence center, equipped with navigation and communication consoles which are serving as prototypes for the next generation Space Shuttle. Bob also had what looked like a covered-up keg of moonshine attached to his rear bumper. (It turned out to be his go-cart covered in a tarp!)

Jeff Rinehart, W4PJW rode alone, which was good because every five minutes Jeff tried, vainly, to make contact on 40-meter HF mobile with Neal Buckingham, WA4KKL. It was later learned that Neil, a professional radio systems designer, technician, and installer, was having — get this! — radio problems!

Neil and his wife Peggy had a several-hour head start. They waited for the group at the Bob Evans lunch stop at Interstate 64 and WV Route 34. While their mobile mansion had more rooms than Richard and Pamela's (including a bowling alley and indoor pool upstairs), it lacked the most important feature: an engine! Neil's manor house had to be pulled along by a separate vehicle. Luckily, Neil and Peggy had brought one along, just for such a purpose.

Gerry Brunk K4RBZ and his XYL Shirley were also in the caravan. Gerry's vehicle served as the wildlife lookout, spotting deer, rabbits, and lots and lots of bull from the other cars in the convoy.

David Fordham KD9LA and Richard Huttiger AA4RH brought up the rear, which is entirely appropriate, if you happen to know these two guys.

The caravan disbanded somewhere just east of Dayton, with the various vehicles going their individual ways to the hotels. (Rumor has it that the Jetta ended up in a dumpster outside a Hooters off I-70.)

On Friday, at the agreed-upon lunch-time pow-wow at the top of the ramps outside the Mendelson tent, the gang was paid a surprise visit by none other than George Brunk, WB4IXG, who apparently was in town as part of his band's 75th re-union tour.

If you get a chance, ask Gerry K4RBZ where he got his Yaesu world map. Ask Jeff W4PJW how easy it is to find the cute little girls giving out the Icom hats. Get Dave KD9LA to tell you about the fellow who was selling lightning arrestors "under the influence". Ask Richard AA4RH about the tuna-tin QRP rig that requires a real can opener! Ask Bob K4DJG about how easy it is to maneuver around 28,000 convention attendees in a motorized cart! Ask Jay W4QDC about the impromptu game of musical chairs held at the Old Country buffet. Ask Richard KR4V about the Dr. Jekyll Mr. Hyde personality change that happens when Dave KD9LA gets really hungry! These hams will be glad to share their knowledge and experiences with you!

Some great bargains and show specials were obtained by most of the hams who went. You can buy everything, *including the kitchen sink*, at Dayton. You can buy a yellow Civil Defense Geiger Counter for \$10. You can buy over 60 million surplus Motorola business band walkie-talkies at various prices. You can buy things that look like they've been IN the landfill for at least two years. You can buy all kinds of assorted hardware for \$1 per pound! You can buy a Heath HW-101 or parts for a Collins S-Line. After enjoying your oriental massage at booth 519, you can buy a pair of Drake twins (no, sorry, Jeff, they weren't the ones handing out the Icom hats!)

Some of the group returned to the valley Sunday, but sadly, many couldn't tell directions and ended up in Indiana, Illinois, and other states west. Really! No Fooling. Just ask 'em!

## VARA President's Message: Glen Sage on Emergency Communication

With much anticipation, MARA and VARA welcomed Glenn Sage to Harrisonburg on May 4th, 2006. Glenn (W4GHS) is the Virginia Section Manager for ARES (Amateur Radio Emergency Services). With a combined group of about seventy persons in attendance, Glenn discussed the role of amateur radio in emergency communications.

Glenn stressed the need for training hams in the area of emergency communications. ARRL offers three courses that provided an excellent source of information. These courses are entitled Level 1 Emergency Radio Communications (EC-001), Level 2 ERC and Level 3 ERC. These can be found at the ARRL website at [www.arrl.org](http://www.arrl.org). Live training classes are provided at different locations throughout the year.

Glenn discussed the importance of new hams in the amateur radio world. Our focus should be three-fold, in that we recruit new hams, retain new hams and train new hams. Many persons receive their ticket and never get on the air. A large number of hams do not renew their ticket for another ten year term after the first ten years have expired. Glenn urged that new hams be provided with mentors to encourage them to get on the air and to provide technical support. The more people

that are trained and willing to help during an actual emergency will benefit everyone.

Glenn addressed that one of the areas that needs to improve is the monthly nets. Many areas of the state hold monthly nets that are "rag-chew" nets. He encouraged the nets to be a time to practice passing emergency traffic. One of the forms that can be used in the nets for this purpose is the Incident Command System Form 213. The ICS-213, as it is commonly called, is a general message form used during emergency situations. A copy of this can be seen on the United States Forest Service webpage at [http://www.fs.fed.us/fire/planning/nist/ics\\_forms.htm](http://www.fs.fed.us/fire/planning/nist/ics_forms.htm).

Another group that was mentioned as becoming very involved in amateur radio emergency communications is the religious community. Several denominations have groups in place. Some examples are the Salvation Army Team Emergency Radio Network ([www.satarn.org](http://www.satarn.org)), Menno Net (Mennonite Church), and the American Baptist Amateur Radio Service ([www.lamardenby.org/abars.htm](http://www.lamardenby.org/abars.htm)).

In conclusion, the evening was very enjoyable and informative. It gives us many things to consider in preparing for a possible disaster. Many thanks to Glenn for sharing with us.

*Marvin Henderson, KF4WDI*  
VARA President



### MARA/VARA Field Day Equipment Policy



Adopted by the MARA and VARA Amateur Radio Clubs.

Be it understood that:

As a participant in Field Day operations, whether a club member or visitor, you are using equipment that may belong to someone else. Care for it as if it were your own.

No repairs or modifications, no matter how slight, shall be made to any equipment without the owner (or owner's designated representative) present.

Any apparent malfunction of the equipment shall be reported immediately to the owner.

Be it further understood that:

Equipment which is brought to the Field Day site and made available for use is done at the owner's discretion, and said equipment should be supervised by the owner or his/her designated representative.

Any damage to, or failure of, the equipment at Field Day will be the responsibility of the owner, and NOT that of the sponsors, organizers, or management of the Field Day Activities.

# Field Day Information

Family Camping will begin on Friday evening, June 16. A porta-potty will be provided, but otherwise all campers must be self-contained, including self-removal of all garbage and refuse.

## General Info and Logistics

Event	Field Day - June 24 - 25, 2006
Location	New Field Day Site 1/4 mile past old site
FD Frequencies	Site - 147.470 Sim. / Talk-in 147.225 Rpt.
Call Sign	W4XD
Station Class	2A
FD Committee	MARA - N4DSL Jason, Sandy K4PZC, Bryan K4RMY Bob N1QEQ Bob VARA - , Lou (W2LYL), Benny (N4BCC) and Doug (N8ESW), Cowles (K4EME)
Scoring / totaling / Entry	N4DSL Jason
Pin Committee	KU4XN Gayle
Band Plan Coordinators	K4PZC Sandy
Welcome Center	Norman KA4EEN and Dick W3HXH
Registration	Norman KA4EEN and Dick W3HXH
Display Table	N1QEQ Bob
Coffee Pot	Welcome Center
2 Tables	W4PJW Jeff
Awning 10' x 20'	MARA Club
Awning 10' x 20'	VARA Club
Pads / Pencils	W4PJW Jeff
Va Generator + Ground	Jason N4DSL
WVa Generator + Ground	Benny N4BCC
Gasoline - 20 gal VA	N4BCC
Gasoline - 15 gal	W4PJW
Signs for each Station	N4XU Neal
Signs at road	MARA/VARA Club
Publicity	N1QEQ
Public Official	N1QEQ
Fire Wood (Camp. Week)	W4PJW Jeff & N4BCC
Fire Wood (FD Weekend)	W4PJW Jeff & N4BCC
Porti-John - 1 week early	N8ESW
Toilet Paper	N1QEQ Bob
Pictures	K4DJG Bob, KG4RMY Bryan
Site Mowing and Prep.	Individual Responsibility

## Welcome Center

Welcome Center	Norman KA4EEN and Dick W3HXH
Registration	Norman KA4EEN and Dick W3HXH
Display Table	N1QEQ Bob
Coffee Pot	Welcome Center
2 Tables	W4PJW Jeff
Awning 10' x 20'	MARA Club
Awning 10' x 20'	VARA Club
Pads / Pencils	W4PJW Jeff
Power	WA4FJC

## HF Phone Station

<b>FD Station #1</b>	Call - W4XD
In Charge of Station	Sandy K4PZC
Location	Southwest Corner
Shelter	W4PJW
Table	N4DSL Jason
3 Chairs	Jason N4DSL
Tower / Mast	???
Rotor	MARA Club
Antenna 1	20m Dipole - Clubs
Antenna 2	40m Dipole - Clubs
Antenna 3	80m Dipole - Clubs
Coax for all Antenna's	MARA & VARA Clubs
Radio	N4DSL Jason
Power Supply	N4DSL Jason
Computer	K4PZC Sandy
Computer Log	CT=FD06PH
Power	N4DSL Jason
Power Cable	VARA Club
Lights	Clubs
Info Packet	K4PZC Sandy
Grounding	KU4XN Gayle
Foot Switch	N4DSL Jason

## HF CW Station

<b>FD Station #2</b>	Call - W4XD
In Charge of Station	N4XU Neal - W4PJW Jeff
Location	North
Shelter	K4DJG
Table	W4PJW Jeff
Chairs	W4PJW Jeff
Tower / Mast	MARA & VARA Clubs
Rotor	
Antenna 1	Extended Zepp
Antenna 2	
Antenna 3	
Coax for all Antenna's	MARA & VARA Clubs
Radio	N4XU Neal - W4PJW Jeff
Power Supply	N4XU Neal
Computer	N4XU Neal
Computer Log	CT=FD06CW
Power	N4BCC
Power Cable	N4BCC
Lights	MARA & VARA Clubs
Info Packet	K4PZC Sandy
Grounding	W4PJW Jeff

## Get On The Air (GOTA) Station

FD Station #3	KD4UPL
Call Sign	KD4UPL
In Charge of Station	KD4UPL Matthew
Location	Center
Table	KD4UPL Matthew
Chairs (2)	K4RMY Bryan
Shelter	KD4UPL Matthew
Mast	?
Rotor	?
Antenna 1	W4PJW zepp
Antenna 2	
Antenna Tuner	W4PJW Jeff
Coax for all Antenna's	N4BCC Benny
Radio	KD4UPL Matthew
Power Supply	KD4UPL Matthew
Computer	K4PZC Sandy
Computer Log	CT=FD06GO
Power	Battery - KD4UPL
Power Cable	N4BCC Benny
Lights	KD4UPL Matthew
Info Packet	K4PZC Sandy
Grounding	KD4UPL Matthew
Operating Modes	SSB & CW

## VHF/UHF Station

FD Station #4	Call - W4XD
In Charge of Station	K4RMY Bryan - N1QEJ Bob
Location	East Side, Near Woods
Shelter	N4DUG Doug
Table	W4PJW Jeff
Chairs	K4RMY Bryan
Tower / Mast	MARA & VARA Clubs
Rotor	MARA & VARA Clubs
Antenna 1	6m beam K4PZC Sandy
Antenna 2	13-B2 K4NRA Ray
Antenna 3	220 vertical K4RMY Bryan
Antenna 4	Triband Vert 6/2/70cm K4RMY
Coax for Antenna's 1-5	KU4XN Gayle
Triplexer for 2/220/440 vert	
Radio 1	K4RMY Bryan
Radio 2	K4NRA Ray
Power Supply	K4RMY Bryan
Power Supply	
Terminal for Pkt	??
Pkt TNC	N4DSL Jason
Computer	K4PZC Sandy
Computer Log	CT = FD06VHF
Power	N4BCC Benny
Power Cable	N4BCC Benny
Lights	MARA & VARA Clubs
Info Packet	K4PZC Sandy
Grounding	K4RMY Bryan

## Satellite Station

FD Station #5	Call - W4XD
In Charge of Station	K4EME Cowles + W3BWD Jim
Location	VHF/UHF Station
Shelter	VHF/UHF Station
Table / Chairs	K4EME Cowles
Radio 1	K4EME Cowles
Antenna 1	KLM 435-40CX - K4EME Cowles
Antenna 2	KLM 145-22CX - K4EME Cowles
Coax for all Antenna's	K4EME Cowles
Amplifier 1	70cm, TE System 4450 300w - K4EME Cowles
Amplifier 2	2m, KLM 160w - K4EME Cowles
Pre-Amp	SSB Electronics SP-7000 70cm LNA under 1db Noise Figure - K4EME Cowles
Pre-Amp	SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME Cowles
Power Meter	Bird Trueline #43 - K4EME Cowles
Power Supply	Astron RS-70M 70amp - K4EME Cowles
Rotor and cable	Yaesu G-5400B - K4EME Cowles
Antenna tripod & base	K4EME Cowles
Antenna Mast	2 5' and 1 10' sections of pipe - K4EME Cowles
3 Guy ropes and anchors	K4EME Cowles
GPS	Garmin 45XL, for Correct time & location - K4EME Cowles
Compass	K4EME Cowles
Down Converter	2.4 ghz to 144mhz dcm 2400 to 144rx
Computer	Pentium Laptop for Satellite tracking (Nova Software) - K4EME Cowles
Computer	486 w / 14" monitor, running LogSat with Kansas City Tracker (Autotrack) - K4EME Cowles
Computer	For logging - K4PZC Sandy - Digital Station
Computer Log	CT = FD05DI
Power Strip	K4EME Cowles
Backup Power Inverter	12 VDC to 120 VAC - K4EME Cowles
Power	N4BCC Benny
Power Cable	N4DSL Jason - N4BCC Benny
Lights	?
Info Packet	K4PZC Sandy
Grounding	K4EME Cowles
Planned Satellites	AO-27, AO-51, OSCAR 52

**Be Sure To Read the Field Day Equipment Policy on Page 7.**

## Natural Power Station

FD Station #6	Call - W4XD
In Charge of Station	KD4UPL Matthew
Location	GOTA Station
Shelter	KD4UPL Matthew
Table / Chairs	KD4UPL Matthew
Tower / Mast	
Antenna 1	W4PJW - Zepp
Coax for all Antenna's	N4BCC Benny
Radio	KD4UPL Matthew
Computer	K4PZC Sandy
Computer Log	CT=FD06NAT
Power	Solar Panels
Gel Cell?	KD4UPL Matthew
Power Cable	KD4UPL Matthew
Lights	MARA & VARA Clubs
Info Packet	K4PZC Sandy
Grounding if needed	KD4UPL Matthew

## Contingencies and Backup Plans

BACKUP'S	
2m all-mode Radio	N4BCC Benny - K4NRA Ray
2m Amp	KU4XN Gayle - K4NRA Ray
6m all-mode Radio	N4BCC Benny - K4NRA Ray
Antenna Analyzer	Bring it just in case - All
Antenna Tuner	AA4RH Richard
Anything Else ?	Bring it just in case - All
Barrel Connectors	Bring it just in case - All
Pushup Masts	Bring it just in case - All
Coax	FD Committee - All
Computer / Keyboards	K4PZC Sandy
H.F. Radio - CW	W4PJW
H.F. Radio - Phone	W4PJW
Power Supply	Bring it just in case - All
Rotor - HAM 3 or 4	KU4XN Gayle
Rotor Cable	W4PJW Jeff
String / Cord for Dipoles	MARA & VARA Clubs
Tarps	Bring it just in case - All
Updated ver. Of CT	??
Wire	Bring it just in case - All
Extra Toilet Paper	??
Hand Soap, Antibacterial	??

## Bonus Point Responsibility

Bonus Points	
APRS	N4DSL Jason - K4EME Cowles
Packet	N4DSL Jason
SSTV	N4DSL Jason
Originate 1 Message to Section Manager	AD4TJ David - N4DSL Jason
Originate 10 Messages	AD4TJ David - N4DSL Jason
Public Official	N1QEQ Bob
Satellite	K4EME Cowles
W1AW FD Msg	AD4TJ David - & All stations
GOTA	KD4UPL Matthew
Natural Power	KD4UPL Matthew
Display Table	N1QEQ Bob
ATV	K4EME Cowles

**Field Day Talk-In: 147.225 (+)  
repeater (131 Hz tone)  
—or— 147.470 simplex**

## Directions to the Field Day Site

From Interstate 81 take Exit 240 (Bridgewater, Mt. Crawford), and go WEST on State Route 257 towards Bridgewater.

Follow Route 257 straight past the traffic signal at US 11. Go 2.5 miles past US 11, and come into the town of Bridgewater. Turn right onto Highway 42 (Hardee's on the corner, Quarles/Bullets ahead) and go north, still following Route 257. Go north on 42/257 for almost three miles.

On your way, you will go through one traffic light (cemetery on the corner) and a second light (Turner Ashby High School). At the third traffic light, turn left onto Mason Street, as you begin to come into the town of Dayton. **Follow Route 257 West!**

**Be careful along this stretch. You will be sharing the road with bicycles, horses, and buggies!** Go 6.5 miles out of Dayton, to a stop sign. Route 257 will make a sharp left turn at the stop sign (Ottobine Store on the right) onto Briery Branch Road. Go three miles on Briery Branch Road. There, Route 257 West will make a sharp **right** turn at the Route 257 Grocery.

**Just keep following Route 257 West!** Bear left as you pass the Hone Quarry Campground entrance, staying on the main road. Just past the campground entrance, Route 257 becomes Forest Road 924. Stay on the main paved road as it begins climbing the mountain. The pavement gets really rough for the next few miles.

Keep going up the mountain. WAY up. Go up the mountain **7.5 miles** past Hone Quarry entrance, (which will be **10 miles** from where you made the right turn at the Route 257 Grocery!). WAY up.

Finally, at the top of the mountain, you'll reach a complex intersection where the paved road makes a hard left (almost U) turn and two gravel roads split off, one due left and one going sort-of straight ahead. Keep as far to the right as possible at this three-way intersection. You want to take the right-most fork (straight ahead). In another half mile, you will pass through a nice meadow, which is the OLD field day site.

Proceed straight through the OLD field day site, and continue into the woods another 1/3 mile, and turn LEFT into the NEW Field Day Site.

It's a LONG way into the wilderness. If you need assistance, call on the 145.225 repeater (transmit up 600 kHz, 131 Hz PL tone required), or try 147.470 simplex once you get up into the mountains.

## VARA Secretary's Report: May 4 Meeting

The **V**alley **A**mateur **R**adio **A**ssociation met at Traditions in Harrisonburg with MARA on May 4, 2006. After a short business meeting of MARA the VARA had a short business meeting. President, Marvin Henderson KF4WDI brought up three new members to be voted into the club, Dan Hale KC8TEN, Mark Botkin KI4OJB and David Grimmert KF4KNM. Welcome to all these new members! We had 20 VARA members in attendance which was great.

We had Glenn Sage W4GHS from ARRL to speak to us on future plans for Emergency Communications, Traffic Nets and Training for emergency communication during emergencies. Glenn talked about getting training classes started, from both classroom and the Internet. With the proper training and equipment in advance we can be better prepared when an emergency arises. He also mentioned getting a database set up for volunteers, which will speed up response time in the event of an emergency situation. There is some information on the ARRL Web Site now for emergency training.

<http://www.arrl.org/search/?exp=1&q=emergency+training&x=0&y=0>

**Remember** The club meeting now starts at 7:00pm to give more time for programs. We will still meet at 6:00pm to eat.

**RIVERFEST** Thanks to everyone that helped with communications in Waynesboro on Saturday April 29, 2006. We had a good turn out from the local hams and the event was a great success again this year.

**VARA ROSTER** is now on the Club Web Page, go to <http://www.qsl.net/w4xd/> click on VARA MEMBERS, at the top click on MEMBERS LOGIN, user name is VARA, password is (lower case) virginia, click on SUBMIT and the roster comes up.

**VARA FIELD DAY COMMITTEE:** Cowles Andrus K4EME, Lou Joseph W2LYL, Benny Cook N4BCC and Doug Tippet N8ESW. Field day plans are coming together for a great weekend on the mountain in June.

**ON THE SICK LIST:**  
**Queenie, Clinton's (KB4OLM) wife** still has health concerns but is improving.  
**Denny Morland N4XPW** is home but his PT at AMC is making him sore for a couple days afterwards so he is reducing his schedule for a while to see if that helps.

**Gordon Batey's WA4FJC, Son & Daughter-in-Law** have had several operations for broken bones from a car wreck. They are scheduled for more operations soon.

**Lets keep these folks in our thoughts and prayers.**

**SWAP SHOP:**  
**This is 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 at: [kg4jof@arrl.net](mailto:kg4jof@arrl.net) Also a picture of the item would help it sell. Go to VARA Web Site at: <http://www.qsl.net/w4xd/>

**PLEASE notify Billy when your item is sold.**

**ADDRESSES!!! Keep your e-mail address up to date.** Please send them to: Marvin Henderson KF4WDI [marvista@ntelos.net](mailto:marvista@ntelos.net) Doug Tippet N8ESW [dtippet@ntelos.net](mailto:dtippet@ntelos.net) Ray Colvin KE4HVR [colvingr@adelphia.net](mailto:colvingr@adelphia.net) and David Fordham KD9LA [ford-hadr@jmu.edu](mailto:ford-hadr@jmu.edu) Also, keep QRZ updated when call signs and e-mail addresses are changed.

**ARES NET:** David Tanks AD4TJ is looking for Net Controls for the Augusta County ARES Net. The Net will be held on 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. Fox hunts are also scheduled for some months as weather permits.

**PROGRAMS NEEDED:** Richard AA4RH, Program Chairman, is looking for anyone that would like to do a program for the club. Give him a call and set up a date to present it. It does not have to be HAM related. It could be anything you think the group would find interesting.

The meeting was adjourned at 8:05pm.

VARA Secretary

Ray Colvin KE4HVR

## MARA Secretary's Report: May 4 Meeting

Due to the joint MARA/VARA meeting featuring ARRL Section Director Glen Sage, the MARA business meeting consisted only of approving new members: Paul Wyse W4PFM, Mike Stouwie KF4FOX, Phil Long KI4ILU< and Brian Cowger KI4LLC. No further reports were given, and no other business transpired.

## New Field Day Site GPS Coordinates

38 degrees, 29.297 min. North Latitude, 79 degrees, 12.995 min. West Longitude, 3860 ft AMSL elevation.

## Calendar

June 1: MARA Club Meeting at Traditions  
June 4: Manassas Hamfest  
June 6: VARA Club Meeting at Kathy's  
June 10: VE Exams in Dayton VA  
June 10-12: ARRL June VHF QSO Party  
June 16-24: Field Day Family Camping  
June 24-25: ARRL Field Day

# 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: Gerald Nauman KN4FM  
Vice President: John Lasher, N3GLZ  
Secretary: Bryan Daniels K4RMY  
Treasurer: Sandy Mullins, K4PZC  
Board (exp 06): Jason Armentrout N4DSL  
Board (exp 07): David Gordon KB4LCI

<http://mara.ws>

MARA meets the first Thursday of each month  
at Traditions Restaurant on Mt Clinton Pike at  
State Highway 42, Harrisonburg.

Meal starts at 6:00 pm.

Business meeting starts at 7:00 pm.

#### **Visitors are welcome.**

Dues (\$12 per year) should be mailed to:

MARA  
PO Box 1882  
Harrisonburg, VA 22801

### VALLEY AMATEUR RADIO ASSOCIATION

President: Marvin Henderson, KF4WDI  
Vice President: Mike Solomon KJ4RM  
Secretary: Ray Colvin, KE4HVR  
Treasurer: Doug Tippett, N8ESW  
Program Manager: Richard Huttinger, AA4RH

<http://www.qsl.net/w4xd>

VARA meets the first Tuesday of each month  
at Kathy's Restaurant on U.S. 11 north of  
the traffic light in Verona.

Meal starts at 6:00 pm.

Business meeting starts at 7:00 pm.

#### **Visitors are welcome.**

Dues (\$15 per year) should be mailed to:

Doug Tippett  
2348 Mosley St.  
Waynesboro VA 22980