June 2003

The Monitor

Published jointly by the Valley Amateur Radio Association and the Massanutten Amateur Radio Association, Dedicated to serving those interested in Amateur Radio in Virginia's Shenandoah Valley

FIELD DAY ISSUE

Field Day Will Be Held At The Usual Location, Rain or Shine!

Rumors have been started that the field day activity this year might be moved to a different location due to poor camping conditions at the traditional site (near Flagpole Knob in the George Washington National Forest in western Rockingham County).

Those rumors are false.

As of Thursday night, May 29, as this issue was going to press, the Field Day Committee had sent representatives to survey the site, and had concluded that the Field Day activity will take place at the usual location after all.

The site will need some extra preparation this year due to damage inflicted by overzealous owners of four-wheel drive mud-runnin' vehicles. Thos drivers tore up the ground, dug trenches and created ruts which became mud puddles during the recent rains.

But after a close assessment, the FD committee found the damage to look worse than it actually was, and they decided to hold the activity at the traditional site.

Even if more rain arrives before Field Day, the committee feels the site will be in acceptable condition. There are planned ground-leveling activities, to be followed by the spreading of hay and other ground cover over the muddy spots. This should be sufficient to allow an enjoyable and pleasant camping experience for all participants.

Many hams will be camping at the site the week before field day. There is no change for camping. Bring your own camping gear, food, and lawn chairs. The actual Field Day activity will begin in earnest on Friday evening with a pot-luck supper around the campfire. Station Setup and operating starts Saturday.

All we need now are OPERATORS! There will be sign-up sheets at each of the seven stations. You can sign up for the station and time shift of your choice.

Since it never rains at Field Day, come prepared for the expected "heavy dew"!

VE Exam Session: Saturday, June 14



With all the hype about Field Day in this issue, don't forget that Saturday, June 14, will be the normal VE examination session in Dayton, Virginia.

As always, registration starts at 9 am, and the tests will begin as soon as the paperwork is ready to qo.

If you are an accredited VE and can help Gayle out by assisting with this session, please give him a call.

The FCC is proposing an increase in the vanity callsign license fee. It is is approved, it will go into effect sometime in September. The icnrease is proposed to jump from \$14.50 to \$16.50.

Also, Gayle points out that a ham was recently fined \$12,000 (yep, that's twelve thousand dollars!) for interference on the ham bands. So it looks as though our enforcement agency is doing a good job. The persons conducting illegal operations in our area should take notice. This could happen to them if the interference keeps up.



For Sale — Kenwood TS-50

Kenwood TS-50 HP/6M radio. \$550.00. Contact Dale, N4DAI at 540-896-7027 day and 540-896-6535 evenings.

For Sale — Icom 751A

Icom 751-A HF Radio, with matching speaker, Shure desk microphone, hand mic, external keypad for frequency entry, all original packing and boxes, and all original manuals. \$650 firm. Contact Colin Hester, N4ZFQ, work: 540-833-5180, home: 540-363-3645, or cellular: 540-810-2214.



For Sale or Trade — Cyrix Computer

Computer for sale: CPU, keyboard, mouse, Windows 98 (no monitor). AST Pentium Cyrix X86 processor, 2G hard drive, parallel and serial ports. Make offer or trade. Howard N9AHQ 540-896-9086 (home) or email: zehrh@aol.com

Welcome Back to the Valley, John! (N3GLZ is Back in Waynesboro!)

Give a warm welcome back to John Lasher, and his XYL Cynthia, as they return from Roanoke. John recently accepted a promotion/transfer with his employer, and will be working out of Erie's Waynesboro office. His new phone number will be 540-932-7662, and his new house in on Ashby Drive in Waynesboro. Welcome back, John!

On the Road with Daryl, WB4YEX

Please Start using the following email address for me. darylcline@yahoo.com. If all goes as planned I am planning on buying a motorcycle and running around the US and mexico for a couple years. I can access this address from libraries all over the world. The cycle I am tentatively planning on getting is an 1100 CC. I am getting saddle bags, the loud pipes and no windshield. Hopefully this will occur this summer in a couple of months. I am just not sure when I am going but no matter where I leave, I can get emails at this address. Maybe I'll join up with the hells angels. :-) — Daryl Cline, WB4YEX

Ozzie Dillon, KD4RD, SK

Local Ham and a good friend becomes a Silent Key...

On Tuesday May 13, Ozro K. Dillon KD4RD passed away at home after a battle with cancer. He was born in Huntsville, Alabama, then moved to Chicago where he worked as an Electrical Technician at the Mallory Capacitor factory before moving to Staunton.

We all called him Ozzie here in the valley. Ozzie was one of the charter members of the VARA and was honored with a Lifetime Membership.

Whenever you met Ozzie he always had a friendly "Hello" for you. He enjoyed ham radio for many years and also liked to buy radios at Hamfests, clean them up so they looked like new and sell them.

He also enjoyed building power supplies from salvaged parts and selling them at Hamfests.

He was always willing to help anyone with a radio or antenna problem or give advice when someone was looking to buy a used radio. He had a small shop in his basement with a metal lathe and other machinist and woodworking tools. Whenever you stopped by to see him he would be doing something in his shop or on the other side in his ham shack working on a radio or power supply.

Ozzie's only survivor is his wife Opel. Everyone in his neighborhood and the ham community will miss our friend, Ozzie.

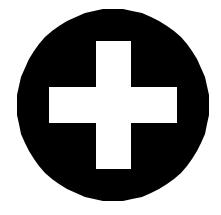
Ray Colvin KE4HVR

Phil Peterman, Local ex-Ham, in Critical Condition After 4x4 Accident

Old-timers in the valley may remember Phil Peterman, an ex-ham who used to be active on 2-meters. Phil is the Director of Finance for the city of Harrisonburg, and a black powder shooter. While on his way back from an outing in his 4-wheeler on April 27, Phil was in an accident which put him in the critical care unit of University of Virginia medical center. He suffered a broken pelvis, fractured skill, and some pretty bad blood clots in the brain. They had to remove the right side of his skull to relieve the pressure due to brain swelling. He was in a deep coma, but at last report had opened his eyes. He doesn't appear to yet be responding to his surroundings, and is moving only his right hand and right leg. The ham community wishes Phil a speedy recovery. (Thanks to Bill Jones, KE4FM, for this report..)

Doug, N4DUG, Suffers Heart Attack, Back on Mend

Doug Alder, N4DUG, gave the local hams quite a scare by having a heart attack the first weekend in May. Doug has served several years as the Public Service Chairman of the MARA club, until "retiring" from that position earlier this year. Doug works hard at Truck Enterprises. After the attack, which put him in critical care of RMH, he received four "stints", three of them in one artery leading to his heart. Demonstrating his good health overall, Doug was back home within a couple of days, although under doctors' orders not to do any work other than walking on flat ground for a couple of weeks! True to his character, he was back on the Virginia phone net within a few hours of coming home! Best wishes to Doug from the ham community to "getting back to normal"!





Harrisonburg March of Dimes Walk: April 26

The day started out to be rather damp over head, under foot, and in between but the spirits where high for about 200 people plus dogs that were ready to go by 9:00 am.

The results of the walk were very good too, with about \$50,000 brought in with more still to come.

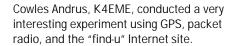
Thanks goes to the following hams that helped with the communications:

N4VZC/Phyllis, KC3AN/Dick, N4DSL/Jason, KN4XN/Gayle, KN4FM/Gerald, KG4KUR/E. C., N4NRA/Ray, KA4EEN/Norman. The walk organizers were again very appreciative of the job that the ham operators did for them.

We had a good time and no unusual events required special attention. Everything went very smooth.

Thanks again, Norman/KA4EEN Net Control

Report on K4EME's Bike-Mobile GPS Experiment



Cowles put a GPS receiver on his bicycle, and use VHF packet radio to transmit his location on the national APRS frequency (144.39 MHz) every five minutes as he rode a nice 30-mile route in the western part of the county.

Vic Alger, KE4LKQ, captured the packet data and published a nice color map with Cowles locations highlighted. See the MARA website for the map.

The batteries in the GPS receiver expired somewhere around Hinton. It took him just under 2 hours riding time, with a top speed of 38 mph and an average speed of 15.3 mph, as calculated by the GPS.

Even using only a rubber ducky antenna on his VHF location transmitter, and the battery failure, 111 packets of usable information were received by the APRS system. Cowles reportedly has upgraded the mobile locator two-wheeler with a J-pole antenna. This will likely give him enough gain (13 db) to get into the APRS digipeaters for the entire duration of a ride.

And Cowles is certainly going on a BIG ride!

The experiment was preparation for Cowles participation in the 2003 Southern Culture Bike Tour, also known as the MS-150. That's MS, as in "Multiple Sclerosis Society". Cowles will be riding 150-200 mi les on June 7 and 8, and has been in training since early February getting ready.

The ride starts on June 7th at 6:30 am just south of Charlottesville, and ends at Longwood College in Farmville. He will spend the night at Longwood and ride back to Charlottesville on June 8.

When he's mobile, you can track his up-to-theminute bike treks at the Find-u site:

www.findu.com/cgi-bin/find.cgi?k4eme-4

Shhh! It's Secret!

Pssst! Wanna know a secret? Well, ... sorry, we can't tell you!

But we can give you some hints: There was a public service event in Waynesboro on April 26. Hams helped out, but no one wrote up a story or gave any information to the newsletter editor, so, ... that information (such as who gave their time to help) is still a big secret! If you know of someone who knows something about this event, have them contact the newsletter editor, and let the cat out of the bag!



MARA President's Message

I was deeply saddened to hear of the death of Ozro "Ozzie" K. Dillon, KD4RD, of Staunton, Virginia who passed away recently. He was a member of VARA, our sister club. I had known Ozzie for a number of years. His quiet manner will be missed by all and our sympathy goes to his family.

I am writing this newsletter in my brand-new office which is away from the daily hustlebustle and activities of the five radio station, nine studio main building where my office was located. The new building where my office is located will eventually house nine radio transmit-

ters so my office could be a noisy place to be but it has a sound-conditioned window and walls with its own airconditioning and heat. It is finally a typical Spring day and I have the outside door open enjoying the weather.

Gosh, it hardly seems possible that Field Day is next month. Seems like just a short time since the Christmas holidays.

Time does fly by faster as one gets older.

I do appreciate the fine program given by Paul Wyse, W4PFM, and his XYL, Peggy, at the last

MARA meeting. Talke about protable operations and under adverse conditions! Wow! I know that some of us here in the Valley think we operate under some tough conditions in our homes, but this slide show really shows us what adverse means! It was a very interesting presentation. Thank you again, Peggy and Paul.

I am so pleased with the large attendance at our meetings. Keep up the good work.

he club is only as good as its members so we have a good, sound club.

I hope to be in Jeanne's and my new house by next year so I can get more permanent antennas in place and I will not have to use the "temporary" antennas that I have used for close to four years now. They work well though.

I invite all who are interested to attend the QRP meeting next month. The details for the next QRP meeting will be given at the June meeting. I was away so did not get to attend the May meeting.

73. Ellsworth K4LXG

WN4JMU Autopatch Now Can Access Staunton and Verona Phone Numbers!

The WN4JMU Autopatch can now access Staunton and Verona telephone numbers, as well as Harrisonburg, Bridgewater, Weyers Cave, Elkton, Broadway, and Grottoes. This patch uses the 145.130 repeater, and allows up to two autodial numbers with each subscription. Subscription is \$15 per year.

For more information on the patch, see the website: http://cob2.jmu.edu/fordham/MARA/patch1.htm

Calendar of Upcoming Events

June 1: Manassas (VA) Hamfest June 3: VARA Club Meeting

June 5: MARA Club Meeting

June 7: Winston-Salem (NC) Hamfest

June 14: VE Examinations in Dayton Virginia

June 14: Bloomsburg (PA) Hamfest june 14: Franklin (VA) Hamfest

June 14-16: ARRL June VHF QSO Party

June 15: Frederick (MD) Hamfest

June 18: Skywarn Basics II Class (Goddard Space Ctr MD)

June 21: Ham Radio Kid's Day June 20-29: Field Day Camping June 28-29: Field Day Operations

July 1: Scheduled VARA Club Meeting July 3: Scheduled MARA Club Meeting July 4: Harrisburg (PA) Hamfest

July 27: Timonium (Baltimore MD) Hamfest

August 2-3: ARRL UHF Contest August 3: Berryville (VA) Hamfest August 5: VARA Club Meeting August 7: MARA Club Meeting

August 10: Westminster (Carroll County MD) Hamfest

August 16-17: ARRL Microwave Contest

Every Sunday Night: Page County ARES Net on 146.670 repeater, PL of 114, at 8:00 pm local time.

Every Monday Night: Rockingham County ARES Net. First Monday of the month on 146.55 simplex, all other Mondays on 145.130 repeater, PL of 88. Net starts at 8:00 pm local.

The Second Thursday night: Augusta County ARES Net on 146.85 repeater, PL of 131.8, at 8:00 pm local time.

First and Third Wednesday nights, 147.18 repeater, PL of 100 Hz, starting at 8:30 pm local time.

MARA Secretary's Report: May 1st Meeting

The May meeting of the Massanutten Amateur Radio Association was held at Evers Restaurant in Mt. Crawford.

The meeting was opened at 7:30PM by the club president, Ellsworth Neff, K4LXG, and there were 34 members and 6 guests present.

The secretary's report for the April meeting was accepted as given in the May issue of the MARA monitor.

Gerald Nauman, KN4FM will be the new MARA public service director.

Gayle Shull, KU4XN announced that the field day pins are in, and that field day T-shirts will still be ordered.

Billy Hooke, KG4JOF announced that field day operators are still needed, especially for the night-shift, and that one more trailer is needed for field day. Also

Billy noted that the next field day committee meeting will be May 8th at 6:30PM at the Mt. Crawford Burger King.

Chuck, KD5KA reported there will be a meeting of the QRP club on Tuesday, May 13th at 7:00 PM at his home in Weyers Cave.

50/50 was won by Billy Hooke, KG4JOF, \$20.00 went to Billy and \$20.00 went to the club.

The formal meeting was adjourned at 7:52PM and this month's program was held by Paul Wyse, W4PFM from Waxhaw, NC. Paul gave an excellent program about his DX'ing from many countries.

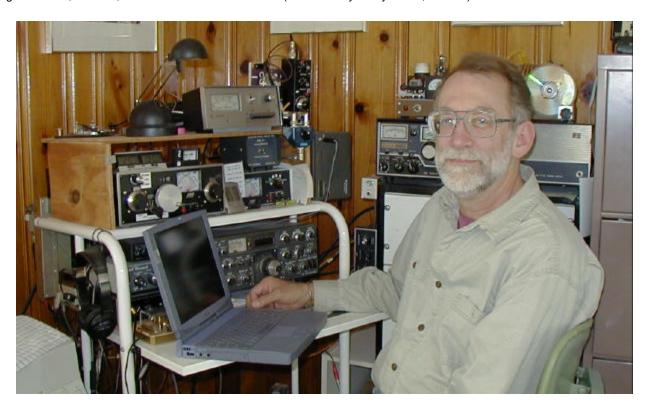
Todd Harrison, K4TMH MARA Secretary

Howard, N9AHQ, Honored in the Garden State!

Howard Zehr, N9AHQ, co-director of the Conflict Transformation Program at Eastern Mennonite University, received the annual Peace-builder Award from the New York State Alternative Dispute Resolution Association at a luncheon at the New York governor's mansion May 13 in Albany.

In notifying Howard of the award, the group stated, "As the pioneer and one of the founders of the contemporary restorative justice movement, your work has provided the impetus and inspiration for many practitioners in the field of dispute resolution in New York State, and your national and international influence, your writing and teaching are all deserving of honor and recognition."

Congratulations, Howard, on this well-deserved honor! (submitted by Gerry Brunk, K4RBZ)



VARA Secretary's Report: May 6th Meeting

The Valley Amateur Radio Association met at Shoney's in Staunton on May 6, 2003. The President Benny Cook N4BCC opened the meeting at 7:30pm. There were 23 members present and 5 guests, Bob Van-Fossen K4DJG, Jess Hancock W4PQK & Valorie Hancock KB8ZIS and Joshua & Jacob, Sons of Frank Green KE4ASC.

The 50/50 was won by Richard Huttinger AA4RH, congratulations Richard!

Frank Green's wife Tammie recently got her ticket, her call sign is KG4ZSQ. Congratulations Tammie! We knew you could do it.

Cowles Andrus K4EME reported that David Tanks, Clinton Campbell and himself placed 4th in the International Multi-Op EME Contest this year.

The club voted to match MARA's donation of \$100 for condiments for the ARES Training Class on May 31st.

The club voted to help with Bike VA again this year on October 18 & 19. Plan to help and enjoy being in the country when the fall colors are at their best.

The VARA Field Day Committee for 2003 is, Terry Kielbasa KG4MWI, Billy Hooke KG4JOF and Mike Reno KG400N. They are working together with the MARA FD Committee. Billy KG4JOF was elected to be the Field Day Committee Chairman and Jason N4DSL will be the Assistant Committee Chairman. Gayle Shull KU4XN has the FD Pins.

There was mention of buying a trailer for club use and also of incorporating the club, this will be discussed later.

Since our Club is out growing

committee of three, Richard Huttinger, Benny Cook and Al Bonck that are looking for a new location.

Billy Hooke KG4JOF has the swap shop page completed and Bob McCracken N4JGO has linked it to the VARA Web Page. This will be for Ham related items only. You can send a list of items you have for sale, swap or something you would like to buy, to Billy Hooke KG4JOF at: KG4J0F@arrl.net Also if you have a digital camera or scanner and can send a picture of the item, that would help it sell. Check it out from the VARA Web Site at: http://www.qsl.net/ w4mus/

Butch Washer N5SMQ is the EC for Highland County and Jerry Moats WD4ITN is his assistant. Their ARES Net will be on the Monterey repeater 147.180+ and tone of 100.0 at 8:30pm on the 1st & 3rd Wednesday of the month. They would like to welcome everyone that can get into the repeater to check into the Net.

ADDRESSES!!! If your e-mail address or home address is changed for any reason YOU need to notify us so we can make the necessary changes so you will continue to get your newsletter. Also you should update your e-mail address in QRZ and Buckmaster. This is where we look if an e-mail is returned to us.

You can send your e-mail address to: Benny, bennycjr@ntelos.net Ken, klharris@rica.net Jeff, jmrinehart@yahoo.com Ray, colvingr@rica.net David, fordhadr@jmu.edu

On the sick list:

I talked with Ozzie Dillon KD4RD on the phone April 28th. bed most of the time, also starting on some mild pain killers.

Dan James W4DLJ is getting around with his walker and staying out of his wife's way in the kitchen as she has taken over the cooking.

I talked with Joe Moomaw's Grandson recently and part of the time Joe doesn't know him. Joe is still in the Convalescent Home.

Doug Alder N4DUG had a heart attack and had four stints, three in one artery. He is recovering at home and has been on the radio some.

Lets keep these folks in our thoughts and prayers.

David Tanks AD4TJ Needs HELP with the Augusta County ARES Net. Anyone that is willing to be net control and help David out give him a call. The Net will be held on the 146.850 repeater on the 2nd Thursday of the month at 8:00pm. This repeater has a minus offset and a tone of 131.8 when needed.

Mark your calendar and check into the net. Remember without YOU there will be NO ARES NET.

We would like to get training classes started for the Technician level. Anyone interested in helping teach the classes please contact Benny N4BCC, Alby AD4KZ or Richard AA4RH. We need to get some young people interested in ham radio. Listen for any hints that someone may like to learn what ham radio is all about.

PROGRAMS NEEDED...Richard AA4RH, our Program Chairman, asks for anyone who would like to do a program at one of our meetings to give him a call and get a date set up to present it. It does not have to be HAM related. It could be anything you

think the group would find interesting.

Field Day is getting close! Make plans to be there and help set up stations, pull up antennas, have fun operating FD 2003. Then comes the time to tear down all the equipment and antennas, pack them up for another year. Don't forget, we need help tearing down also.

The meeting was adjourned at 7:58pm

Field Day Chairman, Billy Hooke KG4JOF, gave a rundown on the progress of the committee. He reported that all stations except the GOTA station has shelters and Jeff Rinehart W4PJW said the Denton Truck was available for that one. Billy said we will be operating 3-A and the computers will be networked and running a different logging program with CT also on the computers for a backup if needed. Jason is in charge of the computers and getting the networking set up on them. Ellsworth & Jeanne said they would run the welcome center and Ken volunteered to help them at our last meeting. If we need another shelter the club voted to rent one for FD this year.

Submitted By: VARA Secretary Ray Colvin KE4HVR

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.

Thanks to the Field Day Committee!

As always, the entire local ham community owes a debt of gratitude to the Field Day Committee and those who helped them. When you see these hams, give them your appreciation: KG4JOF (Billy, chairman), KG4MWI (Terry), KG4OON (Mike), N4DSL (Jason), KG4RMY (Bryan), and help from KU4XN (Gayle), with W4PJW (Jeff), K4DJG (Bob), and many, many more!

Driving Directions to Field Day

From Interstate 81 take Exit 240 (Bridgewater, Mt. Crawford), and go west on State Route 257 towards Bridgewater. Follow Route 257 straight past the first traffic signal, go 2 miles, into the town of Bridgewater. Turn right at the second traffic signal (Hardee's on the corner) and head north, still on route 257.

As you come into the town of Dayton, turn left (following Route 257) at the first Dayton traffic light. (This light was not there last year!)

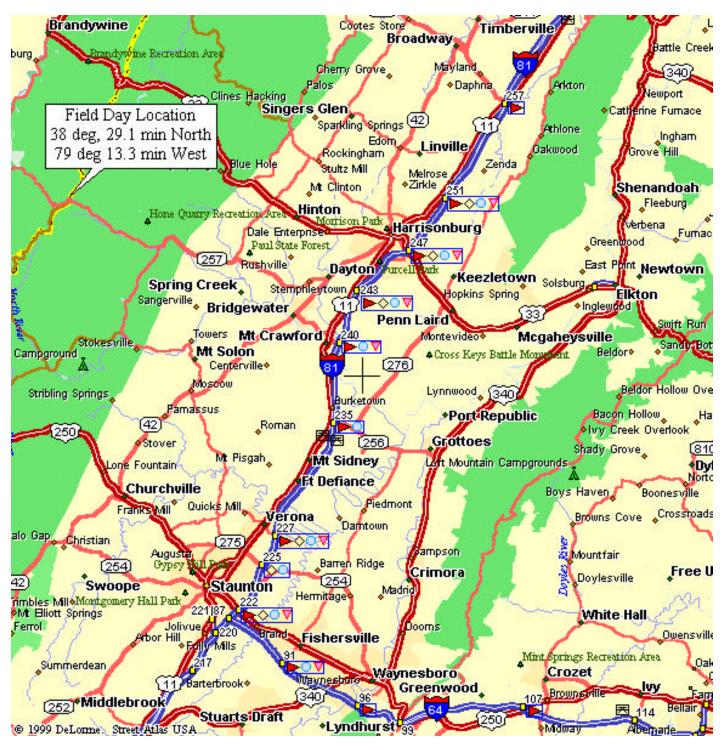
Follow Route 257 west. Route 257 will make a sharp left turn at the Ottobine stop sign, and will make a sharp right at the Briery Branch Diner.

Keep following Route 257!

Bear left past the Hone Quarry Camp ground entrance, where route 257 becomes forest road 924. Stay on the paved road as it crosses a bridge and begins climbing the mountain.

Keep going on the paved road up the mountain about six miles. Finally, you'll reach an intersection where the paved road makes a hard left turn and two dirt roads split off, one going left and one going sort-of straight ahead. Keep as far to the right as possible taking the right fork straight ahead, going another half a mile to the field day site. If you need assistance, call on the 145.130 repeater (transmit down 600 kHz, no PL tone required), or try 147.470 simplex once you get into the mountains.

Map to Field Day



General Field Day Information

Event	Field Day - June 28 - 29, 2003	
Location	Near Flag Pole / Reddish Knob	
FD Frequencies	Site - 147.470 Sim. / Talk-in 145.130 Rpt.	
Call Sign	N4XU	
Station Class	3A	
FD Committee	MARA - N4DSL Jason, KG4RMY Bryan, KU4XN Gale VARA - KG4JOF Billy, KG4OON Mike, KG4MWI Terry	
FD Chairman	KG4JOF Billy	
Assistant Chairman	N4DSL Jason	
Scoring / totaling / Entry	AD4TJ / W4PJW	
Pin Committee	KU4XN	
Band Plan Coordinators	W4PJW JEFF, K4RBZ JERRY	
Welcome Center	K4LXG ELLSWORTH AND JEANNIE (NEED ANOTHER COUPLE)	
Registration	K4LXG ELLSWORTH AND JEANNIE (NEED ANOTHER COUPLE)	
Display Table	K4LXG ELLSWORTH AND JEANNIE (NEED ANOTHER COUPLE)	
Coffee Pot	K4LXG ELLSWORTH AND JEANNIE (NEED ANOTHER COUPLE)	
2 Tables	K4LXG ELLSWORTH AND JEANNIE (NEED ANOTHER COUPLE)	
Power	N4YET RUSTY	
Tent	KE4GKD KENNY	
Awning 10' x 20'	MARA Club	
Awning 10' x 20'	VARA Club	
Pads / Pencils	KG400N MIKE	
Generator (main) + Ground	WA4FJC GORDON	
Generator (main) + Ground	N4YET RUSTY	
Gasoline - 20 gal VA	KD4WWF PAT	
Diesel - 20 gal WV	N4YET RUSTY	
Signs for each Station	N4XU NEAL	
Signs at road	KG400N MIKE	
Publicity	K4LXG ELLSWORTH	
Public Official	K4LXG ELLSWORTH	
FD Fire Wood - truck load	K4EME COWLES (NEEDS HAULED)	
Fire Wood - truck load	W4PJW JEFF (NEEDS HAULED)	
Porta-John - 1 week early	N1QEQ BOB	
Toilet Paper	KD5KA CHUCK	
Pictures	K4DJG BOB, KG4RMY BRYAN, KE4GKD KENNY	
Site Cleanup, Grass, etc. Repair Site	N4BCC BENNY, KE4GKD KENNY, KE4HVR RAY, KD4WWF PAT	

HF Phone Station (#1)	Call - N4XU
In Charge of Station	WA4ITY CHARLIE, KD4WWF PAT
Location	WV. NE near tree beside road
Shelter	K4LXG ELLSWORTH
1 Table / 3 Chairs	W4PJW JEFF (TABLE) N4BCC BENNY(chairs)
Tower / Mast	MARA Club - K4LXG, Ellsworth
Rotor	MARA Club
Antenna 1	Tri-bander - MARA Club - see K4LXG, Ellsworth
Antenna 2	40m Dipole - Clubs
Antenna 3	80m Dipole - Clubs
Coax for all Antenna's	MARA & VARA Clubs
Radio	KD4WWF PAT
Power Supply	KD4WWF PAT
Computer	K4PZC, Sandy
Computer Log	CT=FD03PH
Power	N4YET RUSTY
Power Cable	VARA Club /
Lights	WA4ITY CHARLIE
Info Packet	K4PZC, Sandy
Grounding	WA4ITY CHARLIE

HF Phone Station — Station #1

The MARA-VARA Field Day Activity will set up and operate seven stations. However, only five stations can be on the air transmitting at any given time.

HF CW Station — Station #2

CW contacts count more than phone contacts, and are often easier to make than phone contacts when the bands are noisy or relatively dead. Thus, the CW station will probably operate the most number of hours.

Since many visitors to the site won't be hams, be sure to tell them that the CW station is using Morse code.

HF CW Station (#2)	Call - N4XU
In Charge of Station	N4XU, Neal - W4PJW, Jeff
Location	WV. SW. in opening near campfire
Shelter	N4DUG DOUG
1 Table / 3 Chairs	W4PJW JEFF
Tower / Mast	KE4GKD, Kenny
Rotor	KE4GKD, Kenny
Antenna 1	Tri-bander - KD4FKT, Joe
Antenna 2	40m Dipole - Clubs
Antenna 3	80m Dipole - Clubs
Coax for all Antenna's	MARA & VARA Clubs
Radio	N4XU, Neal
Power Supply	N4XU, Neal
Computer	N4XU, Neal
Computer Log	CT=FD03CW
Power	N4YET
Power Cable	VARA Club /
Lights	W4PJW JEFF
Info Packet	K4PZC SANDY
Grounding	W4PJW JEFF

Digital Station — Station #3

Like CW, Digital contacts count more than regular phone contacts. Digital contacts will be attempted on VHF as well as HF bands. Like CW, Digital modes can sometimes work and get through under adverse conditions which would make phone contact impossible.

Digital Station (#3)	Call - N4XU
In Charge of Station	N4DSL JASON, KG4RMY BRYAN
Location	VA. SE near trees
Tables	N4DSL JASON, KE4GKD KENNY
Chairs	N4DSL JASON
Shelter	N4DSL JASON
Mast	KU4XN GALE
Antenna 1	KE4GKD KENNY (G5RV)
Antenna 2	N4BCC BENNY (GAP VERTICAL)
Antenna 3	?
Antenna Tuner	N4DSL JASON
Coax for all Antenna's	N4DSL JASON
Radio	N4DSL JASON
Power Supply	N4DSL JASON
Computer	N4DSL JASON
Interface	N4DSL JASON
Computer	For logging - K4PZC, Sandy
Computer Log	CT=FD03DI
Power	WA4FJC GORDON
Power Cable	N4BCC BENNY, N4DSL JASON
Lights	N4DSL JASON
Info Packet	K4PZC SANDY
Grounding	N4DSL JAON
Operating Modes	PSK31, MFSK16, RTTY, SSTV, APRS

GOTA Station (#4)	Call - KZ1A
In Charge of Station	KZ1A, Mac - KE4FM, Bill
Location	VA. SW near trees
Table	W4PJW JEFF
Chairs	N4DUG
Shelter	N4DUG
Mast	N4ZFQ COLIN
Rotor	KU4XN GALE
Antenna 1	KZ1A MAC
Antenna 2	N4DSL
Antenna 3	KD4FKT 10M VERTICAL
Antenna 4	?
Antenna Tuner	kz1a mac
Coax for all Antenna's	K4GKD, KU4XN
Radio	KZ1A MAC
Power Supply	KZ1A MAC
Computer	K4PZC, Sandy
Computer Log	CT=FD03GO
Power	WA4FJC GORDON
Power Cable	N4BCC BENNY
Lights	KZ1A MAC
Info Packet	K4PZC, Sandy
Grounding	KZ1A MAC
Operating Modes	SSB & CW

"Get On The Air" (GOTA) Station — Station #4

The GOTA station is intended to get non-hams, inactive hams, ex-hams, Novices, Technicians, and others who don't hold current HF privileges the opportunity to get on the air and transmit on the world-wide HF frequencies.

The GOTA station is limited to power output of 150 watts, and only the first 400 QSO's can be counted. However, if the station exceeds 100 QSO's we get 100 bonus points.

The GOTA station, like the VHF/UHF station, does not count in the transmitter count for determining the Field Day class. That's how we can have five transmitters on the air at any given moment, and still operate and compete in the 3A classification.

VHF/UHF Station — Station #5

VHF/UHF Station (#5)	Call - N4XU
In Charge of Station	KB4OLM, Clint - K4NRA, Ray?
Location	Va East near "Frog Pond"
Shelter	Trailer - KB4OLM, Clint
Table / Chairs	KB4OLM, Clint
Tower / Mast	KB4OLM, Clint
Rotor	KB4OLM, Clint
Antenna 1	6m Beam - KB4OLM, Clint
Antenna 2	2m Beam - KB4OLM, Clint
Antenna 3	432cm Beam - KB4OLM, Clint
Antenna 4	2/220/440 vert - KB4OLM, Clint
Antenna 5	2m Quad Pkt Beam - KB4OLM, Clint
Coax for Antenna's 1-5	KB4OLM, Clint
Triplexer for 2/220/440 vert	KB4OLM, Clint
Radio 1	6m - KB4OLM, Clint - Kenwood TS-660
Radio 2	2m/432 - KB4OLM, Clint
Radio 3	2m/440 FM TW-4000 - KB4OLM, Clint
Radio 4	220 FM TW -321 - KB4OLM, Clint
Radio 5	2m pkt HT IC-2A - KB4OLM, Clint
Amplifier 1	Mirage 1015 6m - KB4OLM, Clint - N/A
Amplifier 2	Mirage 1016 2m - KB4OLM, Clint
Amplifier 3	Mirage 1010 432cm - KB4OLM, Clint
Power Supply	35 amp Astron - KB4OLM, Clint
Power Supply	12 amp Astron - KB4OLM, Clint
Terminal for Pkt	Televideo - KB4OLM, Clint
Pkt TNC	MFJ Pkt TNC - KB4OLM, Clint
Laptop w / Baypac tnc	KB4OLM, Clint
Computer	KB4OLM, Clint
Computer Log	CT = FD03VHF
Generator - 3.5 kw Honda	KB4OLM, Clint
Power Cable	KB4OLM, Clint
Lights	KB4OLM, Clint
Info Packet	K4PZC, Sandy
Grounding	KB4OLM, Clint

Like the GOTA station, the dedicated VHF/UHF station does not count as an additional transmitter on the air for the purposes of determining the field day entry classification.

Thus, we can have up to five operational transmitters on the air at any given time (3 regular stations for the 3A classification, plus the GOTA station, plus the dedicated VHF/UHF station).



The clubs will provide firewood for campfires and cooking fires. There will be a blazing inferno kept going the entire field day period at the central fire pit. This fire is available for your convenience at no charge.

The clubs will also provide a porta-potty portable toilet. Again, there is no charge for using this facility.

Campers, pop-ups, hi-lo's, recreational vehicles, motor homes, tents, lean-to's, grass huts, under-the-stars hammocks, and ground-cloth's are all welcome. There is no charge for camping. Sites are first-come, first served. You can arrive any time (even a week or two weeks early!) to get a good location.

Visitor are welcome and invited to the Field Day site. XYL's and kids are in plentiful supply, so there's lots of company in case your visitors don't see the thrill of operating ham radios.

$Earth\hbox{-} To\hbox{-} Orbiting\hbox{-} Satellite\ Station\ -- Station\ \#6$

Satellite Station (#6) Call - NAXU In Charge of Station K4EME, Cowles Location VA. SE near trees Shelter N4DSL JASON Table / Chairs N4DSL JASON 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 175w - K4EME, Cowles Amplifier 2 2m, KLM 160w - K4EME, Cowles Pre-Amp SSB Electronics SP-7000 7cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under. 8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under. 8db Noise Figure - K4EME, Cowles Prower Meter Bird Trueline #43 - K4EME, Cowles Power Supply Aston RS-70M 70amp - K4EME, Cowles Rotor and cable Yaesu G-5400B - K4EME, Cowles Antenna Hipod & base K4EME, Cowles Antenna Hipod & base K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compuses K4EME, Cowles Down Conve	0 1 1111 01 11 (1111)	0 1110/11	
Name			
Shelter N4DSL JASON Table / Chairs N4DSL JASON Radio 1 K4EME, Cowles Antenna 1 KLM 435-40CX - K4EME, Cowles Antenna 2 KLM 145-22CX - K4EME, Cowles Annenna 2 KLM 145-22CX - K4EME, Cowles Amplifier 1 70cm, TE System 4450 175w - K4EME, Cowles Amplifier 2 2m, KLM 160w - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 7cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 7cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 7cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 7cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 7cm LNA under 1db Noise Figure - K4EME, Cowles Power Meter Bird Trueline #43 - K4EME, Cowles Power Meter Bird Trueline #43 - K4EME, Cowles Power Supply Aston RS-70M 70amp - K4EME, Cowles Rotor and cable Yasu G-4000 - K4EME, Cowles Antenna tripod & base K4EME, Cowles Antenna tripod & base K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles			
Table / Chairs Radio 1 Radio 1 RAEME, Cowles Antenna 1 RLLM 435-40CX - K4EME, Cowles Antenna 2 RLLM 435-20CX - K4EME, Cowles Antenna 2 RAEME, Cowles Amplifier 1 RAME, Cowles Amplifier 1 ROW, K4EME, Cowles Amplifier 2 REAMP 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 Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles Rotrand cable Astenna tipod & base RAEME, Cowles Antenna tipod & base RAEME, Cowles Antenna tipod & base RAEME, Cowles Antenna tipod & base RAEME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass Down Converter 2.4 gbz to 144mbz dcm 2400 to 144rx Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Prologging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI RAEME, Cowles R			
Radio 1 Antenna 1 Antenna 1 KLM 435-40CX - K4EME, Cowles Antenna 2 KLM 145-22CX - K4EME, Cowles Antenna 2 KLM 145-22CX - K4EME, Cowles Amplifier 1 70cm, TE System 4450 175w - K4EME, Cowles Amplifier 2 2 m, KLM 160w - K4EME, Cowles Amplifier 2 2 m, 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 .4d3 - K4EME, Cowles Power Supply Astron RS-70M 70amp - K4EME, Cowles Power Supply Astron RS-70M 70amp - K4EME, Cowles Antenna Mast Antenna Mast 2 5 and 1 10' sections of pipe - K4EME, Cowles GPS Garmin .45XL, for Correct time & location - K4EME, Cowles GPS Garmin .45XL, for Correct time & location - K4EME, Cowles Compass Down Converter 2 .4 gbz to 144mbz .dcm 2400 to 144rx Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI Power Strip AdeMe, Cowles Power WAAFJC GORDON Power Inverter 12 VDC to 120 VAC - K4EME, Cowles WAAFJC GORDON Power Cable NADSL JASON Info Packet MAPJC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down UO-14, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)			
Antenna 1 KLM 435-40CX - K4EME, Cowles Antenna 2 KLM 145-22CX - K4EME, Cowles Coax for all Antenna's Amplifier 1 70cm, TE System 4450 175w - 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 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 Power Supply Astron RS-70M 70amp - K4EME, Cowles Antenna tipod & base K4EME, Cowles Antenna fipod & base Antenna fipod & base AKEME, Cowles Antenna Mast 2 5' and 1 10' sections of pipe - 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 Laplop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Pentium Laplop for Satellite tracking (Nova Software) - K4EME, Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer W48FJC GORDON Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles WA4FJC GORDON N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles AO-10, 70cm up 2m down Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM)			
Antenna 2 Coax for all Antenna's Coax for all Antenna's Amplifier 1 70cm, TE System 4450 175w - K4EME, Cowles Amplifier 2 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 Pre-Amp SSB Electronics SP-2000 2m under .8db 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 Antenna tripod & base Antenna tripod & base Antenna tripod & base Antenna from Same Same Same Same Same Same Same Sam			
Coax for all Antenna's Amplifier 1 70cm, TE System 4450 175w - K4EME, Cowles Amplifier 2 2 m, KLM 160w - K4EME, Cowles Amplifier 2 2 m, KLM 160w - K4EME, Cowles Pre-Amp SSB Electronics SP-7000 70cm LNA under 1db Noise Figure - K4EME, Cowles Pre-Amp SSB Electronics SP-7000 70cm LNA under 1db 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 Antenna tripod & base Antenna tripod & base Antenna Mast 2 5' and 1 10' sections of pipe - K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass Down Converter 2.4 ghz to 144mhz dcm 2400 to 144rx Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer A86 w / 14" monitor, running LogSal with Kansas City Tracker (Autotrack) - K4EME, Cowles Computer Computer For logging - K4PZC, Sandy - Digital Station Computer Log For logging - K4PZC, Sandy - Digital Station Computer Log For Sognon Power Strip Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles W4AFJC GORDON Power Cable Uights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation A0-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)			
Amplifier 1 70cm, TE System 4450 175w - 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-700M 70amp - K4EME, Cowles Power Supply Astron RS-700M 70amp - K4EME, Cowles Rotor and cable Yaesu G-5400B - K4EME, Cowles Antenna tripod & base K4EME, Cowles Antenna Mast 25 and 110 sections of pipe - K4EME, Cowles Antenna Mast 25 and 110 sections of pipe - K4EME, Cowles GPS Garmin 45XL, To Correct time & location - K4EME, Cowles Compass K4EME, Cowles Down Converter 2.4 gbz to 144mbz 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 Log CT = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power W4AFJC GORDON Power Cable Lights MASDN, NABCC BENNY Lights NABSL JASON, NABCC BENNY Lights NABSL JASON, NABCC BENNY Lights MADSL JASON, NABCC BENNY Lights MADSL JASON, NABCC BENNY Lights MADSL JASON (ABCC BENNY Lights MADSL JASON) Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)			
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 70-mp - K4EME, Cowles Power Supply Astron RS-70M 70-mp - 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 GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass 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 Log CT = FD03DI Computer Log CT = FD03DI Computer Log CT = FD03DI Computer Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, NABCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)		·	
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 Antenna tripod & base Antenna tripod & base Antenna tripod & base Antenna fipod & base Antenna Mast 3 Guy ropes and anchors GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass Down Converter Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Computer For logging - K4PZC, Sandy - Digital Station Computer Log Computer Strip K4EME, Cowles Backup Power Inverter Power WA4FJC GORDON Power Cable N4BSU JASON, NABCC BENNY Lights N4DSL JASON Info Packet Grounding AO-10, 70cm up 2m down (FM) UO-14, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)		,	
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 Antenna Mast 8 2 5' and 1 10' sections of pipe - K4EME, Cowles GPS Garmin 45XL, for Correct time & location - 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 Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)			
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 Antenna Mast 2 5' and 1 10' sections of pipe - 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 For logging - K4PZC, Sandy - Digital Station Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI R4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power W4AFJC GORDON Power Cable N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-29, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Pre-Amp	SSB Electronics SP-7000 70cm LNA under 1db Noise Figure - K4EME, Cowles	
Power Supply Rotor and cable Yaesu G-5400B - K4EME, Cowles Antenna tripod & base Antenna Mast 3 Gy ropes and anchors GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass Down Converter Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer Log Power Strip Backup Power Inverter Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights For logating K4EME, Cowles N4DSL JASON RAFEC, Sandy Planned Satellites for operation AO-10, 70cm up 2m down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM) VAEME, Cowles K4EME, Cowles K4EME, Cowles Computer Power Gown Gordon (FM) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Pre-Amp	SSB Electronics SP-2000 2m under .8db Noise Figure - K4EME, Cowles	
Rotor and cable Antenna tripod & base Antenna tripod & base Antenna Mast 3 Guy ropes and anchors GPS Garmin 45XL, for Correct time & location - K4EME, Cowles K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass 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 Log For logging - K4PZC, Sandy - Digital Station CT = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down JOscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Power Meter	Bird Trueline #43 - K4EME, Cowles	
Antenna tripod & base Antenna Mast Antenna Mast Antenna Mast Aguy ropes and anchors GPS Garmin 45XL, for Correct time & location - K4EME, Cowles K4EME, Cowles GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass Compass Compass Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI Fower Strip R4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON N4DSL JASON, N4BCC BENNY Lights Info Packet R4PZC SANDY Grounding K4EME, Cowles R4PZC SANDY Grounding AO-10, 70cm up 2m down Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Power Supply	Astron RS-70M 70amp - 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 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 = FD03DI FOWER Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON, N4BCC BENNY Grounding K4EME, Cowles FORDON AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Rotor and cable	Yaesu G-5400B - K4EME, Cowles	
3 Guy ropes and anchors GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass 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 = FD03DI FOWER Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable IN4DSL JASON, N4BCC BENNY Lights Info Packet K4EME, Cowles FORDON FOWER SANDY Grounding AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Antenna tripod & base	K4EME, Cowles	
GPS Garmin 45XL, for Correct time & location - K4EME, Cowles Compass 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 Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI Fower Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Antenna Mast	2 5' and 1 10' sections of pipe - 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 = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	3 Guy ropes and anchors	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 = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	GPS	Garmin 45XL, for Correct time & location - K4EME, Cowles	
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 = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Compass	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 = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Down Converter	2.4 ghz to 144mhz dcm 2400 to 144rx	
Computer Computer For logging - K4PZC, Sandy - Digital Station Computer Log CT = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Computer	Pentium Laptop for Satellite tracking (Nova Software) - K4EME, Cowles	
Computer Log CT = FD03DI Power Strip K4EME, Cowles Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-27, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Computer		
Power Strip Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Computer	For logging - K4PZC, Sandy - Digital Station	
Backup Power Inverter 12 VDC to 120 VAC - K4EME, Cowles Power WA4FJC GORDON Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Computer Log	CT = FD03DI	
Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Power Strip	K4EME, Cowles	
Power Cable N4DSL JASON, N4BCC BENNY Lights N4DSL JASON Info Packet K4PZC SANDY Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Backup Power Inverter	12 VDC to 120 VAC - K4EME, Cowles	
Lights Info Packet Info Info Packet Info Info Packet Info Info Info Info Info Info Info Info	Power	WA4FJC GORDON	
Info Packet Grounding K4PZC SANDY K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Power Cable	N4DSL JASON, N4BCC BENNY	
Grounding K4EME, Cowles Planned Satellites for operation AO-10, 70cm up 2m down Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Lights	N4DSL JASON	
Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Info Packet	K4PZC SANDY	
Planned Satellites for operation Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Grounding	K4EME, Cowles	
Oscar-20, 2m up 70cm down (JA) Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	9		
Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)	Planned Satellites for operation	AO-10, 70cm up 2m down	
Oscar-29, 2m up 70cm down (JA) Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)		Oscar-20, 2m up 70cm down (JA)	
Oscar-27 2m up 70cm down (FM) UO-14, 2m up 70cm down (FM)		•	
U O-14, 2m up 70cm down (FM)			
		• • • • • • • • • • • • • • • • • • • •	
AO-40, 70cm up 2.4ghz down		• • • • • •	

This station will be on the air only during passes of the orbiting ham radio satellites.

Satellite mode is one of the more unusual modes in the valley. Be sure to stop in and look at this station in operation.

Operating satellites is easier than you think!

Natural Power Station — Station #7

Natural Power Sta (#7) In Charge of Station Location Shelter Table / Chairs Tower / Mast Rotor Rall - N4XU KD5KA CHUCK, AA4RH RICE ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	HARD
Location ? Shelter ? Table / Chairs ? Tower / Mast ? Rotor ?	HARD
Shelter ? Table / Chairs ? Tower / Mast ? Rotor ?	
Table / Chairs ? Tower / Mast ? Rotor ?	
Tower / Mast ? Rotor ?	
Rotor ?	
T total	
Antenna 1 ?	
Antenna 2 ?	
Antenna 3 ?	
Antenna 4 ?	
Antenna 5 ?	
Coax for all Antenna's ?	
Radio ?	
Computer ?	
Computer Log CT=FD03NAT	
Power ?	
Gel Cell?	
Power Cable ?	
Lights ?	_
Info Packet K4PZC SANDY	
Grounding if needed ?	

The Natural Power Station will probably be one of the other stations, put on the air for a minimum of five contacts, using batteries which were charged from a solar panel.

Backups and Contingency Plans

Backups and Contingency	
2m all-mode Radio	N4BCC BENNY, K4NRA RAY
2m Amp	KU4XN GALE, K4NRA RAY
6m all-mode Radio	N4BCC BENNY, K4NRA RAY
Antenna Analyzer	
Antenna Tuner	N4DSL
Antenna Tuner	W4PJW
Antenna Tuner	
Anything Else?	Bring it just in case - All
Barrel Connectors	Bring it just in case - All
Coax	FD Committee - All
Computer / Keyboards	K4PZC SANDY
Generator - 5kw	N4DSL JASON
H.F. Radio - CW	W4PJW
H.F. Radio - CW	
H.F. Radio - Phone	N4BCC
KAM TNC multi mode	
PK-232 TNC	
Power Supply	N4DSL
Power Supply	W4PJW
Power Supply	
Rotor - HAM 3 or 4	KU4XN GALE
Rotor Cable	W4PJW JEFF
String / Cord for Dipoles	KE4GKD KENNY
SWR Bridge	N1QEQ BOB
Tarps	Bring it just in case - All
Tent for Main Generator, WV	N4YET RUSTY
Updated ver. Of Ct as backup	W4PJW
Wire	Bring it just in case - All

Bonus Points Responsibility

Bonus Points	
APRS	N4DSL, Jason - K4EME, Cowles
Packet	N4DSL, Jason
SSTV	N4DSL, Jason
Originate 1 Message to Section Manager	AD4TJ, David
Originate 10 Messages	AD4TJ, David
Public Offical	K4LXG, Ellsworth - N1QEQ, Bob
Satellite	K4EME, Cowles
W1AW FD Msg	AD4TJ, David - & ALL stations
GOTA	KZ1A, Mac - KE4FM, Bill
Display Table	N1QEQ Bob
ATV	K4EME, Cowles

Remember to sign up for the operating position, station, and time shift of your choice.

Each operating position will have a sign-up sheet.

Invite your friends to come up for a few hours and share the excitement of ham radio.

MARA/VARA

c/o David Fordham 131 Wayside Drive Weyers Cave, VA 24486

Phone: 540-568-3024 Email: fordhadr@jmu.edu

Return Service Requested

MASSANUTTEN AMATEUR RADIO ASSOCIATION, Inc.

President: Ellsworth Neff, K4LXG Vice President: Chuck Vogan, KD5KA Secretary: Todd Harrison, K4TMH Treasurer: Sandy Mullins, K4PZC Board (exp 03): Jason Armentrout, N4DSL Board (exp 04): Richard Haxton, KC3AN

http://mara.ws

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

Visitors are welcome.

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

MARA
PO Box 1882
Harrisonburg, VA 22801

VALLEY AMATEUR RADIO ASSOCIATION

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

http://www.gsl.net/w4mus

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

Visitors are welcome.

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