

Field Day 2006 By Don Russell, WA8YRS

The Mt. Vernon Amateur Radio Club once again participated in the ARRL sponsored operating event, Field Day. Mike McCardel, KC8YLD, and Don Russell, WA8YRS, co-chairpersons of the Field Day committee, proclaimed this years event a total success. 724 contacts were made throughout The United States and Canada.

This year, at the invitation of Knox County American Red Cross Director Dave Gore, the club set up at the ARC Training and Communications Center in Mt. Vernon Ohio.

The club members that helped with antenna and equipment setup where Mike McCardel, KC8YLD, Barry Butz, N8PPF, Jeff Butz, N8SMT, Jack Koelbl, N8JQZ, Larry "Doc" Heltzer, AA8WP, and Don Russell, WA8YRS.

Field Day setup started with the group trying to put a three element Tri-band beam antenna in the air. The idea was to put the antenna on one of the clubs telescoping masts. The antenna went together easy enough, but it was soon realized that the mast we were going to use was no match for the weight of the antenna. Although we did have a 30 foot tower, the set up crew was too small to raise the tower with the beam attached, thus plans for using the beam were scratched.

One 40 - 10 meter windom was set up for the 20 - 10 meter SSB station. The group was satisfied with the antenna being 30 feet up in the air, and pretty level at that. Not an inverted V. We used one of the clubs 30 foot masts, and the surrounding trees to accomplish this. Next antenna to go up was the 80 - 10 meter windom. This antenna was going to be used by the 80 and 40

meter SSB station. The group used Jeff Butz's 30 some foot fiber glass mast, a flag pole at one end, and the fence surrounding the property at the other end. The long end to the flag pole was pretty level. The short end going to the fence was low, but out of the way. SWR



Barry Butz, N8PPF and Mary Frances Bartle, KI0DZ

checks on both antennas were good for all bands, so the set up crowd was pleased with the work done thus far. One last antenna was put up. This one was a 40 meter vertical to be used on CW. It was put up Saturday morning. SWR check on it was excellent.

After antenna set up, the group started working on equipment set up. Everything was up and running except the CW station Friday night. We did, however, move the 80 - 40 SSB station to the upstairs Saturday before the event started. This was to reduce all the



FINAL UPDATE OF OUR FIELD DAY LOG

clashing noise between stations, had they both been located downstairs. The CW station was set up Saturday morning. It was placed outside on the back porch of the main building and ran off of a battery charged by a solar panel.

The logging software was networked using N3FJP's Field Day Network Software and a wireless router and laptops. Visit the N3FJP website at http://www.n3fjp.com/ and check out his software. There is something for everyone. The Laptop with the main database was hooked into the overhead projector and anyone at a moments notice could see how things were progressing. There was even a map up on the screen that would color in the states and providences as we worked them. Check it out in the picture above.

Food showed up half an hour before the operating started in the form of a meat and cheese tray. The original plan was to use this as an afternoon snack, and order Pizza for dinner. Dinner time came and went, but the snack tray seemed to satisfy everyone so no Pizza was ordered. David Gore of the Red Cross wanted us to test his generator, and that we did. We found out that the generator would not handle the whole building. We would either have to turn off the air conditioner, or use the generator to power the three stations only. Guess what we did!

The contest started out smoothly and on time. We had one station on 20 SSB and one station on 40 SSB. Due to lack of operators at the beginning, the CW station was not used. There did not seem to be any problems working stations, so everyone was happy.

The CW station was used starting at about the second hour of the event by Don, WA8YRS. With antennas so close together, there was slight interference to the two SSB stations. The power was kept to below 10 watts to minimize this interference, but contacts were plentiful. The few times that a station could not be logged, a momentary increase in power did the trick. All three stations were running smoothly at the time.

Early Sunday morning, some of the crew decided to take

a break and get some shut eye. This allowed Don, WA8YRS, to use the 80 - 40 meter SSB antenna to run some CW stations. With the bigger antenna, and being able to run more power without interfering with the other stations, about 200 CW stations were worked in short order. Then Don went back to SSB and had a really fun time running stations on that mode.

Sunday mid morning, the local "ham family" of Marty Bartle, KI0OQ, Mary Frances Bartle, KI0DZ, and Ryan Bartle, WD8DNL stopped by and did some operating.



Mike Deane, KC8JEZ

Mary Frances had the only true DX contact, which was with TI8CBT. Ryan had some fun on 15 meters, working several stations.



Mike McCardel, KC8YLD and Ryan Bartle, WD8DNL

Then came tear down, which went quickly, as we had a bit more help than when setting up. The Bartle Family stuck around and was a big help during tear down.

Thus ends another fun filled Field Day effort (say that five times real fast!).

ComPlOnents By Mike McCardel, KC8YLD

No Changes in Districting, After all

According to Ohio Section Mgr. Joe Phillips, K8QOE, the Ohio Section Emergency Coordinator, Frank Piper, KI8GW has announced a halt to any plans to change the current Nine Emergency District map for Ohio.



"I will be working with our DEC's and our served agencies to become educated to the final decision of any Ohio map change but do not expect any redistricting until at least 2007," Mr. Piper said, "Thanks to all the District EC's and ARES members who have given me their input on this matter showing there was enough concern to cause me not to push this topic too fast."

Former SEC John Chapman, WB8INY, had asked Ohio ARES members to comment on a plan to cut the number of districts from nine to eight conforming to the current Homeland Security Agency map of Ohio.

Field Day

A good time was had by all. In my humble opinion, the 2006 Field Day was a whopping success. The new Red Cross Training Center is an excellent facility for comfort and control. We set up a CW station on the back porch of the main red Cross office building, complete with solar panel and battery for making alternate energy contacts. We had a 6 meter and 20/10 meter station downstairs, and 40/80 meter station upstairs, in the Center. There was an information station near the Center's entrance. Coffee was perking in the kitchen and there was a lunchmeat platter available to cure any hunger. The really nice edition was the networked logging system, which also enabled us to project on the data projector downstairs. As we logged contacts from any station, the results were immediately logged and added to the display. In addition it displayed a Sections map of the United States. As we worked each Section the software colored in that section on the map. Before we were done we had colored in most of the map. We missed only Utah and Hawaii toward Working All States! We even had a DX from a TI station in Costa Rica. The event wasn't without its glitches. We found out about this early on when we first fired up the generator. We were hoping to truly test out the system for Red Cross. But while running emergency power we found that the draw from the air conditioners was too much for system and we browned out and the generator breaker flipped off. We tried running each air conditioner independently but the same thing happened. From this point on we ran the building power from the commercial grid and our radio equipment from the generator. When we browned out we

lost service to a power supply. The power supply was quickly replaced with a car battery I brought for back up. Eventually the battery was replaced with an extra power supply that Don Russell, WA8YRS had brought. It pays to be prepared for anything, and this is one reason why a Florida paper covering Field Day there referred to Hams as "the MacGyvers of communication". Challenges we still have to meet concern antennas. The antennas themselves worked well enough, but the close proximity of them to each other caused some interference, especially when we were operating CW.

Whereas set-up took a lot of time (about 4 hours), we were able to resolve some of the antenna placement issues we faced. The most fun of set up was using the Tennis Ball Launcher to get our wires high over the limbs in trees. Tear down, on the other hand went guick and we were loaded and ready to close up shortly after 3 on Sunday. Highlights were 724 QSO's. 318 were CW and 406 were Phone. Our attempts at working digital, via PSK31, during the event went unanswered, but we were able to complete 1 contact shortly before Field Day official began when we QSO'd with W4CU Tom Schaeffer from Seminole Florida at 16:10Z. We were able to make several CW contacts under solar power, sent an NTS message to Ohio Section Manager Joe Philips K8QOE, and I acted as station control while11 year old Ryan Bartels, and new tech, WD8DNL, made his first five HF contacts to assist us with extra bonus points. Red Cross representative James Hoey also visited us. I successfully received 3 SSTV transmissions just before we got started operating. When we add this to our pre FD publicity and other bonus scores. I think we will come close to 2004's totals, well surpassing last years.

WMVO Radio Initerview

On Tuesday June 22 I had the privilege of appearing with Barry Butz, N8PPF on WMVO with host Marty Trese. We answered questions about Amateur Radio and talked about the upcoming Field Day. During the half hour show, Ms. Tracy seemed genuinely interested in our conversation. Barry and I were worried about having enough to say, but when it was over we felt we were just getting warmed up. It was a fun experience and one we hope we can repeat in the future to promote local Amateur radio.

Kudos

David Patton KC8UTL and Mike McCardel, KC8YLD for making ARRL's Public Service Honor Roll. For May.

Mike Deane, KC8JEZ for rejoining us at MVARC

Don Russell, WA8YRS for leading us through field day one more time

To Barry Butz N8PPF, Jeff Butz N8SMT, Jack Koelbl

N8JQZ, Don WA8YRS, and Mike KC8YLD for being present at both set up and tear down

Kudos to Barry, Jeff, Don and Larry "Doc" Helzer AA8WP for holding the fort down and operating all night

To the Bartles, Marty KIOOQ, Mary Frances KIODZ, and Ryan WD8DNL who showed up so timely Sunday to relieve the tired and lagging to get those last few contacts of the day, and for staying through tear down

To all our visitors and fellow hams who stopped just to visit.

And to The American Red Cross, especially Dave Gore, Keith Hughes, and James Hoey who welcomed us so well into their Center and saw to our comfort during the weekend. Thank you.

Dick Huggins WD8QHY, Recovering

MVARC Trustee Dick Huggins, WD8QHY, was hospitalized father's day with chest pains. He spent the night at Knox Community in the ICU and was transferred to OSU in Columbus Monday June 21. He had surgery June 22. They put in two stints to clear two blocked arteries. Dick was released from the hospital and is convalescing at home. He has a lot of restrictions but is allowed to walk some and he has been back to monitoring and talking on the radio Please continue to keep Dick and Susan and their family in your thoughts and prayers.

Red Cross Board Approves Communications Project

Dave Gore of the American Red Cross reported to me, as I was writing this column, that the Red Cross Board approved his requests for their communications programs. We don't have full details as to what equipment and antennas will be included, but they will have their own antenna and radios (non-amateur) at the Red Cross site and a repeater (non-amateur) at the county antenna. Earlier this year, MVRAC agreed to assist Red Cross with labor and expertise in completing the project. We will be adding Amateur Radio antennas and ports for Amateur Radio equipment along with their equipment.

HAM HISTORY By Barry Butz N8PPF

Credit for this article goes to: International Electrotechnical Commission (IEC) http://www.iec.ch/100years/techline/

Many of the words we use in the radio and electronic fields have been derived from the names of pioneering scientists, engineers and inventors. I thought it would be

interesting to learn about some of them. The series begins this month with the inventor of the battery, Alessandro Volta (1745-1827), because where would we be without volts?

Born in Como, Italy, Alessandro Volta developed a teenage passion for electricity. After publishing his first paper at the age of 24 he was appointed professor of physics at the city's university in 1774. The following year he invented the first practical electrophorus, a pair of separable metal discs (linked by an insulator) that became the simplest and most convenient means of producing electrical charge for experimental research. Studying gas chemistry next, Volta isolated and identified methane, thereafter devising experiments to examine gas ignition by electric sparks. Such was Volta's reputation that he was soon appointed professor of natural philosophy (physics) at the University of Pavia in 1779.

In response to Galvani's theory of animal electricity, Volta argued that electricity was in fact produced by the contact of two different metals. He devised the 'condensing electroscope' to show that, for example, zinc and copper, acquired equal and opposite charges after being joined and then separated in air. As clinching proof of this 'contact' theory in 1800, Volta produced the first modern device to generate a continuous current without any animal tissue: a column of zinc and copper discs separated by pieces of wet cloth. The 'voltaic' pile or battery could, for the first time, show that water could be decomposed into hydrogen and oxygen; Sir Humphry Davy used it in 1807 to separate the elements sodium and potassium from their alkalis for the first time.

Volta's achievements were permanently recognized in 1881 when the standard unit of potential difference was named the 'volt'.

Next month: the story of André Ampère.

MVARC

Mt. Vernon Amateur Radio Club Minutes for the May 8, 2006 Meeting.

Attendees:

Ruben Clark	KB2SAI
Dave Patton	KC8UTL
Barry Butz	N8PPF
Mary-Frances Bartels	KI0DZ
Don Bunner	KB8QPO
Robert McBride, Sr.	N8QPM
Don Russell	WA8YRS
Zach McCardel	KC8YLE
Mike McCardel	KC8YLD
Tony R. Spiegel	KC8UR
Jeff Butz	N8SMT

President Ruben Clark (KB8SAI) opened the meeting at

6:25 P.M.

The minutes from the April 10th meeting were read and approved.

Bob McBride (N8QPM) reminded everyone of the upcoming SET this next Saturday and that everyone should be prepared to operate mobile with extra batteries and mobile mount antennas. Also, he will check with the hospital and make sure we are coordinated.

Don Russell (WA8YRS) reported that the repeaters are working normally. He also talked about the antennas he is considering for Field Day. They are a rotatable dipole and vertical HF antennas.

President Clark (KB8SAI) asked for a discussion of the Board of Director's Dues Proposal as published in the May newsletter. The motion to accept the Board of Director's proposal was made by Dave Patton (KC8UTL). A vote was taken and the motion passed.

Don Russell (WA8YRS) reminded everyone to bring their laptops to the next club meeting if you are going to use it during Field Day so he can set the logging software up to be used on a network.

The meeting was adjourned at 8:36 P.M.

MVARC Mt. Vernon Amateur Radio Club Minutes for the June 12, 2006 Meeting.

Attendees:

Ruben Clark	KB2SAI
Barry Butz	N8PPF
Jeff Butz	N8SMT
Don Russell	WA8YRS
Mike McCardel	KC8YLD
Dick Huggins	WD8QHY
Don Bunner	KB8QPO
Bob Bruff	N8PCE
Steve Dick	KC8YED
Robert McBride, Sr.	N8QPM
Larry Helzer	AA8WP

President Ruben Clark, KB8SAI opened the meeting at 7:10 P.M.

The minutes from the May 8th meeting were read and a motion to accept them was made by Dick Huggins, WD8QHY and seconded by Bob McBride N8QPM. The motion was approved.

Bob Bruff, N8PCE, made a Treasurer's report. Nothing has been received except 20 cents in interest from the bank and nothing has been spent. Therefore, we have a total of \$1771.54, which breaks down as \$782.88 in the Checking account, \$363.44 in the savings account and

\$625.22 in the repeater account.

Bob McBride, N8QPM reminded everyone of the upcoming severe weather and for everyone to join the weather nets if possible. He said the SET went well. He wants to get with the Red Cross to critique the exercise. One deficiency he noted is that not all Red Cross vehicles took a ham with them and one may have put themselves in harms way because of it.

Mike McCardel, KC8YLD reported that the local radio station will do an interview show and he asked if Barry Butz, N8PPF would accompany him for the interview. Barry agreed. He is going to try to get someone to demonstrate slow-scan/Amateur TV or APRS during field Day. He also plans to send messages to the ARRL section managers for extra points. The County Commissioners have been personally invited to Field Day and they have been requested to make June 18th to June 25th <u>Amateur Radio Week.</u>

Don Russell (WA8YRS) reported that the repeaters are working normally. Steve Dick, KC8YED reported the 440 repeater is repaired and he will give it to Barry Butz, N8PPF in the near future for reinstallation. Don mentioned there might be a possibility to install this repeater at the hospital. Field Day setup will start Friday at 2:00P.M. Everyone is invited to help. Don is planning on bringing a satellite setup to try for a contact. He described the software, written by N8JFP, that we will be using and that it will be networked so everyone will be able to see how everyone else is doing. We will be able to project it on the overhead screen. Don Russell (WA8YRS), Barry Butz, N8PPF and Jeff Butz, N8SMT brought their laptops tonight for a test run of the logging software and to set them up to use on a network.

The motion to adjourn was made by Bob McBride, N8QPM and seconded by Barry Butz, N8PPF. The motion carried and the meeting was adjourned at 8:34 P.M.

REPEATERS AND STUFF BY DON RUSSELL, WA8YRS

Since this is the Field Day issue, I will start right in on it. Of course, my favorite topic is antennas, so I would like to discuss our Field Day antenna set up, and some things we may do to improve them for next year. By the way, I



rarely take one antenna apart to make another one. I usually keep my old antennas for future use. I have enough antennas to support several disaster relief efforts!

This year, the main antennas were an 80 - 10 meter

windom, and a 40 - 10 meter windom. Okay, I know I had said in an earlier Newsletter that using windom antennas close together on different bands may not be a good idea due to the potential interference issue. However, our site Field Day site was a bit antenna limiting and this turned out to be the best solution. Now that we have one year of experience at the Red Cross, I have plenty of ideas on how to put up more effective antennas that would also eliminate some problems we had this year.

Problems? What problems? The antennas worked great. After all, we made 724 contacts! That is a good figure for almost any Field Day group! Well, yes, the antenna worked pretty well. In fact, I am not sure we can beat the antenna we used for the 80 and 40 meter SSB station. I thought the 20 meter antenna left some to be desired. There were a lot of stations that we could not get through to. In fact, I believe if we had worked all the stations on 20 meters that we had heard, our contact total would have been in excess of 800 contacts. It is true that we had the antenna running East and West, and maybe we should have been North and South so that the broad side of the antenna would be facing East and West. Perhaps the antenna radiates broadside, as in a standard 20 meter dipole. However, this antenna is one wavelength at 20 meters and generally, an antenna one wavelength long or longer radiates a lot off its ends with a few minor side lobes broadside to the antenna. After all, we did not have any problems working the East coast, just the West coast. We also had no problem working down into Florida, so who knows? Another problem with the windom antenna is that, being an unbalanced antenna, some feedline radiation is probable. This was mainly apparent at the 80 - 40 meter SSB station, as you would get a little "RF bite" if you touched the metal on the microphone. This problem is sometimes solved by installing an RF ground system. This system can be as little as running a 1/4 wavelength wire, for each frequency you wish to operate, from the grounding lug on the transciever to just about anywhere you want to route it (one the floor is good). A grounding wire may also be needed on the antenna tuner, if one is being used. This may or may not solve the problem and it would a year to year thing as to whether the problem can be solve. Therefore, I would like to eliminate the problem by simply switching to a different kind of antenna. But I digress.

I could almost kick myself for not thinking of putting up a loop antenna early Sunday morning when we were not breaking the pile-ups. I had two available in my box of tricks. It would have been interesting to see if the loop antennas we used last year were better than the windom that was being used this year. Now we will never know. I believe that the loops would certainly have gotten through to a few more stations. In fact, I have always said you need more than one type of antenna to use during a contest. A different antenna changes the radiation pattern and usually provides a few more contacts. Maybe next year.

Oh yes, what about next year? That is part of the fun of Field Day. While the adrenaline still runuth over, we begin thinking of how to improve things for next year. It happens every summer! For the 20 - 10 meter station, I would like to return to the two loop antennas that we had so much success with a couple of years ago. I would like to modify the loop antennas so that they are fed by coax only. Right now I have them being fed with 450 ohm open line into a tuner. This summer, I plan on converting this to coax and checking the SWR. From what I understand, the SWR of a loop antenna is usually under 3 to 1 on all frequencies higher than the designed frequency of the antenna. I will be checking this theory out and if it is in deed the case, the transceivers antenna tuner will tune these loop antennas nicely, and a 3 to 1 SWR will not create enough loss in the feedline to worry I would also like to try my bamboo dipole. about. Decided not to use it this year. Thought I might try it out this summer to see if it works well enough for Field Day. So, in theory, two different antennas should help keep the contacts rolling in. There is an antenna that they are calling the "Mystery Antenna". It is supposed to have about 3db gain over a dipole. The downside of this antenna is that for 20 meters, it would be 55 feet for each leg. The upside is if fed with open line feedline, it can be used on 80 through 10 meters, with some gain on all but 80 meters. I will check it out.

On the 80 and 40 SSB meter band, we may go back to the antenna we used a couple of years ago. This was a combination 80 and 40 meter dipole. It has one set of wires for 80 meters and one set of wires for 40 meters. The 80 meter wires are installed as horizontal as possible. The 40 meter wires droop a little bit under the 80 meter ones. This is the antenna the club used a few years ago when we made over 1000 contacts for Field Day. The down side would be that it does not cover the other bands. I would also like to install a vertical antenna for these two bands. Thus, you have two antennas, each with a different radiation pattern.

The CW station antenna...... Well, that is still a problem. This year we used a 40 meter vertical most of Saturday afternoon. We also used the 20 meter SSB station antenna for a while, and the 80/40 meter SSB station antenna for a while. All told, we probably only operated CW for six or seven hours..... And made 317 contacts! Lots of those were with about 5 watts to hold down interference! Looks like we may have cracked the 1,000 contact barrier this year had we stayed on CW longer (and not had to shut down an SSB station to use their antenna). I have some ideas, but will really have to do a little research on how to minimize interference between stations. The one mistake I did make this year was locating the 40 meter vertical used on CW physically close to the 20 meter SSB station. I mean it was right outside the window! And there was really no need to do that. I could have, should have located this antenna out

front, away from the station. Lesson learned!

All in all, it was a great weekend. I was a little disappointed that we did not have a few more club members participate. But the opportunity was there for those that wished to be there, and that is the best we can do.

See you at the July meeting.

Field Day Points Quick figure

CW	318		x 2 =		636
SSB	406		x 1 =		406
Sub Total					1042
Power Mu	ltiplier	x 2 =	= <u>2</u>	<u>)84</u>	
QSO Tota	l20	<u>84</u>			

BONUS POINTS

100% Emergency Power	<u>100</u>
Media Publicity	<u>100</u>
Public Location	<u>100</u>
Public Information Table	<u>100</u>
Message Origination to Sectional Mgr	100
Alternate Power for making Min.	
Of 5 QSO's Solar Power	100
W1AW Bulletin Copy	<u>100</u>
Red Cross Representative Visitation	<u>100</u>
Youth Participant 18 or Younger and	
Makes at least 1 QSO	20
(20 ea. Participants up to 100 pts.)	

Total Bonus Points	<u>820</u>
FD Total	2904

K8EEN scores from the past:

	Score	Category	QSOs Powe	erMult	Participan	ts
2005	2,226	3Å	568	2	25	
2004	3,282	ЗA	1,051	2	25	
2003	1,792	ЗA	477	2	13	

3F 2005 Great Lakes

1 KC8WIT 1,490 3F 222 2 OH 12 Huron Cty ARS 14TH Overall

2 WD8KAF 1,106 3F 278 2 MI 26 Branch Cty ARC 21ST Overall

3F 2004 Great Lakes

1 KC8CNN 2,420 3F 479 2 MI 15 Tuscola Cty ARC $10^{\rm th}$ Overall

2 KF4NTQ 2,246 3F 517 2 KY 13 Scott County ARES 11th Overall

3 KC8WIT 1,600 3F 293 2 OH 20 Huron Cty ARS 17^{th} Overall

4 WD8KA 984 3F 244 2 MI 22 Branch County ARC, Inc 22nd Overall

The Case of the Leaky Coax By Barry Butz, N8PPF

Several months ago I noticed a wet spot on the shelf in my shack. I looked for leaks and then noticed the water was dripping from one of the coax cables entering from outside. This particular cable came from my discone on the roof via the basement, then came <u>up</u> to the shack. In this case, water ran uphill.

After a suitable interval for contemplation and procrastination, I decided to replace the coax. (The indoor end rested in the wastebasket in the meantime.) After removing the coax I examined it carefully with some interesting observations. The coax was about 12 years old and was made with a gray outer layer. The first picture shows a section that wasn't exposed to sunlight. It looks more or less like new.



In another place, fully exposed to the sun, the cover was severely crazed and had an open crack.



The last photo is the most interesting of all. It is another severely weathered place. You can see where part was protected by electrical tape. If you look carefully you can see another place that was actually protected by the black printing on the surface!



My conclusion is that the gray insulation isn't as durable as black. I have TV feedline three times as old that is still in good shape and hasn't leaked yet.

Membership Form

Club dues run from Jan. 1 until Dec. 31 and are collected during the last quarter of the year. You can mail in the dues to the address below or bring them to a meeting. Dues Schedule: \$12 regular, \$10 for second member in the same family, for over 65 years of age, and for those living outside Knox County.

Mail Dues to: Mt. Vernon Amateur Radio Club, P.O. Box 372, Mt. Vernon, OH 43050

Name				
Call-Sign				
Street				
City	State_	2	Zip Code)
Phone Number				
License Class				
ARRL Member (Y/N)_	EMail_			
Extra Donation (Optior	nal)			
Members are entitled t	o a free N	IVARC	E-Mail a	ddress.
Would you like one?	No	Yes		
If yes please enter pas	sword			
The Mt. Vernon Amate	eur Radio	Newslet	ter. CQ.	is

The Mt. Vernon Amateur Radio Newsletter, CQ, is published monthly by the Mt. Vernon Amateur Radio Club.

Editor: Don Russell, WA8YRS

President:Ruben Clarke, KB2SAIVice President:Don Russell, WA8YRSSecretary:Jeff Butz, N8SMTTreasurer:Bob Bruff, N8PCE

Credits: Clip Art and Cartoons thanks to http://wm8c1.50megs.com/radio_clip_art.htm, http://www.qsl.net/k4adl/, http://pages.prodigy.net/kg0zz/clipart/ham_art3.htm, http://www.arrl.org/,

The ARRL letter is a weekly e-mail publication by the ARRL. You may read the entire ARRL letter by visiting the ARRL Web page at <u>http://www.arrl.org/</u>. Other News from: <u>http://ky4ky.com/fyi.htm</u>

Project OSCAR is a monthly column written for Newsletter Editors. Columns will appear as space permits. You may download all the articles yourself at: http://www.projectoscar.net/beacon.php

FIELD DAY PICTURES



Tony Spiegel, KC8UR



Jeff Butz, N8SMT and Larry "Doc" Heltzer, AA8WP



Marty Bartle, KD0OQ



Barry Butz, N8PPF and guests



Jack, N8JQZ, Mike, KC8YLD, and Jeff, N8SMT



Tony, KC8UR and Mike, KC8YLD



Jack Koelbl, N8JQZ and Steve Dick, KC8YED



Information Booth



80 Meter Windom Antenna



Slow Scan TV Demo

FOR SALE

<u>Umax e3470</u> document scanner. Scans pages up to 8.6 x 11.8". Has built-in light source in the cover for scanning negatives or slides, no attachments needed. Works fine.



Includes manuals, software for Windows or Mac OS9, mask for photo scanning, 12 volt 1 amp power supply, and USB cable. Price is \$30 or come to the next club meeting and get \$5 off! Contact Barry at 397-7540 or <u>n8ppf@mvarc.net</u>