Ham Radio Rocks!

The Mt. Vernon Amateur Radio Club

June, 2010 Newsletter

Meetings are held the 2nd Monday of each Month at 7:00 P.M. at the Knox County Chapter of the American Red Cross, 300 N. Mulberry Street, Mt. Vernon, Ohio

Local Ham Community

K8EEN Repeater: 146.790 Mhz (-600 Khz With PL of 71.9 Hz)
KD8EVR Repeater: 442.100 Mhz (+5Mhz With PL of 71.9 Hz)

Sunday Night ARES Net at 9:00 P.M. on The K8EEN Repeater
Wednesday Night Social Net at 9:00 P.M. on the KD8EVR Repeater

Field Day 2010

By Don Russell, W8PEN

The event many of us have been waiting on is just around the corner! Welcome to our annual Field Day Special Newsletter.

This years Field Day will again be held at The Floral Valley Community Center, 850 Crestrose Drive, Howard, Ohio 43028. We will be located in the rear, next to the ball diamond. Apple Valley will once again provide us with a very large tent to use during the event. As members found out last year, this is an excellent Field Day site with plenty of room for antennas, campers, or what have you. Make plans now to join us so that you will not miss out. ***Please check out the directions to our Field Day site at the end of this article.***

Don't forget our annual Field Day Club picnic on the Saturday of Field Day. We usually start eating a 4:00 P.M. or so. The club is providing meats, drinks, plates, and utensils. Members are to bring a covered dish. Bring a friend too! Please bring your own lawn chairs this year. I suspect chairs will be in short supply again.

Larry "Doc" Heltzer, AA8WP, is working hard to make this years picnic a success. You can help out by coming hungry and willing. Also come ready to operate and

The next meeting of the Mt. Vernon Amateur Radio Club will be June 14, 2010. at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, Mt. Vernon, Ohio. The program for this month will mainly concern setting up our Field Day wireless network to make sure all computers can access it. Any member that wishes to use his computer for logging purposes during Field Day will have a chance to install and test the software before Field Day.

Please remember to check into the long running Sunday Night ARES net at 9:00 P.M. on the K8EEN 2-meter Repeater.

Also check out the UHF net on the KD8EVR Repeater. This net runs each Wednesday at 9:00 P.M. and is a social net. Please join us for the fun of it.

Every Wednesday at 5:00 PM, MVARC club members meet at Wendy's, 522 South Main Street, Mt. Vernon, Ohio. Dinner Coordinator Dick Huggins, N8RDH, reports good turnouts for this event. Come share dinner with friends, or make new friends, by attending one or all of these events.

Join MVARC club members every second Saturday of the month for breakfast. Breakfast Coordinator Arlin Bradford, KD8EVR, reports good turnouts for this event.

****The next Breakfast will be June 12, 2010 at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road,* Mt. Vernon, Ohio****

have a good time. Should be a fantastic day for all.

Operations will start at 2:00 P.M. Saturday June 26 and last through 2:00 P.M. Sunday, June 27, However there will be a lot to do before hand.

As always, Field Day set up will begin at 2:00 P.M. Friday, June 25 with the antenna raising(s). We will need all the help we can get in this endeavor, so please come when you can and help out. It is understood that not everyone can help out that early in the afternoon. Last year we were at it until almost dark, so come when you can.

Equipment set up will be from early Saturday morning until the official start of Field Day. There will be 4 HF stations. One for 160 and 75 meters SSB (voice) and multiband digital, one for 40 meters SSB (voice), one for 20/15/10 meters SSB (voice), and one all band CW station (Morse Code). There will probably be one 6 meter SSB station. The club will operate as a 4A Club Portable this year, which means that we are a club or group operating 4 transmitters simultaneously. The 6 meter station is a VHF station and considered a free station to encourage operations on 6 meters, so it does not count in the total number of transmitters used.

What this means is that we need to limit our HF stations to four transmitters at any one time. It would be okay for one to bring their own radio and use it, however, he would have to let the Field Day Organizers know so we could shut one station down. I mention this only because we have a lot of new hams who may not be familiar with the Field Day rules. There has been a time or two in the past where someone has driven his mobile station up to our Field Day site and start operating. This cannot be done without permission or knowledge of the Field Day organizers. Doing so could keep us from submitting our Field Day score to the ARRL. In such cases, please ask before doing.

Directions to Field Day Floral Valley Community Center on Crestrose Drive

By Mike McCardel, KC8YLD

1. Take US 36 to the Apple Valley entrance (AppleValley BLVD - County Road 4A)
Stay left onto Apple Valley Drive
Follow Apple Valley Drive to Crestrose Dr
Left on Crestrose Drive
Community Center is on the left

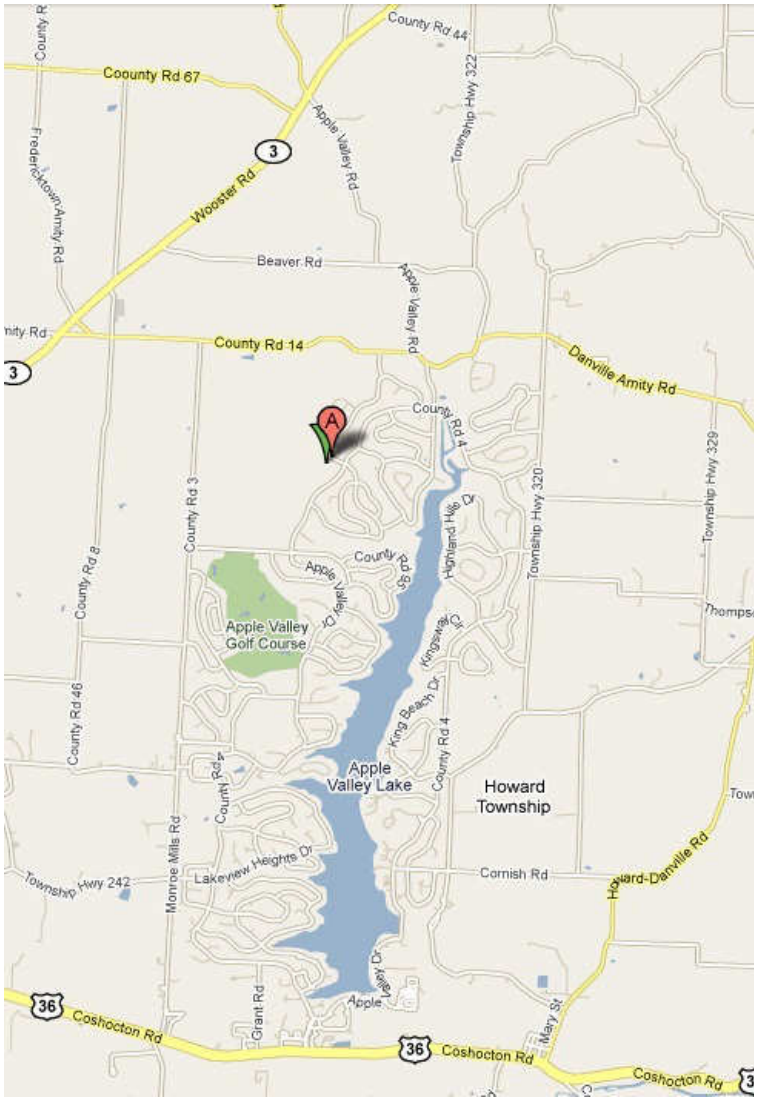
If you don't like the winding roads through the Apple Valley labyrinth try one of these alternatives

2. Right now Monroe Mills is closed at US 36
Take US 36 East to Gilchrist Road - County Rd 8.
Following Gilchrist there is a sharp left at Vincent Rd
After turning left to stay on Gilchrist turn at next right, Harding - TwpRd 245
Turn left on Monroe Mills - County Rd 3
Turn Right onto Floralwood Dr - County Rd 97 Then
Turn left onto Apple Valley Drive - County Rd 4
Crestrose Dr will be first road to the left

3. Take SR 3 to Amity
Turn Right (East) onto Danville-Amity Road - County Road 14
Turn Right onto County Road 84 Ridge Heights (aka Apple Valley)
Turn right onto Apple Valley Drive - County Road 4
Follow Apple Valley Drive to 2nd Crestrose Drive
(Note: the first road you pass is one end of Crestrose Drive, it will get you there but winds a good bit)
See maps on next page.
GPS Coordinates are

40 degrees 27.531' N (40.45885 Degrees N)
82 degrees 21.053' W (82.35083 Degrees W)

E. Michael McCardel



MVARC

Mt. Vernon Amateur Radio Club

Minutes for the May 10, 2010 Meeting.

By Jeff Butz, N8SMT

Attendees:

1.	Jeff	Butz	N8SMT
2.	Steve	Barr	KD8GR
3.	Nick	Alstatt	KD8NG
4.	Ralph	Hoffman	W8LFR
5.	Mark	Bisenius	AC8FV
6.	Don	Russell	W8PEN
7.	Austin	Godber	KD7NM
8.	Don	Blizzard	W8UM
9.	Ann	Bradford	KD8LF
10.	Arlin	Bradford	KD8EV
11.	Brandon	Hunt	KD8LP
12.	Ruben	Clark	KB2SAI
13.	Tony	Spiegel	KC8UR
14.	Ray Ann	Bradford	KD8NG
15.	Larry	Helzer	AA8WP
16.	Barry	Butz	N8PPF
17.	Jason	Bostic	
18.	Jim	Jennessee	KD8UT
19.	Michael	McCardel	KC8YL
20.	Kevin	Lauth	
21.	Jon	Dudo	

Vice President Spiegel opened the meeting at 7:07 P.M.

Treasurers Report: **Barry Butz, N8PPF**
Income for the last three Months:

Interest	$ 4.38
50/50	$17.00
Contributions to First Aid Training	$84.00

Expenses:
No Expenses

Balance: $2986.29
Field Day Fund $64.92

The Equipment Insurance Premium is due the first of the month in the amount of $75,00. Barry needs approval to pay the premium.

Old Business:
Austin Godber, KD7NMS made a motion for the club to pay the equipment insurance premium. It was seconded by Ruben Clark, KB2SAI and was approved by a show of hands.

Repeater Report: Don Russell, W8PEN
The repeaters are running fine. The 2-meter repeater has shown some odd phantom problems from time to time so he and Arlin are planning on visiting the repeater to tune it up. They may install the 100-watt amplifier that was recently donated to the club to improve performance.

Field Day Report: Don Russell, W8PEN
This year we will be operating 4 stations. 3 sideband radios and one CW radio. Don said he has the antennas figured out and we will be operating on all bands.
Don would like to have everyone bring their laptops to next meeting so we can set up the logging software and the network ahead of time.
We will set up the antennas Friday afternoon.

Skywarn: Ruben Clark, KB2SAI
We had Skywarn training last month and we had about 45 attendees.
The tour de cure bicycle event is scheduled for June 5th. We need two more volunteers.

Emergency Vehicle Report: Arlin Bradford, KD8EVR
Arlin still has not received the letter and documentation for the transfer of the vehicle from the City.

New Business:
Mike McCardel made a motion for the club to form a website committee consisting of the Web Master, the Newsletter Editor, the President, The Public Information Officer and any others, as designated by the President. The motion was seconded by Barry Butz, N8PPF and was passed by voice vote.

Austin Godber, KD7NMS made a motion for the club to take the Emergency Vehicle, when we acquire the vehicle, to Mt. Vernon's First Friday events for club promotion. The motion was seconded by Mike McCardel, KD8YLD and was passed by voice vote.

A motion was made by Jim Jennessee, KD8UT to reimburse Arlin Bradford, $129.00 for the purchase of club banners for the Emergency Vehicle; the motion was seconded by Steve Austin, KD7NMS and passed by voice vote.

A motion to adjourn the meeting was made Austin Godber, KD7NMS and seconded by Barry Butz, N8PPF. The motion passed by voice vote and the meeting was adjourned at 8:47 P.M.

Treasurer's Report

June 1, 2010
for May 1 to May 31, 2010

Balance on 5-1-10:		$ 2986.89
Income:		
Interest:	$	
Dues:	$	
Donations:	$	5.00
50-50:	$	11.00
Expenses:		
Banners:	$ 129.00	
Balance on 5-31-10:		$ 2873.89
Designated Funds:		
Year 2005 Repeater Fund:	$ 364.94	
Field Day Fund:	$	64.92
Communication Vehicle Fund:	$	540.18

Barry Butz N8PPF

Field Day: The Plan

By Don Russell, W8PEN

There are a few changes for the clubs Field Day this year. We will be trying two or more new antennas, adding 160 meters to our station capabilities, and setting up a fourth station. Yes, this year we will be saying: **4 Alpha Ohio** instead of **3 Alpha Ohio** that we have been for as long as I can remember.

The reasoning for adding a fourth transmitter for the group is that during the day there are more than enough operators available to operate four stations. During the evening hours the number of operators are limited; however, it is felt that we want everyone to have a chance at operating and adding a fourth transmitter will

help accomplish this. Adding an extra band with 160 meters will also help bring in more contacts. At least that is the plan.

Actually, we will have more than four stations set up. A fifth station for VHF/UHF will be set up. According to Field Day Rules, VHF and UHF count as a free transmitter and does not add to your transmitter class.

There is still some talk about setting up a GOTA station, however, last years was not too successful and we will just let new operators use the main stations, with guidance from us pros of course.

There is also the possibility of setting up a Satellite Station. This would give us additional bonus points, however, we will have to make sure that we shut down one of the main stations while doing satellite work. The satellite station does not count as a free station like the VHF station does.

To round out our plans, one station will be capable of running the digital modes, providing additional contacts.

Of course, Doc AA8WP, is planning a huge eat feast so come Hungry! As usual, we will finish off any left over Field Day food at the July meeting!

Want to check out the Field Day rules before Field Day starts? See this web page:

http://www.arrl.org/files/file/2010%20Rules.pdf

If interested, one may also download the complete Field Day packet here:

http://www.arrl.org/files/file/2010%20FD%20Packet%20February%203.pdf

Here is a rundown of the anticipated Field Day station set up. Nothing here is etched in stone. Things will change as the need requires. We will stay flexible.

4- stations: 4A (4 Alpha)

Station 1

Main Bands: 160 - 75 SSB
Capable of: 160 - 10 SSB, CW, Digital

Antenna: 160 meter doublet (160 meter dipole fed with ladder line into an antenna tuner)

Antenna and Rig supplied by KC8YLD

My guess is we will try digital during the day and push for 75 and 160 meter contacts during the evening when those bands are open. Of course, there is nothing wrong with checking this bands during the day. Should be plenty of Ohio stations operating Field Day.

Note the CW (Morse Code) capability. If we have extra CW operators, this station can be used by them during the day when not doing digital.

Station 2

Main Band: 40 SSB
Capable of: 80 - 10 SSB

Antenna: 80 meter doublet (80 meter dipole fed with ladder line into an antenna tuner), or 80 - 10 windom antenna, or the 80 / 40 dipole used last year.

Antennas supplied by W8PEN

Rig Supplied by KD8EVR

40 SSB has been a very good band for us almost every Field Day.

Station 3

Main Band: 20 SSB
Capable of 40 - 10 SSB.

Antenna: 3 element beam or 20 meter Extended Zepp (3 DB gain). Plus 40 - 10 windom.

Rig supplied by KB2SAI

Antennas supplied by KD8EVR and W8PEN

The 3 element beam be use last year did a heck of a job for us. It should be available this year too. However, the Extended Zepp up high would be an excellent substitie, plus, it can be used on the other bands.

Station 4

Main Bands:160 - 10 CW
Capable of: SSB and perhaps digital if needed.

Antenna: 160 meter windom.

Antennas supplied by N8SMT

Rig supplied by W8OIO

We will want to get this antenna up as high as possible. I am looking forward to a very good CW station. Adding 160 meters should provide an additional 100 contacts or so if the band is in good shape.

Logger

Field Day Network Logger by N3FJP

Wireless network provided by KB2SAI, W8PEN, or

N8PPF.

Database computer provided by KD8EVR

Needs tested before FD!

Point 1

All stations can work any band that there is an antenna available for. That is the beauty of the N3FJP Network FD logger. One should ask before operating a band just to make sure no other station is using that band/mode. Even though the logger will warn that a station is already using a particular band and mode, I have seen this warning ignored (or not understood) a few times. Please double check before using a station on a band other than its designated band. More than one station on the same band/mode is against FD rules.

Digital will be available from station 1 and perhaps the CW station only.

Point 2

All stations on battery power. Or we can use the quite generators from KD8EVR and N8PPF. I stress the word "quite"!

The last two years has seen our Field Days run mostly from battery power. We can always use extra batteries. Please make sure the battery you are offering for use is fully charged before Field Day and is of the Deep Cycle battery type. An ordinary car battery will not last long as a station battery and if could be damaged if discharged to the extreme. Deep cycle batteries are designed for this type of current drain and typically will last most of the Field Day period. I would like to see two batteries per station. One would be the backup in case the other battery goes dead before the end of Field Day. May be a good idea to switch batteries half way through Field Day just to keep things going and power levels up there.

Point 3

Field day will only be as successful as club members make it. This is by far our biggest event of the year and we will need a lot of bodies, equipment, and expertise to pull off another great Field Day.

Please reserve Field Day weekend for joining us. Field Day is always the fourth weekend in June. This year it is June 26 - 27. Field Day operations start at 1800 UTC Saturday (2 PM local time) and will continue to 1800 UTC Sunday (2 PM).

On Friday, June 25, we will be begin setting up antennas at 1800 UTC (2 PM). This is the earliest we can start setting up per Field Day rules. Typically, we work until dark.

Please join us for this fantastic event.

Saucy Pork Chops for Field Day

(For people > 6 just increase proportionately)

6 Pork chops
1 Medium onion
1 10-1/2oz Cream of Chicken or Mushroom Soup
1/4 Cup Ketchup
2-3 TBS Worcheshire Sauce

Brown both sides of chops, then poor sauce over chops. Cook on medium for 1 hour or until done.

From: Betty Crocker Recipe Book.
Submitted by Chuck Russell, AC8R

From The Log of N1GTZ

(From N1GTZ)

Editors Note: Received an email from N1GTZ about the Hurricane of 38. Never heard of it before, but additional reading did prove interesting. One may wish to read this web page first. Sorry, could not locate the video Phil was referencing.

http://www.americanheritage.com/articles/magazine/ah/1969/5/1969_5_10.shtml

Date: Tue May 18, 2010
Medication: Out of Azor
Meal: 9:50am
Medication
Meal: 8:40pm
Medication
Misc Readings: none

Comment…… COFFEE, I need coffee! I'm going to wake with trouble this morning, I can see that! Let me get my coffee... Ahhhhhhhhhh The "American Experience" show on the 1938 hurricane was simply amazing! Living in a world WITH radar and where everyone is instantly connected, then to go back to a world where so many could get nothing at all in the way of instant info is amazing. Not just a completely incompetent NWS but everything else! That day's newspapers were a clean miss but no surprise there for a fast moving storm. Telephones were a mature technology, so was radio, but few could afford telephones, or had the wires yet, in the middle of the depression. Radio also was a mature technology, nearly everyone had it, but also dependent on the NWS, AND THEY DIDN'T FORECAST THE STORM. Sorry, a hour or two is not much of a forecast! Don't that sound

familiar? Still they have their place and I have to respect that, had people listened or even had the ability to listen many hundreds of lives could have been saved. Still THE REASON THE NWS GAVE FOR NOT BEING FASTER was a classic, and they still use it in one form or another!

Given broadcast radio; incompetents, pure and simple. And broadcast radio out of New York City at that! So, as hundreds of years before, many just had a local feeling of what was to happen and had to go with that. That and a barometer! That saved a few anyway, but not many. Afterward everything was down, or gone, but a local Ham got mentioned and kept traffic moving! Good for him! (or her) That hasn't changed a bit. [Time to charge batteries! I'm joking, mine are done!] Then there was the family that, using part of their destroyed house as a raft, was blown across the bay in R.I. and ended up in Connecticut! They all lived while all around them died. That gave them a different perspective on life! I know how they felt so I know it wasn't easy for them afterward. Had I been alive at the time I would have been hit by this storm too. I grew up on the south shore of Long Island. All that was destroyed by this one storm. Then, as now I would have been seriously into radio as a kid. I would have had a single hour warning, but it would have been enough. I must credit the NWS where credit is due. (see Sunday, Sept 14, 2008) grew up in the exact place, but not the correct time. I was 25 years too late yet I do remember being intensely curious about this storm when I heard about it as a kid living on Long Island. I played on the identical barrier beaches and in the same and put there by this hurricane. They didn't exist before, not in their 1963 form anyway. They called it "Fire Island."

The last Ham Radio meeting I was able to attend back in January downplayed disaster preparedness in favor of fun and games. (ie. play) Yet given the above I have to seriously question this approach now. The fun and games path is a way to get kids into the hobby, no question, yet wouldn't disaster preparedness also work as a way to get serious kids into the hobby as well... For life? I believe it would and, for sure, seriousness is what we want! They did at one time, are kids no longer able to do this? I don't believe that for a second and I have history on my side. Given the life and death seriousness of the situation kids have always come through, and are VERY ABLE to do this! I don't believe this has changed, we just need to give them a chance. In this case fun and games is what we don't want! Too many lives are at stake. Maybe it's time we just ask some "kids."

Time to get set-up for NOVA tonight. Another hurricane.. Katrina

Field Day from Somewhere!

Tech Test Gets a Little More Technical

By Dan Romanchik, KB6NU

Ever since the FCC dropped the code requirement and the Novice license exam, the Technician Class license has really been misnamed. Being the first license that most hams obtain, it really should have been called the Novice license. The question pool was arguably at the appropriate level for newcomers to amateur radio, being heavy on rules and operating practices, and perhaps a little light on technical topics.

That's about to change. On July 1, 2010, the question pool for the Tech test changes, and this version has noticeably more technical questions than the previous test. You could say that the Tech test is getting, errrr, a little more technical.

For example, the new question pool contains more questions about electronics components and their functions. In addition to that, examinees must also be able to identify the symbols for these components on a schematic diagram. This is a big change from the previous test, which had no diagrams at all. There are also more detailed questions about transistors and how they work.

There are also questions on how to make basic measurements with a multimeter how to troubleshoot basic problems that Technicians are likely to encounter. One question asks, "What two measurements are commonly made using a multimeter"? Answer: voltage and resistance. A follow up question asks, "What is the correct way to connect a voltmeter to a circuit"? Answer: in parallel with the circuit.

To make room for these questions, the committee dropped questions on operating practices and rules and regulations. In general, these are not big losses, but two questions that I was sorry to see go are the questions on the "basis and purpose" of amateur radio. I think these are very important for new amateurs to learn and keep in mind. If you don't recall them, go the following web page and review them.

http://www.arrl.org/part-97-amateur-radio

By the time you read this--or shortly thereafter--the new version of my No-Nonsense, Technician Class License Study Guide should be available. You can download it free of charge from my website, www.kb6nu.com. Look

for the link in the right-hand column. It's currently in the hands of more than two dozen reviewers, who are proofreading it right now.

While it may not be in the initial release, I plan to include a section that contains links to websites that cover topics included in the study guide. That way, students can find more information on a topic, if they choose to do so. If you have any favorite websites that discuss making measurements with voltmeters or how to read schematic diagrams, I'd love to hear from you.

==========

When not updating his No-Nonsense amateur radio license study guides, you'll find him on 40m, 30m, 20m, and if we ever get any sunspots to stick around, 15m and 10m pounding brass. You may even hear him trying to get the hang of using the bug he bought at Dayton this year. You'll find his blog at www.kb6nu.com, and you can e-mail website suggestions to cwgeek@kb6nu.com

CW Hints for Field Day

By Don Russell, W8PEN

If you like Morse Code, Field Day is an excellent way to get a huge dose of the mode. If you do a lot of CW operating, then Field Day should be no problem for you. However, I usually need to prepare for Field Day and operating CW. Lately, the only time I have been on CW has been during contests. And my contesting activity has slowly dwindled the past 5 years or so. The last contest I worked was the ARRL 160 meter CW contest back in December 2009. I always need a way to wipe off the dust, mostly my copying capability. Field Day CW contacts range right around 20 WPM and up, so jumping into the fire after a 6 month layoff is not the way to go. When I do this, it takes me several hours to really get into it and find some sort of confidence level.

For the last four or five years, I have developed a routine to help peek my copying abilities for a specific contest I wish to participate in. Prior planning is a must for this!

I use two free programs to brush up on my skills:

Morse Runner:

http://www.dxatlas.com/MorseRunner/

This is a contest simulator of the CQ WPX contest. It has many features and you actually feel like your are in a real live contest. There is QRM, QSB, bad operators, weak signals. Just about anything you would run into during a contest, this package has it!

The software simulates you calling CQ and running a frequency. You can even use your callsign (or the clubs for that matter) to make it that much more real. The object is to accurately log each station call letters and the contest exchange. The contest exchange is simply the contact number and CQ Zone. I limit each of my practice sessions to 10 minutes and use this program at least once a day starting two weeks before Field Day. The CW speed is adjustable and I find I am always increasing the speed a bit about every other day. Since most stations calling you (simulated) usually send slower than the speed you have set up for your transmissions, I usually aim for about 35 WPM. Then, most stations you are copying are sending at 20 - 35 WPM. It varies, just like in a real contest.

After my 10 minutes of fame with this contest simulator, I like to sit through a of RufzXP:

http://www.rufzxp.net/

"**Rufz**" is the abbreviation of the German word "Rufzeichen-Hören", which means "Listening to Callsigns". Rufz starts out at a set speed determined by the operator. The object is to accurately copy 50 callsigns during a session. The program will send a callsign and you type it in. It is that easy. If you copied the call correctly, the program sends another callsign at a slightly higher speed. I you made a mistake, the programs sends the next callsign at a slower speed. If your not sure of the call and want a repeat, one may press the F6 key and the call will be repeated. This works only once though. You cannot continually hit F6 until you get the call correct.

This is a really fun program and can dramatically increase the speed at which you can accurately copy callsigns. Does not help practice the exchange, but if you can copy the callsign, you should have no problem with the Field Day exchange.

Now you know. My secret weapon. Start using these two programs once a day two weeks before Field Day and you will arrive at the FD site ready to operate.

Hint to SSB ops: Learn Morse Code before using these two programs. Let the competition begin.

Did I see a roll of the eye there? There are a few other programs that one can use. I even hear that there is one for the SSB operators, but I have not ever run into that particular program. That would be sort of interesting though.

Did I mention that I am really looking forward to our annual CW / SSB war? See you all Field Day…

Editors note: Barry Butz's son, Craig Butz, KJ6DYP, participated in this balloon experiment and sent me this news release for interesting reading:

DRAFT PRESS RELEASE

Contact: Pamela Snellgrove
415 561-5800, ext 103
Email: psnellgrove@bayschoolsf.org

FOR IMMEDIATE RELEASE

HIGH SCHOOL ASTROPHYSICS STUDENTS LAUNCH SPACE BALLOON TO ALTITUDE OF 75,000 FEET TO COLLECT ATMOSPHERIC DATA

San Francisco—May 24, 2010—On May 22, 2010, students from The Bay School of San Francisco launched a 8-foot diameter helium balloon, carrying a payload that included a video camera, temperature and pressure sensors, and tracking equipment to "the edge of space." The flight lasted 1 hour, 20 minutes and the payload travelled 85 miles. The balloon reached an altitude of 75,000 feet before bursting, twice as high as commercial airliners fly, and above 95% of the earth's atmosphere by mass.

Led by astrophysics instructor, Richard Piccioni, and research instructor Craig Butz, the students spent a week in March designing and building the probe, dubbed Ikaros I, as part of the school's annual Intersession Program, a week of hands-on, experience-based classes that are a central part of the Bay School's forward-looking college preparatory curriculum.

After several additional meetings to complete the craft, the team traveled to Carmel-by-the-Sea for a noon launch. After inflating and releasing the balloon, they tracked the payload's GPS location sent by an Automated Packet Reporting System transmitter and a cell phone programmed to report its location through mobile internet.

As the vehicle flew over Pinnacles National Monument, the group followed it from Carmel River State Beach to the Central Valley and located the balloon on a hillside along an uninhabited stretch of I-5 south of Mendota.

During the flight, the payload got a taste of the harsh conditions beyond the protection of the Earth's atmosphere. Temperatures dropped as low as 50 degrees below zero and atmospheric pressure was 5% of what it is at sea level.

In the coming weeks, the students will be analyzing the data about temperature, pressure, and atmospheric composition they retrieved, posting a video of the mission online, and discussing goals for Ikaros II.

The Bay School of San Francisco is located in the Presidio of San Francisco and offers a rigorous high school program focused on the skills and areas of knowledge that are vital in preparing students for the rapidly changing, interconnected world of the 21st century.
Students involved in the Ikaros I project are:

Flight day:
Robin Cassatt-Johnstone
Sam Green
Jesse Greenfield
Meyer Jacobs
Greg Karp-Neufeld
Lucas Peck

Design and construction:
Willie Caldwell
Ben Gershbein
Ian Matthews
Tom Mitchel
Daniel Stuff
Noah Tuchow.

Mt. Vernon ARC Officers

President:	**Arlin Bradford, KD8EVR**	**kd8evr@mvarc.net**	**Phone: 740-627-0922**
Vice President:	**Tony Spiegel, KC8UR**	**tony516@embarqmail.com**	**Phone: 740-392-7586**
Secretary:	**Jeff Butz, N8SMT**	**Jaylynn@copper.net**	**Phone: 740-965-9368**
Treasurer	**Barry Butz, N8PPF**	**n8ppf@mvarc.net**	**Phone: 740-397-7540**

Newsletter Credits
Editor: Don Russell, W8PEN

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 http://www.arrl.org/. **Other News** from: http://ky4ky.com/fyi.htm.

The ARES E-Letter is an e-mail digest of news and information of interest to active members of the ARRL Amateur Radio Emergency Service (ARES). Past issues of The ARES E-Letter are available at http://www.arrl.org/ares-el/. Issues are posted to this page after publication.

Members are encouraged to send articles pertaining to ham radio, with an emphasis on local activities, equipment reviews, and personal experience to w8pen@arrl.net or Don Russell, W8PEN, 815 Brookwood Road, Mt. Vernon, Ohio 43050

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 are prorated for new members at the time of application. Visit our Web Page at www.mvarc.net

Dues Schedule: $12 regular

$10 for second member in the same family, for those over 65 yrs. of age, and for those living outside Knox County

Mt. Vernon Amateur Radio Club, P.O. Box 372, Mt. Vernon, OH 43050

Name_____Call-Sign_____

Street_____

City_____State_____Zip Code_____

Phone Number_____License Class_____

ARRL Member (Y/N)_____E-Mail_____

Extra Donation (Optional)_____

Members are entitled to a free MVARC E-Mail address. Would you like one? No_____Yes_____

If yes please enter password_____

Other Comments: