

The Mt. Vernon Amateur Radio Club March, 2015 Newsletter



Meetings are held the 2nd Monday of each Month at 7:00 PM 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) K8EEN-R Echolink Node: 809800 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 S. Main St. Wendy's Dinner at 5:00PM Friday Breakfasts at Hardy's at 10:00AM

SKYWARN® Severe Weather Spotter Training

Knox County Emergency Management Agency in cooperation with the Knox County Amateur Radio Emergency Service (ARES) and the National Weather Service will be conducting SKYWARN® Severe Weather Spotter training on March 4th. Registration will begin at 6:00 P.M. with



the course beginning at 6:30 P.M. The training will be held at the Knox County Memorial Building. The training is free of charge and no preregistration is necessary.

The effects of severe weather are felt every year by many Americans. To obtain critical weather information, NOAA's National Weather Service (NWS), part of the U.S. Department of Commerce, established SKYWARN® with partner organizations. SKYWARN® is a volunteer program with nearly 290,000 trained severe weather spotters. These volunteers help keep their local communities safe by providing timely and accurate reports of severe weather to the National Weather Service.

SKYWARN® storm spotters are part of the ranks of citizens who form the Nation's first line of defense against severe weather. The class comes during Severe Weather Awareness Week (March 1-7), so it's a great time to get involved. For more information on SKYWARN® visit:

http://www.nws.noaa.gov/skywarn/.

Calendar of Events Mt. Vernon Amateur Radio Club

- Mar 9: Mt. Vernon ARC meeting. 7:00 PM at the Knox county Red Cross Training Center, 300 N. Mulberry St, Mt.Vernon, Ohio
- Mar: Announced Dxpenditions: http://www.ng3k.com/Misc/adxo.html
- Mar 4: Dinner at Wendy's on S. Main St. 5:00 PM
- Mar 4: Skywarn® Spotter Traning. See article on page 1.
- Mar 6: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Mar 11: Dinner at Wendy's on S. Main St. 5:00 PM
- Mar 12: General Class Course starts at the Training Center. Contact DonRussell at <u>w8pen@arrl.net</u> if interested.
- Mar 13: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Mar 14 Breakfast at Allison's Finer Dinner, 11587 Gilchrist Rd. 9:00 AM
- Mar 18: Dinner at Wendy's on S. Main St. 5:00 PM
- Mar 19: General Class Course at the Training Center
- Mar 20: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Mar 25: Dinner at Wendy's on S. Main St. 5:00 PM

*** Continued on Page 2 ***

Ruben Clark - KB2SAI

Emergency Coordinator, Knox County ARES

Email: kb2sai@mvarc.net

Cell: 740-501-81

Technician Class Graduates Thirteen

The Technician Class Course sponsored by the Mt. Vernon Amateur Radio Club graduated 13 new hams during VE testing at the Mt. Vernon Public Library.

Ten of the students passed their Technician Class test. Three other students passed their Technician Class test and proceeded to take and pass the General Class test.

New Technician Class hams are Bryan Hockenberry, Dmitry Shelchkov, Mike Liston, Robert Turner, Bob Paulino, Bobbie Robey, Sally Kerwood, Tim Light, Ed Liddle, and Ron McGlone

Those passing both the Technician and General tests were Richard Wetzel, Terry Windsor, and Scott Majors.

Next up is the General Course beginning March12, 2015. It will be held at the Red Cross Training Center. Prerequisite is the Technician Class License. Students must purchase their own ARRL General Class Licensing guide, However, there are a limited number of these books available on a first come first serve basis by local hams who have already upgraded.

A special thanks to E.Mike McCardel, KC8YLD, for being lead VE during this test session. There is lots of work and Knowledge that goes into testing prospective hams. This task was made a lot easier under Mike's direction.

MINUTES OF MVARC FEBRUARY 9TH, 2014 MEETING

Meeting called to order by President KC8EVS at 7:04 PM.

Motion to approve minutes of January 12th, 2015 meeting. Made by K8ACE, 2nd KD8WSI, approved.

February Treasurer's report read for KC8UR by KD8UT; \$1307.48 savings, \$580.73 checking, CD#-1 \$578.91, and CD#-2 \$811.18. Paid expenses- \$50.00 to W8PEN to cover printing and mailing cost of newsletter and Technician class study materials. Motion to approve Treasurers report- made by W8PEN, 2nd W8TW, approved.

Calendar of Events Continued from Page 1

Mar 26: General Class Course at the Training Center.

- Mar 27: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Apr 1: Dinner at Wendy's on S. Main St. 5:00 PM
- Apr 2: General Class Course at the TrainingCenter
- Apr 3: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Apr 8: Dinner at Wendy's on S. Main St. 5:00 PM
- Apr 9: General Class Course at the Training Center
- Apr 10: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Apr 11: Breakfast at Allison's Finer Dinner, 11587 Gilchrist Rd. 9:00 AM
- Apr 15: Dinner at Wendy's on S. Main St. 5:00 PM
- Apr 17: Breakfast at Hardy's on Coshocton Rd 10:00 AM
- Apr 25: NVIS Antenna Day
- June 27: ARRL Field Day June 27 June 28, 2015 http://www.arrl.org/field-day

OLD BUSINESS

Go Box report- Still waiting on the equipment to complete the project.

Repeater report- W8PEN all ok.

W8PEN reported the Technician class is progressing well and the VE testing session will be held at the Mt. Vernon Library on February 28th from 1 to 4 PM.

W8TW announced that the family of David Byrd had set the prices they would like to receive for David's equipment. Yaesu FT-950 \$1500.00, HF Amplifier \$1000.00, and various other pieces of equipment \$500.00. Contact W8TW for more information.

W8PEN reported on the upcoming NVIS antenna day, and reminded all members that they are encouraged to participate in this event if possible. Event site is yet to be determined.

KC8EVS reported that the Letter to Mayor Mavis thanking the City for the past use of the returned EMCOMM Vehicle had been sent to and received by the City.

<u> The Mt. Vernon Amateur Radio Club</u>

KB2SAI stated the Sunday Night ARES Net script would be added to the MVARC Website. He also stated additional Net Control Stations were needed. KC8BB agreed to be the new 1st Sunday Net Control Station, and KD8WSI will be the new 3rd,

and as needed, 5th Sunday Net Control Station. W8PEN stated he will be the back-up NCS when KD8WSI isn't available for the 3rd Sunday. The following stations would continue as net controls. AC8FV 2rd Sunday, and KD8HSA 4th Sunday.

KB2SAI then advised the group that due to re-alignment, the Knox County ARES was now a part of District 7 which is located in the central part of the state and based out of the Columbus area.

Our weather Nets with the National Weather Service will still be controlled from the Cleveland NWS office. He stated that due to manpower problems, this year's SKYWARN training will be conducted via an internet class. The tentative date for this training is Wednesday, March 4th, at 6:30 PM. The classes will be held at the Knox County EOC. Contact Ruben for further details.

Lastly, KB2SAI stated that the Arnold Classic being held March 6th to the 8th in Columbus was looking for ARES volunteers to provide communications personnel for the event. This would be a 6 hour commitment. If interested contact KB2SAI for further details.

NEW BUSINESS

KB2SAI reported that the Domain Name for our website was up for renewal. KD8UT moved, and K8AEC 2nd the club renew the Domain Name for another 5 year term. Approved.

W8PEN moved to make a donation \$150.00 to the Knox County Red Cross for the use of the Annex Building. 2nd KB2SAI. Approved.

W8PEN announced that a General Class License course was being planned with a start date of March 12th from 7 to 9 PM. The course should take between 7 to 9 weeks to complete. All interested parties are to contact W8PEN at <u>w8pen@arrl.net</u> . At this time, it is undetermined if another license testing session would be scheduled.

W8TW moved the group spend up to \$100.00 to purchase a coffee brewer, filters, cups, and coffee. 2nd AC8PT. Approved. W8TW will handle this.

KC8EVS stated that it looked like fewer events requiring our communications assistance were happening this year. At present the known events are "The Earthday Challenge" on April 19th, "The Tour de Cure" June 7th, and "Pan Ohio Bicycle Event" July 23rd to 26.

KC8EVS also mentioned the upcoming NVIS antenna event on April 25^{th} , and the possibility of setting up special event

The Mt. Vernon Amateur Radio Club									
President:	Frank Counts, KC8EVS <u>fcounts@gmail.com</u> Phone: 740-393-3002								
V. President:	Tom Evans, KD8HSA Phone: 740-625-5138 tom65@embargmail.com								
Secretary:	Jim Williams, N8IBR <u>n8ibr51@centurylink.net</u> Phone: 740-967-0627								
Treasurer:	Tony Spiegel, KC8UR <u>tony516@embarqmail.com</u> Phone: 740-392-7586								
Trustees:	Don Russell, W8PEN <u>W8pen@arrl.net</u> Phone: 740-397-0249 Call & Repeater Trustee								
	Barry Butz, N8PPF <u>n8ppf@mvarc.net</u> Phone: 740-397-7540 Equipment Trustee								
Directors:	Jim Jennessee, KD8UT <u>kd8ut8@gmail.com</u> Phone: 740-397-07								
	Emery Bennett, W8TW <u>eabenn2002@hotmail.com</u> Phone: 740-397-8127								
	David Byrd, KD8RST <u>dbryd@roadrunner.com</u> Phone: 740-392-6325								
	Barry Butz, N8PPF <u>n8ppf@mvarc.net</u> Phone: 740-397-7540								
	Jeff Butz, N8SMT jaylynn4@gmail.com Phone: 740-965-9368								
	Don Russell, W8PEN <u>w8pen@arrl.net</u> Phone: 740-397-0249								
	Don Blizzard, W8UMH <u>w8umh@yahoo.com</u> 740-392-9753								
Newsletter Editor:									
	Don Russell, W8PEN <u>w8pen@arrl.net</u> Phone: 740-397-0249								

stations for Daniel Emmett Days in August, and the "Ohio Parks on the Air Event" in September.

There were 18 people present. 17 members, 1 guest. N8FU won the 50/50 drawing. He donated his winnings back for a total of \$23.00 to be added to the treasury.

Motion to adjourn the meeting at 8:03 PM made by AC8PT, 2^{nd} KD8WSI. Approved.

Respectfully submitted,

N8IBR Secretary MVARC

Cub Scouts Enjoy Night of Communications

"Cub Scout P-344 "God and Me" section three "How we can Communicate with others" The Mount Vernon Amateur Radio Club came to the class to help the scout understand how we can communicate with others. We discussed: Through prayers, music, our own personal actions and manual devices both old a new: smoke singles, pony express, telegraph-lines, radio, television, computers, flags, lights, letters, braille, sign-language, emergency vehicles [police cars, fire trucks, ambulances], walkie-talkie, mores code, amateur radio and more. "Kathleen Dean, KC8VTA.

The club was invited to participate in a Cub Scout meeting at the Journey Church in Howard, Ohio by Kathleen Dean, KC8VTA. This meeting was to be about communications of all sorts, not just ham radio. However, ham radio stole the show.



Jim Jennessee (KD8UT), Emery Bennet (W8TW), Don Bunner (KB8QPO), Jim William (N8IBR), Bill Bradley (KC8BB), and Don Russell (W8PEN) met the group with all sorts of goodies.

Kathleen started out the meeting in good fashion talking about some common communications modes such as speech, typewriter, hand written messages, etc. Then She turned it over to our group. Don (W8PEN) started with introductions of our club members and then showed off his Morse Code straight key. Then asked the group if they could think of any form of communications older than Morse Code. The Scouts were really into this. They came up with Smoke Signals, Sign Language, Pictures, Cave Man cave drawings, bugles, Indian drums, and the list just went on.



Then we talked about telegraph, Morse Code signals, including SOS. How Morse Code is no longer used by our government or commercially, but hams still do it on a regular basis.

After talking a little bit about the 2 meter hand held, Don turned it over to Jim (KD8UT) to explain a bit about digital communications. Jim was able to show the scouts PSK31 signals and how they are decoded using his I-Pad. Great stuff!







Then Jim turned it over to Emery (W8TW). Emery demonstrated WWV out of Colorado using his Yaesu FT-450. Emery also demonstrated using the echolink over his smart phone.

Contesting, Dxing, and County Hunting wer also discussed, as well as ARES and spotter training.

The meeting broke up after Kathleen summarized the evening.

The kids proceeded to check out our equipment, especially the Morse Code Key. They had a lot of fun sending their names in Morse Code. We my have a few new hams coming out of this event.

There were as many as 12 scouts attending along with four or more adults. The possibility of the scouts helping out on Field Day was discussed.

I think the group would agree that this was a very pleasant evening and presented ham radio in a very positive way.

Radio Activity

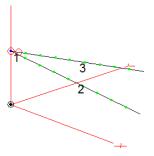
By Don Russell, W8PEN

Spring will be here shortly. What does that mean to ham radio operators? It means antenna time! I know Bill, KC8BB has lots of plans for antennas this Spring.. A few of the other recently licensed locals have also mentioned antenna projects in the making. These antenna projects should keep Steve, KD8TNT from Licking County very busy. He seems to be the go to guy.

I have a few projects of my own that I am hoping to get done. Last year I talked about putting up another home brew rotatable dipole for 20-15-10 meters. I had one of these up a few years ago and it proved to be a good performer.

Never got around to that project and actually decided that I wanted to try something else.

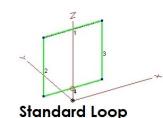
So, the last few weeks I have been running an antenna design program called Eznec. This is a popular one among us antenna guys. I have used it before and actually have a paid for version somewhere in the shack. However, I downloaded the free version just to play with and see what antenna I may wish to put up. I had two antennas in mind. One was a V-Beam antenna. This would require two legs of wire each 106 feet long. This is straight out of the QST magazine of a few years ago. The original article called for five wires controlled by a set of relays to cover 360 degrees. I was not that picky. All I need is a gain antenna pointed East and West to cover the population centers during domestic contests. Thus, I only needed two wires and no relays. A V-Beam delivers a lot of gain for the bucks.



My V-Beam

My second choice was to be a 20-10 meter loop antenna. A loop antenna does not have the gain of a V-Beam but it takes less wire and has a good wide pattern broadside to the wires on all frequencies I was interested in. There are many good points about each of these two antennas:

The V-Beam has more gain but a sharper pattern meaning I would have limited effectiveness in my desired coverage area.



I The V-Beam is a big antenna at 106 feet per leg. Not XYL friendly at all.

triendly at all. However, when not doing contests I can roll up the legs and put them at the base of the tower. When getting ready for a contest, it would take less than fifteen minutes to put up. Pretty reasonable.

Antenna

- I The loop antenna is smaller. Total wire length would be around 70 feet and this would be formed into a square loop. Although in my case by using Eznec, I have found that a rectangular form would be better.
- I can put the loop on my tower and add another loop to the tower to cover another direction if the first one proves effective
- Loops are supposed to be very quite antennas. A plus when trying to pull out that weak contest station.
- Both antennas require ladder line and a tuner.

Long story short, I have decided on the loop antenna to start. If that does not work for me, I can take it down and try the V-Beam. I really want a quite antenna.

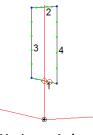
The ladder line may be a problem. I did not like the cost of ladder line at the Mansfield Hamfest. Online stores have been just as bad. So, I decided to make my own ladder line the old fashioned way..... Almost.

In the old days, one made ladder line with wood spacers dipped in wax. I think the modern way would be to use $\frac{1}{2}$ inch pvc pipe as the spacers. I have plenty of wire and a

couple of 10 foot sections of pvc pipe. I figure I can roll my own for almost nothing.

A quick internet search shows several different ways to make ladder line. I will choose one of those methods and see what happens. That is another advantage of trying the loop. I will need less ladder line because the loop will be fed at the bottom at about the 20 foot level. The V-Beam would have to be at 40 or 45 feet.

A normal loop antenna for 20 meters has fours sides, each side about 18 feet in length to form a square. I have chosen to use 10 feet horizontal sides and 25 feet vertical sides. The idea is that the 10 feet horizontal side can be made up of 1 inch pvc pipe and be pretty stable. If I paint the pvc pipe



My Loop Antenna

blue to match the sky or green to match my trees, it will be hard to pick out from the street.

I will keep readers informed as I put this antenna up and give it a test drive.

Another antenna project I am considering is a dual band 2 meter / 70cm quad beam antenna. The 2 meter part would be five elements. The 70cm quad would be as many elements that would fit on the same 2 meter boom. I figure I can put the 70cm quad inside the 2 meter quad and have virtually no interaction between antennas.

Just as a practice, I might try making a dual band quad satellite antenna. This antenna would be a 2 element quad for 2 meters and 4 or 5 elements on the 70cm side. Should prove to be interesting.

AFFILIATED CLUBS COORDINATOR REPORT By: John Myers, KD8MQ ACC

kd8mg@arrl.net

Hi everyone,

Seems we have a bit of a disagreement between Punxsutawney Phil, and Buckeye Chuck, as to the arrival of spring. As I'm writing this, the thermometer says -7 degrees outside. I'm not sure which rodent needs to be cooked first, but...... Anyhow, for those who braved the weather, and made it to the Mansfield Hamfest, I salute you. Temps were brutal, to say the least. I intended to be there, but just too darn cold! I did manage to make it to the Nelsonville Hamfest in January, and had a great time! Good crowd, and very friendly.

Moving on, looking at the latest numbers from the club database, I'm happy to see more & more of you coming up to date on your club paperwork. Out of 99 clubs listed in the Ohio Section, about two thirds of you are up to date on your annual club reports to the league. We are still far from 100%, but I'm happy to see things moving in the right direction.

To beat the drum a little more, the league requires annual updates to your club record as a condition of affiliation. They aren't sitting on the trigger, waiting for you to be one day late. But in time, they will drop your club off of the "active club" list if you neglect this important task.

In last month's column, I spelled out the advantages of keeping your affiliation current. It really does take just minutes to do this online. If you have any questions, just drop me an e-mail (kd8mg@arrl.net), and I'll do my best to answer them.

So, a stranger walks into your monthly club meeting. What do you do? Ignore them, or welcome them? If you're smart, you'll welcome them. We've all read the horror stories out there where the prospective club member shows up to a club meeting, only to be ignored. Not only won't they be back, but likely won't have anything good to say about that club to their friends.

It's up to every one of us to be an ambassador not only for Ham Radio, but for our clubs too. If you put your best foot forward, it will pay future benefits.

I was at a club event recently, and couldn't help noticing how this club treated newcomers. A fellow came out who was licensed, but inactive. The newcomer was made to feel welcome, and included. I bet that they'll be seeing him again.

We have the following clubs to congratulate this month. First, let's welcome a new club, the Kenton Amateur Radio Club. They are in the western part of the state, based in Hardin County.

Next, I'd like to welcome back the Tusco Amateur Radio Club. They are in the East Central part of the state, in Tuscarawas County. They were off the list for a short time, but are back.

Club news from around the state

-The Dayton ARA recently held a Chili Cook-off.

-Congratulations to Chris, KD8TNF, Massillon ARC's Ham Of The Year. Massillon has a full schedule of club programs & activities scheduled for 2015. They recently held their second Mentoring class, where they hold a Saturday morning in-depth class on various subjects; the most recent being a group build on offset attenuators for Radio direction Finding. With all this going on, is it any surprise to learn that they are a Special Service Club?

-The Mt. Vernon ARC has started off the new year with a record number of students in their Technician classes. They are also planning to participate in the Ohio ARES NVIS Antenna day scheduled for April 25th.

-From the Mahoning valley ARA newsletter, Mark, K8MSH hits on an excellent point in his editorial. To quote him, "Get involved in your local club. Pick an activity--even if it's just one--in which to participate or lead. Offer to do a program, teach a class, become a VE, serve on a committee, or help plan a club activity."

-The Pioneer Amateur Radio Fellowship is again doing their bus trip to the Dayton Hamvention.

-The western Reserve ARC will be sponsoring a spud gun build this year.

-From the Cincinnati FM Club, we see an interesting story by N8XX about his trip to Hell (Michigan).

-Northern Ohio ARS recently had a club program on three SDR Radios.

-Also, congratulations to the Alliance ARC Ham Of The Year, Tomas KC8ZEH

And that wraps it up for another month. Stay warm, and have fun!!

A Unique Way To Solder PL-259 Coaxial Fittings By Don Russell, W8PEN

We were talking at the Friday morning breakfast last week about the difficulty of soldering PL-259 coaxial fittings. These are commonly called UHF fittings are are on most HF and VHF radios.

Many hams have difficulty with this. Not so much soldering to RG-8 coax, which is larger in diameter and fits snugly into the fitting. We were talking about the RG-8X, RG-59-U, and RG-58-U, which each take a reducing adapter that fits inside the PL-259.

Tom Evans, KD8HSA, claims that the new solderless fittings are the way to go. They are not entirely

solderless as you have to solder the inner conductor, however, the outside braid is crimped rather than soldered.

I can remember buying many Radio Shack pre-assembled coax cables. These had the outer braid crimped rather than soldered. The would last for six months or so and then start having problems. According to Tom though, if you have the right crimping tool, the solderless fittings work well and are reliable.

I checked out quality crimping tools and found that a good set would cost a minimum of \$130. That is a bit much for something I would use a couple of times a year. If that.

The problem with soldering the braid on the smaller coax is that you cannot get enough solder on the braid before the hole is covered up with solder. You need to get everything really hot before even thinking about using solder.

Years ago, I read on a contesters web page a different way to solder smaller cable to PL-259 fittings. Just so happened I needed to put together a hundred foot length of RG-8X to replace some club coax. I thought I would give this a try.

Here is how I did it:

- Cut your wire as shown in the first picture. Notice that the adapter is already installed onto the PL-259. I tightened it down as much as possible and then soldered a little bead between the adapter and the fitting to provide a good place to solder the outside coax braid.
- I There is one problem with this picture. I found out you need to put the hood of the coax connector on before you do any soldering. I forgot to do this and had to remove the solder and put the hood on. I forgot to snap the new picture. So the fitting shown in the picture should already have the hood on it.



- Now, stick the coax into the PI-259, inserting the center conductor inside the pin.
- Make sure some braid is tucked inside the adapter and twist the remaining braid together

- Now solder the twisted braid to the outside of the PL-259 at the spot where you had soldered the adapter and the fitting together.
- Use an OHM meter to check for shorts between the outside braid and the center conductor. If there is none, the solder the inner conductor to the pin and you are finished. See finished picture below.



I admit this does not look very professional. In fact, I used electrical tap in an effort to make it appear a bit better. However, I did achieve what I set out to do and that was to find an easy way to solder smaller coax to PL-259 fittings.

To test the effectiveness of this assembly, after completing the other end of the assembly I took some measurements. I used 100 feet of RG-8-X which is supposed to have 4.5 db loss per 100 feet at 146 MHz.

Using my VHF/UHF wattmeter, I adjusted my power output to 20 watts. Then I inserted the 100 feet of RG-8-X with my fittings on it. Power out at the end of the coax was 12 watts. That indicates less then a 3 db loss. I calculated that I should have read only 8 watts at the end of the coax. However, the measurement was close enough to convince me that my technique worked out very well in the real world.

Another advantage of soldering the fitting in this way is that if you end up with a short, you can take everything apart and start over. Can't do that the old way. If you end up with a short, it is nearly impossible to reuse the connector. It is a throw-away!

One possibility I see here is to go ahead and use crimp style fittings but instead of crimping them, just solder them. I may look neater in the long run and you would not need expensive crimping tools to do so.

Membership	<u>o Form</u>									
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 <u>www.mvarc.net</u>										
Dues Schedule: \$12 regular										
\$10 for second member in the same fami	ly and for those over 65 yrs. of age.									
Mt. Vernon Amateur Radio Club, P.O.	Box 372, Mł. Vernon, OH 43050									
Name	Call-Sign									
Street										
CitySta	teZip Code									
Phone Number	License Class									
ARRL Member (Y/N)E-Mail										
Extra Donation (Optional)	_									
Members are entitled to a free MVARC E-Mail address. Wou	Id you like one? NoYes									
If yes please enter password										
Other Comments:										

<u>8</u>													
03L VA													
COMMENTS													
Ę													
TIME OFF													
REPORT SENT RECO													
SENT SENT													
STATION													
TIME													
POWER													
MODE													
LINEO.													
DATE													