



The Feedline

NPARC Radio News
Minutes in Next Issue
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Presidents Message for February 2012 (VA3KGS)

Hello fellow members. We had a brief hint of warm weather in March. How many got that new antenna up safely? Easter Weekend should see a lot of new and old antenna activity. I hear that we will soon have 4 new 10 meter vertical antennas up. The 10 Meter net on Tuesday evening has been going for many years now, and are always looking for more check-ins. We are looking forward to our next presenter, our very own Mark Fuller Va3BGL. Mark will do his presentation on Software Defined Radio (SDR), which he has assembled himself. This is an interesting topic, and lets have everyone out to see Mark's presentation.

Our next three events this year are Field Day on June 23, and we will be at Woodend Conservation Park. See Peter WET's update. I know where my 80M Loop antenna is going!! The following weekend July 1 is Canada Day and opening ceremonies for the celebration of the War of 1812. Dave FOI will update us on this event. We are looking for your support for this all day event at Fort George in Niagara-on-the-Lake. And don't forget Canal Days in Port Colborne at the end of July. Reserve those days now, as we will be looking for your support once again.

Be safe putting up those new antennas.

Cheers, Kevin Va3KGS

Google Tap for Android Devices (VE3OGG)

Google has adapted Morse code for Cellular devices. To see a video of Morse to text in action: <http://www.youtube.com/watch?v=1KhZKNZO8mQ>

This is a functioning keyboard application for the Android operating system. Google had multiple departments commit to April fools jokes, this is the only one that became a reality - except for the multiple key operation mode.

There are a number of applications available for Android devices to listen and log CW automatically - with better uptime than Winlink.

Upcoming NPARC Events (VA3KGS)

April 2012	SDR Radio	Speaker: Mark Fuller Ve3BGH
June 2012	VHF Filter Cavities	Speaker: Lloyd Kubis Ve3ERQ
June 23-24 2012	ARRL Field Day	Coordinator: Peter VA3WET
July 1st 2012	1812 Radio C3GB	Coordinator Dave: VE3FOI



Minutes of General Meeting #6 February 2012

Minutes by Geddie, VE3CJX - Meeting was called to order at 7:10pm by Kevin, VA3KGS with the roll call.

Treasurer's Report: Peter, VE3HM indicated that two new memberships had been taken in and the cost of the Hall was paid. He handed the report to the chair. A motion to accept the report was made by Jim, VE3BCA and seconded by Dave VE3FOI. After a vote, the motion was carried.

Feedline: Kurtis, VE3OGG reported on the submissions received and welcomed more. A correction for the call sign of Sean, VE3PSV has been noted as well as a reminder to exclude budget numbers given in the Treasurer's Report. John, VE3JWH moved to accept the report, seconded by VE3FOI. After a vote the motion was carried.

Certificates for the Niagara Falls Santa Claus Parade Participation: Kevin, VA3KGS, handed out certificates to members present at the meeting and a photo was taken.



Emergency Preparedness Event: May 9th at the St. Catharines Market Square, ARES and NPARC will be participating. Planning meetings are ongoing.

NPARC Field Day 2012: June 30th at Woods End Park located off Taylor Road. Peter, VA3WET reported that the change to Woods End has been settled now after some discussion with Fireman's Park representatives and a site visit. It was felt that the north lower area may be too low for effective UHF and VHF operations.

NPARC Charity Radio-Thon 2012: Peter, VA3WET reported the July 1st Canada Day events associated with the 1812 Bicentennial Event may result in a no go for this activity, perhaps depending on the support by members.

1812 Bicentennial Celebration: July 1st, 2012 at Fort George, Niagara-on-the-Lake. Dave, VE3FOI gave an update and thanked Geddie, VE3CJX for assisting with arrangements with Fort Niagara Lighthouse and the Lewiston, N. Y. folks who will likely be participating, representing the spirit of Friendship and Peace, which is the theme of the event. Members are invited to sign up if they are interested in participating, and offered to address any questions with members after the meeting. Dave reminded members regarding logistics at the site for parking and transportation and that due to site security, further directions may be given as this may affect a Friday Set-Up or an Early Sunday Set-Up for a 10:00am site opening.

QSL cards for the event and the designs are being discussed for the Special Event Call Sign CG3B as well as the companion US Station Call Signs for this event.

Canal Days August 3-6, 2012 & Pan Am /Para Pam Games July and August 2015: Kevin, VA3KGS reported that NPARC participation at these events are in the planning stages.

Niagara ARES: Dave, VE3DVE, gave us some highlights about the WINLINK system which gives access to the INTERNET and it does not require a server to do this. The main feature is that written traffic can be used by AREA volunteer operators participating with agencies and community groups.

SATERN: Dave, VE3FOI gave a reminder of the Ontario IRLP Net on Monday evenings at 21:00 hrs using reflector 9032 locally on WCR. This includes the use of the IRLP link. Bob, VE3HNN, one of our NPARC members, has accepted the net controller job. Also there is a daily net at 10:00 am (10:00 hrs) on 20 Meter at 14.265 MHz.

GWEN: Dave, VE3BBN gave an update of work on-going such as the testing of the PSKI 31 on the 80 M band.

50/50 Draw: Frank, VE3SQ

Guest Speaker: Note: this has been sent to Dennis for editing..

Guest Speaker: An Introduction to Arc Flash by Dennis Paganin, VA3DTP. Dennis is a well credentialed and experienced industrial electrician currently working with a major company supervising 15 electrical staff; 10 are full time at 2 research facilities. With over 30 years experience on the job, Dennis advocated a keen concern, the broad scope and technical knowledge needed to ensure electrical safety on-site. Especially useful to amateur radio operators is having an appreciation for the very serious risks involved with electrical hazards.

On display for our benefit, Dennis brought an array of specially insulated electrical tools, full face helmet, insulating wear and coveralls typical of what he uses at work to protect from electrical arc and blasts from ruining his day. The standards for electrical safety and work practices including maintenance, clothing specifications, equipment and procedures were explicitly referenced to CSA Z-462. The presentation slide show was prepared by the Construction Safety Association of Ontario dated March 2009.

To better understand degree of risks associated with electrical hazards and the needed safety precautions of additional material was provided. Most dramatic were the many video clips of the electrical Arc, Arc Flash and the Arc Blast. It was explained that the cause of the blast or explosion was the electrical arc conductor to conductor or a short circuit air to ground. These may be consequent to damaged or corroded wiring, use of improper test equipment, condensation resulting from cold instruments being used on warm equipment, busways and plugs.

Very serious burn injuries, leading to loss of life, or life time health concerns and physical damage result in the 5-10 electrical accidents per day in North America alone.

Describing the Arc Blast associated with copper vaporization in which the copper expands by a factor of 67,000 times creating an enormous pressure wave accounting for the shrapnel and piercings often associated with such explosive incidents. Videos showed a 3 phase short, a 240 volt single phase pane, transformer failure in which over \$ damage was from a short circuit and an Arc Flash. Also an Arc Flash at a breaker failure where a crank handle is involved with switching between open, test and closed positions. A most dangerous industrial electrical situation is dealing with the "bolted fault" as the "bolt" behaves like a crowbar on the bus bar.

The degree of injuries caused by the pressure wave from an Arc Flash depends on the power, the distance and the duration of exposure. A video clip entitled, "Not safe at 18 inches" demonstrated this. 2000 such incidents per year occur in the USA. Burns from the Arc Flash are in the range of 35,000 degrees Fahrenheit (about 20,000 degrees Celsius). The sun's temperature at the surface runs about 9,900 degrees Fahrenheit (...) A graph showing the severity of burns and percentage body burns was presented and graphics of shrapnel wounds sustained from some 700 feet distance. Blast Lung Injury caused by copper vapourization can result in the exposure to the body of over 100 toxic substances in the fumes. Affects on hearing from over 145 db at 2 feet distance is beyond the pain threshold of 130 db. Pressure wave injury caused by 200 lbs per square foot pressure wave is enormous.

Codes and standards in place include the CSA Z-462 and are harmonized with IEE 2-306 and NFPA 70E as

well as IEE standards. Specifications for equipment labeling identify the Arc Flash and Shock hazards. Warning labels defining the approach to areas with a=Arc Flash hazard are described as limited approach boundaries, Restricted approach boundaries and Prohibited approach boundaries in which a risk assessment must be carried out, a plan developed and persons would not be unaccompanied nor unqualified.

Equipment and clothing standards indicate self extinguishing materials and FR fire retardant ratings of 4-100 cal per sq cm . To compare the blue flame of a lighter is about 1.2 calories per sec per sq cm.

Incident energies were described as 1,2which result in 2nd degree burns and 8 results in 3rd degree burns. Flame test of RF clothing are carried out and shown on a video clip. The head being an exposed area average about 9% of the body hence protective helmet and liners and inside coverings are needed.

A caution about the use of synthetic materials that will melt and these include Acetate, Acrylic nylon, Polyester, polypropylene, polyethylene and spandex. Gloves are rated for 1000V. They look like ordinary rubber gloves with leather over gloves. These need to be tested every 4 months. A video clip showing 100% cotton showed a massive and total body burn and by the 2nd cycle it was completely engulfed in flames. Another video clip showing RF rated clothing affected by molten copper and existing ignition hazards. Typical clothing costs are typically in the order of \$ and up. The coverall would price out at about \$.

Working on energized equipment is the most hazardous and arc flash resistant equipment is favoured. It is recommended to use "fuse" test leads. Costs associated with a faulty fuse in a breaker were in the order of \$ - \$ in one case. while in USA and Canada fines have been in the order of \$ - \$. This does not include the costs to persons or property. Questions included the following answers: The service life of the coveralls, about 50 washings; maximum voltage in the industrial setting is 115, 230, 240, 377 and 600, with a minimum of 20 kVA at 240 volts while 600 volts would service the size of the building the meeting was being held in. In amateur radio work always work in a de-energized electric circuit and to completely ensure this one can get the hydro meter pulled when necessary.



CANWARN STORM SPOTTER TRAINING (VA3NZ)

The 2012 CanWarn training session has been announced for the City of Hamilton and surrounding area. Each year Environment Canada trains Ham Radio Operators and other interested parties to spot and report severe weather.

They learn about the structure of storms, types of clouds, types of reportable weather events to watch for, and what the department's severe weather watches and warnings mean.

This years training event will be held on Saturday April 21st 2012, 09:00 until approximately 12:00, Nash Auditorium, Wilcox Building, Chedoke Hospital, Sanatorium Road Hamilton. Admittance and parking are both free. Register at <http://www.canwarnhamilton.ca/register>

Important ARRL Field Day 2012 Update for April (VA3WET)

Last year NPARC operated Field Day at Fireman's Park in Niagara Falls. This year and just down the road, NPARC will be operating Field Day 2012 from Woodend Conservation Area in Niagara-on-the-lake. Woodend is a nice quiet park on the edge of the Niagara Escarpment overlooking Niagara College and the Queen Elizabeth Way. To get there from Niagara College, take Taylor Road south until you see the park sign on your left. Take Warner Road to the end and that is where NPARC will be located for the weekend of June 23 & 24, 2012

Now that you have arrived it is time to setup your station, gas up the generator, check your computer logging program, erect that tower or wire antenna or vertical antenna. It is nice to have help. Once the station is set up, it is pure fun. Your first contact from afar is confirmation that your station is working as it should. Then the contacts begin to pile up. Your logger is busy pushing keys on the laptop as fast as you can acknowledge each contact. In time you need a break and switch places with your logger or with a passing ham or a visitor. Depending on the band, the stations you contact may follow the sun while on other bands there is no noticeable pattern. You may have to change the direction your antenna is pointing every hour or two unless you are using a vertical antenna or a wire. Just when you have a very rare contact, your station goes dead. You cannot finish your QSO. You are reminded that generators need fuel occasionally. Off you go to fill up the generator again.

Many members may not be aware but your membership dues finance Field Day. If you show up and help out we will reward you with a burger or hotdog and soft drinks. But you have to help. Make sure you get on a band sign-up sheet and help out by operating, logging, or putting up a station. For those that stay over night or return to operate, breakfast will be served Sunday morning early. Complimentary coffee and soft drinks will be available Saturday and Sunday.

Field Day is an outdoor twenty-four hour amateur radio event which simulates an emergency and forces you to operate off the grid. It is for new and semi-new amateurs or hams to gain experience, test their skills and have fun contesting with friends. Club members and guests will assemble stations, erect antennas and safely operate gasoline generators. Field Day is sponsored by the American Radio Relay League or ARRL.

No amateur radio experience is necessary. Half the fun is learning. If you would like to be a part of Field Day fun contact Peter at va3wet @ vaxxine.com. To make the event run smoothly, we need Band Captains. The following bands are open: 160 CW, phone and digital; 80 CW and digital; 40 digital; 20 CW and phone; 15 CW, phone and digital and 10 CW, phone and digital. We need people to erect antennas and set up stations on Saturday. We need people to operate radios and log contacts. We will show you how. We need people to tear down antennas on Sunday and help clean up. We need to contact the media and local politicians. The list of agencies, politicians and media to contact is extensive and we can use the help. The sun is making a lot of noise lately, so it would be nice to see 10 and 15 meters active. I hope to see you at Field Day.

Peter, VA3WET, Field Day 2012 Co-ordinator.

Field Day June 23rd and June 24th, 2012

WOODEND CONSERVATION AREA

Niagara Peninsula Conservation Authority

9653 Warner Road off Taylor Road

Niagara-on-the-lake, Ontario, CANADA

43.1433 N Latitude 79.1673 W Longitude

Grid Square: FN 03 kd

CQ Zone: 4 & ITU Zone: 4

SATERN Update (VE3FOI)

The Monday night net on VE3WCR using IRLP is continuing to be popular, hats off to our tech staff, we always get great audio reports with VE3WCR. Bob VE3HNN is now the official SATERN Net Control Chairman and he is the one that will make sure there is a net control in place for the Monday night nets.

Please drop by and say hello, 9:00pm local time every Monday night VE3WCR.

1812-Bi-Centennial of Peace and Friendship (VE3FOI)

It looks like our club has started others to get a special event station operating for this Bi-Centennial so far: **XM31812**- Hamilton ARC will have a station on the air from July 13th to July 15th, more info via VE3ATX and QRZ.com, **XL31812**-Fort Amherstburg from Aug.03 to Aug 05, more info from VA3CSS and QRZ.com this is great amateur radio PR.

CG3B Update (VE3FOI)

Thanks to you people who have sign the list for operating and assisting with our own CG3B operation July 01 at Fort George, I will be emailing you to find out how you can help this club project, please pass along this info to ones that cannot make the club meetings, they can email me ve3foi@yahoo.ca so I can add them to the list. We need setup and take down volunteers, set up at 8:00am , take down 5:00pm (this might change due to activity at the Fort) Their will be lots going on at the Fort that day and night. Thanks to Kevin VA3KGS for keeping the QRZ.com site up to date and he has great plans for it as we get closer to the actual date of operation.

KC2YYL Update (VE3FOI)

Our friends in Lewiston will be operating at the same time as our special event stn. From Fort Niagara, Lighthouse special QSL card will be issued for contacting both stations, there is a possibility of another special event taken place from the Landing site of the British in Lewiston, more details later on this one.

As mentioned these special event stations take our hobby to the general public,as a community service.

Across the Border - 200 Years of Peace & Friendship (VE3CJX)

From time to time as you may participate on air with the ARES, the SATERN and other nets, you might also hear from our neighbours across the river.

<http://www.lewistonarc.org/> and <http://kc2yyl.net/>

Upcoming Events for 2012:

KC2YYL Date(s) of operation: June 30 - July 1:

More info to follow on this event. We will need 6+ operators for Sunday July 1st. As of now we are planning on running 2+ stations for this event.

KC2YYL Date(s) of operation: Aug. 4 & 5 (Sat & Sun):

Event: Official ILLW (International Lighthouse-Lightship Week)

Purpose: To promote public awareness of ham radio and lighthouses; to contribute to the recognition that lighthouses, lightships, and their keepers deserve; to foster camaraderie within the ham fraternity; and to provide fellowship amongst the members of the Amateur Radio Lighthouse

Society. The dates are AUGUST 1 thru August 8, 2012

Web Sites: <http://ILLW.CO.UK> and <http://ILLW.ORG>

KC2YYL Date(s) of operation: Aug. 18 & 19 (Sat & Sun):

Event: An Amateur Radio weekend event for the International Lighthouse

Lightship Weekend Conducted under the sponsorship of the AYR AMATEUR RADIO

GROUP (AARG), Scotland. Held on the third full weekend in August. Event duration is 48 hours from 0001 UTC 18.8.2012.

Purpose: The basic objective of the event is to promote public awareness of lighthouses and lightships and their need for preservation and restoration, and at the same time to promote amateur radio and to foster International goodwill. Lighthouses are fast becoming an endangered species with the introduction of Global Positioning Systems and Satellite Navigation and the automation of the light source to solar power, which has resulted in the withdrawal of management personnel (Keepers). It is hoped that this event will highlight this situation and help prevent further desecration of these magnificent structures all around the world.

Web site: <http://www.illw.net/>