



JUNE 2016

Volume 5 Issue 6

VE3ERC-LUB

President: Rich VE3DCC**Vice-President: John VE3JXX****Secretary: Tom VE3DXQ****Treasurer: Reg VE3RVH****Trustee: Al VA3TET****QSL Manager: Joyce VA3WXU****Repeater Manager & Maintenance:
Carl VE3FEF****Website Admin: Ted VE3TRQ****Lighthouse: Bruce VE3QB****Maple Syrup Display: Joyce VA3WXU
Judd VE3WXU****Newsletter: Bob VE3IXX****ERC REPEATERS****UHF 444.700 TONE: 131.8****VHF 147.390 + TONE: 131.8****EMERGENCY SIMPLEX: 147.51**

**Emergency Reminder:
In the event of an
emergency, tune into**

our repeaters,

UHF 444.700 or

VHF 147.390 or

Low Band 3.755 LSB or

Simplex 147.510

**for coordination and
assignments.**



**Radio Amateurs
of Canada**



Al, VA3TET setting up the G5RV at the Central Ontario Hamfest in Cambridge, Ont. The antenna was used to run ONTARS from the site. Over 40 contacts were logged and good signal reports given. See more photos on p. 3.

THE PREZ SEZ!

This club is Radio-ACTIVE

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President's Update for June 2016



Greetings, as we head into the lazy summer months—but, no grass grows under this club!

ERC was rather nicely represented at the recent “Brass-pounder” tri-club dinner at the Breezy Corners restaurant at Carlisle. The truth is that our members won a disproportionate share of the raffle prizes—we had the cool black shirts on so we were easy to spot! Ted and I were chatting about the transition for our IRLP node to a Raspberry Pi configuration, and, you guessed it, second draw in, he won a Raspberry Pi B starter set. Our IRLP node is now active.

In a related development, the second Yaesu Fusion repeater came home with me after our last meeting—it somehow got lost under the “stuff” sitting at the front desk. John, jxx, and I were able to upgrade the firmware and re-program the unit to UHF. The upgrade to version “N”, gives us SQL hysteresis or control of the gap between open rx squelch and close sql; control over sql tail time and a means to allow the id in cw and voice to transmit without the sub-audible tone. None of these are critical changes, so we are leaving our VHF fusion at version “M” for now. The repeater is currently at John’s QTH for testing. We may end up moving the feed mill unit to John’s and locating both Fusion Repeaters at the Fire Hall, so that the setup looks “pro”.

ERC was, again, active and visible at the Central Ontario Flea Market. The ONTARS station with Bob at the mic, and the club table were in prime locations. I had many positive comments about the club’s visibility. Thank you to the entire crew who made this happen.

Field Day is, traditionally, the end of our activity calendar for the “year”. Details will be discussed at the June 22 meeting. I encourage our new members to come out and experience the moment—and realize that we are not silly enough to operate non-stop for 24 hours. With age and experience, comes wisdom. The event is an excuse to socialize and have one more time together before we break for the summer. I am as yet unsure of our meeting schedule during the summer since we do not have our HF stations up and running. As you can see, the dates have been booked, just in case, however, I suspect that our “nets” and ad hoc repair work may be the extent of our “hands-on” until September. I may send out bulletins as events develop.

I close with the sad announcement of Bill Graham’s passing. As you know, Bill insisted on hosting our October meetings at his home. He was a wonderful and innovative HAM who we will miss. We would like to continue his tradition with a special October “Bill Graham” evening featuring a guest speaker and a dinner at a local venue. The target date would be our regular October meeting on October 26th. We will provide more details as the planning progresses.

In closing, I thank you again for your part in making this club innovative, fun and exciting. After all, that is what we do!!!

de Rich, ve3DCC



CENTRAL-ONTARIO HAM FEST IN PICTURES June 5, 2016





DIRECTIONS TO FIELD DAY

**GPS ADDRESS : 6463 6TH LINE
CENTRE WELLINGTON**



ERC inc ...

By Joyce VA3wxu

I came across an interesting article written by D.E.Logan- W1HEO, that was about how to keep a radio club healthy, productive, and long lasting. His criteria for success included having fun, staying active, publishing a good newsletter, and recruiting new members.

Clearly, our club can easily check off all of the mentioned above but, there is much more to ERC than just that. For example, there is an undeniable “male hubba-hubba factor” in the Elmira Radio Club, which makes things more interesting for the rest of us. (Hi! Hi!)

Seriously though, the tonic that is already keeping ERC healthy is due to the “esprit” of the club and the obvious caring for one another. Think about this; not a day goes by that a member isn’t found helping other members. Whether they are helping to fix a radio or antennas or lending tools or trading tips to improve somebody’s station...there is always someone willing to help another, whenever it is needed.

An offshoot of that is that it produces members who share the work and who can work easily together. In my opinion, our members exceed in teamwork and that is the force that raises the towers, antennas, and repeaters that keeps us on the air.

From my viewpoint, our members also care about each other on a personal level. They worry and want to know how someone’s spouse is faring if they are in the hospital, or when someone is celebrating a 52nd anniversary, or having a birthday, or if their tomatoes are growing in their garden, or who is roaming around in England, or running in Iowa, or how many fish were caught on a trip...etc. Everyone seems to care about the daily life of our “member / friends.”

Consequently, it is the people who fill the FireHall with laughter and warmth every fourth Wednesday who are the heart of our club and the ones that preserve the club’s existence. It is ERC’s reason for being.

ERC also has a dedicated “staff” that does specific jobs for the club. That includes, President- Rich VE3DCC, Vice-President- John VE3JXX, Treasurer- Reg VE3RVH, Secretary- Tom VE3DXQ, Trustee- Al VA3TET, Lighthouse- Bruce VE3QB, Maple Syrup Display- Judd VE3WXU, Website Admin- Ted VE3TRQ and, the very best ever, Newsletter Editor- Bob VE3IXX.

What is absolutely amazing about this group is that most of these men have done these jobs on behalf of our club for many, many years. Their work is vital to the health of our club. It organizes the club’s plans for the future, keeps the records of our past, and manages our dues with diligence.

Our club is not only healthy, productive, and long lasting, it is blessed.



SHOCK -TALK

And the Art of Electrical Safety

By Bob Koechl VE3IXX

EXcept for

the electronic repair techs, most don't spend much time thinking about electrical safety when we work with our ham radios. After all, the rigs generally run on 12 volts and 12 volts is not considered a particularly dangerous voltage. Generally, it is 30 volts that is considered to be a break point. A 12 volt car battery can be handled with relative immunity from shock. But think again!

First, take a look at the following chart:

LEVEL	EFFECT	DC CURRENT	AC CURRENT
1	Slight tingling sensation	0.6-1.0 mA	0.3-0.4 Ma
2	Noticeable sensation	3.5-5.2 mA	0.7-1.1 mA
3	Feel pain but muscle control maintained	41-62 mA	6-9 mA
4	Pain felt and unable to let go the wire	51-76 mA	10-16 mA
5	Difficulty breathing (paralysis of chest muscles)	60-90 mA	15-23 mA
6	Heart fibrillation within 3 seconds	500 mA	65-100 mA

ESTIMATED EFFECTS OF CURRENT ON THE AVERAGE HUMAN BODY

Our human body is like a great variable resistor. While each person is individual, the average human measures a resistance of between 50,000 ohms up to 1,000,000 ohms. However, situations can vary greatly. After an hour of swimming in a lake, dripping wet you might exhibit as little as little as 100 to 300 ohms of resistance from arm to arm, or arm to foot. What would happen if you now touched the poles of a car battery. For simplicity sake let's put your resistance at 120 ohms. Ohms Law would tell us:

$$I \text{ (current)} = E \text{ (voltage)} / R \text{ (resistance)}$$

$$I = 12/120 = .1 \text{ Amps or } 100 \text{ mA}$$

That puts you past level 5 and suddenly you would have difficulty breathing and might find your chest muscles paralyzed. So much for 12 volts. While the voltage determines the threshold, it is the current that can be deadly.

Alternating current is even worse. We know that a capacitor will block direct current, but the same capacitor can allow AC to flow. Your body can act as a capacitor if you are touching metal or if you are grounding yourself. The tissue under your skin is like one of the plates of a capacitor and the metal or the ground act as the second plate. The skin is the dielectric. Hence you see in the chart, that it takes less AC to do damage.

Whenever you are handling your rigs, a little common sense can go a long way. Next month we will discuss some simple common sense safety tips when working with powered circuits. In the meantime, Stay Safe!

Source: "Electronics for Dummies" by Cathleen Shamieh and Gordon McComb

WEDNESDAY NITE NET CONTROLLERS**JUNE 29 - JUDD VE3WXU****JULY 6 - TED VE3TRQ****JULY 13 - AL VA3TET****JULY 20 - REG VE3RVH****JULY 27 - PAUL VE3PVB****AUGUST 3 - TRACY (VE3JVG)****AUGUST 10 - BOB VE3IXX****AUGUST 17 - JUDD VE3WXU****AUGUST 24 - TED VE3TRQ****AUGUST 31 - AL VA3TET**

As you can see, the Elmira Radio Club was well represented at the Dayton Hamfest banquet. From left to right: Bill Unger VE3XT , Thunder Bay ON , Fred Collings VE4TRO Winnipeg MB (standing), VE3XTM Terry Maurice , Guelph ON , Jason Goulding VE3JVG Drayton ON , Ken Buehler VE3KCY Alma ON , Paul Curtin VA3PDC Waterloo ON

Thanks to Paul VA3PDC for the photo.

VE3ERC Elmira Radio Club Inc.

Minutes from June 22, 2016

1. Open and roll call.

VA3TET Al, VE3DXQ Tom, VE3WXU Jud, VA3WXU Joyce, VE3DCC Rich, VA3PDC Paul, VE3IXX Bob, VE3JXX John, VE3QB Bruce, VA3QB Bill, VA3DXK Brian, VE3UTN Dennis, VA3FJM Frank, VE3KCY Ken, VA3JVG Jason, VE3TRQ Ted, VE3EIX Harry, VA3KXX Kathy, VA3GWM Gord, VE3CXU Doug, Tracy

The VE3ERC Elmira Radio Club Inc was opened at 7:30 Pm by the Club President Rich. Rich then asked for a roll call. Present as listed above.

Reports and Announcements:

Installation for new executive: Rich mentioned this is his last meeting as president and is delighted that Joyce VA3WXU has stepped up to the plate as our incoming president. Rich proceeded to put on some white gloves and presented Joyce with a gavel. (actually a rubber mallet). There was applause and laughter.

Minutes from previous meeting: Tom VE3DXQ made a motion that last month's minutes be accepted. This was 2nd by Dennis VE3UTN.

Status of our repeaters: Rich VE3DCC along with help from VE3QB Bruce upgraded the UHF repeater at the fire hall to version "n". The DSP was also upgraded. The VHF repeater at the fire hall is version "m".

The PL tone for the 440 repeater at the fire hall is 123. The repeaters at the fire hall have no voice identifier on them.



Rich VE3DCC passes the President's Hammer on to Joyce VA3WXU who will be the new ERC President in September.

Treasurer's Report: Reg VE3RVH was not present. Al VA3TET reported that we made \$60.00 at the June Ham fest. Al advised all orders are in for the T shirts and hats.

Nomination committee: Nothing new to report.

Incorporation and constitution committee: The next step on the agenda is the revenue Canada filing and income tax. Rich advised he will send in the proper documentation to show change of headquarters from his home to Joyce's home. Also the board will be updated.

Elmira Maple Syrup Day: Nothing to report.

Safety Officer Committee: No incidences to report.

Lighthouse project: Al VA3TET advised it is all arranged. They are expecting us. The Date is August 20th and 21st. Those wishing to help set up should arrive Friday evening the 19th.

Retrofit for the fire hall: Ken VE3KCY brought up the suggestion of having our club station at the senior center rather than the fire hall as it may be more accessible. Much discussion followed. John VE3JXX advised he also thought this is also a good Idea, because things regarding changes at the fire hall or new fire hall make it uncertain. John VE3JXX advised now is the time to do this as we have been recently in front of council. We may get counsels blessing. Also we could talk to the Arena manager. John VE3JXX advised he could see if he can get tour from the manager, and find a

large cleaning closet were we could have our equipment. Ken VE3KCY made the motion that we pursue finding a room for our meeting and a place for our radio equipment at the senior center. This was 2nd by John VE3JXX. All were in favour.

The fact that the Arena is an evacuation center may qualify us for a trillion grant.

Ad Hoc emergency plan update: Rich VE3DCC reminded us of our emergency frequencies. 444.700 /+5 offset / 131.8 tone, 147.390 /+6 offset / 131.8 tone, Also the Simplex and ONTARS frequencies. Rich VE3DCC advised in the Norfolk emergency manual they also mention using the repeater output frequency.

Liaison with Council: Rich VE3DCC advised we have already met with them, but will see them again soon. This would be regarding the senior center.

Field Day: Bob VE3IXX advised we do have the Guelph trailer and also an extendable antenna.

Al VA3TET asked those present if anyone wanted a luncheon on Sunday and there was no interest.

Some of the equipment needed is at Johan's and will have to be picked up.

Dennis VE3UTN asked if the generator was needed and Al VA3TET said yes. Also he said to thank his neighbor Dave for its use.

Bob VE3IXX advised he will put directions to field day in the news letter.

Flea Market: We did have 2 people working ONTARS for a couple of hours and sold \$60.00 in equipment.

QSL Report: Al VA3TET had QSL cards dropped off by someone and gave them to Joyce VA3WXU.

Christmas Party: Nothing to report.

Boy Scouts Liaison: Al VE3DCC mentioned about the RAC magazines now in the Library.

The "Bill Graham" October Event: Rich VE3DCC mentioned that since Bill has passed on we could keep the tradition in remembrance of him by having a speaker and a meal at a restaurant. He also suggested a few restaurants. The first speaker would be Bill's son.

Tom VE3DXQ made a motion that we have the Bill Graham October event at a restaurant of the clubs choosing. This was 2nd by Al VA3TET.

Presentations: Rich VE3DCC an Arduino web server and personal "Cloud". Rich showed us a box called a Uno which can have up to 5 connections. He also mentioned that you can get your own DNS from the web site Nolp.com.

Preliminary hands on with the directional PV antenna: Al VA3TET his PV antenna with him. It was a piece of PVC split in half with copper foil on it. He said that because it has a bigger surface area it is good as a 20M dipole. He said there will be an article on the antenna in QST magazine.

The Raspberry PI RLP-VHF repeater IRLP node and Link: Ted VE3TRQ showed us an IRLP node made from The Raspberry PI. There is an Ethernet port on it as well as USB ports, and a micro USB port for power, an HDMI connector. It has in the small box the Raspberry PI and an IRLP card. Very small compared to



Al, VA3TET showed off his new development of a directional Poynting Vector Antenna.

the present node. He will try it out for VHF with his mobile Kenwood. He said we will also have echo link on the Raspberry PI RLP-VHF repeater IRLP node. He also explained the difference between IRLP and echo link.

Dates for ERC meetings 2016:

Jan 27, 2016 - DMR digital voice capable portable radio (15 min) Gregory Smith.

Feb 24, 2016 - SDR Radio update (Terry VE3XTM)

Mar 23, 2016 - Digital Modes PSK (Dennis VE3UTN).

Also Maple syrup preps.

April 27, 2016 – Late start 7:30 pm

May 25, 2016 – elections and LED presentation by Frank VA3FJM

June 22, 2016 - Financial reports and CRA return. Field day also in June.

July and August - no meetings.

Sept 28, 2016

Oct 26, 2016

Nov 23, 2016

Dec 14, 2016 Christmas Party

Meeting Closed at 9:15 pm.

Ted VE3TRQ showed us the newest technology of linking our repeater to the IRLP. Except for the actual radio, he can hold everything in one hand.

