



NOVEMBER 2017

Volume 6 Issue 11

VE3ERC-LUB

- President:** Joycece VA3WXU
- Vice-President:** Brian VA3DXK
- Secretary:** Tom VE3DXQ
- Treasurer:** Paul VA3PDC
- Trustee:** John VE3JXX
- QSL Manager:** Judd VE3WXU
- Repeater Manager & Maintenance:** Carl VE3FEF
- Website Admin:** Ted VE3TRQ
- Lighthouse:** Bruce VE3QB
- Maple Syrup Display:** Judd VE3WXU
Joycece VA3WXU
- Newsletter:** Bob VE3IXX

ERC REPEATERS

- UHF 444.700 TONE: 131.8**
- UHF 444.700 TONE: 123.0**
- VHF 147.390 + TONE: 123.0**
- EMERGENCY SIMPLEX: 147.51**
- UHF- IRLP node 2404**
- VHF- IRLP node 2403, ECHOLINK node
VE3ERC-R**

**In an emergency, tune
Into our repeaters,
UHF 444.700 or
VHF 147.390 or
HF 3.755 LSB or
Simplex 147.510
For coordination and
assignments.**



**In Flanders fields the poppies grow
Between the crosses, row on row,
That mark our place; and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below.**

**We are the Dead. Short days ago
We lived, felt dawn, saw sunset glow,
Loved and were loved, and now we lie
In Flanders fields.**

**Take up our quarrel with the foe:
To you from failing hands we throw
The torch; be yours to hold it high.
If ye break faith with us who die
We shall not sleep, though poppies grow
In Flanders fields**



**Radio Amateurs
of Canada**



THE PREZ SEZ!

This club is Radio-ACTIVE

This club is Radio-ACTIVE

President's Update for OCTOBER 2017

A New View.....

Who on Earth Would Want to Be a Buzzard?

Are you asking yourself what is a buzzard? The dictionary describes it as a large hawk-like bird of prey with broad wings and a rounded tail, typically seen soaring in wide circles. In essence it is a North American vulture, esp. a turkey vulture.

Now this is not the kind of buzzard I wanted to be. I wanted to be a buzzard of the Buzzard Net. It took me over a year of sitting in our shack, Monday after Monday, waiting for a period of sporadic E to happen, and hoping for a voice that would come out of the white noise that generally crackles on the 6 metre band.

The Buzzard Net is run every Monday evening at 7:00 PM local time. on a frequency of 50.155 MHz. It originates from LaGrange, Georgia, U.S.A. and is run by members of the La-Grange Radio Club. The Net founder of the Buzzard Net is Robert Yates (W4GCB) and he is Buzzard #1. The net has been on air every Monday night since October 2011. The Net controllers are Ed (KE4EE - Buzzard #2) and Rob (N4VPI - Buzzard #4).

This Buzzard Net is different than most other nets. It runs as a team effort that sweeps the horizon clockwise several times for check-ins during the session. The goal for the Ham is to check-in the Buzzard Net more than just once. The first level is to check-in to the Net six times. This is when you become a buzzard and are given a number. Once you have done that, you can shoot for the next levels which are 36 check-ins, 100 check-ins, 155 check-ins, 216 check-ins, 250 check-ins and 300 check-ins. In as much as it took me a year to get 6 check-ins, I think I will be satisfied at the level one. I am truly proud of myself



that I did not give up the hunt. I am Buzzard #172...and I smile because it was mostly magic that it happened.

If you are interested in trying to get involved in the Buzzard Net, this is how you stand the best chance to do the magic (for the "Magic Band") for six-meter operators. Your chances increase during the summer and winter solstices June and December. This time of propagation can provide contacts over a few hundred miles, or a couple of thousands miles, or more with a "multi-hop".

I recently had the opportunity to meet several Buzzards during a visit down south. The people in the picture from left to right are Buzzard #4. Rob Momon (N4VPI), President of the LaGrange Amateur Radio Club, me, and #3 Buzzard Tom Howard (KD4HJD) who is the Net control for LARC's metre net on 28.337 mhz, on Monday evenings at 7:30. It was a privilege to meet these men.

For those determinable Hams who are looking for a challenge, try taking on the buzzard adventure; it is knocking on your door. Good luck. Be patient.

You will win.

Joycee 73 Cheers



ORIGIN OF THE POEM "IN FLANDERS FIELDS"

"In Flanders Fields" is a war poem in the form of a rondeau, written during the First World War by Canadian physician Lieutenant-Colonel John McCrae. He was inspired to write it on May 3, 1915, after presiding over the funeral of friend and fellow soldier Lieutenant Alexis Helmer, who died in the Second Battle of Ypres. According to legend, fellow soldiers retrieved the poem after McCrae, initially dissatisfied with his work, discarded it. "In Flanders Fields" was first published on December 8 of that year in the London magazine Punch.



Composed by Lieutenant-Colonel John McCrae at the battlefront on May 3, 1915 during the second battle of Ypres, Belgium.

It is one of the most popular and most quoted poems from the war. As a result of its immediate popularity, parts of the poem were used in propaganda efforts and appeals to recruit soldiers and raise money selling war bonds. Its references to the red poppies that grew over the graves of fallen soldiers resulted in the remembrance poppy becoming one of the world's most recognized memorial symbols for soldiers who have died in conflict. The poem and poppy are prominent Remembrance Day symbols throughout the Commonwealth of Nations, particularly in Canada, where "In Flanders Fields" is one of the nation's best-known literary works. The poem is also widely known in the United States, where it is associated with Memorial Day.

73

Bill VA3QB



WEDNESDAY NITE NET CONTROLLERS

NOVEMBER 15 - TOM VE3DXQ

NOVEMBER 22 - MEETING

NOVEMBER 29 - PAUL VE3PVB + DIGITAL GROUP

DECEMBER 6 - TRACY VA3TGY

DECEMBER 13 - BRIAN VA3DXX

DECEMBER 20 - BOB VE3IXX

DECEMBER 22 - CHRISTMAS PARTY

DECMEBER 27 - TED VE3TRQ

2018 JANUARY 3 - AL VA3TET

JANUARY 10 - REG VE3RVH

Back-of-the-Napkin Eyeball

QSO notes and stuff

by Rich, ve3DCC

Here are a few (more) dots , from the week's newspaper, to (re)connect:

Last month, I commented on Vladimir Putin's question to the head of a Russian technology company ("When will they, Artificial Intelligence, eat us?") as well as, The Financial Post report on " a Blackberry QNX-equipped self-driving car"

and the detection of those "Gravitational waves – those extremely faint ripples in the fabric of space and time, generated by some of the most violent events in the universe.". From a Ham Radio and communications perspective these are interesting. The notion of keyed morse code has evolved thru ASCII to a place where binary digital storage and communication can now control machines that can sense and interact. It seems more academic than real though.

This past month, however, there is now a report that Saudi Arabia has granted a robot " citizenship" (Waterloo Region Record, page A5, October 30, 2017). You can hear and see the robot at this web link:

Saudi Arabia gave citizenship to a robot named Sophia, and Saudi women aren't amused

<https://globalnews.ca/news/3844031/saudi-arabia-robot-citizen-sophia/>

Of course, the fluid appearance and verbal skills of "Sophia" are impressive, and obviously she is pre-programmed.

However, on the heels of this item, the Waterloo Record (Tuesday October 31,2017) reports that a researcher at the University of Waterloo has now BUILT...well, here are parts of the article so you be the judge....

Waterloo prof constructs world's largest simulation of a human brain Technology developed by UW professor could advance artificial intelligence

NEWS Oct 30, 2017 by Terry Pender, Waterloo Region Record

- Neuromorphic chips mimic the way human brains process information, and solve problems. Intel, IBM, HP and Qualcomm are all pursuing this technology.
- Chris Eliasmith, director of UW's Centre for Theoretical Neuroscience, built the world's biggest, functional model of a human brain. He calls it "Spaun." It is a simulated network of 4.5 million neurons that imitates the way brain cells collect and process information.
- Neural networks are behind leading edge technology such as driverless cars.
- Each of the neuromorphic chips he's making with Stanford will have the computing power of one million neurons. He wants to make the chips available to engineers to spark widespread innovation in what's expected to be the next generation of computer hardware.
- "We think that letting developers play with this kind of computation is important, to work it into their systems and understand how it works," said Eliasmith.

- That neuromorphic chip, like the human brain, will be energy-efficient. With 80 billion to 100 billion neurons, the human brain requires 15 to 20 watts of power to operate " about the same consumption as an efficient fluorescent bulb.

PS: The front page photo seems to show a computer board approx. 1 foot square.

Did a shiver go up your spine?

The implications are incredible. If a human brain can be simulated and then miniaturized , and if a robot can have citizenship (and presumably , the right to vote?), at what point can the "machines" be networked via radio waves and allowed to "talk". Many years ago, a fascinating film called "Colossus: The Forbin Project" imagined a world where two super computers, one Russian ("Guardian") and the other American ("Colossus) merged to create a benevolent ,all powerful, central mind that decreed that war was over, and humanity had to be "cared for".

The movie trailer, which is vintage 1970 and chilling, is located at:

<https://m.youtube.com/watch?v=W7Rq-PEW5qM>

More recent news feeds talk of autonomous drones that can be deployed to recognize facial features and clothing so only the "bad guys" are attacked.

Given the recent behaviour of world governments, no doubt, the notion of a simple place where laws are clear and enforced, is seducing but , surely, the implications for humanity are dire.

Is it possible that we may get to a place where we cannot "pull the plug"?

Will the clinical cold calculations of a machine determine the fates of people and future events?

Will historians place the blame on those radio amateur experimenters who were at that leading, bleeding edge? Hope Not!

So here is something to consider: What safeguards do we need to ensure that Colossus remains only a science fiction nightmare/fantasy?

de Rich, ve3DCC

**FOR LOADS OF INFORMATION
CHECK OUT THE ELMIRA CLUB WEBSITE**

AT

www.ve3erc.ca

An Ufer what???

By Tony Lelieveld VE3DWI

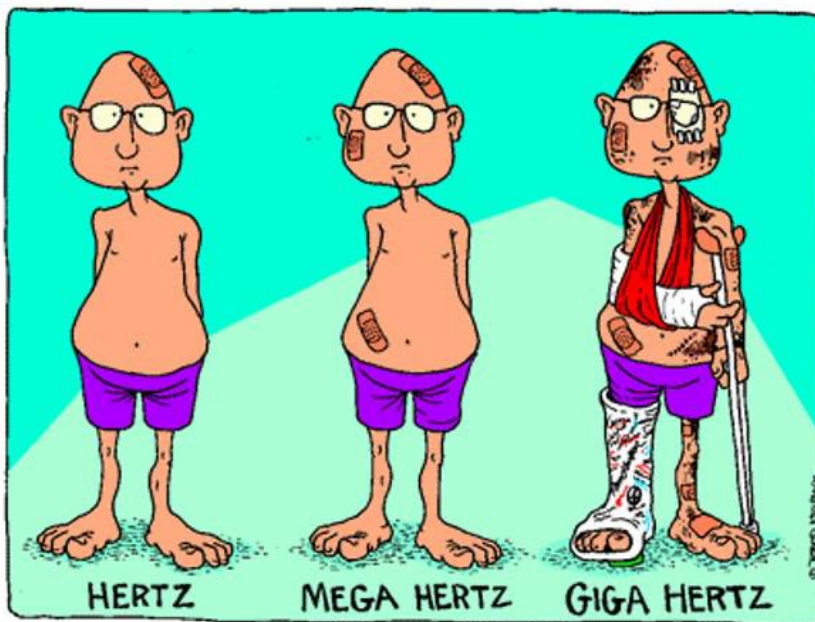
Have you ever heard the expression, “Ufer ground system”? I have on occasion, and wondered what it meant too. Finally curiosity got a hold of me and I had to know. After some research on the internet I came upon some articles and thought to share the information I had garnished. What follows is an excerpt of an internet article by Chris Scott and Associates about this subject.

During World War II, a retired Vice President of Underwriters Laboratories, Herbert G Ufer, developed it (Ufer ground system) for the U.S. Army. Igloo shaped bomb storage vaults were being built, and possible static and lightning induced detonations problems were of concern. Ground conductivity was poor, and to be effective enough, ground rods would have to be driven several hundred feet. After much research and testing Mr. Ufer advised the Army to make connection to the steel bar that would internally reinforce the concrete foundation. He had determined that concrete was more conductive than all but the best soil, and that this improved semi-conducting characteristic would enhance surface area contact with the surrounding soil.

The wire ties normally used would be extra secure, and attention would be given to bonding or welding the lattice-type network together. The Army adopted the idea, and built the vaults as specified. After construction ground resistance tests were made. No measurement exceeded five Ohms. This value was considered extremely low for the local soil conductivity. Later tests confirmed stability. Mr. Ufer went on to develop the concept of concrete encased grounding electrodes. Many of his findings are detailed in IEEE Transaction paper #63-1505. His system has since been used by the military, utility companies, Lake Tahoe Lifts, and industry throughout the country.

Note: Interestingly enough, when I was redoing my home electrical system and in going through the electrical code book, I found reference to the fact that it is allowed by the electrical code to make use of the concrete reinforcement steel in foundations to become the ground system or part thereof. If you ever plan to make use of this in an electrical installation, please confirm this yourself and/or get information from the “Electrical Safety Authority.

Tony VE3DWL



ELMIRA DIGITAL NET...

By VE3WXU – JUDD

This month's digital training will consist of a simple checkin. Your Net Control station will take checkins via roll-call. The roll-call list will be compiled by an email to **'ve3erc@gmail.com'**. If you wish to be on the digital net roll. Send an email to the above address, subject line **'Digital Net roll'**, comment block should contain your **CALL** and **NAME** and **6 digit grid**. Any questions can be included in the comment section of the email.

On November 29, after the FM net, The Digital Net will be called at approx 9:05 PM local. Freq will be 147.525 FM Simplex, Mode PSK63, 1000HZ on the waterfall. Please have RXid enabled...and TXid disabled...Net Control will open the net with the Preamble and then start the checkin roll-call. After each checkin response, a confirmation (CFM) will be sent and Net Control will move to the next on the roll. Required response for checkin:

" **VE3ERC** de *'your call'* *'your name'* *'your 6 digit Grid'* **K**".

Local Active Nets ...

Thurs - Tues 8:15am - 9:00am 147.390+ pl 123.0 Elmira FM Net
 Wed 8:00am - 8:30am 147.390+ pl 123.0 Elmira FM Net
 Wed 7:45pm - 7:59pm 147.390+ pl 123.0 Elmira ECO Net
 Wed 8:00pm - 8:00pm 147.390+ pl 123.0 Elmira FM Net
 Mon/Wed 9:00pm - 9:30pm 144.245 GARC 2M SSB Net
 Fri 9:00pm - 9:30pm 432.210 GARC 70cm SSB Net
Tuesdays 9:00pm - 9:30pm 50.170 USB Great White North 6M Net
 (local RagChew on 50.170 most nights after 9pm...bring a topic)
 5th Wed 9:05pm - 9:15pm 147.525 FM Elmira Digital Net

VE3ERC Elmira Radio Club Inc.

Minutes from Nov 22, 2017

1. Open and roll call.

The meeting was open by our President VA3WXU Joyce at 6:45 pm.

Roll Call: VA3TET Al, VE3DXQ Tom, VE3WXU Jud, VA3WXU Joyce, VA3DXK Brian, VA3GWM Gord, VE3CXU Doug, VE3JMU Jim, VA3PDC Paul, VE3JVG Jason, VE3DCC Rich, VA3QB Bill, VA3AUS Al, VE3KCY Ken, VE3DWI Tony, VE3IXX Bob, VE3TRQ Ted, VE3JXX, VE3AHP Rob, VE3YBM Brian, VA3FJM Frank, VE3LGN Larry, VE3ML Wes, Geoff Coulson (Canwarn), VE3EIX Harry, Ron Koniuch Guest.(Vice pres of Canada colours and co-chair of our local emerg CAER network.

Reports and Announcements: Executive, Committee Chairs, and members:

Secretary Report: Tom VE3DXQ advised that in last month's minutes there was no motion to accept the treasurer's report. This is a point of order. Joycee acknowledged this and said this will be done going forward. Tom made a motion to accept the minutes from the October 2017 meeting seconded by Judd.

All were in favor and the motion was carried.

Treasurer's Report: VA3PDC Paul gave the club our current balance and bills outstanding. Paul made a motion to have the report accepted. This was seconded by Brian VA3DXK. All were in favor and the report was accepted.

Presentation: Geoff Coulson – Canwarn Training. Geoff handed out the application for those who have not had the course, so they can get their Severe Weather Spotter Card once they have taken the course. The course contained much information about different weather conditions and how to stay safe in those conditions.

Meeting ended at 9:30 PM



Reporting Tip Sheet



How to Report

- Amateur radio network (if applicable) - Amateur Radio Condition Codes: Code Green – Severe Thunderstorm Watch
Code Yellow – Severe Thunderstorm Warning or Tornado Watch
Code Red – Tornado Warning
- Email at storm.ontario@ec.gc.ca
ec.cpio-tempetes-ospc-storms.ec@canada.ca
- Twitter with hashtag #ONstorm
- By phone at 1-800-444-WARN (9276)

What Your Report Should Contain

- Who – your name, CANWARN ID, contact number
- Where – your location and approx. location of what you are reporting
- What – describe what are witnessing/what you witnessed
- When – time of occurrence of event and duration
- Movement – where phenomenon came from and where it is going
- Confidence level

What to Report – Spring/Summer

- Large Hail (use coins to describe size...nickel, quarter, loonie for larger hail...golf ball etc..)
- Heavy rain that has resulted in local flooding
- Damaging winds (damage from tree branches down to more significant tree or structural damage)
- Funnel Cloud
- Waterspout
- Tornado
- Dense fog – visibility less than 1 km

What to Report – Fall/Winter

- Dense fog – visibility less than 1 km
- Any occurrence of freezing rain or freezing drizzle
- Heavily accumulating snow (2 or more cm/hr)
- Whiteout conditions in snow/blowing snow (visibility near zero)
- Rapid freezing of water on road surfaces

**- Weather Resources –
Storm Spotter Websites**

<https://ecalertme.weather.gc.ca>

ECAAlertMe – weather alert emails from EC

<http://www.theweathernetwork.com/public-alerts/#alert-twn>

Alert Ready

<https://google.org/publicalerts>

Google Public Alerts

<http://weather.noaa.gov/pub/data/raw/ac/accn10.cwto..txt>

(Daily Severe Thunderstorm Potential Bulletin from Environment Canada)

<http://spotterguides.us/>

(SKYWARN spotter guides...American equivalent to CANWARN)

www.nws.noaa.gov/om/brochures/SGJune6-11.pdf

(NOAA Weather Spotters' Field Guide)

<http://www.srh.noaa.gov/oun/?n=spotterglossary>
(Weather glossary for storm spotters)

<http://ccc.atmos.colostate.edu/pdfs/snowbook.pdf>
(Guide to snow measurement for winter reports)

Lightning Information and Safety

<http://www.ec.gc.ca/foudre-lightning>

<http://www.lightningmaps.org>

http://weather.gc.ca/lightning/index_e.html?id=ONT

<http://www.lightningsafety.noaa.gov/outdoors.htm>

http://safety.dri.edu/FieldSafety/Guidelines/Lightning_Safety_Guideline.pdf

More Internet Weather sites

Environment Canada's Weather website: <http://weather.gc.ca>

Weatheradio Information: <http://ec.gc.ca/weatheradio>

Types of Weather Alerts in Canada:

<http://www.ec.gc.ca/meteo-weather/default.asp?lang=En&n=D9553AB5-1>

National Weather Service: <http://w2.weather.gov/climate>

Jetstream – Online Weather School [_http://www.srh.noaa.gov/jetstream/](http://www.srh.noaa.gov/jetstream/)

WW2010 – Online Meteorology Course [http://ww2010.atmos.uiuc.edu/\(Gh\)/home.rxml](http://ww2010.atmos.uiuc.edu/(Gh)/home.rxml)

The Ohio State University (OSU) Current and Forecast Weather Information -
<http://asp1.sbs.ohio-state.edu/>

Weather Observations

<http://weatherobs.com>

Unisys Weather – Current and Forecast Weather Information

<http://weather.unisys.com/>

Weather Underground Current and Forecast Weather Information

<http://www.weatherunderground.com/>

Intellicast Current and Forecast Weather Information <http://www.intellicast.com/>**Windy** Forecast Weather Information

<http://windy.com>

CoCoRaHS Volunteer Weather Observing Network

<http://www.cocorahs.org/Canada.aspx>

Weatheradio Listeners' Newsletter

<https://weatherradiolistnersnewsletter.wordpress.com/>

Smartphone Apps

Météo – Canadian Weather – Apple/iOS app <https://itunes.apple.com/ca/app/meteo-canadian-weather/id925058325?mt=8>

WeatherEh- Apple/iOS

<https://appsto.re/ca/h-cvcb.i>

Radarscope – Apple/iOS and Google Play <https://radarscope.io/>

Storm (from Weather Underground) – Apple/iOS app

<https://www.wunderground.com/micro/storm/>

Books

Meteorology Today: An Introduction to Weather, Climate and the Environment - 2nd Canadian Edition – 2015 C.D Ahrens, Peter L. Jackson and Chris Jackson

The AMS Weather Book: An Easy-To-Understand Guide to the USA's Weather -2009 Edition, by Jack Williams

The Weather Handbook: An Essential Guide to How Weather is Formed and Develops – 3rd Edition - 2015, by Alan Watts

National Audubon Society Field Guide to North American Weather, by David Ludlum, Knopf Publishing

Guide to Weather Forecasting: All the Information You'll Need to Make Your Own Weather Forecast, by Storm Dunlop, Firefly Books

CONTRIBUTIONS TO VE3ERC-CLUB NEWSLETTER

Do you have an article you'd like to submit? Or photos? Do you have any comments you'd like to make?

Perhaps you'd like to share a photo of your shack, a special project you are working on or a special interest!

SEND THEM TO:

**Bob bobve3ixx@gmail.com (519-787-2279) or
To Joyce va3wxu@gmail.com (519-741-9032)**

NEW PRODUCTS by Paul VE3PVB

Radio amateurs who build their own antennas, appreciate the value of a vector antenna analyzer. The apparatus presented here as a kit is characterised by high accuracy, small dimensions and easy handling. It allows one port measurements in the frequency range 100 kHz to 100 MHz with a system impedance of 50 Ohms (BNC).

This kit is an improved version of the IV-Meter from DG5MK, based on his article published in *QEX May/June 2017*.

Easy to build with all SMD parts preassembled. Comes with pre-machined enclosure, selectable menu language (german/english) and english assembly and operating manual. SOL reference elements are included.

Powered by 2 x AA alkaline batteries (not included in kit), average consumption of 50 mA without display backlight.

Size only 5 $\frac{3}{8}$ x 3 $\frac{1}{2}$ x 1 inch, weighs only 290 g (including batteries)

\$139.95 includes shipping and handling

BX-240 : FA-VA4 Vector Antenna Analyzer kit

Review comments from Mike (Toronto)
VE3WDM QRPower Blog

The kit from Box73 comes from Germany, the shipping time was fantastic as well as packaging. There is no SMD work to be done that was done and I only had to mount some connectors, power on switch, pushbuttons and the LCD display.



This analyzer sells for a fraction of the price of other good quality analyzers. For more information go to www.box73.com