



MARCH 2018

Volume 7 Issue 3

VE3ERC-LUB

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- 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.**



The tower and antennas from Tony VE3DWI's former days. Tony is hoping to eventually re-install this set-up at his present location. Tony gave a presentation on "End Fed Antennas" at this month's meeting.



Brian VA3DXK, our Vice president, sent the following article. His "VICE PREZ SEZ" by-line will resume next issue.

Scientists are slowly unlocking the secrets of the Earth's mysterious hum

"In the deep glens where they lived, all things were older than man and they hummed of mystery."

— Cormac McCarthy, "The Road"

The world hums. It shivers endlessly.

Scientists have long known earthquakes can cause the Earth to vibrate for extended periods of time.



In fact, according to seismologists it actually oscillates like a bell after the shock of an earthquake. Vibrations from the 2004 tsunami generating Indonesian earthquake caused the Earth to resonate for five months afterwards and caused tiny distortions in the shape of the planet. Don't expect to hear this earthly tectonic generated tone – it's very low, an ultra-low frequency resonating at about 1 cycle per hour. However, in 1998 a research team found the Earth also constantly generates a low-frequency vibrational signal in the absence of earthquakes. There are several theories to explain it. One being that the Hum is a terrestrial or geological phenomenon that generates low-frequency sounds or perceptions of those sounds. For example, there is a well-documented history of animals predicting earthquakes and taking action to save themselves. From an evolutionary perspective, there may be survival value in having members of a population highly sensitive to some types of vibrations.

Since then, seismologists have proposed different theories to explain the existence of this continuous vibration, from atmospheric disturbances to ocean waves moving over the sea floor. They've also measured the vibration using seismometers on land, but had not yet successfully measured it at the sea floor, which could help scientists better quantify the sources of the vibrations. Capturing the hum at the ocean bottom could provide new insights into the source magnitude, according to a geophysicist at the Paris Institute of Earth Physics in Paris, France and lead author of the new study.

Now, using seismic instruments on the bottom of the ocean, researchers have successfully quantified Earth's vibrational "hum". This new study published in *Geophysical Research Letters*, a journal of the American Geophysical Union, has determined the frequencies at which the Earth naturally vibrates, and confirmed the viability of using ocean bottom instruments to study the hum. It's a low, ceaseless droning of unclear origin that rolls imperceptibly beneath our feet, impossible to hear with human ears. A researcher once described it as the sound of static on an old TV, slowed down 10,000 times.

It's comforting to think of Earth as solid and immovable, but that's false. The world we live on is vibrating, stretching and compressing. We're shaking right along with it.

"The earth is ringing like a bell all the time," said Spahr Webb, a seismologist at Columbia University. The hum is everywhere. Its ultralow frequencies have been recorded in Antarctica and Algeria, and — as announced this week by the American Geophysical Union — on the floor of the Indian Ocean. We still don't know what causes it. Some have theorized that it's the echo of colliding ocean waves, or the movements of the atmosphere, or vibrations born of sea and sky alike. But if we could hear this music more clearly, scientists around the world say, it could reveal deep secrets about the earth beneath us, allowing us to map the interior of Earth with more detail and accuracy. Including the hum from seismometers on the ocean sea floor can give a better overall picture than using land seismometers alone by increasing data coverage in large uncovered areas, Deen said.

"Earth is constantly in movement, and we wanted to observe these movements because the field could benefit from having more data," she said. And the hum is getting clearer all the time. Earth vibrates at different frequencies and amplitudes, for different reasons, and not all those vibrations are the 'hum'. Earthquakes are like huge gong bangs. When an enormous quake hit Japan in 2011, Webb said, the globe kept ringing for a month afterward. People sitting on the other side of the world bounced up and down about a centimeter, though so slowly they didn't feel a thing.

In 1998, a team of researchers analyzed data from a gravimeter in east Antarctica and realized that some of these vibrations never actually stop. "They discovered features in the data that suggested . . . continuous signals," a University of California at Santa Barbara researcher recounted in 2001. These seismic waves ranged from 2 to 7 millihertz — thousands of times lower than the human hearing range — and continued endlessly, regardless of earthquakes.

The phenomenon became popularly known as the “hum of the Earth.” Webb was one of many researchers who searched for the hum's cause in the 21st century. Some thought interactions between the atmosphere and solid ground caused the shaking, though he discounts the idea. Rather, Webb said, most recent research suggests the primary cause is ocean waves — “banging on the sea floor pretty much all the way around the Earth.”

Sometimes waves sloshing in opposite directions intersect, sending vibrations deep down into Earth's crust. Sometimes a wave on a shallow coast somewhere ripples over the rough sea floor and adds its own frequencies to the hum. “I think our result is an important step in the transformation of mysterious noise into an understood signal,” an oceanographer with the French Research Institute for Exploitation of the Sea told Live Science after publishing a 2015 paper detailing the ocean wave theories.

The result is a harmony of ultralow frequencies that resonate almost identically all over the globe — and that's potentially invaluable to those who want to know what goes on beneath its surface, where the core spins and tectonic plates shift. Scientists already measure how fast earthquake waves travel through different regions of the underground to make detailed subterranean maps from the lithosphere right on down through the mantle to the core. But earthquakes come randomly and briefly, giving only brief glimpses like flashes of lightning on a dark night. A constant, uniform vibration could act like a floodlight into the underworld.

Some researchers believe the hum extends all the way down to the Earth's core, and some have even fantasized about using hums on other planets to map out alien geography and sub-surface geology. And yet we're still only beginning to understand our planet's hum.

And scientists have been limited for years because they only knew how to measure it from land, while nearly three-quarters of the globe is underwater.

That's where the new study comes in. A team led by Martha Deen, a geophysicist at the Paris Institute of Earth Physics in Paris, published it last month in the American Geophysical Union's journal. The scientists collected data from seismometer stations that had been placed in the Indian Ocean near Madagascar several years ago. These stations were meant to study volcanic hot spots — nothing to do with the hum — but the team worked out a method to clean the data of ocean currents, waves, glitches and other noise. They “were able to reduce the noise level to approximately the same level as a quiet land station,” the Geophysical Union said in [an accompanying article](#). And when they were done, they were left with the first-ever underwater recording of the hum. The study determined Earth's natural vibration peaks

at several frequencies between 2.9 and 4.5 millihertz, they said — a tighter range than the first hum researchers in the 1990s had recorded. It was also similar to measurements taken from a land-based station in Algeria. These vibrations can't be heard by people because they are approximately 10,000 times smaller than the lower hearing threshold of the human ear, which is 20 hertz.

The theory and evidence to support it is still being refined, but, as in all science, it seems best to start with what we know and is plausible, gather more evidence that the hum goes all the way around the world; and move towards the hope that we may one day reveal all that goes on in the 'solid' Earth beneath our feet and ocean floors around the world. Perhaps one day in the future this discovery will help us assess and map other worlds in our solar system and beyond. Until then the Earth will continue to resonate, beckoning science to continue to explore and uncover its mysteries.

References:

https://www.washingtonpost.com/news/speaking-of-science/wp/2017/12/08/scientists-are-slowly-unlocking-the-secrets-of-the-earths-mysterious-hum/?utm_term=.2b4ff224e9bf
<https://blogs.agu.org/geospace/2017/12/06/scientists-capture-earths-hum-on-ocean-floor/>

Don't forget

MAPLE SYRUP FESTIVAL ELMIRA

SATURDAY, APRIL 7, 2018

SET-UP BEGINS

2 PM ON FRIDAY APRIL 6

HOPE TO SEE YOU THERE!

Back-of-the-Napkin Eyeball

QSO notes and stuff For March 2018

by Rich, ve3DCC

Do you remember RSO?

RSO was the acronym for Radio Society of Ontario. This group was prolific—for example, it sponsored the tower at Lloyd ve3BZF's home in Orangeville from which "Code Practice" originated each evening during the late 1970's, and to its' credit, it sponsored both Flea Markets and Seminars in large gatherings of Amateurs each Fall. A memorable convention held in Waterloo featured Packet Radio and Satellite RO theory and construction. **WOW**, that was very cool... and very new at a time when cell phones were still years away. Many K-W hams were at that leading edge, and we heard directly from those who were involved of those early steps into AX25 protocols and packet.

Alas, with the demise of RSO, so it seems died the excellent seminars on leading edge Ham Radio thinking. The gatherings ended. A local eyeball vacuum ensued.

Perhaps with the advent of exquisite rigs with throw-away boards, and surgically-perfect black boxes, the allure of hands-on experimenting fell into disrepute. The technology appeared to have reached a very high and specialized plateau. You dare not dabble with things so tiny and complex. However, with a resurgence of interest in new-age digital communications protocols and antennae and software digital, is there a need for a forum for sharing our thinking and innovating as amateurs again?

Fast Forward to 2018, and a new/old idea suggested by Al MacDonald, va3TET. To fill the information gap, Al has suggested that we revive the spirt (and sport) of those leading edge seminars.

Allow me to let Al tell it to you via a letter he has sent recently to various institutions:

"Hello: My name is Alan Macdonald. I am a retired electronics professional.

I am a member and past president of the Elmira amateur Radio Club (VE3ERC Inc.). We are a not-for-profit incorporation. Our members are federally-licensed radio experimenters and represent a cross section of retired engineers, industry professionals and electronic hobbyists. Besides volunteer emergency communications work, we build and innovate (the VE3ERC radio club has been involved in the building and advancement of understanding of Poynting Vector antenna™s). Our work has been published.

Our club would like to sponsor a communications seminar on Saturday, Sept. 22 , 2018 with the intention of facilitating growth and experimentation in this field. We hope to host seminars on antenna, low frequency and spread spectrum communications (etc.) and by popular request, quantum communications. We need material that is non-trivial for this audience. Do you have a community outreach program? Can you direct me to anyone who might help? The sessions will be at the Elmira Legion Hall in Elmira. We are going to charge a nominal cost-recovery registration fee, perhaps \$20 or \$30, to cover expenses. Presentations would be approximately 45 to 60 minutes with questions. The sessions will be scheduled between 9:00 am

and 3:00 pm as befits the presenter's wishes. To reduce printing costs, we would like to make slides and handouts available at the club websites. We are also affiliated with RAC, Radio Amateurs Canada Inc. We will be advertising the event, widely; however, We would like to limit registration to about 50 attendees initially. It is our intention to make this an annual event that will serve to disseminate advancements in communications to the Canadian amateur radio community, and promote the expertise of your Faculty and University."

Well Folks, there you have it. As we start to put the meat on the bare-bones plan, we are hoping that you, the reader, will consider suggesting topics, speakers and ,perhaps, even attending our seminar/workshop day. The date is fixed. We now need speakers. We are also willing to talk to your club about this venture.

You may contact me via raclausi@kw.igs.net or Al via almac01@outlook.com

We would love to involve you. Watcha' waiting for?

De ve3DCC, Rich.

DANGEROUS CRIMINAL AT LARGE IN THIS AREA

Please Help Us Find Him

Submitted by Tony VE3DWI

A reward of 500 micro-Farad is offered for information leading to the arrest of HOPALONG CAPACITY. This Unrectified Criminal escaped from a Weston Primary Cell where he had been clamped in Ions.

He is charged with the murder of his Ant-Enna and his Uncle Con-Denser as well as the induction of an 18 turn Coil called Milli-Henry who was found choked and robbed of valuable Joules. He is armed with a Carbon Rod and is a Potential Killer. He is also accused of driving a D.C. motor over a Wheatstone bridge and refusing to let the Band-Pass.

If encountered he may offer Series Resistance. The Electro Magnetic Force spent the night searching for him in a Magnetic Field where he had gone to Earth. They had no success and now believe that he has returned Ohm via a short circuit.

He was last seen with his friend Eddy Current riding a Kilo-Cycle. Eddy was playing a Harmonic. Charges against HOPALONG CAPACITY are being pursued under Ohms Law.

Author Unknown.

Geoff Coulson did his Canwarn presentation for the Elmira Radio Club last November meeting. However, if you missed the meeting, you can still attend his presentation at one of the following area locations. His e-mail follows:

Coulson, Geoff (EC) <geoff.coulson@canada.ca>

Mar 9 at 3:02 PM

Folks, another year has flown by and it is once again time to be thinking about severe thunderstorms and CANWARN storm spotter training. A number of venues have been confirmed already, some are still in the process of being confirmed but I thought it would be worthwhile to advertise what is known as of March 9, 2018.

As always your membership in this program is greatly appreciated by the forecasters in the Ontario Storm Prediction Centre. While social media can light up during severe weather events, the forecasters need to do a fair amount of legwork to verify these reports. Reports received through social media, the spotter phone line or email that are from identified CANWARN members allow forecasters to utilize the information received much more quickly and with a greater degree of confidence.

I once again look forward to seeing many of you at one of the upcoming training sessions and also look forward to meeting new volunteers that have learned about the program and want to become a part of it.

So, without further delay, please find following the current list of training dates/venues. Please note that some evening training sessions begin at 6:30 PM, others at 7 PM and some morning sessions begin at 9 AM while others at 9:30 AM. This list will be updated regularly in the coming weeks as other venues are confirmed. The training dates in northwestern Ontario are still to be decided and I'll confirm them in the coming weeks. Some of the venues below will have specific people/websites to RSVP to...if no specific RSVP instructions are there, please feel free to RSVP directly to me at geoff.coulson@canada.ca

May 9 – Kitchener-Waterloo – 7 PM – Forbes Room, RIM Park, 2001 University Ave. E, Waterloo

May 15 – Dufferin County/Orangeville – 7 PM – Dufferin County Courthouse, 55 Zina Street, Orangeville

Geoff Coulson

Warning Preparedness Meteorologist |
Météorologue de sensibilisation aux alertes
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Mike VE3MKX sent the following article with permission from the author:

A Boost/Buck DC-DC Converter for use with the KX3 or Other QRP Rig by Al Duncan VE3RRD

I wanted to use my KX3 as a portable transceiver powered from whatever battery power was available to me. For the full output power of 10 to 12W, or to charge the internal batteries, a 13.8V (or slightly greater) supply is needed; so some means of converting voltages that are too low or too high is required. On eBay, I found several boost/buck converters that would work to supply a continuous 13.8V at 2.5 to 3A. The one I ordered can operate from any input voltage between 5 and 32VDC and can supply the required output at 3A continuous (5A peak).



<http://www.ebay.com/itm/DC-DC-Boost-Buck-Converter-5-32V-to-1-25-20V-5A-Power-Supply-Voltage-Regulator/181516035122>

I also ordered a compact DC voltmeter module to monitor the battery voltage so I would not discharge it too far and cause permanent damage.



<http://www.ebay.com/itm/Mini-DC-2-5-30V-Red-LED-Panel-Voltage-Meter-3Digital-Display-Voltmeter-LS4G-/131051474424>

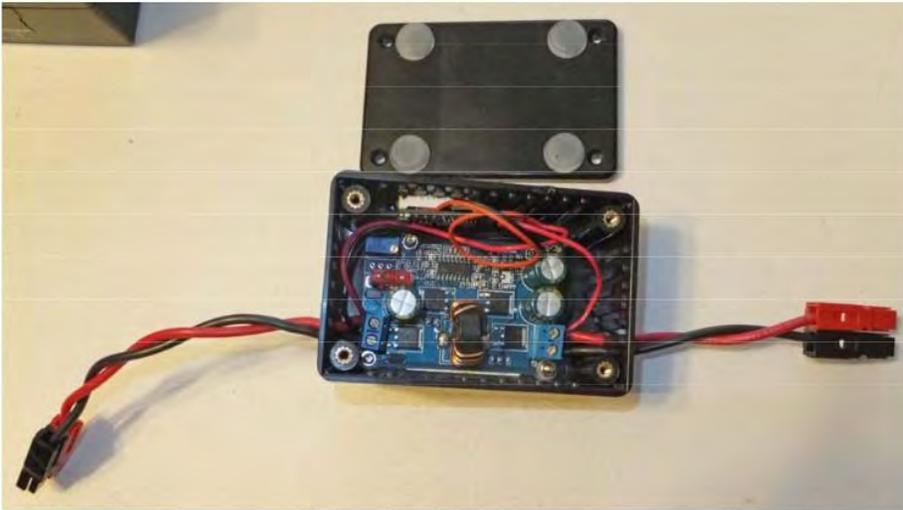


This voltmeter is powered by the voltage it is measuring, and operates over a range of 2.5 to 30VDC. The finished converter allows me to use 6V, 12V or even 24V batteries to power my KX3

A toggle switch allows the voltmeter to monitor either the input (battery) voltage,



or the output voltage. The KX3 has a series diode in the power supply line, so I adjusted the converter output voltage to obtain the desired voltage as displayed on my KX3. An output of 14.1V resulted in a displayed value of 13.9V on my KX3. I used 18 AWG wire for both the input and output cabling to minimize voltage drop. At maximum output current and lower input voltages, the converter can draw as much as 8A intermittently from the battery.



Everything fits inside a Hammond 3.3 x 2.2 x 1.5 inch (1591LSBK) box. There is just enough room between the edge of the PCB and the wall of the box to fit the subminiature SPDT switch and the compact DVM board. The DVM is secured in its opening with a few drops of cement. I monitor the battery (input) voltage while I am operating; as I mostly use 12V gel cell batteries (two 6V - 7AH in series), if I see the battery voltage drop much below 11.5 VDC during transmit, I will switch to a new set of batteries (or call it a day).

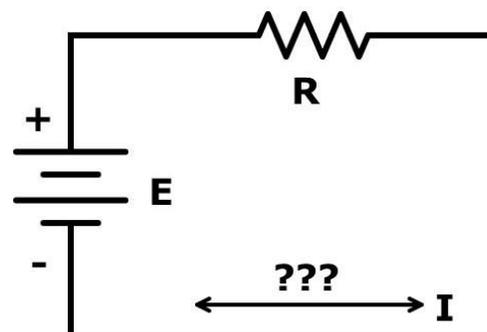


Which Way Does the Current Really Flow?

By Dan Romanchik, KB6NU

I was recently taken to task by one of my blog readers regarding my description of current flow in my *No Nonsense Technician Class License Study Guide*. He wrote:

You casually say that current flows from Positive to Negative (with cool accompanying directional arrows), without any accompanying qualifying statement. Over the years I have looked at ALL the views on the subject. Positive to Negative is NOT what I was taught 48 years ago, and I have never seen a good reason to change my view.



In a subsequent email, he pointed me to a Nuts `n Volts article, "Which Way Does Current Really Flow?" and asked my opinion. In the article, the author, who is a ham by the way, does a good job of explaining the various types of current flow.

I agree that in electronic circuits electrons flow from negative to positive, but it really doesn't matter. I agree with one the article's commenters who says,

This is a silly argument. It's like comparing apples and oranges and challenging people to take sides.

Electron flow is not current flow. Electron flow is easy to understand, an actual physical property, and a real help in understanding vacuum tube operation. But it falls apart when one needs to understand complex electronic systems.

[Conventional] current flow is a mathematical abstraction. It is defined as a net flow of positive charge, irrespective of the polarity of the physical charge carriers — whether electrons, holes, positive or negative ions, or whatever.

When looking at any circuit containing a resistance with a voltage across it, conventional current through that resistor says that the voltage drop occurs as the current through it meets resistance. On the other hand, in negative (electron) flow, a voltage INCREASE will correspond to the 'current' flow through it, clearly violating physical laws. Conventional current flow is consistent with the laws of physics and those of other engineering disciplines.

You are correct that engineers, professors and scientists use conventional current flow. That is not because they are too obtuse to understand electron flow; I assure you they fully understand it. It is because in their world they have to solve more general problems involving complex math and science, and, again, conventional current flow is consistent with physical laws.

It is unfortunate that electron flow and current flow are so often confused. They both have their place.

After reading that article, I thought I'd see what the ARRL Handbook has to say about current. In the 1963 edition, they don't mention electron flow at all. They have one diagram showing the direction of current flow in both series and parallel circuits, but the voltage source has no polarity. It's simply labelled "Source of E.M.F." Diagrams giving practical examples of series and parallel circuits do include a battery, and if the reader were to mash up the two diagrams, they would conclude that current flows from the positive terminal to the negative terminal.

The most recent edition of the Handbook that I have is the 2005 edition (it might be time to get another copy!). It says,

Electrons move from the negative to the positive side of the voltage, or EMF, source. Conventional current has the opposite direction, from positive to negative. This comes from an arbitrary decision made by Benjamin Franklin in the 18th century. The conventional current direction is important in establishing the proper polarity sign for many electronics calculations. Conventional current is used in much of the technical literature. The arrows in schematic symbols point in the direction of conventional current, for example.

Having said all that, I really don't see that there's much of a controversy here. I did learn to think of current as conventional current in college, although it was mentioned that electrons actually flow in the opposite direction. Using the concept of conventional current has never seemed to hold me back. I've been able to design circuits and repair electronic equipment thinking that current flows from positive to negative.

Although it's a departure from my "no nonsense" style, I am thinking of including a sidebar, similar to the paragraph above from the 2005 Handbook explaining the two ways of looking at current flow. What do you think?

When he's not trying to figure out which way current flows, Dan blogs about amateur radio at KB6NU.Com, teaches ham radio classes, and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him at cwgeek@kb6nu.com.

**UPDATE FROM TED VE3TRQ
REGARDING THE ERC WEBSITE AT [WWW.VE3ERC.CA](http://www.ve3erc.ca)**

I have updated the "About" section of the Elmira Radio Club website to include up-to-date repeater and node information. I have also included information about the nets and how they are reachable. See <http://www.ve3erc.ca/about-ve3erc/>

In the last few days we have expanded the reach of our EchoLink connections by connecting to the *TECHLINK* conference server, EchoLink node 9229. This means while traveling, you can connect to *TECHLINK* or node 9229, or to VE3ERC-R. The reason for providing a conference server connection is to make connecting easier while the repeater is busy with a net. You would often get "Repeater locally busy" messages when trying to connect to the VE3ERC-R node during a net - this will not happen when connecting to *TECHLINK*.

Note that there are some other interesting nets on the *TECHLINK* conference, including TechTalk on Fridays at 8 PM (01:00 UTC) and the Mississauga ARC on Tuesdays at 8:30 PM (01:30 UTC).

Ted VE3TRQ ve3trq@yahoo.com

Tom, VE3DXQ sent the following e-mail:

I guess someone heard us talking about WD-40 today.
I just got this in the mail this evening...

What is The Main Ingredient of WD-40?

Before you read to the end, does anybody know what is the main ingredient of WD-40?



WD-40 ~ Who knew!

I had a neighbor who bought a new pickup. I got up very early one Sunday morning and saw that someone had spray painted red all around the sides of this beige truck (for some unknown reason).

I went over, woke him up, and told him the bad news. He was very upset and was trying to figure out what to do. Probably nothing until Monday morning, since nothing was open.

Another neighbor came out and told him to get his WD-40 and clean it off.

It removed the unwanted paint beautifully and did not harm his paint job that was on the truck. I was impressed!

WD-40 who knew?

"Water Displacement #40"

The product began from a search for a rust preventative solvent and degreaser to protect missile parts.

WD-40 was created in 1953, by three technicians at the San Diego Rocket Chemical Company.

Its name comes from the project that was to find a 'Water Displacement' Compound.

They were finally successful for a formulation, with their fortieth attempt, thus WD-40. The 'Convair Company' bought it in bulk to protect their atlas missile parts.

Ken East (one of the original founders) says there is nothing in WD-40 that would hurt you.

When you read the 'shower door' part, try it. It's the first thing that has ever cleaned that spotty shower door. If yours is plastic, it works just as well as on glass. It's a miracle!

Then try it on your stove-top.

It's now shinier than it's ever been.

You'll be amazed.

WD-40 Uses:

1. Protects silver from tarnishing.
2. Removes road tar and grime from cars.
3. Cleans and lubricates guitar strings.
4. Gives floor that 'just-waxed' sheen without making them slippery.
5. Keeps the flies off of Cows, Horses, and other Farm Critters.
6. Restores and cleans chalkboards.
7. Removes lipstick stains.
8. Loosens stubborn zippers.
9. Untangles jewellery chains.
10. Removes stains from stainless steel sinks.
11. Removes dirt and grime from the barbecue grill.
12. Keeps ceramic/terracotta garden pots from oxidising.

13. Removes tomato stains from clothing.
 14. Keeps glass shower doors free of water spots.
 15. Camouflages scratches in ceramic and marble floors.
 16. Keeps scissors working smoothly.
 17. Lubricates noisy door hinges on both home and vehicles doors.
 18. It removes that nasty tar and scuff marks from the kitchen flooring. It doesn't seem to harm the finish and you won't have to scrub nearly as hard to get them off. Just remember to open some windows if you have a lot of marks.
 19. Remove those nasty bug guts that will eat away the finish on your car if not removed quickly!
 20. Gives a children's playground gym slide a shine for a super fast slide.
 21. Lubricates gearshift and mower deck lever for ease of handling on riding mowers.
 22. Rids kids rocking chair and swings of squeaky noises.
 23. Lubricates tracks in sticking home windows and makes them easier to open.
 24. Spraying an umbrella stem makes it easier to open and close.
 25. Restores and cleans padded leather dashboards in vehicles, as well as vinyl bumpers.
 26. Restores and cleans roof racks on vehicles.
 27. Lubricates and stops squeaks in electric fans.
 28. Lubricates wheel sprockets on tricycles, wagons and bicycles for easy handling.
 29. Lubricates fan belts on washers and dryers and keeps them running smoothly.
 30. Keeps rust from forming on saws and saw blades, and other tools.
 31. Removes grease splatters from stove-tops.
 32. Keeps bathroom mirror from fogging.
 33. Lubricates prosthetic limbs.
 34. Keeps pigeons off the balcony (they hate the smell).
 35. Removes all traces of duct tape.
 36. Folks even spray it on their arms, hands, and knees to relieve arthritis pain.
 37. Florida 's favourite use is: 'cleans and removes love bugs from grills and bumpers.'
 38. The favourite use in the state of New York , it protects the Statue of Liberty from the elements.
 39. WD-40 attracts fish. Spray a little on live bait or lures and you will be catching the big one in no time. Also, it's a lot cheaper than the chemical attractants that are made for just that purpose. Keep in mind though, using some chemical laced baits or lures for fishing are not allowed in some states.
 40. Use it for fire ant bites. It takes the sting away immediately and stops the itch.
 41. It is great for removing crayon from walls. Spray it on the marks and wipe with a clean rag.
 42. Also, if you've discovered that your teenage daughter has washed and dried a tube of lipstick with a load of laundry, saturate the lipstick spots with WD-40 and rewash. Presto! The lipstick is gone!
 43. If you spray it inside a wet distributor cap, it will displace the moisture, allowing the engine to start.
- My discovery, Ants don't like it.....

P.S. - As for that Basic, Main Ingredient...
Well... it's FISH OIL...

Editor's Note: With regard to all the claims of the writer, we have not had them all verified. While they may all be valid, view them with a "grain of salt." However I can verify one of the claims. Just after Tom sent me the article, I was spray

painting a bird feeder with one of the grandkids. I inadvertently got some paint on the back of my hand which I didn't notice. Shortly afterwards when I went to turn on the hall light my hand touched the wall. There was a blob of paint. I grabbed a wet cloth to wipe it off. All that did was smudge it even worse and even some elbow grease would not remove it. Recalling this article I grabbed some WD-40, sprayed it on, and, unbelievably, the entire smudge and paint came off. The original wall paint was not affected. So that works for sure.

However, I did do a quick internet search and found an article in Wired Magazine dated 2014 which stated the following: "The recipe for this superlube has long been a closely guarded trade secret—until now. *Wired* sent a can to the lab and got the ingredients.

Mineral Oil

Seriously. WD-40 is mostly a mix of baby oil, Vaseline, and the goop inside homemade lava lamps."

Also the can has a **poison, flammable and explosive label so don't use it on food stuff**. As I said, take it with a "grain of salt". I wonder if it would work to seal antenna and feedline connections!!!

'73 Bob VE3IXX

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)**

WEDNESDAY NITE NET CONTROLLERS

FEBRUARY 28 - MEETING

MARCH 7 - BOB VE3IXX

MARCH 14 - TED VE3TRQ

MARCH 21 - AL VA4TET

MARCH 28 - MEETING

APRIL 4 - REG VE3RVH

APRIL 11 - TOM VE3DXQ

APRIL 18 - PAUL VE3PVB

APRIL 25 - MEETING

MAY 2 - TRACY VA3TGY

MAY 9 - BRIAN VA3DXX

Yearly Events & Contests

• Club Events & Contest

* TCA Contest Calendar: January to Early March 2018 <http://wp.rac.ca/tca-contest-calendar-january-to-early-march-2018/>

* CCO Contest Calendar: <http://www.va3cco.com/calendar.htm>

* WA7BNM Contest Calendar <http://www.contestcalendar.com/>

- North American QSO Party, CW 1800Z Jan 13 to 0600Z Jan 14
- North American QSO Party, SSB 1800Z Jan 20 to 0600Z Jan 21
- Winter Field Day, 1700Z Jan 28 to 1700Z Jan 29
- North American QSO Party RTTY, 1800Z Feb 24 to 0600Z Feb 25
- ARRL International DX SSB, March 3-4, 0000Z to 2400Z
- Elmira Maple Syrup Festival, April 6-7
- ARRL Rookie Roundup SSB, April 15 1800 UTC to 2359 UTC, 6-hour event
- Ontario QSO Party, 1800Z April 14 to 0500Z April 15, 2018 (3rd full weekend of April)
- ARRL Rookie Roundup SSB, April 15 1800 UTC to 2359 UTC, 6-hour event.
- Woolwich CAER Emergency Preparedness Open House with Fire Dept. Fri. May 11
- Museum Ships Weekend June 2-3 0000Z June 2 to 2359Z June 3
- Central Ontario Hamfest, Sunday June 3rd
- ARRL Field Day, 1800 UTZ June 23 to 2100 UTZ June 24
- RAC Canada Day Contest, July 1st 0000Z to 2359Z
- 13 Colonies Special Event, July 1, 2017-1300 UTC to July 7, 2017-0400 UTC
- IOTA Islands on the Air, Saturday July 28 12:00 UTC to Sunday July 29 12:00UTC (last full weekend in July)
- Point Clark Lighthouse Weekend, 0001UTC August 18 to 2400 August 19

visit the ERC Website at



www.ve3erc.ca

VE3ERC Elmira Radio Club Inc.

Minutes from March 28, 2018

1. Call to Order & Welcome

The meeting was open at 7:30 pm by one of our past presidents Rich VE3DCC, as Brian VA3DXK could not be present.

2. Roll Call: VA3TET Al, VE3DXQ Tom, VA3GWM Gord, VE3CXU Doug, VE3JMU Jim, VA3PDC Paul, VE3DCC Rich, VE3QB Bruce, VE3DWI Tony, VE3IXX Bob, VE3TRQ Ted, VE3JXX John, VE3YBM Brian, VA3FJM Frank, VE3EIX Harry, VE3CD Harold, VE3PVB Paul, VE3CDF Andy, VA3QB Bill, VE3JMU Jim, VE3IXX Bob, VE3RVH Reg.

3. Adopt Agenda: Rich asked for a motion to adopt the agenda. Motion by Frank VA3FJM, seconded by Ted VE3TRQ. All were in favor, carried.

4. Secretary's Report: Tom VE3DXQ thanked Bob VE3IXX for doing last month's minutes as Tom was not feeling well and unable to attend February meeting. Tom made a motion to have minutes accepted as printed. This was seconded by Bruce VE3QB.

5. Treasurer's Report: Paul VA3PDC said it was a very quiet month and nothing new to report. Bruce made a motion to have report accepted all were in favor, carried.

6 Vice President's Report BRIAN VA3DXK

- Annual membership dues: \$40 per RAC member and \$50 per non-RAC due in March
- AGM & Officer Elections to be held during the regular May 23rd meeting
- Club Sanctioned Events from present to 2018 AGM through to 2019 AGM

Paul VA3PDC made a motion to sanction all club events and activities from now through upcoming AGM 2018 in May through to AGM May 2019. This was seconded by Bruce VE3QB, all in favor, carried.

7. Committee Reports:

- Safety Officer Tom VE3DXQ No incidents to report.
- Nominations Committee (Brian VA3DXK / Jason VE3JVG / Rich VE3DCC / Paul VE3PVB) Rich VE3DCC advised that positions are generally for 2 year terms and that way everyone gets a chance.

Paul VE3PVC said this will be dealt with at the April meeting.

- Elmira Maple Syrup Festival, April 7. Al VA3TET said that Paul will provide a wire Antenna and Al said he has a mag-mount for VHF/UHF. Al said we need people for set up and tear down. Set up will start at 2 pm Friday April 6, 2018. The tear down will be on Saturday April 7 at 4:30 pm. Ted VE3TRQ said he will do digital radio. Al VA3TET said we need volunteers to operate radios. Bob VE3IXX will be doing ONTARS. Ted VE3TRQ said we need a screen so we can project the digital modes. Bruce VE3QB said he could bring a screen. Tom VE3DXQ and Reg VE3RVH will bring a ladder for putting up the Antennas. Reg VE3RVH will bring a power bar and Al will bring an extension cord.

- Field Day June 23-24 (Al VA3TET, Bruce VE3QB, Frank VA3FJM, Bob VE3IXX)

Al VA3TET said we have not decided on a location for this event as yet. Al asked Frank VA3FJM if he looked into having it at McLennan Park, Kitchener. Frank VA3FJM said he spoke to the local manager and he said there should not be any problem, as long as we clean up after. Frank also advised there is no power up there at all. So we would have to rely on generators. Frank said he would have to find out from his contact who to contact at the City of Kitchener.

- IRLP, Antenna/Repeater Feedmill Committee (Ted VE3TRQ / John VE3JXX / et.al.). John VE3JXX said he has not been by the feed mill in quite some time. Ted VE3TRQ advised that he got a new Echo/ IRLP node for the UHF repeater. This will go on the Link Radio. So we will have Echo Link and IRLP capabilities on both repeaters and tie them together.

- Fall Conference/Workshop (Rich VE3DCC AI VA3TET)

Rich VE3DCC advised that AI VA3TET sent letters to 4 Universities regarding this event. This conference will be on September 22, 2018 at the Elmira Legion. We will go ahead with this regardless and expect we would get a least 40-50 people. We are working at lining up speakers. The Perimeter Institute has been contacted and referred us to another contact. AI VA3TET mentioned Quantum communications would be an interesting topic. This form of communication is instantaneous.

There will be a lunch break and there is a snack area downstairs. AI VA3TET said we should let other clubs in the area know about this event. There will probably be a \$20.00 fee to attend to offset expenses of speakers.

- Website Manager (Ted VE3TRQ) Ted advised he is about a month late getting the latest News Letter on there. He also needs to update the contact list.

8. Unfinished Business: Trusteeship of Club Call Sign & repeater Licence

Carl VE3FEF is willing to sign this over. Wes expressed an interest in taking this over but is not at this meeting so it will be held over to next month's meeting. Rich VE3DCC advised that we should find out the procedure for this from KWARC. Tom VE3DXQ made a motion to have the Club Call Sign & repeater licence signed over, seconded by Jim VE3JMU. All were in favor and it was carried.

9 New Business

- TCA, the RAC official publication to library/school of club's choice

Rich VE3DCC during our incorporation we gave a copy of RAC to the Elmira High School to reach out to the youth in highschool. Rich advised he is not sure why this is on the agenda so this will come up again next month.

- Woolwich CAER Emergency Preparedness Open House Fri. May 11 (Brian VA3DXK)

Rich VE3DCC said he has passed on the info he had on this to Brian VA3DXK. Rich advised that there would be grade 7 students coming to this event by bus and our presence there could spark interest in Amateur Radio. Since we have been asked to participate again this year we will proceed the same as we did last year. The contact for this event is Kathy Martorino.

- Radio gear dispersal & June Hamfest (AI VA3TET Reg VE3RVH)

Reg VE3RVH said he would look after the registration for the clubs table. Reg, AI, and Ted were up to take inventory of Ralph Brubaker's Equipment and have a good idea what is there. He said they did not see the ICOM 970, the 746 pro is there as well as three VHF/UHF radios. There is also test equipment, and rotors of unknown condition. AI VA3TET said if there is time we may be able to take Antenna's from the tower as well.

- Update VE3ERC's info on RAC Ontario South Region (Brian VA3DXK)

Per AI VA3TET this is about letting RAC know about our club activities. Rich VE3DCC asked AI VA3TET to send the info on the Sept 22, 2018 seminar we are having. AI said he would do this.

10. Announcements

- Next meeting: Wednesday April 25th, 2018
- **CANWARN training session May 9 – Kitchener-Waterloo – 7 PM – Forbes Room, RIM Park**
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Tom mentioned the Waterloo Marathon April 29, 2018. Amateurs work the backup communications for this event. Contact Nick Waterman if interested marathon@noseynick.com .

Paul VE3PVB spoke about the New SDR Play receiver. The SDR Play can be purchased for \$99.00.

These are greatly improved from the older dongles. They can be bought from the UK. Do not use DHL, use Royal mail instead. It is 100 KHZ to 2GHz.

11. Presentations/Speakers/Workshop

- End Fed Antennas – Long Wires (Tony VE3DWI)

Tony VE3DWI did an excellent presentation on End Fed Antennas. He had some pictures of different antennas he had over the years. Also he explained the End Fed Antennas are a version of a J pole antenna. He had many drawings and pictures of the different Toroids and windings used in End Fed construction. He also passed around some samples of toroids with windings on them.

Thanks Tony

Meeting ended at 9:30 PM

