



APRIL 2019

Volume 8 Issue 4

VE3ERC-LUB



- President:** Brian VA3DXK
- Vice-President:** Ted VE3TRQ
- Secretary:** Tom VE3DXQ
- Treasurer:** Paul VA3PDC
- Trustee:** John VE3JXX
- QSL Manager:** Tom VE3DXQ
- Repeater Trustee:** Wes VE3ML
- Website Admin:** Ted VE3TRQ
- Lighthouse:** Al VA3TET
- Maple Syrup Display:** Al VA3TET
- 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.**



Radio Amateurs
of Canada

THE PREZ SEZ!

This club is Radio-ACTIVE
This club is Radio-ACTIVE

President's Update for April 2019



April draws to a close, May opens before us, and the Elmira Radio Club VE3ERC is in full swing with its membership looking forward to participating in a flurry of spring activities both within our club and other local clubs of which some of our members belong.

- KWARC Waterloo Marathon (KWARC Communications), April 28th
- Woolwich CAER Emergency Preparedness Open House, May 30th
- Central Ontario Hamfest, Sunday June 3rd, 2019
- ARRL Field Day, 1800 UTZ June 23 to 2100 UTZ June 24

On behalf of the Elmira Radio Club VE3ERC, here's hoping you all have an enjoyable month and we're looking forward to seeing you at our Annual General Meeting taking place on Wednesday, May 22nd, 2019.

Brian VA3DXK

**COMING SEPTEMBER 21
HAM TECH 2019
MARK YOUR CALENDARS
AND
CHECK OUR WEBSITE AT
www.ve3erc.ca**

VE3ERC Elmira Radio Club Inc.

Minutes from April 24, 2019

1. Call to Order & Welcome

The meeting was open at 7:40 pm by our Club president Brian VA3DXK .

2. Roll Call: VA3TET Al, VE3DXQ Tom, VE3CXU Doug, VA3PDC Paul, VE3DCC Rich, VE3QB Bruce, VE3DWI Tony, VE3IXX Bob, VE3YBM Brian, VA3FJM Frank, VA3QB Bill, VA3DXK Brian, VE3KCY Ken, VE3ML Wes, VA3JBO Johan, VA3KXS Kirk, VA3WPJ Jack, VE3RVH Reg, VE3JLC Jim

3. Adopt Agenda : Agenda was approved after a correction to Item 7. The date of the AGM was changed to May 22, from May 24. Also item 10 New business had feed mill antenna work added.

4. Secretary's Report: Tom VE3DXQ asked if there were any errors or omissions from the March 2019 minutes. None were mentioned. Tom made a motion to have the March minutes accepted. This was seconded by Johan VA3JBO Motion carried.

5. Treasurer's Report: Paul VA3PDC showed us the financials to date, including dues collected, RAC insurance paid, and Income tax filed and current balance. Paul VA3PDC made a motion to have report accepted, and this was seconded by Al VA3TET Motion carried.

6 President's Report BRIAN VA3DXK

Brian VA3DXK said to let someone on the Executive know if there are any changes to the club roster.

Rich VE3DCC brought up the question if President had a 2 or 1 year term. Tom VE3DXQ said the constitution currently says it is a one year term. Since we were late striking up a nomination committee. Rich VE3RCC made a motion to strike up a nomination committee consisting of two past presidents AL VA3TET and Rich VE3DCC and at the AGM on May 22nd they will report back with a slate of nominees. Motion was carried. Tom VA3DXQ also volunteered to be on the nomination committee.

Bill VA3QB said that the president should be a 2 year term so that the president and vice president do not leave office at the same time. Rich VE3DCC said changes to the constitution would be needed to make the presidents term 2 years. Rich said that rotation of leadership is good as it brings different flavours to the club. Much discussion followed on how to amend the constitution or Bylaws to Limit the president's term to two years or three maximum. The paragraph below is from the bylaws and explains the procedure for this.

The constitution or By-Laws maybe amended by a two-thirds vote of the total membership. Proposals for amendments shall be submitted in writing at a regular meeting and shall be voted on at the next following regular meeting, provided all members have been notified by mail of the intent to amend the constitution and/ or By-Laws at said meeting. (from the by-laws)

Al VA3TET made a motion to change the constitution or bylaw to limit president's term to 2 years. This was seconded by Bill VA3QB. Carried.

The change will be voted on by ballot at the AGM on May 22, 2019.

A list of nominees with be sent to each valid club member. Official ballots will be made available at the AGM.

Committee Reports:

Safety Officer- Tom VE3DXQ no incidents to report.

Ham Tech committee update: Frank VA3FJM had nothing new to report, but will go into higher gear after the Marathon. Brian VA3DXK said he needs more info at the May meeting, such as number of speakers, and volunteers and financials.

Elmira maple Syrup Festival . All went well.

New Business: Central Ontario Hamfest on June 2nd. Reg VE3RVH said tables have been taken care of. Al VA3TET said we have been provided with the usual spot for running ONTARS.

CAER Emergency Preparedness Open House May 30th. Paul VA3PDC said that we have 3 volunteers and could use more. Frank VA3FJM, Reg VE3RVH, Bruce VE3QB, Bill VA3QB, and Al VA3TET. So there are five now.

Feed Mill UHF and VHF repeaters: Al VA3TET said this was discussed at Coffee and we are concerned about moving ahead on this and need to make a contact at the feed mill to move ahead and install equipment and run power. Brian VA3DXK said we need John VE3JXX to go out there. Bill VA3QB and Bruce said they will go as well. Brian said he will arrange a date ASAP. Bill VA3QB mentioned that he would also like to have repeater in Alma linked to the feed mill repeaters.

Announcements: There will be a celebration of life memorial for Don Fisher VE3ESE. At Edelweiss Tavern 600 Doon village Rd at 2:00 pm Sunday May 28th 2019.

Meeting adjourned at 9:30 pm

Elmira Radio Club List of Nominees 2019

List of nominees for Club Officer Elections

AGM

May 22, 2019

ELMIRA RADIO CLUB - VE3ERC				
LIST of NOMINEES for Club Officer Elections, AGM			MAY 22 nd 2019	
POSITION	POSITION	POSITION	POSITION	POSITION
President	Vice President	Treasurer	Secretary	Trustee
Incumbent/Nominee	Incumbent/Nominee	Incumbent/Nominee	Incumbent/Nominee	Incumbent/Nominee
Brian Filbey^I	Ted Rympa^I	Paul Curtin^I	Tom Mahoney^I	John Sheeringa^I

Updates & Revisions to the Elmira Radio Club Constitution and By-Laws

Notice is being given to all members that we will be voting on updates and revisions to our Club's Constitution and By-Laws during our Annual General Meeting (AGM) taking place during our May 22nd meeting. Since 2015 many changes have occurred including the Incorporation of our Club, and our Affiliation with Radio Amateurs of Canada (RAC), and of course the natural progression and development of our Club through the dedication and thoughtful insight of our active membership. The Executive and Membership have deemed it a suitable time to amend and update our Constitution and By-Laws. To that end the relevant sections are printed below with proposed changes indicated in green. Consult the Club's website should you need full text of said documents. During the Business section of the AGM we will vote on each of the proposed changes. Article IX Amendments of our Constitution states: *This Constitution or By-Laws may be amended by a two-thirds vote of the total membership. Proposals for amendments shall be submitted in writing at a regular meeting and shall be voted on at the next following regular meeting, provided all members have been notified by mail of the intent to amend the constitution and/or By-Laws at said meeting.*

Elmira Radio Club Constitution

Article II

Officers

Section 3. Election

The officers of this club shall be elected for a term of one year by ballot of the members present, provided there be a quorum, at the Annual General Meeting (AGM).

Section 4 Term Limit [split into two paragraphs, one original, one new]

- i. An individual may not hold the same office for three consecutive terms, unless approved by a two-thirds majority of active club members and may not serve more than three consecutive terms as an officer unless approved by a two-thirds majority of active club members. An individual may not hold more than one office during the same term.
- ii. An individual may not hold the office of President for more than two consecutive terms of one year, however, the term may be extended for one year, if approved by a two-thirds majority of club members in good standing and in attendance during the annual general meeting (AGM). At the end of the third consecutive term, the President must step down from their current position for a term of one year. The President may however run for, and if elected, hold any other executive position.

Article III

Duties of Officers

Section. 3. Secretary

The Secretary shall keep a record of the proceedings of all meetings, keep a roll of members, keep an Inventory of Club Equipment and assets, submit membership applications, carry on all correspondence, read communications at each meeting, and email written meeting notices to each member. At the expiration of his/her term he/she shall turn over all items belonging to the club to his/her successor.

Section. 5. Trustee

The Trustee shall be responsible for ensuring and maintaining the status of the club station license and for all correspondence with Industry Canada (or its equivalent), sign official documents adopted by the club, and perform all other duties of the Trustee. The Trustee may designate a member of the club who has Advanced radio qualifications, and who is a member in good standing, to be the designated trustee/licensee of the Club Call sign and repeater license.

Article IV

Meetings

The By-Laws shall provide for regular and special meetings. At meetings, a minimum of one-third of the membership shall constitute a quorum for the transaction of business. Incorporation of the club mandates that an Annual General Meeting (AGM) must take place once per calendar year. The date and time of the AGM shall be specified in the By-Laws.

Robert's Rules of Order shall govern proceedings.

Article IX

Amendments

The Constitution or By-Laws may be amended by a two-thirds vote of the total membership in good standing at any regular meeting. Proposals for amendments shall be submitted in writing at a regular meeting and shall be voted on at the next following regular meeting, provided all members have been notified by email of the intent to amend the constitution and/or By-Laws at said meeting.

Elmira Radio Club

By-Laws

4. Meetings

Regular meetings shall be held on the 4th Wednesday of each calendar month, with the exception of July and August.

The Club shall hold an Annual General Meeting (AGM) during the regular May meeting that takes place on the 4th Wednesday of the month.

Special meetings shall be held... [make this a new paragraph]

6. Elections

Officer Elections shall be held annually at the Annual General Meeting (AGM) held during the regular May meeting of the year.

Nomination Committee

The Nomination Committee will present a 'List of Nominees' to the President at the regular meeting one month prior to elections at which time the President will entertain a final motion for nominations. The President shall then accept the final 'List of Nominees'.

The final 'List of Nominees' will be published and made available to all club members by email.

Voting

Voting shall be done during the AGM, using official paper ballots prepared in advance and made available at the AGM.

Voting may occur by proxy if an attending member presents a paper signed by the absent member granting permission to the attending member. A maximum of two proxy ballots per attending member is allowed.

Immediately after voting the ballots shall be counted openly in front of the membership.

Any candidate may request a recount of the ballots.

In the situation whereby no candidate receives a majority for office, balloting must continue, retaining as candidates all who do not voluntarily withdraw.

In the case of an unopposed slate, in which a nominee is the single candidate nominated for office, the President shall declare the nominee elected by 'acclamation'.



Back-of-the-Napkin Eyeball

QSO notes and stuff

by Rich, ve3DCC

APRIL 2019

There is good news for Amateur Radio:

Last month, Phil McBride VA3QR, was our ve3ERC club guest speaker. Phil is the RAC ARES EC serving our area. Phil talked about Amateur Radio in Canada and Radio Amateurs of Canada (RAC). He said that: "The number of amateurs across Canada is growing at a rate of about 2 per cent per year, double the population growth. Per capita, that means there is one radio amateur for approximately every 536 people". The highest growth rate was in British Columbia where frequent "Search and Rescue" operations have drawn many new members anxious to help. Car Rally enthusiasts and Drone hobbyists have also joined the hobby. This is a pleasant surprise that defies conventional wisdom that the hobby is dying.

Coincidentally, there was more encouraging HAM news in the Waterloo Region Record on Monday, April 8, page A8.

The headline was: "**What do Astronauts eat in Space?: Hamilton boy scouts speak to Saint-Jacques while he was on the ISS**".

Congratulations are certainly due to Gary Notto, VE3TTO, of the Hamilton Amateur Radio Club for arranging a Boy Scout QSO with ISS. "The QSO involved dozens of Beavers, Cubs and Scouts gathered in a big open field at the Mount Nemo Scout Camp in Burlington. Several of them were lined up at a microphone to ask Canadian Astronaut David Saint-Jacques questions". The pass was approximately 10 minutes. The spectators were able to watch the approach of the space station on a large map projected on a screen. This was a tremendous effort requiring months of arranging (PS: see earlier ERC articles that outlined Elmira's unsuccessful attempts to arrange a club QSO-) and the Hamilton Club deserves rich congratulations for a job Well Done. This is a wonderful example of how HAMs make the hobby grow.

Indeed, ALL Activities that engage the public imagination in Amateur Radio become a stimulus that helps the hobby thrive. The target of our communications-based hobby is ever-expanding. It acquires that "fresh look" as Car Rally and Drone hobbyists and sky-watching youngsters join the ranks of those brass-pounders and builders and QSL contesters. Our future innovators and thinkers become engaged as they begin to "Think Big" and dream of what can be. Communications play a key part in those dreams.

As an example, consider the cover of the March 2019 edition of National Geographic. The cover has a picture of a large dish antenna and the caption "WE ARE NOT ALONE". The bottom line clarifies with "Scientists say there must be other life in the universe. Here's how they're searching for it".

This article is worth a visit to your local library with a coffee in hand.

On page 42, a picture depicts how laser beams can propel tiny spacecraft to a fifth of the speed of light to orbit distant exoplanets. "It's not science fiction", says Stanford's Zac Manchester. "It's just engineering." Within the article, spanning pages 42 to 75, there are descriptions of the efforts to scan distant galaxies (Operation Starshade) and to listen for signs of intelligent life. Rather than just listening for radio signals directed our way as SETI (Search for Extra-Terrestrial Intelligence) has done, the focus is now on looking for the "techno-signatures" that advanced civilizations may emit as they go about their daily business.

The role of communications technology and experimentation takes on a whole new life. If those satellites can reach out to orbit distant planets then in order to "phone home", the suggestion is that the probe will beam data back using a laser embedded in a tiny chip weighing less than 5 grams. The message would take approximately four years to reach Earth. Imagine how the satellites might "talk" among themselves as they trek outwards.

It is wonderful to realize that we are now at a point where our ever-evolving technology can facilitate what was previously unimaginable and unreachable. Of course, this means that there is now a great deal of NEW opportunity for innovation by licensed HAMs.

The youngsters whose curiosity is tickled by the activities that Ham Clubs such as the Hamilton Club organize CAN start their journey (while they are still young enough to be called youngsters) as licensed Amateurs.

Ham Radio as a licensed hobby is alive and well.

My conclusion: Every bit of effort in promoting Amateur Radio to grow the ranks is well worth the time investment.

**Regards,
de Rich, ve3DCC**

**SPECIAL REQUEST
FROM DOUG VE3CXU**

Does anybody have a transformer in their junk box? I'm looking for one for our hand held Shark vacuum cleaner - 120 volts AC 60 Hz with Output 22 V, DC 200 mA. Thanks everyone.

Doug VE3 CXU

A Multi-use Battery Charger

By Tony Lelieveld, VE3DWI

Around 1972 I designed and built this charger in order to charge, or revive, multiple NiCad cells that I salvaged from battery packs which were not up to snuff anymore. If not used on a regular basis, NiCad cells can develop a memory which can cause reduced capacity or, a cell shorts out due to crystal whiskers growing inside the cell.

Here are a few facts we have to keep in mind when we are charging NiCad batteries.

1: If a battery or cell(s) get hot while charging, it is most likely that the charging current is too high.

2: To find a safe charging current, divide the battery or cell's Amp/hr rating by 10. For example a 450 mA/hr battery can safely be charged for a long period of time at 45 mA.

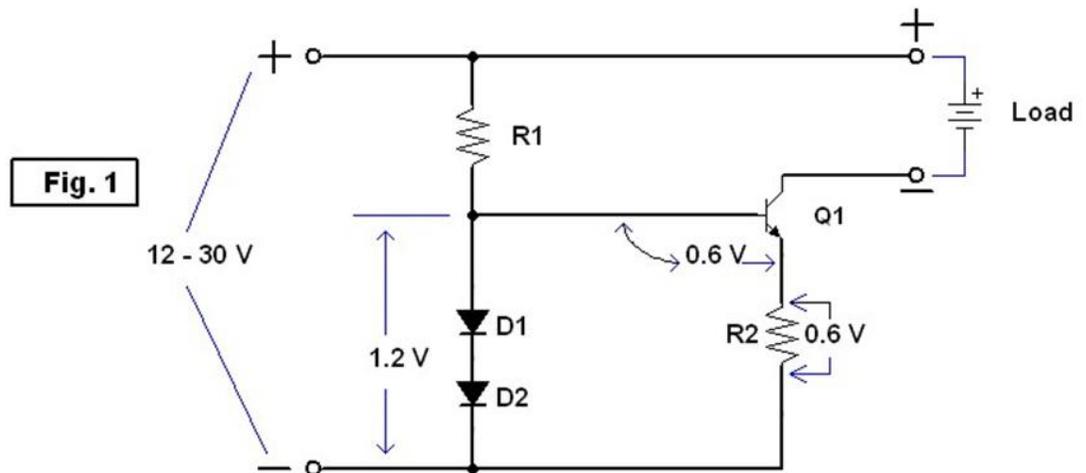
3: NiCads like to be used properly. If you don't charge and properly discharge them at a regular interval and at a proper charging rate, they become lazy, develop a memory and won't deliver full capacity when you need them most.

Why do you need this charger when you can get one cheap at many stores? Look at the header which indicates a "Multi use Battery Charger". There are some interesting features in this design that may come in very handy. First off, it is a "Constant Current Charger" and you can adjust the current anywhere between 11 and 200 mA. Depending on the Voltage of the power supply you use, or build, it will charge as many as 1 to 20 (1.2 Volt) cells. It will automatically set the proper Voltage for the amount of cells or battery on charge while, last but not least, the current is kept at a constant rate. More about other useful features later.

Look at Fig. 1. This is the basic circuit for a current generator. A current flows through R1-D1-D2 and since the diodes are silicon (1N4001) the Voltage drop across them is a total of about 1.2 Volt (0.6 V each). This Voltage is also between the base of Q1 and the bottom of R2. This is a reference Voltage which does not vary, or only very slightly. Since Q1, a silicon transistor, drops 0.6 Volts across its base emitter junction, it follows that there is 0.6 Volt across R2 as well.

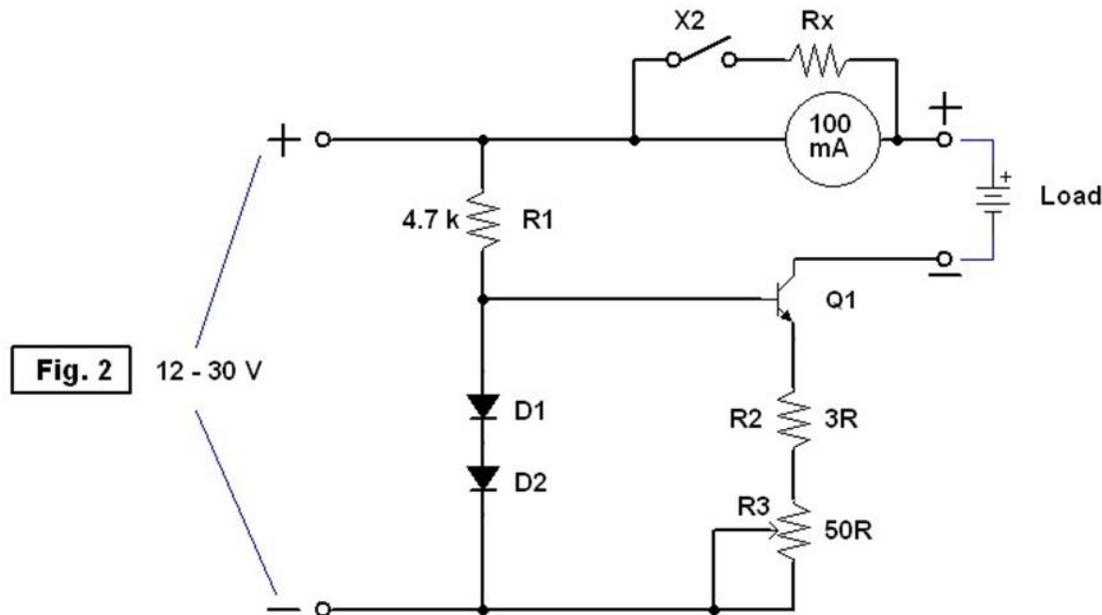
This Voltage does not change either. FACT: if the Voltage across R2 is constant (0.6V) AND R2 is of a fixed value, then the current must stay constant as well (remember Ohm's law).

Suppose our supply Voltage is 30 Volt and we have 0.6 V across R2 then there must be $30 - 0.6 = 29.4\text{V}$ between the emitter of Q1 and the positive supply rail.



If we have a load of 6V (five 1.2V cells), then the transistor will have $29.4 - 6 = 23.4\text{V}$ across the emitter/collector.

At the maximum current of 200 mA (which is 0.2 A) the transistor will dissipate $23.4 \times 0.2 = 4.68\text{ Watt}$. This dictates that we have to use a power transistor hence the 2N3055. At the minimum current of 11 mA the dissipation is only $23.4 \times 0.011 = 0.26\text{ Watt}$. Mount the 2N3055 on a heat sink, or the metal enclosure, and use a Mica insulator with heat sink compound.



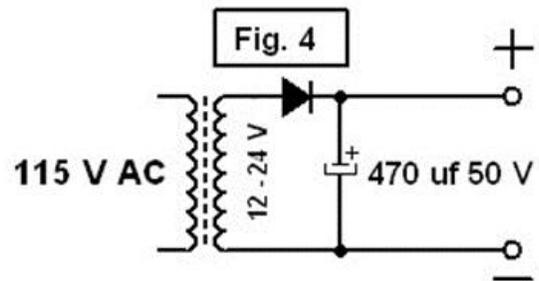
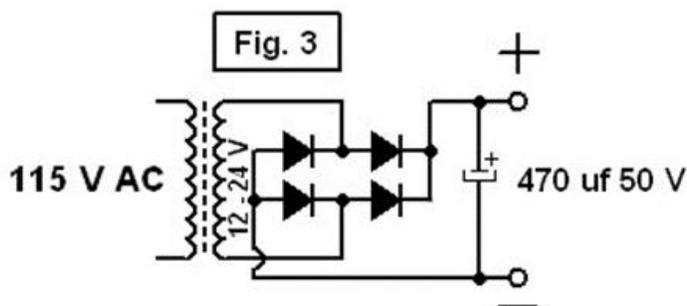
Now for the final design of our charger **refer to Fig.2**. Let's take the maximum current at 200 mA. $R2$ will be $0.6/0.2 = 3$ Ohm. For the minimum current we take $R3$ a 50 Ohm potentiometer plus $R2$, the 3 Ohm resistor, this calculates to $0.6/53 = 11.32$ mA. The power rating of these resistors at maximum current is $0.6 \times 0.2 = 0.12$ Watt. Use 0.5 Watt resistors and you're good to go. Don't expect the calculated resistor values of $R2$ and $R3$ to give the exact current you calculated. Differences in parameters of the transistor, diodes and other components may vary it somewhat but you should be very close. I used a transformer with a secondary Voltage of 24 V at 300 mA. Why... because I had one in my junk box. If you use an existing supply, or transformer, with less Voltage nothing changes except that you can only charge that amount of cells that add up to your supplied DC Voltage. $Q1$ will, off course, dissipate less power too. Fig. 3 and 4 are power supplies you can make yourself with whatever low Voltage transformer.

I installed a 100 mA meter in the DC supply line so I can set the current to what I want it to be, and a switch with a shunt resistor that will make the meter reading to be multiplied by two. Then the meter will indicate 0-200 mA. The shunt resistor has to be the same as the internal resistance of the meter. How do we find out what the meter's internal resistance is? A well respected meter will have that information somewhere on its dial face or body. If not, you can find it by building this circuit, adjust the current for full scale (100 mA) on the meter and read the Voltage **ACROSS** the meter terminals with a high input resistance Volt meter. If the Voltage reads in milli-Volts, divide that Voltage by 100 mA (E/I) and there you have it. Get a resistor of the same value and install it as the shunt R_x . You can also set the current at 100 mA and start connecting resistors across the meter terminals. When the current reads 50 mA you have found the correct shunt resistance. Besides charging batteries and individual cells you can put this charger to good use as follows.

- 1: You can safely short the leads, set the current at any convenient value and use it as a continuity tester.
- 2: Set the current at 11 mA or lower and test LED's. Vary the current and observe the varying brightness
- 3: Test diodes. When forward biased there will be current flow. In reverse bias there should be none. With small signal diodes of the 914 types keep the current as low as possible.
- 4: Fast charge a battery, or cells, in a short time by using a fairly high current. Watch that temperature. .

5: If you have unidentified relays, find the current and Voltage at which a DC relay will pull in reliably. Once it pulls in, read the current on the meter and measure the coil Voltage across its terminals. Reduce the current slowly and see at what values the relay de-energizes.

6: Revive a NiCad battery or cells that appear shorted and won't charge. There could be internal crystal whiskers that short the cell. I take a large, say 5000 uf 50 V, electrolytic capacitor and charge it with the charger. It's interesting to see the time it takes to put a full charge in. Again, because it is a constant current charger you can set it at minimum current and you'll be surprised how long it takes to charge a very large capacitor. Once charged, observe polarity, and connect the cell to the capacitor terminals. It will rapidly discharge through the cell and often destroy the whiskers. Be safe, wear safety glasses. I never had a problem but you'll never know. I am sure you can come up with some more useful activities.



Have fun. 73,

Tony Lelieveld, VE3DWI.

**CONDOLENCES TO JUDD VE3WXU/N4WXU
FOR HIS BROTHER, COOPER HODGE KA4BKD-SK
FROM THE ELMIRA RADIO CLUB**

Judd sent out the following e-mail:

Obituary of Cooper Hodge

Graveside services for Cooper Hodge, age 73, of Five Points will be held on Sunday, April 28, 2019, at 3:00 PM at Rest Haven Cemetery with Rev. Jerry Ledbetter officiating and Quattlebaum Funeral Home in charge of arrangements.

The family will receive friends at the funeral home from 1:00-2:00 on Sunday before services begin.

Mr. Hodge passed away Friday, April 26, 2019, at his residence.

Survivors include his wife, Linda McKinney Hodge of Five Points; one son, Mark Hodge of Five Points; one grandchild, Tilman Hodge of Five Points; and two brothers, Jeffrey Hodge (Shirley) of Eatonton, GA, and Judd Hodge of Lafayette.

A Lafayette, Alabama native, Mr. Hodge was born on March 26, 1946, the son of Cooper Clardy Hodge, Sr., and Dorothy Whittaker Hodge.. He was a member of Lebanon Presbyterian Church and worked as a plant engineer for West Point Stevens. Mr. Hodge was preceded in death by his parents..



BY BOB KOECHL VE3IXX

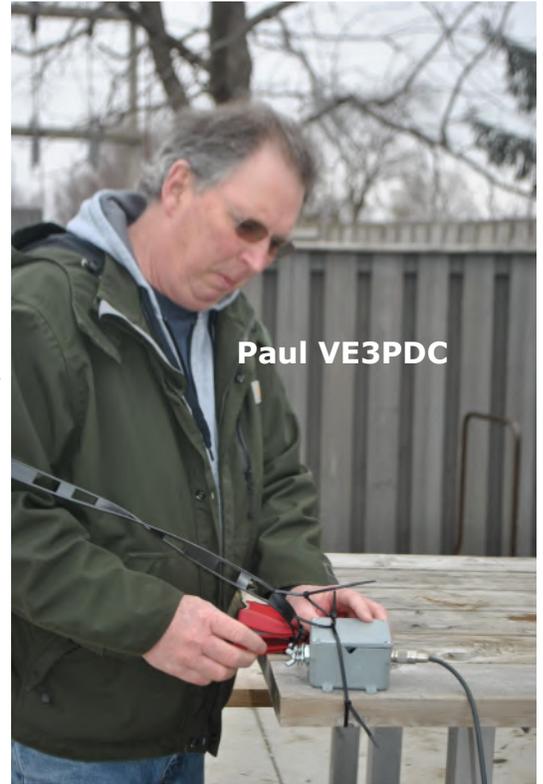


Running ONTARS from the Maple Syrup Festival site.
On the left is Ken VE3KCY and on the right is Frank VA3FJM.

Once again the Elmira Radio Club participated in the Maple Syrup Festival in our usual spot at the Lions Club Hall right beside the Elmira Recreation Centre on Saturday, April 6.

Friday at 2 pm was designated as the set-up time for all the equipment, but when the team of Ted VE3TRQ, Reg VE3RVH, Tom VA3DXQ, Frank VA3FJM, Al VA3TET, Tony VE3DWI, Jim VE3JMU and myself arrived, we found that our early-bird member Paul VE3PDC had already put up

the G5RV antenna up over the roof all by himself. Much to our surprise and amazement, Paul used two freestanding, portable and extendable fibre glass poles for each end which saved us the need to use an extension ladder to the building.



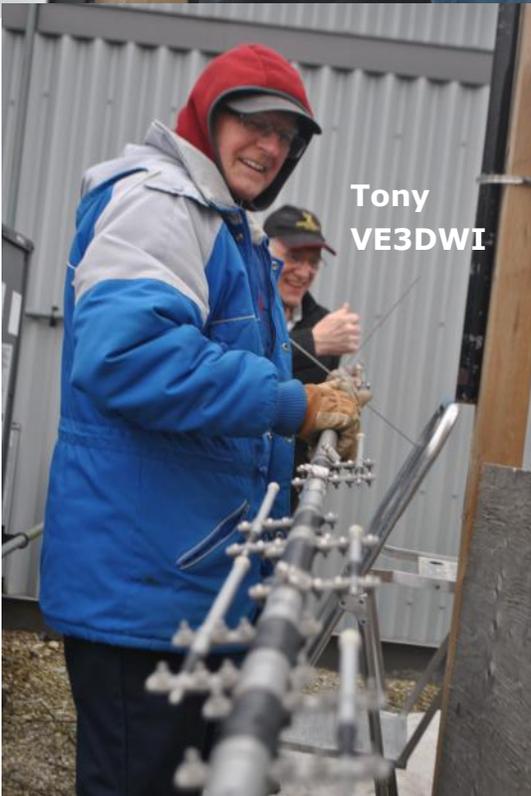
Paul VE3PDC



Ted VE3TRQ

We will have to keep Paul around for his creativity. Ted then put up his multi-band vertical which is pictured on the cover. The G5RV was used to run Ontars and hf phone while Ted used his

vertical for the digital communications. Frank also put a mag-mount mobile antenna on the tin roof of the building to connect with our VHF and UHF repeaters.



Tony VE3DWI



Reg VE3RVH

Tom VA3DXQ

Invariably, there were glitches. The club ICOM 746 radio did not want to tune up to 3755 kHz (ONTARS frequency). There was a lot of hectic activity checking connections,

inspecting the feedline, even switching to a second G5RV, all to no avail. Finally we switched over to the club's secondary transceiver, the Kenwood TS-440 and then Success!

Ted got his equipment set up which included projecting the computer image onto a large screen so that visitors could see digital communications in action. After attaching the VHF/UHF radio Frank put up his "ON AIR" led box and Jim unfurled the ERC banner. Once Reg got the ERC information board up on the tri-pod, the set-up was done. A quick test onto the ONTARS net confirmed that everything was ready for early Saturday morning.



Jim VE3JMU

Activity began early Saturday morning. I took over the ONTARS net for 8 am. This was followed by Frank VA3FJM as controller and then ended with Ken VE3KCY. Everything went without a hitch and propagation even favoured us. A good number of visitors came by. Some chatted and others just checked out our equipment and information board. A goodly number of ERC members dropped in and socialized. All in all, it was great fun and great success not only for our participation but for the festival in general. There was record attendance to the Maple Syrup Festival, probably due to the pleasant weather.

'73 Bob VE3IXX



Brian VA3DXK

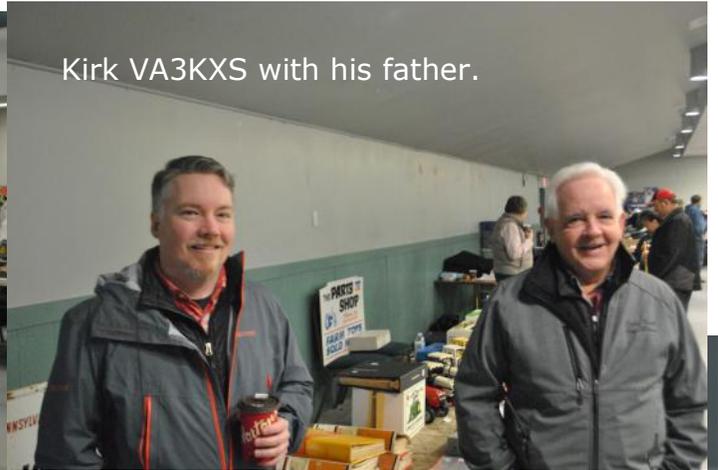
Jim VE3JMU



My Daughter Marie and husband Callum visited our table and chatted with members.



Granddaughters Madison and Elizabeth (on right) came with their cousin Katlyn and their aunt and spoke with Jim VE3JMU.



Kirk VA3KXS with his father.



Dan VA3SQD



Al VA3TET

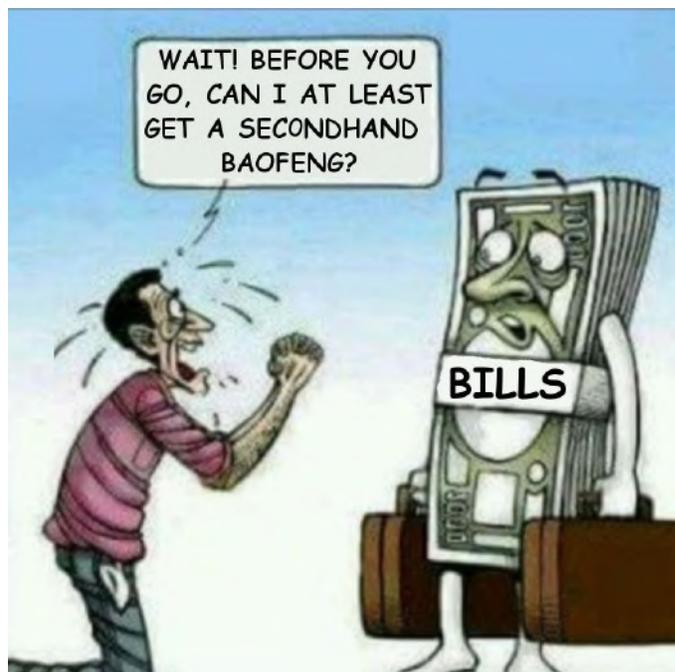
CONTRIBUTIONS TO VE3ERC-CLUB NEWSLETTER

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

MARCH 20 - TED VE3TRQ

MARCH 27 - MEETING

APRIL 3 - AL VA3TET

APRIL 10 - REG VE3RVH

APRIL 17 - FRANK VA3FJM

APRIL 24 - MEETING

MAY 1 - BILL VA3QB

MAY 8 - TOM VE3DXQ

MAY 15 - PAUL VE3PVB

MAY 22 - MEETING

MAY 29 - BRIAN VA3DKX

JUNE 5 - BOB VE3IXX

JUNE 12 - TED VE3TRQ

Can Indoor Antennas Work? Yes!

By Dan Romanchik, KB6NU

Recently, a reader asked:

I am studying your "No Nonsense" book as I prep for the Technician test. I am also learning CW. I am going to buy a Yaesu FT 450D as my first radio, and I want to use an indoor antenna as my first antenna. What do you recommend for CW?

I replied:

To be honest, I've never had a lot of luck with indoor antennas. Don't let that dissuade you, though. I have worked many hams with indoor antennas. Just recently, for example, I worked a guy who was using a Buddipole

(<http://www.buddipole.com/>) inside his apartment.

If you have an attic, you could easily install a dipole up there. The ARRL web page on indoor antennas (<http://arrl.org/indoor-antennas>) notes:

"Attics are great locations for indoor antennas. For example, you can install a wire dipole in almost any attic space. Don't worry if you lack the room to run the dipole in a straight line. Bend the wires as much as necessary to make the dipole fit into the available space.

....

"Ladder-line fed dipoles are ideal for attic use—assuming that you can route the ladder line to your radio without too much metal contact. In the case of the ladder-line dipole, just make it as long as possible and stuff it into your attic any way you can. Let your antenna tuner worry about getting the best SWR out of this system."

There are plenty of remote tuners now, too. You could install a doublet with elements as long as you can make them, connect them directly to the remote tuner, and then run coax to your shack.

I have also worked guys who have used Slinky antennas inside a house. The advantage of using a Slinky is that it is electrically longer than a wire of the same length.

An attached garage might also make a good location for an indoor antenna. VE3SO, who I've worked several times, uses a magnetic loop antenna installed in his garage (<https://www.kb6nu.com/magnetic-loop-antenna-at-ve3so/>).

If you do a web search for "indoor amateur radio antennas," you'll get many more ideas. Here are a few that looked promising to me:

Indoor antenna for 7 Mhz

(<http://www.iw5edi.com/ham-radio/37/indoor-antenna-for-7-mhz>)

An Indoor Reduced Size Rectangular Loop

(<http://hamuniverse.com/kl7jrindoorloop4010.html>)

Another option might be to load up your gutters! I've worked a couple of guy who use gutter antennas, including WA8KOQ (<https://www.kb6nu.com/operating-notes-gutter-antenna-rac-contest-161-countries-worked/>) and K3DY (<https://www.kb6nu.com/operating-notes-computer-virus-club-net-gutter-antenna/>).

This blog post garnered a couple of interesting comments. *K2MUN wrote*, "For many years I've used an attic mounted off-center fed 40 meter dipole. With an automatic antenna tuner and a 4:1 balun I've worked lots of dx with both qrp and, more easily, 100 watts! Certainly, outdoors is much superior but an attic is a nice location in bad weather making playing with your antenna a pleasure :-).

John, KDOJPE, said, 'If you have an attic available, check out the following 6-band coax trap-based antenna: <http://degood.org/coaxtrap/>. I constructed one of these 9 years ago and have had great results with it.

The bottom line is that indoor antennas can definitely work. They may take more work to put up than outside antennas, but as the saying goes, "Any antenna is better than no antenna."

Haldimand Norfolk Amateur Radio club

Repeater update **Paul Fleck** <ve3htf@gmail.com> **Mon. Apr 15, 9:26pm**

Club and repeater change,

Change has come to Simcoe, Ontario. Our club, formerly known as the Norfolk Amateur Radio club, located in Simcoe Ontario has recognized that our service offerings and makeup of our membership covers a very large geographical area.

Our club name has been changed to reflect this with a name change to the Haldimand, Norfolk Amateur Radio Club.

Our membership consists of hams from both counties and our repeater coverage spans the geographical region completely.

Further to the name change, our club has installed new Bridgecom repeater equipment and changed our club / repeater call sign to VE3HNR. Our frequency has changed as well. We currently utilize the frequency of 147.075 +600 and a ctss of 131.8

Our repeater is still physically located in the same location of our former repeater identified as VE3SME.

The VE3SME call sign is no longer a repeater call sign and has been surrendered to Industry Canada.

New club name, new repeater equipment, new club call sign and a new frequency pair!

If you have the ability to check into our Monday night net, we would welcome the opportunity to meet you! Net starts at 19:30 hrs.

73's

Paul
VE3HTF
Repeater Trustee for VE3HNR
Haldimand Norfolk Amateur Radio club



First Amateur in Space, Skylab and Space Shuttle Astronaut, Owen Garriott, W5LFL, SK

The following news item is courtesy of AMSAT:

April 17, 2019 –

Frank Bauer, KA3HDO
 ARISS International Chair
 AMSAT VP for Human Spaceflight Programs

It is with great sadness that the ARISS team recognizes the passing of our great friend and colleague Astronaut Owen Garriott, W5LFL (SK). Owen Garriott died at his home in Huntsville, Alabama on April 15, 2019.



A passionate Amateur Radio operator and ionospheric physics researcher, Owen inspired the Amateur Radio community to reach for the stars. His multi-decade vision to bring Amateur Radio with him as part of his journey in space was realized in 1983 on the STS-9 Space Shuttle *Columbia* mission, where hams the world over for the first time heard a fellow ham call CQ from space.

As the first to operate Amateur Radio in space, Owen blazed a trail that has enabled countless people from around the world to experience what it is like to journey into space and explore our universe. As a result, he inspired the international Amateur Radio community to extend his modest ham station on STS-9 into an international human spaceflight ham radio program that has spanned the Space Shuttle, *Mir* Space Station, and International Space Station.

A member of the US Astronaut Hall of Fame, Owen Garriott was a pioneer and innovator in all his endeavours including Amateur Radio. Selected as a NASA scientist-astronaut in 1965, Garriott was the science-pilot for Skylab 3, the second crewed Skylab mission. Skylab was the first US space station, housing three different crew expeditions from May 1973 to February 1974. Owen spent approximately 60 days on Skylab doing solar physics research, human physiological research and conducting three spacewalks to repair Skylab and extend its research capabilities.

Owen's next flight into space, as part of an international crew on the STS-9 Space Shuttle *Columbia* mission, cemented Amateur Radio's future as part of the human spaceflight experience. STS-9 was launched from the Kennedy Space Center, Florida on November 28, 1983.

Onboard *Columbia* was an internationally developed space laboratory, Spacelab-1, which pioneered international spaceflight research with over 70 separate experiments – a precursor to the research currently being accomplished on the International Space Station (ISS). Onboard also was a Motorola 2-metre handheld radio with a window-mounted antenna to facilitate

Amateur Radio contacts between W5LFL and hams on the ground.

On December 1, the third day of his mission, Owen donned his headset and made history by communicating with Lance Collister, WA1JXN, in Frenchtown, Montana. In W5LFL's own words, here is an excerpt of his first contact:

"W5LFL in *Columbia* is calling CQ and standing by. Go ahead. Hello WA1JXN, WA1 Juliet X-ray November, this is W5LFL. I picked up your signals fairly weakly. I think our attitude is not really the best as yet, but you're our first contact from orbit. WA1 Juliet X-ray November, how do you read? Over."

Owen's ham contacts on STS-9 were trailblazing for many reasons. They represented the first Amateur Radio contact from a human in space to someone on Earth. They allowed the general public to directly listen and communicate with an on-orbit crew where, prior to this, only NASA mission control personnel or heads of State (US Presidents, etc.) could talk to astronauts from space. And the mission also demonstrated that a group of volunteers could successfully build an Amateur Radio station for a human spaceflight vehicle and get it formally approved by a space agency.

Owen spent decades attempting to carry out Amateur Radio on one of his missions, employing gentle assertiveness and steadfast patience to realize his dream. In 1965, when NASA was considering Owen for a planned lunar flight on Apollo 18, 19 or 20, Project MOONRAY was proposed by the Project OSCAR team. Project MOONRAY would support Amateur Radio operations from the surface of the moon. This initiative was scuttled when Apollo lunar expeditions ended at Apollo 17.

Prior to his flight on Skylab, AMSAT submitted a proposal to NASA called SKYLARC (Skylab Amateur Radio Communications). Unfortunately, this proposal was turned down. But, as they say, the third time was a charm on STS-9 and Amateur Radio is now a human spaceflight reality. Also, it should be noted that an AMSAT/ARISS International team is pursuing Owen's plans to fly Amateur Radio to the moon via several lunar proposal initiatives, including the Lunar Gateway.

Owen inspired legions of Amateur Radio operators, worldwide, to support human spaceflight Amateur Radio endeavours and for countless individuals to become Amateur Radio operators. This includes his son, Richard, W5KWQ, who together with Owen became the first multi-generational American Amateur Radio operators to communicate from space.

On behalf of the ARISS International Team, we would like to extend our sincere condolences to the Garriott family, including Owen's son Richard, W5KWQ and Owen's wife Eve. As Owen has inspired the Amateur Radio community to reach for the stars may we wish Owen Garriott Godspeed and a wonderful journey amongst the stars.

Ad Astra!

*73, Frank Bauer, KA3HDO
ARISS International Chair
AMSAT VP for Human Spaceflight Program*

Alan Griffin
RAC MarCom Director