



FEBRUARY 2022

Volume 11 Issue 2

# VE3ERC-LUB

**President:** Ted VE3TRQ  
**Vice-President:** Frank VA3FJM  
**Secretary:** Kirk VA3KXS  
**Treasurer:** Paul VA3PDC  
**Trustee:** Wes VE3ML  
**QSL Manager:** Kirk VA3KXS  
**Repeater Trustee:** Wes VE3ML  
**Website Admin:** Ted VE3TRQ  
**Lighthouse:** Al VA3TET  
**Maple Syrup Display:** Al VA3TET  
**Newsletter:** Bob VE3IXX  
**ERC Website:** <https://ve3erc.ca>

## ERC REPEATERS

**UHF 444.700 + TONE: 131.8**  
**UHF 444.700 + TONE: 123.0**  
**VHF 147.390 + TONE: 123.0**  
**VHF 147.255 + TONE: 131.8**  
**EMERGENCY SIMPLEX: 146.550**  
**UHF-IRLP node 2404,ECHOLINK**  
**VE3ERC-L**  
**VHF- IRLP node 2403,ECHOLINK**  
**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.**



Tom Witherspoon K4SWL who is editor of **QRPer.com** has made a goal of building a different antenna each month of 2022 and activating it some-time during that month. His antenna for January was a doublet antenna which he strung up in the trees of Norman Lake State Park. See his blog on page 15.



Radio Amateurs  
of Canada

# THE PREZ SEZ!

This club is Radio-ACTIVE

This club is Radio-ACTIVE

## President's Update for February 2022

**I**t's getting near time to renew ERC memberships for Elmira Radio Club members! If you are a RAC member, you get to save \$13 per year on your dues - this reflects our RAC-affiliated insurance cost, per member. What a great time to consider joining RAC if you have not already. RAC is the Canadian Amateur Radio organization, which represents and advocates for us all. Without them we would likely not be able to drive with a microphone in hand (can you say "distracted driving legislation?") and may even not have some frequency allocations. Help them help us. We were fortunate to have the President of RAC speak to us at our last Club meeting, even if that happened to be our very own Phil McBride, a member of our neighbouring Guelph Amateur Radio Club. Lower your cost, AND support a very useful organization!



I would like to give a heads up to the members of the Elmira Radio Club - soon there will be a list of radio equipment available for purchase, initially by club members. We have just about completed the inventory of Al VA3TET's estate equipment, and there are also some items that have been in the possession of ERC for a while now. Thanks go to Reg VE3RVH and Frank VA3FJM for all the work they put in to help sort out all of Al's radio possessions - it's our way of helping out the family of an Amateur Operator who has passed on. And don't forget, there will be a tower available for the price of taking it down.

**Ted VE3TRQ**

## Hear Ye Hear Ye

**Read All About It**

**The Memberships are Now Due**

**For the Club   Dit   dit dah dit   dah dit dah dit**





**W**inter Field Day started days before, checking equipment and making final adjustments to go boxes, packing gear etc, but the big day was here.

At about 11:00, Ken VE3KCY and myself Paul VA3PDC met at the end of the maintained road leading to Ken's sugar bush lot near Wallenstein ON. It was a breezy minus 18 C. Ken was there already and had the snowmobile and sled unloaded, so we packed up and took the mile long ride back to the trailer, a chilly ride to say the least!!



We unloaded the first round and while Ken went back for the balance of our equipment, I started the fire and began getting the frost off the walls. We did have some help from a propane construction heater the first half hour or so.

I headed outside to put up my end fed antenna between a couple of the maple trees that shelter the trailer. Thankfully it all went well and I was back in by the now glowing wood stove in short order. We both set up our stations and were ready when the event began, Ken working CW from his Elecraft KX3 with amp and me doing SSB through my IC7300.





Before we knew it, it was well after 6:00 PM and it was time for some much needed FD chili and buns, followed by some of Mary's delicious home made muffins, thanks Mary!

We shut it down for the night about 12:30 AM, after a few trips to the wood pile to make sure we had enough wood for the balance of the night.

Sunday began about 7:00 and after a quick check in on ONTARS and some coffee we were chasing contacts again with a short break for

some breakfast sandwiches.

Just before 9:30 we ventured to the field beside the trailer and attempted to make some satellite contacts, through two different birds overhead. They were within 30 minutes of each other, but no luck this time. The frequencies were jammed full with week-end traffic and other people looking for the extra field day points, here's hoping for better luck in June. I'm sure it'll be much warmer then, might make it a lot easier to do hi hi.



Ken made a trip a quick trip to pick up his YL Mary around 11:00. We all had lunch, left over chili and buns again, but it sure hit the spot. If anybody wants my secret recipe, just let me know?? At 2:00 PM the airwaves went very quiet and Winter Field Day 2022 was in the books. We made quite a few contacts from our modest stations at Ken's sugar shack and have good memories from the whole adventure.

Many thanks to Ken and Mary for all the work they did before, piling firewood and adding insulation to the trailer, the difference was very noticeable.

I can hardly wait for summer field day, it's not that far away. What are your plans?



### 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)**

# I predict that:



SSB operators will declare the bands "Dead." while CW and FT8 Operators make countless contacts.

## WEDNESDAY NITE NET CONTROLLERS

**JANUARY 12 - TOM VE3DXQ**

**JANUARY 19 - TONY VE3DWI**

**JANUARY 26 - M E E T I N G**

**FEBRUARY 2 - BRIAN VA3DXK**

**FEBRUARY 9 - BOB VE3IXX**

**FEBRUARY 16 - TED VE3TRQ**

**FEBRUARY 23 - M E E T I N G**

**MARCH 2 - BILL VA3QB**

**MARCH 9 - KIRK VA3KXS**

**MARCH 16 - REG VE3RVH**

**MARCH 23 - M E E T I N G**

**MARCH 30 - FRANK VA3FJM**

**APRIL 6 - TOM VE3DXQ**



# Move HT's Easily with Ram Ball Mounts

By Al Dee VE3DZZ



On ram ball in shack

I am able to move HT's from car to shack to Go Box Using battery eliminators on both HTs.

Ram Ball Mounts are available on Amazon.



On ram ball in car

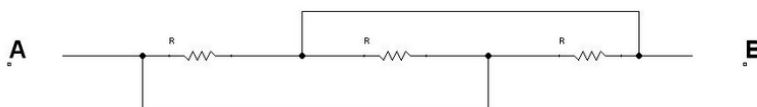


On ram ball in Go Box

# Resistance Challenge

All Resistors are 33 Ohm

Calculate the resistance between point A & B



In answer to the resistance challenge from last month, you will notice that point A contacts one side of each of the three resistors. Likewise, B contacts each of the resistors on the opposite side. In effect then, this is nothing more than three resistors in parallel circuit.

The formula to find the total Resistance is

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

Inputting 33 ohms for resistors 1, 2 and 3 will result in a total resistance of 11 Ohms.

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## CORRESPONDENCE

**Terry VE3XTM wrote about Recently Launched Starlink Satellites Hit by Geomagnetic Storm:**

The recent solar storm has doomed at least 40 Starlink satellites shortly after their launch. Because of the geomagnetic storm, they failed to reach orbit and are now plummeting back to earth. They will probably burn up in the atmosphere, but just to be safe make sure your home insurance is up to date. :)

### Space X Starlink Satellites

A burnt-out Space X booster rocket will impact the moon around March 4 as well. The rocket fragment is the size of a school bus and has been in space since 2015 in a wildly erratic orbit.

### Space X Junk to Hit Moon

Having taken up astronomy in the past year, I am not so sure the loss of these satellites is a bad thing. The attached photo is what Starlink is doing to the night sky. All of these satellite trails are within a 5 minute period.

Terry VE3XTM



# ERC Elmira Radio Club Inc. - Meeting Minutes

February 23, 2022

|  |   |
|--|---|
| <p><b><u>Attendance - Members</u></b></p> <p>Bill Reid VA3QB</p> <p>Bruce McLellan VE3QB</p> <p>Colin Jones VE3FBY</p> <p>Doug Kuhn VE3CXU</p> <p>Gary Kornstein VE3JGK</p> <p>Graham Bauman VE3BYP</p> <p>Jack Sinclair VA3WPJ</p> <p>James Clayton VA3JIC</p> <p>James Litwiller VE3JLC</p> <p>Jim Heidmiller VE3JMU</p> <p>John Enns VE3BB</p> <p>Judd Hodge N4WXU/VE3WXU</p> <p>Ken Buehler VE3KCY</p> <p>Linda Willis VE3CZ</p> <p>Marianne Lelieveld VE3MXT</p> <p>Mike Willis VE3FE</p> <p>Reg Horney VE3RVH</p> <p>Rich Clausi VE3DCC</p> <p>Rod Murray VE3MZD</p> <p>Roger Sanderson VE3RKS</p> <p>Teresa Clayton VA3LTH</p> <p>Thomas Daniel VA3VRA</p> <p>Tony Lelieveld VE3DWI</p> | <p><b><u>Attendance - Officers</u></b></p> <p>Ted Rypma VE3TRQ – President</p> <p>Paul Curtin VA3PDC – Treasurer</p> <p>Kirk Sinclair VA3KXS – Secretary</p> <p><b><u>Guests:</u></b></p> <p>Phil McBride VA3QB</p> <p>Barry Brousseau VE3SLD</p> |
|--|---|

**Meeting Location:** Zoom

## **Meeting Minutes**

### **1. Call to Order:**

- a. Meeting was called to order by President, Ted Rypma VE3TRQ at 7:31pm and he welcomed everyone present.

### **2. Roll Call:**



- a. Roll call established those present and it was noted quorum had been attained.

### 3. Approval of Agenda:

- a. Ted displayed a copy of the agenda on the screen, which had also been circulated prior to the meeting.
- b. MOTION to approve the agenda as presented.

**Motion By:** Gary VE3JGK

**Carried**

### 4. Presentation

- a. About RAC, Why You Should be a Member – Phil VA3QR, President of RAC.

### 5. Secretary Report: Presented by Kirk Sinclair VA3KXS.

- a. Correspondence Received:
  - i. None.
- b. Minutes of the January 26, 2022 meeting were emailed to members on the same day.
  - i. No errors were mentioned.
- c. MOTION to approve the minutes of the January 26, 2022 meeting.

**Motion By:** Kirk VA3KXS

**Carried**

### 6. Treasurers Report: Presented by Paul Curtin VA3PDC

- a. Details of transactions for the month of January were displayed on screen.
- b. Reminder that dues for the upcoming year are payable in March.
- c. MOTION to approve the financial statements for January 2022.

**Motion By:** Paul VA3PDC

**Carried**

### 7. Presidents Report: Presented by President Ted Rypma VE3TRQ.

- a. It is great to hear Phil say there is more emphasis on WinLink as a communications method across the country, since many members of the club are familiar with this mode and will benefit.
- b. Thanks Reg VE3RVH and Frank VA3FJM for helping to get the equipment from Al VE3TET(SK) over to Reg's place and additional thanks to Reg for inventorying the equipment for sale. The equipment will be priced and advertised to club members on the VE3ERC.ca website. Stay tuned for the link. Estimated prices will be included.

### 8. Committee Reports:

- a. Winter Field Day Committee – Winter Field Day – January 29/30, 2022 – Bill VA3QB
  - i. A good number of club members participated and had a good time. <https://VE3ERC.ca/> contests has details from the people who were reporting online. Most people submitted logs with credit to the club, so we should be able to see our totals.
  - ii. Logs are due by March 1.
- b. Summer Field Day Committee - Bill VA3QB

- ## 9. Unfinished Business

- ## 10. New Business

- ## 11. Announcements

- ## 12. Adjournment

- Motion By:** Ted VE3TRQ

**Carried**

### Action Sheet:

[illegible]





# From the PAST



Anyone still remember these old radios?

While Hallicrafters was known for ham radio equipment, they also made home entertainment radios like this AM/Shortwave radio dated from the early 1950's.

## **CORRESPONDANCE**

Thank you to Tony VE3DWI for sending the following fascinating story:

### **HISTORY OF THE CAR RADIO \*\*\***

**Seems like cars have always had radios, but they didn't.**

**Here's the story:**

**One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset.**

**It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.**

**Lear and Wavering liked the idea. Both men had tinkered with radios (Lear served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car.**

**But it wasn't easy: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.**

**One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago.**

**There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator", a device that allowed battery-powered radios to run on household AC current.**

**But as more homes were wired for electricity, more radio manufacturers made AC-powered radios.**

**Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.**

**Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker.**

**Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard.**

**Good idea, but it didn't work. Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.)**

**Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention.**

**Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioners could hear it.**



**That idea worked -- He got enough orders to put the radio into production.**

### **WHAT'S IN A NAME**

**That first production model was called the 5T71.**

**Galvin decided he needed to come up with something a little catchier.**

**In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names -**

***Radiola, Columbiola, and Victrola* were three of the biggest.**

**Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.**

**But even with the name change, the radio still had problems:**

**When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the country was sliding into the Great Depression.**

**(By that measure, a radio for a new car would cost about \$3,000 today.)**

**In 1930, it took two men several days to put in a car radio --**

**The dashboard had to be taken apart so that the receiver and a single speaker could be installed,  
and the ceiling had to be cut open to install the antenna.**

**These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them.**

**The installation manual had eight complete diagrams and 28 pages of instructions.**

**Selling complicated car**

**radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression ♦**

**Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory.**

**In 1934 they got another boost when Galvin struck a deal with B.F. Goodrich tire company to sell and install them in its chain of tire stores.**

**By then the price of the radio, with installation included, had dropped to \$55. The Motorola car radio was off and running.**

**(The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)**

**In the meantime, Galvin continued to develop new uses for car radios.**

**In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory pre-set to a single frequency to pick up police broadcasts.**

**In 1940 he developed the first handheld two-way radio -- The Handy-Talkie for the U. S. Army.**

**A lot of the communications**

**technologies that we take for granted today were born in Motorola labs in the years that followed World War II.**

**In 1947 they came out with the first television for under \$200.**

**In 1956 the company introduced the world's first pager; in 1969 came the radio and**

**television equipment that was used to televise Neil Armstrong's first steps on the Moon.**

**In 1973 it invented the world's first handheld cellular phone.**

**Today Motorola is one of the largest cell phone manufacturers in the world.**

**And it all started with the car radio.**

**WHATEVER HAPPENED TO  
the two men who installed the first radio in Paul Galvin's car?**

**Elmer Wavering and William Lear, ended up taking very different paths in life.**

**Wavering stayed with Motorola.**

**In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention lead to such luxuries as power windows, power seats, and, eventually, air-conditioning.**

**Lear also continued inventing.**

**He holds more than 150 patents. Remember eight-track tape players? Lear invented that.**

**But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.)**

***Sometimes it is fun to find out how some of the many things that we take for granted actually came into being!***

### **Special Request to All Amateurs and Clubs,**

It is time to ask for your help, putting this Special Event Call on the air. VE80LAN joins with GB80LAN & VK80LAN to celebrate the 80Th Anniversary of the first Sortie out of Great Britain for WWII.

You can check out what is happening on QRZ.com, looking up the 3 calls. The 3 Allies that made the Lancaster for the War effort, are doing this Special Event. The Operators from the Radio Room VA3CWM are arranging this with the Canadian Warplane Heritage Museum, that has the only flying Lancaster in North America, is sponsoring our effort in Canada.

So I am looking for Volunteers to put our VE80LAN on the air for the month of March 2022. Pick a time that you or your Club can do this for us. I am suggesting a weekend or a day for any Club to get their members involved and maybe a day or 8 hour time slot for any individual Hams that want to help out. I am expecting great support from our Radio Room volunteers from the Warplane Heritage Museum as well.

Please email me at above email address or [ve3bk@rac.ca](mailto:ve3bk@rac.ca) to give me your choice of time to help out. We will try to accommodate everyone and then make up a schedule for the month of March. Read details on QRZ for the times the other stations are on, so that you can work them as well. Please let me know when you or your Club is available.

Thanks for your consideration, **73 Rick Danby VE3BK**



# Field Activation Antenna Challenge #1: Military Fixture Homemade Multi-band Doublet!

By Thomas Witherspoon K4SWL

**I mentioned in a previous post that my personal "Activation Challenge" for 2022 was "to build a new antenna each month and deploy it at least once that month during a field activation."**



On Thursday, January 27, 2022 I took my first antenna—the military fixture doublet—to Lake Norman State Park for a Parks On The Air activation!

## Lake Norman State Park (K-2740)

I picked Lake Norman knowing that it had numerous spots to set up a doublet.

Unlike an end-fed wire antenna, doublets need a little more clear space to deploy both legs; the idea is to avoid as many low tree branches and other obstacles as possible.

Many (if not most) of the operators I know who regularly deploy field doublets actually use a telescoping mast for the center support to make the whole process easier. I didn't take either of my fiberglass masts on this outing because, frankly, the winding fixture on this doublet acts as the center insulator, and is "heavy" compared to most of my field antennas.



It's not actually \*that\* heavy, but heavy enough I wouldn't want to stress the top of my fiber-glass poles.

I should note here that Eric (WD8RIF), who originally provided inspiration for this build, only used the center fixture as a winder for this very reason. He crafted a center insulator out of a discarded 35mm plastic canister. Here's Eric's doublet:



At Lake Norman, I found a picnic table with ample space to deploy the doublet. Admittedly, there were a couple small branches I had to finagle the antenna around, but it wasn't terribly difficult to set up.

I paired the doublet with my Elecraft KX2, mainly because it has an internal antenna tuner, thus I could simply connect BNC binding posts to the rig, then use the two pre-installed pins on the feedline to connect the antenna to the binding post adapter. Very easy.

This doublet requires an antenna tuner to find an impedance match. With a good ATU (like the one in the KX2) I've found that this doublet will find matches anywhere from 60 meters up to 6; ideal for field activations!



**Gear:** Elecraft KX2

Military Fixture Homemade Doublet

Notepad

CW Morse "Pocket Paddle" (Single Lever Version)

Spec-Ops Brand T.H.E. Pack EDC

Mini Arborist throw line kit

Rite In The Rain Weatherproof Cover/Pouch

Camera: OSMO Action Camera with Joby tripod

My fingerless gloves ([affiliate link](#))



## On the air

I found out later that propagation conditions were pretty poor during the activation. Nevertheless, the doublet performed very well—especially in such a short period of time. I also decided I'd stick to the higher bands in this activation as a few readers/subscribers have asked for me to do a little more 20 meter park work so my signal might reach the west coast more frequently.



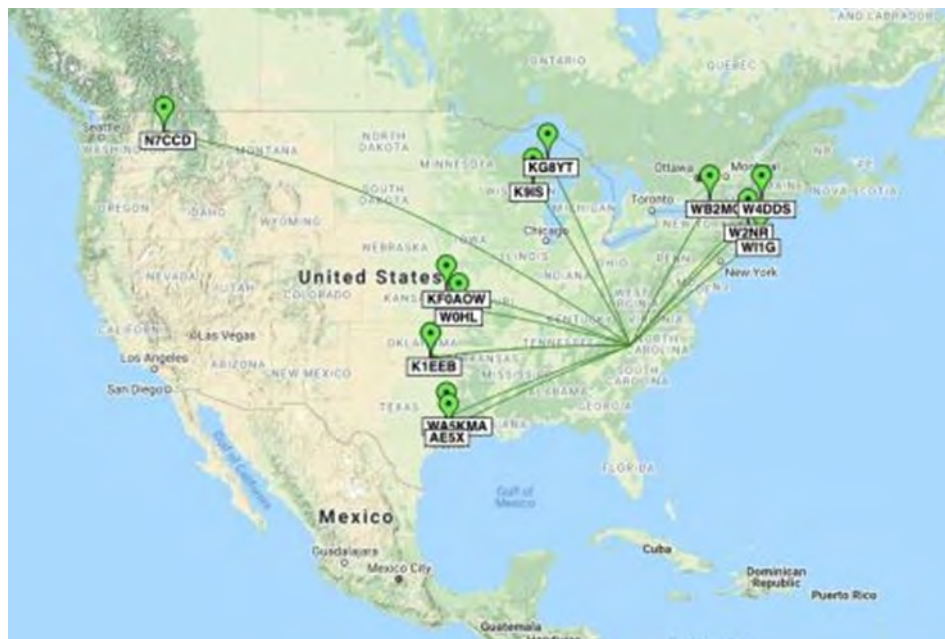
In 19 minutes on the air, I logged 13 contacts—all on 20 meters. Quick and easy!

Honestly, though, had I moved down to 30 meters, or 40 meters, I'm sure I could have logged a couple dozen more in short order.

Frankly, though, I felt a bit of time pressure as another goal at Lake Norman was to hike their Lakeshore Trail before sunset. The previous day, I ran out of time to fit in a good multi-mile hike; I didn't want that to happen again.







## QSO Map

Here's what 5 watts into the doublet yielded on the 20 meter band.

Tom is editor of QRPer.com

His Blog was reprinted with permission.

