



JULY 2023

Volume 12 Issue 7

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:**
- Maple Syrup Display:**
- 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**



Thanks to Tony VE3DWI for this photo of a Super Mobile!

**In an emergency, tune
 Into our repeaters,
 UHF 444.700 or
 VHF 147.390 or
 HF 3.755 LSB or
 Simplex 146.550
 For coordination and
 assignments.**



THE PREZ SEZ!

This club is Radio-ACTIVE

THE CLUB IS RADIO-ACTIVE

President's Update for July 2023

Well, my two years as President of the Elmira Radio Club is about over. I have enjoyed being able to set the agenda to some degree, and be closely involved in getting some things like the Alma Wires-X repeater up and going. It has also been a pleasure providing some educational and interesting content for each meeting - sometimes it was tough coming up with a speaker or focus for a meeting, but my goal at the beginning of my tenure was to provide something of interest at every meeting. I hope that I have accomplished that at least some of the time.



I look forward to continuing to serve the members of the Elmira Radio Club in the coming years as Treasurer, and still plan to help in keeping the goal of an interesting program for every meeting. I'm sure we all welcome Reg VE3RVH as incoming President.

Enjoy what remains of the summer, and I hope to see some of you in Point Clark for the International Lighthouse and Lightship weekend, on August 19 and 20.

Ted VE3TRQ
ve3trq@rypma.ca

CORRECTION

Last month the Club minutes
Inadvertently missed listing
Tony VE3DWI as present.
We apologize for the slip.

Special Visit



Last month we were privileged to have a visit from Trevor VE7BM from Pitt Meadows, British Columbia. We had a lovely lunch with Trevor at the Charcoal Steakhouse. Trevor VE7BM is pictured in the centre and clockwise is Ted VE3TRQ with his wife Sandy, Marianne VE3MXT, Tony VE3DWI and Andy VE3CDF. We were there for two hours. How the time flies. Great to meet you Trevor. **73 Tony VE3DWI**



And then Trevor visited me in Fergus late Saturday afternoon and we had a beer and a meal at the Brewhouse. **73 Rod VA3MZD**

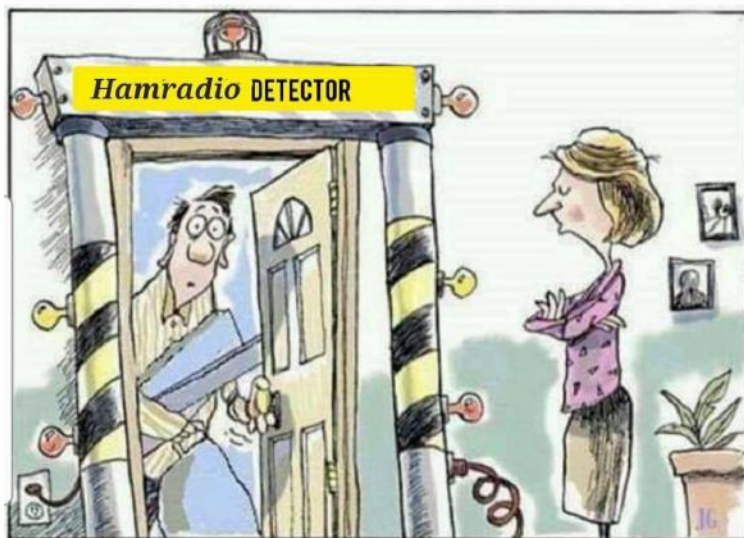
**CONTRIBUTIONS TO VE3ERC-CLUB
NEWSLETTER**

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

- JULY 5 - FRANK VA3FJM**
- JULY 12 - TOM VE3DXQ**
- JULY 19 - TONY VE3DWI**
- JULY 26 - BRIAN VA3DXK**
- AUGUST 2 - TED VE3TRQ**
- AUGUST 9 - BILL VA3QB**
- AUGUST 16 - BOB VE3IXX**
- AUGUST 23 - REG VE3RVH**
- AUGUST 30 - FRANK VA3FJM**
- SEPTEMBER 6 - TOM VE3DXQ**

FIELD DAY RESULTS

Many thanks to Bill, VA3QB for compiling and sending the Field Day results to the ARRL. Here are the results published by the ARRL:

Congratulations! You've successfully submitted your Field Day entry, as well as uploaded all required documentation. Your confirmation number is 25lspfah. A summary of your submission is provided below for your review. If you have any questions about your log, please contact the Contest section at contests@arrl.org.

If you need to update your entry, enter soapbox comments or upload photos of your Field Day activities, please use the appropriate link below.

Links:

Update entry/upload documents <https://field-day.arrl.org/fdentry.php?call=va3tet&id=25lspfah>
 Soapbox comments/photos <https://contests.arrl.org/contestsoapbox.php?call=va3tet&id=25lspfah>

Summary: Entry received at: 2023-07-14 02:40:50

Call Used: VA3TET GOTA Station Call: (NONE) ARRL/RAC Section: ONS Class: 4A

Participants: 4 Club/Group Name: ELMIRA AMATEUR RADIO CLUB

Power Source(s): Generator, Battery

Power Multiplier: 2X

Preliminary Total Score: 1,076

Bonus Points:

100% emergency power	400
Public location	100
Social media	100
Entry submitted via web	50
Total bonus points	650

Score Summary: (Cabrillo log/dupe sheet file: VA3TET.dup)

	CW	Digital	Phone	Total	
Total QSOs	54	0	105		
Total Points	108	0	105	213	Claimed Score = (QSO points x power mult) = 426

Submitted by: Bill Reid, VA3QB billreid@gmail.com

Band/Mode QSO Breakdown:

	CW		Digital		Phone	
	QSOs	Pwr(W)	QSOs	Pwr(W)	QSOs	Pwr(W)
160m						
80m						
40m	39	100			33	100
20m	15	100			72	100
15m						
10m						
6m						
2m						
222						
432						
Other						
Satellite						
GOTA						
TOTAL	54		0		105	



From the PAST

Here's a photo from the late '60s of Chet Atkins. His callsign was originally WA4CZD, and later he was given a new one, W4CGP, reflecting his title c.g.p. (for Certified Guitar Player). One of his favorite activities was to get on the radio on Sunday mornings with his good friend Buster Devault in Luttrell, Tennessee for a QSO. Chet also had a mobile rig in one of his vehicles for awhile.

Thanks to Tony VE3DWI for this Blast from the Past:



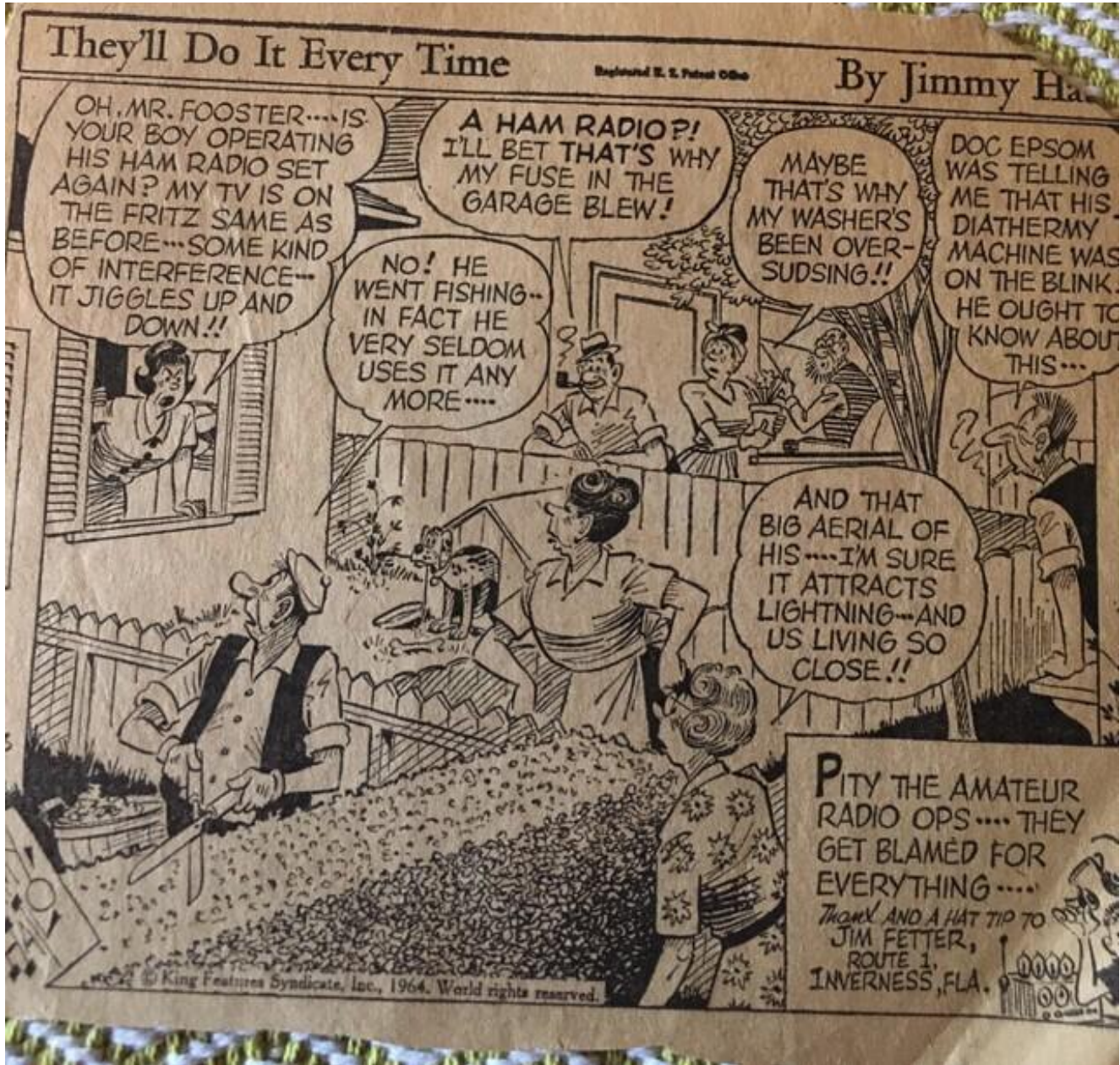
A picture of Mr. Guitar -Chet Atkins. A lot of people didn't know that he too was a ham radio operator.

Amateur Radio Operator WA4CZD

CORRESPONDENCE

Thanks to Rod VA3MZD for sending the following:

Some folks were cleaning out their SK dad's stuff and found this comic clipped from a newspaper.



Tiny 70cm band transmitter - my cat is a HAM

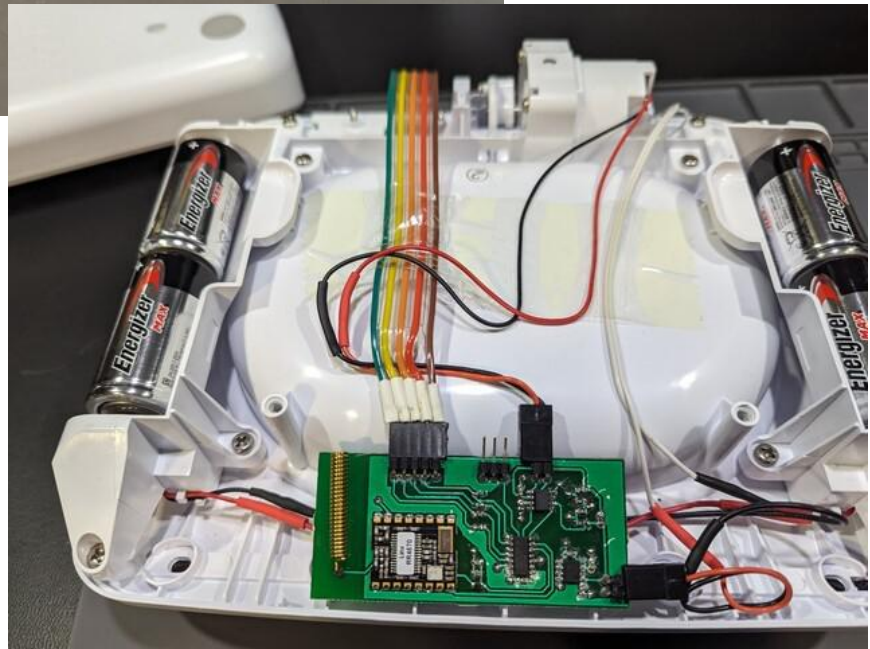
By Hagen Kaye VE3QVY

So, thought I would post this, a very tiny 70cm transmitter at very low power, which transmits about 5ft at the most. Its powered with a CR2032 coin cell that lasts about 30 days. I guess its my first HAM radio I have built (although it is also in the ISM band, but what the heck).

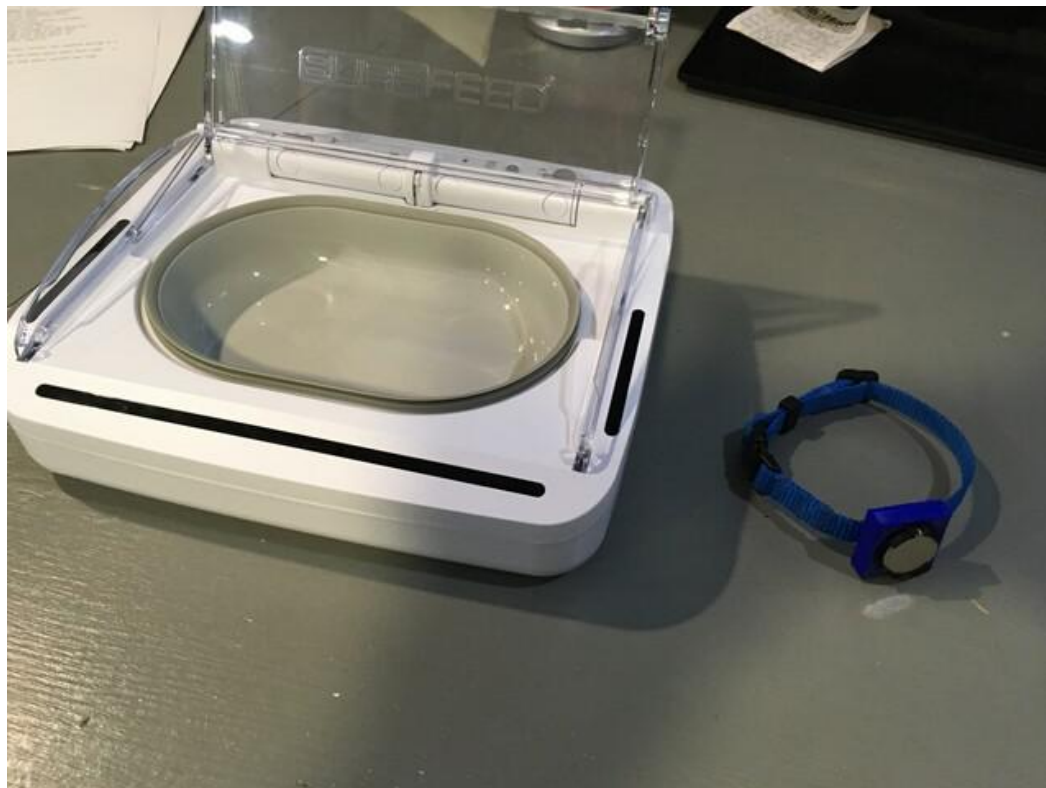
The small transmitter is in a cat collar that sends out "VE3QVY /cat" to a food bowl which I bought that had a motion sensor to open it up and replaced the motion sensor with a RF receiver. So when the HAM cat with the collar gets close to it (by measuring the RSSI) it closes the lid.



The reason: one of my cats is diabetic and can't eat the dry kibble, so this little gadget closes the lid when he tries to get into it. Its sad seeing him disappointed that he can't nibble on this, but it will save his life.



Here is the RF receiver board in the bowl (I made the PCB myself)



And the collar/bowl combo. I'm making a second bowl that only opens for the diabetic cat so he can enjoy fresh wet food all day long.

Not sure what my next HAM transmitter is going to be, but I'm either looking at doing a 6m or 33cm band Tx/Rx. Both have their unique challenges and fun. 6m I would make from scratch, while 33cm I would probably get pre-built modules - since the higher RF is somewhat probably beyond my capability at this stage of learning.

CORRESPONDENCE

Thanks to Mike VE3MKX for sending the following for those who loved the old Heathkits:

A cool book !!

Some great pics with some interesting history !

73 Mike VE3MKX

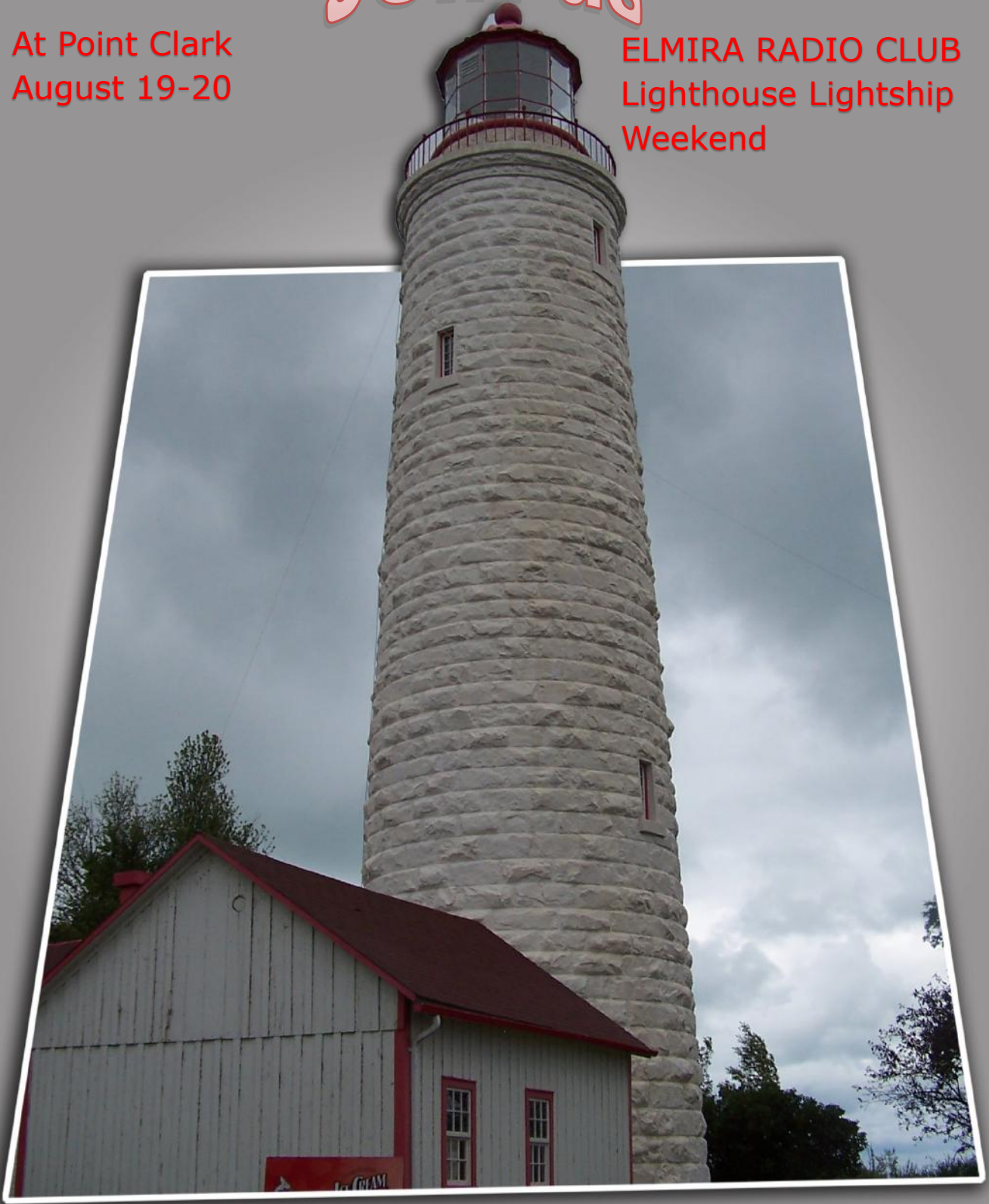
<http://w8dyy.org/wp/wp-content/uploads/2017/11/Heathkit-AGuideToTheAmateurRadioProducts.pdf>



JOIN us

At Point Clark
August 19-20

ELMIRA RADIO CLUB
Lighthouse Lightship
Weekend



CORRESPONDENCE

For those who are planning to come up to Point Clark for the Lighthouse Weekend and have a little time to spare, consider driving next door to the lighthouse in Kincardine and visit the crew there. Rob VE3PCP writes the following:

[International Lighthouse Lightship Weekend](#) is on August 19/20, 2023.

We have participated for the last several years at our local lighthouse in Kincardine, On.

[Kincardine Lighthouse Museum](#)

This year we will be participating once again.

We are setting up our mobile shack on wheels at the base of the lighthouse and we will be running one station there as VE3IHR.

We will also be operating from there, our remote station as VA3YLR.

Experience from the local operation we will most likely be on 20M for most of the operation. We now have an extra desktop amplifier we can use for our on-site operation which will help a bit.



International Lighthouse Lightship Weekend
An annual amateur radio event - ILLW

Our plan is for both stations to be on the same frequency and we will livestream while on the air so both stations will be heard on the livestream.

73 Rob VE3PCP

NOTICE (MISSED LAST MONTH)

Great news, as of Thursday afternoon the repeater at Alma ON, is on the air again.

The repeater call has been changed to VA3TET in memory of Al Macdonald SK.

The frequency is the same as before, 147.255, positive offset and a CTCSS tone of 131.8.

The digital ID is set at 00 for both transmit and receive

It now consists of a Yaesu DR-2X Fusion repeater capable of connecting to the Yaesu Wires-X network.

It is set in auto mode, so if you key up in analog it will work analog and the same for digital mode.

Let us know how it works from your home station and test it when you're out in your mobile too.

Thanks to Tony VE3DWI for his expertise and donated equipment and Ted VE3TRQ for setup and testing. Also thanks to Ken VE3KCY for letting the club install the repeater at his place in Alma, and for allowing use of his internet and therefore access to Wires-X.

Regards,

The Elmira Radio Club Executive and your repeater committee

Shortwave vertical telescopic balcony antenna

by Daniel Romila VE7LCG

Living in an apartment building pretty much kills the shortwave radio activity. A long wire antenna is not possible. A magnetic loop would be visible, expensive, and would require continuous tuning and adjusting the direction. The building management might not be friendly anymore if I put up a magnetic loop structure. I survived for a long time with a modified CB (Citizen Band) stick and some wire spread inside the balcony. It was almost like having no antenna at all, and I had problems just receiving a local 28.197 MHz beacon, VE7MTY, located a few kilometers away.

I decided to make the investment into a telescopic 5.6 meter antenna, a UHF adapter, and the cable. It did not bring me wonderful radio amateur shortwave capabilities, but now I, at least, have a somewhat working antenna, and I can do all kinds of experiments on a real thing.



The following prices are with shipping and taxes included, at the beginning of May 2023. I bought:

- 5.6 Meters 14 Sections telescopic antenna -\$32 CAD (= \$23 USD)
- M10 Thread with SO239 Base Adapter \$18 CAD (= \$13 USD)
- 20 meters of RG58 cable, with UHF male connectors already at both ends \$30 CAD (= \$22 USD)



It was an investment. The advantage of having a telescopic antenna is that it can be retracted in the event of a thunderstorm, and it can be easily adapted for various frequencies by adjusting its length and making measurements with a NanoVNA.

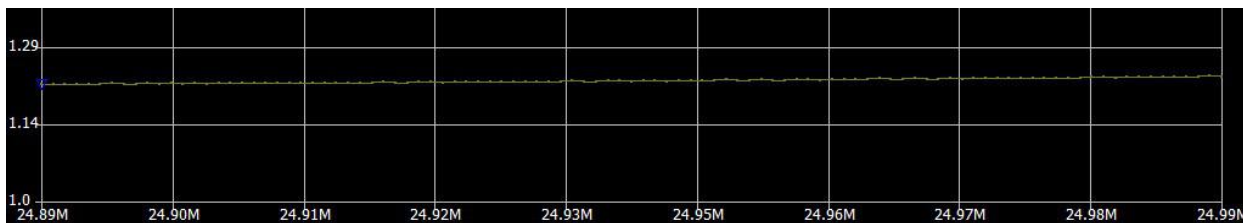
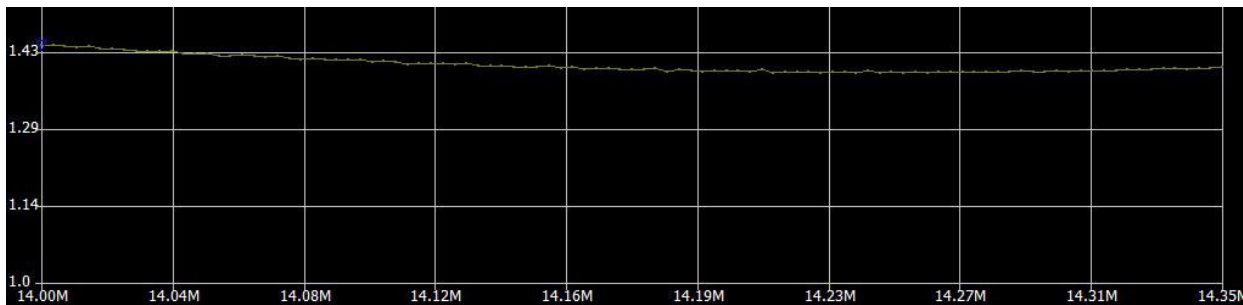
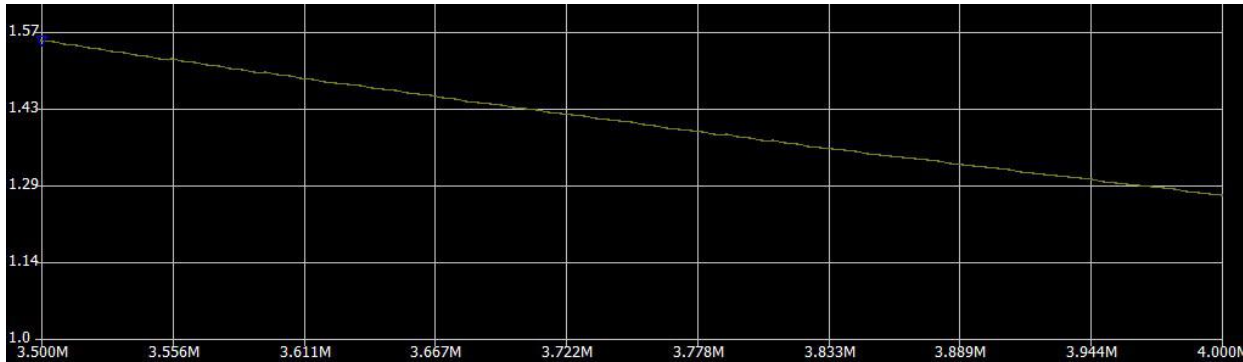


When it is retracted, the antenna is only 60 centimeters long. I was lucky to find a kind of musical instrument support on which I initially installed the antenna, anchored



it in various positions on the balcony until I found a sweet radio spot. Because I am at the highest level of the building, I could extend the antenna directly towards the sky. I settled for the right side of the balcony, using every piece of metal from the structure of my balcony as a counterpoise. You need to experiment with what works the best for your situation.

As is, at full length and using the balcony rail as counterpoise, it was ready to work in several radio amateur bands (3.5 MHz, 14 MHz and 24 MHz):



I also tried to use this telescopic antenna in horizontal position, as a long wire. While this 14 section antenna and its adapter are meant to be part of a horizontal dipole, I found the telescope bends so much that I do not think it would stay intact for more than several minutes. At any rate, putting it horizontally did not improve the reception.

Here is another good position for my antenna, on my balcony:

I had to abandon this version because there will be plants there in the near future in.

Note: it is important to pay attention how you install the red adapter cylinder. Installing upside-down can put the telescopic antenna at the ground side of the cable. There is an indicator which side is for the GND, but it is best to use a multimeter and verify that the ground of the cable is indeed at the ground/counterpoise and the middle of the cable is connected to the telescopic antenna.



It is not the greatest antenna but will work in a desperate solution. When there is good propagation, I hear the closest two world beacons from 14.100 MHz and other two from the 18.100 MHz. There is plenty of FT8 activity, and several CW and SSB stations. I live in a suburb of Vancouver, at 130 meters above the sea level, a clear view towards South, with the border to the United States.

Generally, in North America, activity in shortwaves is sparse. I would not go so far to say that putting this vertical telescopic antenna on the balcony would justify spending a lot of money for a shortwave transceiver, but definitively it made a difference for me in my homebrewing experiments and in receiving commercial shortwave and medium wave radio stations.

CORRESPONDENCE

Tony VE3DWI sent the following newsflash on July 27:

BIG FAR SIDE SUNSPOT: There's a spot on the farside of the sun so large it is affecting the way the whole sun vibrates. Helioseismic echoes [pinpoint the active region](#) in the sun's southern hemisphere not far behind the sun's southeastern limb. It should rotate into view this weekend. **Solar flare alerts:** [SMS Text](#)

A FAR SIDE CME JUST HIT SOLAR ORBITER: Two days ago, a bright CME rocketed away from the farside of the sun. Its plane-of-sky speed in SOHO coronagraph images exceeded 1,500 km/s (3.4 million mph):

If this CME had hit Earth, a strong (possibly severe) geomagnetic storm would have surely resulted. Instead, it flew in the opposite direction and hit Europe's [Solar Orbiter](#) (SolO) spacecraft.

The CME reached SolO on July 26th (0200 UT), barely 32 hours after it left the sun. Considering that a typical CME would take two or three days to reach the spacecraft [at its current location](#), a transit of only 32 hours confirms this CME was a fast-mover.

"This was definitely a big event," says George Ho of the Johns Hopkins Applied Physics Lab, co-principal investigator for the [Energetic Particle Detector](#) suite onboard Solar Orbiter. Ho checked the data right after the initial explosion on July 24th and saw a 10,000-fold increase of 50 MeV ions reaching the spacecraft. "This indicates a strong incoming interplanetary shock."

All Keyed Up by

Dan Romanchik, KB6NU



(Editor's Note: While the following blog directly affects the United States FCC, any use of shortwave frequencies affect Canada as well)

[Stock traders petitioning for high-power access to shortwave frequencies](#) July 22, 2023

One of the big items in amateur radio news the past couple of weeks is an [FCC petition](#) by a group calling itself the Shortwave Modernization Coalition (SMC). Basically, what they want to do is to use HF frequencies formerly reserved for broadcasting to send data using 20 kW transmitters at a bandwidth of 50 kHz. They've been doing this with an experimental license for several years now, and they are now petitioning the FCC to change the Part 90 rules.

I don't really understand all the details, but the theory is that sending stock buy and sell orders via HF is milliseconds faster than sending it via the internet or via satellites, and that this tiny bit of time is money. They say that if approved, "the proposed amendments would enhance market makers' ability to quickly access real-time financial data and to continue to act in a manner that provides liquidity and helps to improve asset prices, to the benefit of centralized markets and market participants."

It goes on to say, "The proposed amendments also have the potential to spur additional innovations in the use of 2-25 MHz Band frequencies. The availability of 2-25 MHz Band frequencies for such use also would obviate the need for businesses that require the fixed, long-distance transmission of time-sensitive data to rely on fiber, microwave and millimeter wave wireless, and satellite systems, which are costly, not capable of achieving comparably short transmission delay, and can be less secure than 2-25 MHz Band transmission systems."

The petition, which you can tell was written by professionals, also says that these operations will not cause interference to the services currently using frequencies between 2 and 25 MHz. They say that they have received no complaints during the experimental period and don't anticipate any in the future.....

How long will it take for this operation to be hacked?

Steve, N8GNJ, had an interesting take on all this. He wrote, "...their signals can be received by equipment as simple as a \$30 Software Defined Receiver and potentially decoded with something as powerful and cost-effective as a [Raspberry Pi 4 cluster](#). Thus, although these companies are undoubtedly being assured that their communications will be private through the use of encryption and proprietary techniques, I suspect it won't be long before such communications are rendered 'not quite so private.'"

There certainly is motivation to hack this system. If the SMC can't make their transmissions secure enough, all the noise that this petition has generated would be moot.

I'll finish this post with a bit of optimism. I can see at least two positive outcomes:

1. This group will spend money researching digital communications on HF. Some of this research could find its way into amateur radio, thereby improving our capabilities.
2. There will be more jobs for HF radio engineers and technicians, and by extension, this will be another reason for young people to get into amateur radio.