AUGUST 2022 Volume 11 Issue 8

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

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.

LIGHTHOUSE WEEKEND 2022

THE PREZ SEZ!

This club is Radio-ACTIVE

President's Update for August 2022

What a blast. The International Lighthouse and Lightship Weekend was a great success, with absolutely great weather most of the day. Many of the regulars were there - I won't name names, because I would end up missing someone.

However, Barry VE3ISX and Judy were there (look for the write-up on the ONTARS website), as well as Dennis VE3UTN and his twin brother – although I missed them because I arrived too late. Frank VA3FJM had his trailer and sun shade up, and Paul VA3PDC and Brian VA3DXK had their fibreglass poles and another sunshade up. Too bad the lighthouse itself was not an option for antennas this year. And wouldn't you know it - Barry VE3ISX had to run remote from his station in Hamilton because of some local radio failures :-)

We sure did miss Al VA3TET's (SK) burgers and topping, but Brian and Paul filled in admirably by cooking burgers and frying onions and mushrooms!

And speaking of Al VA3TET, the Elmira Radio Club has now acquired his callsign, VA3TET, to use on one of our repeaters. Tasty Edible Turnips live on in Elmira.

Ted VE3TRQ

Dennis VE3UTN, with his twin brother, Dave VE3UTM visited the lighthouse.

Lighthouse Weekend 2022

By Paul Curtin VA3PDC

Well, another successful Elmira Amateur Radio Club, International Lighthouse Lightship Weekend activation is behind us. Thanks to all that took the time to stop by and say hello. It was sure a great day to meet and just enjoy each others company.

Rick VE3IMG who is president of the London Amateur Radio Club with Frank VA3FJM who is vice-president of the Elmira Club.

My day started early getting a station set up for the 8:00 ONTARS hour, unfortunately due to problems with my FT-991a, an rf link wasn't possible. Barry VE3ISX was there and did the net remotely from his laptop - thanks Barry!

I was doing digital the night before and changed something in the menu it didn't like, I won't do that again—hi hi. I eventually went with a backup radio and things were up and running. I made a few Lighthouse contacts, but about 10:30 the generator quit, NOT TO BE REVIVED. It was an easy fix, but nothing you want to be doing in a field. Fortunately both Brian VA3DXK and myself were able to use battery back-up to run our stations, so communications were not effected. I didn't work the event much, but Brian had good success considering the poor band conditions that day.

With help from Brian on the barbeque and Judy Lisoweski with the set up, lunch was ready about 12:30. We had a great feed of burgers, assorted salads and some treats for dessert. I did my best imitation of Al's, VA3TET's sauteed onions and mushrooms, they must have turned out ok because there weren't many left, thanks for the help Al, much appreciated!!!! Speaking of Al, Ted VE3TRQ, our President, announced after lunch that the club has been successful, with the cooperation of Al's family, in obtaining Al's former call VA3TET. It will be assigned to one of our club repeaters in the near future.

Brian VA3DXK working other lighthouses on 40 Meters.

A fitting tribute to Al, for all he did for our club over the many years that he was a member. Thanks to the club executive for thinking of this and making it happen.

Unfortunately, about 3:45 Mother Nature brought our lighthouse activation to an

early end. Lightning could be seen fast approaching from the lake side. We quickly dismantled our stations and antennas and packed everything up, but the day wasn't done yet.

A group of us met a Boston Pizza in Kincardine at 5:30 for a great dinner and chatter. Mostly about the people and events of Lighthouse weekends past and present. There was also some antenna and radio talk in there somewhere too. It was a great way to finish off the day.

Gary VE3JGK and his wife Grace came to visit.

Brian VA3DXK showing his end-fed 40 Meter antenna to some visitors.

Everyone headed out about 7:30, I'm sure making plans for next year in their heads. Sunday morning the weather forecast wasn't looking good, so we decided not to set up a station.

In closing, I would like to thank everyone that participated in this years annual ILLW event at the Point Clark Lighthouse, making it once again a successful club event.

I hope to see you all next year, we are already registered!!!!! August 19th and 20th 2023. Pencil it in on your calendar!!!

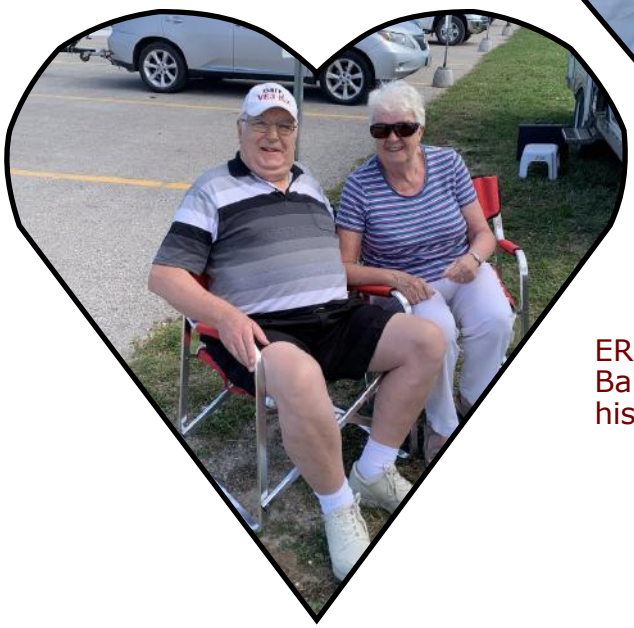
Paul VA3PDC

Brian barbequed the hamburgers and Paul VA3PDC made the special mushroom/onion sauce in the tradition that was begun by Al VA3TET-SK.

Linda VE3CZ
and
Mike VE3FE

Ted VE3TRQ and his wife Sandy.

This year quite a few young couples made the trek up to Point Clark for the Lighthouse Weekend as well as a day on the beach.



ERC's newest member Barry VE3ISX with Judy, his wife.

Frank VA3FJM set up his trailer and station right along the beach front

Paul operating while David VE3UTM and Frank look on.

And then the crew ended the day at Boston Pizza in Kincardine. They were joined by Carol VE3IYY and her hubby Dave VE3DJL.

A great note of thanks to Barry VE3ISX for permission to use the many pictures he took.

Club callsign added - VA3TET

In honour of Al Macdonald VA3TET-SK, the Elmira Radio Club now has a new callsign to use for our repeaters:

VA3TET

Ted VE3TRQ is the sponsor for this Club callsign

Amateur Search

Help

Details	
Call Sign:	VA3TET
Amateur Name:	Ted Rypma
Address:	314 Roxton Drive
City:	WATERLOO
Province:	Ontario
Postal Code:	N2T1R6
Qualifications:	Advanced, Basic with Honours

Club Details	
Club Name:	THE ELMIRA RADIO CLUB
Club Name 2:	
Address:	688 Interlaken Drive
City:	WATERLOO
Province:	Ontario
Postal Code:	N2T2Y4

Return to Search

RBR-4 Update: July 2022

For immediate release:
On July 28, 2022, Innovation Science and Economic Development Canada (ISED) released an update to a very important document for Canadian Radio Amateurs: "RBR-4 – Standards for the Operation of Radio Stations in the Amateur Radio Service".
The document specifies what frequencies we may operate on and with what bandwidths.
There are two major new additions to our spectrum:

- 472 to 479 kHz, also known as 630 metres: on this new band, we are allowed to run a maximum of five watts EIRP, using emissions with a maximum bandwidth of 1 kHz.

5351.5 to 5366.5 kHz in the 60 metre band: this is a new worldwide allocation. Canadian Amateurs are allowed to run a maximum of 100 watts ERP, using emissions with a maximum bandwidth of 2.8 kHz.

The new 60 metre band is in addition to our existing fixed-frequency allocations at 5332, 5348, 5373 and 5405 kHz. The new 15 kHz-wide allocation overlaps our existing authority to use 5358.5 kHz. Canadian Amateurs are unique in having authority to use 100 watts ERP on the four spot frequencies and on the new 15 kHz worldwide segment. Amateurs in most countries are limited to 25 watts or less and may operate only in the new 15 kHz-wide segment.
Please note that Amateur Radio is a Secondary radio service on these bands. Amateurs may not cause harmful interference to Primary users and we may not claim protection from interference by Primary users.

There are other small changes in RBR-4 that bring Canadian Amateur Radio regulations in line with changes agreed at several previous World Radio Conferences (WRCs) of the International Telecommunications Union (ITU).
Radio Amateurs of Canada would like to thank former Regulatory Officer Richard Ferch, VE3KI, for his dedicated work over several years to bring these changes forward.
You can find the English version here:

https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10650.html
You can find the French version (IPR-4) here:

https://www.ic.gc.ca/eic/site/smt-gst.nsf/fra/sf10650.html
If you have any questions, please contact RAC Regulatory Affairs Officer Dave Goodwin, VE3KG, at regulatory@rac.ca

Dave Goodwin, VE3KG
Regulatory Affairs Officer
Radio Amateurs of Canada
regulatory@rac.ca

CONTRIBUTIONS TO VE3ERC-CLUB NEWSLETTER

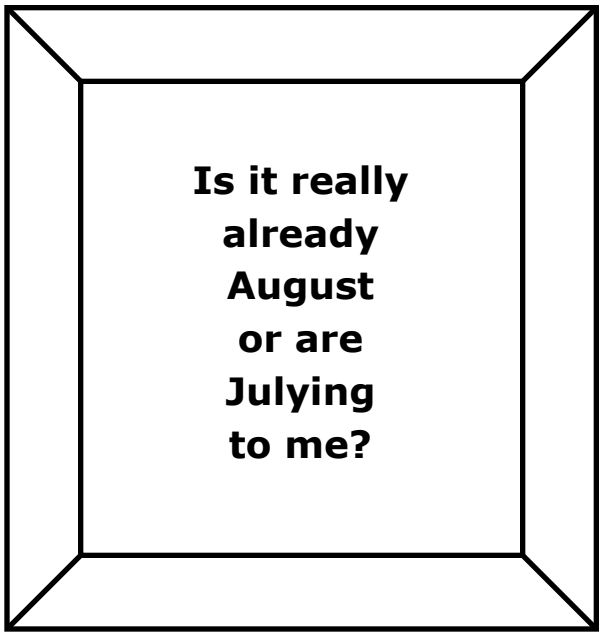
Do you have an article you'd like to submit? Or photos? Do you have any comments you'd like to make?

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 27 - TED VE3TRQ

AUGUST 3 - BILL VA3QB

AUGUST 10 - KIRK VA3KXS

AUGUST 17 - REG VE3RVH

AUGUST 24 - FRANK VA3FJM

AUGUST 31 - TOM VE3DXQ

SEPTEMBER 7 - TONY VE3DWI

SEPTEMBER 14 - BRIAN VA3DXK

SEPTEMBER 21 - BOB VE3IXX

SEPTEMBER 28 - M E E T I N G

OCTOBER 5 - TED VE3TRQ

Hanover Ham Haul

Linda VE3CZ and Mike VE3FE at their booth in Hanover.

Tony VE3DWI was one of the tailgaters in Hanover. Here he is speaking with Brendan Barrett and his sons who are working on getting their Basic licence.

James VE3FGG at left and Mike VE3 MKX at right.

CORRESPONDANCE

My new 49:1 UnUn almost ready to go for my HWEF (Half Wave End Fed) antenna, except for the two 220 pF capacitors in series on the coax input, and a couple of dabs of solder . I bought enough bits and pieces for another one that will be higher power (this one's for a 10M vertical and will be limited to 100W).

Features a SS stud for antenna and ground, a waterproof valve to equalize are pressure, and an "N" connector. Uses a pair of 43-mic toroids and 18 AWG magnet wire with 3P / 21S turns.

73' Ted VE3TRQ

All Keyed Up by

Dan Romanchik, KB6NU

A belle time on Belle Isle

After announcing the Michigan Lighthouse Award, I felt bad about not qualifying for it myself. So, since this weekend is International Lighthouse and Lightship Weekend (ILLW), I decided to activate lighthouse number 5, so that I could award myself certificate #1.

The lighthouse closest to me is the Livingstone Memorial Lighthouse on Belle Isle, in the middle of the Detroit River. So, yesterday, despite my wife warning me that I was going to get rained on, I threw my KX-3 into the car, along with a folding table and chair and a simple lunch, and headed to Belle Isle.

Belle Isle was established as a city park, back when Detroit was in its heyday. It was designed by Frederick Law Olmstead, the landscape designer of New York City's Central Park, the Biltmore Estate in Asheville, NC, and many other famous parks and campuses. As did the city of Detroit, it fell on some hard times, but now, under the supervision of the Michigan state park system, it's enjoying a renaissance. Its 982 acres really are a jewel.

The Livingstone Lighthouse

Livingstone Memorial Lighthouse was named after William Livingstone of Detroit. Born in 1844, Livingstone was president of the Dime Bank, owner of the *Detroit Evening Journal*, and long-time president of the Lake Carriers Association. He was also responsible for several important navigational improvements on the Great Lakes, including the creation of a deep-water channel in the lower Detroit River which became known as the Livingstone Channel. Following his death in 1925, friends and colleagues across the city rallied to build an appropriate monument in Livingstone's memory.

The Livingstone Memorial Lighthouse. Credit: Juan N Only.

Designed by renowned Detroit architect Albert Kahn, the Livingstone Memorial Lighthouse is located on the northern end of Belle Isle, facing

Lake St. Clair, and is one of only two lighthouses that are also memorials. Hungarian sculptor Geza Maroti designed the ornamentation of the lighthouse in 1930. It's very Art Deco style, with a classical fluted pillar. The 58-foot-tall lighthouse was sculpted out of Georgia marble – the only such structure in North America.

The lighthouse's bronze and glass lens, originally from the older Belle Isle Lighthouse that was demolished in 1941 to make room for the Coast Guard station, generates an 8600-candlepower beacon visible for up to fifteen miles.

My operation

I arrived at the lighthouse about 12:30 and took a short hike down a trail to see the light-house up close and enjoy the view upriver. During this short hike, I did feel a few sprinkles, but after inspecting the clouds, I decided to set up anyway.

Just off the parking lot, there's a set of three picnic tables, sitting under a pergola. The per-gola looked like a good, if kind of low, support for my 28-ft. vertical antenna, and the picnic table looked like a perfect operating position. I threw then antenna up into the pergola, and in less than 20 minutes, I was on the air. Almost, anyway.

This antenna consists of a 28-ft. vertical radiator and three radials. Normally, I'd just lay the radials on the ground. That didn't seem to work here. I couldn't get the SWR below about 2:1. It was a little puzzling, as it had never behaved like this before.

I played around with different configurations, but what worked the best was elevating the ra-dials off of the concrete floor. I'm not sure if the concrete had some metal reinforcement that was detuning the antenna, but elevating the radials brought the SWR on 40m down to 1:1.

I spotted myself on pota.app, and over the next hour and half, I made 24 contacts. Towards the end, activity really dropped off, so I started to think about packing up. Before packing it in, I decided to give out one more CQ, and I'm really glad that I did. The last contact proved to be my best contact of the day.

W2RC, with Neil, KC2KY at the key, replied to my CQ. W2RC is the club call sign of the Radio Central Amateur Radio Club, and they were operating from the Old Field Point Lighthouse, on the north shore of Long Island, NY. This was my first lighthouse-to-lighthouse contact of the day. After a nice ragchew with Neil, I said my 73s and packed up my stuff.

I ended my day on Belle Isle by visiting the Dossin Great Lakes Museum. Its exhibits include many models of ships that sailed the Great Lakes; the pilot house of the SS William Clay Ford, an iron ore freighter; and the Miss Pepsi, one of the hydroplanes that raced the Detroit River. All these exhibits tell the story of more than 300 years of Detroit's maritime history. It was a great way to end the day.

Editor Note: Dan and his wife have come up to Point Clark for the Lighthouse weekend several times over the past years. So no sur-prise to see him activate a local lighthouse near his home.

BLAST From the PAST

Jim VE3JMU and Mary handed out roses to all the

Ladies when the Elmira Club held a

Ladies Night in 2005

Reading a Cross-Needle SWR/Power Meter Properly

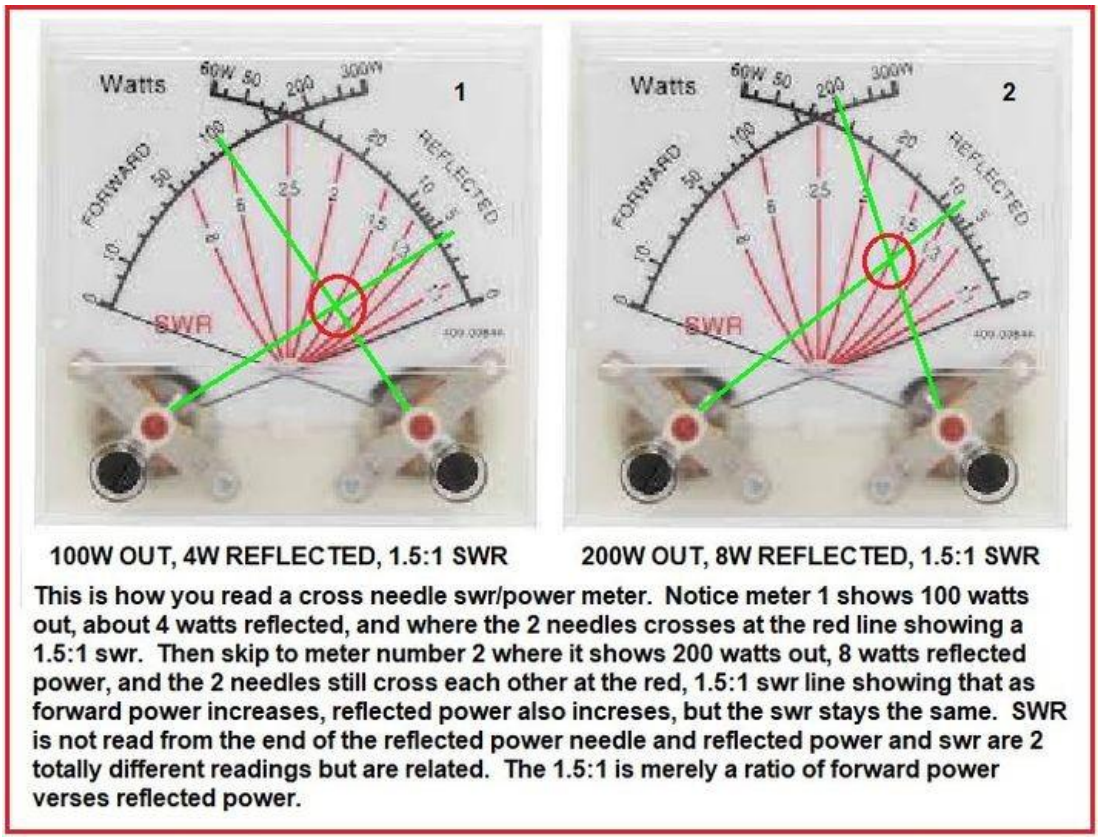
An FYI from AL VE3VY

When many folks are reading the SWR on cross-needle SWR meters, they often don't understand how the reading should really be noted.

Have a look at the attached graphic and explanation --- a great piece of information to help us read SWR readings properly on cross-needle SWR/Power meters, regardless if using one for HF, VHF or even UHF.

Hope this helps some of our members.

73 Mike VE3MKX



100W OUT, 4W REFLECTED, 1.5:1 SWR 200W OUT, 8W REFLECTED, 1.5:1 SWR

This is how you read a cross needle swr/power meter. Notice meter 1 shows 100 watts out, about 4 watts reflected, and where the 2 needles crosses at the red line showing a 1.5:1 swr. Then skip to meter number 2 where it shows 200 watts out, 8 watts reflected power, and the 2 needles still cross each other at the red, 1.5:1 swr line showing that as forward power increases, reflected power also increses, but the swr stays the same. SWR is not read from the end of the reflected power needle and reflected power and swr are 2 totally different readings but are related. The 1.5:1 is merely a ratio of forward power verses reflected power.

Thanks to Bill VA3QB who wrote:

This was a picture taken at Stacks in Guelph on August 11th.

Good turn out!

NiMh batteries from garbage

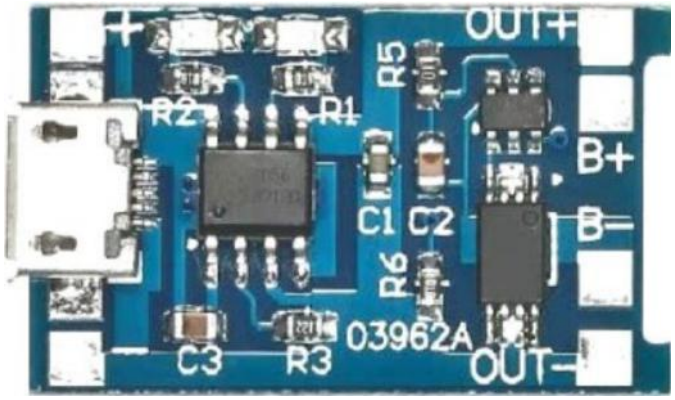
by Daniel Romila VE7LCG

I like taking long walks and in my walks I often have come across things such as this strewn along the streets:

It looks very much like an electric device. In fact one of the devices was even blinking. That indicated it had an LED and a power source.

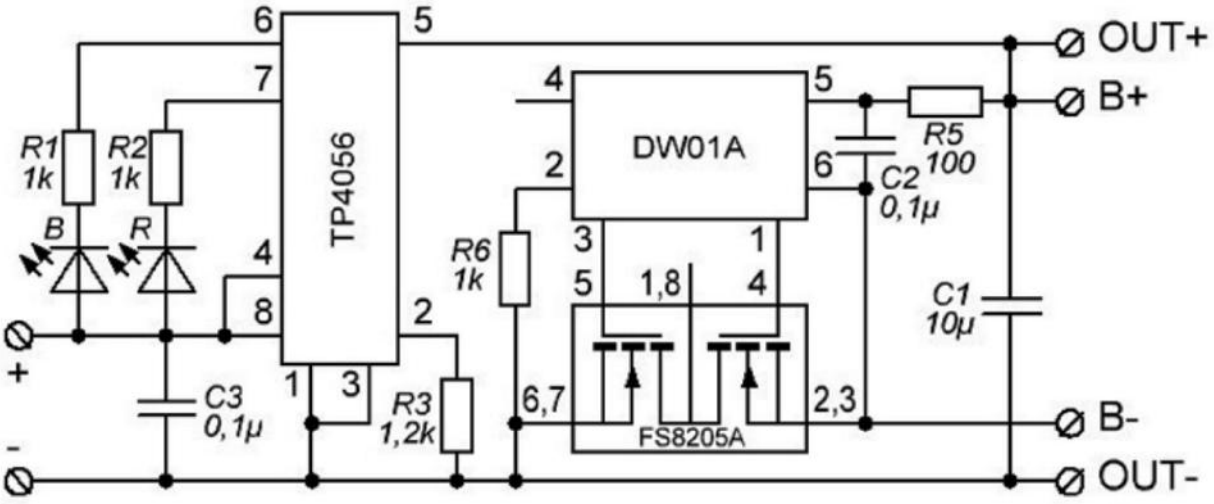
I am not a smoker but I was told by smokers that what I see more and more thrown out in the streets are single use smoking devices, some used for vaping and/or e-cigarettes. Out of interest I took one home. After a little surgery with a pair of big scissors, I got from inside the metallic tube.

There is a NiMh battery inside. Since the device is single use, it means the battery had only one cycle. What a waste! A perfectly good recyclable battery. At a closer look I found it contained a NiMh, with a nominal voltage of 3.7 V and 850 mA - 950 mA. This is usable for many radio amateur projects.

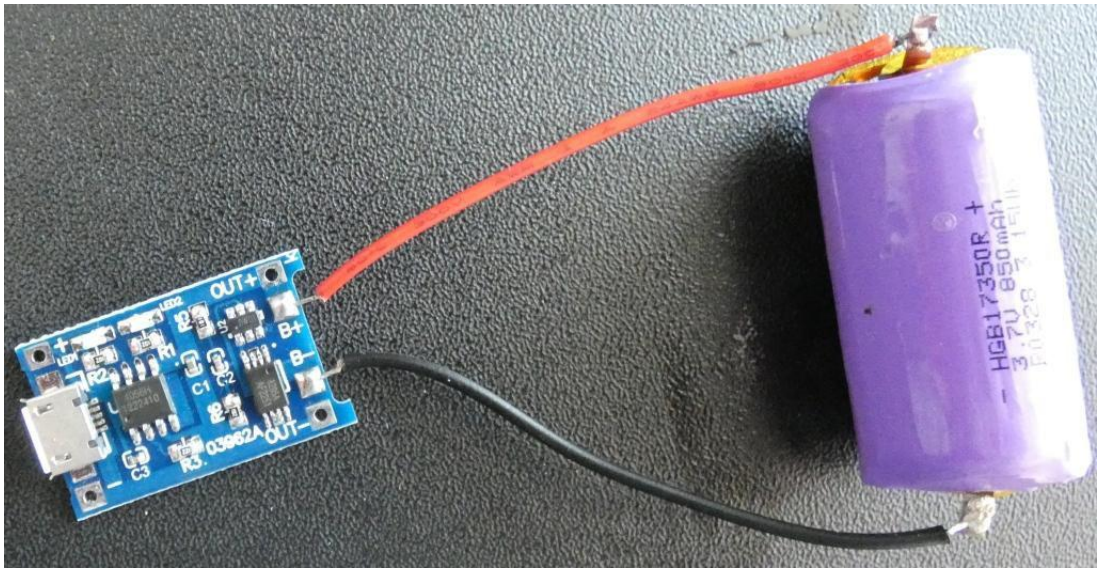


I happen to have some cheap charging boards based on the TP4056 integrated circuit. I measured the batteries I scavenged and all of them had above 3 V as when I found them on the street. I soldered the batteries one by one and they were charged up to 4.15 volts.

When the charging process stopped, the red LED turned OFF and the blue LED came ON. The schematics of this board is shown below.



As an interesting detail, I left the battery dangling from the board for several days, disconnected from the USB power supply, and the voltage on the rechargeable battery did not drop under 4.15 Volts. It started to drop only after connecting the digital voltmeter on the battery. The same happened for all the three recovered NiMh batteries.

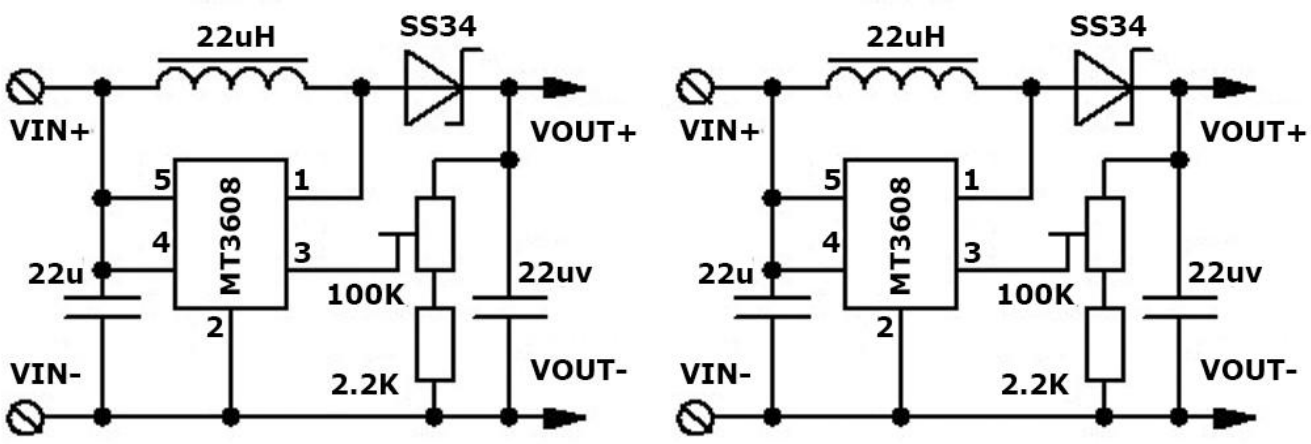


On the Chinese websites such boards can be bought for $2.15 CAD (1.68 USD) for 5 of them, shipping and taxes included:

https://www.aliexpress.com/item/1005004444047086.html?spm=a2g0o.productlist.0.0.5b3c56f33w0P3l&algo_pvid=3c6b07bd-7d25-40f5-bac4-ef5f4f92eb45&algo_exp_id=3c6b07bd-7d25-40f5-bac4-ef5f4f92eb45-15&pdp_ext_f=%7B%22sku_id%22%3A%221200002919953832 7%22%7D&pdp_npi=2%40dis%21CAD%21%214.04%21%21%21%21%21%40210318be16590599152098134ed5b3%211200002919953832 7%21sea

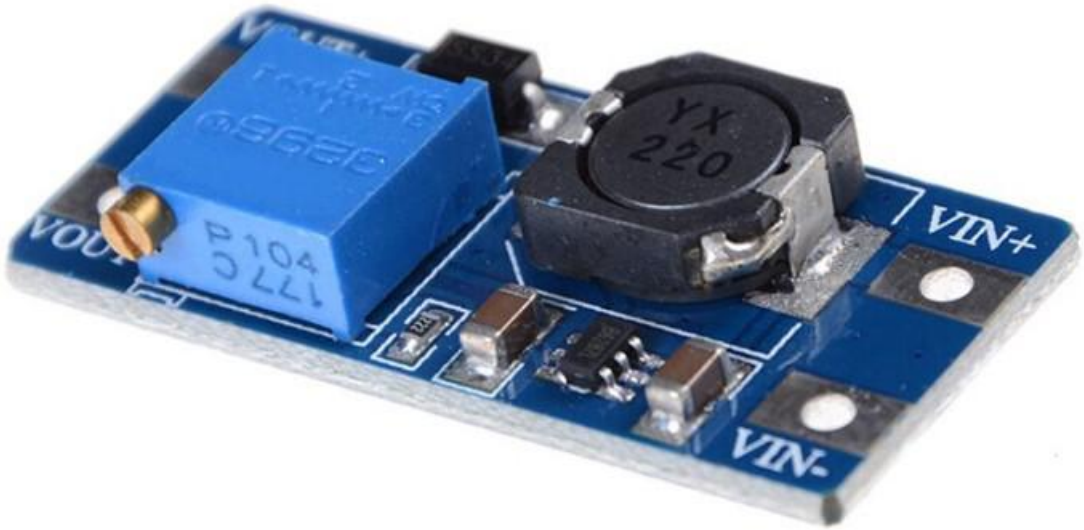
It can take 3 hours for such batteries to go from completely discharged to fully charged (4.15 V). Have patience!

Once the battery is soldered and the charging process is started, connect a voltmeter on the battery and see if the voltage on it slowly increases. If it does you just need patience.



3.7

4.15 volts is already a usable voltage, but something more standard like 5 V – 9 V – 12 V would often be better for radio amateur equipment. This can be achieved with a step-up DC to DC converter. Cheap modules are available with the integrated circuit MT3608.



A simple schematic used in ready-made boards!

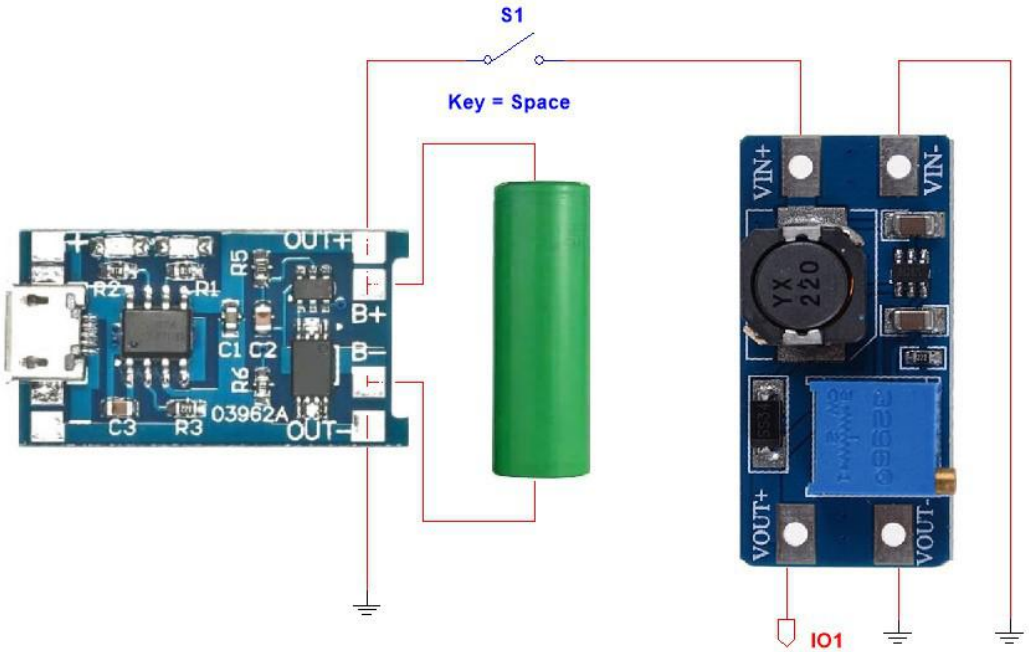
The board themselves look like this:

The acceptable input voltage is between 2 V and 24 V. The output is adjustable from 5 V to 28 V. The maximum output current is 2 A. The switching frequency is fixed at 1.2 MHz. The output ripple is lower than 100 mV.

On the Chinese websites such boards can also be bought for $2.15 CAD (1.68 USD) for 5 pieces, with shipping and taxes included:

https://www.aliexpress.com/item/1005004029395784.html?spm=a2g0o.productlist.0.0.754dfdacLVuvBI&algo_pvid=e4ccdb0e-c574-4594-80fd-d0ce8786d773&algo_exp_id=e4ccdb0e-c574-4594-80fd-d0ce8786d773-10&pdp_ext_f=%7B%22sku_id%22%3A%2212000027796974284%22%7D&pdp_npi=2%40dis%21CAD%21%212.46%21%21%210.51%21%21%402101e9ce16590737159762358ebb01%2112000027796974284%21sea

I made the final schematic by putting together the charger, the battery and the step-up converter:



This is a great way to take long healthy walks, reduce the garbage by recycling and reusing, and create great amateur radio projects.