Monthly Update

www.ve3osh.com

April 2025

Newsletter Change

We are moving all of the static information to the back of the newsletter and having all of the monthly information at the front of the newsletter. As with any changes, we welcome any comments on how you like this new format and also any other suggestions for our Newsletter.
The Static page will contain information about the club which doesn't change every month.

Durham Hamfest

April 12, 2025

The Hamfest has come and gone. This year we had good pre-sales of tables. On Saturday it looked like we had better attendance than last year but we need to wait until all the numbers are crunched. Big thanks go out to the volunteer's who helped make the event happen. That included a few who attended breakfast at 5:00 am and then went over to the facility before any people showed up to ensure that everything went well. Also thanks to Laird VE3LKS who again was this year's Hamfest Chairman. Some of the volunteer's went out for a late lunch after the event was over to relax and have a cold one. Well deserved.

Come to the member's meeting on Wednesday to hear more details about the Hamfest.

April Meeting

Our April meeting will be over the **Google meet platform** on Wednesday April 16, 2025 at 7:00 pm.

From the President

I don't know about you but I would like to get back to in-person meetings. These in-person meetings we would still have the Google Meet for those out of our area and some out of our country. I got a taste of having an in-person meeting last October at the Ontario Tech University. We know that we cannot have meetings there due to the cost so I would like to get a few members together to look for a place where we can meet in-person and the location meets with our financial limitations. I have drafted a document that spells out what this group of members should be looking for and where. I feel that if we have more than one person looking it will make the task a lot easier. I will bring this item up at the April Member's Meeting. Hopefully, we can get a few members to work on this task.

If you know of a location that we could meet, send me an email and I will pass it on to the group to review.

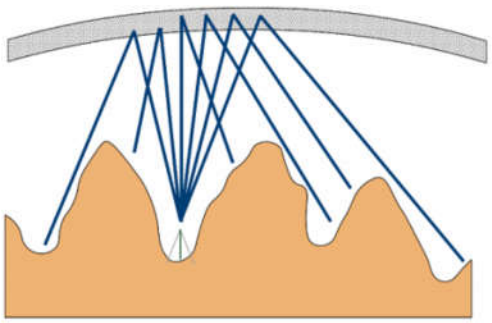
Using the new Google Meet platform. We have had a few Virtual Parking lot meetings using the new Google Meet platform. There have been some bugs that we have needed to fix but overall it now appears to be working. We will have our first members meeting on Google meet this week. I have heard that there are a few people that can not login to Google Meet. If you are one of these people, can you send me an email and we will try to figure out why you can not login.

Remember that in May we will be loosing the Zoom platform for good. This move is saving the club several hundred dollars annually so it's a good move to this new platform.

The Google Meet platform is missing some features that we had in Zoom, one that people have noticed is we do not have the background noise remover so we now hear the slightest noise that you may have in your background so I will now be asking everyone to MUTE their microphone during the meetings. If you need to speak, simply Un-Mute your microphone before speaking.

Derek - VE3TKE

ACCIDENTAL ANTENNA FOR 40 m EMCOMM



by Neil McAlister VA3NH

Winlink is almost an essential component of Amateur Radio emergency communications (EMCOMM). Winlink Express software enables Amateurs to transmit and receive messages similar to email, often using standardized templates, via distant nodes (or "gateways") in order to connect with each other when their own, local Internet and cell phone connections are down. In some locales, Winlink has been a valuable tool in natural disasters and during prolonged power outages when local Internet and phones were out of service.

A backup power supply, a station that operates on relatively low power to prolong battery life (unless an emergency generator is available,) a computer, a transceiver and an effective antenna are needed for Winlink communication. Here we'll talk about antennas.

For short haul work, Winlink Express on 2 meter FM is effective and fast. However, success depends on the user's proximity to a repeater that handles the 2 meter Packet Winlink modality; and of course it assumes that the nearby repeater has remained functional during an emergency. Unfortunately the 2 meter option is unavailable to many Amateurs even in normal circumstances if their QTH is too far away from a 2 meter Winlink gateway. A directional 2 meter antenna (small yagi or log periodic) can help, but even with a relatively unobstructed line of sight, a range of 30 or 40 km may be the best that can be achieved reliably, even resorting to battery-draining high power.

When 2 meter FM is not available for EMCOMM, a suitable antenna and a transceiver with digital capability makes it possible to access distant Winlink nodes on HF. For example, on a good day one can often connect with a 30 meter Winlink gateway in Halifax, NS all the way from Oshawa. However, the need for higher power to connect to far away nodes will drain backup batteries quickly.

Staying closer to home, and thereby keeping backup power consumption to a minimum, an excellent antenna choice uses a phenomenon called NVIS – Near Vertical Incidence Skywave, the topic of a recent online presentation of the Golden Horseshoe Auxiliary Communications Service (ACS). Suppose that an antenna sends most of its RF energy almost 90 degrees straight up. On striking the D layer of the ionosphere, that RF is refracted back downwards towards the earth, generally landing within a radius of 300 to 400 km from the transmitter. (Fig. 1) Such a pattern is unlikely to generate exciting DX contacts. However, on 40 meters it may encompass several Winlink HF nodes within that relatively small geographic circle. In hilly or mountainous regions, sending and receiving radio waves from overhead can largely circumvent propagation problems inherent with horizontal, line-of-sight obstruction. For example, the NVIS phenomenon is therefore one EMCOMM solution for hams living on the wrong side of the ridges north of Oshawa.

At the recent ACS lecture this author was pleasantly surprised to learn that, despite complete ignorance of the topic, he had already constructed a 40 meter NVIS set-up by accident ...

Limited by space and HOA constraints, a home-brew, centre coil loaded "Shorty 40" dipole had been installed inside the garage at VA3NH. This shortened, compromise antenna was not inherently resonant, and it wasn't very high off the ground. It was therefore known in advance that the contraption might work to some extent on 40 meters, but that it would be a pretty inefficient radiator even if it could be tuned to a nearly flat SWR. Think of an antenna tuner as beer goggles for a transmitter: it fools the transmitter, but it does not improve an ugly antenna.

True to pessimistic expectations, the "Shorty 40" was a disappointing underperformer right from the start. During the day, modest DX was sometimes possible on digital FT8; but the band was too noisy and the signals that it transmitted were too weak for satisfactory SSB communication. Perplexingly, propagation got worse after dark, even though 40 meters is typically recommended as the evening and night-time band of choice.

What was going on here? The ACS lecture was highly enlightening. Trying to build an (admittedly inefficient) 40 meter half wave dipole, this author had accidentally constructed a reasonably good set-up for NVIS instead. Ideally a dipole should be strung at least half a wavelength above the ground – for the 40 meter band, that would be an impractical 20 meters high! At a mere 3 or 4 meters above the garage floor, this "Shorty 40" is working not as a proper horizontal dipole, but mainly on NVIS because most of its radiated RF is directed almost vertically. During the day those 40 meter waves refract off the D layer of the ionosphere overhead, and then they come right back down to earth within a circle of a couple hundred km, as explained above. After dark, however, when the D layer loses its charge and dissipates, vertically directed radio waves on 40 meters do not reflect back to the earth. They just continue straight up and away into space. Therefore, 40 meters is not generally used at night for NVIS. Instead, 80 or 160 meters are the preferred NVIS bands after sunset, because those longer wavelengths refract better at steep angles off the higher F layer of the ionosphere.

Not much RF is directed horizontally by the floor-hugging "Shorty 40" at VA3NH. For this reason, 40 meter DX is not facilitated during evening hours when that band is often said to "go long" by giving transoceanic F skip and sometimes spectacular DX along the gray line. The dismal DX performance of this particular setup at the author's QTH is explained: it is an NVIS apparatus, not a properly functioning 40 meter dipole.

Armed with this new insight, contacts are now made regularly with several different 40 meter Winlink VARA HF nodes that are located within a hundred km of this QTH. Power as low as 15 or 20 watts is often sufficient to connect with one or more of these gateways during daylight hours – and low power consumption would be an important consideration when operating with batteries in an emergency situation.

Predictably, 40 meter NVIS performance falls off in the evening. However, even though NVIS for Winlink VARA HF on 40 meters fades to nothing as the sun goes down, Packet Winlink on 2 meter FM is always available as an alternative from this QTH.

Live and learn.

73 de Neil -- VA3NH

CONNECTING MULTIPLE KEYS FOR CW TELEGRAPHY

by **Neil McAlister - VA3NH**

The more hams work with CW, the more likely they are to enjoy using several different types of telegraphy keys. Historical purists and members of the Straight Key Century Club favour mechanical devices: a good, old-fashioned straight key, a sideswiper ("cootie") or a vibrating bug. Or maybe all three! On the other hand, for very high speed, convenience and comfort, and for serious contesting with fast, short, repetitious exchanges, iambic paddles and a memory keyer are almost a necessity.

Modern HF transceivers typically accept quarter inch, three terminal TRS jacks so they can handle any kind of key -- both mechanical ones and paddles that work with the rig's built-in keyer or an external electronic keyer.

Unfortunately rigs usually have only one input for a CW key, and typically it is located on the back panel in a location that makes it maximally awkward to change to a different keying device.

When we were talking radio one day, Brad VA7TSL made an intriguing observation. He said that a ham wanting to use more than one kind of key on the same transmitter is like a musician who needs to use a couple different electric guitars for the same set in a performance. Is there a telegraphy equivalent of a guitar rack?

Interesting thought. You can sometimes get away with a simple line splitter to plug two guitars into one amplifier. But often the differing impedances of two instruments cause too much distortion with a simple splitter, so an A/B switch box is often recommended instead.

However, several musicians often need to listen to the same audio source with headphones. Audio splitter boxes are inexpensive and readily available, adapting the output plug from one audio source to accept two or more quarter inch TS or TRS jacks from several headsets. Since all headphone plugs are available for use all the time, the splitter box is very simple, needing no selector switches.

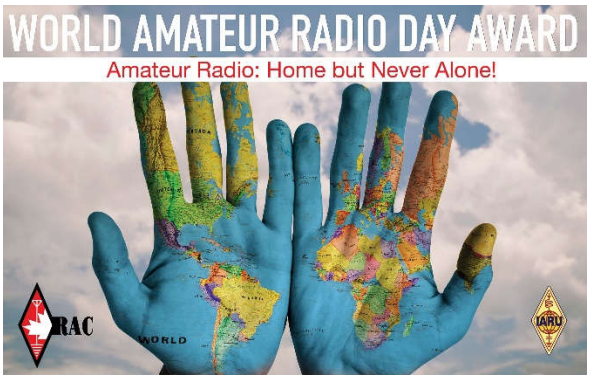
Eureka! The same splitter box can just as easily be used "backwards" to plug several keys and keyers into a ham transceiver's solitary CW input, based on the reasonable assumption that the operator will use only one keying device at a time, leaving the contacts of unused keys open.

A small splitter box makes an intriguing, little show near the rig; or it can be hidden behind the transceiver, since it will rarely be touched once all the keys and paddles are plugged in. (Figs.1 and 2) Have fun.

--... ...-- de **Neil VA3NH**

Figs. 1 and 2. A quarter inch TS/TRS audio splitter box can be used "backwards" to connect several keys to one CW input on the rear panel of a transceiver via the red cable.

Radio Amateurs of Canada / Radio Amateurs du Canada



On Friday, April 18, 2025, Radio Amateurs of Canada is once again organizing a special on-air event to celebrate World Amateur Radio Day.

Every year on April 18, Radio Amateurs worldwide take to the airwaves in celebration of Amateur Radio and to commemorate the formation of the **International Amateur Radio Union** (IARU) on April 18, 1925.

The IARU has announced that the theme for this year's World Amateur Radio Day will be **"Entering the Next Century of Amateur Radio Communications & Innovation".**

Radio Amateurs of Canada is once again holding a **"Get on the Air on World Amateur Radio Day"** special event in which we encourage as many Amateurs as possible to get on the air and contact as many RAC stations as possible.

- RAC official stations will operate across Canada from 0000Z to 2359Z on April 18. The RAC official station call signs are VA2RAC, VA3RAC, VE1RAC, VE3RHQ, VE4RAC, VE5RAC, VE6RAC, VE7RAC, VE8RAC, VE9RAC, VO1RAC, VO2RAC, VY0RAC, VY1RAC and VY2RAC.
- Those contacting one or more of these stations will be eligible for a special commemorative certificate noting their participation in RAC's Get on the Air on World Amateur Radio Day Event.
- Participants simply need to complete one or more contacts, on any band and mode, with RAC official stations to earn their certificates.
- No logs need to be submitted; simply check back on the RAC website when instructed and enter your call sign to download your certificate.

Swap Shop

We are looking for items for sale!

If you have items for sale or if you have items that are free for the pick-up, feel free to list them here in the club swap shop.

Station of the Month

If you would like to share your setup, send your pictures and info to Steve VA3TPS at va3tps@outlook.com

Editor's Note

Thank you to **Neil VA3NH** for the article.

Don't forget I am looking for articles for the bulletin or any special events or information Ham Radio related.

We haven't had any members shack or mobile setup pics in a while. There must be some out there so send them to me with a short description of your station and setup.

Upcoming Events

The 28th Annual Ontario QSO Party 2025

1800Z April 19 to 0500Z April 20, 2025 and 1200Z to 1800Z April 20, 2025, more information at http://www.va3cco.com/oqp/

Canoe the Nonquon - June 7, 2025

Details on this event and the locations are being worked on and more details will be available soon from **Neil VA3NH**.

NSARC Summer Kick off BBQ – June 18, 2025

More information will be available soon from **Louise VA3LLF .**

ARRL Field Day – June 28 to June 29

More information available soon from **Nick VA3NPW**.

Aquino Tank Weekend – July 25 to July 27

More information available soon from **Laird VE3LKS**.

NSARC Fall Return BBQ -September 17, 2025

More information will be available soon from **Louise VA3LLF**

Hike or Bike -September 21, 2025

More information available soon from **Derek VE3TKE**

The Static Section

This section of the newsletter will be for information and will not change.

Club Executive

President – **Derek VE3TKE**
Vice President: **Peter VA3PKM**
Secretary: **Neil VA3NH**
Treasurer: **Nick VA3NPW**
Membership Secretary: **Thomas VE3PDK**

Committee's

Repeater & Technical -Trustee: **Daren VE3NMD**
Website: **Laird VE3LKS**
Club Examiner: **Aldo VA3AG**
Newsletter: **Steve VA3TPS**
Net Manager: **Steve VA3TPS**
Presentation Coordinator: **Dylan VE3KXY**
RAC Representative: **Ken VE3RMK**

Repeaters

2m VHF FM Repeater – VE3OSH

Frequency: 147.120 MHz
Input Tone: 156.7 Hz
Input Offset: +600 kHz
Allstar Node # 27838

70cm UHF Fusion/FM Repeater – VE3NAA

Frequency: 443.000 MHz
Input Tone: 136.5
Input Offset: +5 MHz

70cm UHF DMR Repeater – VE3LBN

Frequency: 443.9875 MHz
Colour Code: 3
Input Offset: +5 MHz
DMR ID: 302340

APRS iGate – VE3OSH

Frequency: 144.390 MHz

Tuesday Night Rag Chew

The club's weekly Tuesday Night Rag Chew starts at 7:00 pm. Our current net controllers are: **Aldo VA3AG**, **Grant VA3KJI**, **Derek VE3TKE**, Neil **VA3NH** and **Steve VA3TPS.**

This is not a formal net but rather a lively round table. Some can only stick around for
a
few minutes while others are there from start to finish. We never know what the topic de jour will be but someone always comes up with something interesting. So, if you are available between 1900 and 2000 hrs on Tuesday's pop onto VE3OSH and join the conversation.

A big thank you to all our Net control operators for stepping up!!

If anyone would like to give Net control a try one week, let me know and we will fit you in as a guest net control.

Just a reminder to everyone that our Net Controllers are doing a great job volunteering and are there for us every Tuesday at 7:00 pm so that we have a Net, so how about dropping by and checking in and say hello. It only takes a few minutes and the Net Control operators will appreciate it.

Wednesday Night Virtual Parking Lot

The club has a weekly Virtual Parking Lot (VPL) meeting on the Google meet platform starting Wednesday night at 7:00 pm for members and guests. Everyone is welcome to attend. On the third Wednesday night the club has its member meeting on Google Meet first and after the meeting is finished, we have our virtual parking lot for those who are still on-line.

If you would like to attend our weekly VPL send an email to **Derek VE3TKE** at **president@ve3osh.com**. Our club Secretary **Neil VA3NH** will be sending out the Google Meet link prior to the Wednesday meeting time. It has actually has been quite a success as more people can show up, due to distance or schedules, and yet we can still do show & tells by simply sharing our screens. It is not uncommon to have 20 to 25 participants but we can easily handle more. So, quit complaining about being bored and hop on the Virtual Parking Lot also remember that you can also ask questions of the group as well.

At our Google Meet meetings, we have Amateurs from around the globe.

So, try to remember Wednesday nights and drop by our google Meet VPL and say hello and see who is visiting from around the globe. It starts around 7:00 pm and lasts until the last die-hard leaves but you can pop in anytime and say hello and stay as long or short as you want.

White Feather Fun!

Some of the club members meet up on Saturday morning at **White Feather Country Store.** So, if you need your fix of a steamy hot beverage, as well as a hot fritter, pop up to **White Feather Country Store**, which opens at 8:30 am, and join the gang in the south east corner of the parking lot. Make sure to bring a lawn chair as we sit outside in the parking lot even when it's cold or raining. Just give a shout on the repeater between 8:00 and 8:20 to see if anyone is heading up that way and come and join us. **White Feather Country Store** is located at the corner of Simcoe St and Raglan Rd in Raglan, just south of our repeater site.

Some of the dedicated White Feather gang on a cool November 2 morning.

Alternate Location During Winter Months

During the winter months, when it is colder, some of our members meet Saturday morning at the Coffee Time in Courtice, Courtice Rd and Hwy 2 at 8:30 am.

Here is a photo from April 5,2 025 with a large group attending White Feather South South!