The Halifax Amateur Radio Club



REFLECTOR



PO BOX 8895 HALIFAX NS B3K 5M5

April 2019, Volume 80 Number 4

club web site is www.halifax-arc.org



CNPOTA is one more good reason to tour around parts of Canada you haven't visited recently – or ever

HARC Club Station phone number - 902-490-6421

| Executive | | |
|---|----------|--------------------------------|
| President - Bill Elliott, VE1MR | 865-8567 | bowser.elliott@ns.sympatico.ca |
| First V.P. – Jason Ingraham, VE1PYE | 292-9924 | VE1PYE@bellaliant.net |
| 2nd V.P VACANT | | |
| Secretary - Roger Stein, VA1RST | 403-3738 | burch.craft@gmail.com |
| Treasurer - Bill Simm, VA1ALW | | williamrham@live.ca |
| Member-at-Large: -Tim Delaney, VA1TIM | | kimdelaney@ns.sympatico.ca |
| Station Manager: - Brian Allen, VA1CC | 489-4656 | basailor@eastlink.ca |
| Past President - Jeremy Fowler, VE1JHF | 240-4302 | ve1jhf@gmail.com |
| Director Emeritus - Bill Elliott, VE1MR | 865-8567 | bowser.elliott@ns.sympatico.ca |

Committees/Offices/Prime Contacts

Government & Media Relations - Gary Murphy VA1GGM, 461-9416

garygmurphy@gmail.com QSL Bureau Mgr - Murray MacDonald (VE1BB) twomacds@ns.sympatico.ca EMO Coordinator - David George, VE1AJP 466-8723 dgeorge@dal.ca EMO Trailer coordinator – David Musgrave, VE1EDA 435-4333 ve1eda@rac.ca Reflector editor - Lynn Bowser, VE1ENT 865-8567 bowser.elliott@ns.sympatico.ca Reflector Hardcopy Dist. - Jeremy Fowler, VE1JHF 240-4302 ve1jhf@gmail.com Membership - Jim Calvesbert, VE1PPA jim.calvesbert@gmail.com Reflector electronic Dist.; Jim Calvesbert, VE1PPA jim.calvesbert@gmail.com Web site content Manager - Brandon Fowler, VE1BMF bmfowler95@gmail.com Basic ham course - Jason Ingraham, VE1PYE 292-9924 VE1PYE@bellaliant.net 2019 Flea market Chair – George Snow, VE1CAW ve1caw@gmail.com 2019 Field Day Coordinator - Dick Grantham, VE1AI rgrantham@ns.sympatico.ca Safety Officer - Pat Kavanaugh, VE1PK ve1phk@rac.ca VA1MMA Project Manager - Dick Grantham, VE1AI rgrantham@ns.sympatico.ca

865-8567

Non Club Contacts

RAC Atlantic Director - Dave Goodwin, VE9CB ve9cb@rac.ca
RAC Section Manager - Dave Hull, VE1HUL d.hull@ns.sympatico.ca
RAC Assistant Director for HRM Scott Wood, VE1QD, 823-2191 ve1qd@rac.ca

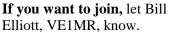
Take-15 Net Controllers This will be the rotation. We

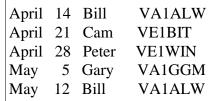
NSARA Director - Bill Elliott, VE1MR

Honorary Legal Counsel - Paul Radford, VE1ARH

need more net controllers.

If you want to join, let Bill





HAZARD ALERT

bowser.elliott@ns.sympatico.ca

Last night (March 20) at the HARC meeting I parked in the rear of the station 50 lot.... behind the junked cars....... this morning I had 2 flat tires....big chunks of metal in the tires. Be warned for now until we or the city get that area cleaned up. Dick, VE1AI

All phone numbers must be preceded by area code 902 when dialling, unless otherwise indicated

The April **2019 General Meeting** of the Halifax Amateur Radio Club will be held Wednesday, April 17, in the training room at Station 50 in Hammonds Plains. Please see information on page 3 about parking, etc.

6:30-7:00pm - Social half-hour with refreshments.

7:00-8:00pm - Presentation: Worldwide Organization of Amateur Radio

Presenter: Scott Wood, VE1QD 8:00-9:00pm General Business Meeting

Guests are welcome

When Insults Had Class.
"I feel so miserable without you; it's almost like having you here."
-Stephen Bishop

Deadline for submissions to the April Reflector is Saturday, May 4, 2019

GENERAL INFORMATION



Sunday evenings: TAKE-15 NET at 8:30 PM

CLUB REPEATERS:

VE1PSR - 147.270 MHz + TX=82.5

VE1PSR/UHF - 444.350 MHz + VE1PSR/6M - 53.550 MHz -

access tone 151.4 Hz

VE1HNS - 146.940 MHz - TX=82.5

PACKET: VE1NSD 145.050 MHz LAN NODE

Events for Your Calendar

Page 2

The CNPOTA Event is supported by Radio Amateurs of Canada and Parks Canada and will run from 00:00 UTC January 1, 2019 until 23:59 UTC December 31, 2019.

The Newbie Round Table will be on hold until May 5th at 2100hrs on a MAVCOM repeater near you

April 13 & 14 - The 20th annual Shearwater Spring Hobby Show will be held at the Sea King Club,

242 Warrior Avenue, Shearwater, from 10 AM - 4 PM on Saturday & Sunday April 13 and 14. Craig. VE1JMA, is the co-ordinator. Contact Craig at

cjmackinnon@gmail.com

The SMART 2019 is scheduled for April 27 in Springhill at the Dr Carson & Marion Murray Community Centre. Registration is now open. The link to the webpage for information and registration is.

www.westcumb.ca/s-m-a-r-t-2019

May 26 – the MS Walk

June 15 – Car rally, Jason, VE1PYE is the co-ordinator, contact Jason at ve1pye@bellaliant.net

June 22, 23 – ARRL Field Day Co-ordinator, Dick Grantham, VE1AI – rgrantham@ns.sympatico.ca

July 27-28 – the MS Bike Tour To help out, contact Sheldon Page at sheldon.page@gmail.com

July 27-28 (the last full weekend of July) – IOTA (Islands On The Air)

August 11 Ledwidge Lookoff Rally To help out, contact Jason, VE1PYE at ve1pye@bellaliant.net

The 2019 ARRL National Convention at Dayton Hamvention® is Friday, May 17, through Sunday, May 19, at the Greene County Expo Center, 120 Fairgrounds Road, Xenia, Ohio, sponsored by the Dayton Amateur Radio Association. [I am hoping to meet and greet readers at Dayton in just a couple of months. See you there! - K1CE]

THE HALIFAX ARC FLEA MARKET

WHEN

Saturday May 25th 2019

WHERE

Same location as last year The Royal Canadian Legion 45 Sackville Cross Road Lower Sackville

TIME

Sellers may set up after 8 AM Buyers allowed in after 10 AM

GENERAL ADMISSION

Buyer - \$5.00 Seller - \$10.00

Which includes a 3' X 6' selling space - some with power

Space is limited so book your table as soon as possible.

Contact Fraser MacDougall ve1wo@eastlink.ca Phone: 902-406-5327

Buyer entrance tickets will be presold before 10 AM

Talk in frequency 146.970 - VE1CDN





((0))

CNPOTA 2019 The Canadian National Parks on

the Air (CNPOTA) software development team of Sheldon Hartling, VE1GPY, Doug McComber, VE1FAL, & Ryan Hickman, VO1RCH, worked diligently through the second half of 2018 and into the December holidays to get the cnpota.ca website ready for its January 1 launch. This turned out to be just-in-time, with a number of very keen participants jumping onboard to activate parks at 00:00Z on January 1!

The dedicated cnpota.ca website will accept log files generated by most Amateur Radio logging programs in both ADIF & Cabrillo formats. So far, most of the logs received have been in ADIF format.

S.M.A.R.T. 2019 www.westcumb.ca

The WestCumb ARC in Amherst Nova Scotia will once again be hosting the 4th annual *Symposium for Maritime Amateur Radio Technicians* on Saturday April 27th, 2019 at the Dr. Carson & Marion Murray Community Center, 6 Main St., Springhill NS.

- Talk-In (Amherst VE1WRC 147.285+)
- Doors open at 7am for volunteers, vendors and presenters
- Doors open at 8am for general public
- Entrance fee (\$5 dollars)
- •Tea, coffee, cookies, muffins available upon arrival
- Classes begin at 9am.
- 12 classes (6 morning + 6 afternoon)
- Multiple door prizes.
- Tickets available for 50/50 and grand prizes
- Amateur radio displays
- Flea market in the arena
- Lunch hour 12 noon–1:30pm
- Canteen available throughout the day (cash only)

If you're interested in attending this year's event fill out the registration form on theWestCumb ARC website at

https://www.westcumb.ca/s-m-a-r-t-2019

NOTICE: Your registration is important as it helps us to prepare the rooms, stock the canteen and order food for the lunch hour.

Any questions contact Jim Langille VE1JBL at

jimve1jbl@gmail.com

All participants – chasers & activators – are encouraged to upload their log files as soon as possible. There are many eyes closely following the 3 CNPOTA leader boards waiting for confirmation of their recent activity.

The newly-developed software used

(Continued on page 8)

PRESIDENT'S MESSAGE for February, 2019

The Basic Amateur Radio class of early 2019 is finished and on Saturday April 6th 10 students wrote the exam and all passed. 9 students passed Basic with Honours and one student passed the Basic. We will be looking for these new Amateurs on the air in the near future. Another exam date is set for Saturday April 20th and probably another date on Thursday evening of the 25th. Hopefully the other 8 students will write the exam on these dates.

The flea market will be May 25th and we will need people to man the club tables - contact me if you can spare an hour or two during the event. The MS Walk will be on Sunday May 26 and we need an organizer for this event - contact me if you can do this. Generally there is a dedicated group that will volunteer to help with the MS walk.

Some of the other upcoming events will also need people to help out. Check Page 2 of this newsletter for more information and the coordinators and contacts.

73 - Bill Elliott, VE1MR, President of the HARC

Russian SSTV Transmission Event Planned

ARISS Russia is planning Slow Scan Television (SSTV) image transmissions from the International Space Station. The transmissions begin Thursday, April 11, 2019 around 18:00 UTC and run continuously until approximately 18:00 UTC on Sunday, April 14, 2019. This event uses a computer in the ISS Russian Segment, which stores images that are then transmitted to Earth using the ARISS amateur radio station located in the Service Module which employs the Kenwood TM D710E transceiver. Once these images are received by ham radio operators and other radio enthusiasts on Earth, many participants will post them for viewing at http://www.spaceflightsoftware.com/ARISS_SSTV/index.php . In addition, you can receive a special SSTV ARISS Award for posting your image. Once the event begins, see details at https://ariss.pzk.org.pl/sstv/ . The transmissions will be broadcast at 145.800 MHz using the PD-120 SSTV mode.

Please note that the event is dependent on other activities, schedules and crew responsibilities on the ISS and are subject to change at any time.

Please check for news and the most current information on the AMSAT.org and ARISS.org websites, the AMSAT-BB@amsat.org, the ARISS facebook at Amateur Radio On The International Space Station (ARISS) and ARISS twitter @ARISS_status.

HARC Booking Calendar

Looking to find out what is going on in the HARC Station? If so, you should go to our on-line room booking calendar at:

> https://teamup.com/ ksa1105421c0509940

There you can find information on events taking place in the:

• Club Station Main Meeting

Room

- Club Library / Technical Room
- Club Radio Station Room
- Club Remote Radio Reservation Booking

If you want to reserve space in one of the above three rooms, or if you are approved to use and want to book time on the Club Remote Radio, then send an email to our Station

HELP NEEDED

The annual Shearwater Hobby Show is on the 7th and 8th of April this year. Craig, VE1JMA is willing to take the lead but will be looking for help. For the past several years the same people have helped Craig but several of those people will not be able to offer help this year.

A couple of people are needed for set up on Saturday morning. A couple of people are needed to help man the table. Shifts can be arranged - generally Saturday morning then Saturday afternoon. Again Sunday morning and then take down later Sunday. Please consider spending a shift of 3 or 4 hours to help out.

This event offers good exposure for the club and the hobby.

The Brit Fader Scholarship

As we speed toward 2018 income tax filing time consider legal ways of reducing your (2019) payable income tax like donating to the The Brit Fader Scholarship Trust.

Donations are tax deductible. The Trust is a registered charity with the Canada Revenue Agency (registration # 0984971-25).

-ed

A Cessna inbound at the reporting point over ManlyBeach.

Tower (Female voice): "Cessna WYXD, congestion at airport approach. I'm going to have to hold you over the Manly area."

Cessna WYXD: "I love it when you talk dirty to me."

Manager, Brian, VA1CC at 902-489-4656

or basailor@eastlink.ca or to our Club Website Manager, Brandon, VE1BMF, at bmfowler95@gmail.com and they will make your booking.

ITU Teams with Americas' Telecoms and IARU, Promotes WinLink

In 2018, the International Telecommunication Union (ITU), the specialized UN agency, teamed up with regional telecommunications bodies and the International Amateur Radio Union (IARU) to set up an alternative telecommunication system for use in times of emergencies. The system does not rely on conventional means of communication such as the internet, but rather on Amateur Radio systems.

The alternative telecommunications system used is amateur-developed WinLink, a worldwide email service that uses radio pathways and is capable of operating completely without the internet. Winlink is well-known for its role in emergency and disaster relief communications, providing its users email with attachments, position reporting, weather and information bulletins. The system is built, operated and administered entirely by licensed volunteers.

WinLink has a proven track record for emergencies. As recently as 2017, WinLink was extensively used in the aftermath of the highimpact hurricane season in the Caribbean and also after the earthquake in Mexico.

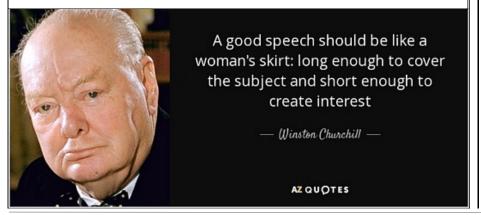
Nodes are an important part of the WinLink system. A node is a point of connection within the network and are the major centers through which internet email traffic is typically routed.

At the beginning of 2018, ITU started to implement the project using WinLink in cooperation with IARU and the Federación Mexicana de Radio Experimentadores (FMRE). ITU and FMRE worked in collaboration with the Regional Telecommunications Commission of Central America (COMTELCA) to define system specifications.

Governments have played an important role in project implementation. This was necessary for effective coordination among telecommunications authorities, organizations responsible to respond to emergencies and radio-amateur associations. Governments have also provided some equipment and carried out preliminary work to start operations. National partnerships were built among relevant entities to procure the needed equipment, deliver training, and increase awareness of WinLink.

The project has built and strengthened synergies among different entities at the national, regional and international level and helped highlight the role of amateur radio systems in disaster management. ITU stands ready to expand this project in all beneficiary countries, and counts on the cooperation of IARU and FMRE to bring this solution to the whole Americas region.

- source: ITU News, Emergency Comms, March 5, 2019



Safety bulletin issued for all mariners who use GPS equipment -

March 22

The Maritime & Coastguard Agency (MCA) has issued a special safety bulletin to all mariners that use GPS to prepare for a rollover event that will occur on 6 April 2019.

On April 6 navigation data from some older GPS systems might become inaccurate due to the 'week number' rollover event.

This could cause stand-alone GPS receivers and systems using GPS chips, to produce data that is 19.7 years either in the past or future, therefore generating errors in both the GPS position and time. However, if onboard equipment has been installed after August 1999, or has regular firmware updates from the manufacturer, there should be minimal risk of an error occurring.

Luke Hallett Radio Spectrum Policy Co-ordinator for the Maritime & Coastguard Agency said: 'If your GPS is more than 10 years old or it's had no firmware updates then you're definitely at higher risk of you GPS not working from 6 April. If your GPS falls into either of those categories you need to check with the manufacturer before April 6, otherwise time and position data used for navigation could become inaccurate. It's important that GPS users check their systems as soon as possible to ensure that they won't be affected by the impending rollover.'

The MCA's safety bulletin is intended to help operators understand the implications of the week-number rollover and to take action to ensure all GPS updates are completed.

For more information on the rollover event please visit: GPS safety bulletin Posted 3 weeks ago by HM Coastguard

http://hmcoastguard.blogspot. com/2019/03/injured-fishermanairlifted-from.html

From Peter Service, VE1PS

Most of the Basic Class wrote the exam on April 6, 2019. All who wrote passed and all except one passed Basic with Honours.

Sébastien Labbé - Basic
Scott Johnston - Basic with Honours
Gordon Young - Basic with Honours
Ralph Deon - Basic with Honours
Lloyd Monroe - Basic with Honours
Greg Estabrooks - Basic with Honours
David Lewis - Basic with Honours
Nicholas Hansen - Basic with Honours
Jay Frye - Basic with Honours
Lloyd Warren - Basic with Honours
As of April 9, 6 have calls.

Sixteen students took the classes. Two did self-study.

Examiners were Bill, VE1MR & Brian, VA1CC

The next exam will sit on April 20.

A big THANK YOU to all instructors who taught the various course chapters And a tip of the hat to Jason, VE1PYE, coordinator of HARC's first Basic course at our new club location, Fire Station #50. -ed

What is the primary use for birds' nests in China? For birds to lay their eggs in.

The Atlantic Amateur

Ham Radio for the **Atlantic Provinces**

www.atlanticamateur.ca

The first piece of luggage on the carousel never belongs to anyone.

~ George Roberts.







NOTICE:

If you are interested in getting fall arrest certification for tower climbing. please contact an executive member. No course is currently scheduled but you want to be sure to be on the list for a seat.

I find it ironic that the colours red, white and blue stand for freedom, until they are flashing behind you.

Do you have pictures, an interesting or funny radio-related story, an article or a question or news you would like to share via the HARC Reflector? Please send it/them to Lynn at

bowser.elliott@ns.sympatico.ca

Please show "For Reflector" on the "Subject" line so I don't miss it Thanks!.-ed

Halifax Amateur Radio Club Minutes of the HARC Monthly General Meeting 20 March 2019

- 1. Welcome to the HARC monthly meeting for March 2019: The meeting was called to order by Bill VE1MR at 2015
- 2. Report of any Silent Keys: None to report
- 3. Roll Call: 24 members and visitors in attendance.
- 4. Acceptance of the Agenda presented: on screen
- 5. <u>Approval of Minutes</u> of 20 February 2019 as printed in the Reflector:

Tim, VA1TIM moved to approve the minutes, seconded by Rich, VA1CHP. Motion carried.

6. <u>Correspondence</u>: Roger, VA1RST reported the AMSAT and QST publications were received and that a few QSL Bereau cards returned due to address on file nolonger valid.

7. President's Report:

Nothing heard back regarding the Bay Treasure Chest honorarium application. The HRM Community Grant application for equipment was submitted. It may be several months before we hear back. The MS Bike tour will be the last weekend in July 27-28. Sheldon Page, VE1SJP, has agreed to organize the MS Bike Tour.

The MS Walk will be Sunday, May 26 and we may need an organizer for the event, Jeremy VE1JHF has done this in the past but has been busy as of late.

Brian VE1IQ, is no longer net control Cross Canada Net due to his hearing loss. If anyone would like to take on Net Control for Nova Scotia, please let it be known. The Cross Canada IRLP net is on Wednesdays from 1200 to 1300 and usually has quite a few repeaters linked in Nova Scotia and PEI as well.

8. **Treasurer's Monthly Report:** Bill VE1ALW reported the income and expenses for the reporting period, he moved to accept, Dick VE1AI seconded.

9. Other Executive Reports:

Jason VE1PYE reported 15 people still participating in Basic course, about 3 weeks to go.

Brian, VA1CC Main station and remote up and running, requested quote on 30' tower for satellite antenna, parts ordered to repair the Mosley beam, both the sloper and beam are now accessible by remote operation, thanks Bill!,

Saturday cleaning routine expanded to include washroom.

Rotor control to be expanded. Fraser has been doing radio checks on Saturday mornings.

10. <u>Committee</u>, <u>Event and</u> <u>Special Projects Reports</u>

- a) Membership Report Jim, VE1PPA: 74 paid up members, 22 associates, 4 life and 18 complimentary for a total of 118. Jim will be sending out notices (54) to those still unpaid, letting them know they will have received their last Reflector
- b) <u>EMO</u> Dave George, VE1AJP nothing to report
- c) <u>Search & Rescue</u> Dave George, VE1AJP - nothing to report
- d) <u>Station Manager Report</u> See Other Executive reports, above
- e) <u>HATS</u> Scott, VE1QD send in your time sheets
- f) MMA, Dick VE1AI reported that the Wireless Room activity is off and running with March break staffed and going well
- g) <u>Field Day</u> Dick VE1AI, will be looking after CW, Brian, VA1CC, will be looking after SSB.

11. **Old Business**:

a) Fund raiser – The Bay Treasure
 Chest – No word back yet.
 Offers a \$500 honorarium to assist

with one weekly count

12. **New Business:**

- a) Advanced course, October, will order books and checking with other clubs to see if they have any power point presentations. Coax publishing had no supplemental materials other than their book.
- b) Other new business: April 13th Volunteer appreciation lunch, let Dave Musgrave know.
- c) Meeting with <u>Car Rally</u> people, June 15th 4 to 5 operators needed, August the big Rally. Let VE1PYE know.
- d) Hobby show is April 13-14, drop by and give a hand to help out. Saturday is the big day. Sunday usually clears out around 1pm. Held at the Sea King Club, 242 Warrior Avenue Shearwater Aviation Museum. Doors open 10 AM both days.
- 13. <u>Round Table</u> Member News: the <u>brief</u> sharing of important personal news.

Fraser received a request for a Callbook from VE1BTC, SMART seminar coming up in April 27. A discussion was held regarding a new Callbook as the last one was issued in 2012. Articles, advertsing, editing are the main tasks that need to be filled.

1000 were printed last run, contemplating 800 copies this time.

A system fusion repeater is operational at Jason VE1PYE's OTH.

Still no update on ID and access cards...

- 14. 50:50 Draw: \$66 collected, draw ticket #5171 Tom VE1BMJ won \$33
- 15. The meeting was adjourned at 2102 Hours on a motion by Doug, VE1LDL.

Respectfully submitted by Roger Stein, VA1RST, HARC Secretary

FULLY ENCODED, 9046 x N, RANDOM ACCESS 25120 WRITE - ONLY - MEMORY

FINAL SPECIFICATION(10)

DESCRIPTION

The Signetics 25000 Series 9046XN Random Access Write-Only-Memory employs both enhancement and depletion mode P-Channel, N-Channel, and neu(1) channel MOS devices. Although a static device, a single TTL level clock phase is required to drive the on-board multi-port clock generator. Data refresh is accomplished during CB and LH periods(11), Quadristate outputs (when applicable) allow expansion in many directions, depending on organization.

The static memory cells are operated dynamically to yield extremely low power dissipation. All inputs and outputs are directly TTL compatible when proper interfacing circuitry is employed.

Device construction is more or less S.O.S.(2).

FEATURES

- . FULLY ENCODED MULTI-PORT ADDRESSING
- WRITE CYCLE TIME 80nS (MAX. TYPICAL)
- WRITE ACCESS TIME (3)
- POWER DISSIPATION 10uW/BIT TYPICAL
- CELL REFRESH TIME 2mS (MIN. TYPICAL)
- TTL/DTL COMPATIBLE INPUTS(4)
- AVAILABLE OUTPUTS "
- CLOCK LINE CAPACITANCE 2pF MAX.(5)
- VCC = +10V VDD = OV ± 2%
- VFF = 6.3Vac (6)

APPLICATIONS

DON'T CARE BUFFER STORES
LEAST SIGNIFICANT CONTROL MEMORIES
POST MORTEM MEMORIES (WEAPON SYSTEMS)
ARTIFICIAL MEMORY SYSTEMS NON-INTELLIGENT MICRO CONTROLLERS FIRST-IN NEVER-OUT (FINO) ASYNCHRONOUS BUFFERS

PROCESS TECHNOLOGY

OVERFLOW REGISTER (BIT BUCKET)

The use of Signetics unique SEX(I) process yields Vth (var.) and allows the design(8) and production(9) of higher performance MOS circuits than can be obtained by competitor's techniques.

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BIPOLAR COMPATIBILITY

All data and clock inputs plus applicable outputs will interface directly or nearly directly with bipolar circuits of suitable characteristics. In any event use 1 amp fuses in all power supply and data lines.

INPUT PROTECTION

All terminals are provided with slip-on latex protectors for the prevention of Voltage Destruction. (PILL packaged devices do not require protection.)

SILICON PACKAGING

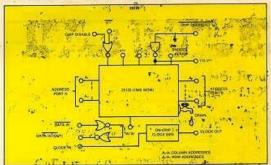
Low cost silicon DIP packaging is implemented and reliability is assured by the use of a non-hermetic sealing technique which prevents the entrapment of harmful ions, but which allows the free exchange of friendly ions.

SPECIAL FEATURES

Because of the employment of the Signetics' proprietary Sanderson-Rabbet Channel the 25120 will provide 50% higher speed than you will obtain.

The 25120 is easily cooled by employment of a sixfoot fan, 1/2" from the package. If the device fails, you have exceeded the ratings. In such cases, more air is recommended.

BLCCK DIAGRAM



PART IDENTIFICATION

| TYPE | "n" | TEMP BANGE | PACKAGE |
|-------|-----|------------|---------------------|
| 25120 | 0 5 | 0 to −70°C | Whatever's Right |

- 1. "Neu" channel devices enhance or deplete regardless of gate polarity, either simultaneously or randomly. Sometimes not at all.
- 2. "S.O.S." copyrighted U.S. Army Commissary, 1940.
- 3. Not applicable.
- 4. You can semehow drive these inputs from TTL, the method
- 5. Measure at 1MHz, 25mVac, 1.9pF in series.
- 6. For the filaments, what else!

- You have a dirty mind 'SEIX is Signetics EXtra Secret process, "One Shovel Full to One Shovel Full", patente by Yagura, Kashkooli, Converse and Al. Circa 1921.
- 8. J. Kane calls it design (we humor him).
- See "Modern Production Techniques" by T. Arrieta (not yet written):
- Final until we got a look at some actual parts.
- 11. Coffee breaks and lunch hours.
- 12. Due credit to EIMAC for inspiration.

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From the Mail Bag



Hi All.

Just an FYI, the Newbie Round Table will be on hold after tonight until May 5th at 2100hrs on a MAVCOM repeater near you

73, Dave Hull, VE1HUL
President TARC
RAC Maritime Section Manager

There are a number of ways to take down radio towers. Some conserve the component pieces for future reassembly; then there's the fast way.

Controlled demolitions of VOA...

https://www.icqpodcast.com/ news/2016/4/17/implosions-removes-48-surplus-voa-towers

Contributed by Ken, VY2RU

AMSAT-India Successfully Launches APRS Satellite 04/09/2019

The Automatic Packet Reporting System (APRS) payload on AMSAT-India's AISAT-1 satellite is operational on 145.825 MHz following a successful April 1 launch on the PSLV-C45 mission. The payload was powered up on schedule over Europe, and AMSAT-India announced that DK3WN was able to digipeat through the satellite. AMSAT-India requests that radio amateurs use the payload and SatGates to feed the traffic.

The fourth stage of the PSLV rocket (PS4) will become an orbital platform in a 485-kilometer orbit hosting the APRS digipeater, an Automatic Identification System (AIS) from India's space agency, ISRO, and an ionospheric analyzer from the Indian Institute of Space Science and Technology (IIST).

— Thanks to AMSAT News Service

Everyone has a photographic memory; some just don't have film.

Sílent Key

VE1WW - Stanley Witham Godfrey

With regret, I wish to inform you of the passing of Stanley/VE1WW. His obituary can be viewed at https://kaulbachfamilyfuneralhome. com/tribute/details/941/Stanley-Godfrey/obituary.html#tribute-start

Silent Key

VE1BRM - Robert Manship With regret, I wish to inform you of the passing of Robert/VE1BRM. His obituary can be viewed at https://www.dignitymemorial.com/ en-ca/obituaries/sydney-ns/robertmanship-8151701

CNPOTA (Continued from page 2)

to upload log files, confirm & track contacts, accumulate statistics, and report progress in the leader boards is proving its mettle. The site is working very well; so far, only a few minor refinements have been needed.

Speaking of refinements, there have been a few rule changes made to accommodate feedback & suggestions from participants.

1) Reported QSO times must now be within 10 minutes of each other to be confirmed.

ABOUT ARISS

Amateur Radio on the International Space Station (ARISS) is a cooperative venture of international amateur radio societies and the space agencies that support the International Space Station (ISS). In the United States, sponsors are the Radio Amateur Satellite Corporation (AMSAT), the American Radio Relay League (ARRL), the Center for the Advancement of Science in Space (CASIS) and National Aeronautics & Space Administration (NASA). The primary goal of ARISS is to promote exploration of science, technology, engineering & mathematics (STEM) topics by organizing scheduled contacts via amateur radio between crew members aboard the ISS & students in classrooms or informal education venues. With the help of experienced amateur radio volunteers, ISS crews speak directly with large audiences in a variety of public forums. Before and during these radio contacts, students, teachers, parents & communities learn about space, space technologies & amateur radio.

For more information see

www.ariss.org, www.amsat.org, and www.arrl.org.

David Jordan, AA4KN, ARISS PR

- 2) Canadians may now make QSOs for chaser credit while in the United States as well as in Canada. This is a change to Rule 10(iv) which allowed Americans to work both countries but restricted Canadians to just Canada. You might call this the "snowbird" rule.
- 3) More than one call sign can now be used during an activation with the same equipment and antennas provided:
- a) each call sign makes its own contacts;
- b) separate logs are maintained and submitted for each call sign;
- c) once a call sign is changed it cannot be changed again for 30 minutes.

This should allow for some friendly competition between the husband/wife teams that requested this change.

A reminder: We've been asked by Parks Canada to remind Activators that "they must operate independently. Parks Canada cannot provide power

(Continued on page 10)

HATS NEWS: April 2019

The Halifax Auxiliary Telecommunications Service (HATS) is an operational vehicle through which HARC and DARC contribute to emergency telecommunications when a man-made or natural disaster strikes our community. This service is a joint effort of amateur radio clubs in the Halifax region and functions under the direction of the Emergency Management Division of Halifax Regional Fire and Emergency (HRFE).

NEWS:

Well, I am back from Mexico and ready to move ahead with the HATS agenda again!

We are still working on the development of a **Net Controller course** and will announce a date for its presentation when everything is finalized. I will be sending out a message soon to determine the demand for **our key courses** to accommodate new members and those who missed them earlier. The design and message formulation for **HATS display material** are still in progress and include bug banners, display boards and other display materials. Hopeful this will be completed soon.

The Emergency Management Division of Halifax Regional Fire and Emergency will hold a Volunteer Appreciation Celebration on 13 April to honor volunteers who serve the community through HATS, Joint Emergency Management (JEM) groups and Ground Search and Rescue (GSAR) units. For details about the time and place, look at **Up Coming Events** below. We are now beyond the cutoff date for RSVPing. However, if you wish to attend, let me know and I will see what is possible.

This year **Emergency Preparedness Week** will take place on 6 - 11 May and plans are being made to mount a HATS field exercise as part of the events of this week. I am still looking for a location – the preferred location turned out not be available. However, one way or another the exercise will go ahead! Stay tuned for breaking news!

A HATS Steering Committee Meeting will be held on 18 April; and a HATS General Meeting will take place on 2 May. An invitation has been extended to a speaker for our HATS General Meeting, and I will make an announcement when I send out the Agendas in advance of the meeting.

Lots of balls are up in the air. Please stick with us and help catch them! There is a lot of useful work ahead and hopeful it will also be fun and rewarding!

UP COMING EVENTS:

- Every Sunday at 1930 hrs. the WinLink Express Practice Net takes place on 146.685 MHz. Following check-in members exchange messages via Telnet or VHF. If you want more information about the net, please contact David Musgrave: veleda@bellalianat. net
- 10 April (Wednesday) at 1000 hrs. the HRFE/EMO Amateur Radio Advisory Committee Meeting at the Eric Spicer Building, 21 Mt. Hope Ave. in Dartmouth.
- 13 April (Saturday) from 1000 1400 hrs. Halifax Regional Fire and Emergency, Emergency Management Division, Volunteer Appreciation Celebration will be held at the NSCC Ivany Campus cafeteria.
- 18 April (Thursday), 1600 1800 hrs. The HATS Steering Committee meeting location remains to be determined.
- 30 April (Tuesday) at 1900 hrs. Exercise Handshake tests readiness of key communication nodes and individual HATS members stations.
- 2 May (Thursday), 1900 2130 hrs. A HATS General Meeting will be held at HARC Club facilities in HRFE Station # 50 Hammonds Plains Road.
- 6 11 May Emergency Preparedness Week will feature a HATS Exercise at a location to be announced as soon as we have a commitment in place.

ACTION:

I am looking for **one or more volunteer** who are experienced with photography and can function as **official HATS Photographers**. We need to do more to create a visual record of our activities. If you may be one of these persons, please send me an email.

Remember to submit your **HATS monthly volunteer time and travel data for February** to Jim Calvesbert, VE1PPA – jim.calvesbert@gmail.com1

Do you want membership information? Please contact Dave Musgrave, VE1EDA. He is our membership officer and will see that you get the necessary information and application forms. His contact information is via email: veleda@bellaliant.net

73 de Scott

K. Scott Wood, VE1QD, Coordinator Halifax Auxiliary Telecommunication Service (HATS)

Email: scott.velqd@gmail.com

Tele: 902 823-2191 (h)

My mechanic told me, "I couldn't repair your brakes, so I made your horn louder."



The NSARA website is at http://nsara.velcfy.net

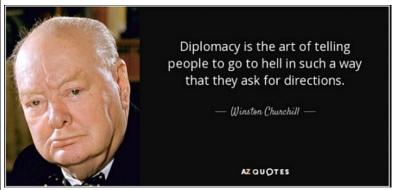
"Instead of giving a politician the keys to the city, it might be better to change the locks." ~Doug Larson~

CNPOTA ((Continued from page 8)

sources for their equipment nor be expected to allow them to do any kind of formal interpretation at any of Parks Canada's Sites". Parks Canada has already received these kinds of requests.

As of February 12, 13 of the 220 Canadian National Parks and Historic Sites have been successfully activated. This is turning out to be a fun activity and there's still time for you to be a first activator for one of the 205 remaining units!

Alan Griffin, TCA Editor/MarCom Director



| | | II. | | | | |
|---|---|---------------|-------------------|------------------|----------------------------|--|
| HALIFAX AMATEUR RADIO CLUB MEMBERSHIP - For 2019 | | | | | | |
| ☐ Same address as last year ☐ New address | | | | | | |
| ☐ I would like newsletter as PDF E-Mail (Please note by taking the newsletter online you save the Club significant mailing and printing costs) | | | | | | |
| I would prefer to have the newsletter mailed to my home at an additional cost of | | | | | | |
| \$10.00 to the regular membership fee structure below | | | | | | |
| WALLERY AM | ATELL | | | | | |
| HAR | E Mail Address | (Please pr | ovide for our fil | les) | | |
| RADIO C | Call Sign | | | Are you curre | ently a RAC member? | |
| First Name | Initial | | Surname | | | |
| Street Address | (Mailing) | | | | | |
| City/Town |] | Province | Postal | Code | Telephone Number | |
| Fees □ Fu | ll Member, must be a lic | ensed Amateur | (\$30.00)* | ☐ Associate mem | ber (Non Voting) (\$20.00) | |
| ☐ Family membership (one newsletter) $(\$30.00)^* + \20.00^* each additional person.* Amount submitted $\$$. | | | | | | |
| The membership year is from January 1 to December 31. All members receive the newsletter, which is also available on the HARC website. | | | | | | |
| Please fill in n | nethod of payment | □ cheque | □ cash | □ Interac/e-trar | nsfer | |
| Mail to: | Membership Chair Halifax Amateur Rad | | | CARD | | |
| | P.O. Box 8895 Halifax, NS B3K 5N | | | ENTERED | | |

Or if using Interac e-transfer to pay, please follow the instructions on the HARC website's Membership page for e-mailing this form and your Interac funds.

Payment Options ... In addition to mailing a cheque to the Club mailing address along with the application form, or paying at the January Club meeting, we have set up an electronic money transfer process.

Go to the H.A.R.C. Website's membership page at http://www.halifax-arc.org/pages/membership.html for more details.