The Halifax Amateur Radio Club



# REFLECTOR

PO BOX 8895 HALIFAX NS B3K 5M5

May 2013, Volume 74 Number 5 club web site is www.halifax-arc.org



## Come to the DownEast Fleamarket June 1 at the St. Andrews Ctr.



HARC Club Station phone number - 490-6421

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President - Scott Wood, VE1QD	823-2761	ve1qd@rac.ca
First V.P Bill Elliott, VE1MR	865-8567	bowser.elliott@ns.sympatico.ca
2nd V.P Doug LeBlanc, VE1LDL	465-4665	leblanc@accesscable.net
Secretary - Jeremy Fowler, VE1JHF		VE1JHF@Gmail.com
Treasurer - John Goodwin, VE1CDD	865-5731	VE1CDD@eastlink.ca
Co-Treasurer – Jim Guilford, VE1JG	466-2124	jimguilford@gmail.com
Director-at-Large: - Ian Pierce VE1IGP		ijpierce@hotmail.com
Club Station Mgr Jim Flowers, VE1JIM	443-8657	ve1jim@ns.sympatico.ca
Past President - Fraser MacDougal, VE1WO	865-4198	fmac@eastlink.ca

#### Committees/Offices/Prime Contacts

Government liaison - VACANT

QSL Bureau Mgr - Tom Caithness, VE1GTC 477-7081 tom.caithness@ns.sympatico.ca EMO Coordinator - Dave 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 Dist. - Carol Wood, VE1HAZ carolwood@accesswave.ca Membership - Howard Dickson, VE1DHD dhdickson@eastlink.ca Web page – Brandon, Detmers VA1BSD brandon.detmers@dal.ca Basic ham course - Erik Hein, VE1JEH 826-7145 bravojeh@gmail.com 2012 Flea market Chair - Murray MacDonald, VE1BB twomacds@ns.sympatico.ca Callbook Editor – Howard Dickson, VE1DHD, dhdickson@eastlink.ca 823-2024 Field Day coordinator - Brian Allen VE1AZV basailor@eastlink.ca Safety Officer - Terry Bigelow, VE1TRB ve1trb@eastlink.ca NSARA Director - Barry Diggins, VE1TRI 861-3719 ve1tri@rac.ca

#### **Non Club Contacts**

RAC Atlantic Director - Everett Price, VO1DK vo1dk@rac.ca RAC Section Manager – Craig Seaboyer, VE1DSS cseaboye@stfx.ca RAC Assistant Director for HRM Scott Wood, VE1QD, 823-2761 ve1qd@rac.ca

#### **Take-15 Net Controllers**

Honorary Legal Counsel - Paul Radford, VE1ARH

This will be the rotation. We need at least 2 more. If you want to join, let Bill Elliott, VE1MR, know.



May	12	Doug	VE1LDL
May	19	Bruce	VE1MLW
May	26	Emil	VE1ESP
June	2	Peter	VE1PJW
June	9	Win	VE1WIN
June	16	Erik	VE1JEH
June	23	Doug	VE1LDL

Exaggerations. I Owe My Mother

My mother taught me WISDOM. "When you get to be my age, you'll understand."

My mother taught me about JUSTICE.

"One day you'll have kids, and I hope they turn out just like you!"

My mother taught me about CHOICE.

"Do you want me to stop this car?"

The May, 2013 **General Meeting** of the Halifax Amateur Radio Club will be held Wednesday, May 15 in the Senior's Room on the 1st floor of the St. Andrew's Centre, 3380 Barnstead Lane, Hali-

Social Hour begins at 6:30 p.m. As usual, refreshments will be available.

For our May meeting program -Erik, VE1JEH, will give a presentation about the radio course and trying to further the interest in Amateur Radio.

Guests are welcome

#### **Notice of Motion**

The Executive is recommending that the club purchase and make appropriate modifications to a 40' L x 8' W x 9'6" H insulated container. For more information see page 2

How come you never hear father-in-law jokes?

**Deadline for submissions to** the June Reflector is Saturday, June 8, 2013

#### 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

May 26, 2013 – MS Walk. Contact Tom Caithness, VE1GTC; or Terry Bigelow, VE1TRB, to help with communications

Mic Mac Mall demonstration

June 1 – Downeast Flea Market will be held at the St. Andrew's Centre. Set up tables beginning at 7 AM Open for sellers 8 AM Open for buyers 10 AM For Table Reservations contact Fraser MacDougal, VE1WO, By phone at 865-4198 Or e-mail at fmac@eastlink.ca

June, fourth full weekend -Field Day 2013

July – Museum Ships Special Event

July - IOTA (Islands on the Air)

July & August – Pizza Nights

Aug. 3 to 5 – 100th anniversary of the CSS Acadia

Aug. 25, 2013 – Bluenose Auto Sport Club Car Rally. This year's race will take place on August 25.

July 27/28, 2013 – MS Bike Tour Contact Rick Gardner, VE1RGG, to help with communications

August – NSARA Picnic

August – International Lighthouse & Lightship Weekend
For more information see
http://www.lighthouse.fsnet.co.uk/
events/intlighthouseday.html

Sept.21 - demonstration at Mic Mac Mall

Bluetooth Ham Radio Interface....

Essex radio amateur George Smart M1GEO has published details of a Bluetooth Ham Radio Interface for Yaesu's CAT standard or Icom's CI-V system

See http://www.george-smart.co.uk/wiki/Bluetooth\_Radio\_Interface

Ken, VY2RU

A backward poet writes inverse.

#### **Notice of Motion**

The Executive is recommending that the club purchase and make appropriate modifications to a 40° L x 8° W x 9°6" H insulated container. It will be used for storage of our emergency field equipment and other club assets. Permission to locate this container at City facilities on Cowie Hill, in close proximity to our repeaters and antennas, is being sought with the co-operation of EMO. The proposal includes the City's preparation of the container site.

Thus, **it is moved** that the club approve an additional expenditure of \$4,000 to bring the \$6,000 that has already been approved up to a total of \$10,000 for the purchase of the container, modifications, moving costs and HST, subject to obtaining an agreement for the location of the unit on City property at their Cowie Hill facility, or if necessary, at an appropriate, alternative site.

This will be the required second vote to approve this expenditure.

Website Policy & Procedure: Howard Dickson, VE1DHD is the person to whom all website-related materials are to be sent, Howard will do his best to keep the site current.

Please, help us to keep our website a current and valuable asset to our members as well as the rest of the world. The website has now been updated and there are a couple of new features -- have a look.

Howard Dickson (VE1DHD)

Nostalgia isn't what it used to be.

## AC Bulletin 2013-017E - Radio Amateur of the Year for 2012

The RAC Board of Directors takes great pleasure in announcing the selection of Scott Wood, VE1QD of Halifax, Nova Scotia, as the Canadian Radio Amateur of the Year for 2012.

Scott celebrated sixty years in Amateur Radio in 2012. Over these years he has contributed enormously, and in many and varied ways both to our hobby and to radio in general. In his youth as a net controller in the Oregon State Fire Service, later as a radio operator in the US Naval Reserve, as a member of the Board of Directors for Radio for Peace International, in contesting and DXing, and in Elmering aspiring new hams, both young and old. However, it is the leadership in Amateur Radio that Scott has demonstrated locally, regionally, and internationally that is being recognized with this award. Scott has demonstrated vision, enthusiasm, dogged determination, and commitment to excellence in the area of Amateur Radio DXing through the establishment and management of the Maritime DX Forum for eight consecutive years. Scott envisioned the forum to be a venue where DXers in the region could come together annually to hear world-class, as well as local DX experts speak about important and current DX topics, and to provide a forum in which to share ideas with some of the best operators and leaders within the Amateur Radio community.

A presentation will be made to Scott by the RAC President at the RAC booth at the Dayton Ham Fest this month. A more detailed article will appear in an upcoming TCA/RAC Report

Geoff Bawden, VE4BAW President and Chair RAC

Wayne, VE1WPH, as one of the few Canadian ARRISS mentors, has been invited to St. Hubert, PQ for Chris Hadfield's return from the ISS. Wayne plans to attend and has been urged to bring back lots of photos of the event. -ed

#### PRESIDENT'S MESSAGE: May 2013

Another month is behind us. In April we successfully participated in the Shearwater Hobby Show and generated significant general interest in amateur radio as well as a list of people who are thinking of taking our amateur radio certification course. Lots of events are coming up in May and June that offer opportunities for members to help out and to have fun. Take a look at *Events for your Calendar* elsewhere in this issue of the *Reflector*.

On 1 May about two dozen representatives from various Atlantic Provinces ARCs that are affiliated with RAC were part of our national organization's first regional webinar, including four of us from HARC. Using a program called *Go-to-Webinar*, we were able to meet with key RAC Officials, including President Geoff Bawden, VE4BAW. While we viewed his power point slides on our screens, Geoff provided a briefing about what has happened at RAC recently and what are the plans for the period 2013 – 2016. The on-line meeting format allowed us to provide immediate feedback and to ask questions. This *focus group* of Club leaders was a part of RAC's planning process.

Space here doesn't allow for a summary of the meeting, but from my view point what RAC has accomplished in the last 2-3 years is remarkable and the plans for moving ahead are very encouraging. The key message was about RAC's continued commitment to open communications and development of a supporting infrastructure to help the organization better serve amateur radio in Canada. Look at the RAC Website issues of the TCA for more details.

Regional Director Everett Price, VO1DK, and Associate Regional Director Len Morgan, VE9MY, announced that the RAC Board will establish a *RAC Affiliated Club Challenge* as proposed by HARC. The purpose of the *Challenge* is to encourage the growth of RAC membership. You can see our original proposal on the HARC Website and look forward to an announcement in the next TCA about the operational details of the program. HARC was given warm acknowledgement by the RAC team for originating this idea.

A bit less than 40% of HARC members are also members of RAC. In order for us to achieve a high ranking in this *Challenge*, we must push that percentage beyond 50%. If you are not a RAC member, please pick up an application form at the membership table at our next Club meeting.

I am not going to be at the May meeting, since I will be attending the Dayton Hamvention in Ohio, gathering ideas and information and helping out at the RAC Booth. OK, yes, I will be buying a few things too! Bill Elliott, VE1MR, as First VP, will be chairing the meeting. Remember that we will hold an important final vote on the purchase of a storage container for our field equipment. Also Erik Hein, VE1JEH and our Basic Radio Course leader, will make a presentation about our course and share thoughts about where HARC educational efforts may go in the future.

Enjoy the final arrival of spring. See you later in May!

K. Scott Wood, VE1QD

Executive Reports for May, 2013

#### **Past Presidents Report**

The Club has a requirement for a Representative / Lead Person to act on the following two Committees / Projects:

A: <u>Combined Maritime</u>
<u>Flea Markets</u>. The will be a meeting following the Down East Market on June 1. If an agreement is made to pursue this venture, a working group will probably be formed. HARC will require a representative for this Committee.

B: Maritime Museum of the Atlantic. The Museum will be celebrating a Anniversary for CSS Acadia in early August. HARC has been invited to participate but we require a Lead Person to co-ordinate.

Please contact me or any member of the Executive if you may be interested in taking on either of these Projects.

Fraser Mac Dougall, VE1WO

### 1<sup>st</sup> Vice President's Report

Nothing to report Bill, VE1MR

#### 2nd Vice President's Report

Nothing to report Doug, VE1LDL

#### Secretary's Report

"Nothing to report."

Jeremy, VE1JHF

#### **Station Manager's Report**

Nothing to report

Jim, VE1JIM

#### Report of Director-at-Large

Nothing to report Ian, VE1IGP



From URGENT COMMUNICATIONS APRIL 13

## Amateur radio experiences DIY renaissance

BY DAVID SUMNER

When amateurs began experimenting with radio more than a century ago, they had no choice but to build everything they needed. Some went on to become successful entrepreneurs, selling their creations to fellow hobbyists who were more interested in operating radios than constructing them. Others built their own receivers and transmitters out of economic necessity, or for the fun and satisfaction of saying, "I did it myself."

After World War II, the market was flooded with surplus electronic components that could be bought in bulk for less than the cost of manufacture. The Heath Company parlayed these riches into a successful business by designing kits that could be built by anyone with simple tools and a soldering iron.

Step-by-step instructions virtually eliminated the risk of failure. No one embraced Heathkits more enthusiastically than the amateur-radio community. At the time, electronic manufacturing still involved point-to-point wiring and was very labor intensive, so hams could buy a kit for less than the cost of an equivalent factory-assembled unit and—as a bonus—experience the joy of putting it together. Other companies also offered kits, but the Heathkit is virtually synonymous with the era.

The advent of solid-state devices, printed circuit boards, and automatic parts insertion removed the price advantage that kits enjoyed. By the time the Heath Company closed its doors in 1992, most amateur-radio equipment was being manufactured in Japan.

But the Heathkit's demise did not spell the end of home construction in amateur radio. Anyone who has ever made a two-way radio contact with simple equipment they built on their own will tell you that it's a thrilling experience. One of the many thriving subcultures in amateur radio is the QRP community, named for the international Morse code signal for "decrease power." QRPers pride themselves on being able to communicate all over the world with less than 5 watts of transmitter power, often with homemade gear. Their clever equipment designs have led to a renaissance in kit building. There are so many kits available that, if you tried to build them all, you would never finish!

Today, the fruits of a kit-builder's labors can be slipped into a backpack, along with a battery and a roll of wire for a day of hiking, with space left over for lunch. At a nice spot along the trail, one end of the wire gets tossed into a tree, and the other is connected to the radio for a couple of hours of surfing the ionosphere in search of contacts with other hams near and far. You might be able to get a signal on your smartphone, but it is truly liberating to communicate using gear you've built yourself-using just the natural phenomenon of radio-wave propagation and without a trillion dollars worth of telecommunications infrastructure.

Radio amateurs don't develop radio-communication skills and capabilities just for ourselves. We want to be of service to our communities and country. Public service and emergency preparedness are important ways to give back for the privilege of accessing the radio spectrum. The more we know, and the more capabilities we develop by doing it ourselves, the more valuable we can be when we're needed. And we will be needed. Society relies ever more heavily on a fragile telecommunications infrastructure that is susceptible to overload and outright failure. We can't substitute for all that infrastructure. But we can communicate, no matter what.

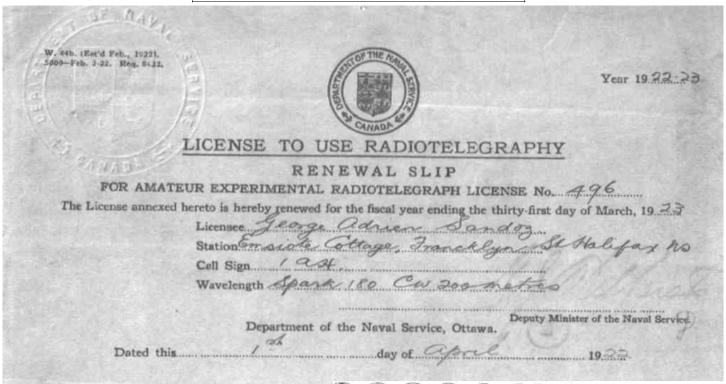
David Sumner is the CEO of ARRL — the national association for amateur radio.

If we all threw our problems in a pile and saw everyone else's, we'd grab ours back.

. Mahatma Gandhi, as you know, walked barefoot most of the time, which produced an impressive set of calluses on his feet. He also ate very little, which made him rather frail and with his odd diet, he suffered from bad breath. This made him (Oh. man, this is so bad, it's good)... A super calloused fragile mystic hexed by halitosis!

When you go into court, you are putting yourself in the hands of twelve people who weren't smart enough to get out of jury duty

A peek into Amateur Radio history – George Sandoz



George had the 1AH call before 1920 and was definitely there when Canada went to the 1 prefix. From my history:

The list of Canadian call signs on page 42 of the July, 1920, issue of QST simply confirms the above list. The Halifax Amateurs on the 1920 list were the same two as on the 1919 list:

1AH George Sandoz1AI P. L. Whitman

His son was Oscar Sandoz, VE1QZ. Oscar was big in





2-meters at one time if my memory serves me correctly and a naval officer.

73/88, Spud

#### The Maritime Amateur

Ham Radio for Maritimers by Maritimers www.maritimeamateur.ca If money is the root of all evil why do churches beg for it?

#### **Halifax Amateur Radio Club**

General Meeting Minutes April 17<sup>th</sup>, 2013

Meeting called to order 2045

Silent Keys: VE1AL, VE1FOG, VE9AZE, NY1S, VE2AYU.

Approval of the agenda: Approved

Approval of minutes from March, moved by WIN, seconded by LDL ... Approved.

<u>Treasurers Report</u>: Jim (JG) gave an overview of the treasury.

Motion to accept: moved by JG, seconded by MR ...accepted

Scott reported on the Shearwater Hobby Show in April, and that it was a successful endeavour which generated more interest in the Radio course.

Scott reported that he would be away in May at Dayton, and Erik (JEH) would be giving the presentation at the May meeting about the radio course and trying to further the interest in Amateur Radio.

Scott informed those assembled about the upcoming webinar with RAC that he was invited to be involved in, with other club presidents.

He also reported that he has been looking at updating the club brochures, with some assistance.

He stated that we are still looking for someone to act as mentor for the CP Allen radio club.

Dick (AI) volunteered to assist in the endeavour.

#### **Committee Reports:**

Fraser reported that all our standing committees are filled, but that the upcoming anniversary of the Acadia still required someone to coordinate the project. And they are still looking for someone to spearhead the remote station project for the club.

Ed (EGG) has been working on the technical aspects of it.

Membership: Howard reported that as of the meeting there are 4 life

members, 89 full members and 13 associate members.

Howard also made light of the significant costs associated with mailing physical copies of the Reflector, and urged everyone to consider receiving the Reflector by email.

#### EMO / Search and Rescue:

Dave Musgrave reported on the recent emergency exercise involving the JEM sites around metro, and what they encountered, using the VHF system, the WinLink email system, and the TMR system.

Dave (AJP) reported there have been no searches as of late, and gave an update on the ongoing repairs to the garage and the ongoing fundraising efforts.

<u>Basic course:</u> Erik had nothing report, except that he had put together a CD with all the handouts for the course in order to try and save some money on course costs.

Scott reported information pertaining to the upcoming <u>Flea Market</u>, including times, and the arrangements made for breakfast and lodgings. We still need volunteers for setup and security for the event, as well as a portable PA system.

He also reported on the upcoming <u>Field Day plans</u>, and the need for people to coordinate the various aspects of the event.

Fraser gave a short report on the Archive project and the progress he and Spud have made in choosing and copying the material to give to the Archives. He stated that he may be looking for some volunteers when it comes time to start copying the material.

<u>Station Manager:</u> Jim (JIM) reported about the use of the new vertical antenna at the Hobby Show,

It is hard to understand how a cemetery can raise its burial costs and blame it on the higher cost of living.

the demise of the keypad on the radio room and its upcoming replacement as well as the replacement of the wireless router in the club station.

#### Member news:

Bill (MR) reported that Brian (RCF) was up from the Valley recently and brought up some interesting documentation about his licensing activities from many years ago as well as his ARRL affiliation from the 50's.

Scott then brought up the subject of the long term storage dilemma, and gave a brief overview of our needs and the recommendation of the Executive to purchase the container.

This topic has been covered extensively in the last few months and following an extensive discussion among those present, it was moved by Jim, VE1JIM, and seconded by Dick, VE1AI that the club approve an additional expenditure of \$4,000 to bring the \$6,000 that has already been approved up to a total of \$10,000 for the purchase of the container, modifications, moving costs and HST, subject to obtaining an agreement for the location of the unit on City property at their Cowie Hill facility, or if necessary, at an appropriate, alternative site.

The motion was passed.

Scott advised that we have to renew our <u>insurance</u> in the near future and there was some discussion on the RAC insurance policy and the benefits thereof.

There was brief mention of the MS Walk / Bike Tour, Brit fader Scholarship fund, the remote station and the upcoming Mic Mac Mall demonstration.

The meeting at this point had run longer than expected, so it was decided to terminate the proceedings.

The draws for the 50/50 and the door prize were held.

(Continued on page 7)

When you really got to fix it ...

## The Saturday May 5, Musquodoboit repair trip

7 AM departure, off to Marinette where we diagnosed 2 blown fuses and a necessary soldering repair. Then we found out that Cochrane Hill was suffering from an open squelch, so off we go to Chochrane Hill; arrived; repaired. Then to Jerusalem Hill where we found the squelch breaking even though the squelch pot was set at pretty well full scale. Removed the receiver from the MICOR; tested the pot – was TOAST. While removing the pot, we needed to remove the preamp. Broke the power wire inside the amp ("Ouch"). With no spare parts at hand we had to remove the volume pot and use it for the squelch ... And the only soldering iron available was definitely not designed for the job.

When you are out in the boonies and the only iron you have is this "precision" unit. We had to scrounge through our the tool cases for the stuff to make the wires stick to the board. Tiny pieces of solder, man we were roughing it...

We checked and adjusted ALL radios at ALL sites, netted all frequencies. Tested Power out and recorded all test readings. Repairs completed. I arrived home at 11PM. What a day, fun, but what a day.

All I can say is that the next trip will have the soldering station along with us for the ride..

73 , VE1TA-Tom Cohoon President, Nova Scotia Amateur Radio Association

Minutes (Continued from page 6)

The door prize of a \$25 Canadian Tire gift certificate was won by Graham Fowler, VE1GFA (2<sup>nd</sup> month in a row).

The 50/50 draw was won by Jim (JIM).

Meeting was moved adjourned at 2155.

Respectfully submitted Jeremy Fowler, VE1JHF H.A.R.C. Secretary



Using an American Beauty iron to solder electronic components should only be attempted by a tech with lots of experience and quick & delicate hand-eye co-ordination (and a bit of luck) who doesn't want to go home return another day with the right tool.

Fortunately, Bill, VE1MR, has the essential skills

#### Safety – Driving in the rain

A woman was travelling between Gladewater and Kilgore in Texas. It was raining but not excessively when her car began to hydroplane and literally flew off the road. While not seriously injured, she was stunned at the sudden occurrence. Her car was totalled.

When she explained to the highway patrol officer what had happened he told something every driver should know – **NEVER DRIVE IN THE RAIN WITH YOUR CRUISE CONTROL ON. This is also true when driving on ice.** 

She had thought she was being cautious by setting her cruise control and maintaining a safe, consistent speed. The highway patrol officer told her that if your cruise control is on and the car begins to hydroplane, when your tires lose contact with the pavement your car will accelerate and take off like an airplane. She said that was exactly what had happened.

It is important for a driver to read the car's owners manual and understand all the technological features of his/her car. This includes cruise control, ABS brakes, etc. Safe operation of a motor vehicle is not the time for "if all else fails read the instructions" After the failure is too late.

Sent in by Win, VE1WIN

Stella Awards - Outlandish Lawsuits & settlements

Kathleen Robertson of Austin, Texas was awarded \$80,000 by a jury of her peers after breaking her ankle tripping over a toddler who was running inside a furniture store. The store owners were understandably surprised by the verdict, considering the running toddler was her own son



### From the Mail Bag



It looks like Helen was the first VE1YL. The following is from my history:

Helen Hubley, VE1YL, received her licence in 1933 and married Wes Street, VE1EK, later that year. This was 13 years after the phrase YL was created in 1920. Helen retained the VE1YL call sign for the rest of her life. She was one of, if not the first YL in this area. There were three ladies in a class of over 30 students with the Halifax County Amateur Radio Association during the winter of 1926 – 1927 but I have found no record of one receiving a licence.

73/88, Spud VE1BC

As of Nov.28, 2012, anyone the world over can cruise the streets of **Cambridge Bay, Nunavut**.

In August, a **Google** crew captured every angle of the town's gravel roadways. They used a special tricycle equipped with 360-degree cameras. The team leader said "This tricycle has never been above the 60th degree parallel. It's unique, bringing this equipment to the Arctic."

Cambridge Bay was the first community in Nunavut to get **Street View**. A company spokesperson said they will head to another community in Nunavut next year.

This is the first time the service has come to Nunavut, where internet access is only available via satellite instead of a fibre optic link. There is no 3G or 4G service in the territory.

Tour the Cambridge Bay visitors Ctr. without leaving your chair at

https://maps.google.com/? ll=69.116667,-105.044281&spn=0.018694,0.18702 5&t=m&layer=c&cbll=69.116667,-105.0

Honk if you love peace and quiet.

#### **ARRL News Bulletin: Issued 4 April 2013**

#### FCC Seeks to Reassess RF Exposure Limits

On March 27, the FCC released a *First Report and Order*, *Further Notice of Proposed Rulemaking* and a *Notice of Inquiry* (**ET Docket Nos. 13-84 and 03-137**). The documents seek to reassess the FCC's RF exposure limits and policies, as well as to propose changes to the FCC's rules regarding human exposure to RF electromagnetic fields. These proposed changes would affect the Amateur Radio Service (**Part 97**) rules.

In the 201-page document, the FCC noted that "periodic review of the government's rules and regulations to ensure they have kept pace with current knowledge and changing needs is an important characteristic of good government, and we here will advance the process of providing a comprehensive review and modification, where appropriate, of this Commission's various rules pertaining to the implementation of the National Environmental Policy Act (NEPA) requirements for environmental reviews, specifically those reviews related to health and safety of radiofrequency (RF) emissions from radio transmitters. Our actions herein are intended to ensure that our measures are compliant with our environmental responsibilities and requirements and that the public is appropriately protected from any potential adverse effects from RF exposure as provided by our rules, while avoiding any unnecessary burden in complying with these rules."

The FCC proposes to further update and revise its procedures and treat all services equally.

According to the FCC, mitigation matters are "post-evaluation procedures to ensure exposure limits are not exceeded, such as labels, signs, barriers, enforcement and occupational issues.

This policy was first established in the *RF Report and Order of 1996*, but it was not incorporated in the rules at that time. It allows amateur stations to be evaluated "with respect to occupational/controlled exposure limits, as long as appropriate training and information has been provided to the amateur licensee and members of his or her immediate household. Other nearby persons who are not members of the amateur licensee's household must be evaluated with respect to the general population/uncontrolled exposure limits." The FCC will codify this policy by adding a paragraph as a new sub-section in **Section 1.1310** -- radiofrequency radiation exposure limits -- to its rules.

The FCC is proposing to delete the special exemptions from evaluation in the Amateur Radio Service in **Section 97.13(c)** of its rules.

"We appreciate that Amateur Radio operators are knowledgeable about the appropriate use of their equipment, such that separation distances are likely to be maintained to ensure compliance with our exposure limits," the FCC said. "However, since the existing amateur exemptions are based only on transmitter power and do not consider separation distance or antenna gain, exempt transmitting antennas that are unusually close to people could potentially lead to non-compliant exposure levels." The FCC said that a separation distance of at least 24 feet would meet its proposed exemption criteria, "considering a currently exempt 50 W transmitter at VHF in accord with Section 97.13(c) and assuming an antenna gain of 6 dBd."

"The ARRL has an RF Safety Committee, consisting of experts in the field," explained ARRL Chief Executive Officer David Sumner, K1ZZ; "The committee members, as well as Board members and staff are reviewing the lengthy document and will formulate a response."