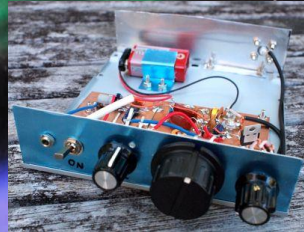


# Explore the Magic of Radio!

## Earn your Amateur Radio license!

Make friends around the world!



Emergency Communications Build equipment

For more information  
contact  
Al Penney at (902) 847-0554  
or at  
[alphonsepenney@gmail.com](mailto:alphonsepenney@gmail.com)



Public Service



Storm Reporting



Exotic Locations



# Basic Course 2024-1



Annapolis Valley Amateur Radio Club

# Basic Course 2024-1

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- Course starts Sunday 21 January.
- Course ends late March.
- Classes held Thursday evenings and Sunday afternoons.
- Thursday and Sunday classes are different – you need to watch both!
- Classes are recorded – link will be sent next day.

# Basic Course 2024-1

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- RAC recently transitioned to a new payment service.
- Unfortunately, a few bugs became apparent:
  - Confirmation e-mails weren't automatically sent to everyone, including me.
  - I just received several registrations, so my apologies for sending the course instructions and Zoom login at such short notice!

# Course Timings

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- Thursday classes
  - 1930 – 2200 Newfoundland
  - 1900 – 2130 Atlantic
  - 1800 – 2030 Eastern
  - 1700 – 1930 Central
  - 1600 – 1830 Mountain
  - 1500 – 1730 Pacific

# Course Timings

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- Sunday classes
  - 1430 – 1700 Newfoundland
  - 1400 – 1630 Atlantic
  - 1300 – 1530 Eastern
  - 1200 – 1430 Central
  - 1100 – 1330 Mountain
  - 1000 – 1230 Pacific



# Instructor

AI VO1NO



AI Penney  
VO1NO

# Course Schedule

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<b>Jan 21 (S)</b>	<b>Ch 1 Introduction</b>
<b>Jan 25</b>	<b>Ch 2 Basic Electricity</b>
<b>Jan 28 (S)</b>	<b>Ch 3 Ohms Law</b>
<b>Feb 1</b>	<b>Ch 4 Part 1 Inductance, Capacitance</b>
<b>Feb 4 (S)</b>	<b>Ch 4 Part 2 Resonance</b>
<b>Feb 8</b>	<b>Ch 5 Waves</b>
<b>Feb 11 (S)</b>	<b>Ch 6 Propagation</b>
<b>Feb 15</b>	<b>Ch 7 Transmission Lines</b>
<b>Feb 18 (S)</b>	<b>Ch 8 Antennas Part 1</b>
<b>Feb 22</b>	<b>Ch 8 Antennas Part 2</b>
<b>Feb 25 (S)</b>	<b>Ch 9 Active Devices</b>
<b>Feb 29</b>	<b>Ch 10 Power Supplies</b>
<b>Mar 3 (S)</b>	<b>Ch 11 Establishing a Station</b>
<b>Mar 7</b>	<b>Ch 12 Operating a Station</b>
<b>Mar 10 (S)</b>	<b>Ch 13 Modulation and Transmitters</b>
<b>Mar 14</b>	<b>Ch 14 Receivers</b>
<b>Mar 17(S)</b>	<b>Ch 15 Radio Frequency Interference</b>
<b>Mar 21</b>	<b>NO CLASS (RAC Director Meeting)</b>
<b>Mar 24 (S)</b>	<b>Ch 16 Safety</b>
<b>Mar 28</b>	<b>Ch 17 Regulations</b>



# Class Format

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- Log on no sooner than 20 minutes before start time.
- Classes may run late!
- Leave mic off during class.
- I will ask questions – no class answers please!
- 5 minute break halfway through class.
- Use the Chat box for questions – I will monitor.
- Technical issues, Zoom problems – check e-mail.
- Try to attend classes, though occasional absence is okay.

# Lesson Plans

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- PowerPoint presentations will be available (in PDF) from <https://avarc.ca/index.php/online-basic-course/>
- Lots of other educational material on the AVARC website.
- Classes will be recorded. Link will be sent after each class.

# Discord Server

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- Previous courses have had a Discord server to allow students to discuss topics of interest outside of class.
- A previous course has established one for all follow-on courses:  
<https://discord.gg/xuXcUmTE>
- Link to Anki question bank there:  
<https://ankiweb.net/shared/info/617183868>

# E-Mail

---

- A suggestion about the e-mails I send....



# E-Mail

---

- A suggestion about the e-mails I send....

**READ THEM!!**

# Course Philosophy!

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- This is not a “memorize the answer to the question” type of course!
- We will learn more than is required to pass the exam!
- There will be lots of supplemental material to enrich your knowledge.
- When the course is over however, you will be ready to assemble a station and get on the air!

# Exams

---

- Exams are not included in the course.
- When you are ready, you schedule an in-person exam with an Accredited Examiner.
- Contact an examiner in your area and work out a date/time/location to write the exam.
- Procedures explained later this lesson.

# Questions?



# Amateur Radio!

## What is Amateur Radio?



**ICA**  
Canada's Amateur Radio  
Le Réseau des Radiosam  
Émission Radioactive Sa Santé  
1000-1000-1000



# Ham Radio is...

- A form of communication...



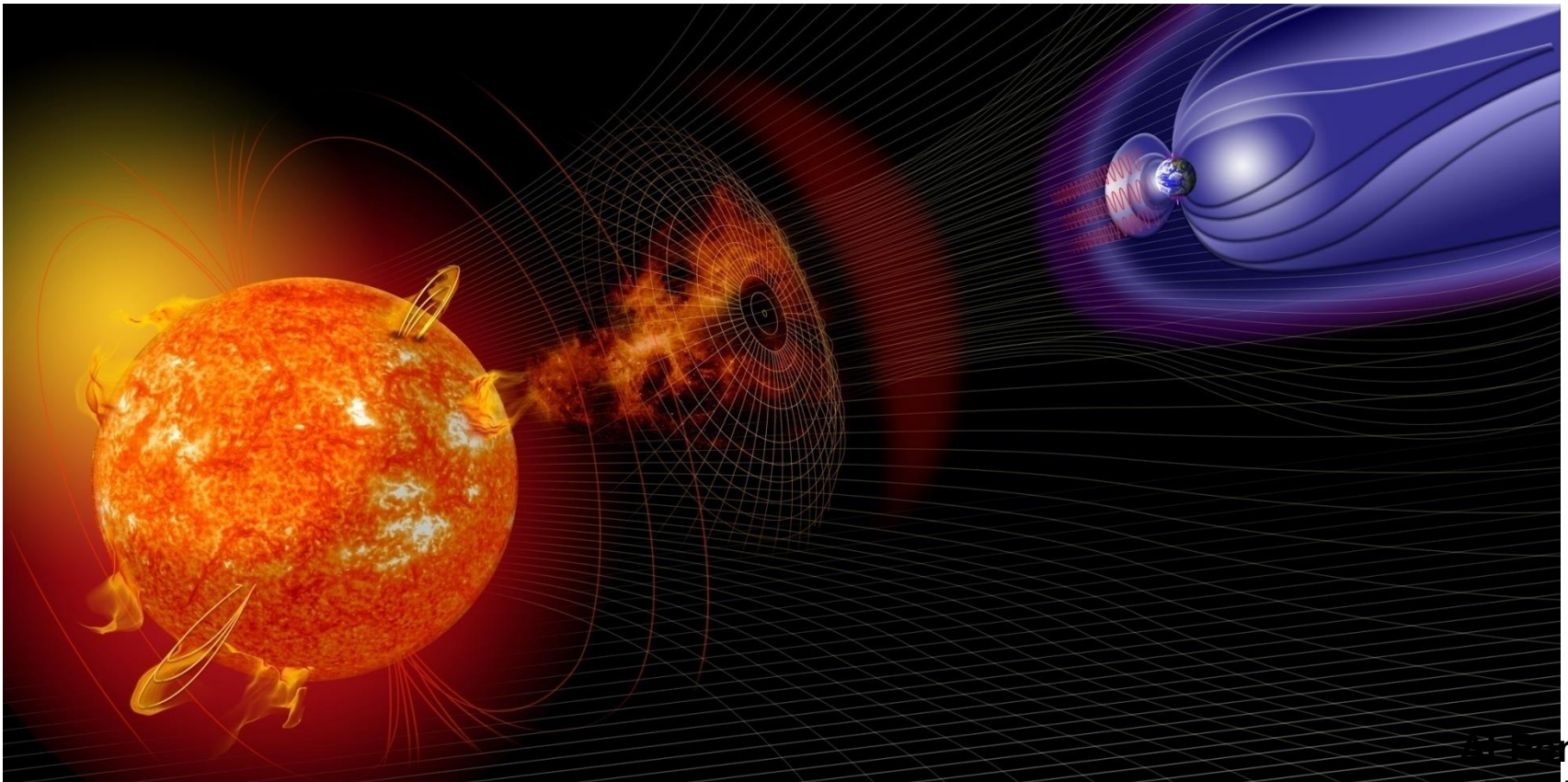
# Ham Radio is...

- A Public Service...



# Ham Radio is...

- A chance to explore science...





# Ham Radio is...

- A stepping stone to a lifelong career!



# What do Hams do?

- Use Morse Code...



# What do Hams do?

- Use voice transmissions...





# What do Hams do?

- Use digital modes...

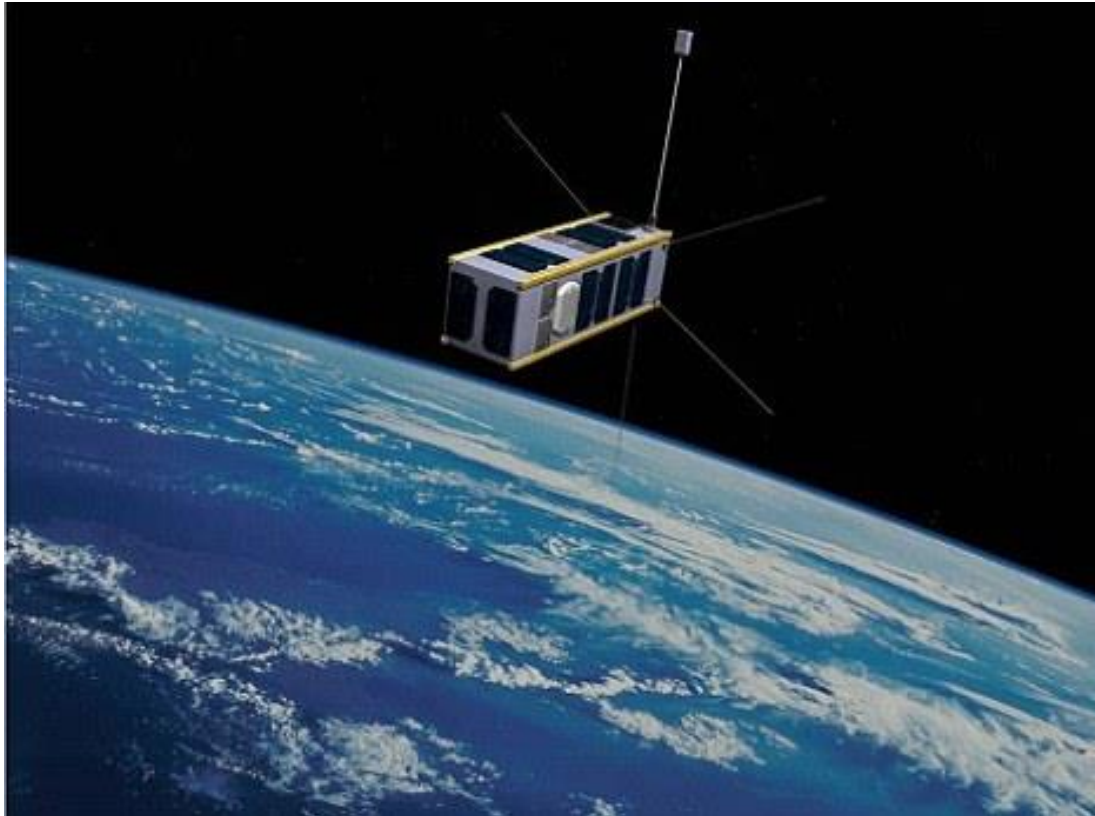
The screenshot shows the fldigi software interface for AA6E. The main window title is "fldigi - AA6E". The menu bar includes File, Op Mode, Configure, View, and Help. The interface is set to "Hamlib TT-565 Orion" and "USB" mode. The current frequency is 14070.000, with a QSO frequency of 14071.661 and a call sign of 2017. The QTH field is empty. The main display area shows a yellow background with the following text:

```
RTX: Yaesu LT 847 abt. 75tyu  
' a  
' lBTU Nh ta jfm  
IW2HUS DE N4TDO  
Tnx for Info using FT450 with short vertical Antenna Your signal is good copy Tnx  
QSO and good DX My report pls Best 73 to U and good DX 73 IW2HUS DE N4TDO SK  
ot u 4TDO de IWGx your equipment working fine, solid copy e aE for BK31 qso.  
I hop te 'e yot agn on screen.  
Best 73 & DX.  
N4TD. & n1
```

The interface also features a control panel with buttons for CQ, ANS, QSO, KN, SK, Me/QTH, QTH, Brag, Tx, and Rx. A frequency scale is visible at the bottom, ranging from 14070.5 to 14072.5. The bottom status bar shows "BPSK31", "s/n 20 dB", "imd -31 dB", and "AFC" and "SQL" indicators.

# What do Hams do?

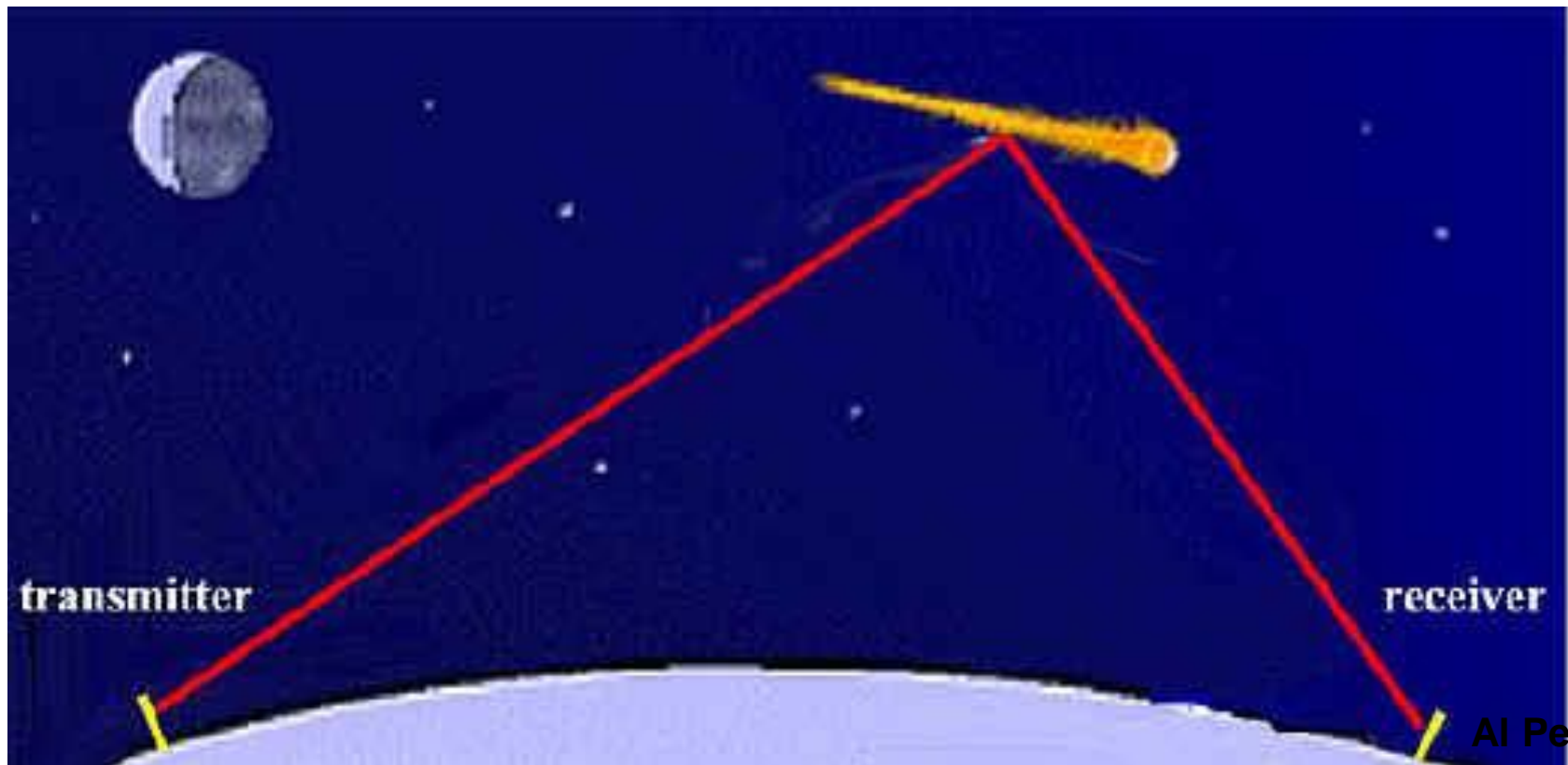
- Build and use their own satellites...





# What do Hams do?

- Bounce signals off meteor trails...



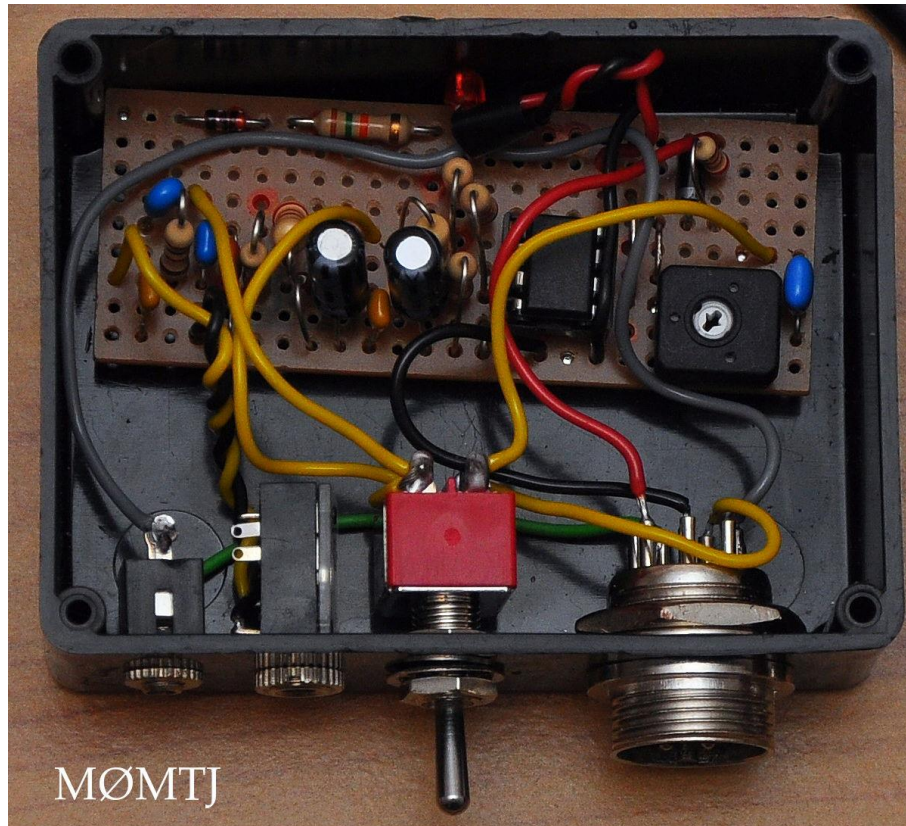
# What do Hams do?

- Bounce signals off the Moon...



# What do Hams do?

- Build their own equipment...



# What do Hams do?

- Talk to Astronauts...



S119E009662

Al Penney  
VO1NO



# What do Hams do?

- Experiment with cutting edge technology...





# What do Hams do?

- Find hidden transmitters...



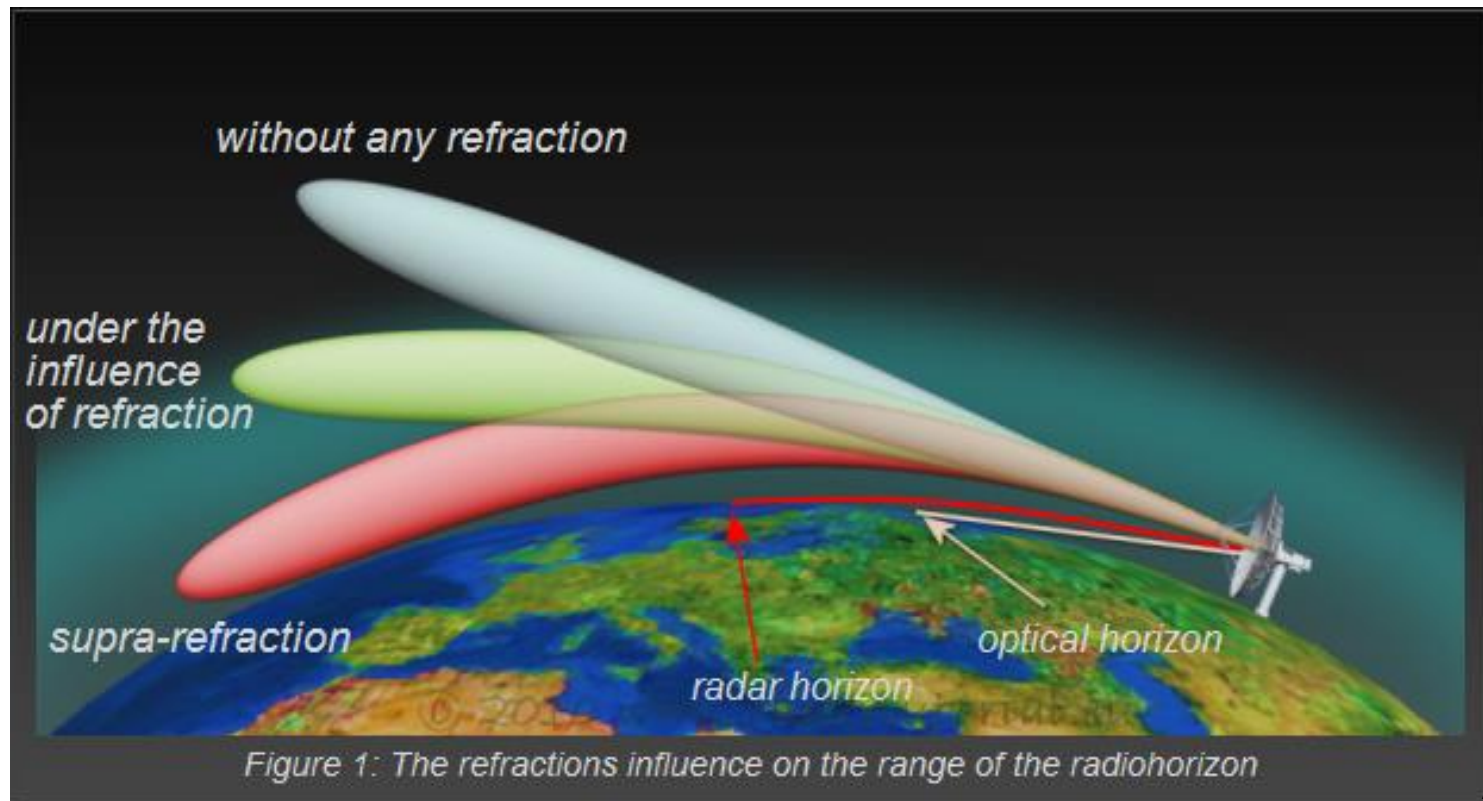
# What do Hams do?

- Help in time of disaster...



# What do Hams do?

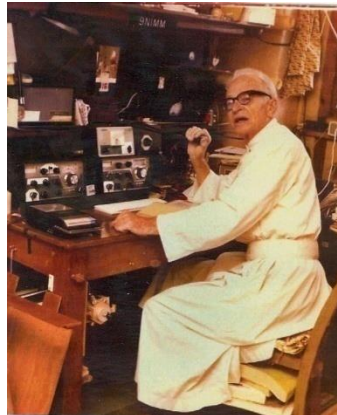
- Advance scientific knowledge...





# What do Hams do?

- Make friends around the world...



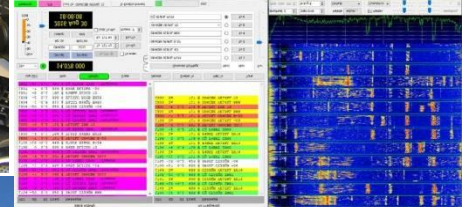
Al Penney  
VO1NO



# Annapolis Valley Amateur Radio Club

[www.avarc.ca](http://www.avarc.ca)

Make friends around the world!



## Hams prepare for emergencies

A group of Annapolis Valley amateur radio operators recently spent a weekend training to provide emergency support in winter field day exercises.

Amateur radio operators are professional communicators in the form of a contest. Participants attempt to contact as many radio operators as possible, passing the necessary information in a quick and efficient manner. For winter field day, participants are given a list of emergency stations to contact. The goal is to establish a network of emergency stations that can be used in the event of a disaster. Participants are given a list of emergency stations to contact. The goal is to establish a network of emergency stations that can be used in the event of a disaster.



**Fuel savings predicted for Kings Transit**

The Kings Transit Authority is expected to save a significant amount of money on fuel costs by switching to a more fuel-efficient vehicle.

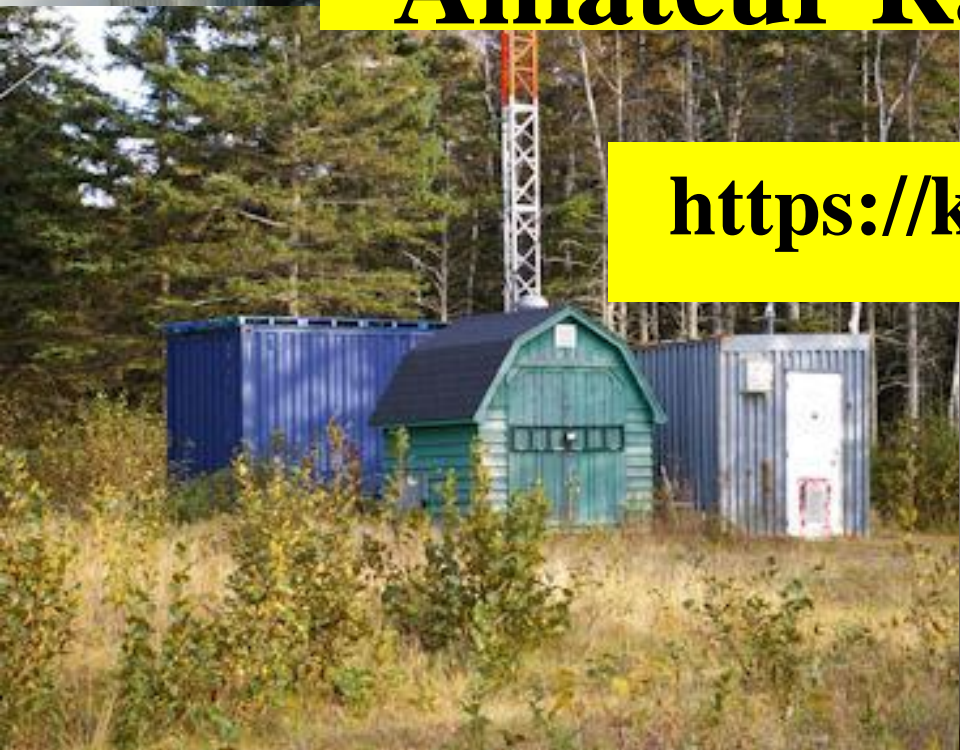
The Kings Transit Authority is expected to save a significant amount of money on fuel costs by switching to a more fuel-efficient vehicle.







# **Kings County Amateur Radio Club**



<https://kcarc.ca>





# Amateur Radio!

## What is Amateur Radio?



**ICA**  
Canada's Amateur Radio  
Le Réseau des Radiosam  
Émission Radioactive Sa Santé  
100% Canadian



# Amateur Radio!

