



Communication between two parties only happens when the message is Sent, Received, Understood and Acknowledged. Everything else is just noise.

vol.4 issue 3

VE3OAK-VHF 147.015
VE3OAK-UHF 444.325
VE3PDX-VHF 147.345
ARES NET: Mondays @ 7:30 pm VE3OAK-VHF
HRECT NET: Tuesdays @ 7:30 VE3PDX-VHF
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The A.R.E.S. Group Newsletter is published monthly for members of the Oakville A.R.C. and the Oakville ARES Group.
Editor: George Davis VE3OGP
Contributions related to A.R.E.S., Amateur Radio in general or emergency preparedness are welcome.
Please send articles to oarc.ares@interhop.net

CANWARN



CANWARN is a volunteer program created by Environment Canada (EC).
We provide weather info and spotter training.
Membership is composed of volunteer amateur radio clubs and individuals who are interested in cooperatively understanding, identifying and reporting severe storms to Environment Canada.
We rely on membership expertise to help recruit new members, work together as equals and provide/maintain an effective severe weather response/communications network.
Why does EC need our help?
-Canada ranks 2nd in the world for tornadoes.

-80-100 reported each year
-Half are on the Prairies.
-S/W Ontario approaches the Midwest USA in frequency & severity.

This means there is a need to get credible ground reports, in near real time, of any severe weather to back up radar images.

We are in the process of developing a Canwarn net for use in times of severe weather in the Oakville and Halton region area.

Come out the March 7th meeting for more information.

John McKay, VA3BL.

Events & Links



- ARES Group Meeting- March 7, 2010
Chili Run - March 7, 2010 (non ARES)
Ham-Ex - March 27, 2010
Durham Region Hamfest - April 17, 2010
Mercedes-Benz 10K-Sunday April 25th, 2010. (Oakville ARES Group)

PLEASE NOTE: THE TIME HAS CHANGED FOR THE MARCH MEETING!

- RAC Blog Site
E-Ham.com
Guestbook
News Letter PDF



APRS: A Quick Overview



In the past The Oakville A.R.E.S. Group has used the Automated Position Reporting System (APRS) for some of our public events. It is hoped that more of our members will equip themselves with APRS units. Here are some of the basics.

In North America the APRS network operates on 144.390 MHz.

SOME BASICS

APRS is used to transmit real-time position reports, storm warnings, weather reports, direction finding bearings, and text messages using amateur radio.

Receiving stations can then process the data with a computer and appropriate mapping software to view the data.

The most wide spread form of APRS uses the AX.25 protocol (normal packet) at 1200 baud on the 2 meter amateur frequency of 144.390 Mhz.

A large number of digital repeaters receive and relay the data across the APRS network. Now with the aid of internet gateways, data is also relayed to the APRS internet system for worldwide coverage.

An APRS radio station is made up of the following equipment: a radio and antenna a TNC or "Tracker" unit, (basically a "radio modem"), and if you plan to be in motion, a GPS receiver. You may also want a computer with APRS software if you plan on viewing data on a map, but this is optional.



The OpenTracker+ used in the VE3OGP Mobile

One common software for APRS is UI-View32. It's a great program with many available add-ons. You can download it from the Official UI-View32 Home Page. The program is free, however you must go through the registration process before it can be used.

APRS is different from regular packet in four ways.
-First by the integration of maps and other data displays to organize and display data, (such as weather or altitude).
-Second by using a one-to-many protocol to update everyone in real time, (network broadcast).
-Third, by using generic digipeating so that prior knowledge of the network is not required.

-Fourth, since 1997, a worldwide transparent

internet backbone, linking everyone worldwide. APRS turns packet radio into a real-time tactical communications and display system for emergencies and public service applications (and global communications).

Normal packet radio is useful in passing bulk message traffic (Email) from point-to-point, but it does not do well at real time events where information has a very short life time and needs to get to everyone quickly.

Keep in mind that APRS is a LOCAL RF network. Although the Internet monitors APRS worldwide, this is not the primary objective. But like all of our other radios, how we use APRS in an emergency or special event is what drives the design of the APRS protocol. Although APRS is used 99% of the time over great distances, and benign conditions, the protocol is designed to be optimized for short distance real-time crisis operations on RF. Perfect for ARES!

APRS provides universal connectivity to all stations in the net by avoiding the complexity and limitations of a connected network. It permits any number of stations to exchange data just like voice users would on a voice net. Any station that has information to contribute simply sends it, and all stations receive it and log it. Secondly, APRS recognizes that one of the greatest real-time needs at any special event or emergency is the tracking of key assets.

Where are the emergency vehicles?
Where is the Event Leader?
Where is the last runner?
What's the Weather at various points in the Region?
APRS can tell you.

For a Power point introduction go to:
<http://www.aprs.org/APRS-by-Bob-j.ppt>

EQUIPMENT

As stated earlier you need a radio and antenna, The radio can be a simple HT or low power mobile rig. Nothing fancy here, which is a plus as a search of fleamarkets. A simple mag-mount 1/4 wave antenna will do for ARES work, unless you wish to (cont.)

permanently install a mobile unit. Be careful to keep as much distance between the APRS antenna and the other VHF antenna to minimize de-sensing of both units.

The next item is the TNC or a tracker unit. For a non moving mobile, a shelter or base station any TNC that can be programmed with APRS parameters can be used. The various software programs, such as UI-VIEW coupled with sound packet driver like AGWPacket engine can also be used if installed in a laptop. Some hardware interfacing may be required.

Mobile operation for tracking usually uses a tracker like the Tiny-II or Opentracker+, and the addition of a GPS receiver to provide updated positional data of the mobile to the APRS network.

Once the hardware is setup you must set the APRS parameters.

Mobile Settings:

The preferred PATH for mobile users is "WIDE1-1,WIDE2-1". The terms RELAY, WIDE and TRACE are no longer supported.

If you travel to the US or Southern Ontario, you'll most likely need to remove "RELAY". In some highly congested areas, digi owners are actively ignoring beacons that don't follow the new paradigm, and you'll find your packets going nowhere.

You should never need to set an n-n value higher than 2-2 for mobile use in Ontario (and also most of the US). There is very good digipeater coverage, and almost all of them can get to one of the "core" digipeaters. This will get you to an IGate, and wide RF coverage.

Recognize that "WIDE2-2" is *not* the same as "WIDE,WIDE". The latter is to be strongly discouraged, since it tremendously increases packet duplication. In addition, use of "TRACE" is to be discouraged as well, since it is the same as an extra "WIDE" and doesn't add any value.

Set your beacon rate to no more often than once every 2 minutes. If you're lucky enough to have a TNC or Tracker that supports smart beaconing set the "timed" beacon rate to 20 minutes, and the traveling rate to roughly once every 2km (higher if you spend a lot of time on the highways).

Of course during an ARES event you may need to update more often .

APRS is another tool at the disposal of the Oakville ARES Group. Check into it!

George, VE3OGP



6 Metre Net!

We are trying to get the band going on 6 metres with as many check-ins from anywhere on 50.130.00 USB.

The band is quiet right now because the conditions are not very good. We are on pretty much every night between 19:30 and 20:00 local. If you hear us, give us a call. It's only a 'rag chew' and we are just trying to get more people involved.

Once the band is more active, we will keep quiet, but for now we are using it.

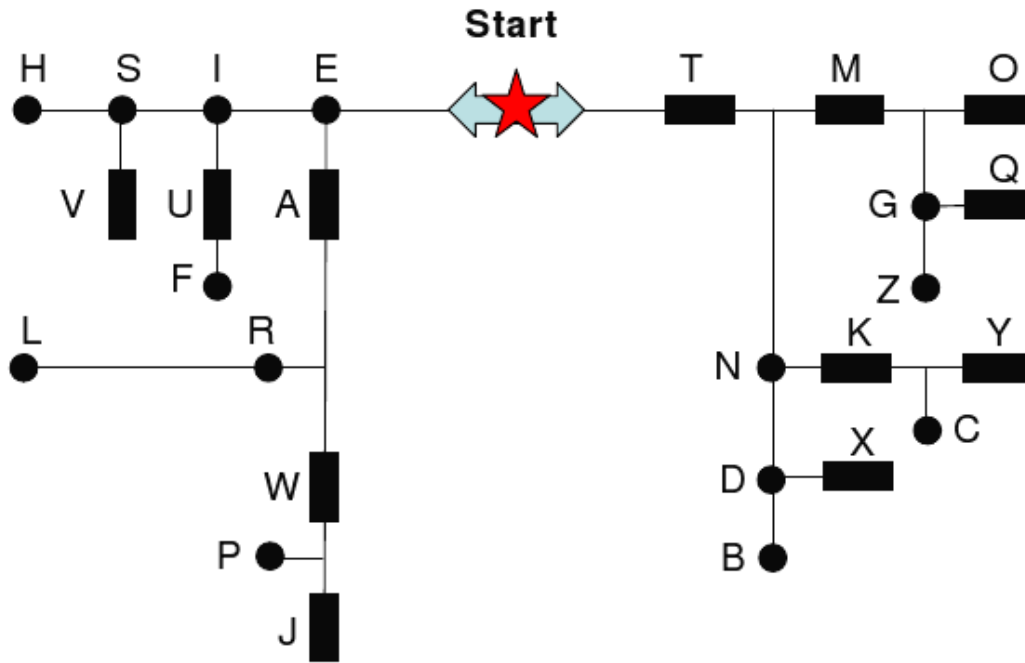
Because you know the saying "If we don't use it, we lose it".

73,
Darren , VA3EGG



MORSE CODE ANYONE? A visual aid.

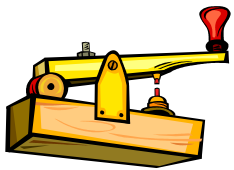
From Ian, VE3IAN



International Morse Code

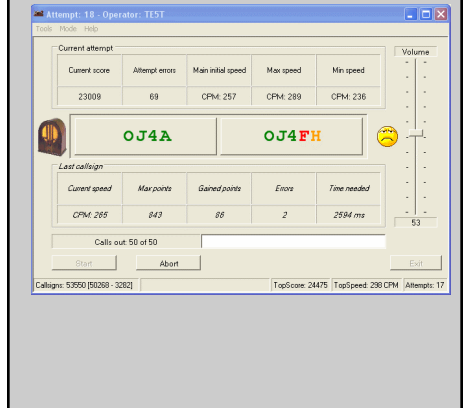
- 1 dash = 3 dots.
- The space between parts of the same letter = 1 dot.
- The space between letters = 3 dots.
- The space between words = 7 dots.

A	• —	V	• • • —
B	— • • •	W	• — — —
C	— • — •	X	— • • —
D	— • •	Y	— • — — —
E	•	Z	— — • •
F	• • — •	.	• — — — • • —
G	— — • •	,	— — — • • — — —
H	• • • •	?	• • — — — • •
I	• •	/	— • • — • •
J	• — — — —	@	• — — • • • • •
K	— • — —	1	• — — — —
L	• — • •	2	• • — — —
M	— —	3	• • • — —
N	— •	4	• • • • —
O	— — —	5	• • • • •
P	• — — • •	6	— • • • •
Q	— — — • —	7	— — — • •
R	• — — •	8	— — — • • •
S	• • •	9	— — — — •
T	—	0	— — — — —
U	• • • —		



Also check out this program:

www.rufzxp.net



**Amateur Radio Newsline Report 1697
- February 19, 2010**

**RADIO LAW: CELLPHONE BILLS BEFORE
HAWAII HOUSE WILL EXEMPT HAM RADIO**

SOME good news for hams living on the Island state of Hawaii. It appears as if they will likely be safe from rules to be imposed on the mobile use of cellular telephones.

PACIFIC ARRL Section Manager Bob Schneider, AH6J, and Bart Aronoff, WH6AA recently

testified before a Hawaii house subcommittee on HB 2225 however HB2602 is now before committee in place of 2225. Both measures deal with the use of cellular telephones while driving.

CONFEREES are now trying to combine HB2602 with SB2755 to come up with a final version. Both of these bills as well as the recently passed Kauai council bill 226 exempt amateur radio operators from the restrictions imposed by what is known as mobile cellphone prohibitions. (hamradiohawaii via KH6QX)

One Liners

You may be a HAM if:

When your doorbell rings, you immediately shut down the amplifier.

Fermentation never enters your mind when "homebrew" is mentioned.

Instead of just saying no, you have said "negative".

You have used a person's name to indicate acknowledgement. (Roger)

(Thanks to Gary, VE3TGH)

"Only those who risk going too far can possibly find out how far they can go." - T.S. Eliot



March 27, 2010



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Questions or comments? E-mail us at oarc.ares@interhop.net

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