



RADIO AMATEUR NEWS & VIEWS

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NEXT MEETING: NOVEMBER 11

EXPERIMENTS WITH BEVERAGE ANTENNAS

Cathy N5WVR will tell us about her experience with Beverage antennas.

The Beverage antenna was originally designed and patented by Dr. Harold Beverage (1893-1993) while working for RCA in the 1920-30s. This is a multiband straight wire antenna, usually one wavelength in length and about 8'-10' high. Beverage antennas are said to be very effective allowing an operator to pull very weak signals out of the noise.

Come and hear Cathy's adventure in designing, building, and experimenting with her Beverage Antenna.

Bob KB1FRW will be providing refreshments.

ELECTION BALLOTS

Please fill in your ballot and bring it to our November 11 meeting. If you can't make the meeting you can e-mail your vote with the following caveats: (1) be sure you include the special ballot serial number found on the ballot in your copy of this newsletter; (2) email your ballot by noon on November 11 to ranv@sover.net

SUNSPOT AR2192

Kathi K1WAL

If you were working HF the last week of October you may have noticed some funny business on the bands! We were witnessing the largest sunspot in nearly 25 years! Sunspots are active regions on the sun and are generally formed when magnetic field lines are warped and become twisted. This sunspot, about the size of the planet Jupiter, was designated AR2192 (AR stands for Active Region.)

Usually large sunspots produce enormous flares which cause large bursts of plasma called coronal mass ejections (CMEs). Earth directed CMEs cause geomagnetic storms that can harm satellites in orbit and power grids on earth.

While Sunspot AR2192 produced many flares – including 26 M-class and 6 X-class – there were no CMEs directed towards earth! I would consider us rather lucky.

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SECRETARY'S MINUTES

Kathi K1WAL

Bob KB1FRW opened the meeting. Nomination of Officers were held and the incumbents were nominated once again. Ballots will be included in this issues of **News & Views**.

We discussed the NEARFest then went on to our feature presentation:

Ham Radio and Cyber Security

We were privileged to have Duane Dunston, Assistant Professor of Information Science at Champlain College to find a free Tuesday evening to tell us about Cyber Security.

Duane focused his presentation to threats to hams. As hams we have a rather low threat of being targeted, but as computer users we are all vulnerable. Duane touched on things to be aware of and ways to protect ourselves.

The greatest threats to hams are untrusted software and internet-based applications. Hackers like to store their "stuff" on someone else's computers. Duane talked about closed source/open source software. Most ham applications don't have a checksum to make sure that the software they downloaded doesn't have anything extra attached.

Duane described having a hardware firewall and using Firefox Chrome (portable version) with portable apps that have no installation requirements (see portableapps.com).

He also discussed MALWARE (MALicious softWARE), rootkits that hid Trojans, viruses, worms, spyware, adware, and all the nasty things that we can unintentionally bring into our computers.

After showing us what we are up against he offered ways to avoid them. There are free applications such as Spybot and Malwarebytes which Duane recommends running once a week. Calmav is an open source antivirus application that is free and works on many platforms.

Sandboxie is another free application which runs your programs in an isolated space which prevents them from making permanent changes to other programs and data in your computer. While Sandboxie is free Duane warned that it will nag you after 30 days. Sandboxie Pro is a good solution for those still running Windows XP which costs around \$20.

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Sunspot AR2192 Continued

What does M-class and X-class mean? On the Solar Flare Richter Scale flares are categorized according to their brightness in wavelength ranging from 1 to 8 Angstroms. There are 3 categories: X-class flares are big and are major events that can trigger planet-wide radio blackouts and long-lasting radiation storms. M-class flares are medium-sized and can cause brief radio blackouts that affect Earth's Polar Regions and are sometimes followed by radiation storms. C-class flares are small with few noticeable consequences here on Earth.

Sunspots work their way around the sun, taking up to two weeks. They sometimes make it all the way around, and some have even gone around more than once! If AR2192 makes it around to the Earth-facing side of the sun again we may have another visit!

Sec'y Minutes Continued

Duane also discussed software restriction policies (SRP) to prevent unwanted programs from running.

The biggest take away was to keep your system updated. For legacy OS's such as Windows XP use a hardware firewall to place in front of the system and use portable apps and sandboxing.

Soon Duane will have several tutorials on our RANV website to demonstrate some of the things he talked about.



NEWS&VIEWS

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UPCOMING, NOTICES, & MISC

- Steering Wheel: 3rd Tues 6:30; Ninety-Nine Restaurant, Taft Corners, Williston
- VE Exams every 2nd Friday; Red Cross Building 29 Mansfield Ave, Burlington
- Dues due? Pay online at www.ranv.org/ranvpay.html

NEXT MEETING

TUESDAY • November 11 • 7:00 PM
O'Brien Civic Center • Patchen Rd
South Burlington, VT

Experiments With Beverage
Antennas