

The

Modulator

Newsletter of the Newport County Radio Club, February 2015

EmComm Training

If you have a genuine desire to serve your neighbors in time of need, as a ham you can be a valuable resource for providing critically needed communications during emergencies.



A typical EmComm work station

However, to provide the high degree of reliability required, you will need training to serve in an Emergency Operations Center, a Red Cross evacuation shelter, or a Medical Emergency Distribution System Point of Dispensing. These skills are applicable to operations in many other public safety emergency communications venues.

This training runs from 7:00 PM to 9:00 PM for seven consecutive Tuesday evenings beginning March 3rd at the Portsmouth Emergency Operations Center. The course is open to all licensed Amateurs, although preference is given to Newport County residences. Other hams are welcome on a space available basis.

Contact Portsmouth EMA Director John King (WA1ABI) at: wa1abi@cox.net or (401) 683-3660

Winter Storm Juno and EmComm

Severe weather of any kind poses a threat, but the combination of wind, cold, and snow produces a signature array of emergencies:

- Loss of electrical power
- Loss of phone service
- Inadequate heat
- Closed roads

Juno did not produce the degree of hardship expected, but it would have been worse if only one of several factors had been different. Consider temperature: Because it was cold, the snow was dry and blew through the trees and wires causing few power outages. Had it been a bit warmer, the snow would have been sticky and downed many lines. Colder, and we would have seen more house fires as families struggled to heat their homes.

Predicting weather is difficult, but predicting *the effect of weather on the community* is impossible.

This is why Emergency Communication (EmComm) is critically important during weather and other emergency events—when you can't predict, you have to prepare for the worst.

Any watch stander will tell you that the hardest job is to sustain a high degree of readiness in the face of an undefined threat. Our NCRC Emergency Communicators represent that facet of ham

radio of which we can be most proud and is the source of our motto "When all else fails." It also explains why the Division of Motor Vehicles, in appreciation of our service, gives us a license plate with our calls without a vanity plate surcharge.

John King WA1ABI, Portsmouth EMA Director, recognizes our NCRC volunteers for their service during winter storm Juno—"I can't thank these guys enough!"

- Brian N1TBT (Portsmouth EOC)
- Paul KC1AQP (Portsmouth EOC)
- Sam N1SRV (Standby for Portsmouth EOC)
- Chuck KB1ZZX (Middletown regional Red Cross shelter)
- Ted W1GRI (Standby for Middletown regional Red Cross shelter)
- Willy W1LY (Standby for Jamestown Red Cross shelter)
- Bob WB4SON (Red Cross HQ EOC)

Dateline Newport, Jan. 28th

"The Newport Emergency Management Agency would also like to thank [among others] Newport Ham Radio Club [sic] ..."

"Having the Regional Emergency Shelter available eased NEMA's and all Aquidneck Island Emergency Management teams workload."

See more about EmComm training at www.w1sye.org

Business Meeting Agenda February 9, 2015

- Roll Call.
- Reports.
- Election of New Members.
- Who are You?
- Member's new business.
- Presentation.

NCRC New Members

Eight new members were elected to our club at the January meeting. Several are already regulars on the weekday 2-meter net. Here's a warm welcome to you all:

Dan Britton, KC1CZU
Middletown, RI

Forrest Ficke, KC1CWX
Newport, RI

Peter Fusco, KC1CVY
South Dartmouth, MA

Harry Peirson, KC1CWA
Tiverton, RI

Jason Sagamang, KC1CWQ
Wakefield, RI

Kathryn Sagamang, KC1CVZ
Wakefield, RI

Paul Silverzweig, KC1CZV
Portsmouth, RI

Frank Zappala, KC1CWB
Portsmouth, RI

Logging in at Meetings

As a secure government contractor, KVH is required to maintain records of all visitors. On arriving for NCRC meetings, please find near the door both our club log book and the KVH sign in page and complete both. Thanks in advance for this courtesy.

Psst—Dues are due. Pass it on.

Rob Vincent at the February 9th Meeting

What's smaller than you'd think and works better than you'd guess?

Rob Vincent has been experimenting with electronics and antennas since he was a youngster in Warren back in the 1950s. In

recent years, his interest has been in improving the efficiency and bandwidth of vertical antennas. Traditional verticals suffer from having the bulk of their radiation near their base. There are ways to improve this limitation somewhat, but Rob, who is with URI's Physics Department, has designed a vertical that puts more radiated power where you want it. This idea is reflected in the name of his antenna—Distributed Load Monopole or DLM.



PBN Photo/Michael O'Reilly

For us as HF hams, that means you can have a combination of better efficiency and small size while improving antenna bandwidth at the same time!

Rob's presentation will describe his original DLM designs, then

take us into his latest work, transforming a three-dimensional vertical antenna into a two-dimensional flat sheet antenna!

Although this is heady stuff, Rob is a personable speaker and his presentation is not mired in heavy theory. Anyone with an interest in radio will be fascinated.

The web is replete with articles about Rob and his antennas, simply Google *DLM antenna* for a sampling.

Allison Phillips at the January Meeting

Allison used two programs to introduce us to the world of computer assisted circuit design.

The first, LT-Spice, is a free circuit simulation tool, available from Linear Technology at:

<http://www.linear.com/designtools/software>

She also used Express PCB, another free tool that is well integrated with the DigiKey parts catalog. This software will lay out a board from your schematic or a

library import. You then can have ExpressPCB produce the board. In a few days you can have 3 identical small boards for about \$51. This software is available at:

<http://www.expresspcb.com>

The other 8-hundred pound parts gorilla, Mouser, offers MultiSIM BLUE, also free and similar to Express PCB, that is keyed to their catalog. Find it at:

<http://www.mouser.com/multisimblue/support>