

Maine Makes Waves – Again: Waldo County EMA Becomes the First to Deploy a New Wide-Area Public Information Radio Service

By Bill Baker, President, American Association of Information Radio Operators

It's not the first time a communication innovation has come out of the State of Maine. In 1868, Mainer Joseph Stearns came up with a way to carry on two ends of a conversation simultaneously on the same wire, revolutionizing the telegraph industry – and later what would become the “telephone” industry.

The Nation's First County-Wide Emergency Broadcast System

In that spirit, one Maine county, with the assistance of seasoned amateur radio operators, is implementing the nation's first county-wide emergency broadcast system, utilizing universally available AM radio channels. The new wide-area “RadioSAFE” system will be utilized in emergency/disaster situations in which citizens are cut off from power and communications – something that could easily have happened had Hurricane Dorian

steered a slightly different course in September 2019.

Explains Waldo County emergency management director Dale Rowley, “We realized that the last option [in emergencies] most people have for getting information is by broadcast radio.” It was December 2013 when the county experienced a massive ice storm that crippled the power grid for a full week.

Rowley recounts: “We established an emergency shelter, but could not get the word to residents that the shelter was open! They couldn't watch TV, and their smart-phone batteries were dead. We realized that the last option that most people have for getting information is by broadcast radio through their car radio or with a small battery-operated receiver. Then we found out about emergency radio advisory stations.”

Though a power outage is the number-one situation in which the



county will utilize the service, emergency management officials say it also could be of critical assistance in large-scale evacuations due to forest fires, HAZMAT spills or other hazards that would endanger the public.

WEAs to be Sent to Cell Phones Directing People to Tune in to the AM Radio Station

Waldo County will be erecting road signs and will be using all local media to promote the presence of the emergency service. “During an emergency, we will send out a Wireless Emergency Alert (WEA) to cell phones directing people to tune to the AM station for more detailed information,” adds Rowley.

Recognizing that an emergency AM radio system capable of covering their entire county was not an off-the-shelf item, in 2018 Waldo County reached out to equipment suppliers to propose the parameters of such a service. That request resulted in the design (by Information Station Specialists) of a high performance radio antenna with the efficiency and power-handling capability to cover a radius of more than 20 miles – what is required to cover the county.



Waldo County emergency management's director Dale Rowley (right) and Brit Rothrock (left).

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Condensed versions of the RadioSAFE system are also available with 6-10-mile and 3-5-mile signal coverage distances. Depending on the version, a waiver and/or a Special Temporary Authority (STA) may be required from the Federal Communications Commission for operation.

State Homeland Security Grant Obtained to Cover Costs

The county then obtained a Subrecipient State Homeland Security Grant to cover costs. Information Station Specialists designed RadioSAFE wide-area emergency broadcast systems as a

direct result of the county's expressed needs. The RadioSAFE system that Waldo County selected is under construction at this time at a hilltop tower site, centrally located near the town of Knox, Maine. Adjacent Lincoln County (also in Maine) is proceeding with engineering work on a similar system for their jurisdiction.

Amateur Radio Pros at Waldo County EMA Handling System Planning and Installation

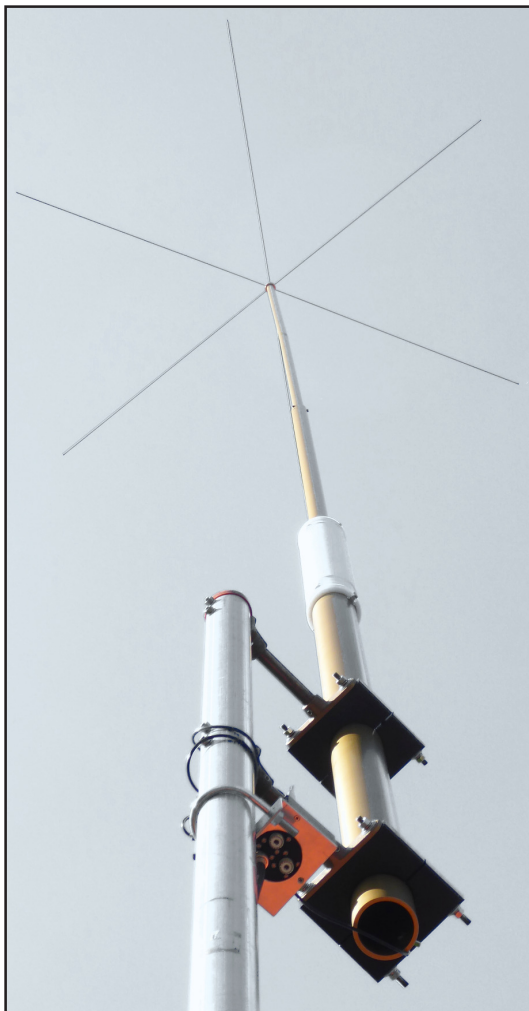
Amateur radio pros Brit Rothrock (Communications) and Robert Hoey (GIS) within the Waldo County Emergency Management Agency are doing the system planning and will be installing the new service at the county's Aborn Hill tower site. The county's

RadioSAFE System will operate on AM Frequency 530 kHz, a channel designated exclusively for Travelers' Information Station service in the United States.

There are no other broadcast stations on 530 kHz in the nation now, making it an ideal channel for emergency use. Because frequencies for RadioSAFE operation are not universally available, planning a system begins with a frequency search to determine availability.

Learn More

Visit Waldo County's EMA website at www.waldocountyme.gov/ema. To learn more about RadioSAFE systems, visit www.theRADIOsource.com/products/radiosafe.htm. ▲



Information Station Specialist's Geoff Penna adjusts a RadioSAFE System's HPR.0990 Antenna.

The HPR.0990 High Performance Antenna is the heart of Waldo County's RadioSAFE System.