Community Emergency Communications using Inexpensive, Off-the-Shelf Radios

Stay in touch! Communicate locally and even countrywide during service interruptions

Pen Bay ARC Tech Session, December 14, 2019
Presented by Richard Bates and Steve Hansen with Eric Greiner and Phil Gaudet

This presentation will have two parts with the first providing a non-technical introduction to the FRS (Family Radio Service) and GMRS (General Mobile Radio Service) Personal Radio Services and how they can be used in emergencies. The second part will cover in more detail radio characteristics. GMRS station operating procedures and FCC rules.

Part 1. Introduction to the Personal Radio Service using FRS and GMRS consumer two-way radios

- What is an FRS radio? How they are used, features and the truth about range
- How to select a radio that will provide what you need
- How FRS radios are commonly used and how they can be put to use for emergency communications: personal safety, damage reports, storm reporting, sending personal messages to distant friends and family.
- Neighbor to neighbor communications and the National SOS Radio Network
- The importance of practice
- What is a GMRS radio? How they are used, features, coverage, licensing
- Utilizing amateur radio stations that are equipped with GMRS radios - Neighborhood HamWatch (relaying messages to agencies and others). We'll discuss the program that is being piloted in Owls Head, So. Thomaston and St. George.
- Monitoring Knox County ham radio storm nets (i.e. top of the hour nets) with a scanner
- On line resources

Part 2. FRS and GMRS equipment and channels

- Part 95 FCC rules and equipment certification
- Channels and power levels
- Shared FRS/GMRS channel details
- GMRS repeaters
- HamWatch GMRS station operating norms
- Unattended HamWatch GMRS operation using voice message logging

Richard, Steve, Eric and Phil are all members of the Pen Bay Amateur Radio Club. Each has a GMRS radio license. Richard has a HamWatch station in St. George, Steve has a station in Owls Head and Eric has a new station in Spruce Head. All are members of the Knox County ARES/RACES emergency communications team.