

Search and Rescue Volunteers Association of Canada (SARVAC)
Humanitarian Workforce Program (HWF)
Operational Communications Plan (OCP)
Summary

Overview

The HWF Operational Communications Plan (OCP) defines a robust and resilient operational communication plan for SARVAC's HWF program. It outlines a comprehensive solution set to achieve this goal while addressing potential challenges and risks.

OCP Goals:

1. **Go Anywhere.** The OCP provides operational communications over local, regional, inter-regional and Canada wide distances. It addresses the need for communications in different geographic areas, from local search areas to remote regions with limited infrastructure or poor cell phone coverage. This capability ensures that SARVAC's HWF program can maintain effective communication regardless of the location of their missions, thus enhancing their capacity to respond to emergencies across Canada.
2. **Reliability and Redundancy.** The OCP places a strong emphasis on ensuring reliable communications. It employs a layered systems approach, with multiple levels of redundancy through primary, alternate, contingency, and emergency (PACE) systems. This capability is crucial for ensuring that communications work consistently and effectively, even in challenging and remote environments, which is essential for responder safety and mission success.
3. **Interoperability.** The OCP highlights the importance of interoperability, allowing HWF responders to communicate and coordinate with local SAR teams, the authority having jurisdiction (AHJ), and other relevant entities. This capability ensures that SARVAC can seamlessly collaborate with local resources and support agencies during missions, improving overall efficiency and effectiveness.

These three capabilities collectively support the HWF mission. Robust and resilient communications foster responder safety, efficient mission management, and effective collaboration with other response organizations.

Capabilities

General

- The OCP aims to ensure self-sufficient operational communications for HWF responders anywhere in Canada, including the front country, backcountry, and boundary areas between the two where the solutions are less clear or straightforward. The plan makes allowance for and anticipates public communications infrastructure failures.

- The OCP objective is 24/7 HWF responder accountability and safety during their door-to-door deployment experience.
- The plan employs a Primary, Alternate, Contingency, Emergency (PACE) layered systems approach with multiple levels of redundancy for mission success and responder safety.
- Key elements include:
 - VHF portable radios (with GPS tracking) and repeaters.
 - VHF remote base station radios when repeater operations are unavailable.
 - Push-To-Talk (PTT) Over Cellular (PoC) applications for very wide area, radio like communications and HWF responder accountability/safety
 - Satellite PTT radios for wide area communications in areas with no public cellular network or radio system infrastructure available.
 - HWF responder individual personal satellite trackers and emergency communications capability.
 - Interoperability controllers to deliver a Unified Communications solution through radio system/PoC integration. AHJ system integration is possible if necessary.
 - Cellular data, portable and mobile satellite systems for Internet access and radio system inter-networking
 - Networking equipment for Wi-Fi and Ethernet internet access distribution throughout the deployed MIST ICP/Camp location or wherever required.
 - Tactical mission management software for logging and integration of track displays from radios, satellite trackers and smartphone applications
 - HF radio and HF radio email for back up and satellite heavy solution risk mitigation.
 - Amateur Radio Service support for back up.

Operational

- Dispatchers play a crucial role in maintaining communication efficiency, situational awareness and supporting mission members.
- Logging is essential for documenting mission details, decisions, and radio traffic and building the response timeline. Establish early.
- Group call communications for mission and response management and responder safety. This also supports the situational awareness, logging and documentation and member safety goals.
- Interoperability with local SAR teams available through pre-programmed radio channels in SARVAC HWF radio cache.
- Full-time integration of radio and PoC channels, team tracking and log system between the National Incident Support Team (NIST), and remote deployed HWF elements. Achieved through Unified Communications Solution of remote satellite internet access and radio system- PoC system interoperability.
- Local, regional, and inter-regional and national communication capabilities can be deployed.
- System flexibility to design capabilities as needed to meet mission goals.