The mission of the Logistics Communications Unit (LCU) is to provide uninterrupted communication channels between AHJs, critical infrastructure and response partners supporting disaster-related operations with Washington State Emergency Management. The LCU coordinates and operates key elements of the statewide alternate, contingency and emergency communications infrastructure.

The LCU consists of four core teams:

- **SEOC Radio Room Operations** from Camp Murray, Washington.
- **WA EMD/ DHS CISA SHARES RMS Station Operations** from various locations around Washington State.
- **HF Radio Interoperability Operations**. WA EMD, working in conjunction with the United States Department of Homeland Security (DHS), serves as the net control station (NCS) for emergency regional interoperability net on DHS CISA SHARES frequencies. In an emergency, WA EMD will manage net control operations. WA EMD also manages the WA EMD 60 Meter Net. This net serves as a training ground for interagency interoperability training and operations. In both cases, WA EMD operates and serves as a US government radio station operating on US government interoperability frequencies.
- **WA EMD 220 MHz Amateur Radio Network Operations** (Voice message traffic)

The **DHS CISA SHARES Radio Messaging Service (RMS) stations** operate 24 hours a day as a radio-based email/message forwarding system using the freeware program Winlink®. These radio stations are available to tribal, county and large city emergency management agencies, certain NGOs and designated critical infrastructure partners licensed with DHS CISA SHARES. WA EMD’s SHARES RMS stations serve all of Washington State as well as our partners across FEMA Region X, the western United States, including Alaska and Hawaii.

Washington State Emergency Management is partnered with DHS CISA SHARES to serve as the net control agency for HF interoperability emergency nets for FEMA Region X and the western United States.

The goals of the LCU are to provide:

- **Tactical voice communications**, for coordination of personnel and resource movement(s) as needed.
- **Voice message traffic** when passing message traffic via digital means is not available.
- **Data communications through Winlink®** in the form of email and document attachments. Examples include but are not limited to: situation reports (SITREPs), staffing schedules, requests...
for resources (ICS-213RR), general message traffic (ICS-231 General Message), ICS forms/documents and ISNAP reports. Templates of these forms can be found in the Winlink program.

- **Redundant communications**, giving WA EMD and AHJs both alternate and additional forms of communication when systems are overtaxed or impaired.

**COMMUNICATIONS SYSTEM REDUNDANCY PLAN.** WA EMD Logistics established the **PACE Communications Plan**. The PACE plan provides alternate and/or additional means of communication. The PACE plan outlines both how and what resources are available.

**PACE is the acronym for Primary, Alternate, Contingency and Emergency Communications Channels.**

- **Primary Communications Channels.** This includes commercial telephone services (tactical) and Internet providers (data). In many if not most disaster events, primary communications channels are more than sufficient to handle need.
  - EMD Staff Phone Directory
  - EMD Organizational Chart

- **Alternate Communications Channels.** Implemented when primary voice and/or email is impacted/interrupted, temporarily unavailable or overloaded and resources are needed.
  - Tactical (voice): Satellite phone; CEMNET.
  - Data:
    - HamWAN. HamWAN is radio-based broadband Internet available on the base at Camp Murray. Contact Logistics for the current password.
    - Winlink email. Email address via Internet to the SEOC Radio Room: NNA0WA@winlink.org. Email address by Winlink radio: NNA0WA.

- **Contingency Communications Channels.** Implemented when primary and alternate communications channels are impacted or insufficient to handle the message load.
  - Tactical: As per standing/operational period ICS 205.
  - Data:
    - HamWAN. HamWAN is radio-based broadband Internet. Contact Logistics for the current password.
    - Winlink email. Email address via Internet to the SEOC Radio Room: NNA0WA@winlink.org. Email address by Winlink radio: NNA0WA.

- **Emergency Communications Channels.** Implemented when a disaster event has occurred and the scope may not be fully known. Emergency communications provides resources specific to the disaster response.
  - Tactical: As per standing/operational period ICS 205.
• Data:
  
  • **HamWAN.** If available: HamWAN is radio-based broadband Internet. Contact Logistics for the current password.

  • **Winlink email.** Email address for the Camp Murray Radio Room via Internet: NNA0WA@winlink.org. Email address for Camp Murray by Winlink radio: NNA0WA. Additional Winlink email addresses can be found on pre-event standing/ operational period ICS 205.

**STANDING ICS-205.** Specific information regarding transmit/ receive frequencies, function, and operational modes can be found on the preset standing/ operational ICS-205. Information regarding SHARES Interoperability Nets and RMS station frequencies are FOOU and can be accessed by DHS licensed stations from the Homeland Security Information Network (HSIN) website. For the most current preset standing ICS-205 for each level of the PACE plan, contact Mark.Douglas@mil.wa.gov or if the LCU is activated, one can request the SCEO’s ICS-205 via Winlink (Internet and radio) at NNA0WA@winlink.org.

**COMMUNICATIONS UNIT CONCEPT OF OPERATIONS AND ACTIVATION PROCEDURE**

Mobilization, staffing and demobilization of the LCU follows ICS procedures established as per any given operational period of an incident. When activated, the standing ICS-205 will be in force throughout the first 24-hour operational period, or until the new ICS-201/ ICS-205 is released and is in full effect.

**RADIO FREQUENCIES, OPERATIONAL PRACTICES**

Both digital and tactical operational frequencies/ assignments can be found on the standing ICS-205. Operational practices will follow plain language procedures as per National Incident Command System/ Incident Command System (NICS/ ICS) guidelines. Voice operations/ etiquette follow the United States Coast Guard Tactics, Techniques, and Procedures.

**HOW THE WASHINGTON STATE SHARES RMS NETWORK IS STRUCTURED**

Washington State SHARES stations are all strategically located. One string runs up the I-5 corridor, supporting major population centers. Anchoring this is a grid pattern across the state, tying together both eastern and western Washington.

The goal was to establish stations no more than 90 miles apart. This way:

- RMS stations can communicate with each other (hybrid) directly.
- Local EOCs will be no further than 45 miles away from RMS stations, thereby allowing them to connect via “groundwave.”
- If groundwave communications is not possible, a simple wire antenna approx. 10 feet off of the ground would be capable of accessing stations via Near-Vertical Incident Skywave (NVIS) transmissions. NVIS transmissions are those that go straight up to the ionosphere and come back almost straight down. In disaster conditions, being able to utilize standard copper wire 10 feet off the ground is easily done and rapidly deployable.
If propagation conditions are such that longer transmission routes are needed, stations can transmit messages to any SHARES station within the nation. WA EMD SHARES stations can pick up these messages from anywhere.

WASHINGTON STATE SHARES STATION OPERATIONS

Washington State RMS stations all share operational control and oversight from WA EMD and are coordinated by WA EMD Logistics LCU for optimal operational coordination and control.

WA EMD SHARES RMS station SYSOPs are volunteers serving WA EMD Logistics LCU. All will receive training in WebEOC and will have WebEOC logins. In the event a disaster renders a given station inoperable, any SHARES RMS station connected to the internet can input requests for resources, ISNAP reports and general message traffic directly into WebEOC.

All RADOs and WA EMD Logistics LCU personnel will be trained in WA State AUXCOMM standards. These standards exceed the standards established as the minimum for WA State.

WASHINGTON STATE SHARES RMS STATIONS CAPABILITIES

SHARES communications capabilities are specifically for and limited to emergency communications with AHJs. It is designed for encrypted, password-protected and private message traffic. Information regarding stations is FOUO and is not public. Unlike amateur radio, there is no requirement for public disclosure of messages sent. The AHJ remains in full control of their messaging.

Radio operators do not need to hold a license to operate SHARES stations. This means that both professional staff and trained volunteers may operate SHARES stations for AHJs.

Specific to Washington State Emergency Communications:

- Transmit/ forward standard any standard email and attachment to anyone, anywhere.
- Transmit/ forward ICS-213 RR (Washington State- Specific Resource Requests)
- Transmit/ forward Washington State Incident Snapshot (ISNAP) Reports to state, county, tribal or city EOC
- Transmit ICS-213 General Message traffic to state, county, tribal or city EOC

Those listed below have SHARES stations. All are in Washington State.

- State, County, Tribal and Large/ Strategic City EOCs; Government Agencies
- Multiple County EOCs
- Multiple Large City EOCs
- Washington State Department of Transportation (WA DOT)

Current NGOs; Critical Infrastructure Stations in Washington State

- Puget Sound Energy (PSE)
- Christensen USA (major petroleum distributor in WA State)
- Verizon
American Red Cross

Federal/ Military Agencies

- Federal Emergency Management Agency (FEMA)
- United States Navy
- United States Air Force
- United States Coast Guard
- United States Transportation Command (USTRANSCOM)
- Federal Aviation Administration (FAA)
- Federal Bureau of Investigation (FBI)
- Madigan Army Medical Center
- United States Department of Health and Human Services (HHS)
- Department of Veteran Affairs (DVA)
- US Army MARS (DoD)
- US Air Force MARS (DoD)
- General Services Administration (GSA)

SHARES OPERATIONAL PROTOCOLS

- NIMS/ ICS only as per CISA SHARES.
- Follows the USCG Radiotelephone Handbook Tactics, Techniques and Procedures.
- Radio stations are federal stations. They are subject to NTIA rules, not FCC.
- All RMS stations in Washington State are coordinated by Washington State Emergency Management directly.
- RMS stations, locations and frequencies can be found using Winlink Express software or on the Winlink.org website. All information relative to SHARES is FOUO.