

**Amateur Radio
Emergency Communications
Interoperability Plan**

**Washington State
Regional Homeland Security
Coordination District IV**

**Clark County
Cowlitz County
Skamania County
Wahkiakum County**

v1.0 adopted: 7 December 2011
v1.1 adopted: 14 May 2015

Amateur Radio Emergency Communications Interoperability Plan

Table of Contents

Section	Page
1 Overview	1
2 Purpose	1
3 Scope	1
4 Responsibilities and Autonomy	1
4.1 HSPD-5 and NIMS	1
4.2 Emergency Manager Duties	1
4.3 Training of Amateur Radio Personnel	1
4.4 Coordination of Interrelationships	1
4.5 Emergency Worker Certification	2
5 Emergency Communications Categories:	
5.1 Routing Emergencies	2
5.2 Extraordinary Emergencies	2
5.3 Disaster Emergencies	2
6 Washington RHSCD IV Communications Links	3
7 Inter-Region Communications	3
8 Intra-Region Communications	4
9 Preparation for Emergencies	4
10 Net Control Stations	5
11 EOC to EOC Communication	5
12 State Communications Exercises	5
13 Activation During Emergencies	5
14 Plan Visibility	6
15 Annual Review	6
16 References	6
Appendix A: Activation Checklist	
Appendix B: Regional Net Protocols	
Appendix C: Emergency Frequencies and Modes	
Appendix D: Acronym Definitions	
Agreement by Region IV / District 4 Counties	7

Amateur Radio Emergency Communications Interoperability Plan

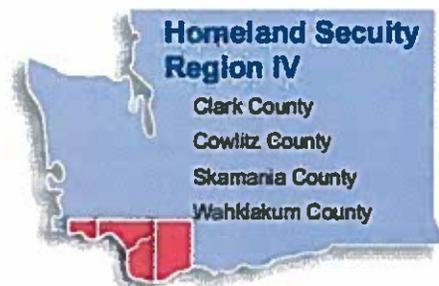
Washington Regional Homeland Security Coordination District IV

1 Overview

Amateur Radio has historically been, and will continue to be into the foreseeable future, a disaster-resilient mode of emergency communications which serves to both augment and backup the communications systems of other public service entities. FCC-licensed amateur radio emergency communications volunteers are organized to assist in public service and emergency/disaster communications. Depending on the jurisdiction, these resources may be part of the Radio Amateur Civil Emergency Service (RACES), the ARRL Amateur Radio Emergency Service (ARES), or another organizational structure approved by the local Emergency Manager (EM).

2 Purpose

The purpose of this document is to facilitate amateur radio emergency communications interoperability between the four counties in Washington Regional Homeland Security Coordination District (RHSCD) IV in order to provide mutual aid as necessary during emergency operations.



3 Scope

This agreement augments the Amateur Radio Emergency Communications Plans of Clark, Cowlitz, Skamania, and Wahkiakum counties, and is intended to bond the four counties as a cohesive entity in order to provide mutual aid and assistance during emergencies. The scope of this document includes both intra-region communications between the four counties, as well as inter-region communications with adjacent counties, RHSCDs, and ecoregions in both Washington and Oregon.

4 Responsibilities and Autonomy

- 4.1 Homeland Security Presidential Directive 5 (HSPD-5), "Management of Domestic Incidents," directed the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). HSPD-5 required adoption of NIMS as a condition for receiving federal preparedness assistance, so it has been widely implemented by local, tribal, and state organizations through executive order, regulation, proclamation, legislation, etc.
- 4.2 The Emergency Manager in each jurisdiction within Washington RHSCD IV is responsible for strategic planning and preparations for, and tactical responses to, emergencies where amateur radio emergency communications personnel are called upon to assist.
- 4.3 The amateur radio emergency communications leader in each Washington RHSCD IV jurisdiction is responsible for training of amateur radio personnel and for preparations for, and responses to, emergencies involving amateur radio resources in that jurisdiction.
- 4.4 The amateur radio emergency communications leader for all of Washington RHSCD IV is responsible for coordination of the interrelationships between jurisdictional emergency plans and between amateur

Amateur Radio Emergency Communications Interoperability Plan

radio communications networks.

- 4.5 Amateur radio emergency communications volunteers are required to meet minimum NIMS training requirements in order to participate in disaster response efforts at all levels of government. Each disaster communications volunteer must be certified as an "Emergency Worker" as defined under RCW 38.52.010(4).

5 Emergency Communications Categories

5.1 Routine Emergencies *(NIMS Type 4 and Type 5 incident complexity)*

This category includes localized emergencies where the need for supplemental communications is minimal. These emergencies could include, but are not limited to:

- chemical spill
- civil unrest
- drought
- hazardous materials release
- landslide
- minor flooding
- small wildfire
- thunderstorm
- transportation incident
- typical seasonal storm

Except when an emergency straddles a jurisdictional boundary, deployment of amateur radio resources from outside the affected area is unlikely.

5.2 Extraordinary Emergencies *(NIMS Type 2 and Type 3 incident complexity)*

This category includes multi-county and large single-jurisdiction emergencies where normal communications systems will be capable of up to 75% of normal capacity in affected areas.

These emergencies could include, but are not limited to:

- heat wave
- large wildfire
- nuclear / radiological exposure incident
- power outage (local)
- serious flooding / dam failure
- severe freezing
- severe storm

Supplemental amateur radio emergency communications resources may be needed for auxiliary command posts and until regular communications are restored. Depending on the quantity of communicators needed, deployment of amateur radio emergency communications resources from outside the affected jurisdiction(s) is possible.

5.3 Disaster Emergencies *(NIMS Type 1 and Type 2 incident complexity)*

This category includes major failures and overloading of the communications infrastructure, including the degradation or loss of the electrical grid, cellular phone network, Internet, public safety radio systems, and AM/FM radio systems. These emergencies could include, but are not limited to:

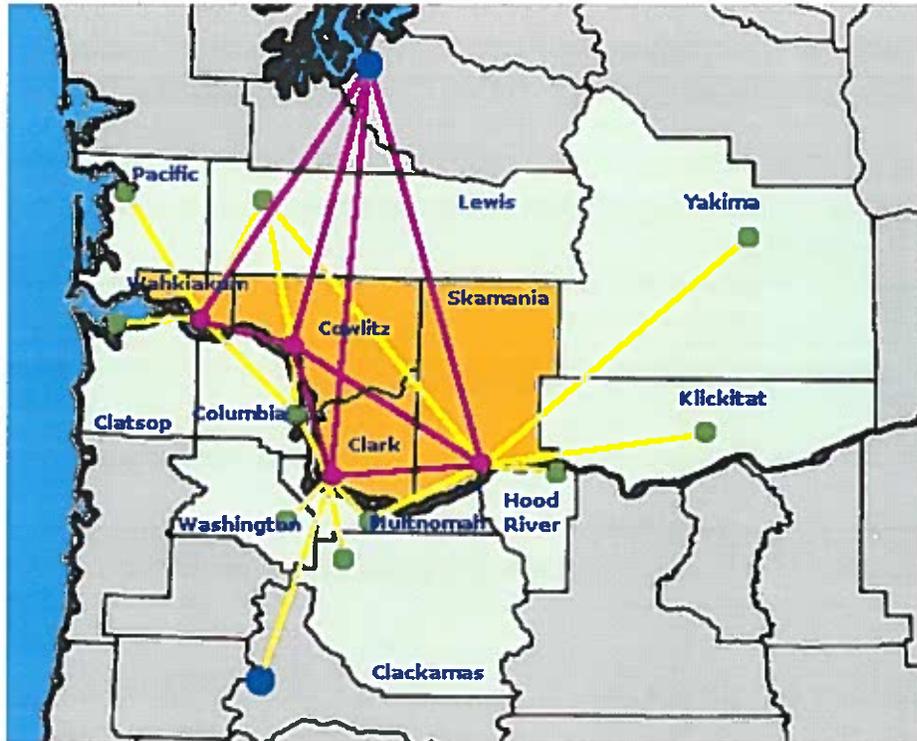
- earthquake
- large meteorite impact
- nuclear detonation
- power outage (regional)
- solar electromagnetic storm
- terrorism
- tornado
- tsunami
- volcanic eruption
- war

Supplemental amateur radio emergency communications resources will be needed in quantity and possibly for extended periods until regular communications are restored. Deployment of amateur radio emergency communications resources between jurisdictions within Washington

Amateur Radio Emergency Communications Interoperability Plan

RHSCD IV, as well as from other regions, is expected.

6 Washington RHSCD IV Communications Links



Washington RHSCD IV Counties, EOCs, and Communications Links

Key to diagram:

- Orange:** Washington RHSCD IV counties
- Light Magenta dots:** Emergency Operations Centers – Washington RHSCD IV
- Light Magenta lines:** Communications links – Washington RHSCD IV
- Blue dots:** Statewide Emergency Management communications centers
- Light Green:** Adjacent and ecoregion counties
- Green dots:** Emergency Operations Centers – adjoining RHSCDs (Oregon & Washington)
- Yellow lines:** Communications links – adjoining RHSCDs (Oregon & Washington)

7 Inter-Region Communications

7.1 Counties adjacent to Washington RHSCD IV (ARES District 4):

Washington	RHSCD	III	(ARES District 3):	Lewis, Pacific
Washington	RHSCD	VIII	(ARES District 8):	Klickitat, Yakima
Oregon	RHSCD	II	(ARES District 1):	Clatsop, Columbia, Multnomah
Oregon	RHSCD	IV	(ARES District 2):	Hood River

7.2 Non-adjacent nearby counties in the same ecoregion:

Oregon	RHSCD	II	(ARES District 1):	Clackamas, Washington
--------	-------	----	--------------------	-----------------------

8 Intra-Region Communications

- 8.1 Amateur radio resources are available for emergency communications support to any public service agency. Examples of deployment locations:
- Auxiliary Command Posts
 - Emergency Operations Centers
 - Emergency Shelters
 - Evacuation Sites
 - Fire Stations
 - Medical Facilities
 - Mobile Disaster Vehicles
 - Police Stations
 - Public Works Sites
 - Volunteer Intake Centers
- 8.2 Amateur radio emergency communications resources are also available for deployment to provide mobile links to:
- Create communications links between similar agencies across political boundaries, especially where there are mis-alignments in frequency bands and modes.
 - Establish communications in locations outside the existing coverage areas of public service and commercial communications systems.
 - “Shadow” critical public officials to facilitate constant and rapid contact.
 - Monitor crucial infrastructure (such as highways and bridges) and provide periodic situation reports.
 - Staff observation posts (river levels, flooding, damaged areas) and provide periodic situation reports.
- 8.3 In many areas, amateur radio emergency communicators may be able to provide both voice and digital communications modes.

9 Preparation for Emergencies

- 9.1 The Emergency Manager of each jurisdiction within Washington RHSCD IV is expected to coordinate the inclusion of amateur radio emergency communications resources into emergency exercises and drills conducted by public service agencies within their jurisdiction as appropriate.
- 9.2 The amateur radio emergency communications leader for all of Washington RHSCD IV plus the amateur radio emergency communications leaders in each Washington RHSCD IV jurisdiction are expected to work together to:
- Maintain this Amateur Radio Emergency Communications Interoperability Plan and related documentation.
 - Develop redundant amateur radio communications frequencies, modes, methods, and protocols to facilitate adequate and sustained intra-region and inter-region communications during emergencies affecting one or more jurisdictions within this region or a locale in an adjacent region.
 - Establish criteria for vetting of net control stations within Washington RHSCD IV.
 - Sustain a weekly Washington RHSCD IV communications net.
 - Maintain a Washington RHSCD IV amateur radio resources list.
 - Coordinate at least one Washington RHSCD IV training exercise per year.
 - Participate in state-wide exercises and drills as a cohesive entity.
- 9.3 In carrying out their responsibilities, amateur radio emergency communications leaders may recruit other amateur radio licensees to perform tasks such as radio propagation studies, identifying potential

Amateur Radio Emergency Communications Interoperability Plan

net control operators, conducting training, etc.

10 Net Control Stations

Each jurisdiction within Washington RHSCD IV shall recruit, secure, and train sufficient radio operators so that should the need arise, Net Control Station (NCS) operations can be sustained by any of the jurisdictions during any emergency. Vetting and approval of NCS facilities and operators shall be by consensus of the amateur radio emergency communications leaders in the Washington RHSCD IV jurisdictions.

11 EOC to EOC Communications

Amateur radio emergency communications personnel within Washington RHSCD IV shall participate in sufficient tests of communications between the Emergency Operations Centers (EOCs) in each jurisdiction, and backup EOCs, to ensure that the Intra-Region Communications frequencies and modes shown in Appendix C of this document remain functional.

12 State Communications Exercises

- 12.1 Washington RHSCD IV shall participate in state-wide communications drills and exercises with the Washington Department of Emergency Management. NCS operational duties shall rotate among the jurisdictions so that all NCS operators have the opportunity to keep their skill level current.
- 12.2 Each jurisdiction within Washington RHSCD IV is responsible for check-ins within its boundaries, to summarize the quantity of check-ins (in the format prescribed for that exercise), and to perform a single check-in with the Washington RHSCD IV communications net. Once jurisdiction check-ins are complete, the NCS will check into the state-wide emergency net with a summary (in the format prescribed for that exercise) of available Washington RHSCD IV resources.

13 Activation During Emergencies

- 13.1 NIMS and ICS (Incident Command System) compliance mandates that no emergency responder or non-governmental organization volunteers may “self deploy” to an incident. These protocols do not prevent early “stand by” alerts to volunteers, communications channels from being activated, and other readiness activities from taking place prior to an official activation from local authorities.
- 13.2 The Emergency Manager of each jurisdiction within Washington RHSCD IV is the key to initiating requests for FCC-licensed amateur radio emergency communications personnel during emergencies. These resources remain under the direction of the Emergency Manager in the jurisdiction where they are deployed.
- 13.3 While an official request for mutual aid resources is in process, it is desirable for the amateur radio emergency communications leader in the affected area to give a “heads up” notification to their counterpart(s) in the area(s) from which equipment and personnel resources are being sought, in order to minimize the response delay.
- 13.4 Nothing in the section prevents amateur radio emergency communications personnel from “standing by” with their radios during emergencies prior to official activation.

Amateur Radio Emergency Communications Interoperability Plan

14 Plan Visibility

The current version of this plan, as approved, shall be posted on the Internet, and each jurisdiction within Washington RHSCD IV is encouraged to create a link to it.

15 Annual Review

This plan shall be reviewed by Washington RHSCD IV Emergency Managers and amateur radio emergency communications leaders on at least an annual basis.

16 References

This section of the United States Code, as published and as amended in the future, is made part of this document:

- Title 47, Chapter 5, Subchapter VI, §606 – War powers of President
<http://www.gpo.gov/fdsys/pkg/USCODE-2013-title47/pdf/USCODE-2013-title47-chap5-subchapVI-sec609.pdf>

These sections of the (United States) Code of Federal Regulations, as published and as amended in the future, are made part of this document:

- Title 47, Chapter I, §97.407 – Radio Amateur Civil Emergency Service
<http://www.gpo.gov/fdsys/pkg/CFR-2014-title47-vol5/pdf/CFR-2014-title47-vol5-sec97-407.pdf>
- Title 47, Chapter II, §214 – Use and Coordination of the Radio Spectrum During a Wartime Emergency
<http://www.gpo.gov/fdsys/pkg/CFR-2014-title47-vol5/pdf/CFR-2014-title47-vol5-part214.pdf>

This document from the State of Washington Emergency Management Division, as published and as amended in the future, is made part of this plan:

- Washington State Comprehensive Emergency Management Plan, Emergency Support Functions (ESF) 2, Appendix 2, Tab D
http://mil.wa.gov/uploads/pdf/PLANS/races_plan.doc

Document Revision History:

1.0 7 December 2011: *adopted.*

1.1 13 May 2015: *adopted.*

Global updates: converted the "EmComm" acronym to "emergency communications" and created a new Activation Checklist appendix.

Section 4: added references to HSPD-5 and Washington State Emergency Worker certification.

Section 5: inserted cross-references to NIMS incident complexity types and enhanced emergency/disaster examples.

Section 8: added content about digital communications modes and enhanced deployment examples.

Section 13: added "self deployment" caution.

Section 16: updated URLs of federal code and Washington CEMP publications.

Agreement by Region IV / District 4 Counties

Clark County



Scott Johnson, Emergency Manager
date: 14 May 2015

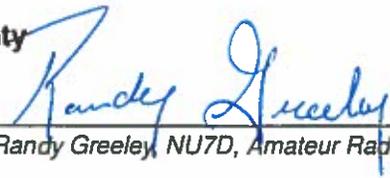


John Gainsborough, KM7LJ, Amateur Radio leader
date: 31 May 2015

Cowlitz County



Ernie Schnabler, KB7YPU, Emergency Manager
date: 14 May 2015

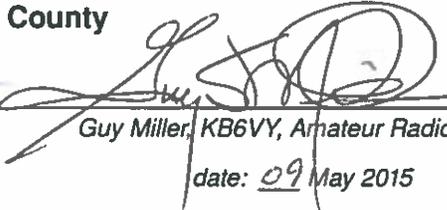


Randy Greeley, NU7D, Amateur Radio leader
date: May 2015

Skamania County



Dave Brown, KF7HTQ, Sheriff, DEM Director
date: 07 May 2015



Guy Miller, KB6VY, Amateur Radio leader
date: 09 May 2015

Wahkiakum County



Beau Renfro, Emergency Manager
date: 21 May 2015



Kevin Maki, KE7WFO, Amateur Radio leader
date: 21 May 2015

The signatories to this plan acknowledge that any URLs contained herein, and the appendices to this document, may be updated to keep them technically current without need for an additional approval process.

