



EXECUTIVE SUMMARY

On October 29th and 30th of 2024 the State of Oregon conducted an exercise called IronOR 24. The simulated scenario the State was responding to was a Cascadia Subduction Zone Earthquake. The exercise focused on establishing redundant communication systems and ensuring operational coordination. IronOR 24 was built on the 2016 Cascadia Rising exercise, which simulated the immediate response to a Cascadia Subduction Zone Earthquake.

The members of Central Oregon Amateur Radio Emergency Communications Team (COARECT) participated in this Statewide drill to evaluate and enhance their operational preparedness. COARECT objectives during this exercise built upon and expanded on previous SET's conduct by COARECT and included the following: allow local operators, remote stations, to participate by checking into COARECT control point; Improve familiarization with the Mobile Interagency Communications Unit (MICU); test communication connectivity between COARECT's control point and Deschutes County Emergency Management; practice passing traffic from the COARECT control point to Deschutes County Emergency Management; improve Net Controllers familiarity with the communications equipment in the MICU.

Deschutes County Emergency Management objectives were to: evaluate communication connectivity between areas within their sphere of control; evaluate their ability to assimilate information provided by La Pine, Sisters, Redmond and Bend; to transmit that information on to Oregon Emergency Management; and respond to any injects transmitted by Oregon Emergency Management.

Remote stations began check-in with COARECT control point at 11:45 am. Due to no injects from Deschutes County remote stations were released at 2:15 pm. Operators at COARECT control point kept operating, transmitting information to Deschutes County Emergency Management. With the approval of Deschutes County Emergency Management, COARECT control point station was shut down at 4:45 pm.

Bottom Line

A-WHAT WAS THE PURPOSE?

1. To familiarize team members with the basic operations necessary in the event of an emergency call-out.
2. To provide a basic understanding of individual radios and repeaters in the area.
3. To determine an individual's coverage on simplex frequencies.
4. To allow net controllers to practice and hone their skills in handling traffic.
5. Ensure effective oversight of the SET occurred.
6. To test and evaluate communication connectivity, both voice and digital between COARECT and Deschutes County Emergency Management.



B-WHAT WENT WELL?

1. Remote stations gained experience in checking in on simplex frequencies, providing Lat/Lon and awaiting further instructions.
2. There was effective use of COARECT relay stations to ensure distant stations could communicate with COARECT Control Point.
3. Effective transfer of information between Net Operator taking check-ins and the COARECT Control Point (Mobile Interagency Communications Unit).
4. COARECT Control Point after numerous tries on differing frequencies was able to transmit, digitally, Vara HF reports to Deschutes County Emergency Management.
5. While not optimum, voice communication was maintained with Deschutes County Emergency Management via cellphone.
6. Received confirmation from OEM of information transmitted to Deschutes County Emergency Management.
7. Appropriate ICS and other Winlink forms were used effectively by COARECT Control Point staff.
8. Good participation by members: 13 remote station check-ins and 5 personnel working at the COARECT control point (MICU).
9. La Pine and Sunriver were successfully grided out for reporting purposes. This included Sunriver and Water Wonderland, La Pine sectioned into N/S at State Park and E/W at Huntington.

C-WHAT COULD HAVE GONE BETTER?

1. Improve availability and reliability of voice communications between COARECT and Deschutes County Emergency management.
2. Improve digital connectivity between COARECT and Deschutes County Emergency Management.
3. Deschutes County could have provided injects to improve exercise realism.
4. Need for all COARECT members to have a general understanding and working knowledge of Winlink as well as other digital modes used by the County or State.
5. Develop and utilize other ICS and local forms for message handling and operations. Previously unknown distribution limits, such as Inability to cc.
6. Limited time to plan for the exercise
7. SET operations to include a written communications plan (ICS 205) both at the regional and local level. Such plans should evaluate current ECOM resources and should be distributed to Net Controllers at a minimum.
8. Continue efforts to increase the number of personnel who are willing to participate in future SET's and/or ECOM activities.
9. Ensure all stations are using the correct Lat/Lon format when checking in.



C-WHAT COULD
HAVE GONE
BETTER?

10. Ensure a strong IC is appointed for each exercise.
11. Ensure enough personnel have a working knowledge of the MICU's equipment.
12. Evaluate the number of radio frequencies in the MICU and provide a method for easy frequency identification.
13. Need for additional remote operators east of Huntington Rd.

D-WHAT
SHOULD BE
CHANGED GOING
FORWARD?

Communication Connectivity COARECT And Deschutes County Emergency Management

1. Improve voice communication

VHF/UHF - Take steps to improve use of Spring Butte repeater (146.640), and use of the Mt Bachelor repeater (145.450) as a backup. May require relocation or additional antennas at Deschutes County facilities. Another option would be to setup a mobile repeater to improve communication.

HF - Identify primary and alternate frequencies to minimize competing traffic and would be effective based on the time of day/night. Experiment with different types of antennas, including NVIS type antennas on 40/80 meters.

2. Improve digital communication

VHF/UHF - Steps taken to improve voice, relocation and/or raising the antenna may solve this issue as well. If not, then when possible, use a directional antenna. Identify VARA/packet nodes or gateways equipped with emergency power.

HF - Apply some of the same proposals for HF - voice.

NOTE: Recommend Deschutes County Emergency Management direct AUXCOMM to consider appointing a technical committee to address communication issues throughout Deschutes County and develop short and long-term proposals to improve overall communication.

Training

1. Provide introductory training for all digital modes and winlink used by OEM.
2. Conduct regular SETs or ECOM exercises. With increasing complexity as well as working with other agencies.
3. Provide an introductory class on message handling.
4. Continued participation in Regional, Statewide, and National SETs.
5. Increased training opportunities on the MICU and accompanying equipment.
6. Provide ICS classes necessary to ensure effective operation, during an exercise and/or emergency.



D-WHAT
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FORWARD?

MICU Setup

1. Complete of SOG's which will outline the steps of operation for each piece of equipment on the MICU.
2. Maintain current membership roster with Lat/Lon for each member's residence, in proper format acceptable to the State.
3. Evaluate programmed radio frequencies and prioritize their use and placement. Those not routinely used move to another memory bank if possible. Identify frequencies with common recognizable characters. Maintain a hardcopy list of programmed radio frequencies readily available.
4. Maintain and store a hardcopy of all commonly used State and Regional incident forms.
5. Provide collapsing masts for HF antennas
6. Evaluate and expand, where necessary and feasible, the MICU's equipment.

D-WHAT
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FORWARD?

SET Operational Package

1. Incorporate post SET comments from membership in SETs going forward.
2. Continue earlier distribution of SET instructions to allow for questions/clarifications.
3. Provide face-to-face training on any upcoming SET.
4. Deschutes County EM is working on the ability to complete forms off-line and transfer completed forms to radio operators using memory sticks.

SET Planning Committee

1. Get instructions and information on local, regional, State and National SETs to the membership in a timely manner.
2. Get ideas from different experience level/perspectives and share the planning load.
3. Review past SET and develop AAR.
4. Announcement of upcoming SETs on daily rag chew, Thursday La Pine LAN net and Facebook page.

Coordination With Other Agencies to Enhance Operations



D-WHAT
SHOULD BE
CHANGED GOING
FORWARD?

1. Work with Deschutes County Emergency Management through AUXCOMM to improve communication connectivity.
2. Enhance partnerships with La Pine Fire, Walker Range as well as other affiliated emergency agencies to improve and coordinate communication activities.
3. Work with South County facilities manager to install a tower/antennas.

Communications Log (ICS 309)

1. INCIDENT NAME IRON OR - 24			2 OPERATIONAL PERIOD From: Date 10/31/24 Time 2:45 pm To: Date 10/31/24 Time 2:15 pm		
3. RADIO NETWORK NAME			4. RADIO OPERATOR (Name, Call Sign) CR Vaniman (WB7PSE)		
5. COMMUNICATIONS LOG					
Time (24:00)	FROM		TO		Message
	Call Sign/ID	Msg #	Call Sign/ID	Msg #	
12:45	KK7APE		JEFF		
{	KJ7ZNH		ED		
	N6DFW		BEV		
	KI7VUL		BOB		
	WB7RVX		WAYNE		
	KK7KGN		MARK		
	KK7ROG		TAMARA		
	KK7NBO		MIKE		
	NC7CH		CLIFF		
	KD7WRQ		EVIE		
	KK7MKQ		ALLAN		
	AA1JW		JUNE		
					RELAY STATIONS DROPPED OUT - UNABLE TO COPY
					MOBILE @ TIME OF CHECK-IN
					ASSETS RELEASED AT 2:15 PM.
					MOBILE INTERAGENCY COMMUNICATIONS UNIT (MICU)
	W2JST		JEFF		
	KK7JEW		DOM		
	KK7AED		CYNTHIA		
	KK7EYI		TOMY		
	WB7PSE		CLIFF		
					MICU ASSETS RELEASED AT 4:45 PM BY DESCHUTES COUNTY EMERGENCY MANAGEMENT
6. PREPARED BY (Name, Position)			SIGNATURE		7. DATE & TIME