

# ARES News



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## The ARES E-Letter

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Editor: Rick Palm, K1CE <k1ce@arrl.net>

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ARES Briefs, Links

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<<http://www.arrl.org/news/hams-support-air-force-marathon>>  
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Putting Contesting to Work for Your Public Service Team

<<http://www.arrl.org/news/putting-contesting-to-work-for-your-public-service-team>>

(10/30/2015); Amateur Radio to Have a Presence at National Tribal

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<<http://www.arrl.org/news/amateur-radio-to-have-a-presence-at-national-tribal-assistance-coordination-group-workshop>>

(10/27/2015); National Emergency Net Active as Category 5 Hurricane

Patricia Nears Mexico

<<http://www.arrl.org/news/national-emergency-net-active-as-category-5-hurricane-patricia-nears-mexico>>

(10/23/2015); Radio Amateurs in Mexico Prepare as Powerful Hurricane

Patricia Nears Landfall

<<http://www.arrl.org/news/radio-amateurs-in-mexico-prepare-as-powerful-hurricane-patricia-nears-landfall>>

(10/23/2015); Amateur Radio Was Part of Typhoon Koppu Response in the

Philippines

<<http://www.arrl.org/news/amateur-radio-was-part-of-typhoon-koppu-response-in-the-philippines>>

(10/19/2015)

==> OREGON 2015 QUAKEEX SETS: A RECAP

Next spring, FEMA Region X

<<http://www.fema.gov/region-x-ak-id-or-wa>>, county emergency management agencies statewide, many others and Oregon

ARES/RACES will participate in the FEMA Cascadia Rising exercise

<<http://www.emergencymgmt.com/emergency-blogs/disaster-zone/csxexercise2016cascadiarising.html>>.

This is a functional exercise that will play out what might happen

should/when a major earthquake strike the Pacific Northwest. The drill

scenario anticipates widespread loss of normal communication modes such

as cell phones, Internet and public safety radio as well as

major power  
outages.

To prepare for Cascadia Rising, Oregon ARES/RACES conducted two statewide simulated emergency tests (SETs) patterned after the FEMA scenario playbook. The spring 2015 SET involved 24 counties, four cities, ten hospitals, about 300 ARES/ACS/other volunteers and moved about 1,700 messages to various addresses (mostly by HF Winlink Pactor) during the six hour SET. All traffic went by simplex VHF (no repeaters), HF SSB and HF Winlink Pactor to out of state gateways. All of this was done from within state/county/city EOCs statewide. The fall 2015 SET played the same scenario but mostly from the field on generators/batteries and in stormy weather. The November SET involved 16 counties and about 250 volunteers.

The differences between the two SETs were striking, proving that operating from the field, Field Day style, is far more challenging. During high winds and heavy rain, HF antennas were blown down, tents were flooded and operators got uncomfortable. We discovered that under field conditions with no Internet, if you haven't updated your modem firmware lately or obtained your Winlink password, you are off the air. Repairing broken HF wire antennas in the wind and rain means that you hope you have that backup antenna! And if the generator won't start you have no power. If your people aren't trained or prepared for contingencies, these problems just seem to multiply.

We've learned that as much as you might think you are "ready" to go into the field in a major disaster like a magnitude 9 earthquake, it takes constant preparation and training to be truly "ready." Those that have participated in Oregon's Quake EX SETs have learned a lot and have a lot more work to do. It was a realistic training experience. More information is available on-line at Oregon ARES/RACES <<http://www.oregonaresraces.org>> on the Cascadia Rising and SET pages.  
-- John Core, KX7YT, Oregon ARES/RACES SET Coordinator, KX7YT@arrl.net

==> MAINTAIN A STRICT LISTENING WATCH

"We have two ears and one mouth and they are to be used in proportion."  
- anonymous. In the days where every ship of credibility carried a Morse code set, the radio operator was required to maintain radio silence on the international distress frequency of 500 KHz for a three minute interval, at 15 and 45 minutes of every hour. As radiotelephone came into being a 3 minute watch was maintained at 0 and 30 minutes. If the disaster your vessel encountered fit within the 30 minute schedule, your weak, plaintive CQD (later, SOS) had a good chance of being heard amidst all the commercial traffic and noise.

Today, satellite communications systems have forced these "antiquated" structures into retirement, but not entirely. A few years ago I enjoyed a tour of a huge container ship at Boston Harbor. After

pleasantries

with the Captain I asked for permission to meet his Radio Officer. "Our

Engineer holds that title," he told me, "but in reality," with the

Captain putting his hands on a piece of satellite gear, "this is our

Radio Officer." Paying deference to the captain and the high tech gear,

I then headed straight for the radio room - thankfully they still had

one -- and was warmly greeted by a middle-aged man of professional

bearing in full white uniform. There, in a large space, were three

racks, each with a high powered HF transmitter. The wise officer

revealed his best-kept secret to safety: "Should we be going down," he

said, opening a small desk drawer, "I'm using this." A rather sturdy

Morse hand key was revealed, and there began an understanding between

us. "The satellites don't talk back," he told me. "This does."

### Quiet Periods, Listening Watches and Amateur Radio

He knew about the quiet periods and listening watches of old and the

stories of lives lost and saved. He also knew that the necessity of

maintaining a strict listening watch has not been lost to time and

technology. In fact, it's a greater necessity than we may have considered in our own Amateur Radio service. The very first Amateur

Radio public service event I was responsible to organize included this

concept. "Let's keep an ear on the radio, so we might be less tied up

with getting your attention and have more time to pass actual

traffic."

Time and experience reveals that other problems such as the limitations of newer digital modes are mitigated by the maintenance of the strict listening watch.

My local club, the Police Amateur Radio Team [<http://www.wblgof.org/>](http://www.wblgof.org/) (PART) of Westford, Massachusetts, operates a 2-meter analog repeater that is a fantastic performer. It's reliable. It has a wide reach. It is well maintained. Still, there are instances where the combination of interference, distance from the repeater site, and operator technique combine adversely.

The Boston Athletic Association Boston Marathon [<http://www.baa.org/>](http://www.baa.org/) communications system offers excellent fodder for study. With almost 300 communications volunteers and a few dozen unique repeaters and other radio-communication systems all pressed to the limit within a very short time span, anything and everything that can go wrong generally does go wrong. I have, as a volunteer (this is my 15th year), listened in pain to dreadfully long attempts at getting a simple message between two units, which generally begin with several unanswered calls, adding to the mess. In 2015, in a leadership capacity, I targeted the only variables within our immediate control: the operator on both ends of the circuit. Maintaining a strict listening watch became a mantra, and it will continue as long as we hold a radio in one hand and a cup of coffee in the other.

At a public service event many of us clip our radio to the belt. Body fading, the same physical phenomena that aids us in Fox Hunting, attenuates what's coming in and of course what goes out. I now encourage my Net Control Operators (NCO) to request that field units "raise the radio over your head and try again" in the first instance where that unit is unreadable. This solves the input problem in almost all cases. With sufficient practice, it's hoped that awareness will spread, and the reminders be made obsolete.

The output problem - the ability to receive the repeater output in the field - is rarely that the (stronger) repeater transmission cannot be heard. It's simply that the operator is not focused, not listening for the call. The operator is chatting with friends, tired and glazed, or listening to other communications. One volunteer insisted that he bring along another radio so he might "listen in on public safety." "That's nice," I replied, "but it's not in our job description." I feared that, while lost to more exciting radio banter, my volunteer would lose awareness - of our situation and responsibility -- so necessary to maintain. I was right. He was often difficult to reach and generally ineffective. Hopefully it was a lesson learned.

Sure, our work can sometimes involve simply waiting for that one call, and this can be boring. But think of how interesting we can make our

listening watch when we form a picture in our mind of what's happening at the event overall, and what has happened in the past, to grasp that we perform a life or death function. 100% focus on our duty and assignment is critical to our "client" event officials being able to secure the public's safety as best they can, at the rest stop, intersection, or Red Cross facility to which we are assigned.

Maintaining that strict listening watch repeatedly overcomes the limitations inherent in our technical communications method, promotes situational awareness, improves our effectiveness to the teams we support, and in the end is a discipline that keeps us focused on the reason we're standing underneath that silly orange hat in the first place: to provide instant, reliable communications.

So maintain that strict listening watch. Your performance and overall satisfaction, and public safety at the next public service event will be all the better for it. -- Mark Richards, K1MGY [Richards serves as a member of the Boston Athletic Association Communications Committee, and is a frequent public service event volunteer and organizer. He is employed in the technical design and product development of hand-held environmental monitoring instrumentation].

==> TYPHOON! -- A LESSON IN PACIFIC ISLAND DISASTER RELIEF

With a population of 103,000, the Federated States of Micronesia



<http://www.visit-micronesia.fm/index.html> (FSM) in the Pacific is comprised of four states -- Pohnpei, Kosrae, Chuuk and Yap. There are more than 600 islands, spanning 1800 miles from east to west and several hundred miles north to south. On the night of March 31, 2015, super typhoon Maysak [https://en.wikipedia.org/wiki/Typhoon\\_Maysak\\_\(2015\)](https://en.wikipedia.org/wiki/Typhoon_Maysak_(2015)) struck Ulithi Atoll in Yap State. With winds of more than 160 mph and gusts greater than 210 mph, Maysak was a Category 5 storm. A major storm surge resulted and on most islands, infrastructure including schools, homes, power and communication systems, suffered major damage or were destroyed completely. No fatalities occurred on Ulithi.

I have a home there (on Falalop Island) and my job is to develop computer systems for schools. I also teach technology to the schools' students and train their teachers. I also provide humanitarian services with the help of our local radio club, the Big Island Amateur Radio Club <http://www.biarc.net/>. I was off the island when the typhoon hit, but was ticketed to fly home on April 10 - my mission upon arrival would be disaster relief.

I packed communications equipment, emergency power sources, antennas, tools, spare parts, survival equipment, and enough emergency food for my adopted family of 14 (including ten hungry high school students from Satawal Island) for a period of five weeks. Some of the

supplies were shipped to Yap just before I left Hilo, Hawaii, but 11 bags had to be taken on the plane. (Hawaiian Airlines waived all excess baggage fees). There were some customs hang-ups to be dealt with.

My house survived, but power lines were down and the diesel generator power house was partially destroyed. The International Office of Migration (IOM) loaned me two 60 amp/hour batteries and gave me a ride to my home. Richard Darling, AH7G, and Barbara Darling, NH7FY, had provided funding for a Renogy 100 watt suitcase folding solar panel, inverter, battery pack, and toolbox. By morning, I had set up the batteries and solar power systems, and an Icom IC-718 HF transceiver. Fiberglass masts and antennas were erected. I then contacted Richard Darling, AH7G, and William Radolfethg, V63YWR, as scheduled, with good propagation and signals. We ultimately conducted 35 health-and-welfare phone patches from Falalop, Ulithi, and another 38 patches from Federai back to Hawaii and beyond.

ARRL Pacific Section Manager Bob Schneider, AH6J, procured an ARRL HF Go Kit from ARRL HQ to be set up as a secondary station at the dispensary. The kit contained four VHF hand-held radios, which proved useful for local communications.

Falalop Island was devastated, with vegetation gone, including food plants. There was no shade. Our household had only 48 hours'

supply of  
potable water. Much of the water catchment systems on the  
island were  
destroyed. In many cases, remaining standing water was  
contaminated and  
amoebic dysentery became a problem. The water problem was  
solved when  
IOM set up a desalinization plant. Water was then transported  
to the  
people by wheelbarrow or by whatever containers could be  
found. Relief  
food and supplies started to arrive from Guam.

Many had no houses left and the houses that remained had no  
roofs. The  
United States Agency for International Development  
<<https://www.usaid.gov/>> (USAID) sent tarps for temporary  
roofs. Most  
of the island's HF, SSB and VHF communications were down for  
an  
extended period -- there was no power and most of the antennas  
were  
destroyed. We got the dispensary's VHF communication systems  
up and  
running again with emergency repairs on its antenna.

### Insult to Injury

On Monday, May 4, tropical storm Noul hit us, and the next  
morning it  
hit the rest of Yap as a full category 1 typhoon. Our 20-meter  
vertical  
was blown almost horizontal, but continued to hang in there.  
During  
this storm, we remained in communication with Darling,  
Radolfetheg, and  
Ray Gibson, KH2GUM on Guam. Granola bars were the food of the  
day.  
Between 8 pm and 10 pm that night our dining hut with my  
antenna still  
attached finally blew away. The next day, after the storm had

blown by,  
we gathered all of the pieces of the hut and rebuilt it. The  
vertical  
antenna and mast had survived but the radials had broken.  
After more  
work, everything was repaired and we were back up on the air.  
Unfortunately, all of the USAID tarps on the roofs had blown  
down so we  
were back to square one with no roofs to protect many of us. A  
week  
later, typhoon Dolphin came along, but thankfully it missed us  
on  
Ulithi by a few hundred miles. It did hit Guam.

I was then tasked by the Yap State Department of Education to  
assist in  
rebuilding and restarting the schools that had been destroyed.  
All of  
these buildings were constructed with concrete!

### The Value of Amateur Radio

There were two amateurs on Federai Island: William  
Radolfetheg, V63YWR  
and Albert Haped, V63YAH. Richard Darling, AH7G, Ray Gibson,  
KH2GUM,  
and I were in communications with Federai every evening as the  
storm  
approached. We remained in communications until four hours  
before the  
storm made landfall. As a result, the Federai community took  
our  
warnings very seriously and was well prepared: Roofs were tied  
down  
with large ropes, school computers were stored in the new  
dispensary,  
and families with children were sheltered in the dispensary  
building.  
While Federai also had a lot of storm damage, they fared much  
better  
than the other islands. The point is that Amateur Radio

communications

can be even more valuable in advance of and leading into a disaster

like this where there is time for preparations to be made.

Amateur

Radio communications in remote locales like this is more effective and

efficient than all other communication systems -- both before and after

the onset of the effects of the disaster. The health-and-welfare phone

patches alone were of great humanitarian value.

A technical note on antennas: the elevated ground plane antenna with

resonant radials performs very well. It's an inexpensive, effective,

efficient antenna, easy to transport, and easy to assemble. It is more

resilient than other antennas.

See the V63JB page <<https://www.qrz.com/v63jb>> on QRZ.com for photos

and more information on typhoon responses. -- John Bush, KH6DLK/V63JB;

and Bob Schneider, AH6J, ARRL Pacific Section Manager [Bush is the 2012

ARRL International Humanitarian Award

<<http://www.arrl.org/international-humanitarian-award>> winner - ed.]

==> AMATEUR RADIO CLUB HELPS PROMOTE DIABETES AWARENESS

Members of the University of Mississippi Amateur Radio Club

<<http://www.w5ums.org/>> (UMARC) provided on-course communications for

the annual Walk For Diabetes held in Oxford on Sunday, November 8. The

walk, sponsored by the Diabetes Foundation of Mississippi, began at the

Lyceum Loop on the university campus and continued to the

downtown area  
before returning to the Lyceum.

UMARC members took up positions at rest stops and key junctions, calling in status reports on the progress of the more than 150 walkers via the club repeater located on the campus.

The Diabetes Foundation of Mississippi <https://www.msdiabetes.org/> conducts these and similar events to raise awareness of diabetes and raise financial support in helping them provide care for Mississippians who have diabetes.

Sarah Abraham, Program Coordinator, made the request to UMARC for supporting the event. A number of walkers assembled in groups, each distinguished by colorful tee shirts showing their support for a loved one who has diabetes. All who finished the walk received a medal to wear and most got a tee shirt promoting diabetes awareness.

Located on the university grounds, UMARC operates with station call sign W5UMS. Members provide similar coverage for other local events such as the annual Double-Decker Fun Run and anticipate a continued partnership with the Diabetes Foundation of Mississippi. -- Ron Lefebvre, W1IBL, President, University of Mississippi Amateur Radio Club

==> VETERANS' DAY MONTH: HDSCS LOSES ONE OF ITS OWN

On November 6, the ARES-affiliated Hospital Disaster Support Communications System <<http://www.hdscs.org/>>, Orange County, California, lost member Roman Kamienski, KG6QMZ, a Lt. Colonel in the Army Reserves and active Army MARS operator. He was remembered in a military memorial service complete with flag presentation to his wife and a 21 gun salute. Only 56, he died of complications from a ruptured cerebral aneurysm. During Roman's 12 years with HDSCS he participated in almost every major drill. He also communicated in some actual emergencies, including a 2004 phone failure caused by a power interruption at an Anaheim Hospital. In 2005 he was on site for a standby operation during phone work at St. Jude Hospital in Fullerton, which then turned into an all-night emergency when the system did not come back on line. In addition to a display of his military certificates and medals, including the Army Commendation Medal with Oak Leaf cluster for distinguished achievement presented in 2007, Roman's wife added his HDSCS blue vest, name badge, certificates related to HDSCS service and an HDSCS commemorative challenge coin numbered 73. We were honored to have had him in HDSCS as a communicator and antenna team member. - April Moell, WA60PS, District Emergency Coordinator, Amateur Radio Emergency Service; Hospital Disaster Support Communications System, Orange County, California

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