



# THE OHM TOWN NEWS

*Voice of the Bridgerland Amateur Radio Club*

>>>>>>> <http://www.barconline.org> <<<<<<<<

## April 2016

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# PRESIDENT'S MESSAGE

April showers (and sometime a bunch of snow) bring May flowers, as the saying goes. A weather forecast can give us some advance warning about the severity of an upcoming storm. But what about something where there is no advanced warning about its severity, only past history of the events? We live in a region that has earthquakes and these have no advanced warning when they are going to happen. An earthquake might not be felt or it could be the big one which would cause major damage. How do we protect ourselves in an earthquake?

April is the month for the [Great ShakeOut Earthquake Drill in Utah](#) that helps us know how to protect ourselves during earthquakes. The ShakeOut drill began in California and has also been organized in many other states and countries. Official ShakeOut Regions requires significant local or regional coordination, typically by emergency management agency or an alliance of many organizations. You could be anywhere when an earthquake strikes: at home, at work, at school, or even on vacation. The Great ShakeOut earthquake drills are an opportunity to practice how to be safer during earthquakes. ShakeOut also has been organized to encourage you, your community, your school, or your organization to update emergency plans and supplies, and to secure your space in order to prevent damage and injuries.

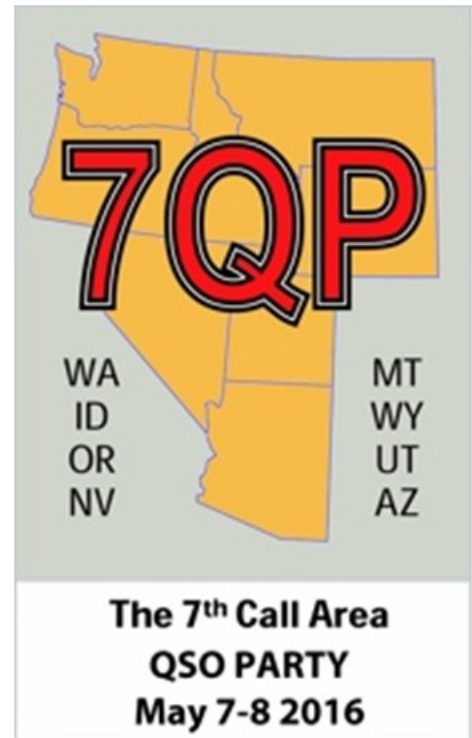
[Be Ready Utah](#) is the State of Utah's official emergency preparedness campaign managed by the Division of Homeland Security. It's designed as a bottom-up approach for preparedness with the focus on every individual's personal responsibility in preparedness first. The web site provides valuable information for individuals and families, communities, and others on how to get started with simple, basic steps to preparedness.

Next month on May 7<sup>th</sup>, BARC will be participating in the 7<sup>th</sup> Call Area QSO Party (7QP). This is a state QSO party involving the 7<sup>th</sup> call area states that are Washington, Idaho, Oregon, Nevada, Montana, Wyoming, Utah, and Arizona.

The 7QP contest is where 7<sup>th</sup> call area stations try to work as many stations within the 7<sup>th</sup> call area, the rest of US, Canada, and the world over an 18-hour period commencing at 1300 UTC (7AM MDT). There are 259 counties in the 7<sup>th</sup> call area and each county may be active with a fixed, portable, and/or a mobile station. Stations that are in the 7<sup>th</sup> call area give a signal report and a 5-letter state/county code. Non 7<sup>th</sup> area stations give a signal report with their state/province/"DX" two-letter code. More information on 7QP is at [www.7QP.org](http://www.7QP.org). Also, the Indiana QSO Party and New England QSO Party are happening the same weekend, and those stations will be giving their appropriate exchange. It is fun to see what counties, states, and DX stations that can be contacted.

If you would like to try working an HF contest, making some contacts, learn how to use contest logging software, or just watch and listen to a contest, we will be at the club ham shack in the Engineering Lab Building room EL224 on the USU campus from 7 AM to about Midnight. Drop by and we will get you involved with whatever you would like to do. Those who would like to meet for breakfast before the contest starts, we will be at Angie's at 5:45 AM.

73,  
Cordell  
KE7IK



# UPCOMING 2016 ACTIVITIES

- 09** April 10 AM **BARC Club Meeting- Presentation: Intermountain Intertie**
- 13** April, 7:30 PM — **ARRL Rocky Mountain Division Net**  
147.200/IRLP Node: 9871
- 16** April, 8 AM-5 PM—**One Day Ham Class General Class License**—including VEC License **Test Session @** USU Eng. Bld (NEW) Rm 302 ([More Info](#))
- 16** April, Sheridan Swapfest (Sheridan, WY) ([More Info](#))
- 19** April, 6:30 - 8:00PM — **Elmer Night** - Cache County Sheriff's Office
- 20** April, 7:00 PM — Cache County **ARES meeting** at the Sheriff's Office
- 21** April, 8:00 PM - **RACES VHF Net** 147.180 Snowbird 147.20 IRLP 146.72 Mt. Logan
- 07** May, 7:00 AM — **7th Area QSO Party** (see presidents message on [page 2](#))
- 11** May, 7:30 PM — **ARRL Rocky Mountain Division Net**  
147.200/IRLP Node: 9871
- 14** May, 10 AM — **BARC Club Meeting - Summer Activities Presentation**
- 18** May, 7:00 PM — Cache County **ARES meeting** at the Sheriff's Office
- 21** May, 8:00 AM — **RACES HF Net** 3920 KHz
- 02** June, 7:00 PM—VEC License **Test Session @** USU Eng. Bld (NEW) Rm 302

For more calendar information see the [barconline.org/calendar](http://barconline.org/calendar)

## Local Radio Nets:

The **Weekly BARC net** is for BARC members and anyone else that would like to check in, held **every Tuesday night at 9:00 p.m.** local time on the Mt Logan BARC Repeater and Linked Systems (146.720)

The **BARC Ladies Net** is every **2nd and 4th Tuesday at 8:00 p.m.** on the BARC Repeater and Linked Systems (146.720). All licensed lady amateur radio operators are welcome to check in.

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**BARC Club Meetings** are normally on the 2nd Saturday of the month at 10:00 A.M. on the 3rd floor of the Cache County Sheriffs Complex on 200 North and 1225 West, Logan, Utah.

**On Saturday, March 5, 2016 at the BARC sponsored an exam session.**

**The following individuals earned a Technician License:**

Teri Anderson – KI7CKQ  
Terrell Olsen – KI7CKP  
Jessie Richardson – KI7CKO  
Sid Titensor – KI7CKN

**The following individual passed both the Technician and General Exams:**

Corey Haun – KI7CKR

**The following upgraded to an Extra License:**

Robert Hendrickson – KG7LBO  
Alan Maughan – N7NAM  
Nathan Crapo – KG7ZUM (Passed General and Extra Exams)  
Andrew Titensor – KG7RCP  
Cameron Dockstader – K7CDD

Here is a summary of the number of exams given and new licenses earned at this session:

Technician License Exams Given:	8	New Technician Licenses Earned:	4
General License Exams Given:	8	New General Licenses Earned:	1
Extra License Exams Given:	5	New Extra Licenses Earned:	5
Number of Exams Given:	21	Number of New Licenses Earned:	10

Number of People Served: 15

Welcome to the Bridgerland Amateur Radio Club to those that earned their first Amateur Radio license on March 5<sup>th</sup>, and congratulations to all that earned a Technician, General or Extra license.

A big thank you to all the VEs and other club members that helped with the exam session.

Richard Elwood  
KE7GYD  
VE Liaison

# What do we do, the repeater's down!?

Last Tuesday (3/22) the Mt. Logan repeater went down for about 20 minutes and right now as of this writing it is down also. The reason? Complete power failure on the site.

So, the question has come up, The repeater's down. Now what do we do?

The BARC Tuesday night net preamble says:

” The series of three tones you just heard indicates that a net or an emergency situation is in progress. Should you hear these tones, please stay on frequency and check in with net control. If you hear no traffic within a couple of minutes, call for the net control operator on this frequency or the 147.200 repeater.”

But this scenario covers an emergency situation that the repeater is still up and working.

Our county ecom plan (<http://barconline.org/wp-content/uploads/Cache-County-ECOM-Plan-1-12-2016.pdf>) says:

Cache County Command and Monitoring Frequencies			
TACTICAL CALL	PRIMARY	BACKUP #1	BACKUP #2
Command #1	147.200+ (PL103.5) 220 un-link Mt Logan	146.640 s	146.640- (No PL)
Command #2	146.720- (PL103.5)	146.720 s	146.800- (PL 88.5)
EOC Intercom	147.520 s		

Again this is for an emergency situation.

So for a regular weekly scheduled net we should attempt to stay on the same frequency.

First option would be 146.720 simplex, with stations from outside the valley checking in by relay. All stations on the net should monitor for distant stations that may not be heard by net control and relay those calls to net control.

Other stations may be required to monitor the repeaters that are normally linked to our system to make an announcement on what is going on with the net and take checkins to relay to net control. And others may be required to monitor the input of the .72 system (146.120) and listen to stations that were not able to change to simplex.

So this is a good time to learn how to do 146.720 simplex with no PL tones on the fly with your equipment.

Elmer Night would be the perfect opportunity to get help if you are struggling with this option. Next Elmers Night is Tuesday April 19<sup>th</sup> 6:30 PM at the Cache County Sheriff's office third floor training rooms.

## **The ARES E-Letter for March 16, 2016**

### **Boston Marathon Communications Committee Seeks Amateur-Volunteers**

The Boston Athletic Association (BAA) begins its Boston Marathon volunteer communications work with the slogan "*Volunteers Run This Event.*" Indeed, the Amateur Radio community has a role in nearly every aspect from Start to Finish. Preparations are in high gear as Amateur Radio continues to serve in this extraordinary event -- we need you! Each year around 300 communications volunteers organize, plan, train and serve the BAA, some 30,000 runners, 10,000 volunteers, and their communities. Registration for Amateur Radio volunteers remains open with assignments available for new volunteers who have a passion for public service, and for experienced hands at this longstanding event. [Registration](#) is easy and one-stop. For more information, click [here](#). -- *Brett Smith, AB1RL, BAA Communications Committee Volunteer Coordinator*



## **The ARRL Letter for March 17, 2016**

### **ARES, SKYWARN Volunteers Respond to Heavy Rain, Flooding in Louisiana**

Amateur Radio Emergency Service (ARES) and SKYWARN volunteers in Louisiana assisted the National Weather Service (NWS), as record-setting rainfall led to severe and widespread flooding. The Federal Emergency Management Agency (FEMA) has approved a disaster declaration for the state. Region 7 District Emergency Coordinator John Mark Robertson, K5JMR, in the Shreveport-Bossier City area, said Amateur Radio involvement began on March 8, when the NWS-Shreveport Office requested a SKYWARN activation during a tornado watch.



For the next 17 hours, Robertson reported, a group of volunteers handled weather-spotting duties over linked repeaters, filing some 70 reports. Their coverage included parts of Texas and Arkansas. The severe weather included hail as well as major flooding that closed Interstate 20 in three Louisiana parishes and inundated entire neighborhoods. On March 10, the ARES team in Tangipahoa Parish in southeastern Louisiana was active for nearly 2 days in response to heavy rain and flooding.

"Local hams operating [fixed, portable, or mobile] provided updates on local conditions and were able to offer road reports to travelers on the state highways and Interstate 12, which crosses all of the major rivers in our area," ARES Region 9 DEC Bob Priez, WB5FBS, told ARRL. He said numerous rivers, streams, and waterways were well above flood stage by the afternoon of March 11.

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"We were able to receive and send weather bulletins and flood conditions to and from the NWS in Slidell, Louisiana, using our 147.000 repeater and the Slidell 147.270 repeater. The 147.000 repeater also provided communication with the EOC at Southeastern Louisiana University and Tangipahoa Parish EOC in Amite, Louisiana," he said. Fixed stations used packet radio on VHF as well as conventional e-mail to relay NWS weather bulletins and to forward local reports to NWS.



Some livestock in this flooded area took refuge under the porch of a home under construction on higher ground. [Photo courtesy Bossier Parish Sheriff's Office]

Priez said the March activation was the third for his ARES crew since two events in February, when the area was hit with heavy rain and wind. He said that event gave the group the opportunity to test recently revised plans to interface directly with the NWS Office in Slidell via repeaters in Tangipahoa and St Tammany parishes, and via packet.

"This plan proved really effective in the February 23 event, which, in addition to rains and winds, also spawned numerous tornadoes across the southeast region," Priez said. "Our widespread ham radio observers were able to send real-time reports of tornado activity in Livingston, Montpelier, and Convent, and from Washington and St John parishes in Louisiana, and also from southwestern Mississippi." The group also kept in contact with the Southeastern Louisiana University EOC and the Tangipahoa Parish EOC via the local VHF repeater.

On March 13, Robertson said three SKYWARN volunteers activated in response to severe weather, posting 25 messages dealing with tornado watches and warnings, reports of hail, and continued major flooding.

As the National Weather Service reported, the highest reported rainfall total was "a whopping 26.96 inches!" southeast of Monroe. The NWS has [posted](#) rainfall totals for the March 8-12 period. The flooding has led to road closings over a wide area, and law enforcement personnel assisted by the Louisiana National Guard used boats to reach and rescue stranded residents and their pets.

## **RFinder -- The Worldwide Repeater Directory -- Now Includes Coverage Maps**

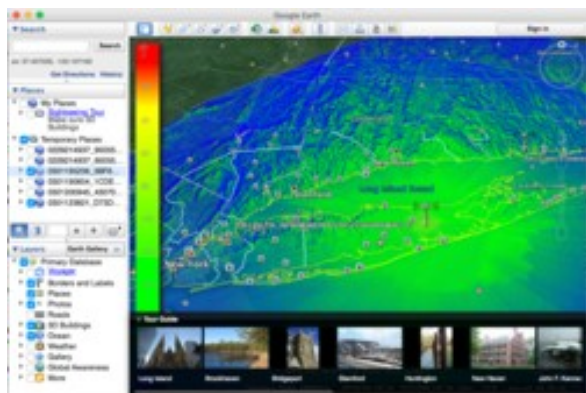
RFinder -- The Worldwide Repeater Directory -- now will include coverage maps for all repeaters on Earth. In February, the ARRL established an agreement with RFinder, the creator of a web- and app-based directory of Amateur Radio repeaters worldwide, to serve as its preferred online resource of repeater frequencies. RFinder has partnered with CloudRF.com to provide the maps.

"Our systems are busy rendering and indexing coverage maps, based on ground-path loss using the [Longley-Rice irregular terrain model](#)," explained RFinder Creator Bob Greenberg, W2CYK. "We have worked with Alex Farrant, M6ZUJ, creator of CloudRF.com, to render coverage maps for nearly the entire collection of repeaters in RFinder's database."

RFinder has downloaded and will serve as a host for KMZ (Keyhole Markup Language Zipped) overlays for Google Earth. The resulting KMZ place marker files will be viewable in Google Earth on *Windows* and *Mac* platforms (via [web.rfinder.net](http://web.rfinder.net) and [routes.rfinder.net](http://routes.rfinder.net)) and on *Android* and *iOS* versions

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of RFinder. The *Windows* and *Mac* versions allow the viewing of multiple coverage maps at the same time.



An RFinder screenshot of the Long Island, New York, vicinity.

As part of this project, RFinder will provide free access to repeater coordinators worldwide. As coordinators update repeaters with height above average terrain (HAAT), power and gain, and latitude and longitude, maps will be automatically re-rendered within a few minutes and made available to subscribers. The sign-up procedure for the repeater coordinator program will be announced later this month. The new capability is expected to ease the work of repeater coordinators, as they will easily be able to see repeater coverage maps side by side for both coordinated and uncoordinated machines -- information critical as simplex nodes for Internet linking, cross-band repeaters, and homebrew repeaters crop up worldwide.

Users of the trial version of RFinder on *Android* will have access to coverage maps for a limited time, after which only [subscribers](#) will have access. An annual \$9.99 RFinder subscription provides access to repeater data worldwide.

RFinder will be an ARRL EXPO exhibitor at Dayton [Hamvention](#)<sup>®</sup>, May 20-22. Read [more](#).

## ARISS Marks its 1000th Contact!

The Amateur Radio on the International Space Station ([ARISS](#)) program has celebrated a milestone -- its 1000th school radio contact. The first ARISS contact with students on Earth took place a little more than 15 years ago. On March 10, ISS crew member Tim Kopra, KE5UDN, did the honors for number 1000 -- a contact with students from schools in North Dakota and Minnesota gathered at the University of North Dakota in Grand Forks, organized by the North Dakota Space Grant Consortium ([NDSGC](#)). The ARISS contact was the first to be hosted in North Dakota, and some 500 students and visitors were on hand for the big event. ARISS International Chair Frank Bauer, KA3HDO, congratulated the ARISS team on what he called "this phenomenal accomplishment."

"With the outstanding support of NASA and the international space agencies participating in ISS, the ISS on-orbit crew members encompassing all 48 expeditions and the hundreds of ARISS volunteers worldwide, the ARISS team has reached a tremendous milestone: 1000 ARISS contacts between schools on the ground and the ISS crews on orbit," he said. "Since our first contact in December 2000 to today's contact in North Dakota, hundreds of thousands of students have participated in the hands-on STEM learning that ARISS affords, and many millions from the general public have witnessed human spaceflight in action through an ARISS contact."



Astronaut Tim Kopra, KE5UDN, on the air as NA1SS from the International Space Station. [NASA photo]

During the 10-minute ARISS contact Kopra answered 20 questions posed by young people ranging from kindergarten to graduate school.

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Veteran astronaut Mike Fincke, KE5AIT, marveled at the number of contacts completed to date. "A thousand contacts. Who would have ever thought?" he said in a NASA video marking the milestone. "That means a thousand times we've had a chance to reach down to Planet Earth to make contact and to inspire the next generation of explorers. So, I congratulate the ARISS program."

Astronaut Tim Peake, KG5BVI -- one of Kopra's crew mates on the ISS -- said in another NASA video marking the milestone that talking to schools via Amateur Radio has been "one of the most rewarding activities" of his time in space.

Ahead of the actual contact, a consortium team led youngsters at participating schools in hands-on activities and learning about aerospace, priming them for the interview with Kopra. The students, many from smaller rural communities, built and launched rockets, crafted and tested parachutes similar to those on NASA's *Orion* capsule, and designed and tested neutral buoyant objects. Read [more](#).

## Young Connecticut Ham Off to an Award-Winning Start

Fifteen-year-old Matt Shea, KC1DLY, had no Amateur Radio ticket 1 year ago. Today, he's an Amateur Extra class licensee and already holds two of the League's flagship operating awards -- [DXCC](#)



ARRL CEO-Elect Tom Gallagher, NY2RF (left), with Matt Ettus, KC1DLY, and his WAS and DXCC certificates. [Sean Kutzko,

and Worked All States ([WAS](#)). His 100 W station is quite modest, with a 35-foot end-fed wire in the attic for his antenna (and he even operates on 160 meters!). He confirmed all of the contacts necessary for the two awards using Logbook of The World ([LoTW](#)). ARRL CEO-Elect Tom Gallagher, NY2RF, on March 7 congratulated Shea and presented him with his awards.

"I play radio daily and absolutely love it," Shea, a high school sophomore in Southington, Connecticut, said on his [QRZ.com](#) profile. In addition to ham radio, he's on the Southington High School Robotics Team, and he's been busy recruiting new radio amateurs among his friends at school. "I am hoping to get a few more new hams on the air to keep the great hobby going!" he said. -- *Thanks to Sean Kutzko, KX9X*

## In Brief...

**ARRL 2016 August UHF Contest Cancelled:** The ARRL August UHF Contest for 2016 has been cancelled, while the ARRL VHF Contest Revitalization Committee mulls its future. The Contest Revitalization Committee fielded dozens of comments from members concerning possible changes to this annual UHF operating event, traditionally held on the first weekend of August each year. Many commenters expressed dissatisfaction with the timing of the contest, occurring as it does at the hottest time of the year, and that it was too close on the calendar to other VHF/UHF events. In response to this member input, the Contest Revitalization Committee recommended to the Programs and Services Committee (PSC) that the 2016 August UHF Contest be cancelled, and the PSC agreed. The ARRL VHF Contest Revitalization Committee continues to study the possibility of redesigning the August

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UHF Contest or replacing it with a similar event at another point in the calendar -- possibly in the spring -- for 2017. The Committee will solicit member comments in the near future, as it weighs several alternatives.

## **The ARRL Letter for March 31, 2016**

### **"ARRL The Doctor is In" -- the Podcast -- Debuts on April 7**

The popular QST "The Doctor is In" column soon will also be available as a podcast! "ARRL The Doctor is In" will debut on Thursday, April 7, and subsequent new episodes will be posted every other Thursday. The podcast will feature QST columnist and technical whiz Joel Hallas, W1ZR, with QST Editor in Chief Steve Ford, WB8IMY, serving as the host. Each 20-minute program will be available from Apple [iTunes](#) and [Stitcher](#) -- the two largest podcast distribution platforms (search for "ARRL The Doctor is In") -- and episodes will be [archived](#) on the ARRL website. [DX Engineering](#) is the sponsor of the "ARRL The Doctor is In" podcast.



"When the ARRL presented us with this unique opportunity, it was an easy decision to make," said DX Engineering CEO Tim Duffy, K3LR. "DX Engineering is one of the most prominent businesses supporting the ham radio community, so it just makes sense to be part of the 'ARRL The Doctor is In' podcast."

The new, twice-monthly podcast will cover a broad range of technical topics of interest to all amateurs -- everything from antennas to zener diodes and beyond. We invite listeners to [send us their own questions](#) for the show. *Your* question could be answered in a future podcast.

"ARRL The Doctor is In" arrives on Thursday, April 7!

## **National Parks on the Air Update**

Satellite aficionado Paul Stoetzer, N8HM, activated the National Mall (DZ06) in Washington, DC, on March 27, during two FO-29 satellite passes. Stoetzer said he plans to operate from other NPOTA sites in the DC area and will set up to operate HF between satellite passes. [See](#) W5PFG's blog about N8HM's activity.

The week of April 1 offers some very high-profile [NPOTA](#) expeditions.

A team of five Hawaiian operators from Oahu will travel to the north side of Molokai Island to activate [Kalaupapa National Historical Park](#) (HP18), April 1-5, as KH6BWG. Once a leper colony, the site is isolated from the rest of the island by 1600-foot cliffs. It's located in Kalawao County, one of the rarer US counties. One QSO with KH6BWG is worth a credit in several awards programs. Activity will be on 40-10 meters on SSB, CW, and digital modes.

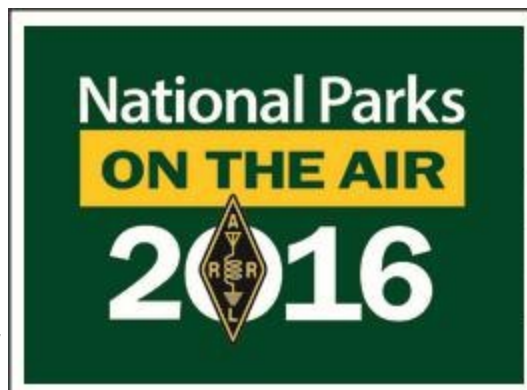
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Yosemite National Park has published a [guide](#) for NPOTA activators who visit this venerable National Park. The Yosemite Office of Special Park Uses worked with ARRL to establish equitable rules for visiting Activators that will help promote NPOTA activity while minimizing impact on other park visitors, during what is certain to be a season of record attendance at Yosemite. The document is also available on the NPOTA website.

In all, 44 Activations are slated for March 31-April 6, including Organ Pipe Cactus National Monument in Arizona (MN58), and the San Juan National Historic Site in Puerto Rico (NS63).

[Details](#) about these and other upcoming activations can be found on the NPOTA Activations calendar.

Keep up with the latest NPOTA news on [Facebook](#). Follow NPOTA on [Twitter](#) (@ARRL\_NPOTA).



## Kingman Reef (KH5) Deleted from DXCC List

The ARRL Awards Committee has voted to delete Kingman Reef (KH5) from the DXCC List, effective March 29, 2016. Kingman Reef will be added to the Deleted Entities List on March 29, 2016. The total number of entities on the List will drop from 340 to 339. The deletion process is described in DXCC Rules Section II DXCC List Criteria, Part 5(a) Deletion Criteria.



Kingman Reef at low tide.

*"An entity may be deleted from the List if it no longer satisfies the criteria under which it was added. However, if the entity continues to meet one or more currently existing rules, it will remain on the List."*

Kingman Reef's original addition by virtue of separate administration has changed (separate administration by the US Navy has been removed), and the reef does not meet any current criteria to remain on the List. The US Fish and Wildlife Service (F&WS) administers Kingman Reef and Palmyra Island. The reef is too close to Palmyra Island to count as a separate entity and now will be considered a part of the Palmyra/Jarvis DXCC entity.

Prior to its deletion, Kingman Reef was the seventh most-wanted DXCC entity, according to ClubLog. It was last activated as K5K in 2000. Read [more](#).

## "Elmer" Inspiration, Elmer "Bud" Frohardt Jr, W9DY, SK

The ham radio mentor who inspired the term "Elmer" -- Elmer P. "Bud" Frohardt Jr, W9DY (ex-W9GFF), of Madison, Wisconsin -- died on March 22. He was 93. A friend and co-worker of the late Rod Newkirk, W9BRD (later VA3ZBB), who edited QST's "How's DX?" column, Frohardt was the

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"Elmer" that Newkirk had in mind when he used the name in his March 1971 column, referring to someone who helped to mentor new Amateur Radio licensees.

"Too frequently one hears a sad story in this little nutshell: 'Oh, I almost got a ticket, too, but Elmer, W9XYZ, moved away and I kind of lost interest,'" Newkirk had written. "We need those Elmers. All the Elmers, including the ham who took the most time and trouble to give *you* a push toward your license, are the birds who keep this great game young and fresh."

On AC6V's "[Origin of Ham Speak](#)" web page, John Becker, K9MM, is quoted as saying, "Bud was very well known locally for his involvement with the RAMS (Radio Amateur Megacycle Society) radio club, and he was always helping newcomers to the hobby."

Frohardt was an ARRL Life Member. Read [more](#). -- Thanks to [The Daily DX](#)



## ISS Expedition 47/48 Crew Increment Includes Two Radio Amateurs

After launching on March 18 in a *Soyuz* TMA-20M vehicle from the Baikonur Cosmodrome in Kazakhstan, the Expedition 47/48 crew increment of Astronaut Jeff Williams, KD5TVQ, and Cosmonauts Oleg Skripochka, RN3FU, and Alexey Ovchinin is settling in on board the International Space Station (ISS).



(L-R) Oleg Skripochka, RN3FU; Jeff Williams, KD5TVQ; Alexey Ovchinin; Tim Peake, KG5BVI/GB1SS; Tim Kopra, KE5UDN, and Yuri Malenchenko, RK3DUP. [NASA photo]

"During their 6-month mission, the expedition crew members will facilitate approximately 250 research investigations and technology demonstrations not possible on Earth," NASA said. "Science conducted also will enable future long-duration human and robotic exploration into deep space and on the agency's journey to Mars."

Williams, Skripochka, and Ovchinin joined Expedition 47 Commander Tim Kopra, KE5UDN, European Space Agency astronaut Tim Peake, KG5BVI/GB1SS, and cosmonaut Yuri Malenchenko, RK3DUP, on the ISS. Williams will take command of the station on June 4 for Expedition 48.

This mission marks the fourth spaceflight for the 58-year-old Williams, and it will be his third long-duration stay on the orbiting laboratory -- a first for an American. It's also his first time back to the ISS since its completion in 2011. When his duty tour is over, Williams will become the new American record holder for cumulative days in space -- 534 -- surpassing Expedition 46 Commander Scott Kelly, who wrapped up his 1-year mission on March 1.

Skripochka has the distinction of having flown on both the maiden and final voyages of the "old" *Soyuz* spacecraft. Russia's Energia is set to debut a new *Soyuz* model, the MS.



Membership in **The Bridgerland Amateur Radio Club, Inc. (BARC)** is open to anyone interested in Amateur Radio. You do not need an amateur license to join. Learn more online at <http://www.barconline.org/> or by emailing [membership@barconline.org](mailto:membership@barconline.org) .

The Bridgerland Amateur Radio Club provides the following to its members:

- A repeater system that covers northern Utah from Bear Lake to Salt Lake Valley.
- Events where you can practice your radio skills in a fun learning environment.
- Club meetings are held the second Saturday each month from October to May. An opportunity to meet and learn from other amateur operators.
- Social activities where members can make friends and interact with other members.



Your tax deductible membership supports club activities and the BARC repeater system.

\*\*\*\*\*



### The Bridgerland Amateur Radio Club, Inc.

#### Membership application for the year 2016

*Dues are in effect January 1, 2016 through December 31, 2016*

*Please indicate if you or family member is an American Radio Relay League (ARRL) member*

Name \_\_\_\_\_ Call Sign \_\_\_\_\_ Date Paid \_\_\_\_\_

ARRL member

P.O. Box \_\_\_\_\_ Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Home Phone ( ) \_\_\_\_\_ Work Phone ( ) \_\_\_\_\_

E-mail \_\_\_\_\_

(The club's newsletter, THE OHM TOWN NEWS, is sent to the E-mail Address)

Individual Membership - \$25 \$ \_\_\_\_\_

Addition Family members in same household - \$3 ea \$ \_\_\_\_\_

Donation for Repeater upgrades / equipment purchases \$ \_\_\_\_\_

Total \$ \_\_\_\_\_

#### Names and Call Signs of additional family members

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

ARRL member E-mail \_\_\_\_\_

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

ARRL member E-mail \_\_\_\_\_

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

ARRL member E-mail \_\_\_\_\_



Bridgerland Amateur Radio Club is an ARRL affiliated club

Mail your completed form and a check to: B.A.R.C., P.O. Box 111, Providence UT 84332-0111 or pay online at <http://www.barconline.org/join-barc> via PayPal

*B.A.R.C. is a non-profit organization*



## Questions for Technician Class License

1. (T1B06) Which 23 cm frequency is authorized to a Technician Class licensee?
  - A. 2315 MHz
  - B. 1296 MHz
  - C. 3390 MHz
  - D. 146.52 MHz
  
2. (T2B12) Under what circumstances should you consider communicating via simplex rather than a repeater?
  - A. When the stations can communicate directly without using a repeater
  - B. Only when you have an endorsement for simplex operation on your license
  - C. Only when third party traffic is not being passed
  - D. Only if you have simplex modulation capability
  
3. (T3B02) What property of a radio wave is used to describe its polarization?
  - A. The orientation of the electric field
  - B. The orientation of the magnetic field
  - C. The ratio of the energy in the magnetic field to the energy in the electric field
  - D. The ratio of the velocity to the wavelength
  
4. (T4A05) Where should an in-line SWR meter be connected to monitor the standing wave ratio of the station antenna system?
  - A. In series with the feed line, between the transmitter and antenna
  - B. In series with the station's ground
  - C. In parallel with the push-to-talk line and the antenna
  - D. In series with the power supply cable, as close as possible to the radio
  
5. (T5A04) What is the name for a current that flows only in one direction?
  - A. Alternating current
  - B. Direct current
  - C. Normal current
  - D. Smooth current
  
6. (T6B04) Which of the following components can be made of three layers of semiconductor material?
  - A. Alternator
  - B. Transistor
  - C. Triode
  - D. Pentagrid converter
  
7. (T7B08) What should you do if something in a neighbor's home is causing harmful interference to your amateur station?
  - A. Work with your neighbor to identify the offending device
  - B. Politely inform your neighbor about the rules that prohibit the use of devices which cause interference
  - C. Check your station and make sure it meets the standards of good amateur practice
  - D. All of these choices are correct
  
8. (T8A10) What is the typical bandwidth of analog fast-scan TV transmissions on the 70 cm band?
  - A. More than 10 MHz
  - B. About 6 MHz
  - C. About 3 MHz
  - D. About 1 MHz
  
9. (T9B05) What generally happens as the frequency of a signal passing through coaxial cable is increased?
  - A. The apparent SWR increases
  - B. The reflected power increases
  - C. The characteristic impedance increases
  - D. The loss increases
  
10. (T0B07) Which of the following is an important safety rule to remember when using a crank-up tower?
  - A. This type of tower must never be painted
  - B. This type of tower must never be grounded
  - C. This type of tower must never be climbed unless it is in the fully retracted position
  - D. All of these choices are correct

(For answers to test questions see bottom of [page 15](#))

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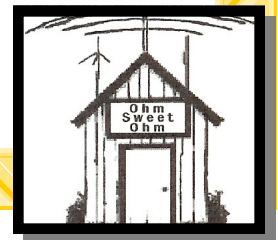
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Answers to questions on [page 14](#): 1-B, 2-A, 3-A, 4-A, 5-B, 6-B, 7-D, 8-B, 9-D, 10-C