

# THE OHM TOWN NEWS

# November 2016

### Some Contents...

President's Message	2
Upcoming Activities	3
Club Officers Election and Absentee Ballot	6
BARC Club Bylaws	7-12
Diffee eras Dyraws	
Test Questions for Extra Class License	







# PRESIDENT'S MESSAGE

The <u>ARRL November Phone Sweepstakes</u> will hit the airwaves for on November 19-21. The Sweepstakes or "Sweeps" as it is usually called is a contest in which modest stations can do exceptionally well. There's no need for giant towers and antennas or legal-limit amplifiers, for simple antennas and a "barefoot" HF rig will do just fine. Sweepstakes brings out many US and Canadian operators, and there will be a lot of stations to work on the 160, 80, 40, 20, 15 and 10 meter bands. More stations = more contacts = more fun!

If you'd like to know more about Sweepstakes, download the <u>Sweepstakes Operating Guide</u> – there are simple explanations of the rules and a list of resource articles and websites to help you get the most from your Sweepstakes weekend.

So get on the air during the sweeps and make contacts throughout the US and Canada. This is an excellent opportunity for you to get that <u>Worked All States Award</u> with lots of operators on the air and great band conditions.

Don't have a HF rig and want to participate in the sweeps? BARC will be participating in the sweeps on November 19 at the club ham shack in the Engineering Lab Building room EL224 on the USU campus. The Sweeps start at 2100 UTC and we will be



there until 0700 UTC (that's 2 PM MST to midnight). Drop by and we will get you involved with whatever you would like to do, making contacts, logging contacts, or just watching what goes on.

Hope to hear you on the air during sweepstakes or have some fun operating an HF radio at the club ham shack. Our club is always looking for operating events and opportunities that excite and motivate amateur radio operators to be active, especially on HF.

Last month, I was checking the HF bands for stations operating the "<u>ARRL National Parks on the Air</u> (<u>NPOTA</u>)" Event. The National Park Service (NPS) is celebrating its 100th anniversary, and radio amateurs are able to help mark the occasion with the ARRL NPOTA event. NPOTA will run throughout 2016, with activity promoted and encouraged from each of the more than 430 official NPS administrative units and affiliated areas across the US. This includes all 59 National Parks as well as National Battlefields, Historic Sites, Memorials, Preserves, Reserves, Rivers, Seashores, National Scenic Trails, and other units. Portable operators participating in the NPOTA register their activation (some require permits) with the ARRL for the <u>NPS unit</u> they will be operating from.

In looking for NPOTA stations on the 80 meter band and I could hear a lot of static crashes. The weather was clear at my QTH but I was wondering where the storm was that had so much lightning. The station I was listening to was covered by static crashes every 10 to 30 seconds making it difficult to hear. Weather sites on the web can show the cloud and radar information but not the active lightning with the storm. There is a web site that shows near real time lightning activity, LightningMaps.org. Looking at the LightningMaps web site, it showed there were two areas nearby which had lightning and many in the Midwest. Nearby, one was from an area east of Boise ID (about 250 miles distance) and the other area was near the four corners in UT (about 300 miles distance). Both of these areas had a lot of lightning activity associated with the storms. I was able to make contact with the station at the Death Valley National Park (NP 15) but it took many repeats to get the information exchanged for the contact.

Ah, the fun and challenges of amateur radio.

73, Cordell KE7IK



# UPCOMING 2016 ACTIVITIES

4-5 Nov, ARES, RACES Conference

- 9 Nov, 7:30 PM ARRL Rocky Mountain Division Net 147.200/IRLP Node:9871
- 12 Nov, 10:00 AM BARC Club Mtg Elections of Club Officers for 2017, also - Making HF contacts: techniques, tricks & tips
- 15 Nov, 6:30-8:30—Elmer Night @ Cache County Sheriff's Office 3rd Floor
- 16 Nov, 7:00 PM Cache County ARES meeting at the Sheriff's Office

**19** Nov, 8:00 AM — **RACES HF Net** 3920 KHz

- 8 Dec, 6:30 PM BARC Christmas Party/Club Meeting @ The Bluebird Menu: Prime Rib, Chicken Cordon Bleu, Au-gratin Potatoes, Salads, Rolls, Turtle Cake. For more info see below.
- 14 Dec, 7:30 PM ARRL Rocky Mountain Division Net 147.200/IRLP Node:9871
- 15 Dec, 8:00 PM RACES VHF Net 146.72 Mt. Logan 147.180 Snowbird 147.20 IRLP
- 20 Dec, 6:30-8:30-Elmer Night @ Cache County Sheriff's Office 3rd Floor
- 21 Dec, 7:00 PM Cache County ARES meeting at the Sheriff's Office

For more calendar information see the <u>barconline.org/calendar</u>

# The BARC Club Christmas Party

The December BARC club meeting and Christmas Dinner will be Thursday December 8th at the Bluebird restaurant in Logan. The dinner will be a prime rib and chicken Cordon Bleu, Au-gratin Potatoes, Salads, Rolls, Turtle Cake. The cost will be \$17 per person. The dinner will be served at 6:30 pm. There will be the usual drawing for goodies, prizes and gifts. Please call or E-mail Tammy Stevens by December 1st for all who would like to come.



**NOV 2016** 

## Pictures of Some Recent Activities



NOV 2016

The Ohm Town News

Page 4

## More Pictures of Recent Activities



NOV 2016

The Ohm Town News

Page 5

### Proxy (Absentee) Ballot and List of Candidates For year 2017 Officers and Board

Of the Bridgerland Amateur Radio Club

#### Voting held on Saturday November 12, 2016 at 10:00 A.M. On the 3rd floor in the Cache County Sheriffs Complex on 200 North and 1225 West, Logan, Utah

*Important Instructions:* If you are unable to attend the above meeting and wish to vote you may mail this ballot to any club officer in time to be in their hands before the meeting time noted above, or, you may seal the ballot in an envelope and send it with someone to be handed to a club officer at the meeting. If you need help, please contact any club officer. You need to be a current member of BARC to vote

For President	
Cordell Smart KE7IK	
•	
For Vice President	
• Ted McArthur AC7II	
•	
For Secretary	
Tammy Stevens N7YTO	
•	
For Treasurer	
Kevin Reeve N7RXE	
•	
For members of the board (Vote for four)	
Chris Clement K7CTC	
• Tyler Griffiths N7UWX	
Richard Elwood KE7GYD	
Stan Laughlin KG7LBP	
Jason Peterson KG7YKZ	
Mitch Smith N7USU	
•	

You **MUST** get approval from a write-in candidate before submitting their name for office. Additional nominations will be accepted from the floor at the meeting, with the approval of the nominee. Ballot can be mailed to **BARC P.O. Box 111 Providence Utah 84332**. It must reach the post office box by November 11<sup>th</sup>. Send in your ballot or come in person. If mailed please put your name on the mailing envelope only.



#### BYLAWS of THE BRIDGERLAND AMATEUR RADIO CLUB, INC

#### Article I – NAME

Section 1: The name of this organization shall be THE BRIDGERLAND AMATEUR RADIO CLUB, INC.

#### Article II – PURPOSE

**Section 1:** The purpose of this organization shall be to unite radio amateurs in fellowship, to aid those not licensed in learning code and theory, and to provide service to the community especially in times of emergency.

#### Article III – MEMBERSHIP

- **Section 1:** All persons having a bona fide interest in amateur radio, whether licensed or not, shall be eligible for membership.
- Section 2: Application for membership shall be submitted to a club Officer. A member charged with conduct unbecoming a member of this Club may be expelled by a two-thirds (2/3) majority vote of the members if the Board of Directors (Board) has found the charges are sustained by its investigations. An expelled member may not reapply for membership unless approved by the Board.
- **Section 3:** A member shall be defined as one who has submitted an application for membership and paid the appropriate dues.

#### Article IV – OFFICERS AND BOARD

- **Section 1:** There shall be a Board of Directors which shall consist of the Officers, the immediate past President and two at large Board Members.
- Section 1A: If the Board of Directors determines that more at large Board Members are needed, they shall be elected per Article V and Article XII.
- Section 2: The Officers of the club shall be: President, Vice-President, Secretary, and Treasurer.
- Section 3: All Officers and Board members shall be members of the club in good standing.
- **Section 4:** Any person elected to the office of President shall have served at least one year as Officer or Board member of the club, whether before or after incorporation.
- **Section 5:** The immediate past president shall serve the subsequent year as a member of the Board.
- **Section 6:** Committee chairpersons of the various committees required shall be appointed by the Board. Additional members of said committees shall be appointed by the committee chairperson.

#### Article V – ELECTIONS

- Section 1: The Officers and Board members of the club shall be elected for the term of one (1) year and until such time as their successors shall have been elected and take office. Newly elected Officers and Board members shall take office the first day of January of the next year.
- **Section 2:** The President shall appoint a nominating committee of three (3) members, at least one (1) of whom shall be a member of the Board. They will present their list of nominations by notification as specified in Article XII Section 6.
- **Section 3:** Election of Officers and Board members shall be held at the November Club meeting. Nominations will be accepted from the floor. Those receiving the largest number of votes shall be elected.

**NOV 2016** 



- Section 4: Vacancies occurring between elections must be filled by a special election at a general meeting after which the withdrawal or resignation is made known. Nominations for replacement shall be made by the Board. Nominations shall also be accepted from the floor. Voting shall be conducted per Article XII and the person receiving the largest number of votes will be the new Officer. The newly elected Officer shall take office immediately.
- **Section 5:** Officers and Board members may be removed by a petition signed by at least ten (10) members and upheld by a three-fourths (3/4) majority vote.

#### Article VI – DUTIES OF THE BOARD AND OFFICERS

- **Section 1:** The Board shall be the governing body of the Club and as such shall formulate and be responsible for all matters of policy. Decisions of the Board shall be reached upon majority vote; and thereupon the President shall execute the decisions so made or the policies so formed.
- **Section 2:** The newly elected President shall call an organizational meeting of the old and new Officers and Board members within 30 days of the election meeting.
- **Section 3:** The President shall preside at all meetings of this Club; shall enforce due observance of the by-laws; shall decide all questions of order; shall sign all official documents that are adopted by the Club; and shall perform all customary duties pertaining to the office of President.
- **Section 4:** The Vice-President shall possess all the powers and assume all duties of the President in the event of the absence, disability, refusal, or failure to act, of the President. The Vice-President shall further assist the President in all functions of that office and shall perform such other duties as are properly assigned by the Board.
- **Section 5:** The Secretary shall countersign all deeds, leases, and conveyances executed by the corporation; shall keep a record of all proceedings of all meetings; keep a roll of members and the current status of these members; shall keep a roll of members present at meetings; accept applications for membership; keep a copy of the Articles of Incorporation and By-laws present at all meetings; carry on all correspondence; read communications received at each regular meeting, and give notice of all meetings.
- Section 6: The Treasurer shall receive and disburse all club funds, including dues from members; shall keep an accurate record of all such transactions; and shall give a financial report to the Board and members upon request.

#### Article VII – MEETINGS

- **Section 1:** There shall be a general Club meeting held monthly. This meeting schedule may be changed, subject to a decision by the Board.
- Section 2: Special meetings of the members may be called at any time by the President, provided the entire Club membership is notified in writing of such special meeting ten (10) days prior to the meeting. Notification may be done per Article XII, Section 6. The President shall be required to call a special meeting upon receipt of a written request signed by ten (10) or more members.
- **Section 3:** The Board shall meet in a general or special meeting in order to transact business. The Board shall normally meet once a month. All meetings of the Board shall require ten (10) days notice to the Board members.
- **Section 4:** All meetings of the Board shall be open to all Club members.

## NOV 2016

#### Article VIII – DUES

**Section 1:** The annual dues will be recommended by the Board and approved by the members. The dues year shall be January 1 to December 31. Pro-rated dues will only apply to new licensees or those new in the area. The Board has the authority to accept dues paid from any valuable consideration.

#### Article IX – AMENDMENTS

Section 1: The by-laws may be amended by a two-thirds (2/3) majority vote at a general meeting, providing that members shall have been notified per Article XII, Section 6. Proposals for amendments shall be submitted in writing to a Club Officer.

#### Article X – RULES

Section 1: Roberts's rules of Order shall govern all proceedings of this Club.

#### Article XI – BUDGET AND REPORTING

**Section 1:** The Board shall give an annual report to the members on the activities of the Club with a financial report including the receipt and disbursement of Club funds. The Board shall present an annual budget after receiving input from committee members and members at large. The members shall vote upon said budget within the guidelines of said budget. A vote of the members will not have to be given again unless the budget is changed materially or exceeded in total.

#### Article XII –VOTING

- **Section 1:** Only members in good standing shall be entitled to vote.
- **Section 2:** All voting shall be by majority vote of the members present, unless specially stated otherwise in these articles.
- **Section 3:** Voting for the election of the Board and Officers; expulsion of a member; Board member or Officer; adoption or amendments of the By-laws; approval of the annual budget and dues; and other issues as designated by the Board shall be conducted as stated below in Section 4 through 6.
- **Section 4:** Voting on matters specified in Section 3 of this Article shall be by secret ballot of members in attendance and by members Proxies.
- Section 5: A Proxy shall be included with the notification as specified in Section 6 below. Proxies may be given to a Club Officer or any other member by mail or in person. Proxies may be specific or general. The form of the proxies, ballots and balloting procedures shall be determined by the Board.
- **Section 6:** Notification to members of the subject matter of any vote to be taken shall be by publication in the OHM TOWN NEWS the issue prior to the meeting in which the voting is to be done. The notification shall include the time, date and place of the meeting in which the vote will be taken. The notification shall be sent no later than seven (7) days prior to the scheduled meeting date.

#### The Bridgerland Amateur Radio Club sponsored license exam session

on Thursday, October 6, 2016. Here are the results of the exams given at this session.

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

Dane Ashworth – KI7HNO Paula Boothe – KI7HNR Carruthers Hays – KI7HNP Robert Jensen – KI7HNL Teuvo Jones – KI7HNQ Sharyl Malouf – KI7HNH Ryan McNeill –KI7HNJ Carl Quinton – KI7HNM Jesse Quinton – KI7HNI Brent Randall – KI7HNN Cody Randall – KI7HNK Jonathan Schultz – KI7HNG

#### The following upgraded to a General License:

Michael Fralick - KG7YMX

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

Hafin Painter – KI7EZM Joseph Sposato, Jr – KA1BWO

Here is a summary of the number of exams given and new licenses earned at this session:				
Technician License Exams Given:	12	New Technician Licenses Earned:	12	
General License Exams Given:	6	New General Licenses Earned:	1	
Extra License Exams Given:	2	New Extra Licenses Earned:	2	
Number of Exams Given:	20	Number of New Licenses Earned:	15	

Number of People Served: 13

Welcome to the Bridgerland Amateur Radio Club to all those that earned their first Amateur Radio license on October 6<sup>th</sup> and congratulations to all that earned a General or Extra license.

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

There is one more BARC sponsored exam session scheduled for 2016 on Saturday, December 3<sup>rd</sup> at 8:00 am in Room 302 of the USU Engineering Building.

Tell your friends and family members that are interested in Amateur Radio about these test sessions and about the one day class.

There is also an exam session being offered in Davis County in December. Here is the information about that exam session: Wednesday, December 7<sup>th</sup> at 7:00 pm Clearfield City Offices 55 South State Street, Clearfield UT

Richard Elwood KE7GYD VE Liaison

**NOV 2016** 

## The ARRL ARES E-Letter for October 19, 2016 Editor's Notes from Hurricane Matthew

Earlier this month, major category five (on the Saffir-Simpson hurricane wind scale) Hurricane Matthew destroyed lives (more than 1,000 perished) and property on its wicked path through the Caribbean and on up the southeast coast of the US, to the Canadian Maritimes. The responses of many ARES® and partner entities are documented in the ARRL news stories linked below; many after action reports noting lessons learned are expected in the weeks to come.

Northern Florida coastline was heavily impacted by Matthew; the eye wall brushed Daytona Beach, where I live, at around 1 PM Friday, October 7, with wind and gusts that toppled large trees, and ripped off shingles and roofs. The storm eroded beaches and took out coastal roads such as historic route A1A in Flagler county, just to the north of Daytona Beach here in Volusia county.

I rode out the storm at home just three miles from the beach, which is not recommended, but I had an obligation to work at the city hospital for the vulnerable patient population, so I could not evacuate. On battery power, I checked into the Volusia County ARES net on the 147.24 MHz KV4EOC repeater located at the large county EOC west of Daytona. Remarkably, the repeater never lost viability, and net control stations, although weary,

performed flawlessly for the duration, taking and relaying reports of damage, and logistical requests. For example, issues with staffing and protocol at area Red Cross special needs of the storm, 1 PM, October 7, 2016. shelters were handled and resolved over the repeater. The



Portable VHF FM station at K1CE, checked into the Volusia County EOC net on the ARES 147.24 MHz KV4EOC repeater, at the height

Daytona Beach city EOC, located at the city's police headquarters, was checked into the net by its station N4DAB, with operator ARRL Northern Florida Section Manager Steve Szabo, WB4OMM, at the helm. Szabo, a retired law enforcement officer, pulled 67 hours of duty there over the course of four days. He was able to monitor HF and VHF storm-related communications, and said "What I heard was capable, professional net control operation and excellent cooperation by the amateur community at large in keeping those frequencies clear for safety of life communications."

I suspect that this operator scenario was repeated hundreds of times throughout the storm impacted areas. -- K1CE [Please copy and send your after action reports and lessons learned to k1ce@arrl.net for follow-up discussion in this newsletter. Thank you. -- ed.]

## **ARES Briefs, Links**

Hurricane Watch Net Active as Hurricane Nicole Passes Over Bermuda (10/13/16); Hurricane Watch Net to Reactivate for Hurricane Nicole (10/12/16); Amateur Radio Response Continues as Hurricane Matthew Moves Up East Coast (10/8/16); Hurricane Watch Net Stands Down Following Record Activation for Hurricane Matthew 10/9/16); ARES Activates as Florida Girds for Hurricane Matthew (10/6/16); Frequencies in Use in Conjunction with Hurricane Matthew Response (10/5/16); Florida Coastal ARES Groups at Local Activation Level, Statewide Declaration Pending (10/5/16); Hurricane Watch Net Ramps Up to "Catastrophic Response Mode" for Matthew (10/4/16); ARRL Invites Nominations for 2016 International Humanitarian Award (10/4/16); Radio Amateurs in Cuba Stand Ready for Hurricane Matthew (10/3/16); Hurricane Watch Net Now Active as Hurricane Matthew Targets Jamaica, Haiti, Eastern Cuba (10/2/16); Amateur Radio Credited with Helping Injured Cyclist (9/28/16); Amateur Radio Volunteers on Call during Major Puerto Rico Power Outage (9/23/16)





# The ARRL Letter for November 3, 2016 **Rule Making Petition to FCC Calls for Vanity Call Sign Rule Changes**

The FCC is inviting comments on a *Petition for Rule Making* (RM-1775) from a Nevada radio amateur that seeks changes to the rules governing the Amateur Radio Vanity Call Sign Program. Christopher

LaRue, W4ADL, of North Las Vegas, is proposing that any licensee obtaining a vanity call sign be required to keep it for the full license term. LaRue contends in his petition that excessive and frequent vanity call sign filings are hampering the ability of other qualified licensees to obtain vanity call signs in one of the more desirable 1 × 2 or 2 × 1 formats. LaRue said that since the FCC dropped the fee to file for a vanity call sign, some applicants are taking advantage by regularly obtaining new call signs, thereby keeping them out of circulation.

"Some are changing call signs almost monthly, just to keep the newer code-free Extra class operators from obtaining a shorter call sign," he said in his petition. "I even saw an older operator that said he does it all the time and has not even owned a radio in over 6 years. When I looked him up, he has had 16 different [call signs] in 18 months."



LaRue said his proposed minor rule change would require any licensee applying for and obtaining an Amateur Radio vanity call sign "be required to keep it for the duration of the license, which is currently 10 years."

He said this would "alleviate a lot of the stress on the ULS system and manpower requirements" at the FCC. "It will also keep inactive amateurs from changing call signs regularly, thereby tying up call signs for 2 years after dismissal of said call."

Interested parties may comment using the FCC Electronic Comment Filing System (ECFS). Comments are due within 30 days of the October 26 posting date.

## Maybe a Solar Minimum Can Be Too Deep for 160 Meters

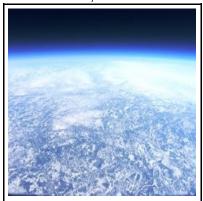
Propagation observer Carl Luetzelschwab, K9LA, recently offered some "deep thoughts" on the Top Band Reflector. As he explained, while less geomagnetic field activity heading into winter bodes favorable 160-meter propagation, more galactic cosmic rays entering our atmosphere could become a factor.

"The Sun's magnetic field is weakening, probably to the lowest levels in our lifetimes," Luetzelschwab

said. "With a weak solar magnetic field, more galactic cosmic rays will be able to get into Earth's atmosphere. We are now seeing unprecedented high neutron counts (neutrons are one of the byproducts of cosmic rays). Since galactic cosmic rays are mostly very energetic protons, they can get down to low atmospheric altitudes, causing collisional ionization in the D region and lower E region."

He said a cursory estimate using cosmic ray ionization rates confirms greater ionization in the lower atmosphere, and 160 meters is not too tolerant of more absorption.

"Many of us think that 'solar min is solar min is solar min," Luetzelschwab said in his post, "but maybe a solar minimum can be too deep Earth from the low ionosphere. for 160 meters." He said a good question to ask in the early 2020s may [Stanford University image] be, "How was 160 meters?" -- Thanks to the ARRL Contest Update







#### **Questions for The Extra Class License**

1. (E1C02) What is meant by automatic control of a station?

A. The use of devices and procedures for control so that the control operator does not have to be present at a control point

B. A station operating with its output power controlled automatically

C. Remotely controlling a station's antenna pattern through a directional control link

D. The use of a control link between a control point and a locally controlled station

2. (E2D03) Which of the following digital modes is especially useful for EME communications? A. FSK441

**B. PACTOR III** 

C. Olivia

D. JT65

3. (E3B01) What is transequatorial propagation?

A.Propagation between two mid-latitude points at approximately the same distance north and south of the magnetic equator

B. Propagation between any two points located on the magnetic equator

C. Propagation between two continents by way of ducts along the magnetic equator

D. Propagation between two stations at the same latitude

4. (E4C03) What is the term for the blocking of one FM phone signal by another, stronger FM phone signal?

A. Desensitization

B. Cross-modulation interference

C. Capture effect

D. Frequency discrimination

5. (E5A14) What is the resonant frequency of a series RLC circuit if R is 22 ohms, L is 50 microhenrys and C is 40 picofarads?

A. 44.72 MHz

B. 22.36 MHz

C. 3.56 MHz

D. 1.78 MHz

6. (E6C14) What is the primary advantage of using a Programmable Gate Array (PGA) in a logic circuit?

A. Many similar gates are less expensive than a mixture of gate types

B. Complex logic functions can be created in a single integrated circuit

C. A PGA contains its own internal power supply D. All of these choices are correct

7. (E7D03) What device is typically used as a stable reference voltage in a linear voltage regulator?

A. A Zener diode

B. A tunnel diode

C. An SCR

D. A varactor diode

8. (E8C02) What is the definition of symbol rate in a digital transmission?

A. The number of control characters in a message packet

B. The duration of each bit in a message sent over the air

C. The rate at which the waveform of a transmitted signal changes to convey information

D. The number of characters carried per second by the station-to-station link

9. (E9C03) What is the radiation pattern of two 1/4 wavelength vertical antennas spaced a 1/2wavelength apart and fed in phase?

A. Omni-directional

B. Cardioid

C. A Figure-8 broadside to the axis of the array

D. A Figure-8 end-fire along the axis of the array

10. (E0A09) Which insulating material commonly used as a thermal conductor for some types of electronic devices is extremely toxic if broken or crushed and the particles are accidentally inhaled? A. Mica

B. Zinc oxide

- C. Beryllium Oxide
- D. Uranium Hexafluoride

(For answers to test questions see bottom of page 14)

# **BARC Club Officers**

President Cordell Smart KE7IK president@barconline.org (435)245-4581

Vice President Ted McArthur AC7II ac7ii33@gmail.com (435)770-9169

Secretary Tammy Stevens N7YTO secretary@barconline.org (435)753-2644

Treasurer Kevin Reeve N7RXE treasurer@barconline.org (435)753-1645

#### **Board Members**

Tyler Griffiths N7UWX <u>N7UWX@comcast.net</u> (435)881-3834 Laurie Littledike KF7DKM laurie9088@gmail.com 435)752-8029

Mitch Smith N7USU <u>n7usu@mitchsmith.me</u> (435) 764-4828

Answers to questions on page 13: 1-A, 2-D, 3-A, 4-C, 5-C, 6-B, 7-A, 8-C, 9-C, 10-C

V

Richard Elwood KE7GYD <u>r.d.elwood@gmail.com</u> (435)753-4360

(P) (P) (P)

Newsletter Editor Dale Cox KB7UPW <u>newsletter@barconline.org</u> (435)757-4063

Web Page Editors Kevin Reeve N7RXE and Bob Wood WA7MXZ webmaster@barconline.org



**NOV 2016** 

The Ohm Town News

Page 14