



THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

November 2009

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

PRESIDENT'S MESSAGE

The last couple of months have had busy weekends with events where I used my 2 meter radios. I had not been on my HF rig for while. I decided to get up early on Sunday Oct 18th and see what was happening on HF.

I turned my HF rig on at 5 AM and started to listen on the 160 meter band. It had a S8 to S9 noise level and there were a few stations above the noise level that I could hear. I then went to the 40 meter band. It was



much quieter, with the noise level under S1. I started on the high end of the band and worked down. There some shortwave broadcast stations, then different groups of hams talking. I tried to listen for callsigns so I would have an idea of the area they were in. Next, I went to 80 meters and started at the bottom of the phone band. It was fairly

quite with a noise level of S1 to S2. Again, there were some groups of hams talking.

Moving up the 80 m band to between 3830 and 3835 KHz there were a lot of callsigns were being repeated over and over. I had found a pile up of hams trying to contact a distant station. The pileup would last up to 15 seconds, then it would go silent for about 20 to 30 seconds, and then the pileup would start again. But I could not hear the calling station. I suspected that the calling station must be working splits. Splits is where a station is transmitting on one frequency and listening on another frequency which could be +/- 5 KHz or more from the transmitting frequency. After some dial turning, I found the calling station on 3799 KHz with a callsign of K4M. When I googled K4M, the information that came back was "2009 DXpedition to Midway Island" (<http://www.midway2009.com>). Wow, a DXpedition with a good signal. A DX-pedition is an expedition to what is considered an exotic place by amateur radio operators,

(Continued on page 3)

HAM PROFILE

by Brent Carruth, AD7VF

Sheri, KC7MCP, and Khalil, WA7SHW, Godfrey, of Clarkston, Utah, are two of Cache Valley's most experienced amateur radio operators and avid supporters of many local public service events including bicycle races, Top of Utah marathon, Cache Cruise in and others. For LOTOJA 2009 they volunteered for the start line assignment coordinating the departure time of those volunteer amateur radio operators driving neutral support vehicles and attending to a myriad of details prior to and at the beginning of the event. Coordinating seventeen vehicles escorting some 800, of more than 1000, riders leaving in three minute intervals starting about 6:30am is indeed a very challenging assignment. Once the last pack of riders left they then served as vehicle rover 2 from Logan to Jackson. Their vehicle was well equipped for communications with four radios and four mag mount antennas. One for repeaters along the way, one for simplex, one for APRS, and one for ten meters.

Sheri earned her Technician license eleven years ago after twenty years of gentle persuasion from Khalil. They were driving together in two vehicles in a wintery storm and had agreed to meet at a



certain location. Sheri arrived and waited and waited with growing concern for Khalil to arrive. Both vehicles were equipped with amateur radios but she didn't have a license and anxiously wished she had. This was a time before cell phones became widely available. She soon earned her license following this experience. Preparing for the exam was not too difficult for her. She studied the manual and took some

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UPCOMING ACTIVITIES 2009



BARC Club Officers



President

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



Vice President

Tyler Griffiths N7UWX
vice-president@barconline.org
(435)752-7269



Secretary

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



Treasurer

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



Board Members

Ted McArthur AC7II
ac7ii@comcast.net
(435)245-4904



Roger Ellis KE7HTE
ellis.roger@gmail.com
(435)753-7807



Jacob Anawalt KD7YKO
webmaster@barconline.org
(435)753-9033



Newsletter Editor

Dale Cox KB7UPW
newsletter@barconline.org
(435)563-3836



Web Page Editor

Jacob Anawalt KD7YKO
webmaster@barconline.org
(435)753-9033



BARC Club Meeting — 14 November
Election of Club Officers for 2010

RACES HF Net — 21 November, 8:00 AM

BARC Christmas Party/Club Meeting— 3 December 6:30 PM
At The Bluebird Restaurant at 19 N. Main in Logan

VE Test Session - 12 December, 8:00 AM

You Must RSVP on the BARC web site www.barconline.org
The test is at the Merrill-Cazier Library on the USU campus

RACES VHF Net — 17 December, 8:00 PM

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.

ARES Meetings are usually held on the Third Wednesday
of each month at 7 P.M. at the Cache County Sheriffs Complex.
Contact Tyler Griffiths for more information.



Presentation topic for BARC November 14th meeting

Kay Hargis, N7KH, will be giving a presentation on
DXing. Kay will talk about his DXing experiences, QRP
and minimal station requirements, QSL cards, Logbook of
the World, and other DX topics. He holds awards for #1
DXCC Honor Roll, DXCC Mixed, DXCC Phone, DXCC
CW, WAS, WAC, 5BDXCC, and others. Kay operates on
HF, VHF, and UHF, using CW, Phone, and digital modes.

**Be sure to attend our November club meeting to learn
what DXing is all about.**



The BARC Board members have proposed changing some
of the wording of the BARC Club Bylaws, Article 12 Sec-
tion 6. The proposed changes will be voted on in the No-
vember club meeting. The proposed changes are as fol-
lows: (Items in *Red* to be replaced by items in *Blue*)

Article XII –VOTING

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 *mailed sent* no later
than *Ten Seven (10)(7)* days prior to the scheduled meet-
ing date.



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

(Presidents Message Continued from page 1)

because of its remoteness or because there are very few radio amateurs active from that place. The information on the web site indicated it has been almost 10 years since amateur radio operation has been allowed at Midway Atoll.

K4M 's signal was S8 to S9 and conditions might be favorable for a contact. I set my rig for splits where I would listen on 3799 KHz and transmit on 3830KHZ. I started listening, figuring out where and when would be a time to jump into the pileup. I could hear lots of stations calling from back east and the south, and the west. I used the dual watch capability on my HF rig so I could listen to the stations transmitting to K4M. That allowed me to figure out which frequency K4M was listening to when he would answer the calling station with their callsign. Well, I chased K4M up and down between 3830 and 3835 for over 2 hours. His signal remained between S8 to S9.

After trying for 2 hours, I did notice that I was not hearing as many station from back east. I kept on trying and finally at 1402 UTC (8:02 AM), I made contact with K4M on 3830 KHz. I was on cloud nine to finally make a contact after two and a half hours of trying. I guess you want to know what type of beam antenna and what my amplifier power was set to. Well, I have neither one of those. I have an end feed wire antenna 121 feet long with an AH-4 antenna tuner and I was running 100 watts.

Propagation was apparently good for my contact. I had recently installed a program called Ham CAP (<http://www.dxatlas.com/hamcap/>). It is a freeware program that is a frontend interface to the VOACAP program (<http://www.vocap.com>) and predicts the HF propagation to a distant station. I was curious to check out the program and the propagation prediction information it provides with respect to the Midway DX station I had just worked. I entered the parameters it needed such as my QTH and distant station coordinates and other values. I started looking at the map tab window which displays the world coverage map. See Figure 1 for the resulting prediction map for Midway Atoll for the 3.5 MHz band at 1100 UTC.

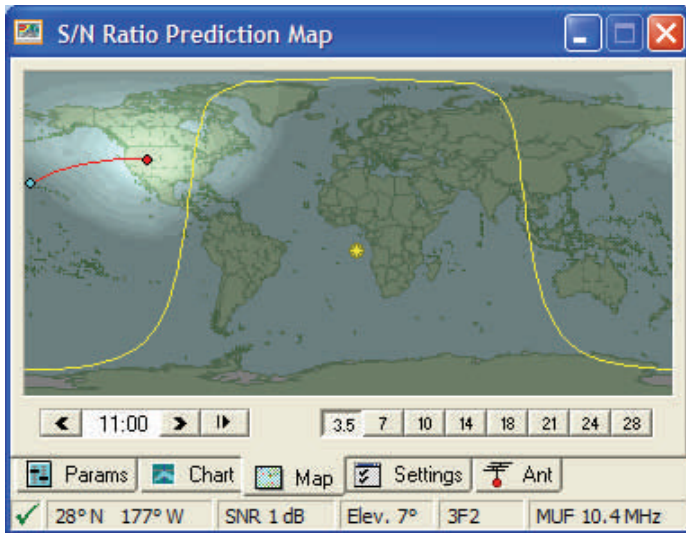


Figure 1. 1100 UTC (5 AM)

The red dot is my QTH and the blue dot is the distant station location. The yellow line is the sunrise/sunset boundary with the yellow star indicates the daylight area. The brighter areas indicate better propagation. From the map, a large part of North America is in the good propagation area. Along the bottom status bar, with the cursor placed over the distant station, are the coordinates of the distant station, the SNR (Signal to Noise Ratio), arrival angle of the signal, number of hops and ionosphere layer, and MUF (maximum usable frequency).

The next group of maps, Figure 2 through Figure 5, is each one hour later from the previous map.

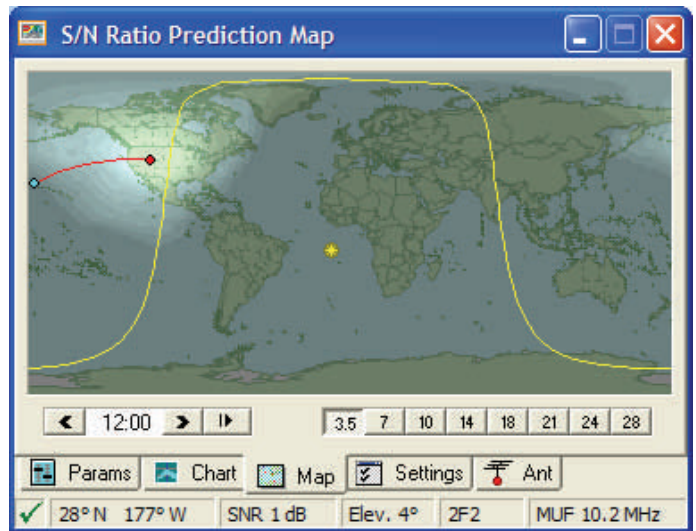


Figure 2. 1200 UTC (6 AM)

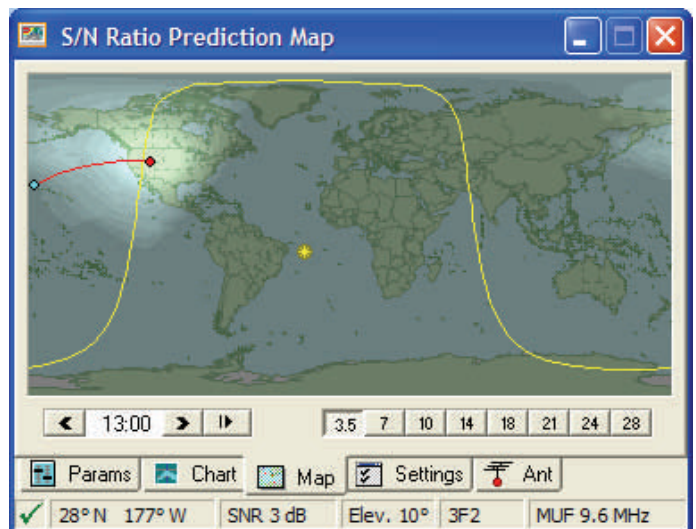


Figure 3. 1300 UTC (7 AM)

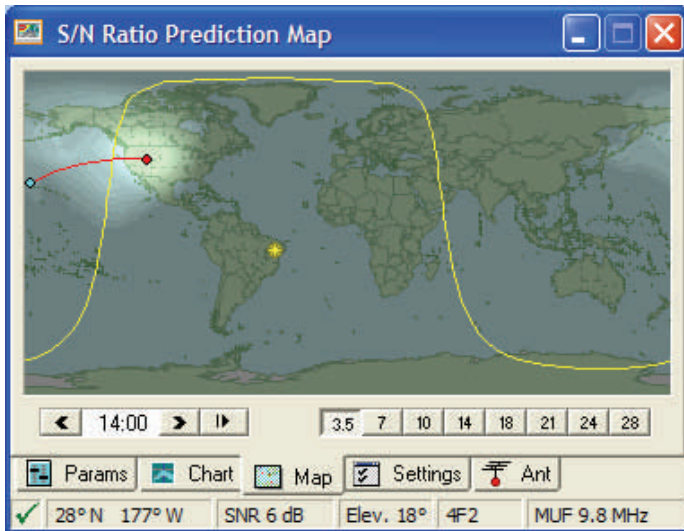


Figure 4. 1400 UTC (8 AM)

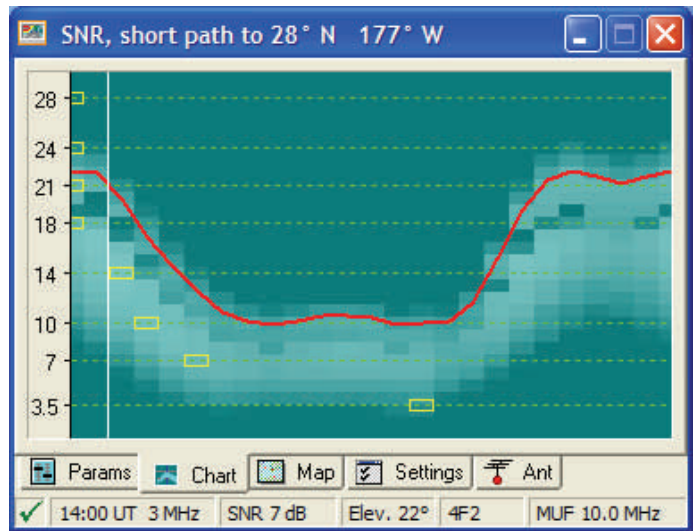


Figure 6.

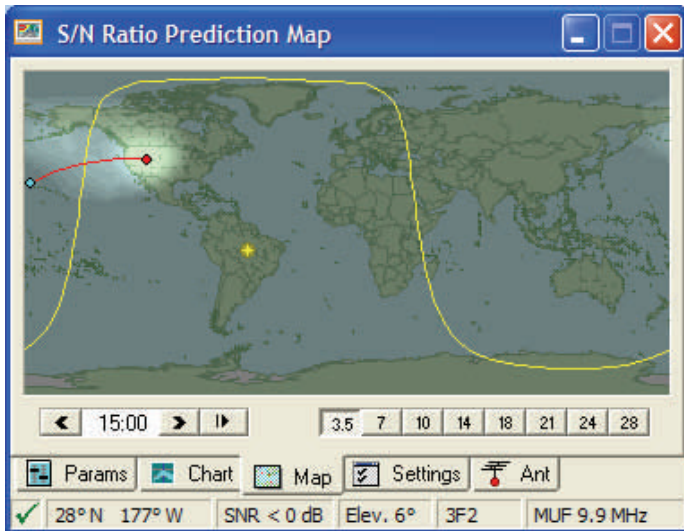


Figure 5. 1500 UTC (9 AM)

As you can see from Figure 1 to Figure 5, the propagation area is changing as the daylight area moves.

Another interesting screen is the chart tab window which has the point to point prediction from my QTH to the distant station (see Figure 6).

The point to point prediction chart shows the median SNR values vs. the UTC time and frequencies from 2 to 30 MHz. The ham bands are shown as green horizontal dotted lines. The whiter the tile, the better the propagation. The white vertical hair line indicated the current hour. The red curve shows the statistical median MUF (50% Maximum Usable Frequency). The yellow box indicates where the program has found the highest SNR value along each green horizontal dotted line and places the box at the peak (the best time to transmit on the band for the given parameters). Placing the cursor on the left side of the yellow box on the 3.5 MHz line showed a time of 1330 UTC and the right side of the box showed 1400 UTC. The time interval of the box indi-

cated the best time to make contact with the distant station. Actual contact was made to Midway Atoll at 1402 UTC.

The information from the HAM Cap program mirrored what I had observed earlier from working K4M. Ham radio has so many different things to explore and learn. Way cool!

73,
Cordell
KE7IK



The Club Christmas dinner is going to be at 6:30 P.M. on December 3rd at the Bluebird Restaurant. It will be



on the third floor where it has been in the past. The dinner will include Prime Rib and Chicken entrée, the usual potatoes and veggies and other good things. The cost will be \$17 per ticket and tickets will need to be purchased by November



25th. Pay-pal will be an option to pay with. Plan on coming and having a great time with the prizes and ending the year with a great time with your friends. For tickets or for more information contact Tammy Stevens or one of the other club officers.



There is a class currently being taught for getting a new ham license. It started last week but there will be 3 more classes, they will be from 7 to 9 P.M. on November 5, 12, and 19. If you need more information please contact Cordell Smart KE7IK.

Proxy (Absentee) Ballot and List of Candidates

For year 2010 Officers and Board
Of the Bridgerland Amateur Radio Club

Voting held on Saturday November 14th, 2008 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	
• Tyler Griffiths N7UWX	
•	
For Secretary	
• Tammy Stevens N7YTO	
•	
For Treasurer	
• Kevin Reeve N7RXE	
•	
For members of the board (Vote for three)	
• Roger Ellis KE7HTE	
• Neil Dabb KC7GCL	
• Richard Ellwood KE7GYD	
• Bob Wood WA7MXZ	
• Steve Harris KZ3SAH	
• Ted McArthur AC7H	

*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 13th. Send in your ballot or come in person.
If mailed please put your name on the mailing envelope only.*

(Ham Profile Continued from page 1)

practice exams on the computer, which she found to be very helpful. The FCC had removed the code requirement for the Technician class license by that time. Morse Code has always been difficult for her so she has stayed on the phone part of the VHF band. In addition to the many radios in both vehicles, Sheri's radio is one that she won at one of the club parties; however, she uses one of their other radios because the charger failed. Of their four children, their oldest son, Shawn, KD7TXT, is the one who has earned his license, which was about seven years ago.

Sheri and Khalil have used and relied upon amateur radio communications: for camping, for talking to each other while she was driving home from work and he was driving to work, for using the autopatch especially before the advent of cell phones. They talk to friends who they have met on ten meters and have joined them in club meetings, a field day event and other occasions, three times now on the island of Kaua'i. On this particular field day event Khalil made contact with our local Bridgerland Club.

Sheri is the youngest of nine children in the Facer family, growing up in Smithfield. She was in the second graduating class which attended all four years in the new Skyview High School, constructed in 1964. Sheri and Khalil attended the same junior high school for two years and the same high school for three years. Khalil was born and raised in Clarkston. It was after Khalil returned from an LDS mission that they started dating and then were married. They have three sons and one daughter and seven grandchildren. Sheri works as a cook at the Williamsburg Retirement Community and enjoys this work. Khalil is employed at Schrieber Foods in Logan where several other area hams work, among them Tyler Griffiths, N7UWX, Darrell Robison, KD7BWV, and Mark Bingham, KB7HFQ.

Khalil earned his first license his senior year in high school in 1968. This was a Novice class license, two years nonrenewable, with call sign WN7JKO on which he operated CW. His uncle, who lived in Boston, Massachusetts, was an amateur radio operator and he sent him his first radio. It was a Johnson Viking Adventurer crystal controlled transmitter with a bandswitched pi-network output for 80-40-20-15-10 meters. First manufactured in 1954 and assem-

bled in kit form by Novice class licensees. It was a fine work of craftsmanship, well-built the way some things used to be built. A friend had an old Allied Radio Knight Kit R-55 general coverage AM receiver which included the ham bands. You would tune it to 40 meters on one side and spread it out on the other side. Assembling radio equipment from kits was a great way to learn about radio. See accompanying photographs of these two instruments.

Khalil earned his General class license in late 1971 or early 1972 and with it his current call sign of WA7SHW which he retained when he moved up to Advanced and then to Extra. In the 1970s there was an active radio club which met once a month on the USU campus and an HF radio in a room in the engineering building. He operates all the amateur bands with the ten meter band being his favorite, making perhaps seventy percent of his contacts. In 1977, one night, he made a contact on ten meters who wanted to contact someone who had a ten-ten number, so he got one and his was the only station in Utah which had one and everyone wanted to contact him. "It was just like working DX." He could make a contact every 30 seconds. For the first six or twelve months he worked one hundred stations and he was always their number 49 or 50 for working all states on ten meters. He just stayed on ten meters. Even when the sunspot cycles were down he could still work ten meters. This present sunspot cycle is the lowest he has experienced on ten meters. He has thoroughly enjoyed meeting many friends through the ten-ten international net.

A notable experience occurred with a contact from Argentina on ten meters in the late 1970s or early 1980s. This man had a son who was attending Utah State University and he was coming to see his son for graduation in Logan in three weeks. The man and his son joined them for dinner, they just had a super time together.

Khalil belongs to RACES, MARS, ARES (renewal needed) and the local radio club. Khalil and Sheri are involved in many facets of amateur radio with two meters being one of them. Together they have given many years of valuable service and mentoring to the local radio community and to a worldwide radio community. Those of us in Cache Valley give our heartfelt thanks to these two fine veteran amateur radio operators.



BYLAWS
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 bonafide 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 (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 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.

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 $\frac{3}{4}$ 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.

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 mailed no later than ten (10) days prior to the scheduled meeting date.

Questions for General Class License

1. (G1A02) On which of the following bands is phone operation prohibited?
 - A. 160 meters
 - B. 30 meters
 - C. 17 meters
 - D. 12 meters
2. (G1E09) What language must you use when identifying your station if you are using a language other than English in making a contact?
 - A. The language being used for the contact
 - B. Any language if the US has a third party agreement with that country
 - C. English
 - D. Any language of a country that is a member of the ITU
3. (G2F02) What should you do if a CW station sends "QRS" when using Morse code?
 - A. Send slower
 - B. Change frequency
 - C. Increase your power
 - D. Repeat everything twice.
4. (G4A10) What is the reason for neutralizing the final amplifier stage of a transmitter?
 - A. To limit the modulation index
 - B. To eliminate self oscillations
 - C. To cut off the final amplifier during standby periods
 - D. To keep the carrier on frequency
5. (G5B12) What would be the voltage across a 50-ohm dummy load dissipating 1200 watts?
 - A. 173 volts
 - B. 245 volts
 - C. 346 volts
 - D. 692 volts
6. (G7A08) What circuit is used to process signals from the RF amplifier and local oscillator and send the result to the IF filter in a superheterodyne receiver?
 - A. Balanced modulator
 - B. IF amplifier
 - C. Mixer
 - D. Detector
7. (G9A13) What would be the SWR if you feed a folded dipole antenna that has a 300-ohm feed-point impedance with 50-ohm coaxial cable?
 - A. 1.5:1
 - B. 3:1
 - C. 6:1
 - D. You cannot determine SWR from impedance values

**THE OHM TOWN NEWS
PO BOX 111
PROVIDENCE, UT 84332**



November, 2009

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