

THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

May 2008

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

HAM PROFILE

by Brent Carruth KE7QHP

For Marilynn Cowley, KE7SGN, ham radio has always been a part of her life. Listening to her, one quickly observes how happy she is to have her license. Generously replying to a request for a biographical sketch for this newsletter, which relates her interest in amateur radio, Marilynn prepared such a well-written engaging account that it is best shared in her own words.

"Ham radio has been a part of my life since I can remember. My father was a ham radio operator for as long as I can remember up until the day he died. Growing up I remember being excited to hear



KA0ASO this is WA7VQC. This meant that dad was close. We would go on trips and have to watch out when we went into covered parking because of the

antenna on top of our regular size van. I think it was pushed back several times if not totally scraped off the top. Dad would just stop and put it back on.

"In 1989 I went to live with my dad in California. That October there was an earthquake in San Francisco I heard about it on the TV and raced over to my dad's radio set up. For the next few hours I sat and listened to what was happening. Many times I would hear things before the news got them. It was so neat.

"From a young child I wanted my radio license. I tried to learn Morse code and didn't do so well. I just got really frustrated and decided I would never get my radio license. A couple of years ago I had heard that they didn't need Morse code any more. Since I didn't have any one to talk to I didn't do anything about

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CALLING ALL AMATEURS

IT'S PUBLIC SERVICE TIME

by Kevin Reeve

There is one thing you can say about the Bridgerland Amateur Radio club, and that is service. Ya we enjoy the hobby, but the large majority of hams also love to use their radio to help out. Many of us stand around waiting for the big emergency to happen, but it hasn't. We find solace in the fact that we can train, and we can use our skills to help one of the many events happening over the next few months. I thought I would share a few tips I have based on my own experience.

Public service events are for the most part casual. We are there to help everyone have a safe and enjoyable event. We are called upon by event organizers, but are really there for the participants. These events are a great opportunity to use your equipment, learn about it's strengths and weaknesses, and get some hands on experience. Don't be shy, sign up for a couple of events this summer, come have fun, and those who have done them before will help you out. To be honest, it has been these public service events that I have really learned how to operate my equipment, and meet fellow hams.

What to bring. Besides your radio, be prepared for all kinds of weather. You never know in Cache valley, even in the so called summer months. Sun screen is a must, as is some water. Bring a notepad and pen/pencil. You may need to record information such as names, participant numbers, or other information to relay. If someone approaches me to request some info I do not know, I write it down, then when appropriate I can get on the radio and relay the information or ask the question. Time stamps are a good thing to have. For some events, I have found earplugs to be handy. During the Cache Cruis'n, those cars are loud. I have a earphone in one ear to hear my radio, and a earplug in

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UPCOMING ACTIVITIES 2008

- May Club Meeting - May 10
Including an Antenna building party
- Mountain Man Rendezvous - May 21,22,23
- 4-H Ham Club Meeting - May 29
7:00 PM at the ASTE building at USU
- Little Red Riding Hood - June 7
- VE Test Session - June 14
- Tour deCure - June 14
- Cache Valley Biathlon - June 14
- Wasach Back Relay-ARES - June 20-21
- Field Day - June 28-29
- Utah MS 150 - June 28-29

The VE test sessions are normally held at the Old Main building at Utah State University at 8:00 AM

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.

The Listening Post

Name	Notes	Frequency	Days	Time
VHF morning rag chew		146.720- 103.5	M-F	6:30AM
VHF evening rag chew		146.560	M-F	4-5PM
BARC Net		146.720- 103.5	T	9:00PM
SLC SSB VHF Net		144.250 USB	M	9:00PM
	(horizontal polarization)			
Logan Storehouse ERC		146.420	1&3 Sn	8:30PM
	(W7MOY)			
Ogden Utah North VHF		145.590	2,4 T	7:15PM
	(W7OGD)			
SPARC Net		146.800- 88.5	1 W	8:00PM
	(Sedgwick Peak)			
RACES VHF Net (IRLP)		147.200+ 103.5	3 Th	8:00PM
	(even months)			
HF daily rag chew		7.228	Dy	12:00PM
High Noon Net		7.240	Dy	12:00PM
	(relaxed)			
Beehive Utah Net (NTS)		7.272	Dy	12:30PM
HF daily rag chew		3.904	Dy	6:00PM
Ogden Utah North HF		3.993	1,3,5 T	7:15PM
RACES HF Net		3.918	3 S	8:00AM
	(odd months)			

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

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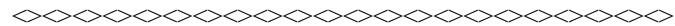
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(Ham Profile Continued from page 1)

it. So I just let it go. Then I got my CERT training at USU. I love that kind of stuff (I took the EMT class at Weber State and loved it.) A friend of mine took the CERT class and told me she wanted to get her HAM radio license. I heard about the Cache 4-H class being taught by Kevin Kesler and Kevin Reeve beginning February 2008 and we decided to take the challenge. Since my friend was going to be gone when the test was given we traveled down to Clearfield and took the test there on 5 March. We got the same score and were so excited to find out what our call signs were going to be.

"The Sunday after we took the test I talked to my brother and told him about the vanity call signs and that someone could have that call sign even though dad was dead. He was excited to find out that Morse code wasn't required either. After finding out about the vanity call signs he decided to get his license and get dad's sign. He will be the third of six siblings to get one."

This is a story certainly of interest to our amateur radio community and worthy to be told. Some of us knew her father well. A few more personal anecdotes may also be of interest to the reader. Marilyn's father Dick Cowley drove oil rigs. Once, in the 1980s she accompanied him driving through Wyoming. He stopped and said, "Do you want to call Mom?" Of course she did, and he called home to Evanston using a distant repeater's autopatch. This was amazing to her. Marilyn has a degree in Criminal Justice Enforcement and knows first-hand that communications is important at all times. She wants to help with civic events and emergency communications. Soon she and her friend Victoria want to get their general class license and get some additional equipment. Her present radio is a Yaesu VX-150 and she is looking for another antenna, finding it a challenge to decide which one. She is active in the local radio community and one can hear her on the weekly Bridgerland net.



(Public Service Info—Continued from page 1)

the other. Works great, and I can still hold a conversation with someone nearby.

First Aide Kit. You probably have one in your car, but during more than one event, I have been approached about basic first aid supplies. A band aide, Ibuprofen, etc. I also carry extra water.

Radio Manual. Many of these events are very relaxing and easy. It gives me time to learn more about my radio. I can read through the manual or have it available if I need to program a frequency into my radio.

For those of you new to the hobby, don't be

shy. This is your chance to learn more about ham radio and your equipment. For those of you long time amateurs, dust off the handheld and come on out and have some fun, while mentoring all the new amateurs we have in the valley. We have had more than 40 earn their license in the last 6 months.

**ARRL Rocky Mountain Division update
April 2008**

==== 2008 Rocky Mountain Division Convention ====

Dealers. Swapmeet. 15+ seminars. Fun ham radio competitions. Lots of prizes. VE exams. Great food. Even better company.

Planning for the 2008 Rocky Mountain Division Convention is happening right now, and you're invited to spend a wonderful weekend with hams from across the Division in Bryce Canyon, Utah this July 11-13. Special guest Katie Breen W1KRB, ARRL's membership manager will be present to share fantastic ideas that can be taken back to your respective ham communities and clubs.

The convention will occur at Ruby's Inn at Bryce Canyon. Hotel accommodations are available, as are camping and RV sites. Advanced registration as well as special hamfest rates for hotel rooms are available only until June 1.

We hope you'll join us for a great time! All the information you need awaits you at:

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

==== Upcoming hamfests, tailgates & conventions ====

- April 26 Central New Mexico Spring Tailgate (Albuquerque, NM)
- April 27 Mesilla Valley Radio Club Bean Feed & Swapfest (Las Cruces, NM)
- May 10 Silver City Swapfest (Silver City, NM)
- May 24-25 Wyoming State Convention (Casper, WY)
- June 7 Pikes Peak Radio Amateur Assn Megafest (Monument, CO)
- July 11-13 Rocky Mountain Division Convention (Bryce Canyon, UT)
- August 17 Denver Radio Club Swapfest (Golden, CO)

Links to websites belonging to the above events are found on the Rocky Mountain Division site: www.RockyMountainDivision.org

===== Upcoming on-air activities =====

In addition to chewing the rag with fellow hams, here are some additional on-air activities which await you on the airwaves:

Upcoming special event stations:

<http://www.arrl.org/contests/spew.html>

Upcoming contests:

<http://www.arrl.org/contests/calendar.html>

Operating awards:

<http://www.arrl.org/awards/>

===== Final note... =====

Please touch base with your Section Manager if he can be of any assistance to you:

Jeff Ryan K0RM (Colorado):

<http://www.arrl.org/sections/?sect=CO>

Don Wood W5FHA (New Mexico):

<http://www.arrl.org/sections/?sect=NM>

Mel Parkes NM7P (Utah):

<http://www.arrl.org/sections/?sect=UT>

Chris Pritchard WY7UPR (Wyoming):

<http://www.arrl.org/sections/?sect=WY>

We also welcome you to contact both Dwayne and I with concerns, questions or ideas. See you on the air-waves!

73,

Brian Milesosky N5ZGT,

Rocky Mountain Division Director

Dwayne Allen WY7FD,

Rocky Mountain Division Vice-Director

Division website:

www.RockyMountainDivision.org

The ARRL Letter Vol. 27, No. 16 April 25, 2008
=> **COURT FINDS FCC VIOLATED ADMINISTRATIVE PROCEDURE ACT IN BPL DECISION**

The US Court of Appeals for the District of Columbia Circuit today released its decision <<http://pacer.cadc.uscourts.gov/common/opinions/200804/06-1343-1112979.pdf>> on the ARRL's Petition for Review of the FCC's Orders adopting rules governing broadband over power line (BPL) systems. The Court agreed with the ARRL on two major points and remanded the rules to the Commission. Writing for the three-judge panel of Circuit Judges Rogers, Tatel and Kavanaugh, Judge Rogers summarized: "The Commission failed to satisfy the notice and comment requirements of the Administrative Procedure Act ('APA') by redacting studies on which it relied in promulgating the rule and failed to provide a reasoned explanation for its choice of the extrapolation factor for measuring Access BPL emissions."

The Court agreed with the ARRL that the FCC had failed to comply with the APA by not fully disclosing for public comment the staff studies on which it relied. The Court also agreed with the ARRL that the Commission erred in not providing a reasoned justification for its choice of an extrapolation factor of 40 dB per decade for Access BPL systems and in offering "no reasoned explanation for its dismissal of empirical data that was submitted at its invitation." The Court was not persuaded by the ARRL's arguments on two other

points, on which it found that the Commission had acted within its discretion.

The conclusion that the FCC violated the APA hinges on case law. "It would appear to be a fairly obvious proposition that studies upon which an agency relies in promulgating a rule must be made available during the rulemaking in order to afford interested persons meaningful notice and an opportunity for comment," the Court said, adding that "there is no APA precedent allowing an agency to cherry-pick a study on which it has chosen to rely in part."

The Court continued, "The League has met its burden to demonstrate prejudice by showing that it 'ha[s] something useful to say' regarding the unredacted studies [citation omitted] that may allow it to 'mount a credible challenge' if given the opportunity to comment." Information withheld by the Commission included material under the headings "New Information Arguing for Caution on HF BPL" and "BPL Spectrum Tradeoffs." The Court concluded that "no precedent sanctions such a 'hide and seek' application of the APA's notice and comment requirements."

With regard to the extrapolation factor, the Court ordered: "On remand, the Commission shall either provide a reasoned justification for retaining an extrapolation factor of 40 dB per decade for Access BPL systems sufficient to indicate that it has grappled with the 2005 studies, or adopt another factor and provide a reasoned explanation for it." The studies in question were conducted by the Office of Communications, the FCC's counterpart in the United Kingdom, and were submitted by the ARRL, along with the League's own analysis showing that an extrapolation factor closer to 20 dB per decade was more appropriate, as part of the record in its petition for reconsideration of the FCC's BPL Order. The Court said that the FCC "summarily dismissed" this data in a manner that "cannot substitute for a reasoned explanation." The Court also noted that the record in the FCC proceeding included a study by the National Telecommunications and Information Administration that "itself casts doubt on the Commission's decision."

The briefs for the ARRL were prepared by a team of attorneys at WilmerHale, a firm with extensive appellate experience, with assistance from ARRL General Counsel Christopher D. Imlay, W3KD. Oral argument for the ARRL was conducted by Jonathan J. Frankel of WilmerHale. Oral argument was heard on October 23, 2007; the Court's decision was released more than six months later.

After reading the decision, General Counsel Imlay observed, "The decision of the Court of Appeals, though long in coming, was well worth the wait. It is obvious that the FCC was overzealous in its advocacy of BPL, and that resulted in a rather blatant cover-up of the technical facts surrounding its interference potential. Both BPL and Amateur Radio would be better off had the FCC dealt with the interference potential in an honest and forthright manner at the outset. Now there is an opportunity to finally establish some rules that will allow BPL to proceed, if it can in configurations that don't expose licensed radio services to preclusive interference in the HF bands."

ARRL Chief Executive Officer David Sumner, K1ZZ, added: "We are gratified that the Court decided to hold the FCC's feet to the fire on such a technical issue as the 40 dB per decade extrapolation factor. It is also gratifying to read the Court's strong support for the principles underlying the Administrative Procedure Act. Now that the Commission has been ordered to do what it should have done in the first place, we look forward to participating in the proceedings on remand, and to helping to craft rules that will provide licensed radio services with the interference protection they are entitled to under law."

ARRL President Joel Harrison, W5ZN, concluded: "I am very pleased that the Court saw through the FCC's smoke screen and its withholding of valid engineering data that may contradict their position that the interference potential of BPL to Amateur Radio and public safety communications is minimal. The remand back to the FCC regarding their use of an inappropriate extrapolation factor validates the technical competence of Amateur Radio operators and especially of the ARRL Lab under the direction of Ed Hare, W1RFI. We are grateful for the work of our legal team and especially for the unflinching support of the ARRL membership as we fought the odds in pursuing this appeal."

Space Bulletin 004 ARLS004

From ARRL Headquarters April 28, 2008

ARRLS004 Ten New Satellites in Orbit

Ten satellites reached orbit April 28 aboard an Indian PSLV-C9 rocket launched from the Satish Dhawan Space Center. The primary payloads were India's CARTOSAT-2A and IMS-1 satellites. In addition to the NLS-5 and RUBIN-8 satellites, the rocket carried six CubeSat research satellites, all of which communicate using Amateur Radio frequencies. All spacecraft deployed normally and appear to be functional at this time.

The SEEDS satellite is designed and built by students at Japan's Nihon University. When fully operational, SEEDS will download telemetry in Morse code and 1200-baud FM AFSK packet radio at 437.485 MHz. The satellite also has Slow-Scan TV (SSTV) capability. Several stations have reported receiving SEEDS CW telemetry and the team would appreciate receiving more reports from amateurs at their ground station Web page.

AAUSAT-II is the creation of a student team at Aalborg University in Denmark. It will downlink scientific telemetry at 437.425 MHz using 1200 or 9600-baud packet.

Can-X2 is a product of students at the University of Toronto Institute for Aerospace Studies, Space Flight Laboratory (UTIAS/SFL). Can-X2 will downlink telemetry at 437.478 MHz using 4 kbps GFSK, but the downlink will be active only when the satellite is within range of the Toronto ground station.

Compass-One was designed and built by students at Aachen University of Applied Sciences in Germany. The satellite features a Morse code telemetry beacon at 437.275 MHz. Compass-1 will also provide a packet radio data downlink, which will include image data, at 437.405 MHz.

Cute 1.7 + APDII is a satellite created by students at the

Tokyo Institute of Technology. This satellite will not only provide telemetry, it will also offer a 9600-baud packet store-and-forward message relay with an uplink at 1267.6 MHz and a downlink at 437.475 MHz.

Delfi-C3 was designed and built by students at Delft University of Technology in the Netherlands. It includes an SSB/CW linear transponder. The satellite will be in telemetry-only mode for the first three months of the mission, after which it will be switched to transponder mode. Delfi-C3 downlinks 1200-baud packet telemetry at 145.870 MHz. The linear transponder, when activated, will have an uplink passband from 435.530 to 435.570 MHz and a corresponding downlink passband from 145.880 to 145.920 MHz.



The ARES E-Letter April 22, 2008

+ LETTERS: FEMA Now Responsible for Mass Care; ARES Role More Defined?

FEMA is now the lead agency for Mass Care (ESF #6) at the Federal level based on the recently released National Response Framework (replacing the National Response Plan). Red Cross still maintains a support role. The same is true in many states as well. For instance, in Georgia, the Department of Human Resources' Division of Family and Children Services is the government lead and Red Cross the volunteer lead for Mass Care.

As a professional disaster preparedness planner, we recognize that the local Emergency Management Agency (EMA) is ultimately the primary agency responsible for all disaster response. They have the ability to task whatever resources are appropriate to a response and assign them as needed, including communications (ESF #2 Telecommunications). This includes tasking ARES and/or RACES organizations to assist Red Cross with communications if communications support is requested by Red Cross to the local EMA. In the county where I live, Gwinnett County, Georgia, ESF 2 lists ARES as a supporting organization. That is how local ARES members respond and are assigned as needed.

We as Amateur Radio operators and as members of ARES need to have a better understanding of core emergency response planning to understand just how we fit in. If something happens locally that requires my professional involvement, I probably won't be available to ARES, but if I can, I will, through the direction issued by the local EMA. It may be to support Red Cross who will take me as an EMA resource.

I think it is probably true that Red Cross is having to learn to function within this structure as well. No single agency can provide all the resources in all the support functional areas that it needs during a disaster. That was discovered during Katrina. That is why we see the changes and a heavy emphasis in the emergency preparedness community on incident command and the National Response Framework. -- Stan Edwards, WA4DYD, Georgia Master Certified Emergency Manager <WA4DYD@gmail.com>

[For more information on the new National Response Framework, see <<http://www.fema.gov/emergency/nrf/mainindex.htm>> -- ed.]

Questions for Extra Class License

1. (E1A07) Within the 20-meter band, what is the amount of spectrum authorized to only control operators holding an Amateur Extra Class operator license?
 - A. 25 kHz
 - B. 50 kHz
 - C. None
 - D. 25 MHz
2. (E1F22) What must the VE team do if the examinee does not score a passing grade on the examination?
 - A. Return the application document to the examinee and inform the examinee of the grade
 - B. Return the application document to the examinee
 - C. Inform the examinee that he or she did not pass
 - D. Explain how the incorrect questions should have been answered
3. (E3A07) What frequency range would you normally tune to find EME stations in the 2-meter band?
 - A. 144.000 - 144.001 MHz
 - B. 144.000 - 144.100 MHz
 - C. 144.100 - 144.300 MHz
 - D. 145.000 - 145.100 MHz
4. (E4E01) What circuit construction technique uses leadless components mounted between circuit board pads?
 - A. Raised mounting
 - B. Integrated circuit mounting
 - C. Hybrid device mounting
 - D. Surface mounting
5. (E5G01) What is the Q of a parallel R-L-C circuit if the resonant frequency is 14.128 MHz, L is 2.7 microhenrys and R is 18 kilohms?
 - A. 75.1
 - B. 7.51
 - C. 71.5
 - D. 0.013
6. (E6D04) Exceeding what design rating can cause a cathode ray tube (CRT) to generate X-rays?
 - A. The heater voltage
 - B. The anode voltage
 - C. The operating temperature
 - D. The operating frequency
7. (E7E15) What are the major spectral impurity components of phase-locked loop synthesizers?
 - A. Broadband noise
 - B. Digital conversion noise
 - C. Spurs at discrete frequencies
 - D. Nyquist limit noise

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May, 2008

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