



THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

FEBRUARY 2003

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

PRESIDENT'S MESSAGE

First of all, I'd like to thank all those who attended our January club meeting. The presentation was put together a bit hastily, and Murphy did rear his ugly head (I SWEAR the PSK31 bands are usually much busier!), but all in all I think we had a good time. If you weren't able to attend and would like a copy of the CD we distributed, please contact me and I will try to bring some to February's meeting. This month we hope to have a presentation on using the IRLP (Internet Radio Linking Project) system. It should be a lot of fun and I hope everyone can attend.

Now, to more serious matters. I think most amateurs would agree that one of the more serious challenges facing us today is that of antenna restrictions. By limiting the types of antennas and support structures we can erect, zoning laws and restrictive covenants threaten to limit our communications capabilities. It should come as no surprise that local governments and owner's associations would be willing to restrict our rights and hobble our emergency communications capabilities in the name of someone's idea of aesthetics. After all, in today's society homogeneity is the norm and being different is looked down upon.

In light of the current environment, we amateurs must look out for ourselves. One way we can do this is by supporting House Bill 79. This bill has been introduced and sponsored by Representative Neal B. Hendrickson, and is basically Utah's attempt to get PRB-1 protection to the local level as many other states have already done. In a nutshell the bill would force local governments to "reasonably accommodate" amateurs in any laws they pass restricting antennas or sup-

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HAM PROFILE

By Boyd Humpherys W7MOY

It's not often we find one of our cohorts who has traveled so much of the world, did so many things, and is still doing them as Erin Milligan N7WJL. We'll run out of space long before we cover all the details, however we'll cut the print size down a bit.

Erin claims he's native Cachevalley-ite, however he must have been home just long enough to shift gears, pack his bags, and head for the airport. Erin has held a ticket for about 11 years, updating to Extra about a year ago. He sports a KENWOOD HT and a Yaesu HT plus some Radio shack gear. His VHF vertical blew down in a tornado a short time ago. It appears we need to organize a mast mounting project and get him back on

the air. He was born on the Island, (Logan area, not Washington or California), then at about 6 months



moved to North Logan and hasn't changed addresses since. 100 acres and several horses gives one an idea how he spends some of his time. He matriculated and graduated from South Cache High School, the rest of us just squeaked by. He attended some quarters at USU, then took a break for a 30 month mission for his faith in Norway. Of course they had to learn Norwegian the difficult way, that was one of the first languages he

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port structures. Of course, this bill won't affect restrictive covenants, and your definition of "reasonable" may differ from the powers that be. Still, it is an important first step.

In order to get this bill passed, it is vitally important that you contact your state representatives. If you don't know who they are, visit the following sites:

Senate Roster

<http://beta.utahsenate.org/perl/sperl/roster2003.pl>

House Roster

<http://www.le.state.ut.us/house/members2003/membertable1.asp>

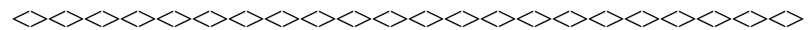
All you have to do is let them know that you are one of their constituents, and that you would like them to support HB 79. If you want to plead the case a little more, here are some suggestions:

- 1) Be polite. Yelling and screaming about things won't help, and may even force opinions to the other side.
- 2) Don't use the word "hobby". The minute you do, you put us in the same category as stamp collectors. Refer to Amateur Radio as what it is: a service.
- 3) Focus on emergency communications. It has a lot of clout in the current political environment.

I hope that everyone will make his or her voice heard in this matter. I must admit that I'm as apathetic as most people when it comes to participating in our political process. In this case, however, we can't afford to "let someone else do it".

Thanks, and see you at club meeting!

73 de N7XZ



Tidbits

Ever wonder why a 14 gauge copper wire is smaller than a 10 gauge copper wire. Logic would tell us that the larger the number the larger the gauge. Not so with wire. The American Wire Gauge (AWG) has little to do with size and more to do with a manufacturing process. Copper wire is made from long copper rods that are pulled through holes (dies) that are increasingly smaller in size. Pulling the wire through the die causes it to stretch and reduces the wires diameter. The AWG is simply the number of dies the wire had to be pulled through in order to reach its final diameter or size. Thus a 10 gauge wire was pulled through 10 different dies.

From the book Cabling – The complete guide to network wiring – a Sybex book.

Bridgerland Amateur Radio Club Proposed Budget for 2003

	2001 Budget	2001 Actual	2002 Budget	2002 Actual	<i>Members in 2002</i>	Proposed for
Budgeted Income						
Member Dues	\$1,875.00	\$1,525.50	\$1,875.00	\$1,645.39	83	\$1,875.00
Equipment Dona-	\$0.00	\$700.00	\$0.00	\$0.00		\$0.00
Total Income	\$1,875.00	\$2,225.50	\$1,875.00	\$1,645.39		\$1,875.00
 Budgeted Ex-						
Autopatch Phone	\$200.00	\$0.00	\$0.00	\$0.00		\$0.00
Christmas Party	\$300.00	\$300.64	\$300.00	\$364.56		\$400.00
Club Fees	\$18.00	\$15.00	\$18.00	\$0.00		\$18.00
Equipment	\$150.00	\$111.07	\$150.00	\$0.00		\$150.00
Field Day	\$300.00	\$264.08	\$500.00	\$52.44		\$500.00
Misc. Expense	\$100.00	\$0.00	\$200.00	\$0.00		\$200.00
Newsletter	\$650.00	\$361.74	\$650.00	\$240.05		\$300.00
PO Box	\$30.00	\$20.00	\$40.00	\$20.00		\$40.00
Soc. & Refresh.	\$250.00	\$126.82	\$250.00	\$104.34		\$250.00
Supplies	\$100.00	\$126.82	\$0.00	\$0.00		\$0.00
Promitory Rent	\$0.00	\$0.00	\$0.00	\$0.00		\$600.00
Contingency Fund	\$850.00	\$0.00	\$800.00	\$600.00		\$450.00
Total Expenses	\$2,948.00	\$1,326.17	\$2,908.00	\$1,381.39		\$2,908.00
 Overall Net In-	-\$1,073.00	\$899.33	-\$1,033.00	\$264.00		-\$1,033.00

Absentee Ballot

Proposed 2003 Budget

Vote to be taken Thursday, February 13, 2001

Hyde Park City Office Building, 7:30 p.m.

As to the adoption of the proposed 2003 budget as presented in this newsletter, I am

IN FAVOR

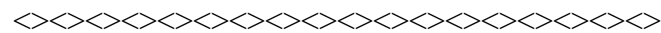
OPPOSED

INSTRUCTIONS:

This ballot must be either sent by mail in time to be received prior to the meeting or it may be another member of the club who is coming to the meeting. The mailing address

**BARC
P.O. BOX 111
Providence, UT**

Hams help out during OK telephone emergency
Hams responded with emergency communication when Broken Arrow, OK, a town of 75,000, experienced a citywide telephone outage on December 23. A request went out for amateurs to assist with emergency effort at the local Emergency Operations Center and three area hospitals. Several hams from the Broken Arrow Amateur Radio Club responded to the call, staffing positions at the Broken Arrow EOC and three hospital emergency rooms. The operation lasted about five hours, with messages between the EOCs and hospitals being passed. Lines of communications were also opened with the Oklahoma State Department of Civil Emergency Management in Oklahoma City via the HF amateur station in the Broken Arrow EOC. The trouble with the phone system was created by the loss of SS7 signaling, a digital protocol for call routing. Unable to route a call out of the local exchange, Broken Arrow phone customers could not call outside the city limits. As a result, the City of Broken Arrow implemented its Telecommunications Failure Plan.



HIGH SPEED MULTIMEDIA HAMMING
COULD BE THE NEXT BIG THING

High-speed multimedia hamming via the "Hinternet" could be the next big thing for Amateur Radio. That's the hope of the ARRL High Speed Multimedia (HSMM) Working Group, which is adapting the highly popular IEEE 802.11b Part 15 wireless Internet protocol to Part 97 amateur operating. "We expect it to be nothing less than revolutionary!" says John Champa, K8OCL, who chairs the ARRL HSMM Working Group—a subset of the League's Technology Task Force. The Working Group's new "High-Speed Digital Networks and Multimedia" page <<http://www.arrl.org/hsmm/>> recently premiered on the ARRL Web site. Champa's team is calling the specific techniques, software and hardware involved "the ARRL 802.11b protocol" to distinguish it from the unlicensed, commercial protocol. Systems employ direct-sequence spread spectrum techniques and operate in the 2.4 GHz range. The term "Hinternet" (ham + Internet), Champa says, is a user-friendly way to refer to the development of high-speed Radio Local Area Networks (RLANs)

capable of simultaneously carrying audio, video and data signals. "The development of the ARRL 802.11b protocol will significantly enhance Amateur Radio, especially with respect to emergency communication and support of public service activities," Champa predicted. He and his HSMM Working Group colleagues also expect that it will attract many technically oriented users of the Internet and wireless LANs to get their amateur tickets. In addition to emergency communication, Hinternet applications could include two-way streaming video, full-duplex streaming audio, Voice over Internet Protocol (VoIP) applications such as eQSO, EchoLink, iLink and IRLP, and digital voice. As on the wired Internet, communication can be point-to-point, point-to-multipoint and multicast at high bandwidth. "An emergency volunteer equipped with a laptop or a wireless PDA (personal digital assistant) with a microphone and a small video camera now has the tools to be a mobile set of eyes and ears in the midst of a communications emergency," says Working Group member Kris Mraz, N5KM. In Michigan, the Livingston County HSMM Experimenters Team already has three HSMM access points—called "APs" in the commercial world—and about a dozen stations on the air centered on 2437 MHz. Another group of Amateur Radio 802.11b enthusiasts has recently organized in the San Antonio, Texas, area. Although other amateur allocations also would be appropriate for Hinternet operation, the use of 2.4 GHz was an easy choice, since Part 15 WiFi (wireless fidelity) devices already operate in that part of the spectrum, and inexpensive commercial equipment is widely available. Acting on an ARRL petition, the FCC has proposed elevating amateurs to primary at 2400 to 2402 MHz. The ARRL publications catalog now includes the book 802.11 Wireless Networks: The Definitive Guide <<http://www.arrl.org/catalog/?category=&words=802.11>> by Matthew S. Gast. The book covers the topics of creating and administering wireless networks. Champa says that taken in a nationwide context, the meaning of the term Hinternet goes deeper than just an amalgamation of words. "In nautical terms the word hinterland is 'the land beyond the coast,'" he said. "And so it is with us. 'The Hinternet' is the radio net beyond the Internet."



(Continued from page 1)

was exposed to. He then spent what was to be an extended period in the Army, first as a Pvt.E1. Then a stint with the National Guard in 91, culminating with some bronze stars and a Lt. Col rank. He began two tours of Vietnam, two years in Iran, Germany, Iran, France, and a few other good places. He now speaks a rather fluent Farsi, French, Norwegian, Vietnamese, Spanish, and German. CQ in any of those languages sounds about the same however.

He relates some fascinating accounts of working with the Vietnamese under hot fire conditions when a good portion of his team got wiped out. He worked with a medical team and helped relieve a lot of human suffering. His unit had volunteered to build a couple of dams to assist in irrigation during the dry seasons. When they dedicated one of the dams, a lot of high powered brass of the country attended, and he attended under protest, however one of officials, the number 2 Engineer in the country came up, slowly read his name on the uniform and commented that he had heard that name (Milligan) before, then it came, he had attended USU many years back in Civil Engineering, and had taken classes from Dr. Cleve Milligan, Erin's father. Small world, however things got a little easier after that.

His good spouse Eileen Carleson, whom he met in Minneapolis, keeps a great home, is convinced of the merits of Ham Radio, and both of them have been volunteering at the Martin Harris pageant for about a decade. The enclosed picture illustrates their dedication and enjoyment in the endeavor. When time permits, when there is time, snowmobiling and stamp collecting get squeezed in. A few years back, on a snowmobile excursion in the Tony Grove area, they encountered a very desperate snowmobiler, revealing that a lady had suffered an accident up the canyon, likely had a broken neck and he was headed for Beaver to try a call 911. Erin's son John, N7YSU, said hang on, I have capability to do the trick with his HT and the repeater. The call to 911 was relayed, and a chopper was on the way. They had agreed to communicate on the repeater, then shifted to a simplex frequency, and shortly a most welcome sight of the chopper being zeroed

in on location. Undoubtedly a life was saved, someone went prepared.

Space is limited, Erin has spent a good portion of his life assisting others. As they say in Australia, Good on Ya.



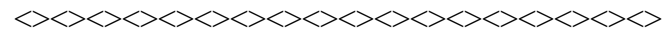
Board Meeting Briefs - Held January 15, 2003.

President Rik Stallings led a discussion on ideas on what could be done to take the club to the next level, including topics for club meetings, activities, projects events, and activation. The board members discussed ideas for making sure the club has something to offer all hams. Ideas and suggestions from club members are needed and appreciated. The entire years club meetings and themes will be planned out over the next few weeks.

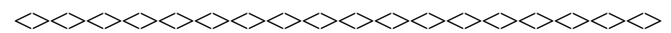
The budget for this year was discussed and planned. Last year's budget along with expenditures and income was reviewed. The club is in good financial shape. The budget will be presented to the club for voting in February and will be sent out in the February newsletter.

We need to get the hams back and heavily involved with the city stations. One idea discussed was to have hams check in from city stations to the state wide RACES net which is held every other month. Also discussed was bringing the various emergency com groups together to talk and coordinate. We discussed ideas for training. Some newer hams would like classes in basic electronics, CW, and other things. Could we get enough interest to get a CW class going weekly and have some fun? Would members be interested in building kits of some type?

In attendance **Pres** Rik Stallings N7XZ, **VP** Ted McArthur AC7II, **Tres**, Dave Fullmer, N7RRZ, **Sec** Kevin Reeve N7RXE, **Board Member** Dave Fornefeld KC7UYJ



Field Day is coming up in June, volunteers are needed. If you want to help let one of the Board members know. (Stay tuned for other events too.)



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

Questions for Technician Class License

1. (T1D07) How often must an amateur station be identified?
 - A. At the beginning of a contact and at least every ten minutes after that
 - B. At least once during each transmission
 - C. At least every ten minutes during and at the end of a contact
 - D. At the beginning and end of each transmission
2. (T1G03) Which band may NOT be used by Earth stations for satellite communications?
 - A. 6 meters
 - B. 2 meters
 - C. 70 centimeters
 - D. 23 centimeters
3. (T2C06) What is the meaning of: "Your signal report is five nine plus 20 dB..."?
 - A. Your signal strength has increased by a factor of 100
 - B. Repeat your transmission on a frequency 20 kHz higher
 - C. The bandwidth of your signal is 20 decibels above linearity
 - D. A relative signal-strength meter reading is 20 decibels greater than strength 9
4. (T3C02) If you are receiving a weak and distorted signal from a distant station on a frequency close to the maximum usable frequency, what type of propagation is probably occurring?
 - A. Ducting
 - B. Line-of-sight
 - C. Scatter
 - D. Ground-wave
5. (T4D08) What effect might a break in a cable television transmission line have on amateur communications?
 - A. Cable lines are shielded and a break cannot affect amateur communications
 - B. Harmonic radiation from the TV receiver may cause the amateur transmitter to transmit off-frequency
 - C. TV interference may result when the amateur station is transmitting, or interference may occur to the amateur receiver
 - D. The broken cable may pick up very high voltages when the amateur station is transmitting
6. (T6B01) Which component can amplify a small signal using low voltages?
 - A. A PNP transistor
 - B. A variable resistor
 - C. An electrolytic capacitor
 - D. A multiple-cell battery

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

February, 2003

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