

THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

April 2007

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

PRESIDENTS MESSAGE

Welcome to the new hams

What an exciting month March has been. From the wrap up of a large class full of self-motivated and enthusiastic potential hams, through a full testing session day that was well organized and staffed by the BARC ARRL VE team, to the end of a longer than normal (in recent history anyway) wait for the new call signs to appear in the FCC ULS database.

We want to welcome and thank you new hams for your positive and patient attitudes and for your show of proper amateur radio procedures on the air.



Everyone I have talked to about this process has gla dexpressed ness in their own wavs.

Please continue to join us on the air on weekly nets, face to face at monthly club meetings

and a combination of both with some hands on experience at events like Field Day (always the fourth full weekend in June) and public service events. Ask us questions and let us know what your needs are. We will try our best to remember what it was like to be in your shoes and keep you in mind as we prepare net topics and club activities.

April Club Meeting

The theme for the April Club Meeting is Digital HF modes.

Last year at Field Day a lot of people were curious about the software Ted (AC7II) had running. It looked like some kind of merging of a chat program, RTTY and an audio equalizer. When he told them about

(Continued on page 3)

HAM PROFILE

by Boyd Humpherys W7MOY

We are enduring daylight savings time earlier than ever, morse code requirements for Amateur License applicants have been eliminated, and pretty soon we'll need a passport to travel through Petersboro. What other earth shaking events have we forgotten. Ah yes, this is the April issue of the club news letter. Most of you know what that entails.

To see just how many of you loyal enthusiasts know your beans, we'll begin with a bit of head scratching. See how many of the following events you can remember, have read about, or remember hearing grandpa relate in tales of the "olden days".

We haven't listed the name of said individual, at least to begin with. To do so would give the whole thing away. NOW—no cheating and peeking at the end of the article. Here goes !!!

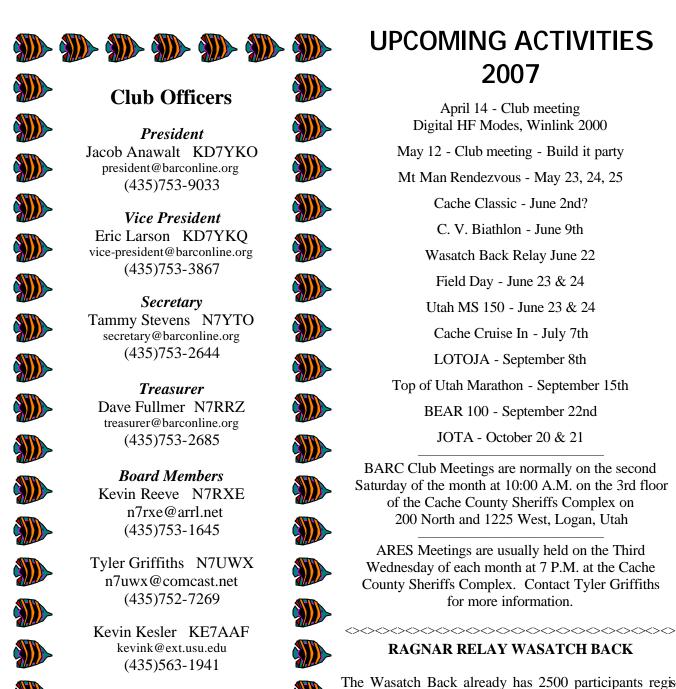
- Perhaps one of the earliest hams, he obtained his Amateur Radio license from the Federal Radio Commission in 1923 at the age of 14. 9CXX.
- Six years earlier he and a childhood friend Merrill Lund, made their first crystal receivers using Quaker Oats tubes Merrill's father brought home from work.
- A former neighbor told the New York Times in 1962 that "We sensed that was different, but we did not know he



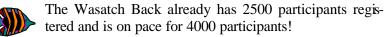
was a genius". "When the rest of us were out playing Cowboys and Indians, was in the house working on his radios.

• At 16 he was able to establish a communications link with Navy Commander Richard E. Berd during his exploration of Greenland in 1925—a feat that

(Continued on page 3)



RAGNAR RELAY WASATCH BACK



Due to the fantastic growth of the Wasatch Back we have been forced to make some changes to the 2007 course. We are pleased to announce that the new location of the Wasatch Back start line will be Merlin Olsen Park in Logan, UT. In addition Exchange 6 has been moved to Eden and Exchange 12 has been moved to Snowbasin. For more details on the course changes go to http://www.ragnarrelay.com/wasatchback/index.php



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Answers to questions on page 8: 1-D, 2-C, 3-D, 4-A, 5-A, 6-C, 7-B (Presidents Message Continued from page 1)

PSK31 and how much fun he had been having with it, they wanted to learn more. Ted won't be able to make this next meeting so Brik (KD7YKQ) has offered to give an overview and demonstration of PSK31, a fun and simple sound card based HF mode.

In more recent history Tyler (N7UWX), who has always had an interest in the digital modes like packet, has been teaching the ARES group about Winlink 2000 (WL2K), a system that enables hams to send and receive email over Amateur Radio frequencies, including HF. He will tell us about the ARES group's plans for Winlink 2000 and the local infrastructure available now for WL2K.

We will spend some time addressing any questions people have about the BARC repeaters and other resources available from the club and to describe the different public service events coming up this Summer. Please come with your questions and knowledge to share and we will have a good time.

(Ham Profile Continued from page 1)

the U.S. Navy struggled to accomplish.

- In 1932 began to manufacture transmitters to order, initially for the Amateur market.
- Less than a year later founded the Radio Company.
- Early 30s, Provided the first radios to police departments across the country.
- 1934-First airborne radio on the Goodyear airship "Enterprize".
- 1934-The Byrd Antarctic Expedition II sails with a complete short wave broadcasting station aboard.
- 1938-Invented the "Autotune" system for radios in aircraft and ground installations. The ART 13 transmitter of which thousands were built, became standard equipment in all military

aircraft during WW II. R-390 receivers and many other designs followed.

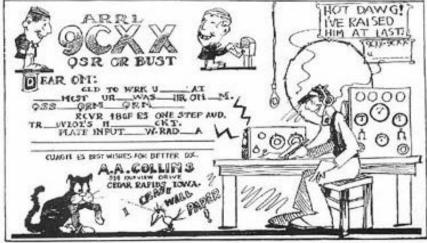
- 1945built and installed the world's first commercially built cyclotron, also known as an "atom smasher", at Brookhaven, Long Island.
- 1949-First to observe lunar eclipse by use of radio astronomy.
- 1952-In cooperation with the National Bureau of Standards, sent the first long distance messages using

the moon as a reflector.

- 1950s-Developed the 50 foot Big Dish Antenna at the Naval Research Laboratory, the world's first parabolic reflector which enabled astronomers to hear into outer space.
- 1956-With at the dials, a U.S. Military plane flying atop the North Pole made radio contact with another U.S. craft hovering over the South Pole.
- By 1961, ____ __owned 623 U.S. patents.
- 1960s- supplied the communications systems used by America's first astronauts in the Mercury space capsule Freedom 7 and Liberty Bell 7.
- 1969-Introduces **DME** and ATC transponders for the aircraft industry.
- 1970-World's first microcomputer with HLL architecture, began. His efforts.
- WW II—SAC aircraft equipped with communications equipment.
- Many, many other accomplishments too numerous to mention.



How many remember how most Amateurs listened in awe when the guy on the other end of the QSO casually mentioned he was using the 32----series of equipment. It was the Cadillac line of radio gear, the envy of most every aspiring Ham. By now you may have guessed who was behind this tremendous effort. None other than Arthur A. Collins, a Hero among Hams. His era and the Collins Radio Company will likely never be duplicated. Dig out your old oatmeal boxes gents, and see what you can hear.



The Bridgerland Amateur Radio Club, Inc. 2007 Members As of 31 March 2007

Dave Allen KB7RAY

Jacob Anawalt KD7YKO

Anna Anawalt KE7CMJ

I saac Anawalt Ethan Anawalt Esther Anawalt

Heidi Bleazard AC7ZC Wayne Campbell KC7GCC Scott Corbridge KC7CUB

Dale Cox KB7UPW
Leon Creger W7NRV
Cody Dobson KD7LGT
Dorothy Dobson
Richard Elwood KE7GYD

Nathan Elwood KE7GYF

Roger Ellis KE7HTE

Rosario Ellis KE7MDV

Arnold Finchum W6HO
Dave Fullmer N7RRZ
Wally Gibbons WB7ASQ
Roxanne Gibbons N7NJD
Tyler Griffiths N7UWX
Paul Hansen WO7N

Linda Hansen N7NIS

Richard Harris KC7TXX

Philip Harris KE7BVR

Gary Hawkins KC7EUW Cline Hendrickson K7KE

Robert Henke

Ralph Holt KC7CWI

Gloria Holt KC7CWU

Neil Holt N7PEO

Kathy Holt N7PEN
Heather Holt KE7ERD
Eric Holt KE7ESS

LaDell Hoth KC7BDU

Paul Hoth N1I M

Bonnie Hoth KC7DGP

Bob Humphreys KD7BHB Boyd Humphreys W7MOY

Kevin Kesler KE7AAF

Robyn Kesler KE7GYI Tyson Kesler KE7CMK

Wallace Kohler N7YTL Fred Larson KB7ZOU Erik Larson KD7YKQ

Heather Larson KD7ZFQ

Jim Lofthouse K7OA

Beanie Lofthouse KJ7LQ

Ken Lyon KD7BGZ
Ted McArthur AC711
John Merkley KB7RAO
Kurt Meyer W7CKY
Stanley Miller KE7JED
Bill Neville WA7KMF
Dennis Peck KC7YVO

Teddy Peck KD7ARW

Bryan Purdie KE7CML Philip Rasmussen N7JFG Kevin Rees KB7RAI

Donald Rice KC7JIQ

Susan Rice KD7RUM
Cordell Smart KD7WRB

Russell Smart KD7WRA

Dean Stevens N7WDY

Tammy Stevens N7YTO

Lisa Swing KE7GYC
Russ Tarbet KJ7UP
Keith Thompson AC7ZJ
Colby Vanderbeek KE7LAY
John Waldron KB7WET
Jay Williams KB7RAZ
Harold Winger KB7RBA

Bob Wood WA7MXZ

Valerie Wood N7NJV

Terry Zollinger N7PEG

If your name is missing from the list, please contact one of the club officers or send an email to membership@barconline.org. Be sure to act soon so you don't miss the next issue of The Ohm Town News. We thank you for your support and look forward to seeing you at the meetings and activities.

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

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

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

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



Your <u>tax deductible</u> membership fees maintain the repeaters and support club activities.

****************************** The Bridgerland Amateur Radio Club, Inc. Application for the Year 2007 Membership Dues are in effect January 1. 2007 through December 31. 2007 Name _____ Date Paid _____ P.O. Box Street Address City ______ State _____ Zip Code _____ Home Phone () ______ Work Phone () _____ E-mail ☐ Individual Membership - \$25 ☐ Additional Family members in same household - \$3 ea □ Equipment Donation (One Newsletter per household) Total \$ _____ Names and call signs of additional family members Name _____ Call Sign _____ Name _____ Call Sign _____ Name _____ Call Sign ____ RADIO CLUB Mail your completed form and a check to: B.A.R.C., P.O. Box 111, Providence, UT 84332-0111 or pay online at http://www.barconline.org/?q=node/242

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

The ARRL Letter Vol. 26, No. 09 March 2, 2007 ==>AMATEUR RADIO VOLUNTEERS ASSIST FOLLOWING SEVERE WEATHER

Amateur Radio Emergency Service (ARES) members and individual radio amateurs pitched in to assist after severe weather struck Arkansas and Louisiana February 24. In Desha County, Arkansas, more than two dozen people were injured when a tornado ripped through Dumas, causing widespread damage. Dumas resident Roger Lunsford, KD5HMS, says the twister spared his neighborhood. "My family and I huddled in the bathroom with my radios in hand monitoring public officials reporting a visual sighting of the funnel cloud . . . heading straight for town," he recounted. The storm took out electrical power. Once the storm passed, Lunsford grabbed his radio and went into town to help search for victims; most escaped without life-threatening injuries. No ARES teams deployed, but with telephone service out, Lunsford was able to get out word of the damage via Amateur Radio. He and his family had to take cover again as another tornado threatened. In Louisiana, Caddo-Bossier Parish Emergency Coordinator Richard Lea, NZ5S, reports Bossier Marshals Office Chief Rick Ware, K5VXT, requested ARES activation after a tornado struck North Bossier Parish. An emergency net convened for three hours on a VHF repeater, with 20 check-ins and others monitoring. SKYWARN volunteers relayed storm and weather data. Agencies responding to or using the ARES net included the Bossier Office of Emergency Preparedness as well as law enforcement. "The affected area was thankfully small, and only minor injuries were reported," Lea said. "ARES stations were prepared to deploy, but there was not a need at the time of the activation." ARES terminated operations at midnight, although Lea and Ware stood by overnight.

ARRL Regulatory Information Branch issues reminders: The ARRL Regulatory Information Branch advises all Technician and Novice licensees that they may not operate FM mode on 10 meters (or anywhere else below 30 MHz). Novices and Technicians may operate CW and data on the segment 28.0 to 28.3 MHz, and CW and SSB phone on the segment 28.3 to 28.5 MHz. Novices and Technicians must limit their output power to 200 W PEP on these 10-meter segments and on any HF bands where they have privileges (ie, CW on 80, 40 and 15 meters). The RIB also notes that a valid Certificate of Successful Completion of Examination (CSCE) for element credit issued prior to February 23, 2007, does not automatically convey operating privileges under the new rules. The holder must first redeem the CSCE by applying at an examination session and paying any application fee. If the Volunteer Examiner (VE) team accepts the CSCE for element credit, it will issue a CSCE for upgrade credit. Only then may upgraders operate under their new privileges, identifying as /AG (if upgrading to General) or /AE (if upgrading to Amateur Extra) until the FCC Universal Licensing System (ULS) http://wireless.fcc.gov/ uls/> database reflects their new license class. A CSCE is valid for 365 days from the date of issuance.

The ARRL Letter Vol. 26, No. 10 March 9, 2007

==>ARRL PRESIDENT EMERITUS JIM HAYNIE,
W5JBP, NAMED "AMATEUR OF THE YEAR"

Dayton Hamvention® http://www.hamvention.org has

named ARRL President Emeritus Jim Haynie, W5JBP, as its 2007 Amateur of the Year. Hamvention says Haynie's League leadership "helped define Amateur Radio's role in emergency communication." Ha mvention also announced this week that ARRL Laboratory Manager Ed Hare, W1RFI, will eceive Hamvention's Special Achievement Award to recognize his technical expertise in documenting the threat of interference from broadband over power line (BPL) systems. Internet Radio Linking Project (IRLP) http://www.irlp.net David Cameron, VE7LTD, was named the recipient of the Technical Excellence Award. "I was astonished, and I'm deeply honored," Haynie said after getting word that he'd be receiving Hamvention's top award in May. "It's quite a recognition—and quite a surprise." A ham for 34 years, Haynie, who lives in Dallas, was West Gulf Division Director for eight years and an ARRL vice president for two years. He then served three terms as the League's volunteer president, from 2000 until 2006, when he was succeeded by current ARRL President Joel Harrison, W5ZN. Haynie's award nomination cited his "energy, tenacity and attention to detail that has transformed the American Radio Relay League from the service organization it was prior to 9/11 into the proactive, vital emergency service clearing house and educational operation that it is today." During his tenure as League president, Haynie's effort to define Amateur Radio's role in homeland security was among his top initiatives. In 2003, he signed a formal Statement of Affiliation between the Department of Homeland Security and ARRL. He has an abiding interest in emergency communication and has promoted Amateur Radio's emergency communication value and contributions on Capitol Hill and elsewhere. Haynie also championed "The Big Project"—now the ARRL Education and Technology Program (ETP) -- to bring ham radio and wireless technology into schools. Special Achievement Award: Ed Hare, W1RFI Dayton Hamvention will honor Hare for his extensive work calling attention to the potential threat of BPL interference to licensed radio communication services and in documenting it. A member of the ARRL HQ staff for more than 20 years, Hare said he's honored but feels the award really is one for Amateur Radio. "What I did would have had no meaning without the work of hundreds of hams across the country working on BPL issues locally," he said. "They have put in countless hours as volunteers, making a difference when a difference was really needed." Hamvention said Hare's modeling of BPL interference "made a convincing argument" about the threat. "Hare even outfitted his own automobile so he could travel the Northeast and conclusively document BPL interference," the announcement added. Hare said the award would have a place in the ARRL Lab "to honor and thank all of those who have given their time to protect Amateur Radio." Technical Excellence Award: David Cameron, VE7LTD In announcing the recipient of its Technical Excellence Award, Hamvention cited Cameron's instrumental role in developing IRLP to permit worldwide radio and repeater linking. "His work literally transformed FM repeater communication from a local entity into a worldwide communication network that has been of immense value in emergencies and has helped unite the world's radio amateurs over the Internet and radio," the announcement said. "IRLP and its derivatives have opened up

a whole new world of communications in VHF/UHF repeaters with the power of the Internet." Dayton Hamvention 2007 takes place Friday through Sunday, May 18-20, at Hara Arena near Dayton, Ohio. The theme of the 56th Hamvention is "Local Clubs: The Heart of Ham Radio."

ARRL releases statement on Red Cross background check policy: ARRL—the National Association for Amateur Radio, has released a position statement http://www.arrl.org/announce/ARRL-ARC-bg-check.html regarding the implementation of a background check procedure by the American Red Cross. The statement was released to address ARRL members' concerns prior to a March 31, 2007, compliance deadline the Red Cross has set. The application of the background check policy to Amateur Radio operators providing communication services to the Red Cross—either as Red Cross volunteers or as Amateur Radio Emergency Service (ARES) members—is the subject of continuing discussions between the ARRL and the Red Cross. Therefore, the position statement is subject to change. The ARRL will announce any such revisions and updates on its Web site.

CONTROL CON

CQ introduces HF Operator's Survival Guide: In response to recent changes in licensing rules and operating privileges for all hams, the editors of CQ Amateur Radio magazine have prepared an HF Operator's Survival Guide, a 16-page gettingstarted guide for newcomers to high-frequency (shortwave) Amateur Radio communications. Written by CQ Contesting Editor John Dorr, K1AR, Contributing Editor Gordon West, WB6NOA, and CQ Editor Rich Moseson, W2VU, the booklet is a practical, hands-on guide to success in HF ham radio. "Starting out on HF can be pretty intimidating, especially now, at the bottom of the sunspot cycle, when DX opportunities are harder to find," said Moseson, who also oversaw the guide's overall production. "This practical guide will help the new HF operator, regardless of license class, hit the air running." Among other topics, the book discusses the characteristics of each HF ham band and explains which is best and when, basic HF operating practices, choosing your first HF transceiver, antenna basics, and various HF modes and operating activities. There's also an HF band chart. The HF Operator's Survival Guide is \$2 (plus shipping), with discounts available for bulk purchases. To order, or for more information, contact CQ Communications Inc, 800-853-9797 (toll-free) weekdays 9 AM to 5 PM Eastern Time.

Cushcraft Corporation acquired by Laird Technologies: Cushcraft Corporation, a manufacturer of antennas for Amateur Radio, commercial and industrial applications has been acquired by Laird Technologies. A February 26 announcement put the purchase price at \$89.75 million. Headquartered in St Louis, Laird Technologies designs and manufactures antenna systems, electro magnetic interference shielding products and wireless systems, among other products. Cushcraft has design and manufacturing centers in New Hampshire, California and Utah.

Che ARES E-I etter | March 21 2007

The ARES E-Letter March 21, 2007
JOINT ARES-MARS EXERCISE "OPERATION DEEP

FREEZE 2007" DEMONSTRATES CAPABILITIES

Not far from the area of New York State buried by 10 feet of snow, MARS and Civil Air Patrol members set up a joint operations center (JOC) at Hancock Air National Guard Base in Syracuse to manage a disaster drill based on a catastrophic winter storm scenario. The purpose of the February 10 "Deep Freeze '07 Exercise" was to evaluate the capability of MARS, ARES and RACES operators to cooperate and support a federal response to a major disaster. One of the specific goals was to file with the JOC numerous Essential Elements of Information (EEI) reports, which are important sources of information for the federal disaster response planners and others. Another goal was to test the effectiveness of obtaining "spot reports" of conditions from the Amateur Radio community that could be formatted into EEIs by the MARS operators. The exercise dovetailed with disaster drills at eight up-state hospitals and included a patient evacuation and tracking exercise run by the Central New York Regional Resource Center, the Medical Reserve Corps, and the NY Air National Guard. According to Deep Freeze Coordinator James Edmonds, the exercise was a complete success surpassing all expectations for participation and messages successfully delivered. Observers from the Transportation Security Administration and NY Division of Military and Naval Affairs were impressed by the technical capabilities and operator skill demonstrated by the volunteer radio operators. The technology included HF and VHF voice nets on Amateur and MARS frequencies, WinLink 2000, HF phone patches, and liaison with the SHARES net, an HF component of the National Communications System. Thomas Carrigan, NE1R, who served as net control on a busy 75 meter net observed that the interaction between ARES operators and MARS operators was "seamless." As MARS is redefined from its Viet Nam era role as a communications service for deployed military to a more current role providing auxiliary communications for homeland security and disaster response, it appears likely that more drills including ARES members will be planned.—Tom Carrigan, NE1R <tomc54@charter.net>

ARMY MARS AND WINLINK 2000 INSTALLATION AT DHS

In a letter to its members, new Army MARS Chief Carter reports, "Our efforts to make Army MARS 'Relevant to First Responders Today and Tomorrow' are paying off with big results. The Department of Homeland Security (DHS) has studied our efforts with Winlink 2000 and well understand its utility when coupled with Army MARS HF capability. DHS has completed installing and activating its own hardened Winlink Message Server, called a Common Message Server (CMS), in its Headquarters in Washington D.C. This is the fourth hardened CMS in the Army MARS Winlink 2000 network. All four Army MARS Winlink 2000 CMSs mirror 100% of all Army MARS Winlink message traffic. This redundancy will assure the unrestricted availability to all Winlink message traffic during even the most catastrophic conditions to support emergency relief efforts." "DHS is the first federal agency to adopt the Army MARS Winlink messaging strategy to maximize a low cost, readily available, and highly reliable Army MARS HF/e-mail capability. Soon, other agencies will leverage the capability and reliability that Army MARS and its Winlink system provides."-Stuart S. Carter, AAA9A, Chief, Army MARS (AAA9A)

Questions for Extra License

- 1. (E1E06) Which amateur stations are eligible to operate as a space station?
- A. Any except those of Technician Class operators
- B. Only those of General, Advanced or Amateur Extra Class operators
- C. Only those of Amateur Extra Class operators
- D. Any FCC-licensed amateur station
- 2. (E2B07) What is the standard video level, in percent PEV, for blanking in amateur fast scan television?
- A. 0%
- B. 12.5%
- C. 75%
- D. 100%
- 3. (E3C01) What effect does auroral activity have upon radio communications?
- A. The readability of SSB signals increases
- B. FM communications are clearer
- C. CW signals have a clearer tone
- D. CW signals have a fluttery tone
- 4. (E4D01) What is one of the most significant problems associated with reception in HF transceivers?
- A. Ignition noise

- B. Doppler shift
- C. Radar interference
- D. Mechanical vibrations
- 5. (E5D07) What is the relationship between the current through an inductor and the voltage across an inductor?
- A. Voltage leads current by 90 degrees
- B. Current leads voltage by 90 degrees
- C. Voltage and current are 180 degrees out of phase
- D. Voltage and current are in phase
- 6. (E5I09) Which material will exhibit the greatest photoconductive effect when visible light shines on it?
- A. Potassium nitrate
- B. Lead sulfide
- C. Cadmium sulfide
- D. Sodium chloride
- 7. (E6E01) For single-sideband phone emissions, what would be the bandwidth of a good crystal lattice band-pass filter?
- A. 6 kHz at -6 dB
- B. 2.1 kHz at -6 dB
- C. 500 Hz at -6 dB
- D. 15 kHz at -6 dB

THE OHM TOWN NEWS PO BOX 111 PROVIDENCE, UT 84332



April, 2007

Some Contents...

Presidents Message	1
Ham Profile: Mystery Guest??	1
Events Calendar	2
BARC Membership Application Form	5
ARRL News	6-7

