

THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

Summer 2006

June, July, August

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

PRESIDENTS MESSAGE

Summer is here and so are lots of public service events and activities. This will be the last newsletter you get before September, so catch us online at www. barconline.org for the latest club information. I was reading about a tragic event on the ARRL website, involving two hams who's vehicle went off the road and down a cliff during a radio activity. Nothing has worried me more than the safety of hams who help out in



emergencies, and activities. Luckily we have not had anyone in BARC seriously injured participating with ham related activities.

We have 4 events going on in June. We have three public service events and Field Day. Field Day this year will be at the "Holiday Inn" (aka CC camp) in Logan Canyon. Lots of fun. If

you are new to the hobby, I hope you will join us and learn about HF. If we have not seen you for awhile, well then here is your excuse to come say hi, see some familiar faces, and visit with some new members of the club. The CC camp or Forestry Field Station features an indoor facility with running hot and cold water, flush toilets and showers. There are several private rooms along with a big bunk hall. Plenty of places to take a nap. I hope some of you code operators will come and keep the radios going into the wee hours of the morning. Under the direction of control operators, anyone who would like to operate an HF radio can. So come on up and have some fun. For me the best part of field day (Continued on page 3)

HAM PROFILE

by Boyd Humpherys W7MOY

Well we ran into an old classmate (no injuries), battle of South Cache High, US Navy, USU and a relative of the first settler of Cache Valley. How's that for an introduction? None other than Arol Maughan, WA7FMW, long time resident of Wellsville, who resides on a lofty knoll overlooking his 75 acre (74.31416 specifically) spread, where black angus and a few other varieties graze peacefully below. It is rumored that he or his kin may have started the phrase "blacker than the inside of a cow", especially with the black angus. Of course some critters are more translucent than others, especially at night. Those varieties of bovines mutate into mighty fine T-bones. He moved quite a few to market recently, you'll probably run into the end product in some of the finer eating establishments in the area shortly. Ask, they should inform you.

Arol sports a Swan 500 rig abng with a 2 meter



HT and the dead give away for those seeking his pad, a multi element beam on the roof with a rotator. (Continued on page 3)



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UPCOMING ACTIVITIES 2006

June 23 - Wasatch Back Relay http://www.wasatchbackrelay.com/

June 24 & 25 - Utah MS 150 http://www.nationalmssociety.org/UTU/event/default.asp?g=6

> June 24 & 25 - Field Day http://www.arrl.org/

July 1 - Cache Cruise-IN http://www.cachevalleycruisein.com/

August 4-6 - WIMU 2006 http://www.redgiant.org/wimu2006/

September 9 - LOTOJA http://www.lotojaclassic.com/LOTOJAmain_content.html

> September 22 & 23 - Bear 100 http://www.bear100.com/

September 23 - Top of Utah Marathon http://todaix.lib.usu.edu/run/marathon.htm

October 21 & 22 - Jamboree on the Air http://www.scout.org/wse/jota.shtml

BARC Club Meetings are normally on Saturday mornings 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.

Lots of Summer activities and things to get involved with. If you haven't been to one of the activities this would be a great time dig in and see what it is all about. It doesn't take a lot of experience to help out, and the best way to learn is to dive in and do something.

Due to all of the activities during the summer there is not a formal BARC Club Meeting at the usual schedule for the months of June, July and August, but we will be getting together for activities of various sorts. Field Day is in June with fun and good food, and September starts out with a Pot-Luck dinner just before LOTOJA.

With everything that is going on, the Ohm Town News will also be taking a break until September. If you need updated information about the activities or to sign up to help with one, contact one of the Club officers or check out the latest news on the club web site at http://www.barconline.org

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

has been learning from others, and enjoying a chat around the table.

Set-up will begin Friday afternoon. We will need some bodies around 4 - 6 PM to help us raise the tall masts we have. Some of us will be arriving around 1 - 2 PM, so if you can come up early, then please do. The sooner we get set-up, the sooner we start having fun. We have the place reserved both Friday and Saturday nights, so come up and stay if you can. I hope you will make the trip even it if it just for a minute. Our dinner will be Saturday at 6:00 PM. Bring your own plates and utensils, along with a side dish or desert. The club will furnish the main dish, most likely sloppy joes again.

The repeater committee met this past week and has a summer full of work to do. They have planned 3 mountain top repeater trips to work on the repeaters, and now have plans to place the 147.20 repeater back on a mountain. Look for some more news from them in the near future. I appreciate the work they do, and the expertise they bring to the club.

We will pick up in the fall with our pot-luck dinner in September. In October we will have a presentation on HF and contesting, it should be lots of fun. November is elections and December is our Christmas Party.

Look forward to seeing you all this summer. I hope you have taken the chance to sign up to help with one of the activities for this summer.

See ya all soon,

73's

N7RXE Kevin Reeve

The ARRL Letter Vol. 25, No. 17 April 28, 2006

==>EUROPEAN HAMS HEAR SIGNALS FROM THE EDGE OF SPACE

Hams in Germany and Portugal reportedly have received signals from the US Voyager 1 spacecraft http://voyager. jpl.nasa.gov/> in March and April. On March 31, AMSAT-DL (Germany) radio amateurs at the Institute for Environmental and Future Research (IUZ) at Bochum Observatory used a 20-meter radio telescope dish to detect Voyager 1's 8.4 GHz signal. Using Doppler shift and sky positioning, the German team received the signal from a distance of 8.82 billion miles (14.7 billion km)--nearly 100 times the distance from the sun to Earth. This is the first recorded reception of signals from Voyager 1 by radio amateurs. Members of the AMSAT-DL/IUZ team included Freddy de Guchteneire, ON6UG, James Miller, G3RUH, Hartmut Paesler, DL1YDD, and Achim Vollhardt, DH2VA/

(Continued on page 4)

(Ham Profile Continued from page 1)

Although you may not have heard him on the air just recently, he promised full repentance with thorough treatment with a vacuum cleaner to rid the rig of spiders and such. He picked up his ticket back in 67, now holds a General passport.

A bit of interest here and a spate of history. With the name Maughan, one might suspect some connection to one of the first Settlers of the Valley by the name of Peter Maughan, who founded Wellsville, and which bears his name, originally called Maughan's Fort. Indian problems you know, now it's cattle rustlers. I asked him for more details and he indicated his great great grandfather was indeed Peter Maughan, who owned the present spread, then down through the family until Arol acquired it. I pondered asking him to verify the old urban legend that had the wheel falling off the Maughan wagon as they came out of, what is now called Wellsville Canyon, Mrs. Maughan laying down the law and said this is it, we're not going any further. I decided to pass on that one.

He attended elementary in Wellsville, Hyrum, and South Cache High, then ultimately USU after a hitch with Uncle's sea faring contingent. He and his cohorts covered most of the islands around Guam, provided support for the nuclear tests at Bikini in project crossroad, saw some flashes, felt some shock waves with the tests. Had to decontaminate the ship afterwards, and ultimately headed for the states and discharge.

One of his first experiences at work began with a friendship made while living in one of the Quonsets on campus. Anyone remember those Hiltons? He met and shared a few hamburgers with a gent who just happened to be the Supt. of the Randolph, Laketown, Woodruff school district. The offer came, shortly he and his spouse the former Lea Cottle were residing where the wind blows in all directions and the prestone freezes at minus 42. Then back to Lincoln Elementary in Hyrum for a couple of years, thence to Sky View where he taught Industrial Arts, electronics, established a ham shack, steered a few enthusiasts into the fold, and then did the same at Mountain Crest.

He met his future spouse at a missionary farewell up around Trenton, claiming complete loss of direction. Sounds reasonable doesn't it? His good spouse, Lea passed away several years ago. They have 6 harmonics and 54 second harmonics for a posterity. The enclosed snapshot tells the tale on his favorite hobby. Incidentally Lea caught the lunker in Bear Lake. Welcome back to the mob Arol. 73s.

(Continued from page 3)

HB9DUN. Assisting were Theo Elsner, DJ5YM of IUZ, and Roger Ludwig of Jet Propulsion Laboratory (JPL), as well as the Deep Space Network (DSN) tracking station in Madrid, Spain. Luis Cupido, CT1DMK, in Portugal reported April 15 that he spent "two nights without sleep" to hear Voyager I at his QTH using a 5.6-meter dish. To detect the signal, Cupido says he had to acquire and integrate spectrograms over an extended period. "I did several acquisition periods of 15 minutes (900 s), the minimum I would expect to see something," he said on his Web site http://w3ref.cfn.ist.utl. pt/cupido/dsn.html>, noting that any longer time period would be incompatible with his Doppler-shift correction scheme. "The receiver is operated at fixed frequency, and the Doppler variation was corrected by skewing successive spectrograms in software while accumulating [images]." He based positive identification of Voyager 1's signal on the fact that signal is "only visible for the right skew amount that corresponds to the Doppler variation as predicted by the relative velocity calculation." Voyager 1 was launched in September 1977 to conduct close-up studies of Jupiter and Saturn, Saturn's rings and the larger moons of the two planets. Designed to last only five years, the probe is expected to send back astronomical information to NASA and JPL until at least 2020. Voyager 1 will study ultraviolet sources among the stars, and its fields and particles instruments will continue to search for the boundary between the sun's influence and interstellar space.

==>NON-DELIVERABLE CARD REMAINS IN "QSL LIMBO" FOR 50 YEARS

George Hitz, W1DA, of Sudbury, Massachusetts, can finally account for one of his QSL cards—one he sent in 1956. While a newly licensed teenager living in DeLand, Florida, Hitz, then KN4DPI, fired up his Johnson Viking Adventurer transmitter and made contact with Dave, KN6MSI, on 40 meters. Like a good operator, Hitz sent off a QSL card, addressed only to "Amateur Radio-KN6NMI, Chief Op Dave, Address Unknown, Riverdale, Calif." This turned out to be David Leaven, later WI6J, who became a Silent Key in 2003. "I was 14, and like me, Dave was a new ham, and he wasn't in the call book," Hitz told ARRL. "I hoped there would be someone at the Riverdale post office that would know who Dave was, and it would get to him." But Hitz made one mistake: he addressed the card to Riverdale instead of to Dave's actual QTH, Riverside. That simple error left the card sitting in QSL limbo from 1956 until now. "In 1956, I was just a Novice operator with a primitive station and even more primitive operating skills," Hitz explained. "Back then, with my radio built from a kit and my BC-348 World War II Army Air Corps surplus receiver and a 60foot long wire antenna that was 15 feet high, California, was like a whole other country. And I needed that California QSL!" Hitz had put a return address on his card, but for reasons perhaps best known to the US Postal Service, it finally was returned to his former Florida address in early April. It turned up in the mailbox of Mack McCormick, a nonham now living in Hitz's childhood home. "The card apparently has been in the 'Twilight Zone' for 50 years," McCormick

said. "It's not wrinkled or anything." McCormick offered to return the card to Hitz, but Hitz declined. "What would I do with it?" he said. "I understand the guy who found it is going to frame it and place it on his coffee table!" The story of the long-lost QSL card received worldwide attention. "The press has run wild with this," Hitz said. "I heard this story has een in newspapers in India, Iceland, Ireland—all over the world, over 100 countries! It's almost like I could have DXCC from all the countries that have reported it."

SuitSat-1 still in orbit:

Tossed into orbit three months ago from the International Space Station, SuitSat-1 continues to orbit Earth—although its batteries are long since dead, Spaceweather.com reported this week that skywatcher Kevin Fetter videotaped SuitSat-1 as it passed over his Brockville, Ontario, Canada, home (the bright star in the movie is Vega) http://science.nasa.gov/ spaceweather/swpod2006/27apr06/fetter.wmv>. A spare Russian Orlan spacesuit equipped with a voice transmitter, slow-scan TV system, voice recordings and various sensors, SuitSat-1 was the brainchild of the Russian Amateur Radio on the International Space Station (ARISS) team. From the outset, radio signals from the unusual satellite were very weak due to an undetermined problem. Even so, SuitSat-1 remained in operation for more than two weeks, easily outlasting initial predictions that it would only transmit for about one week. The last confirmed reception of SuitSat-1's voice audio was on February 18. Calling the project "tremendously successful," ARISS International Chairman Frank Bauer, KA3HDO, says SuitSat-1 captured the imagination of people around the world, despite its much-lowerthan-expected signal strength. Eventually, SuitSat-1 will sink into Earth's atmosphere and disintegrate in a flash of fire. Another surplus Orlan suit remains aboard the ISS, so SuitSat-2 could be in the offing.

<>>>>> ARRL Bulletin 8 ARLB008

From ARRL Headquarters Newington CT May 3, 2006 To all radio amateurs

ARLB008 FCC WRC-03 amateur rule changes now in effect

Several FCC Part 97 Amateur Radio rule revisions to implement changes agreed to at the international level during World Radiocommunication Conference 2003 (WRC-03) now are in effect. The FCC Order, released in January, affects 97.111, Authorized transmissions; 97.113, Prohibited transmissions; 97.115, Third party communications, and 97.117, International communications. The Federal Register published the changes May 3. "These amendments will ensure that the Commission's Amateur Radio Service rules conform to Article 25 of the international Radio Regulations adopted at the 2003 World Radiocommunication Conference, and will further the Commission's ongoing efforts to streamline its Amateur Service Rules," the FCC Order said. "The overall effect of this action is to update the Part 97 Amateur Radio Service rules in the Code of Federal Regulations to conform to now-effective international agreements." The FCC Order revises:

- ? 97.111(a)(1) to permit "transmissions necessary to exchange messages with other stations in the Amateur Service, except those in any country whose administration has notified the ITU that it objects to such communications. The FCC will issue public notices of current arrangements for international communications." The old language permitted communication among amateur stations in different countries "except those in any country whose administration has given notice that it objects to such communications." The FCC said the change does not prejudice its proposal to amend 97.111 (a)(2) to clarify that amateur stations may, at all times and on all authorized channels, transmit communications necessary to meet essential needs and to facilitate relief actions.
- 97.115(a)(2) to facilitate the transmission of international communications on behalf of third parties in emergency or disaster-relief situations, whether or not a thirdparty agreement is in place between the US and the countries involved. The revision now permits communication with any non-US station "when transmitting emergency or disaster relief communications" as well as with any non-US station "whose administration has made arrangements with the United States to allow amateur stations to be used for transmitting international communications on behalf of third parties." The revised rule further provides that no station may transmit third-party traffic other than emergency or disaster relief communications to a station in a country lacking a third-party arrangement. Still excepted from the prohibition is any third party eligible to be the control operator of an amateur station.
- ? 97.113(a)(4) to prohibit amateur stations exchanging messages with amateur stations in other countries from making transmissions that are encoded for the purpose of obscuring their meaning, except for control signals exchanged between Earth command stations and space stations in the Amateur-Satellite service, something Part 97 already provides for. The old rule referred to the use of "codes and ciphers." The same rule also already prohibits transmitting music, communications intended to facilitate a criminal act, obscene or indecent words or language and false or deceptive messages, signals or identification.
- ? 97.117 to state that amateur stations may transmit communications incidental to the purposes of the Amateur Service and to remarks of a personal character.

The FCC also revised 97.3 and 97.309 to update the definition of International Morse code and of various digital codes in the amateur rules to reflect changes in the international Radio Regulations.

The ARRL Letter Vol. 25, No. 18 May 5, 2006

=>A FORCE FOR THE FUTURE: EDUCATION AND
TECHNOLOGY PROGRAM NEEDS YOUR HELP

To those who wonder—or worry—about what the League is doing to ensure the future of Amateur Radio, ARRL Chief Development Officer Mary Hobart, K1MMH, offers a prompt response: the ARRL Education and Technology Program (ETP). More familiar to many as "The Big Project," the program has provided turnkey Amateur Radio stations

and educational materials to more than 170 schools across the US. More important, Hobart says, the ETP each year exposes many youngsters and their teachers to Amateur Radio, wireless technology, electronics and even robotics—something that likely wouldn't happen if the program didn't exist. With the ETP kicking off its 2006 fundraising campaign this month, Hobart emphasizes that the program depends entirely on individual donations. "The Education and Technology Program is unique among ARRL's programs in that it is totally funded by voluntary member contributions, so the onus to continue to put stations in schools and to grow the program rests on those willing to contribute," she says. "This is an awesome responsibility for the Amateur Radio community." Campaign revenue not only covers the cost of placing stations in schools, Hobart notes. It also funds a burgeoning schedule of Teachers Institutes each summer as well as ongoing efforts to guide national educational standards in science and mathematics. Hobart called the Teachers Institutes "a powerful tool" to inspire educators and to help them develop confidence in teaching about wireless technology and electronics through Amateur Radio. Generous gifts helped the ETP to expand to five the number of free Teachers Institutes it's offering in 2006, its third year, and Hobart is optimistic that the program will be able to afford additional sessions in the years ahead. Some, but not all, of those who attend are Amateur Radio licensees, while others become hams as a result of attending the weeklong sessions. In any event, Hobart points out that Teachers Institute alumni influence thousands of youngsters each year. In fact, the "poster boy" for the 2006 campaign is Ronny Risinger, KC5EES, a teacher at LBJ High School in Austin, Texas—an ARRL "Big Project" participant. Risinger attended the first ETP Teachers Institute in 2004 at ARRL Headquarters. His success with the program became the centerpiece of this year's ETP fundraising effort. "Ronny's story is a powerful one," said Hobart. "He's a teacher and a ham who's taken advantage of all the ETP resources at his disposal. This is why we tell his story." Risinger credits the ETP and the Teachers Institute with his success in inspiring and teaching his students. He says the League program gave him a strong sense of confidence that allows him to be a better teacher, presenting his classroom material in unique and engaging ways—and especially hands-on projects that captivate his students. Hobart says Risinger is just one example of how ETP participation and attendance at a Teachers Institute can inspire educators and help their students to embrace both wireless technology and Amateur Radio. "Supporting the ARRL Education and Technology Program is an opportunity to do something about the future of Amateur Radio and attracting the younger generation," Hobart says. "Outside of the League's ongoing and essential effort to defend our spectrum, I can think of no other initiative that prepares ham radio for its future." Contribute to the ARRL Education and Technology Program by July 31 via the secure donation Web site https://www.arrl.org/forms/development/donations/ education/education.html>. Contributions are tax deductible to the extent allowed by law.

Questions for Technician Class License

- 1. (T1A03) What is the definition of an amateur station?
- A. A radio station in a public radio service used for radiocommunications
- B. A radio station using radiocommunications for a commercial purpose
- C. A radio station using equipment for training new broadcast operators and technicians
- D. A radio station in the amateur service used for radiocommunications
- 2. (T2A16) What is the basic unit of frequency?
- A. The hertz
- B. The watt
- C. The ampere
- D. The ohm
- 3. (T4C09) What are messages called that are sent into or out of a disaster area concerning the immediate safety of human life?
- A. Tactical traffic
- B. Emergency traffic
- C. Formal message traffic
- D. Health and welfare traffic
- 4. (T6C08) What circuit blocks RF energy above and below certain limits?

- A. A band-pass filter
- B. A high-pass filter
- C. An input filter
- D. A low-pass filter
- 5. (T8C15) Where should the squelch be set for the proper operation of an FM receiver?
- A. Low enough to hear constant background noise
- B. Low enough to hear chattering background noise
- C. At the point that just silences background noise
- D. As far beyond the point of silence as the knob will turn
- 6. (T9B21) What is the term that describes a repeater that receives signals on one band and retransmits them on another band?
- A. A special coordinated repeater
- B. An illegally operating repeater
- C. An auxiliary station
- D. A crossband repeater
- 7. (T0E11) What is one effect of RF non-ionizing radiation on the human body?
- A. Cooling of body tissues
- B. Heating of body tissues
- C. Rapid dehydration
- D. Sudden hair loss

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Summer, 2006

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