



THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

April 2005

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

HAM PROFILE

by Boyd Humpherys W7MOY

April 1st. may be an excuse for all sorts of chicanery however in keeping with the high standards of BARC publications, it was felt we ought to recognize some of our patron saints, few though they be. Probably one of the most outstanding individuals in the history of Electricity, Physics, and Communications was Nikola Tesla. No question he was a man ahead of his time, and still understood by few.



Born 9 July, 1856 in Smiljan, Croatia, he emigrated to the United States in 1884, with but four cents in his pocket, a few of his own poems, and calculations for a flying machine. His father was an Orthodox priest, his mother was unschooled but highly intelligent. A dreamer with a poetic touch, he matured with a self discipline and desire for precision that

few have acquired.

He attended the Technical University at Graz, Austria and the University of Prague. Here he saw the first Dynamos, all DC operated, and visualized the principle of rotating magnetic fields and thus began the eventual utilization of alternating current.

He first found employment with Thomas Edison but the two were far apart in background and methods, and their separation was inevitable.

Westinghouse Electric purchased the rights to Tesla's polyphase system of alternating current dynamos, transformers, and motors, which precipitated a titanic power struggle between Edison's direct current systems and the Tesla-Westinghouse alternating current approach, which eventually won out.

Tesla soon established his own laboratories which delved into myriads of his endeavors which boggle the mind. In examining just two of his projects which may relate directly to some of our interests, today's scien-

(Continued on page 3)

PRESIDENTS MESSAGE

It's Spring time, or so the calendar says, perhaps mother nature has the wrong calendar on the wall. With April here it is time to start planning for all the events we help out with each year. One of the great parts of this hobby is the ability to give service, and have a lot of fun at it. I remember the very first public service event I signed up for, the Pony Express in Clarkston. My radio was an VHF Yaesu FT 411E handheld. I was nervous when I arrived. How would these expert hams view me, a brand new tech license of 3 months. I received my assignment and out into position I went. The race went off, the horses came by me without incident. I transmitted 4 or 5 times during the event. Whew, it was over, and I did good I think. Well just then a vehicle came down the road with a flat tire. A haw! Autopatch time. Unfortunately I had never used the autopatch before. But there was Clayton Clark, AC7O to coach me along and tell me how to do it. The call was made, and the folks were grateful to have someone coming to their rescue.

No wonder groups seek us out for our help. It is exciting and fun to get involved with public service events. It is really how I have gotten to know many of the hams in this valley.

This summer we have agreed to assist with many events. In May we have the Mountain Man Rendezvous. We need to cover a Tuesday and Wednesday mid morning shift, to be there while all the school kids are there. In June we have the Cache Classic (Moved from labor day) the Wasatch Back Relay, and Field Day. Field day will be at the CC camp in Logan Canyon again. Field day is the 4th weekend in June.

In July we have the cruise-in. A great time to see



(Continued on page 3)

UPCOMING ACTIVITIES

April 9 - Club Meeting - Discuss Summer activities
And Information on Portable repeater

April 23 - Northern Utah Hamfest - Ogden

May 14 - Club Meeting - National Weather Service

May - Mountain Man Rendezvous

June 11 - 8:00 A.M. VE Test Session
Location: Utah State University
Old Main Building 4th Floor

June - Cache Classic (Moved from labor day)

June - Wasatch Back Relay

June 25 - Field Day at CC camp in Logan Canyon

July - Cache Cruise-in

September - LOTOJA

September - Top-of-Utah Marathon

BARC Club Meetings are normally on Saturday
mornings at 10:00 A.M. on the 2nd floor in the EOC
at the Cache County Sheriff's Complex on
200 North and 1225 West, Logan, Utah



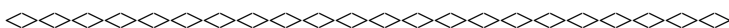
Weekly Tuesday night BARC Net

Time: 9:00PM - 10:00PM MST (GMT-07:00)

146.720 (Mt. Logan), 145.310 (Red Spur),

449.625(Mt. Logan), 147.260 (Promitory) Repeaters

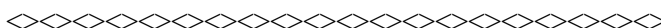
Come join in the fun, find out what is going on, get on air training.



HF NETS

Group	Day	Time	Frequency (MHz)
Beehive	Daily	12:30 p.m.	7.272
UT Code Net	Daily	7:30 p.m.	3.710
FARM	Daily	8:00 p.m.	3.937
MARA Voice	Saturday	7:30 a.m.	3.918
MARA CW	Saturday	8:00 a.m.	3.723
RACES	3rd Saturday	8:00 a.m.	3.918
UT MARA	Saturday	8:30 a.m.	3.873

(Thanks to SPARC Newsletter)



Answers to questions on page 6:

1-B, 2-C, 3-A, 4-D, 5-D, 6-D, 7-B

Club Officers

President

Kevin Reeve N7RXE
n7rx@arrl.net
(435)753-1645

Vice President

Tammy Stevens N7YTO
djstevens@sisna.com
(435)753-2644

Secretary

Julie Dabb KC7RPP
(435)797-6724

Treasurer

Dave Fullmer N7RRZ
Webmaster@spectradesign.com
(435)753-2685

Board Members

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

Tom Baldwin KD7TRN
tomb@cachecomm.com
(435)232-6699

Ken Buist KC7QES
nuke54@juno.com
(435)752-3154

Newsletter Editor

Dale Cox KB7UPW
dbclfc@mtwest.net
(435)563-3836

Web Page Editor

Kevin Reeve N7RXE
n7rx@arrl.net
(435)753-1645

all the hot-rod and a few classic cars with the best seats in the house.

In September we have LOTOJA and the Top-of-Utah marathon. These events are back to back and require more than 30 hams. No experience required, just good communications equipment and patience.

Please help us out with several of these events. They are fun, and do wonders to promote the good nature of amateur radio.

Congratulations to Bob Wood, Terry Zollinger, and Ted McArthur. The first to find the hidden transmitter on the trail near the golf course in Logan. Look forward to more Bunny hunts.

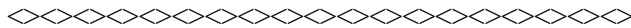
At our April club meeting, We will discuss all the summer activities and show some pictures from past events. Ted McArthur will have the clubs portable repeater and give a brief demo of how a repeater works. In May the National Weather Service will give us a presentation. They are working to get a storm watchers group going in Cache Valley.

I would like to pay tribute to our fabulous group of VE's that provide license test sessions 4 times a year in the valley. We appreciate the great things you do.

See ya on the air, and at club meeting,

73's,

Kevin Reeve N7RXE



tists are still probing the potentials of these little understood principles. Tesla briefly involved himself in some rather bizarre experiments in Colorado Springs in 1899 & 1900. He purportedly lighted 200 lamps without wires from a distance of 25 miles and created terrifying displays of man-made lightning, with flashes measuring some 135 feet. His supposition was that that the earth could be used as a conductor and would be responsive as a tuning fork to electrical vibrations of a certain frequency.

Returning to New York, Tesla began construction of a wireless world broadcasting tower with handsome financial backing from J.P. Morgan. It was his intent



to provide world wide communications from this installation at Wardenclyffe, N.Y. He visualized pumping enormous amounts of RF energy into the atmosphere, thus affecting the ionosphere or ether as he termed it. The project was ultimately abandoned due to financial

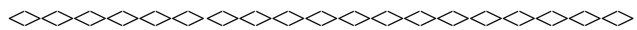
problems, something he endured most of his life, this was his greatest defeat.

Marconi and others subsequently pursued the development of wireless technology and the filing of patent applications. This Tesla failed to do.

These concepts have not gone away, and are being actively pursued today, somewhat covertly. It is well known that with the aerial detonation of our first Hydrogen device over the Pacific many years ago, that the ionosphere was so disturbed that HF communications were extensively disrupted for an extended period of time over great areas of the Pacific. The prospect of weather modification involving this principle has been the subject of experimentation by our Russian friends for several decades.

Most recently a joint project involving the University of Alaska and the Military with a 40-50 acre site of phased antennas in the bush country of Alaska, pumping GIGA watts of energy in the VHF range of 3-10 MHz, into the ionosphere has verified Tesla's theory. It is deeply involved in the so called missile shield concept. A recent radio broadcast involving two scientists connected with the experiments, posed several point blank questions in which they guardedly acknowledged that the system was activated on 9-11 and most recently during the US elections. Some credence is given by a recent statement by Putin claiming they had found a way around the so called US missile shield. Sounds like Buck Rogers doesn't it? A host of questions come to mind, most relating to Tesla's basic investigations. Weather control, Van Allen belt disturbance, Ozone layer modifications, communications disruptions, nuclear explosions without radiation, etc., etc., etc.

If you want to explore these interesting topics further, type the word HAARP on your favorite web search engine. You'll likely come up with more reading material than you can digest in a month of Sundays. It's indeed an eye opener. This type of thing involving the disturbance of the ionosphere, that which we and many others utilize for HF communications might possibly change things drastically. It could be profound. Should we nominate Tesla for honorary BARC membership? Get his \$25 first.



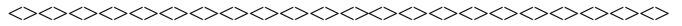
Thank you

To all our friends at the
Bridgerland Amateur Radio Club
Thank you so much for your kind thoughts and
Beautiful flowers.

Bill, Lana & Katie Neville
WA7KMF

A new QST column, "Getting to Know Your Radio" debuts in the April edition of QST. Author and ARRL Product Review Editor Joel Hallas, W1ZR, says the column "basically talks about what all those knobs do" on modern equipment. "The idea is to acquaint users with the typical features of modern radios." Hallas says there was a time when radio receivers were pretty easy to understand—in some cases not all that much different from the broadcast set in the kitchen or living room—so most new amateurs could quickly learn their way around the front panel. It's a new world now. "It's fair to say that modern transceivers have come a long way since the boat anchors of the 1950s and earlier," he says. "Many transceiver makers seem to sell their wares by claiming the most and newest features." As a result, modern ham transceivers can be pretty intimidating, making operation daunting for newcomers and veterans alike. The first installment of "Getting to Know Your Radio" will cover the now-popular—

and common—passband tuning feature. Hallas says a column on audio compression systems is in the works.



==>GERMANY, SPAIN ANNOUNCE CHANGES IN
 AMATEUR REGULATIONS

Germany and Spain have recently announced changes in their Amateur Radio regulations. Some revisions stem from the outcome of World Radiocommunication Conference 2003, which essentially left it up to individual countries to decide if they wanted to continue to impose a Morse code requirement for HF access. In Germany, the Deutscher Amateur Radio Club (DARC) reports that, effective February 19, there now are only two classes of Amateur Radio license: Class A (formerly Class B and C) and Class E (formerly Class D). The new Class A works in accordance with the Harmonized Amateur Radio Examination Certificate (HAREC), T/R 61-02. It permits radio amateurs in participating European countries to go from one European nation to another and obtain a full license. (Note: The US does not participate in HAREC.) Longtime visitors or foreign residents with a CEPT license in Germany will be is-

NORTHERN UTAH HAMFEST

Sponsored By
The Ogden Amateur Radio Club (OARC)

Location: Browning Armory, 625 E. 5300 S., South Ogden



Date: Saturday April 23, 2005

Start Time: 8:00 AM

Raffle

Grand Prize: Icom IC-703 HF Radio

(Must be present to win)



Pre Registration Form

Call Sign: _____

Name: _____

Email: _____

Phone: _____

Entrance Donation \$ _____

(\$5 or \$10 family, (\$6/\$12 at door) includes a ticket for door prizes)

Raffle Tickets for IC-703..... \$ _____

(\$3.00 per ticket, 2 for \$5.00)

Vendor Table \$ _____

(\$3.00 per Table)

Lunch - # & Type of Sub..... \$ _____ # _____ (_____)

(\$5 - 6 inch (T)urkey, (H)am or (B)eef Subway with chips)

Total \$ _____

Registration forms can be sent to: OARC P.O. Box 3353 Ogden, UT 84409

sued a German Class A license. The Class E license remains limited to VHF/UHF frequencies only, with the addition of 10 GHz, output limited to 10 W EIRP. There also have been some changes to the spectrum allocation at 1.8 MHz. The text of the new regulations, in German, is available on the DARC Web site <<http://www.darc.de/aktuell/afuv.pdf>>. In Spain, the Unión De Radioaficionados Españoles (URE) reports two significant changes in that country's Amateur Radio regulations, effective March 3: Spain has deleted the Morse code requirement to obtain a Class A (General) or Class C (Novice) license. Also, Class A (General) and Class B (Restricted) licenses now are allowed to use the band 50.0 to 51.0 MHz "under special and particular authorization." There's information on reciprocal licensing on the ARRL International Operating Web page, <<http://www.arrl.org/FandES/field/regulations/io/recip-country.html>>.

? New TrustedQSL software released for Logbook of the World: Version 1.11 of the TrustedQSL software used with ARRL's Logbook of the World system now is available. Windows, Linux and Mac OS users are encouraged to update their systems. The new version fixes a serious bug that affected Linux and Mac OS X versions of the software. This bug caused users' saved certificate (.P12) files to be corrupted. Linux and Mac OS X users are strongly advised to install the new version of the TrustedQSL software and save all existing certificates into .P12 files. Older .P12 files saved from these systems should be discarded. Windows users of the TrustedQSL software should update to the new version, in part because the updated Windows version of the TQSL program now signs log data much faster. Instructions for downloading and installing the software are available on ARRL's LoTW Web page <<http://www.arrl.org/lotw>>.

? Emergency communication volunteers watch over California marathon: While most of Huntington Beach, California slept early Sunday morning, February 6, a team of Huntington Beach Radio Amateur Civil Emergency Service (RACES) and Community Emergency Response Team (CERT) radio communications volunteers began to deploy along the 26.2 mile course of the Pacific Shoreline Marathon. The mission of the radio volunteers: To help ensure a safe and fun event for all participants and spectators. For the fourth consecutive year, RACES and CERT personnel were on-hand to provide instant communications to authorities in case an emergency happened during the marathon. Improvements in the Amateur Radio "safety net" for this year's race included having a communications volunteer "shadowing" medical personnel in the medical aid tents. Huntington Beach RACES team member John Cerecedes, KE6OAO, was among the runners.

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The ARRL Letter Vol. 24, No. 13 April 1, 2005

==>AMATEUR RADIO LINKS EARTHQUAKE-STRICKEN ISLAND WITH OUTSIDE WORLD

Working under harsh conditions, Indonesian Amateur Radio Emergency Service (ARES) volunteers this week established VHF links between earthquake-stricken Nias Island and northern Sumatra. Nias Island was hit March 28 by nearby magnitude 8.2 and 8.7 underwater earthquakes. More than 1000 people are reported to have died as a result of the earthquakes. The tremors affected some of the same areas still recovering from

the December earthquake and tsunami. Although officials and residents remained on alert for tsunamis this week, none occurred. A magnitude 6.3 aftershock occurred in the vicinity March 30. Organization of Amateur Radio for Indonesia (ORARI) headquarters in Jakarta this week called on its members to be ready to assist. An ORARI team deployed by air to Nias Island March 29 set up "zulu" (emergency) station YB6ZAH in Gunung Sitoli, the island's largest city. YB6ZAH has been in contact with the ORARI District 6 command post in Medan, North Sumatra. The ORARI team already had experience supporting communication following the December 2004 tsunami that claimed an estimated 300,000 lives in South Asia. In the earthquake's immediate aftermath, ORARI ARES members reportedly were on duty with little or no food to eat, although they did have drinking water. At that point, many victims had not yet been evacuated, and some remained trapped in the debris. ORARI team members include Zulkarman Syafrin, YC6PLG, Herman Rangkuti, YC6IQ, and Soejat Harto, YB6HB—a medical doctor. Syafrin reports that the earthquake damaged the power, telecommunication and transportation infrastructure or took them out altogether on Nias Island. Buildings in Gunung Sitoli were reportedly flattened and roads severely damaged or impassable. In the early going, the team was using portable generators and had to restrict operation to every two hours to conserve scarce fuel. TELKOM, the Indonesian Department of Public Telecommunication, has since provided the ORARI ARES team with a bigger generator, and the operation has relocated to the TELKOM building, where fuel is no longer a problem. ORARI District 6 plans to supply more logistical and radio equipment, while Ady Susanto, YB6VK, was preparing a set of solar cells for the ORARI ARES team's use in Gunung Sitoli. New Mexico radio amateur Earl Campbell, N8TV, now working with the International Red Cross in Banda Aceh on post-tsunami relief, plans to set up an emergency Amateur Radio station on Simeulue Island, which also was affected by the earthquakes. Campbell's IT team reportedly is headed for Nias Island to set up a satellite Internet connection and to support the ARES team in Gunung Sitoli. Updates on ham radio earthquake relief activity in Indonesia are available on the AB2QV Web site <<http://www.qsl.net/ab2qv/nias.htm>>.—Wyn Purwinto, AB2QV



? Radio amateur tapped to head NASA: President George W. Bush has announced his intention to nominate Michael Griffin, NR3A, to be the next administrator of the National Aeronautics and Space Administration (NASA). He'll succeed Sean O'Keefe, who departed NASA earlier this year. Griffin currently heads the Space Department at Johns Hopkins University Applied Physics Laboratory. In 2003 testimony before the US House of Representatives' Future of Human Space Flight Committee on Science, Griffin described himself as "an unabashed supporter of space exploration in general, and of human space flight in particular." Griffin expressed his belief that the human space flight program "is in the long run possibly the most significant activity in which our nation is engaged." His extensive and impressive academic resume includes five master's degrees and a doctorate (aerospace engineering). The US Senate must confirm Griffin's appointment.

Questions for General Class License

1. (G1A07) What are the frequency privileges for a General Class control operator in the 12-meter band?
 - A. 24890 - 24975-kHz
 - B. 24890 - 24990-kHz
 - C. 24900 - 24990-kHz
 - D. 24900 - 24975-kHz
2. (G1C08) What is the maximum transmitting power a station with a General Class control operator may use on 28.400 MHz?
 - A. The minimum power necessary to carry out the desired communications, with a maximum of 200 watts PEP output
 - B. The minimum power necessary to carry out the desired communications, with a maximum of 1000 watts PEP output
 - C. The minimum power necessary to carry out the desired communications, with a maximum of 1500 watts PEP output
 - D. 2000 watts PEP output
3. (G2A01) Which sideband is commonly used for 20-meter phone operation?
 - A. Upper
 - B. Lower
 - C. Amplitude compandored
 - D. Double
4. (G2D09) What information is normally contained in a station log?
 - A. Date and time of contact
 - B. Band and/or frequency of the contact
 - C. Call sign of station contacted and the RST signal report given
 - D. All of these choices
5. (G3C12) Daylight fading on the 40-meter band is associated most with which ionospheric layer?
 - A. The F2 layer
 - B. The F1 layer
 - C. The E layer
 - D. The D layer
6. (G5B14) What percentage loss would result from a transmission line loss of 1 dB?
 - A. 16.6%
 - B. 12.5%
 - C. 14.7%
 - D. 20.6%
7. (G9D02) What is the typical characteristic impedance of coaxial cables used for antenna feed-lines at amateur stations?
 - A. 25 and 30 ohms
 - B. 50 and 75 ohms
 - C. 80 and 100 ohms
 - D. 500 and 750 ohms

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PROVIDENCE, UT 84332



April, 2005

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