
CQ BARS

Volume XXVI Issue 11

November 2008

President's Corner

Hello All,

Hope everyone had a good Halloween! I would like to say welcome to our new Treasurer, Marianne Stacey KC9JLK, who was elected at the last meeting. I would also like to thank Barb Denk, KB9JLB for her service to the club this past year. Job well done, Barb! AJ, Don, and yours truly were also voted in for another year. I hope we can continue in a positive direction, gain more membership, and have a few more activities this year.

During the past several months there was a poll on the website that asked if you would use PayPal, and over ¾ of you said Yes. As a result, we're in the process of starting a PayPal account which will be on the website so you can pay dues, donate, buy hamfest tickets, and vendors can purchase tables for the hamfest. I hope to have this done by next meeting.

As far as the repeaters, 220 is still having some problems, but hopefully we can find a duplexer or try to fix the old one so we can get that on the air soon. The duplexer was also water damaged during the water tower flooding which we only found out when we tried to put it on the air. I would like to say thanks to John, AJ, and Andy from United Radio for the effort in trying to get both repeaters on the air! They spent better than five hours at the hospital that late afternoon and into the night – Andy even missed his child's birthday party to get the job done. Thank you, Andy, for your support!

On a final note, we will be voting for the Service, Ham Of the Year, and Achievement awards at this Monday's meeting, which will be presented at the December meeting.

Happy Thanksgiving To All!

Tom, N9LJY
BARS President

Secretary's Column

Last month I reminded you all that it's membership time again. Let's keep those applications coming, folks!!



I want to add my thanks to Tom and the others who have been working so hard to get the 220 and 440 machines up and running.

They have out in UNTOLD hours on the roof of the hospital (at least once in the rain), and Tom has been meeting with the hospital personnel to put it all together. When you see them next time, pause and shake their hands, pat them on the back, and if you're a young cute blond give them a hug!! Seriously, we have a great group in those fellas. Let them know you appreciate their efforts.

73's for this month

Don - N9VJV

Last Months Meeting Minutes

The meeting was opened at 19:00 hours by KC9JQW (AJ). Introductions followed. Officers present were: N9VJV (Don), and KB9JLB (Barb). Also present at the meeting were:

NW9V	WA9IL	W9WRS
K9JTB	KB9JLB	WB9PDD
KA9SFW	KC9BST	KC9JQW
WD9AYR	N9ZMM	KC9CCH
N9QOD	KC9GMD	KC9JLK
KC9GRH	W9KHX	WA9IQL

N9VJV WX9WRN

A motion to accept the minutes as published in CQ Bars was made by K9JTB (Bill), seconded by KB9JLK (Barb) and carried

KB9JLK (BARB) presented the Treasurer's report. No motion required.

COMMITTEE REPORTS

2 meter: KC9JQW (AJ) reported that it's working.

220/440 WA9IL (John) reported the 440 machine is up and running with a PL of 114.8. The antenna is 80' shorter than the old one. A new antenna and feed lines will be going in the end of this week. The 220 machine is installed but not active yet. Echolink is going to be back up. The machines are on the hospital generator. No autopatch is going to be available.

Net Control: N9ZMM (Archie) reported that checkins are getting slightly better.

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Hamfest: KC9JQW (AJ) reported that a poll will be going up on the web site to determine the membership's feelings about continuing to hold a hamfest.

Education: No Report.

VE: K9JTB (Bill) reported that the last session produced 1 person who passed with a score of 100%. He will be getting his father's old call.

Field Day: WA9IQL (Elden) donated 3 laptop computers for Hamfest. Don (N9VJV) will recondition and store them.

Public Relations: Nothing to Report.

Skywarn: WX9WRN (Toni) reported that things have been quiet. She reminded is that Skywarn Recognition Day will be 12/6.

OLD BUSINESS:

Nominations were continued for officers.

President: N9QOB

Vice President: WA9IQL

A motion to close nominations was made by KC9GRH (Bryan), seconded by KA9J (Frank) and carried.

Elections were held by written secret ballot. Winners were:

President: N9LJY (Tom)

Vice President: KC9JQW (AJ)

Secretary: N9VJV (Don)

Treasurer: KC9JLK (Marianne)

A motion to close old business was made by K9JTB (Bill), seconded by N9QOB (Ron) and carried.

NEW BUSINESS:

N9ZMM (Archie) spoke about his suggestion (that was in last month's newsletter) to go as a group to Dayton next year. A small group could go as a car pool. If there's enough interest perhaps a bus could be considered.

A motion to close new business was made by KC9GRH (Bryan), seconded by KC9JLK (Marianne) and carried.

A motion to adjourn was made by KC9GRH (Bryan), seconded by KC9JLK (Marianne) and carried.

Respectfully submitted,
Don, N9VJV
Secretary

Weather Facts

Courtesy of our own George Geotsalitis NB9R

Are U.S. Balanced Budget Amendments affected by weather? Our federal budget deficit is a moving target but for argument sake, at some point in time, it was the neighborhood of 9.2 trillion dollars. A significant amount of the deficit can be blamed on "mother nature." The federal government spent about \$26 billion on disaster relief payments from 1985 to 2005, including tornadoes, hurricanes, floods and droughts (and those payments have increased by an average of \$65 million per year).

How have athletic shoes been used in charting ocean currents? In 1990, a Korean container ship bound for the U. S. ran into difficulty that resulted in 40,000 pairs of Nike athletic shoes being swept overboard. These shoes have since been retrieved on beaches from Alaska to Oregon to Hawaii. These "findings" have

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allowed validation of ocean current computer modeling.

Next Generation Warning Products and Services Workshop

On December 2-4, the National Weather Service and the University of Oklahoma will hold a joint workshop in Norman, OK, to bring together technical and operations experts from the private weather enterprise, broadcast media, emergency management and academia. The meeting's goal is to determine specific requirements associated with the NWS watch, warning and advisory services. Discussions will range from broad concepts of watch, warning and advisory services to the details of textual and graphical dissemination.

SKYWARN Recognition Day Set for December 6

The 10th Annual SKYWARN Recognition Day (SRD) Special Event will take place Saturday, December 6, 2008. SRD is co-sponsored by the ARRL and the National Weather Service (NWS) as a way to recognize the commitment made by Amateur Radio operators in helping to keep their communities safe. According to SRD Coordinator David Floyd, N5DBZ, Amateur Radio operators can visit their local participating NWS office, working as a team to contact other hams across the world throughout the 24 hour event.

The idea for the first SRD took shape in the summer of 1999. Meteorologist-in-Charge of the Goodland, Kansas NWS office Scott Mentzer, N0QE, tried to find a way to recognize the valuable contributions storm spotters make to the National Weather Service. "Since many of those storm spotters were also hams," Floyd said, "it seemed like a natural fit for the recognition to be centered on Amateur Radio."

With the approval of NWS headquarters and a commitment to participate from many local NWS offices across the country, the first National Weather Service Special Event took place on November 27, 1999. "At the end of the event, an amazing 15,888 QSOs were logged, with contacts made to all 50 states and 63 countries," Floyd recounted. "The Des Moines forecast office took the honor of making the most contacts of any office that first year with 761 QSOs, and went on to lead the pack until 2003 by logging between 1300-1500 contacts each year!"

Floyd said that feedback from that first event was "overwhelmingly positive" from both the NWS staff and the local ham clubs: "Suddenly there was incentive for more NWS staffers to either obtain a license or upgrade so that more people could work ham radio during severe events. In addition, many club members had never visited an NWS office before. When they came for the special event, they learned the value of their reports and how they were used in conjunction with existing technology."

And so began an annual tradition. The following year, 85 of the 122 NWS offices -- almost 70 percent -- participated in the event, making nearly 24,000 QSOs. "Perhaps the most unusual contact occurred in 2000 was with an airliner 39,000 feet above Utah," Floyd said. "The pilot ended the QSO with a request for a 'spot weather forecast' for his arrival at Salt Lake City airport."

In 2001, the name of the event was changed to SKYWARN Recognition Day, a name Floyd said better relayed what the day was all about: "Each year since the inception of SRD, the number of NWS offices and local ham clubs participating has increased, until now more than 100 offices sign up each year to take part. The most contacts made during any SRD occurred in 2006 when -- thanks to the staff and local hams in the Grand Junction, Colorado area -- 1640 QSOs were logged!"

Station call signs have also changed over the years. Floyd said that some NWS offices and clubs apply for a special event call

sign, "such as W3B in Brownsville or NOY in Aberdeen, South Dakota. Other call signs hint at office location, including WX9GRB in Green Bay and WX4NHC at the National Hurricane Center. Still others represent more of the big picture, as in KC0SKY in Pleasant Hill, Missouri."

Floyd said that as SKYWARN Recognition Day has grown throughout the years, he has seen a greater use of digital communications in addition to CW, RTTY and packet radio: "Each year, more and more contacts are being made using EchoLink, Winlink and the use of e-mail reflectors."

2008 SKYWARN Recognition Day will be held on December 6 from 0000 UTC-2400 UTC. Last year, contacts were made in all 50 states and 40 countries during the 24 hour event. If you haven't joined in the fun, make 2008 your year to do so!

ISS CROSSBAND REPEATER

Reports from the ISS indicate that Mike Fincke has turned on the D-700's crossband repeater function.

The up and down links are:

Crossband FM repeater downlink: 145.80 MHz (Worldwide)
Crossband FM repeater uplink: 437.80 MHz (Worldwide)

You operate as if you are working AO-51. You'll talk "through" the ISS to others hams on earth.

Have fun,

John - AG9D
ARRL OPS

ARRL VEC ANNOUNCES EXAM FEE INCREASE

On November 6, The ARRL VEC <<http://www.arrl.org/arrlvec/>> announced that as of January 1, 2009, the fee to take an ARRL Volunteer Examiner (VE)-administered Amateur Radio license exam will increase by \$1, from

\$14 to \$15. According to ARRL VEC Manager Maria Somma, AB1FM, ARRL VE teams may retain up to \$7 of this fee to directly reimburse their teams'

out-of-pocket examination expenses; currently, VE teams keep \$6. This is the first time in four years that the examination fee has been adjusted.

Somma said that the FCC allows VECs to collect an examination reimbursement fee from each candidate who takes one or more exam elements. "VEs and VECs may be reimbursed by examinees for out-of-pocket expenses incurred in preparing, processing, administering or coordinating an examination for an amateur operator license (FCC Rule 97.527)," she said <http://edocket.access.gpo.gov/cfr_2002/octqtr/pdf/47cfr97.527.pdf>.

"These exam fees help the VEC recover its costs of providing its services."

Saying that every examinee at each ARRL coordinated examination session is charged the same fee in accordance with the annually-established fee schedule, "Any person sitting for an exam, or having a new license or upgrade processed at a test sessions, must pay the exam fee applicable for the calendar year," Somma explained. "The ARRL VEC's exam fee for calendar year 2009 is \$15. Each time a candidate pays one exam fee, they are entitled to take tests for Elements 2, 3 and 4 as needed, up to all three elements under the single exam fee. Each time an examinee retakes an exam element (assuming the VE Team has different exam design available), another exam fee is charged."

VE teams may elect to keep a prescribed portion of each exam fee collected exclusively to offset expenses that are directly incurred in administering the VE program. "All out-of-pocket reimbursable expenses shall be necessary and prudent, and must relate to the examination process in some way," Somma said. "VECs and VEs are expected to use good business judgment with respect to reimbursement amounts. The examination reimbursement fee cannot be used to offset non-session related costs and must be kept separate from other accounts."

Somma pointed out that business expenses such as postal, utility, fuel and printing charges, are increasing: "Our VE teams are feeling the effects of the current economy, too! Teams are retaining reimbursement at amounts considerably larger than previous years. The amount of out-of-pocket costs that our VEs and the VEC are expending to provide authorized services in connection with Amateur Radio operator examinations continues to rise."

Recent ARRL VEC cost-cutting steps have included staff reduction, reduced printing charges of ARRL VE training material and exam software, renegotiating shipping and printing contracts and eliminating lesser-used services.

"Only so many cost-cutting measures can be justified without cutting back significantly on services essential to our VE teams, our customers and our program," Somma said. "As a result, an adjustment was needed in the 2009 exam reimbursement fee if we intended to maintain the basic levels of service that our VEs, VE teams and candidates have come to expect."

Somma said that the ARRL VEC permits its VEs to retain a portion of the exam fees they collect to directly reimburse themselves for out-of-pocket expenses incurred in setting up and conducting their examination sessions. "As long as the expense is warranted and has been prudently incurred -- and the expense is specifically related to exam administration -- then the fee can be retained," she said. "The team should keep a complete record of the expenses paid (with receipts) in team records for two years. Records must be made available to the ARRL VEC upon request. Costs not related to the exam session processes or paperwork are not reimbursable."

"We believe that the ARRL VEC's level of assistance and services are outstanding," said ARRL Chief Operating Officer Harold Kramer, WJ1B.

"Exam supplies, such as paperwork and software, shipping costs both to and from the VEC and ARRL VE accreditation, as well as credentials, are all free of charge for our VEs. We maintain a toll-free number for our VEs and we even offer reimbursement to the VE team for their expenses.

We appreciate the dedication and volunteerism of all our VEs in the field. This is why we offer so many services free of charge. This is why we have that same level of duty and commitment here. Every test fee we collect goes right back into the VEC program and to serving the Amateur Radio community."

The Canaries in the Mine

By Gregory Lapin, PhD, PE, N9GL
Chairman, ARRL RF Safety Committee
g.lapin@ieee.org
October 31, 2008

Amateur Radio is more than 100 years old. At one time, hams were virtually the only people in the world exposed to RF signals. As time progressed and radio communications technology has been developed and proven -- largely by radio amateurs -- its use was made available to the masses and the number of RF signals in the air greatly increased. This has reached a zenith today, with

a majority of people walking around with RF transmitters in the form of cellular telephones.

With this new-found, wide-based exposure to RF energy, fears of ill effects have grown. Over time, as studies have been performed on the health of the newly exposed population, most have shown no increase in disease; however, the concern is that "more studies must be done," because the length of exposure of cellular telephone users may be too short to reveal diseases that take a long time to occur.

Miners in the old days would take canaries with them deep into mines. The small bird was an indicator of problems with the air quality, its demise serving to warn the miners to get out of the mine before the air got bad enough to injure a human.

Radio amateurs are arguably the largest group in our society with the highest exposure to RF for the longest time. Like canaries in mines, studying the health of radio amateurs in reference to the general population could be used to warn the rest of the population if RF exposure can cause disease.

This was the motivation behind the epidemiological study of radio amateurs by Samuel Milham in the mid-1980s. This study of the death records of a relatively small group of California and Washington State hams purported to show a very weak relationship between being a radio amateur and one form of leukemia; however, the study was far too limited to be used to draw any conclusions (for more information, please see N9GL's RF Safety Column, "They Blinded Me With Science," April 2000.).

The health records of hams are too valuable a resource to be ignored -- a more comprehensive study of hams would still make a valuable addition to the science of public health. As such, around the year 2000, the National Cancer Institute (NCI) -- one of the National Institutes of Health (NIH) -- undertook a new epidemiological study of radio amateurs (see "Researcher Undertaking Epidemiological Study of Radio Amateurs"). Epidemiologists at NCI studied 108,586 subjects who held Amateur Radio licenses and who had lived in California any time from 1966-1995. California death records, the National Death Index and the Social Security Administration mortality listings were used to track which of these people had died, resulting in 1,734,930 person-years of study.

This group was subdivided into subgroups based on license class, with the expectation that high license classes indicated more intense activity on the radio and a likelihood of employment in broadcasting or electronics industries. Deaths were compared to standard population death rates, subdivided by disease and results were expressed as SMRs, or Standard Mortality Ratios. An SMR of 1.0 means that the test group has the same rate of death from a particular cause as the standard population. An SMR of 2.0 means that the test group is twice as likely to die from a particular cause than the standard population, and an SMR of 0.5 means that the test group is half as likely to die from a particular cause than the standard population. Because these are statistical calculations, a 95 percent confidence interval is also calculated for each SMR. Thus, an SMR of 2.0 with a confidence interval of 1.0-3.0 means that the test group appears to be twice as likely to die of a disease than the standard population, but the uncertainty of the numbers is such that the SMR could have been anywhere between 1.0 and 3.0. Such a result is not considered to be statistically significant because 1.0 is within the 95 percent confidence limits.

The relevant results from the first phase of the study are as follows:

* Cancer Deaths: 0.79 (0.76-0.81) -- this is a significant result that hams are less likely to die of any of the many types of cancer than

the standard population.

* Glioma Deaths: 1.14 (0.97-1.30) -- this is a non-significant result that hams appear to be slightly more likely to die of this type of brain tumor than the standard population.

* Leukemia Deaths: 0.89 (0.80-1.03) -- this is a non-significant result that hams appear to be slightly less likely to die from any form of leukemia (blood cancer) than the standard population.

* Chronic Myelogenous Leukemia Deaths: 1.2 (0.90-1.70) -- this is a non-significant result that hams appear to be slightly more likely to die from this specific form of leukemia than the standard population.

* Hodgkin's Disease Deaths: 1.3 (0.90-1.90) -- this is a non-significant result that hams appear to be slightly more likely to die from this form of lymphatic cancer than the standard population.

* ALS Deaths: 1.21 (0.90-1.60) -- this is a non-significant result that hams appear to be slightly more likely to die from this form of nervous system degeneration (Lou Gehrig's disease) than the standard population.

* Laryngeal Cancer Deaths: 0.60 (0.40-0.80) -- this is a significant result that hams are less likely to die from this often smoking-related disease than the standard population.

* Lung Cancer Deaths: 0.65 (0.61-0.69) -- this is a significant result that hams are less likely to die from this disease, which is also most often related to smoking, than the standard population.

If the average numbers are taken at face value without considering the statistical uncertainties, there are four of the above diseases that hams appear to incur more often than the rest of the population, no matter how slight the increase. The same set of numbers also could imply that ham radio protects people from four other diseases. In fact, even though none of the increased rates of disease is statistically significant, three of the apparent protective effects are statistically significant.

As with the Milham study, the NCI study is highly preliminary. It does not consider any of the many other factors that affect the onset of disease. There was no information obtained for either study that took into account health factors such as smoking habits, the general health of the subjects including weight, diet and exercise, family disease histories and occupational factors. Also, neither study confirmed the amount or type of exposure each licensed ham had to RF. Were they operators who used QRP or QRO, UHF or VLF, an HT or an antenna on a 100 foot tower?

Just as it defies logic that simply being a radio amateur protects one from getting laryngeal cancer or lung cancer, the results above clearly do not support any implication that being a radio amateur increases the risk of glioma, leukemia, Hodgkin's disease or ALS. Clearly, based on this analysis, we hams are not dropping dead because we enjoy our hobby.

Epidemiological studies are fairly expensive to perform. From results such as those listed above, it is hard to make the case that much additional money should be spent to obtain the information that would make the results more conclusive. From preliminary studies such as these, it often takes SMR values of 5.0 or greater to justify more research to improve the specificity of the results.

The epidemiologists at NCI are continuing to subdivide the sample population on which they have already collected information. They are using additional statistical techniques to try to glean more conclusions from these data. To date, the cry to get

out of the mine does not appear to be forthcoming.

We as hams can be proud that our experience in our hobby is providing scientists with valuable information that directly benefits public health policy. We should be proud to be the canaries in the mine.

Greg Lapin, N9GL, started working in the RF safety world after spending many years first studying cardiac function imaging and then brain tumor kinetics. He serves as chairman of the ARRL RF Safety Committee and as a member of the FCC Technological Advisory Council. A former professor of Biomedical Engineering and Neurology at Northwestern University, Lapin now works as a consulting professional engineer in the electronics industry. He was first licensed while a teenager in 1969 and continues to be fascinated by virtually all aspects of Amateur Radio. One of his many interests is electronic design, and he is the author of Chapter 8, "Analog Signal Theory and Components" in The ARRL Handbook for Radio Amateurs. His non-ham interests include making things grow in his garden and serving as commissioner of the local children's softball league. At other times -- when he is not working or helping his kids with their homework -- you might find him with the local emergency services agency, climbing his tower, building a new QRP rig, playing with his APRS setup, responding to QSL cards, going off on a DXpedition or trying to get that "new one." You can reach him via e-mail at g.lapin@ieee.org. The ARRL RF Safety Committee page contains a link to archives of previously posted editions of N9GL's RF Safety Column.

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For you nostalgia buffs, here's something submitted by our friend Frank (KA9VPH)

Hello All,

The link below is a UTube Video of how radio works circa 1937. It is a great opportunity to take this look back. Be sure to turn up the volume on your speakers and ENJOY!

http://www.southgatearc.org/news/october2008/on_the_air.htm

Caution

E-mails Asking for Personal Information Are Not from ARRL: We have received several reports from ARRL members with arrl.net e-mail accounts who have recently been contacted via e-mail asking for personal information, such as user names and passwords. Please be assured that these e-mails are fraudulent attempts at "phishing" <<http://en.wikipedia.org/wiki/Phishing>> and did not originate from ARRL.

According to ARRL Information Technology Manager Don Durand, "This is a very crude attempt at phishing, using an easily determined spoof of the originating/return address. There is never a time when we would ask via mass e-mail for user names and passwords of arrl.net users. There is simply no need to ever do so." If you receive an e-mail asking for personal information and it looks like it originated from ARRL, please do not respond, just delete it.

ARRL Presents New Membership Benefit

With just a mouse click or two, ARRL members can now access the online QST magazine archive. This new benefit -- a service of the ARRL Technical Information Service (TIS) -- provides PDF copies of all QST articles from December 1915 through

December 2004, enabling members to view and print their favorite article, project and more.

For many years, the TIS has provided members with assistance researching ARRL periodicals and publications, as well as providing members and non-members with article reprints for a small fee. Access to the new online digital QST archive is free for ARRL members

"Having access to every issue of QST through 2004 is absolutely incredible!" said ARRL Lab Manager Ed Hare, W1RFI. "The best of the best of QST from every era is now at the fingertips of every ARRL member with a keyboard and an Internet connection. Members can research articles on any subject that interests them, or just browse the past issues. This will be a popular membership benefit that will be of special value to new and long-time hams alike. This valuable content will help radio amateurs who use QST as a technical resource -
- for projects, equipment 'hints and kinks' -- and for other research contributing to the advancement of the radio art. We know many hams will simply enjoy perusing these pages of history, too."

The ARRL Periodicals Archive and Search lists every article for QST from 1915 to the present, QEX from 1981 to the present, Ham Radio from 1968 to 1990 and NCJ from 1973 to the present (please note that beginning in 1998, each issue of QEX covers two months). Only ARRL members will be able to download and print copies of the QST articles.

QST magazine is the official journal of ARRL, the national association for Amateur Radio. An interest in Amateur Radio is the only essential qualification of membership. ARRL membership is \$39 per year in the US. For a complete list of membership benefits and dues, please visit the ARRL Membership Web page at <https://www.arl.org/forms/membership/>

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