

# SQUAKBOX

Issaquah Amateur Radio Club

Volume 31, No. 12

Issaquah, Washington

December 2009

## Remembering W7BI

*(Here is the next segment of Howard's Story continuing from last month as told to and transcribed by Pete Petersen WY7Z.)*

Continuing the projects on which Howard participated or supervised in the 1940's to the 1970's includes:

- Developed the first short-term, continuous signal storage device for analyzing received signals (1955). Developed the first device for displaying such data on a CRT (1965).
- In an ongoing project, provided improvements to the design, packaging and dispensing of chaff to protect aircraft from increasingly sophisticated radar-directed attack.

The project was so successful in contributing to the protection of aircraft in combat that, based on a nomination by Howard, Link was awarded the Distinguished Civilian Serve Award. Later, in 1960, Howard received this same award which is the nations highest award for civilian service.

One of Howard's more interesting assignments involved an episode that, to his knowledge, has not been made public. At the end

*(Continued on page 2)*

## NCVEC to Release New Technician Question Pool in January

The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC) is due to release the new Technician class (Element 2) question pool to the 14 VECs on December 1, 2009; it will be released to the public in January 2010. Each question pool for the three Amateur Radio license classes -- Technician, General and Amateur Extra -- is reviewed on a four-year rotation. This new Technician class pool will become effective on July 1, 2010.

According ARRL Assistant VEC Manager Perry Green, WY10, the QPC reviews the three question pools every four years to ensure that the questions are kept current with the latest amateur practice and technology, as well as addresses information relevant to that particular license class. "In the case of the Technician pool, the question set should provide for the new Technician licensee to be able to establish his station and operate it legally, courteously and safely. The Technician question pool and

*(Continued on page 3)*

## December Program

### Annual Holiday Ice Cream Party

See the article on Page 3 for the information.

Future programs are as follows:  
Jan - Open  
Feb - Open

There are openings for future programs. Contact Bruce KG7OI, 425-391-6828 to volunteer.

### Also . . .

Last Meeting	2
Greek to Me	3
Call Signs	4
Distracted Driving	4
RYRYRYRY	5
Coming Events	6

## At the last meeting . . .

November 4, 2009

The meeting was called to order at 7:32 by President Ross Morris KF7D

There were 13 members present

Treasurer's Report: \$1821.54 in the bank

The minutes of the October meeting were approved as printed

IHRSG: Flash Parlani N7TCW mentioned the statewide SET drill on October the 10<sup>th</sup> and the Practice CERT deployment on the 25<sup>th</sup>.

A motion was made, and seconded, to allow Jim Horn to sell some surplus W7RQT (SK) manuals on e-bay.

Elections were part of the New Business. (Please consider volunteering for a club office position for the 2010 year-ed.)

Rod announced that he had procured a table for the club at the Puyallup ham fair in March.

Bruce Helbert KG7OI suggested that the spouses and significant others be invited to the December social meeting.

Bruce also stated there would be a gift exchange for those who were interested. Details to follow.

Bruce also wants to procure some 'wire'. Details of the exact type, length or application were difficult to determine, but after some interrogation it appears that he wants some sort of antenna wire-the longer and stronger, the better.

The meeting was adjourned at some point; and time was given for folks to look over the donated auction items.

The program for the evening was the annual Equipment Auction and Junk Swap.

The Issaquah Amateur Radio Club collected \$238 as a result of the generosity of those donating and bidding. A Butternut HF vertical antenna was set aside to be taken to Puyallup ham fair in March.

Submitted by Rod Johnson, IARC Secretary/Treasurer

## E-Mail Elmer

Got a HAM radio question and can't find an Elmer to talk to? Just send your question by E-Mail to our E-Mail Elmer at:

[IarcElmer@dhuibh.net](mailto:IarcElmer@dhuibh.net) - Ed. - S

### 2009 IARC Officers

#### President

Ross Morris (KF7D) - (425) 392-1053 (Issaquah)

#### Vice President

Bruce Helbert (KG7OI) - (425) 391-6828 (Sammamish)

#### Secretary-Treasurer

Rod Johnson (WE7X) - (425) 392-8497 (Issaquah)

#### W7BI Trustee

Rod Johnson (WE7X) - (425) 392-8497 (Issaquah)

## W7BI Cont.

of WW2 in Europe a German submarine, enroute to Japan, surrendered in the Western Atlantic to a U.S. Navy destroyer and was taken to the Portsmouth Navy Yard. Among those on board was Dr. Heinz Schlicke, a German electronics expert. The purpose of his trip had been to deliver a series of lectures to the Japanese on German electronic developments. He had with him extensive notebooks, documentary materials, and equipment of prototypes including solid state microwave detectors (similar to what NRL was developing) and antennas. Howard never met Dr. Schlicke but the captured material and the records of Dr. Schlicke's debriefing were given to the NRL section headed by Howard to review.

Howard screened the material and referred it to staff members who specialized in topics such as IFF, sonar, and communications for detailed analysis. As rumor of the material circulated through the pentagon, Howard was besieged by admirals who thought their staffs or departments should have received the material or at least should participate in it's analysis. Extreme tact and firmness, plus a solid screen of special security requirements were needed by Howard to control the material and carry out his responsibilities. Information from the captured material was made available to the pentagon as quickly as possible. In July, 1945, Dr. Schlicke delivered to Naval officials the lectures he had planned to give in Japan.

(Continued on page 3)

## W7BI Cont.

By 1973 Howard had been at NRL for thirty three years, three years longer than was needed to qualify for civil service retirement. His name is on at least twelve patents, including those for an orbital beam vacuum tube and a permeability tuned intermediate frequency transformer, and a number of technical papers. His achievements were recognized with honors and awards and his advice was respected at high levels. (See addenda) Howard felt that a suitable replacement was in line to assume the superintendency and take over the projects Howard had been overseeing so the decision to retire was easily made.

More next month. – S

## It's All Greek to Me

Ask any high school physics student and they'll tell you that electrons govern pretty much everything we do. We call electrons in motion an electrical current, and those radio waves that we hams are so fond of are the result of high frequency electrons traveling in our antenna conductors. Think of a 40 meter wave as an accidental tourist who wants to go somewhere (somewhere nice and warm, maybe a rare DX station). But how to get there? It needs some mode of transport -- think of electrons as the transport providers.

We use our transmitters to move

## Holiday Ice Cream Party

The next ISSY HRC meeting will be our annual Ice Cream Social and a Holiday (I guess we can't say Christmas anymore) gift exchange. Spouses, significant others, and guests are welcome.

Remember to bring *wrapped* gift to exchange with the group (One for each member of your party for participating guests).

Gifts may be of a radio-techie-geek item of minimal value.

Note it is NOT proper to wrap and something that didn't sell at the auction. - S

---

the electrons in our antennas to-and-fro to produce radio waves, hopefully to that rare DX destination. When the radio waves get there, they set electrons in another antenna in motion. That current -- electrons in motion -- is amplified and detected at the receiving location and a QSO is made.

But why do we call them electrons? The ancient Greeks noticed that amber attracted small objects when rubbed with fur; apart from lightning, this phenomenon is thought to be man's earliest known experience of electricity. Back in 1600, the English physician William Gilbert - in his treatise *De Magnete* - coined the New Latin term *electricus* to refer to this property of attracting small objects after being rubbed. Both electric and electricity are derived from the Latin *Ä“lectrum*, which came from the Greek word *Ä“lektron* for amber. Now you know! – ARRL Letter, Nov. 19, 2009 - S

## Questions Cont.

exam are intended to be the beginning of the journey into the Amateur Radio Service. It prepares the person for the enjoyment of operating, and that of preparing to learn electronics, the cornerstone of the education needed to obtain the further enjoyment that can come with the higher license classes." Green is a member of the NCVEC's Question Pool Committee. Other members of the QPC include Chairman Roland Anders, K3RA (Laurel VEC), Larry Pollock, NB5X (W5YI VEC), Jim Wiley, KL7CC (Anchorage VEC) and Tom Fuszard, KF9PU (Milwaukee VEC).

Green said that earlier this year, the QPC solicited input from Amateur Radio operators concerning the new question pool, accepting input for new question topics and new questions, as well as suggestions for changes or deletions: "The QPC must rely on members of the Amateur Radio community to suggest questions and answers in a responsible manner to preserve a high level of legitimacy for our radio service, so the NCVEC QPC seeks input from the amateur community concerning a revision."

The new question pool will become effective for all examinations administered on or after July 1, 2010, and it will remain valid until June 30, 2014. The current Technician question pool that became effective July 1, 2006 will expire June 30, 2010. The new Technician pool contains approximately 400 questions, from which

(Continued on page 4)

## US Call Signs Not Issued by the FCC

If you're an American ham, chances are that your call sign was issued by the Federal Communications Commission. A "no brainer," right? Well, if you're an American ham who happens to be stationed at Guantanamo Bay or at one of the US bases in the Antarctic, your call sign is not issued by the FCC - it's issued by the base commander. Guantanamo Bay (or Gitmo as it's commonly called) uses the KG4 prefix, followed by a two-letter suffix; this block is reserved exclusively for American hams at Gitmo. As for Antarctica, the Antarctic Treaty, signed on December 1, 1959 (and entered into force on June 23, 1961), established the legal framework for the management of Antarctica, including allocation of amateur call signs; the National Science Foundation received their block on July 1, 1959. US military hams in Japan and Korea are also issued special call signs:

KA2AA-KA9ZZ -- reserved for US Army-authorized amateur stations in Japan.  
 KC4AAA-KC4AAF -- reserved for the National Science Foundation's use at the South Pole.  
 KC4USA-KC4USZ -- reserved for US Navy-authorized amateur stations at their Antarctic bases.  
 KG4AA-KG4ZZ -- reserved for US Navy-authorized amateur stations at Guantanamo Bay).  
 KL9KAA -- KL9KHZ -- reserved for assignment to US personnel stationed in Korea.

The 40 call signs having the first two letters AF, KF, NF or WF and the letters "EMA" following a numeral are available to the Federal Emergency Management Agency (FEMA).

The FCC once issued call signs to hams who lived in the Caroline Islands and the Marshall Islands. Even though these entities -- former United Nations Trust Territories -- now have their own sovereignty (and DXCC prefixes), the FCC will not issue call signs in the following blocks:

KC6AA-KC6ZZ -- KC6 was two DXCC entities: The Eastern Caroline Islands and the Western Caroline Islands. The Eastern Carolines became the Federated States of Micronesia (V6) and the Western Carolines became the Republic of Palau (T8).

KX6AA-KX6ZZ -- the former Marshall Islands, now the Republic of the Marshall Islands (V73). You can find out more on the FCC's Web site. Now you know! - ARRL Letter, Nov. 12, 2009 - S

## ARRL President Presents League's Views on Distracted Driving Laws

To ensure that Amateur Radio is not an unintended victim of the growing public debate over what to do about distracted drivers, ARRL President Joel Harrison, W5ZN, has written a letter to the National Safety Council (NSC), highlighting issues regarding the use of Amateur Radio emergency communications devices in vehicles. Many states have outlawed the use of cell phones while driving; some states with these laws have ambiguous wording (such as "mobile communication devices" or "mobile electronic devices") concerning the use of Amateur Radio while driving.

According to ARRL Chief Executive Officer David Sumner, K1ZZ, it boils down to the difference between simplex -- when only one message can be sent in either direction at one time -- and duplex -- a communications mode, such as a telephone system, that provides simultaneous transmission and reception in both directions. Harrison, citing Sumner's 40-plus years of experience as an Amateur Radio operator, puts it this way: "Simplex, two-way radio operation is simply different than duplex, cell phone use. Two-way radio operation in moving vehicles has been going on for decades without highway safety being an

*(Continued on page 5)*

## Questions Cont.

35 are selected for an Element 2 examination. This question pool will contain graphics and diagrams, something new for this element.

The current General class question pool was effective July 1, 2007 and is valid through June 30, 2011. The current Amateur Extra class pool was effective July 1, 2008 and is valid until June 30, 2012. - ARRL Letter, Nov. 19, 2009 - S

## Distracted Cont.

issue. The fact that cell phones have come along does not change that."

Harrison attached a copy of the ARRL's Policy Statement on Mobile Amateur Radio Operation to the letter to the NSC. "Amateur Radio mobile operation is ubiquitous, and Amateur Radio emergency and public service communications, and other organized Amateur Radio communications activities and networks necessitate operation of equipment while some licensees are driving motor vehicles," the Policy Statement reads. "Two-way radio use is dissimilar from full-duplex cellular telephone communications because the operator spends little time actually transmitting; the time spent listening is more similar to, and arguably less distracting than, listening to a broadcast radio, CD or MP3 player. There are no distinctions to be made between or among Amateur Radio, public safety land mobile radio, private land mobile radio or citizen's radio in terms of driver distraction. All are distinguishable from mobile cellular telephone communications in this respect. Nevertheless, ARRL encourages licensees to conduct Amateur communications from motor vehicles in a manner that does not detract from the safe and attentive operation of a motor vehicle at all times.

"The ARRL acknowledges numerous and increasing instances of state legislative proposals (and occasionally municipal ordinance proposals) to curb the use of cellu-

# RYRYRYRY...



DE KA7TTY

Happy Holidays Everyone and best wishes for a safe and Happy New Year.

73, John KA7TTY

lar telephones while operating motor vehicles, ranging from prohibitions on hand-held telephones to prohibitions on all forms of electronic devices," the Policy Statement maintains. "These statutory proposals would supplement the more generalized motor vehicle code requirements that exist in various forms in virtually all States, which require operators of motor vehicles to pay full time and attention to the operation of the vehicle while driving. ARRL understands that driver inattention is a leading cause of automobile accidents, and it is not unreasonable to be concerned about substantial distractions to drivers of motor vehicles."

Saying that the League understands that driver inattention is a leading cause of automobile accidents, "it is not unreasonable to be concerned about substantial distractions to drivers of motor vehicles. Given the necessity of unrestricted mobile Amateur Radio communications in order for the benefits of Amateur Radio to the public to continue to be realized," the policy statement reads, "the ARRL urges state and municipal legislators considering restrictions on mobile cellular telephone operation to (I) narrowly define the class of devices included in the regulation so that the class in-

cludes only full duplex wireless telephones and related hand-held or portable equipment; or alternatively (II) specifically identify licensed Amateur Radio operation as an excluded service."

Harrison pointed out that some states have done exactly what the Policy Statement suggests.

Georgia SB 218, which exempts the proper use of radios, citizens band radio, or mobile telephone.

Iowa SF 190, which does not apply to the use of an amateur radio by a federally licensed Amateur Radio operator.

Oklahoma HB 1782, provides exceptions for a person who is operating an amateur radio and who holds a current, valid Amateur Radio station license issued by the Federal Communication Commission.

Texas HB 55, which exempts an operator who is licensed by the Federal Communications Commission while operating a radio frequency device other than a wireless communication device.

"The ARRL is aware of no evidence that [mobile] operation contributes to driver inattention," the Policy Statement asserts. "Quite the contrary: Radio amateurs are public service-minded individuals who utilize their radio-equipped motor vehicles to assist others, and they are focused on driving in the

## SQUAKBOX

This newsletter is published monthly for the members of the Issaquah ARC W7BI. Items for publication must be received by the 15th day of the month preceding publication. Send items to:

**SQUAKBOX Editor**  
**John MacDuff, KA7TTY**  
**620 S.E. Bush St.**  
**Issaquah, WA 98027-3909**

Material may also be sent via E-Mail at w7bi@qsl.net.

The IARC is a nonprofit organization registered in the State of Washington and is affiliated with the American Radio Relay League (ARRL). Visit our WEB page at: <http://www.qsl.net/w7bi/>

Membership is open to anyone regardless of age, sex, race, national origin, religion, or amateur radio license status. Dues are \$20 per year for a family membership, free for those under 19 years of age.

A two-month courtesy mailing of this newsletter will be made to meeting visitors and others upon request.

Original material may be quoted without prior permission provided ISSAQUAH ARC SQUAKBOX is credited.

## Distracted Cont.

execution of that function."

Harrison told the NSC that the ARRL "would welcome the opportunity to review further these issues and explain the important role of Amateur Radio operators in emergency communications

operations to save lives and property in disasters and severe weather." - ARRL President Joel Harrison, W5ZN - S



## - Coming Events -

- **December 2, 2009** - Monthly Issaquah ARC meeting at the Issaquah Valley Senior Citizens Center, 75 NE Creek Way, Issaquah. Doors open at 7:00 PM, the meeting begins promptly at 7:30 PM and the program begins at 8:00 PM. Refreshments are provided.
- **December 28, 2009** - Issaquah Ham Radio Support Group meeting on the air on 146.56 MHz at 7:30 PM.
- **January 6, 2010** - Monthly Issaquah ARC meeting. See Dec. 2<sup>nd</sup> for time and location.
- **January 25, 2010** - Issaquah Ham Radio Support Group meeting, Police Station, Issaquah, talk-in 146.56 MHz at 7:00 PM, Meeting at 7:30 PM.
- **February 20, 2010** - Salem Hamfair & Computer/Electronics Swapmeet. Rickreall, Oregon at the Polk County Fairgrounds.
- <http://www.w7sra.com> .
- **March 6, 2010** - Mike & Key Swap Meet, Puyallup Fairgrounds Exhibition Hall, Puyallup, WA. Info: [dmdink@yahoo.com](mailto:dmdink@yahoo.com) or [n7wa@arrl.net](mailto:n7wa@arrl.net) . <http://www.mikeandkey.org/flea.htm> .
- **March 7, 2010** - Burnaby ARC Flea Market. New Westminster, BC [http://rac.eton.ca/events/detail.php?event\\_ID=1333](http://rac.eton.ca/events/detail.php?event_ID=1333)

NEXT MEETING: Wednesday, Dec. 2, 2009 - 7:30 PM

Talk-in frequency: 146.56 MHz

TIME SENSITIVE MATERIAL  
 --- FIRST CLASS POSTAGE

Issaquah Amateur Radio Club  
 P. O. Box 2171  
 Issaquah, WA 98027-0097