

SQUAKBOX

Issaquah Amateur Radio Club

Volume 32, No. 2

Issaquah, Washington

February 2010

Remembering W7BI

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

Howard's Geloso kit was the first one sold in the United States and it ended up in unexpected hands. (More about that later.) The kit quality was extremely high so the finished transceiver looked like it had been factory-built. Howard made a great many contacts with this transceiver, including some with Signor Geloso in which he asked Howard's advice about the radio and its competition.

One of the nice things about being in NRL's ham club was that its membership included experts

who could provide the latest developments or research data on almost any radio-related topic, such as the scientist who did propagation calculations for the Navy. When his work indicated especially favorable propagation conditions he would tell club members in a memo or 'phone call. In the late 1940's and early 1950's propagation favored the ten meter band and Howard quickly earned 10M WAS and 10M

(Continued on page 2)

The ARRL Amateur Auxiliary

The Amateur Auxiliary is composed of approximately 700 ARRL volunteer-appointees known as Official Observers (OO). Located across the country, they monitor the bands and notify amateurs of technical and operating discrepancies as a service to their fellow hams. Time and again, the FCC has indicated the responsibility to keep our operating standards and spectrum in shape rests with the Amateur Service. The Amateur Auxiliary program and its OOs are the League's answer to this challenge.

The OO Program has four main objectives: to foster a wider knowledge of and better compliance with the FCC rules; to extend the concepts of self-regulation and self-administration in the Amateur Service; to enhance the opportunity for individual amateurs to contribute to the public welfare, and to enable the FCC's Enforcement Bureau to efficiently and effectively utilize its limited manpower and resources. The role of the Amateur Auxiliary is to provide an unbiased forum for technical and operational advice and

(Continued on page 4)

Also . . .

Last Meeting	2
Shack in the Corner	3
RYRYRYRY	5
Coming Events	6

February Program

Mystery Program

Come see what is going on.

Future programs are as follows:
Mar - Open
Apr - Open

There are openings for future programs. Contact Gerard AD7ZE, 425-395-4554 to volunteer.



At the last meeting . . .

January 6, 2010

The January meeting was called to order by our newly elected President Bruce Helbert KG7OI, at 7:30 PM.

After introductions there were seventeen members and guests present.

The minutes of the December meeting were approved as printed.

The Treasurer's report showed \$2044.91 in the checking account.

Flash reported on some of the activities of the HRSG, with the next HRSG meeting to be January 25. There will be a "Fifth Saturday" HRSG event on January 30.

There was some discussion as to the possibility of adding an antenna to the Senior Center. Cost, location and possible advantages and disadvantages needed to be investigated.

There was some discussion about disposition of the Icom IC-245 transceiver that was donated to the IARC. It had been offered to the HRSG, but it has been determined that it is not compatible with the currently used automatic antenna tuner used in that application.

A motion was made and approved, for the IARC to retain the Icom 745 transceiver for future use.

The Issaquah Amateur Radio Club will have a table at the Mike and Key Puyallup Hamfair on March 6, 2010.

A motion was made to donate \$200 to the Senior Center for use of the facility. That motion passed, and the treasurer was directed to forward that check to the Senior Center.

Gil Drynan N7GIL also requested a note be added to show the number of IARC members and guests that have used the Senior Center meeting facility this last year.

Mike Crossley KF7BIG showed some "HEX Bug's" that a group of

(Continued on page 4)

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 - Ed. - S

2010 IARC Officers

President

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

Vice President

Gerard Hickey (AD7ZE) - (425) 395-4554 (Issaquah)

Secretary-Treasurer

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

W7BI Trustee

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

W7BI Cont.

DXCC using mostly AM voice and some CW. To assure his CW proficiency on the air he would listen to W1AW code practice for a while before starting QSO's.

In 1976, after being retired for several years, Howard and Etta May moved to Bellevue, WA. To be near their daughter and grandsons. At that time the FCC accepted requests for specific call signs (for a \$25 fee) so Howard asked for a one-by-two seventh area call sign to include the letter "B" in keeping with his previous calls and a second letter early in the alphabet. He received W7BI which he has "loaned" to IARC a number of times for field day operations.

Howard's station in his Bellevue home included an HF Yagi and antennas for use with the Oscar Ten satellite, both of which were well used; he earned WAS in both voice and CW. In 1976 he earned the special centennial DXCC.

The Lorenzens moved to their present home in the Emerald Heights retirement community in Redmond in 1993. Present or future condominium owners should take note that Howard negotiated a purchase contract that included a clause allowing him to erect a tower and rotary beam antenna on the premises. So far he has installed an HF trapped vertical which serves him well in keeping a weekly schedule on 20M with old friends on the east coast. He has to be careful though, too much transmitter power sets off the fire alarm system. He has completed a

(Continued on page 3)

W7BI Cont.

number of construction projects and is currently converting a computer keyboard into a CW keyer.

* * * *

Electronics as a career and as a hobby has been rewarding to Howard and he has given generously in return. His work at NRL has contributed significantly to the science of electronics and to national security. His work has been recognized with honors and his advise has been heard in high levels of government. Every ham that communicates via satellite or moonbounce, or uses a receiver, benefits from his work. We all can be proud to know him as a friend.

* * * *

Editors Note: Howard became a silent key on February 23, 2000 at the age of 87. The Issaquah ARC obtained permission from his family to acquire his callsign W7BI for the club on condition that if a family member were to obtain a license and want to use Howard's callsign, that we would return it. We are very proud to be able to put his callsign on the air at Field Day each year. - S



From the Shack in the Corner

(Is it February already?)

Are You Seeing (Sun) Spots Yet?

One of the more interesting items possessed by IHRC is a very nice ICOM IC-745 HF Rig. For those who's amateur experiences consist solely of the VHF type, this is a multi-mode (CW-Single Sideband-Digital) radio for work in the 3-30 MHz range of the radio spectrum.

We are going to make this a "club radio", as decided at the last meeting, and that means we will be putting in place a system to let our club members use this radio for their own stations on a loaner basis. Details on this program will be available shortly.

The timing for this may well prove to be excellent, as we all expect HF conditions to improve greatly over the next several years. Fine and good, but what exactly does "improve greatly" mean? It all has to do with the sun, sol, that great big bright spot in the sky that occasionally makes an appearance in these parts and specifically the sunspots on the sun's surface.

My experiences, and others, from the last several years concerning HF propagation conditions have been somewhat better than dreadful. I work mostly digital modes on HF these days with some SSB, CW and RTTY thrown in. Yes there have been stations to work, but compared to what I have seen in the past things have not been very good. (Heard that before have you?) Let me explain.

For the past several years it has not been too hard to get on say 20 Meters and work stations around the country in the late morning into the evening. Most all the time everything above 20 meters is dead. Below 20, on 40 and 80 meters there is the opportunity for some decent local (west coast) QSO's as well. There are occasionally openings that can yield some good DX but they can be rare. There has also been a lot of QSB (fading) and this can be a real pain. It is not unusual to initiate a contact and just as the signal exchange is taking place the band takes a bad fade and the contact is lost. The digital modes, with the waterfall on the computer, have really been an eye opener watching these fades takes place. Often they can be 30dB or more (that's 1000 down to 1) and I have seen the entire band fade away to nothing in the space of a few minutes. This is called frustration.

So you may ask "What does all this sunspot "mumble jumble" have to do with ham radio?" Well, quite a bit actually. And it also may have significant effect on daily life as well.

Radio waves, and specifically radio waves in the HF spectrum have the ability to bounce (actually it is more of a refraction to be specific) off the upper layers of the atmosphere. That is because the sun's energy ionizes the rare air, and ionized air has the ability to actually "bend" radio waves. This opens up the whole

(Continued on page 4)

Shack in the Corner Cont.

concept of HF propagation, which we will skip for now. But let's just say the sun hits the earth's atmosphere, the air gets ionized, the radio waves get "bounced" back to earth and this phenomenon allows for some interesting long range radio communications possibilities. The greatest effects are seen in the HF bands, although it can occur on the VHF bands as well. The term for this is "skip". And skip is what those of us who work HF really live for.

Skip can and does affect the bands differently. Generally in periods of daylight the higher bands are better and in periods of darkness the lower bands are better. Ah, but there is a catch here. Since we are talking long distance communications, potentially around the entire world, where the radio waves travel is the consideration, not what you may see outside your window. So let's say it is a nice rainy afternoon in Seattle and 20 Meters is open to the East Coast. Fine and good, but since it dark over most of the Atlantic the radio waves are probably going to stop well short of say South Africa. Well this is where the sunspots come in.

Sunspots have the effect of sort of "supercharging" the atmosphere, at least that is what we wish them to do. So if compare HF conditions as the sunspot cycle builds, you are going to find more and more skip and with this more and more long range contact possibilities. These kinds of things can get hams very excited.

Well as the sunspot count picks

up we are all hoping for better "conditions". What exactly are we expecting? From past experience I can talk about a few interesting things I have seen.

The higher bands, 15 and 10 meters will start to have some good openings. These openings will result in some good solid long distance contacts, and possible with very modest rigs, power and antennas. From our area expect solid openings into Japan, Korea, Eastern Russia and the entire South Pacific areas including down under.

Twenty meters will be opening up stronger and longer until it will often be open WORLD WIDE 24/7. This is kind of good/bad

OO Cont.

other assistance to amateurs who are receptive. The task is not to find fault or lay blame. It is to identify cause and effect, many of which are not based upon technical, but behavioral or social issues, as well as to find ways to achieve solutions to promote good amateur operating and engineering practice on our bands.

Even though you might consider yourself a good operator (and don't we all consider ourselves to be good operators?), you might receive an OO Notice. If you do get one, don't worry! The OO post card is simply a friendly note to alert you to possible equipment factors or operating practices that might have contributed to an apparent departure from a rule or the

situation. The good is there is the potential to work anywhere/anytime. The bad is the competition is fierce, and I mean it can be a real "dog-eat-dog" environment. Great fun if you have a competitive side. If you are the type who likes to win "all the time-every time" there might be tower, big expensive antenna and lots of transmitter power in your future. One of the most amazing events in all of ham radio is hearing several hundred (or even thousands) of hams calling a DX station...ALL AT THE SAME TIME ON THE SAME FREQUENCY...ah, the joys of a pile up!

The lower bands, 80 and 40 meters will also open up. It will be typical for 40 to be open across the entire west during the day. A modest station can literally work anyone else in 6 or 7 land with only a few Watts as clear as a telephone call. 80 typically is much the same through much of the evening and dark hours. And it is not unusual for either to open with some really long distance work, although again good antennas and

(Continued on page 5)

Meeting Cont.

robotics enthusiasts are selling to raise funds for their projects.

The meeting was adjourned some time after 8 pm.

The program for the evening was a presentation about use and application of APRS, by Gerard Hickey AD7ZE.

Submitted by Rod Johnson, IARC Secretary/Treasurer—S

OO Cont.

good amateur practice standard. Remember, OOs are friendly helper-advisors; their mission is to assist those who are receptive to being assisted. You do not need to reply to the notice, but you may want to take a few minutes to determine what caused the apparent problem and then take steps to fix it. Your corrective actions might even head off an FCC "pink slip" down the road (which, by the way, are not pink!).

OFFICIAL OBSERVER ADVISORY NOTICE

Radio: _____ your call was heard calling _____ at _____ UTC.
 Date: _____ 19__ Frequency _____ kHz. Mode _____ Your RST _____

The following is noted in the interest of maintaining Amateur Radio's reputation for good operating/technical practices: 1C FREQUENCY INSTABILITY 2C QRM 2D BRUISED 4C HARMONICS 5C NOISE 6C KEY CLICKS 7C SIGNAL 8C DISTORTED AUDIO 9C OVER DEVIATION 10C OUT OF BAND 11C IMPROPER ID 12C LANGUAGE 13C CAUSING INTERFERENCE 14C CARRIER 20C OTHER

Remarks: _____

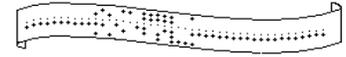
Please refer to FCC Regulation _____ Please take a few minutes to determine what equipment factors or operating practices might have contributed to this apparent departure from the rules or the good amateur practice standard. The intent of this notice is to alert you to the above noted operating condition. **NO REPLY IS NECESSARY.** The undersigned ARRL Official Observer has fulfilled this helping role by simply alerting you, and is not required to reply to any correspondence. Thank you for your attention and any cooperative efforts to enhance the high standards of the Amateur Radio Service which we all share with pride.

Observer: _____ Signature _____ Call _____

Keep in mind that OOs are advised to avoid hair-splitting and to deal only with black-and-white rule discrepancies *only*. For example, an OO should not send a notice to someone who forgot to identify his station for 10 minutes and 8 seconds! If you feel that the OO sent you a notice that violates the principles of the program, send a copy to your Section Manager or to Headquarters for evaluation and possible action -- quality control is critically important in a program as sensitive as this one.

To emphasize the positive nature of the Amateur Auxiliary Program, OOs will also send out "Good Operator Reports" to those operators whose radio signals and/or operating practices are consistent with the highest standards and

RYRYRYRY..



DE KA7TTY

Hello everyone,

Where did January go? Seems like we are just past New Years. Everybody keeping their antennas in the air so far?

Speaking of antennas, does anyone have a good knowledge of NVIS antennas? That would be a good program for those of us with limited space for putting them up. Shoot, anyone knows more than me.

Hey. Is it time for another QLF Contest? Let me know. (For the new folks, that is Send With Your Left Foot.)

Sorry folks, I will be missing the meeting again. Hope it is a good one.

73, John KA7TTY

Good Operator Report *****

Radio: _____ your call was heard calling _____ at _____ UTC.
 Date: _____ 19__ Frequency _____ kHz. Mode _____ Your RST _____

We thought you would like to know . . .

This Official Observer has noted your EXCELLENT radio signal quality/operating procedure as a fine example for all radio amateurs.

Remarks: _____

This observation by the undersigned ARRL Official Observer is a function of the Amateur Auxiliary to the FCC's Compliance and Information Bureau. This Observer thanks you for your excellent example of good amateur practice for others in the Amateur Radio Service. Keep up the good work.

Observer: _____ / Signature _____ Call _____

are a model for others to follow. Every amateur should strive to pattern their operating and signals after your example.

Prospective OOs must pass a comprehensive examination based on a set of study materials before they can be certified as members of the Amateur Auxiliary; they must also be an ARRL member and be licensed for at least four years. If you are interested in becoming an OO, contact your Section Manager.- Khrystyne Keane, K1SFA, ARRL News Editor – ARRL News Letter, Jan, 21, 2010 - S

Shack Cont.

real power will make this happen more easily.

So let's take a look at this whole sunspot thing and where we may be headed. History tells us Sunspots were first discovered in 1843 by astronomer Samuel Heinrich Schwabe. Others further studied the solar cycle and charted it back to 1745. Not sure how they did that one! Today it is generally agreed the solar cycle is about 10.5 years long on the average and there have been 28 of these cycles since science started counting. But the cycles are anything but constant, they have varied from 9-14 years and there is some disagreement over how to define the end of one cycle and the beginning of another. The solar cycle is defined by the number of sunspots. At the beginning of a cycle there

(Continued on page 6)

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:

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 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.

- Coming Events -

- **February 3, 2010** - 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.
- **February 20, 2010** - Salem Hamfair & Computer/Electronics Swapmeet. Rickreall, Oregon at the Polk County Fairgrounds. <http://www.w7sra.com> .
- **February 22, 2010** - Issaquah Ham Radio Support Group meeting, Police Station, Issaquah, talk-in 146.56 MHz at 7:00 PM, Meeting at 7:30 PM.
- **March 3, 2010** - Monthly Issaquah ARC meeting. See Feb. 3rd for time and location.
- **March 6, 2010** - Mike & Key Swap Meet, Puyallup Fairgrounds Exhibition Hall, Puyallup, WA. Info: dmdink@yahoo.com or 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 .
- **April 10-11, 2010** - Communications Academy Seattle, WA. <http://www.commacademy.org>

Shack Cont.

are very few and typically no sunspots and then as the cycle runs the number of sunspots climb, peak and finally decline back to a minimum. We have been in a

rather long minimum for the last several years, but there is hope and optimism the number of sunspots will be climbing in the next several years.

More next month.

CUL n 73s/88s, de KG7OI—S

NEXT MEETING: Wednesday, Feb. 3, 2010 - 7:30 PM

Talk-in frequency: 146.56 MHz

FIRST CLASS POSTAGE

TIME SENSITIVE MATERIAL

Issaquah Amateur Radio Club
P. O. Box 2171
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