

Watt's Up

*Newsletter for the Umpqua Valley
Amateur Radio Club
P.O. Box 925 Roseburg, OR 97470*

November 2009

*Watt's Up Staff: Editor-Wayne W9AE Publishing-Russ, W7DUR
E-Mail Distribution, Dick, AA7GC*

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Club Call Signs

**KC7UAV
KC7TLY**

ARES Nets

Douglas County ARES
145.430 repeater
Mondays at 7 PM
District 5 ARES
3964 kHz
Mondays at 6:30PM
State ARES
3964 kHz, first/third
Tuesdays at 7 PM.

President's Message

Greetings to all of the UVARC members.

At our November meeting we nominated club officers for the coming year. Besides the current slate of officers, Hutch KE7JFQ was nominated for President and Jerry KB7WDR was nominated for First Vice President.

We will elect officers for next year at the November meeting. Also any nominations for Ham of The Year have to be turned in by the November Meeting.

In the repeater department the 146.900 Lane Mt. repeater is running well. The 147.120 Boomer Hill repeater is working better than it ever has. The DC packet node 144.930 is working great.

We had nine candidates show up for the last VE session. Seven passed their Technician class test. George Roth KE7MVX passed his General class and one candidate from Grants Pass passed his Extra class test. We hope to hear some new Hams on the air shortly. Maybe we will see a few of them joining the club.

The next VE session is December 9, 2009 at 6:00 P.M. at the courthouse in Room 310. Don't forget to bring a copy of your original license if you are upgrading. You also need some form of acceptable identification. The new VEC license fee for 2009 is \$15.00. Cash or a check made out to ARRL is acceptable.

Jim WA6KHG

MEMBERSHIP 2009

As of November 1, 2009 membership is 80.

Each month updated information will be provided in this space so members may keep their roster current.

Please take the time to review your information and notify me of any corrections or changes.

** 2010 **

As of November 1, 2009, the 2010 membership is 10. The 2010 roster is online in the club webpage.

I may be reached via:

1. E-mail: aa7gc@arrl.net
2. Telephone: (253)631-3467
3. Regular Mail: 15823 SE 254th Pl., Covington, WA 98042-4183

73, de Dick, AA7GC, Membership

** NEW MEMBER **

KF7FIB, Jim Stuntz, 1381 NW Jefferson, Roseburg, OR 97471, 541-440-6837E-mail: brewmaster2@charter.net

** EARLY-BIRD **

Just a reminder that it is time to renew your club membership for 2010. Members are encouraged to submit their Early-Bird contest applications. As in the past, the winner will receive his or her (or family) membership for 2010 free. Either the paper or on-line membership application form may be used.

Editor's Notes

- If you want to be in the UVARC Spotlight, send pictures of your shack, antennas, or mobile setup to w9ae@charter.net. Please also send any club news, pictures, for sale announcements, etc.
- A photo journal of my 43-day, 1884-mile "California J" bicycle tour is online at <http://CaliforniaJ.crazyguyonabike.com>

Wayne W9AE

UVARC REPEATERS

146.900-, PL 100 (Lane Mountain)

147.120-, PL 100 (Boomer Hill)

PACKET

Node - 144.930, DC:WB6RHW-1

UVARC Web Page

<http://aa7gc.net/uvarc/>

NOTES:

1. Watt's Up is **on line** in the UVARC web Page. It may be viewed in PDF format.
2. Members **E-mail addresses** are on the web page as a link. Password required.
3. The **club roster** is included in the web page as a link. Password required.
4. Club **constitution** is available as a linked page.
5. Back issues of **Watt's Up** are available through the club web page in PDF format.

VE Testing in Douglas County

Testing sessions are affiliated with the ARRL. They are scheduled the second Wednesday of even months except August. Sessions are held in Roseburg at the Douglas County Courthouse, room 310, 6 PM.

ARRL VEC Test Fee for 2009 is \$15.00

This fee is charged once, no matter whether taking any one, two, three or all four test elements, one time. Retests of an element failed at the same test session will require payment of an additional test fee.

Testing Dates

Second Wednesday of each even Month

February 11

April 8

June 10

August - None

October 14

December 9

For further information contact **Jim WA6KHG**,
at (541) 496-2262



SUNSHINE

If you hear of someone who is ill or in the hospital, please let me know. Also notify me of any silent keys.

Russ Nelson, W7DUR, at 440-3840

George Smith, AA2EJ, Wins Nobel Prize

Around 5:30 on the morning of October 6, George E. Smith, AA2EJ, of Barnegat, New Jersey, got a phone call that changed his life: He had just found out he had won the [Nobel Prize in Physics for 2009](#) "for the invention of an imaging semiconductor circuit -- the [CCD sensor](#)." Smith will share the prize money with two other recipients: Charles K. Kao, of Standard Telecommunication Laboratories in the United Kingdom and Chinese University of Hong Kong in Hong Kong, China, and Willard S. Boyle, of Bell Laboratories. Each recipient will receive a [diploma](#), a [medal](#) and a [document confirming their share of SEK 10 million](#) (about 1.4 million US dollars); Kao will receive 50 percent, while Smith and Boyle will each receive 25 percent of the monetary award.

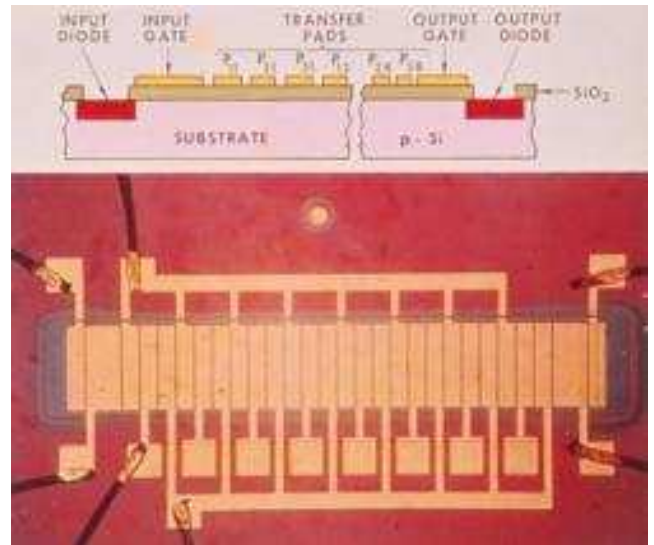
Kao was recognized by the prize committee for his "groundbreaking achievements concerning the transmission of light in fibers for optical communication." His discoveries paved the way for optical fiber technology, used for almost all telephony and data communication today. Boyle and Smith invented a digital image sensor -- the CCD -- that has become an electronic eye in almost all areas of photography.

"Amateur Radio has always attracted individuals who want to understand and exploit nature's laws," fellow Nobel Laureate Joe Taylor, K1JT, told the ARRL. "These are essential characteristics for first-rate scientists, as well. The 2009 Nobel Prize in Physics honors the invention of an imaging semiconductor circuit -- the CCD sensor used in digital cameras, the Hubble Space Telescope and many other scientific and consumer devices. It was no great surprise to learn that one of the Laureates, George Smith, is also a radio amateur." Taylor was [awarded the Nobel Prize in Physics in 1993](#) "for the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation."



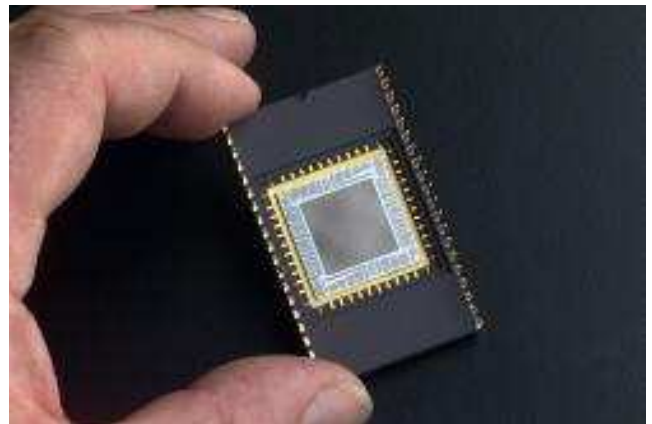
Nobel Laureate George Smith, AA2EJ. Smith received the 2009 Nobel Prize in Physics for his invention of the charged-couple device (CCD).

Smith earned his PhD from the University of Chicago in 1959 with a dissertation of only three pages, which he later described as "short, but pretty good." Like Boyle, Smith was a serious sailor and the two took many sailing trips together. After his retirement, Smith sailed around the world for 17 years, according to an [interview](#) he gave to the Adam Smith, Editor-in-Chief of the Nobel Foundation's official Web site; he only gave up sailing in 2001 to spare his "creaky bones" from further storms.



This very first CCD prototype was pieced together months after Smith and Boyle laid out its working principles.

George told the ARRL "We sailed around the world for 17 years,. While we were on our boat, we used Amateur Radio, especially in the South Pacific. My wife Janet, AA2EI, was the principal radio operator. With our radio, we could keep track of other boats in the area. Over in the Southwest Pacific, there are shore stations that provide weather forecasts every day on the ham radio. We would listen for these, as it was such a tremendous help for us as sailors. Janet and I haven't really been on the radio since we got back to the US in 2003. The boat's out stuck behind our house; we have a dock back there."



Today, a smaller CCD that the one first envisioned 40 years ago can hold much more information.

Amateur Radio Quiz: Assault'n Batteries

By H. Ward Silver N0AX

Powering everything from power amplifiers to personal phones, no other practical product packs the punch of electrochemical cells, the first true electrical device. Ubiquitous though they may be, our knowledge of their inner workings is often weak. Discharge your memory banks into this quiz to see how you measure up!

- 1) What causes the terminal voltage of a battery to drop under load?
 - a. ennui
 - b. internal resistance
 - c. contact delamination
 - d. electromigration
- 2) Who invented the first electrochemical cell?
 - a. Volta
 - b. Voltaire
 - c. Volare
 - d. Voldemort
- 3) What's the difference between a battery and a cell?
 - a. Cells are only found in laboratories.
 - b. There's no difference - they mean the same thing.
 - c. Batteries have more current capacity.
 - d. Batteries are made up of more than one cell.
- 4) Volume being equal, which type of battery will deliver the most energy?
 - a. Lead-acid
 - b. Zinc-air
 - c. Lithium-ion
 - d. Carbon-zinc
- 5) Which type of charger maintains a battery at a stable voltage?
 - a. Constant current
 - b. Trickle
 - c. Float
 - d. Training
- 6) Which type of battery can be recharged?
 - a. Primary
 - b. Secondary
 - c. Tertiary
 - d. Stationary
- 7) What does "MH" stand for in the abbreviation "NiMH"?
 - a. Metallic Hydrogen
 - b. Maximum Horsepower
 - c. Metal Hydride
 - d. Mega Henries

- 8) What is necessary for a battery to produce the flow of electrons?
 - a. A completed external circuit.
 - b. A liquid or gel electrolyte.
 - c. Free metallic cations.
 - d. An acid and a base, separated by a dielectric.
- 9) A deep-cycle battery is specially designed so that it can be used in what way?
 - a. Supplying pulses of high current.
 - b. To maintain a constant output voltage with wide variations of current.
 - c. Underwater applications, such as sonar and remote vehicle propulsion systems.
 - d. Be repeatedly discharged to low output voltage between charges.
- 10) If a battery is a "pull-out," what does that mean?
 - a) It slides in and out of a battery holder.
 - b) It has been removed from some other piece of equipment.
 - c) It failed to meet manufacturer specifications and is sold at a discount.
 - d) These are new batteries, just received from the manufacturer.

Answers

1. b -- Current flowing through the internal resistance causes a voltage drop, just like a separate resistor.
2. a -- He was rewarded (eventually) by having the unit of electromotive force -- the volt -- named after him.
3. d -- For example, a 9 V battery consists of six 1.5 V cells in series. That's why we buy "D cells" and not "D batteries."
4. c -- This is the reigning energy density champ of consumer batteries, but new "chemistries" are being devised all the time!
5. c -- Float charging applies a constant voltage to the battery after full-charge is reached.
6. b -- Although it helps for the battery to be stationary, only secondary batteries can be recharged.
7. c -- Some metallic hydrides (compounds of metal and hydrogen) can store and release electrons quite effectively.
8. a -- Without a path for the electrons, the chemicals in the cell cannot react by exchanging electrons.
9. d -- A regular automotive battery used in this way quickly loses its energy storage capacity. Batteries with a large reserve capacity (RC) are the right ones to use.
10. b -- Rechargeable batteries are often removed from service on a fixed schedule to ensure that equipment operates properly. They may have significant service life left, but generally less than that

October 15 Meeting Minutes

Jim WA6KHG called meeting to order. 22 present. Introduction and call signs.

No Treasurer's report. Jerry Hathaway not present. No minutes from September meeting. Russ Nelson not present.

Nominations for 2010 officers: Roger Patitz KE7KEE nominated Kerry Hutchison for President. Jeannie Hutchison KE7KDZ nominated Jerry Eifert for 1st VP. Doug Hanson made a motion to close nominations. Seconded by John Donner. Early bird contest has started. Winner will get free 2010 membership.

Reminder that Ham of the Year nomination forms were in Oct. Watts Up. Must be delivered by US Mail or hand delivered to a HOTY committee member.

Reminder about the Rickreal Hamfest on October 24.

Repeater update: Lone Rock Timber and BLM must provide written easement documents for road access before the repeater can move to the new building. Goal is to move the repeater to the new site before snow and before sale of the old site to Silky communications.

SET (simulated emergency test) on Oct. 16. Will focus on digital messages.

Jerry Eifert made a presentation about when to stop driving. Symptoms: getting lost, getting honked at, friends refuse to ride with you.

Doug Hansen reported on a visit to ORRC (OR region relay council). He was granted approval for use of the frequency pair on Lane Mountain.

HAM-OF-THE-YEAR

It's that time of the year again. We need your letters nominating your choice for the Ham-Of-The-Year Award to be presented at the December meeting. Your nominations forms may be given to any of the officers at the October meeting or mailed to UVARC PO Box 925, Roseburg, OR 97470.

There are 79 members in the club, many who are good ambassadors for amateur radio and who work quietly in the background (not only this year, but in past years too) for the good of the club. This is our opportunity to recognize and honor one of these unsung heroes. All it takes is some thought and a short letter to the selection committee (the last three recipients).

The award is based on the following guidelines:

- ☺ Someone in the club whom you think is an "ideal ham".
- ☺ Someone who promotes amateur radio and uses good operating practices.
- ☺ Does more than asked.
- ☺ Someone who works quietly in the background and is always there when needed.

The guidelines and nomination form are available for review and downloading from the club webpage: A copy of the nomination form is attached to this newsletter.

<http://aa7gc.net/uvarc/>. Deadline for nominations is the November meeting.

Hams Assist in Catalina Island Rescue

Around 9:45 on the night of October 23, while attending an overnight event at the Boy Scouts' [Camp Emerald Bay](#) on [Santa Catalina Island](#), Karl Tso, KI6PCW, and his wife, Deborah Ava, KJ6CRZ, of Topanga, California, decided to climb a hill to check out the view -- and to see if they could get into the repeater on the island with their handheld transceivers. As they climbed the hill, the two radio amateurs heard a sound; Tso turned his high-powered flashlight on the source, only to discover 61 year old Peter Koll who had fallen 48 feet to the rocks below, bleeding and severely injured. At the accident scene, Tso and Ava got on their radios and quickly made contact with Scott Bastian, KD6QZX, of Fullerton, who called emergency services. Joyce Wood, KD6HYO, of Costa Mesa, who stood by in case further assistance was required. Koll was evacuated by Bay Watch and airlifted to St Mary's Hospital in Long Beach. According to the LA County Sheriff's office, his current condition is unknown. "It was a surreal experience that Deborah and I will never forget," Tso said. "We were horrified, yet very happy that we were there for the gentleman that was injured. At the same time, we strangely felt empowered, knowing that the ham radio system works. As we hoped, the ham community is for the most part made up of people who want to be helpful to others in times of need".



Just a reminder: If you have e-mail capability, Let Russ, W7DUR know! you'll be able to see all pictures in color and save money for the club !

November 2009

Sun Mon Tue Wed Thu Fri Sat

1	2 DC ARES net 6:30 PM 145.430 rpt	3 Oregon state ARES HF net 3964 kHz, 7 PM	4 UVARC net 7 PM 146.90 rpt	5	6	7 Club Breakfast Rsbg IHOP 7AM
8	9 DC ARES net 6:30 PM 145.430 rpt	10	11 VET'S DAY UVARC net 7 PM 146.90 rpt	12	13	14 Club Breakfast Rsbg. IHOP 7 AM
15	16 DC ARES net 6:30 PM 145.430 rpt	17 Oregon state ARES HF net 3964 kHz, 7 PM	18 UVARC net 7 PM 146.90 rpt	19 Club Meeting 7PM court house Room 310	20	21 Club Breakfast Rsbg IHOP 7AM
22	23 DC ARES net 6:30 PM 145.430 rpt	24	25 UVARC net 7 PM 146.90 rpt	26 Thanksgiving	27	28 Club Breakfast Rsbg IHOP 7AM
29	30 DC ARES net 6:30 PM 145.430 rpt					

ON-LINE FORM AVAILABLE ON CLUB WEB PAGE

UMPQUA VALLEY AMATEUR RADIO CLUB, INC

ON-LINE FORM AVAILABLE ON CLUB WEB PAGE

NAME _____ CALL SIGN _____ LICENSE CLASS _____

STREET _____ CITY/STATE _____ ZIP _____

ARRL MEMBER YES NO E-mail Address _____

Other names at your address desiring family membership

NAME _____ CALL SIGN _____ LICENSE CLASS _____ ARRL MEMBER YES NO

NAME _____ CALL SIGN _____ LICENSE CLASS _____ ARRL MEMBER YES NO

Please show names the way you want them to appear in the roster

HOME PHONE _____ RECEIVE YOUR NEWS LETTER BY: U.S. MAIL OR E-MAIL (PDF)

RENEWAL _____ *AMT. ENCLOSED _____ DATE _____ DATE OF BIRTH (STUDENTS) _____

SPOUSE'S NAME _____ SIGNATURE _____

Membership dues are \$10.00 for individuals and \$5.00 for each additional family member living at the same address per calendar year. Associate membership dues are \$5.00. Dues are prorated (NEW members only): Jan - Mar \$10/5 (each additional member); Apr - Jun \$7.50/3.75; Jul - Sep \$5/2.50; Oct - Dec \$2.50/1.25. Membership is free for **Licensed** students, 18 and younger. Make checks payable to: **UVARC, PO Box 925, Roseburg, OR 97470.**