

The Oscillator

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Since 1927

February 2012



A Sincere "Thank You" from the Membership Chairman

The ARALB Officers and Board of Directors would like to thank the membership. Your participation and loyalty to the organization is much appreciated. Without you, the members we would not have such a great organization.

Each and every member is important to ARALB. As I look back on last year we provided great programs, excellent opportunities for education, and classes to get or upgrade your license. This year the Officers and Board members promise more of the same and are geared up to keep that momentum going and make this year even better.

If you haven't already renewed please take the time to renew, as you are important to the membership of ARALB. Use the form available on the back of this newsletter or the form on the web. And please, let us know what are your interests in Amateur Radio so that we can better serve you.

We would like to thank the members who have taken the time and already renewed their membership. And a special thanks to the individuals that chose to be Lifetime Members.

This past year we introduced a Lifetime Membership option. While it is not for everyone, you asked and we listened. Thanks to Hans Heimburger's, N6TCZ, suggestion at a General Meeting, the Officers and Board formulated the Lifetime Membership option. Lifetime Members see the value in ARALB and provide a significant investment in our organization.

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CALLING ALL HAMS

ARALB Monthly Meeting

February 3, 2012; 7:00 PM

Signal Hill Community Center

1780 E. Hill Street

**Jerry Blackburn, President,
Aerospace Legacy
Foundation**

**Will give a presentation on
70 years of history at the
Downey aerospace site.**

The Downey NASA Plant, occupied by Rockwell International, where location of Apollo and Space Shuttle craft were constructed, had a long previous history of aircraft development stretching back to the E.M. Smith Emsco airplanes built in the late 1920s and early 1930s. Other site tenants were Consolidated-Vultee, North American Aviation, and Boeing (as successor to Rockwell). The Aerospace Legacy Foundation is dedicated to preserving our aerospace heritage.

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LIFE MEMBERS AT THE ARALB BANQUET



YOUR OFFICERS AND DIRECTORS FOR 2012

**Join the ARALB and Repeater Associates for
Breakfast! 8:00 AM, Every Wednesday!**

Spires 2590 Del Amo Blvd., Long Beach

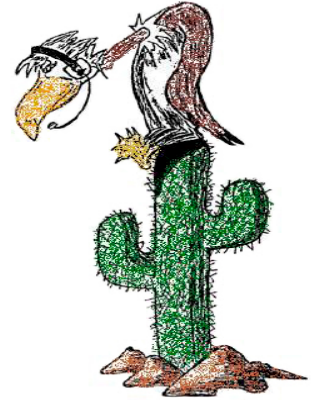
2012 ARRL Southwestern Division Convention

8th Annual

***Yuma Hamfest
& Arizona State Convention
Yuma, Arizona***

Feb. 17 & 18, 2012

Yuma County Fairgrounds
2520 East 32nd Street, Yuma, Arizona



Check the website at www.yumahamfest.org for more information, contact directly at info@yumahamfest.org, or call 928-305-1034.



An Open Letter About ARES Nets

By Sibyl Keirns, KA6RXX

Dear Thursday night 2 meter ARES net Hams,

Have been missing you on the Thursday night ARES net at 7:00 PM, 145.520 simplex. I think that you will find that we have more information about upcoming events, especially FCC license classes, monthly meetings and future classes regarding emergency communications.

Every second Tuesday of the month is now our new designated ARES meeting night. We had our first meeting recently with good attendance. You are cordially invited to join us the second Tuesday of the month at 7:00 PM. Last night's meeting was held at the ECOC but location could change from time to time. Tune in to the Thursday evening nets and be sure you have the correct information.

The Southeast LA ARES group is in the process of restructuring its organization. The ARES nets and the monthly meeting are the most up to date means of finding out just what is going on with your ARES section.

Of course, I am plugging the 2 meter net because I conduct that net. However, there are other nets on Thursday night at present. I guess that I should tell you about those nets also should you miss your 2 meter simplex ARES net.

Thursday

6:30 PM 449.780 - PL131.8
223.800 - PL 156.7

6:45 PM 1282.200 - PL156.7

7:00 PM 145.520 simplex

Monday

7:00 PM 28.130 mhz slow speed cw net with QRQ net afterwards

Friday

7:00 PM 146.145 + PL156.7

Note that I said these nets are "**held at present**", well, there will be some minor but important changes so please check into one of these nets for notification of changes. We will conduct one net on the DARN system and you want to find out all about that when the time comes.

Hope that this information" lures you back to the fold" as new and exciting things will be happening this year and we don't want you to miss out.

73, Sibyl, KA6RXX
Net Control Thursday night 2 meter ARES net

Leaping Seconds

Excerpted from a New York Times article by Kenneth Chang (January 18, 2012)

In Geneva, 700 delegates from about 70 nations were charged with deciding whether to abolish the leap second, however the decision was postponed for three years.

Unlike the better-known leap year, which adds a day to February in a familiar four-year cycle (with a few well-defined exceptions), the leap second is tacked on once every few years to synchronize atomic clocks with Earth's rotational cycle, which does not run quite like clockwork. The next one is scheduled for June 30.

The United States is the primary proponent for doing away with the leap second, arguing that the sporadic adjustments, if botched or overlooked, could lead to major foul-ups if electronic systems that depend on the precise time — including computer and cellphone networks, air traffic control and financial trading markets — do not agree on the time. Britain, along with Canada and China, would like to keep the current keeping system, arguing that, in the 40 years that leap seconds have been gracefully inserted in our midst — most recently in 2008 — there have been no problems to

(Continued on page 8)

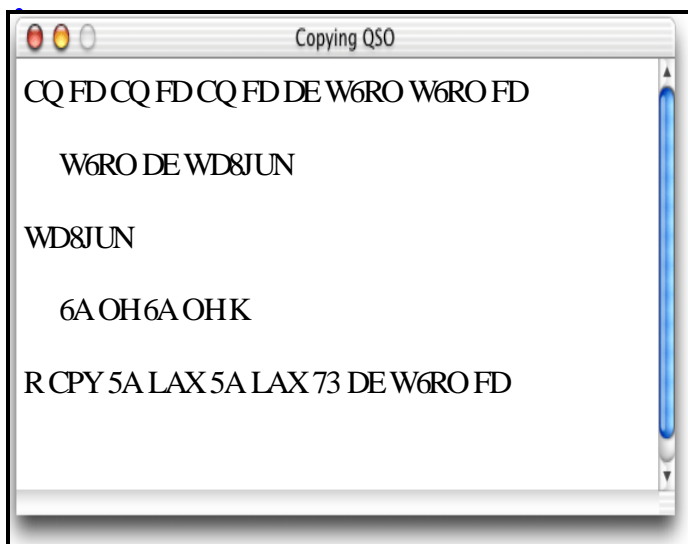
Let's Actually SEE Morse Code QSOs at Field Day, Okay?

by Bob Grubic, NC6Q

If you walk by an SSB (voice) station on Field Day, you can actually hear "we are three-alpha Maine" or "one-delta Florida." Wow, you might think, that's far! That's neat! But if you walk by a CW station you might not hear anything at all because the operator has headphones on, or, if you hear something, it's just a bunch of fast dits and dahs. Ho hum. Whatever!

I'd like to change that. I'm looking for someone to team up with me, take an audio feed from my Field Day CW radio, and display on a screen--for all to see--just what all those dits and dahs are saying. Use any decoding program you want. Ham Radio Deluxe comes to mind. It's free and can do the job. You won't be transmitting and your display will not be used by the CW operators. It'll be just for spectators to see. If you think you're really an expert on it, you might even consider doing a workshop on it during Field Day! We could then use the extra educational points!

Not an expert? Try it anyway and learn! Contact me: Bob nc61@arrl.net 562 961-6711



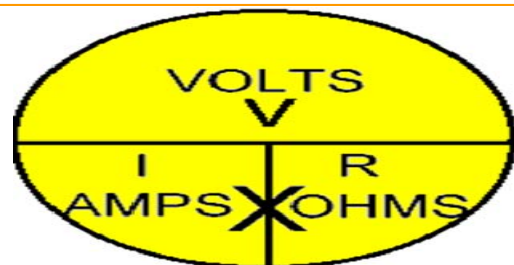
Ohm's Law Gets Down

Excerpted from Ohm's Law in a Quantum World by David K. Ferry, Science (January 6, 2012)

Ohm's Law is an empirical relationship based on the observation that the electrical properties of materials exhibit linear behavior. For instance, voltage is linearly proportional to current with the constant of proportionality termed resistance. In the 1920s and 1930s, it was expected that this type of classical physical behavior would operate at macroscopic scales but not at the microscopic scale, where it would be replaced by a quantum mechanical relation.

For more conductive materials, properties at the microscopic level are characterized by coherence, where the phase behavior of the waves remains undisturbed over sizable distances. Coherence leads to wave interference, and in the constrained geometry of nanowires, resistance is related to the number of transverse wave modes that propagate and is independent of the length of the wire. However, in the January 6, 2012 issue of Science, Weber and others report that Ohm's Law remains valid in certain low conductive material atomic scale nanowires.

In general, quantum relations apply at small scales and low temperatures, and Ohm's Law applies at larger scales. There is a region where quantum relations transition to those defined by classical physics and for electricity the size and temperature range of this transition depends on the material being tested. Ohm's Law takes over at relatively smaller wire sizes for those materials that exhibit greater electron scattering strength. The phosphorous nanowires embedded in silicon that were used in the experiment described above experience a high degree of electron scattering, which in turn pushes the properties of even small wires towards Ohm's Law.



ARALB Banquet 2012

By The Oscillator Staff

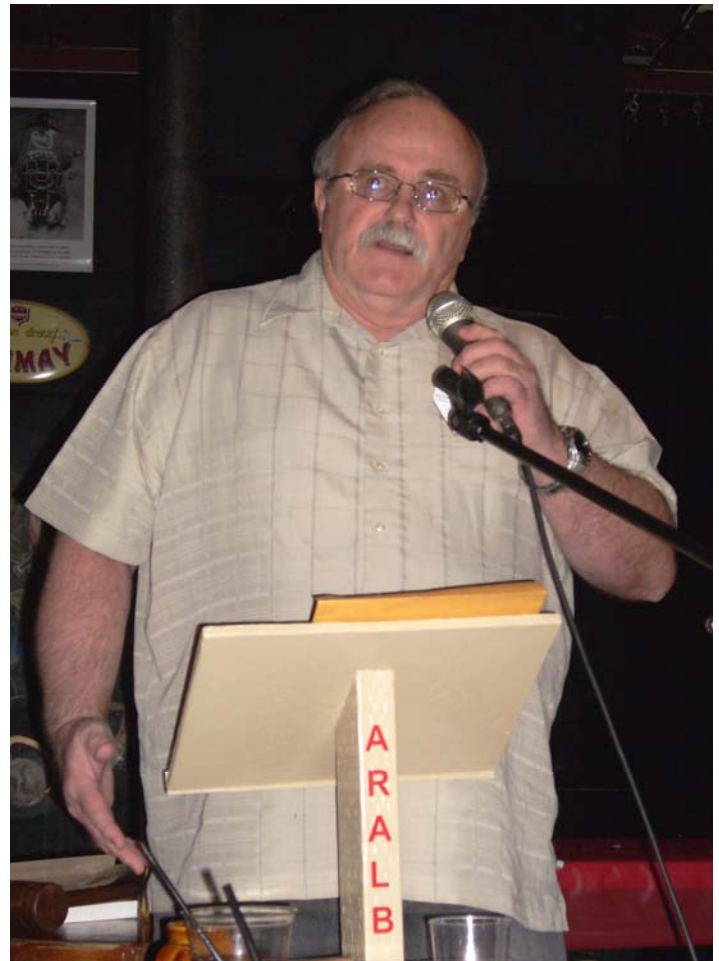
The annual ARALB banquet was held January 14th at DiPiazza's Restaurant at 5205 Pacific Coast Highway in Long Beach. Mark diPiazza graciously opened his restaurant and bar for our exclusive use. We had comfortable banquettes for members and guests, and a long head table. The sound system was just right, and Art Borges, WA6UNC, brought a custom made portable table-top podium adorned with "ARALB". Nice touch!

In a most amazing display of punctuality, almost everyone had arrived and was seated by the 1:00 start time! Since dinner would not be ready until 2:00 a quick decision was made to present the program before the meal, a turn out of the ordinary for this hungry bunch.

Nate Brightman, K6OSC, presided as Master of Ceremonies. He called upon Lonnie Bingham, K6CBN, to give an invocation, and then he presented a commemorative plaque to outgoing President Carina Lister, KF6ZYY. Janet Margelli, KL7MF, manager of HRO in Anaheim, with slide show help from Chip Margelli, K7JA, gave an excellent presentation about retailing ham radio equipment at HRO. She may have been worried that we would doze (which we didn't!), so she also showed lots of slides from the Margellis overseas trips where they operated with portable equipment in numerous foreign locations such as Pohnpei Island in the south Pacific.

A wonderful dinner was served by Mark DiPiazza followed by more ceremonies. Larry Rolewic, WA9SVD, gave a brief speech and then presented the Ham of the Year award to Bob Grubic, NC6Q. David Greenhut, N6HD, ARRL Los Angeles Section Manager, installed the new ARALB officers. Finally (what everyone was waiting for) Steven Christ, K9AOG, presided over the prize drawing, which included a mobile radio, a handy talkie, and many runner up prizes.

A great time was had by all.



THE PRES (ABOVE), HOTY (BELOW)



Large Club Patches for Sale

by Bob Grubic, NC6Q

If you would like to purchase a large ARALB Club patch (6 ½ x 6 ½ x 6 ½ inch), please let me know. I'll be placing an order for several the middle of February with Cecil & Reed (2551 California Ave, Long Beach), the company that has done our club embroidering in the past. They have our logo (seen here) on their computer and can stitch it into a large patch or anywhere. This patch is \$13.00.

I decided to order one for myself so I could put it on a warmer jacket that I got for when the weather gets cold. I already have one on the old blue club wind-breaker but it's not always warm enough for cold weather. In the past, they even stitched one on a piece of cloth I had sewn onto a small bag that I use for ham material.

Since I ordered one for myself and talked to them about it, I thought I would offer my services this one time to other club members who would like one. I'll take orders then submit them all at once—after the February general meeting.

Contact me at 562 961-6711 or at nc6q@arrl.net.



(President's Message Continued from page 1)

Hans was quick to accept ARALB's offer of Lifetime Membership. Hot on his heels were Scott Neal, N6SDN, and Bruce Takenaka, KJ6DXJ. ARALB's Officers and Board of Directors would like to thank these members for their support and confidence in the organization. I also would like to recognize Nate Brightman, K6OSC, an Honorary Member for Life, for his life long contributions to the ARALB organization.

73,
Steven Christ, K9AOG

ARALB Meeting Refreshments

We need volunteers to bring refreshments to monthly ARALB meetings. Sign up now.

March: **SIGN UP NOW**

April: **SIGN UP NOW**

May: **SIGN UP NOW**

All you need to bring are nibblies – cookies, donuts, crackers and cheese, or popcorn — whatever.



GRAND PRIZES

(Continued from page 4)

speak of, and the worriers have greatly exaggerated the potential for havoc.

Since the 1950s, the world has run on two sets of clocks. One is the ticking of atomic clocks, defined by the precise frequency that electrons jump around in atoms. The other is based on the traditional notion of a spinning Earth. In 1967, the nations of the world changed things around, creating a new definition of a second based on atomic clocks and pegged to the length of an astronomical day in 1900. But the Earth's rotation has slowed down since 1900, and the time between sunrise and sunset has grown longer. Atomic clocks now run slightly ahead of what is defined in the sky, and, starting in 1972, leap seconds have been added to keep the two sets of clocks synchronized.

If the leap second is stamped out, the astronomical definition of time will diverge from what is dictated by the atomic clocks, about a couple of thousandths of a second a day, growing to a minute over the course of a century.

A panel of experts at the **International Telecommunication Union** began discussions eight years ago, but could not come to a consensus to keep or get rid of them. The United States and Britain have been butting heads over the issue over most of that time. Regardless, there will be one extra second to enjoy this summer. Any change would not take effect until 2018.

W6RO, the ARALB Station

Join the fun. **Become a W6RO Operator.**

We have had operators from all over southern California, and even some from out of state.

To learn more about this opportunity, please contact assistant manager David Akins, N6HHR, at 714-826-0807 (or e-mail him: david.akers@live.com). For orientation for new operators contact Jerry Fullerton at 714-839-9299 or e-mail (kd6jbl@socal.rr.com). If you already are a W6RO operator and have scheduling questions, call Nate Brightman, K6OSC, at 562-427-5123 or e-mail him (nehtan@juno.com).

Upcoming Events

February 2012

- 3 ARALB General Meeting 7 pm
- 6 ARALB Board of Directors Meeting 7 pm
- 18 ARALB Testing at CSULB. 9 am
- 21 LB Repeater Associates, Spire's. 6:30 pm.

March 2012

- 2 ARALB General Meeting 7 pm
- 5 ARALB Board of Directors Meeting 7 pm
- 17 ARALB Testing at CSULB. 9 am
- 20 LB Repeater Associates, Spire's. 6:30 pm.

April 2012

- 6 ARALB General Meeting 7 pm
- 7 Signal Hill Spring Festival
- 9 ARALB Board of Directors Meeting 7 pm
- 17 LB Repeater Associates, Spire's. 6:30 pm.
- 21 ARALB Testing at CSULB. 9 am

**Thank you Bruce Takenaka,
KJ6DXJ, for the refreshments
at the January Meeting!**

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Meeting Info: The February 3, 2012 meeting will be held at the Signal Hill Community Center, 1780 E. Hill Street, Signal Hill, beginning at 7:00 PM. There will be a presentation by [Jerry Blackburn](#), on "70 Years of History at the Downey Aerospace Site"; .

See the ARALB web site at www.aralb.org!

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Associated Radio Amateurs
of
Long Beach



Important Nets

ARALB Net

Fridays at 7:00PM

146.145 + PL 156.7

Mondays at 7:00 PM

28.130 MHz Slow Speed CW Net

with QRQ Net afterward

ARES/RACES Net

Tuesdays at 6:30 PM

146.145 + PL 156.7

Thursdays at 6:30 PM

449.780 -PL 131.8

223.800 -PL 156.7

Thursdays at 6:45 PM

1282.200 - PL 156.7

Thursdays at 7:00 PM

145.520 Simplex