



# Smoke Signals

## Newsletter of Fullerton Radio Club

### February 2016

#### February Club Meeting

This month's presentation is by the club's newest member, Bob Houghton, AD6QF. His presentation is titled "Building the World's Worst Loudspeaker and An Even Poorer Microphone." It will be a demonstration of a couple of very practical uses for electromagnetism and Faraday's Law of Electromagnetic Induction.

Bob first got interested in radio as an AM broadcast band DXer when he was in the 8th grade - often sleeping with a transistor radio under his pillow, so his parents didn't know he was awake at 2 a.m. on a school night.

A slow learner, somehow it took Bob 24 more years to discover that it was possible to transmit. He earned his first ham license in 1990 and has been an extra class ham for about 15 years.

Bob has recently retired from 37 years as a science teacher - most of those years teaching high school physics. Surprisingly, he claims that still enjoys teaching, so we hope you will join his class at this month's meeting.



What is it? Hint: James Bullough Lansing would not be impressed.

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### FRC February Club Meeting

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**Wednesday,  
February 17, 2016**

**Chapman Activity Center**  
2515 San Carlos Dr.  
Fullerton, CA

**Dinner before the meeting at 5:00 PM at:**  
**Coco's Restaurant, 1011 N. Harbor  
Blvd.  
Fullerton**

**Meeting time: 7:00 PM**  
**Visitors are welcome**

**Fullerton Radio Club**  
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**Show –and–Tell**

Bring something of interest to the meeting to show and share your story. Something old, new, or just of interest to hams.

**Web site: [www.FullertonRadioClub.org](http://www.FullertonRadioClub.org)**

## February Board Meeting

The February 3, 2016 FRC Board meeting was called to order by President Albert Solomon AG6OF at 7:30pm. Present: Vice President Walter Clark, Treasurer Gene Thorpe KB6CMO, and Secretary: Linda Endsley KJ6IHB, Directors: Richard Belansky KG6UDD and Larry McDavid W6FUB, and Mike LeFevre WD6AQH, and member Cheryl Thorpe KE6TZU, visitors Justin and Natalie.

Minutes of the January Board meeting were approved with the addition of the November checking and savings amount of funds; checking \$2,682.73, Savings \$3,073.44.

Treasurer's report: checking - \$2,640.74, savings - \$3,073.49 (of which \$1,000.00 is for the Kohlenberger memorial. A check of \$1,532.00 from Hamcon was deposited.

Old Business:

Have received 20 renewals; 2 new members. Please send in renewals for 2016

Discussed whether to remove names of people who have not paid dues in several years.

New Business:

Discussed having a trip/tour to Goldstone DSN. Will make contacts regarding this.

Justin discussed creating video connection from the park used for the monthly general meetings so that meetings could be shown on the web.

April 30, Sat., Donate Life Run at Cal State Fullerton

Next board meeting: 02MAR2016

Adjourned at 8:23 pm

Submitted by Linda Endsley KJ6IHB

**A P.S. to the  
announcement of ARDF  
at Griffith Park**

We try to have a session of on-foot transmitter hunting somewhere in southern California every month. If you can't attend the session in Griffith Park on February 13, you will have another opportunity on Saturday, March 12, when there will be a session in Schabarum Regional Park near Rowland Heights. We'll include a workshop for building measuring-tape yagis and active attenuators if you haven't made yours yet. More information about upcoming sessions is always at [www.homingin.com](http://www.homingin.com).

73,  
Joe Moell K0OV

**FRC Mobile T-Hunts**

Fullerton Radio Club continues to have mobile hidden transmitter hunts on the third Saturday of each month, starting at 8 PM from the top of Acacia Avenue in Fullerton. Boundaries go west to the 605 freeway, south to Pacific Coast Highway, north to the 10 freeway and east to the Prado Dam area. That's small enough to make it a hunt where beginners can succeed. The transmitter is usually on continuously, so that adds to the beginner-

friendliness. Winner is determined by odometer mileage from start to finish, so you can take your time getting bearings and driving to the T.

The results of some recent hunts will give you an idea how these hunts go. On November 21, 2015, Glenn Tobey AB6PA and Bill Greganti KG6EEK put a hidden transmitter near the end of Blue Ridge Drive in Yorba Linda. The transmitter ran just 15 milliwatts into a three-element horizontally-polarized beam. Discussions after the hunt revealed that some hunters neglected to properly reset their odometers at the beginning of the hunt. But attempts were made to determine mileages based on paths taken, giving these results:

<u>Team Calls</u>	<u>Odo Miles</u>
N6MJN	13.7
N6ZHZ & Ben	15.6
WA6CYY	15.9
WB6JPI	20.2

As winner, Dave Balgie N6MJN was tapped to hide the FRC mobile hunt on December 19. He chose the parking lot of an In And Out Burger in the shopping center on Carson Street just west of the 605 Freeway in Hawaiian Gardens. (Yes it was out of bounds by a hundred feet or so.) Here

are results:

Team Calls	Odo Miles
WA6CYY	16.6
WB6JPI	16.9
N6ZHZ & KK6JPC	17.8
N6AIN	24.9

Even though he was last to arrive, Ron Allerdice WA6CYY had low mileage and won the hunt. So he hid on January 16, 2016 in an unusual place -- Studebaker Self Storage in Seal Beach. It was difficult to get to, because it was accessible only via a road on the eastbound on-ramp of the 22 freeway. The last hunter didn't arrive until almost 10:30 PM. Here are the mileages:

Team Calls	Odo Miles
N6MJN	22.7
AB6PA & KG6EEK	24.7
N6ZHZ & Donald	26.6
WB6JPI	31.9
N6AIN & WA6PYE	35.5

Now it's your turn. Put a direction-finding antenna on your car and come on out. You'll be welcomed. The next hunt will be February 20.

73,  
Joe Moell K0OV

## More Stuff About D-STAR

In 1998 an investigation was put into finding a new way of bringing digital technology to amateur radio. The process was funded by a ministry of the Japanese government, then called the Ministry of Posts and Telecommunications, and administered by the Japan Amateur Radio League. In 2001, D-STAR was published as the result of the research.

In September 2003 Icom named Matt Yellen, KB7TSE (now K7DN), to lead its US D-STAR development program.

Starting in April 2004 Icom began releasing new "D-STAR optional" hardware. The first to be released commercially was a 2-meter mobile unit designated IC-2200H. Icom followed up with 2 meter and 440 MHz handheld transceivers the next year. However, the yet to be released UT-118 add-on card was required for these radios to operate in D-STAR mode. Eventually Icom began selling the card and once installed into the radios it provided D-STAR connectivity for each of the transceivers. The June 2005 edition of the ARRL's QST magazine reviewed the Icom IC-V82.

JARL released some changes to the existing D-STAR standard in late 2004. Icom, aware that the changes were coming, had placed the release of their hardware on hold for a period of as much as a year while they awaited the changes. As soon as the changes were out, Icom announced they would be able to finish up and release equipment.

The Icom ID-1 1.2 GHz mobile

radio was released in late 2004. The ID-1 was the first and only D-STAR radio that provides digital data (DD) mode operation. In this mode data via TCP/IP can be transferred at 128 kbit/s.

The first D-STAR over satellite QSO occurred between Michael, N3UC, FM-18 in Haymarket, Virginia and Robin, AA4RC, EM-73 in Atlanta, Georgia while working AMSAT's AO-27 microsatellite (Miniaturized satellite) in 2007. The two operators used a variety of Icom gear to make the contact and experienced slight difficulty with doppler shift during the QSO.

As of late 2009 there are around 10,800 D-STAR users talking through D-STAR repeaters which have connectivity to the Internet via the G2 Gateway. There are around 550 G2 enabled repeaters now active. Note; these numbers do not include users with D-STAR capabilities but not within range of a repeater, or working through D-STAR repeaters that do not have Internet connectivity.

The first D-STAR capable microsatellite was scheduled for launch during early 2012. OUF1-1 is a CubeSat and is built by Belgian students at the University of Liège (Haute École de la Province de Liège). The name is an acronym for *Orbital Utility For Telecommunication Innovation*. The goal of the project is to develop experience in the different aspects of satellite design and operation. The satellite weighs just 1 kilogram and will utilize a UHF uplink and a VHF downlink.

In 2015 FlexRadio Systems added D-STAR support to their line of HF transceivers and receivers via a software upgrade. D-STAR support requires the addition of the

ThumbDV device from NW Digital Radio.

Thomas S. Fiske  
Amateur Radio AA6TF

Web Site:

<http://www.fiskefamily.com/>

(I "borrowed" the D-Star stuff from Wikipedia. It is not mine. There is more info on that page, too. Look up D-Star and see what else Wikipedia has to offer.)

## Donate LIFE Run Walk April 30, 2016

Amateur Radio Operators  
NEEDED

Please Save Saturday 30 April, 2016 for the Donate LIFE Run/Walk & Family Festival at CSUF.

We need 30 Amateur Radio Operators all around the course. Time: 0700 - 1130 hrs. or so.

Contact: Gene Thorpe  
[KB6CMO@Juno.com](mailto:KB6CMO@Juno.com) with your Name, Callsign, E-mail Address and Phone#. I need the info ASAP.

Thanks

## FRC Board Meeting

Open to all Club members  
**Marie Callender's Restaurant**  
126 Yorba Linda Blvd.,  
Placentia

First Wednesday of each month.

**Next Board Meeting**  
**March 2, 2016**

QSO and dinner; 7:00 PM  
**Meeting: 7:30 PM**

## Something Presidential **not** linked to current debates

As Groucho Marx famously said, "Who's buried in Grant's tomb?" Marx used the throwaway question on his television quiz show "You Bet Your Life" in the 1940's and 1950's as a way to give a person who wasn't doing very well a chance to win a prize. Unfortunately, a lot of his contestants read more into the question than there was.

I thought of this famous quip last year as I strolled the New York City grounds and mausoleum of the 18th President of the United States and Commanding General of the Union Army in the American Civil War. The General Grant National Memorial is the largest mausoleum in North America and one of the largest in the world.

From 1864 to 1869, Grant worked closely with President Abraham Lincoln to lead the Union Army to victory over the Confederacy. After the war, he implemented Congressional Reconstruction, often at odds with Lincoln's successor, Andrew Johnson. Twice elected president, Grant led the effort to remove the vestiges of Confederate nationalism and slavery, protect African American citizenship, and support economic prosperity nationwide. Yet his presidency has often come under criticism for protecting corrupt associates and in his second term for leading the nation into a severe economic depression.

Grant graduated in 1843 from the U.S. Military Academy at West Point, served in the Mexican-American War, and initially retired in 1854. On April 12, 1861, the American Civil War began as Confederate troops attacked Fort Sumter in Charleston, South Carolina. Two days later, President Lincoln called for 75,000 volunteers and a mass meeting was held in Galena, Ill. to encourage recruitment. Recognized as a military professional, Grant was asked to lead the ensuing effort.

After his victories in the Chattanooga Campaign, Lincoln promoted him to lieutenant-general and Commanding General of the United States in March 1864. Grant coordinated a series of devastating campaigns in other theaters in Kentucky, Tennessee, the Battle of Shiloh, TN, and Vicksburg, MS. Grant later confronted Robert E. Lee in a series of bloody battles, trapping Lee's army in Richmond, VA. In April 1865,

Lee surrendered to Grant at Appomattox, VA, effectively ending the war. Historians have hailed Grant's military genius, and his strategies are featured in military history textbooks, but a minority contend that he won by brute force rather than superior strategy.

On March 4, 1869, Grant was sworn in as the eighteenth President of the United States. In his inaugural address, Grant urged the ratification of the Fifteenth Amendment and said he would approach Reconstruction "calmly, without prejudice, hate or sectional pride." Grant recommended the "proper treatment" of Native Americans be studied; advocating their civilization and eventual citizenship. His signature appears on the act that established our first national park—Yellowstone—on March 1, 1872.

To bolster the new amendment, Grant relied on the army and in 1870 he signed legislation creating the US Justice Department primarily to enforce federal laws in the South. Where the attorney general had once been only a legal adviser to the president, he now led a cabinet department dedicated to enforcing federal law, including a solicitor general to argue on the government's behalf in court.

In 1880, Grant was unsuccessful in obtaining a Republican presidential nomination for a third term. His death in 1885 prompted an outpouring of national unity. 20th century historical evaluations were negative about his presidency before recovering somewhat beginning in the 1980s. Scholars rank his presidency below the average of other presidents. Grant's critics take a negative view of his economic mismanagement and his failed Dominican Republic annexation treaty, while admirers emphasize his concern for Native Americans and enforcement of civil and voting rights. In May 2012, the Ulysses S. Grant Foundation selected Mississippi State University as the permanent location for Ulysses S. Grant's Presidential Library.

The impressive memorial is located in Harlem's Riverside Park, and just to put that old question to rest, yes, Ulysses S. Grant—and his wife, Julia Dent Grant—are both interred there. But, just to throw a wrench in the works, note I wrote "interred". They aren't buried there, they are entombed (see photo). And yes, the Park Service staff have heard the question 275,000 times.

Tom WB2LRH

# A New SoCal Swap Meet

CLAREMONT AMATEUR RADIO SOCIETY

Presents

## An Amateur Radio Swap Meet

Third Saturday of each month

Time: 6 AM – 11 AM

Location: Granite Creek Community Church parking lot.

1580 N. Claremont Blvd. Claremont, CA 91711

Entry is FREE to visit.                      Sellers; \$10 per space

Additional info; KG6ABF@ YAHOO.COM

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## Reminder

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It's a new year and Club membership dues are due. Membership dues payments are in arrears for many of you. Some haven't been paid members since 2011. We will be reviewing the membership list, and those who have not paid membership dues will receive personal reminders. Continued non-payment may result in removal from membership roles and from receipt of Smoke Signals.

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### MEMBERSHIP RENEWAL / APPLICATION

Fullerton Radio Club  
PO Box 545, Fullerton, CA 92836

(Please Print)

Name #1 \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

Name #2 \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State/Zip: \_\_\_\_\_

Phone #1: \_\_\_\_\_ Email #1: \_\_\_\_\_

Phone #2: \_\_\_\_\_ Email #2: \_\_\_\_\_

ARRL Member     Yes                       No

Special Amateur Radio Interests: \_\_\_\_\_

Dues are \$20 per member, or \$25 per family. Students (full time) \$10

**Bring your application and dues payment to the next meeting or mail to the above address.**