



# Orange Section News

by Carl (WU6D)

Section Manager

June 2015

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Check out the

Orange Section web  
site at:

[www.orange-arrl.org](http://www.orange-arrl.org)

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direction.



Volume 15 Issue 3

## Field Day 2015 - Are You Ready??

*Why do we have this event called "Field Day"?*

Well, it is to test our equipment and see how many contacts we can make and how far we can transmit while using low power (100w or less), which includes, batteries, solar, bike, etc.

This event has also turned into a contest to see who can achieve more points than the next group, club, or individual.

What about the social side? This might be a techie type event, but it takes people to make it happen.

This is where I personally have seen concerns; EGO's, not working as a team if you are with a group/club, safety and most of all lack of volunteers.

Field Day in the last several years seems to be not as exciting as it used to be. Groups/Clubs are changing, we are getting older and just cannot spend as much time transmitting, setting up and tearing down.

Where are our young hams? They have family

responsibilities, work, financial problems (don't we all now days). We hide in the mountains, in parks where people have to pay to get in, in order to participate or we are away from the public. How do we make coming to, and participate in a field day operation not only a contest, but fun?

First, to our new members to amateur radio, we need to make this event *exciting*. Remember the first time that you were asked if you would like to participate?

I remember. I was a new ham, female, and just learning how to use my HT, let alone get on HF. Wow, the only time I could work on HF without a Tech Plus or better license. I signed up. I helped set up, did kitchen duties for lunch and dinner and worked the bands when my shift came up. I had fun.

I volunteered along side of many already experienced field day operators, who broke the chores up to get the most out of all volunteers and not to exhaust 2 or 3 people only.

EGO was not an issue, they were helpful, they taught you how to proceed with your project that you signed up for.

We had many meetings, discussions, and after an out briefing to see what we could do to make it better the next time. I also at one time was a field day chairperson. Some clubs have a mini pre-field day just to make sure everything is ready to go and train at the same time.

Here was the kicker. One year after I started working DX (long distant communication and contests), I worked the 10 pm to 2 am shift one time and had a pile up (hams calling for me all over the country) on 20m (propagation was great that year). I was tired....but enjoyed every minute.



**ARTICLE CONTINUES  
ON PAGE 2**

## Field Day, Cont'd.

So, with that said, here is what I believe after many years of participating in field days, I would expect to see happen to encourage new volunteers and to keep experienced ones coming to Field Day.

### CHECK YOUR EGO AT THE DOOR

Make it a challenge, but make it fun to be there.

Listen, learn and teach those who don't know a lot about the technical side.

Be the one! Whoever is in charge, form committee team leaders (those experienced).

Give them assignments to do with deadlines for completion and allow them to do those assignments without micromanaging them.

Do an educational class on field day. Such as a 101 How To: (Orange County Amateur Radio Club did one in May)

The leaders of the committees get volunteers (A mixture experienced with non experienced) so that knowledge will be available to take over in years to come.

**Safety Coordinator** - setup of towers, antennas, wiring, cables, design (never throw caution to the

wind). Check the weather conditions for the event time

**Freq. Coordinator** - Stations to be used at field day. (Radios, speakers, mics, keyers, cables, stubs, RF chokes) frequencies used are only as good as the license class used (make sure the event call is an extra class license)

**Setup** - Who will the volunteers be? Anyone who can do the job and is eager to learn but knows the safety protocols that go with it. Same for tear down.

**Station Setup** - Pop ups, trailers, tents, tables, chairs (do you have whoever signs up to be in charge of a station bring all their own gear, or everyone who volunteers to work the station bring a little bit of stuff to make the station work? Shares the load!

**Meals** - Cooking (have more than 1 cook), setup of kitchen and responsibilities), lists of food to be bought by organization and a list of those to bring side dishes) & plenty of water.

**Security** - Assignment of volunteers to take point on watching the area, people will be busy and may not see something occur at the site(s).

**Welcome to Our Field Day Info Booth** - Many times groups/clubs forget that the general public might be around and are curious to what is happening.

Make sure that there is someone who loves to talk with people and explain Amateur Radio and what we do in times of need. Make sure that there are more than 1 volunteer to cover a certain amount of time during the day and evening. Invite them to talk on the radio at the GOTA station (They don't need to be licensed). What Fun!

**Personal Items You Bring** - Breath mints, Tums, etc; deodorant, tooth brush, hygiene stuff, medicines, hats, sunglasses, etc. Remember Field Days are usually in remote to semi remote areas, shopping malls, hospital parking lots, and unless you brought your trailer/5th wheel (PU) You know what I mean?



**ARTICLE CONTINUES  
ON PAGE 3**

## Field Day, Cont'd.

Keep everyone involved, don't let anyone stand still too long or your volunteer will walk away. Some need a little nudge and some don't.

the project will be a little on the fun side too.

### MAKE THIS A FAMILY EVENT!



Sitting down to have lunch or dinner at the site. Team work is social also, helps build character and makes for new friendships. After all we are a family, an Amateur Radio Family!



Well, you know where I was going with all the details that are needed to get the show on the road, but what about those young new OM's (Term used for a male) and YL's (Term used for young lady) that have families?

Who else could we invite to this event, anyone, do you have anyone else that may enjoy coming and participating. I know, How about the Boy Scouts and Girl Scouts, or other organizations. Do you have someone on your team that can do awards? Boy Scouts get a Merit badge and Girl Scouts have an equivalent badge. They can work some stations, help with meals, learn more about Amateur Radio. Shouldn't they.

Bring the kids, make them fit into the plans. There can be a safety zone developed for play and fun for the kids so that mom and dad can have a chance to work the frequencies.



73  
Cathy (K6VC)



Oh, I almost forgot, the social aspect of Field Day. Bringing people together (Talking, listening, & laughing). Meeting friends that we only see occasionally as they pass by to move on to another field day.

Give projects for those who are part of the group/family that are under 16. You'll help them learn responsibilities and maybe



## Barstow ARC Now An SSC!

They have demonstrated proficiency in the following areas:

a. Training and supporting local Amateur Radio efforts in licensing, upgrading and continuing education or Elmering.

b. Public Relations and improving the visibility of Amateur Radio, promoting it as a positive force within the community.

c. A willingness to become involved in any local emergency or drill.

d. Technical Advancement and encouraging members to become more familiar and knowledgeable in technical amateur radio aspects in the community.

e. Operating Activities in which a substantial program is conducted in an area of particular interest of the club; and,

f. Miscellaneous Activities in which ongoing programs or activities are in additional established areas (or suitable substitutes).

### CONGRATULATIONS!!

The clubs repeater system is on 147.180 + PI 151.4 & 147.885 - PL 151.4

Our stand-alone local area repeater is on 146.970 -

Club Contacts are:

President Jock Soutar (KC6IIH) [kc6iih@aol.com](mailto:kc6iih@aol.com)

Vice President/ARES EC Bernard Harris (KE6UKY) [biggdogg0003@yahoo.com](mailto:biggdogg0003@yahoo.com)

Secretary / Treasurer Art S a c h s ( N 6 Z G F ) [n6zgf@arrl.net](mailto:n6zgf@arrl.net).

Club meetings are held on the second Tuesday of each month at 7:30 PM at 25647 West Main Street, Lenwood , CA. On the corner of Western and West Main Street.

Our net is called on the other Tuesdays at 7:00 PM, AR Newline, roll call , roundtable, etc. on our linked system .

The Barstow Amateur Radio Club provides voice coverage for most of the high desert with repeaters in :

**Barstow** at 147.180 PL 151.4

**Newberry Springs** at 146.700-

**Ludlow** at 147.885-.

These machines are linked to provide almost total coverage of the high desert

from Victorville to Holoran Summit along Interstate 15, and to Ludlow along Highway 40.

There are also some low level machines available in the local Barstow area at 146.97- , and the Barstow R.A.C.E.S. machine at 146.76- PL 123. Blynn, (WD6BNG) maintains a machine on 147.03. These machines are open and are maintained and kept available for the use of the traveling ham community.

The high desert offers many interesting sites both on and off road. While traveling through the high desert please keep extra water with you for your car as well as all people in the car. Please check in with someone on the radio before doing any off road exploration.

PLEASE ENJOY OUR DESERT! BUT PLEASE BE SAFE!

WA6TST  
P.O. Box 451  
Barstow  
California  
92312



"While traveling through the high desert please keep extra water with you for your car as well as all people in the car."



## Moreno Valley Amateur Radio Society

Hello everyone,  
Club meetings are held on the 1st Thursday of the month at 6:30 PM at Lake Perris State Recreation area in the meeting room at Parking lot No. 9.

\*There is No need to pay at the gate, just tell the Ranger that you are going to the MVARA Ham Radio meeting.

NORTHWEST RIVER-SIDE COUNTY ARES  
Monday Net @ 1830  
449.300- pl:103.5  
(There is no NET on Monday Meeting Nights)  
w - 220mhz Net!

A new ARES Net started in N6BOX Box Springs April. It rolls at 1930 hours 449.300 Repeaters on 224.460 PL 110.9 linked (MVARA Tuesday net now to 146.880 PL 146.2. The purpose of his net is to encourage use of the 220 band and bring together Members and guest check-ins welcome!

ARES current members and new members in the Moreno Valley ARES Net MONDAY 6:30 PM  
Moreno Valley ARES Net, 146.655 simplex 1st, 3rd, 4th, 5th

We encourage all amateurs to check in on this net.

Join us on our weekly net!  
Tuesday evening at 7:00 PM on both the:  
AB6MV Moreno Valley 146.655 Repeater

P.O. Box 7642  
Moreno Valley, California 92551  
[Ab6mvnet@Gmail.com](mailto:Ab6mvnet@Gmail.com)  
[WWW.MVARANET.ORG](http://WWW.MVARANET.ORG)



## Hams Fined 11K & 22K - Gear Confiscated

The FCC Enforcement Bureau has affirmed an \$11,500 fine against Brian Crow, K3VR), of North Huntingdon, PA., for deliberately interfering with other ham radio communications.

The FCC first proposed the fine last July in a Notice of Apparent Liability for Forfeiture (NAL), and it released a Forfeiture Order on January 13

The FCC said it imposed the fine because of Crow's "willful and repeated violation" of Section 333 of the Communications Act and of Sections 97.101(d) and 97.119(a) of the Amateur Service rules "by causing intentional interference to licensed radio operations and failing to transmit

his assigned call sign."

Crow did not respond to the 2014 NAL. The Commission, affirmed its proposed fine. In July, 2014,. The FCC also issued a similarly worded NAL to Michael Guernsey, (KZ8O) (ex-ND8V), of Parchment, MI., proposing to fine him \$22,000. In both cases, the FCC said the evidence indicated that the transmissions at issue were aimed at interfering with other radio amateurs with whom each licensee "had a long-standing and well-documented dispute" that had spilled out onto the air.

In both instances, the FCC said, it responded in March 2014 to "several complaints of intentional interference"

on 14.313 MHz, and Commission agents used radio direction-finding techniques to pin down the transmission sources.

According to the NAL issued to Crow, FCC agents monitored transmissions from his station for approximately 3 hours on March 14, 2014, and heard him transmit slow-scan television (SSTV) signals and "a pre-recorded voice transmission of another amateur station on the frequency."

"These transmissions prevented other amateur licensees from communicating over the frequency," both NALs said, adding that neither Guernsey or Crow transmitted their assigned call signs while the agents were

listening.

The FCC agents visited Crow's residence and asked to inspect his station, which they confirmed was capable of operating on 14.313 MHz. Crow denied operating his station that morning, however, and claimed that he was not at home when the interfering transmissions occurred.

The Enforcement Bureau had warned both Guernsey and Crow in the past regarding interference to other Amateur Radio operators.

Guernsey's case is still pending.

## Another Jammer Gets The Hammer

It was a day many radio amateurs in Southern California had been anticipating for a very long time.

On September 18, 2006 US District Court Judge R. Gary Klausner sentenced convicted radio jammer Jack Gerritsen, now 70, to seven years imprisonment and imposed \$15,225 in fines on six counts -- one a felony -- that included willful and malicious interference with radio communications and transmitting without a license. Before sentencing, Gerritsen apologized to the federal government, the FCC and the local ham community, which had endured the brunt of Gerritsen's on-air tirades and outright jamming. "I'm sorry, and I apologize to everyone here," Gerritsen told those in the courtroom, which included more than a dozen radio amateurs and Gerritsen's family members. Gerritsen's contrition did nothing to convince Judge Klausner toward leniency.

"How many times have you said you would not do this again?" Judge Klausner reportedly asked Gerritsen, a repeat offender who served as his own attorney

during his trial. "But based on your history, you come back again and again for this. I believe you will continue to do it, and it would send the wrong message to others, that five years is not long enough either!"

The sentence even exceeded US District Attorney Lamar Baker's recommended 46-month sentence. Gerritsen could have received up to 15 years in federal prison. Sentences on all counts will run concurrently.

The judge also tacked on two years' of supervised probation following Gerritsen's prison term, but he recommended Gerritsen remain in custody during that period. Judge Klausner further ordered Gerritsen to participate in a substance-abuse program. He told Gerritsen he could not identify himself by using any other means -- including his previously held Amateur Radio call sign KG6IRO -- than his real name, and he prohibited Gerritsen from owning, possessing or using any radio transmitting equipment.

The FCC fielded complaints of illegal radio

transmissions linked to Gerritsen for four years. The Commission's investigation and signal tracking revealed that Gerritsen transmitted both prerecorded messages and real-time harassment and profanity for hours at a time. He often targeted local ham repeater systems, precluding their use by licensed operators. Hams were among the most vocal complainants.

In May 2005 FBI agents, accompanied by FCC staff, arrested Gerritsen without incident and seized his radio equipment. Released on \$250,000 bond while awaiting trial, Gerritsen remained in home detention, barred from possessing any radio equipment.

The FCC already had fined Gerritsen \$10,000 for violating its rules and the Communications Act during his reign of radio terror. Just days before his December 2005 trial, the Commission affirmed \$42,000 in additional fines -- two \$21,000 forfeitures.

**Article continues on Page 10**



## What if You Experience Jamming?

**Call 1-855-NOJAM**

**\*\*\*ALERT\*\*\***

Federal law prohibits the operation, marketing, or sale of any type of jamming equipment, including devices that interfere with cellular and Personal Communication Services (PCS), police radar, Global Positioning Systems (GPS), and wireless networking services (Wi-Fi).

"Jamming devices create serious safety risks. In the coming weeks and months, we'll be intensifying our efforts through partnerships with law enforcement agencies to crack down on those who continue to violate the law. Through education, outreach, and aggressive enforcement, we're tackling this problem head on."

P. Michele Ellison,  
Chief, Enforcement Bureau  
Jamming Prohibition

The use of "cell jammers" or similar devices designed to intentionally block, jam, or interfere with authorized radio communications (signal blockers, GPS jammers, or text stoppers, etc.) is a violation of federal law. Also, it is unlawful to advertise, sell, distribute, or otherwise market these devices to consumers in the United States. These de-

vices pose serious risks to critical public safety communications, and can prevent you and others from making 9-1-1 and other emergency calls. Jammers can also interfere with law enforcement communications. Operation of a jammer in the United States may subject you to substantial monetary penalties, seizure of the unlawful equipment, and criminal sanctions including imprisonment.

**FAQ'S Regarding:**  
GPS, Wi-Fi, and Cell Phone  
Jammers

### File a Complaint

If you are aware that someone is operating, selling, leasing, advertising for sale, shipping, distributing, and/or importing jammers, you can file a complaint at: <https://www.fcc.gov/complaints>.

### Applicable Law

The Communications Act of 1934 Section 301 - requires persons operating or using radio transmitters to be licensed or authorized under the Commission's rules (47 U.S.C. § 301)

Section 302(b) - prohibits the manufacture, importation, marketing, sale or operation of these devices

within the United States (47 U.S.C. § 302a(b))

Section 333 - prohibits willful or malicious interference with the radio communications of any station licensed or authorized under the Act or operated by the U.S. Government (47 U.S.C. § 333)

Section 503 - allows the FCC to impose forfeitures for willful or repeated violations of the Communications Act, the Commission's rules, regulations, or related orders, as well as for violations of the terms and conditions of any license, certificate, or other Commission authorization, among other things.

Sections 510 - allows for seizure of unlawful equipment (47 U.S.C. § 510).

### The Commission's Rules

Section 2.803 - prohibits the manufacture, importation, marketing, sale or operation of these devices within the United States (47 C.F.R. § 2.803)

Section 2.807 - provides for certain limited exceptions, such as the sale to U.S. government users (47 C.F.R. § 2.807)

The Criminal Code (Enforced by the Department of Justice)

Title 18, Section 1362 - prohibits willful or malicious interference to US government communications; subjects the operator to possible fines, imprisonment, or both (18 U.S.C. § 1362)

Title 18, Section 1367(a) - prohibits intentional or malicious interference to satellite communications; subjects the operator to possible fines, imprisonment, or both (18 U.S.C. § 1367(a))

### Related FCC Materials

Sale or Use of Transmitters Designed to Prevent, Jam or Interfere with Cell Phone Communications is Prohibited in the United States, Public Notice, DA 05-1776 (2005).

Office Of Engineering and Technology and Compliance and Information Bureau Warn Against the Manufacture, Importation, Marketing or Operation of Transmitters Designed to Prevent or Otherwise Interfere with Cellular Radio Communications, Public Notice, DA 99-2150 (1999).





Malcolm Levy  
(K06SY)

## Malcolm Levy (K06SY) - Silent Key

I first met Malcolm Levy (K06SY) on the air more than 20 years ago. In true British tradition we moved the conversation from the radio to a local pub (in our case the Elephant Bar in Laguna Hills) where we solved all the world's problems over a couple of pints.

We always had plenty to talk about, including our early days of amateur radio, the music we listened to, and the TV shows we watched growing up in the UK. We were both members of the South Orange Amateur Radio Association (SOARA) where Malcolm held various board positions, including President and Vice-President. He was an excellent speaker and gave presentations at many club meetings as well as American Radio Relay League (ARRL) conferences.

His technical presentation abilities were only surpassed by his skills as an auctioneer - the SOARA auctions that Malcolm ran were legendary. He would hold up some piece of junk and make tongue in cheek outra-

geous claims about what it could do while maintaining that cheeky grin on his face. He made buying junk fun.

I got to know him better over the past few years and yes - I learned about his foot on the floor driving style when he took me up to Angelus Oaks in his Lotus Elan for a bite to eat before we went to see a Pink Floyd cover band perform in San Bernardino.

I last saw Malcolm on March 21st. Amongst other things he asked me if I would like his personalized copy of the 2014 American Radio Relay League Centennial Handbook. It was an emotional moment for both of us that, along with the book, I will treasure forever.

Malcolm made numerous friends through amateur radio and he will be missed by us all. On the morning following his passing I announced the sad news at the start of Gordon West's daily California Rescue Communications net on 40M. The net has upwards of 100

regular members and, following my announcement, net control KG6FCT called for a few moments of radio silence to honor our friend Malcolm, Kilo Oscar Six Sierra Yankee who was now a "Silent Key".

So Malcolm, thank you for everything you did for our hobby, thank you for all of the conversations, the magazines, the music and much, much more. Thank you most of all for being my friend.

73 and I'll look forward to talking to you again somewhere down the next log book.

Richard Saunders  
(K6RBS)

Official Observer Coordinator  
for the American Radio Relay  
League Orange Section



April Moenn  
(WA6OPS)

## HDSCS Report

HDSCS was represented at the May Orange County Multi-Agency Disaster Committee meeting on May 31st, 2015. There was an early review of the recent county wide hospital drill on May 21.

HDSCS provided recommendations regarding antennas at several hospitals. Most have to do with relocation issues related to changes in command center locations. Hospital visits are planned in the near future

to assist with some of the issues.

HDSCS Field Day leadership team is at Huntington Beach Hospital this morning reviewing the site for our potential antenna set-ups. In addition to our normal Field Day activities we will have one of our stations operating as a memorial to member Fred Wagner, KQ6Q, who passed away 2 months ago. The HF rig he always brought to Field Day will be in

use along with a few pictures and items of his on view for members and guests to see. 2015 is also the 35th year that HDSCS has provided back-up communications for Orange County Hospitals. We intend to celebrate that throughout Field Day weekend.

73

April (WA6OPS)

HDSCS



## The Future of Ham Radio

We should all understand that the future of ham radio lies with young people. We must attract new folks into the hobby. One of the very best methods of accomplishing that is to work with your local high school. Most schools are seeking ways to attract students into STEM courses. STEM stands for Science, Technology, Engineering & Mathematics. Ham radio is a perfect fit to fill those needs.

You will be probably be pleasantly surprised at the reception you will receive when you present a coherent and cohesive program to the administrators and show them the professional training that is available from the ARRL. Tell them about the diverse support available from the local ham club and they will most likely be "all in" with the idea.

*What do I need to know to talk to my local school about Amateur Radio?*

The most frequently asked question about ARRL's Education & Technology Program is:

*How do I approach a school to introduce Amateur Radio curriculum and convince them to consider including the curriculum as part of their school program?*

This question comes from hams outside the educational system who would like to see Amateur Radio included as an accepted program in their local schools.

As Ham Radio operators, we recognize the numerous benefits from including Amateur Radio as an enrichment program in schools. We are aware of the relationship between the knowledge base of our hobby and the concepts in science, math, geography and other subject matter taught in schools. We have observed how the use of Amateur Radio can improve young people's verbal and social skills. We are familiar with the sense of accomplishment gained by passing an FCC exam and operating on the air.

To be successful you'll need to be informed about the re-

sources ARRL offers through our Education & Technology Program. You'll also want to know what teachers are doing in their classrooms to use amateur radio as an instructional tool. It would also be good to have some knowledge of what other local ham radio clubs are doing with their local schools.

Spend some time reading the information provided through the links below.

Discuss your thoughts and ideas in a conversation with the local school administrator. Take advantage of the prep tool we (the ARRL) have prepared for launching your conversation with your local school. This will help you organize and be successful.

Check us out at:

<http://www.arrl.org/amateur-radio-in-the-classroom>



**"The average age in most ham clubs is between 60 and dead. Our future lies in the young."  
(AE7QU)**

## Schools, Do You Know???

Do you know that your Amateur Radio Clubs can become affiliated with the ARRL?

Only the president of the club or the faculty advisor needs to be an ARRL member in order for the club to become affiliated. Benefits, resources, etc., are great for your school club, why not join up, IT's FREE!

You'll be posted and recognized

in the club database and can be located by those interested in what you are doing

For resources and information to assist your endeavors see:

<http://www.arrl.org/clubs>

<http://www.arrl.org/affiliated-club-resources>

[http://www.21stcenturyschools.com/Ham\\_Radio.htm](http://www.21stcenturyschools.com/Ham_Radio.htm)

It's simple to do, see Bill Prats' (K6ACJ) article on becoming affiliated.

If you have questions regarding a school affiliation, please contact Bill (K6ACJ) at:

[k6acj@biztek.com](mailto:k6acj@biztek.com)

or

contact Carl at:

[wu6d@arrl.org](mailto:wu6d@arrl.org) for further information.





**"Fight back  
against  
restrictive  
CC&R's."**



**Ham Radio Needs  
YOU!**

## Jammer, Cont'd

In doing so, the FCC rebuffed every argument Gerritsen offered in response to each Notice of Apparent Liability, including insistent "freedom of speech" claims. The government has yet to collect anything from Gerritsen.

Following his nearly four-day trial, Gerritsen, who lives in Bell, was found guilty on a felony count of causing malicious interfer-

ence to a communications system operated by the United States -- the US Coast Guard Auxiliary -- during a 2004 search-and-rescue operation. He was convicted of misdemeanors for interfering with American Red Cross radio transmissions in early 2005 while the agency was preparing for disaster relief operations, and for causing the cancellation of a US Army Reserve homeland

security training exercise in 2005 by interfering with US Army Military Affiliate Radio System (MARS) communications. He also was convicted of transmitting on Amateur Radio frequencies without a valid license on three separate occasions in 2003 and 2004, all misdemeanors. The jury deliberated for less than an hour before returning its verdict December 9. Gerritsen has

## Ham Radio Needs Your Help

Have you been abused by deed restrictions or CC&R's??

HR-1301 - Amateur Radio Parity Act of 2015

The Amateur Radio Parity Act of 2015 -- H.R.1301 -- has been introduced in the US House of Representatives. The measure would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land use restrictions.

US Rep Adam Kinzinger (R-IL) introduced the bill on March 4th with twelve original co-sponsors from both sides of the aisle -- seven Republicans and five Democrats.

HR 1301 would require the FCC to amend its Part 97 Amateur Service rules to apply the three-part test of the PRB-1 federal pre-emption policy to include homeowners' association regulations and deed restrictions, often referred to as "covenants, conditions, and restrictions" (CC&Rs).

At present, PRB-1 only applies to state and local zoning laws and ordinances. The FCC has been reluctant to extend the same legal protections to include such private land-use agreements without direction from Congress.

H.R. 1301 has been referred to the House Energy and Commerce Committee.

Rep Greg Walden, W7EQI (R-OR), chairs that panel's Communications and Technology Subcommittee, which will consider the measure.

ARRL members are urged to contact their US House members and ask them to sign on to the bill as a co-sponsor. We recommend sending the letter to your member of Congress to:

ARRL  
Attn: HR 1301 grassroots campaign  
225 Main St  
Newington CT 06111

For more information point your browser to:

<http://www.arrl.org/prb-1>

## Corona PD Sponsors Ham Club W6CPD

This is to inform you of our Field Day Club meeting at Jameson Park in Corona, Ca.

We are a club sponsored by the Corona Police Dept. Our club call sign is W6CPD and our local, private repeater is on 147.225 with a negative offset and a PL tone of 88.5.

Best Regards,  
Paul Deveny (KV6P)  
951-202-8078

We meet on the second Monday of every month at 7:00 PM at the Corona Police Department EOC located at 730 Corporation Yard Way, Corona, California 92882.

We are affiliated with Riverside County RACES and specialize in assisting with Public Service/Emergency.

We publish a club newsletter and offer entry-level license classes, and license test sessions.

We have 24 voting members and would love to have you join us.

Contact our editor Edward W. Hopkins (AE6ED) at: 1035 Silvercreek Rd Corona, CA, 92882-6147

Kevin R. Seeger NC6V  
President

[http://  
www.discovercorona.com/  
City-Departments/Police-  
Department/  
Communication-Specialist-  
Volunteers.aspx](http://www.discovercorona.com/City-Departments/Police-Department/Communication-Specialist-Volunteers.aspx)



## Mountain Top Amateur Radio Assoc.

The Mountain Top Amateur Radio Association, MTARA, was created by a group of about a dozen amateur radio operators living in the mountains in the San Bernardino National Forest who wanted to have a club that promotes the amateur radio hobby through mentoring, license testing, communi-

cations training and community service in a fun, friendly, and active environment.

We meet on the first Tuesday of each month from 7:00 PM to 9:00 pm at the Presbyterian Church on Hwy 173 in Lake Arrowhead.

We encourage anyone interested in amateur radio as well as all existing licensed amateur radio operators to attend our meetings whether a member or not.

We offer low cost individual and family memberships at the meetings.

## Intro to EMCOMM - EC-001 Class

We are planning to have the ARRL Introduction to Emergency Communications Course (EC-001) in the Riverside area sometime in July or August.

The course is nationally certified through the ARRL and taught by a certified instructor..

The course will take two days on a weekend or on two Saturdays. The course culminates with an exam given by VE examiners. The course is open to all licensed amateur radio operators.

Further information will be provided at a later date.

If you're interested please send me an email at:

[KB6DMZ@arrl.net](mailto:KB6DMZ@arrl.net).

Alan Pearson, (KB6DMZ)

[http://www.arrl.org/  
online-course-catalog](http://www.arrl.org/online-course-catalog)



## CBARC Announces New Net

CBarC is pleased to announce the start of a New CBarC Net on the Club Repeater. Open to everyone. New Hams and Seasoned Hams please join us!!!

Right now we have not decided on a final Name for the Net so for now we are calling it The Future Elmers Net. It rolls Wednesday at 2000-hours (8PM).

CBarC Repeater (W6JBT)

Repeater Information:

2-Meter: 146.850 p/l 146.2  
(-)offset

The term "Elmer"-- meaning someone who provides personal guidance and assistance to would-be hams--first appeared in QST in a March 1971 "How's DX" column by Rod Newkirk, W9BRD (now also VA3ZBB). Newkirk called them "the unsung fathers of Amateur Radio."

The term Elmer describes an Amateur Radio Mentor. Seasoned and experienced Ham's willing to pass on their sage knowledge and

more recently licensed Hams should join. You will grow in knowledge and experience and someday pass on your own experiences and sage knowledge. Don't under estimate yourself. Believe it or not we all started at the same place - little knowledge but an interest and openness to Learn!!!

Join us on the air starting this Wednesday June 3, 2015!

## ISS Voice Contacts for Field Day??

Doesn't look promising this year. The Russian Progress Module problems have messed up the crew's schedules, and I have been told that it is unlikely that the crew will do much ham radio work during late June - meaning possibly no FM voice contacts like we enjoyed last year for Field Day





## RCARA

RCARA's 80 members celebrate their 60th anniversary in June 2015.

Their monthly meetings are held on the second Thursday of each month at 7:00 PM in the La Sierra University Church Conference Center directly behind the church located at the corner of Pierce and Sierra Vista, Riverside, CA. See our webpage for directions and more information: [www.w6tj.org](http://www.w6tj.org).

RCARA is ARRL Affiliated Club #1720. The clubs Riverside repeater is on 146.880 MHz, -600 KHz offset, PL 146.2 Hz

The club offers license classes and testing on the first Saturday of the month in Corona. Ed Morgan is the Chair Person for this activity and all reservations must be made through him at [edjmorg@aol.com](mailto:edjmorg@aol.com). You may also contact RCARA President, Ron Braley (KE6RYX) at (951) 369-5149.

The Riverside County Amateur Radio Association (RCARA/RACES) will host Field Day 2015 at:

Martha McLean Anza Narrows Park 5759 Jurupa Avenue, Riverside, CA.

This is a FREE event open to the public and anyone interested in learning about ham radio is welcome.

Field Day runs from 11:00 AM Saturday, June 27 through Sunday, June 28, 11:00 AM. Click [here](#) for a map to the Field Day site.

The Talk-in Frequency is 146.880 -600Hz shift PL 146.2 Hz. On site HT communications: Simplex 147.10

### Field Day Operations

The RCARA RACES ECG groups will be operating in Class "A". The number of simultaneous transmitters we will be running is 3 stations and a GOTA set up.

Technician class operators, this is your opportunity to work some HF. If you are looking for inspiration to upgrade, this is your chance. Anyone can work the HF bands at a Field Day site with a properly licensed control operator present.

We will be using the RCARA Club call W6TJ on Field Day for general operations.

We are most grateful to the

Emergency Communications Group (ECG) and CERT as well as the Boy Scouts from Riverside Troop 2 for their contributions and participation. Thank you to Captain Tim of the Riverside City Fire Department for also lending a hand behind the scenes and to all the others who have contributed in no small way.

### RCARA NETS

Every Sunday at 8:30 AM the RACES PUBLIC SERVICE NET rolls on 3.945.

Every Monday at 7:00 PM the RACES/ARES PUBLIC SERVICET rolls on 146.880 MHz, Minus, 146.2 PL.

Last Monday of the month at 7:00 PM the RACES/ARES PUBLIC SERVICE NET rolls on 146.880 000MHz, NO PL – SIMPLEX.

Don Williams (KD6UVT)

Every Tuesday at 7:00 PM the QCWA NET rolls at 145.580 – SIMPLEX.

Every Tuesday at 7:00 PM the ECG Emergency Communications Group net rolls at 445.060 -shift 162.2.



## Dedicated Volunteers Enable Public Safety at Swallows Day Parade



For more info on Broadband Ham-Net mesh networks, go to:

<http://www.broadband-ham-net.org/>

OR

<http://www.aredn.org/>

The Swallows Day Parade in San Juan Capistrano, California is, according to its organizers, the largest non-motorized parade in the United States.

Hundreds of volunteers worked with local officials to maintain public safety among the estimated 35,000 people who attended the 57<sup>th</sup> annual event.

To support the unique communications needs that go beyond the normal capacity of the public agencies, a small team of FCC-licensed amateur radio operators who belong to the Radio Amateur Civil Emergency Service (RACES) provided specialized communication services.

The local Tri-Cities RACES (San Juan Capistrano, San Clemente, and Dana Point) and San Juan Capistrano Community Emergency Response Teams (CERT) have actively supported city events for many years. For example, Joe Lopez, (W6BGR), Chief Radio Officer demonstrated Amateur Radio Emergency Data Network (AREDN™) technology deploying four IP cameras to the Annual Tree Lighting Celebration in December 2014.

The Sheriff's Department leadership noticed the capability, which lead to a closer

partnership and the integration of all of these resources into the command center for the Swallows Day Parade, the city's biggest annual event.

The RACES team developed a plan to provide real-time video camera coverage of the parade route to support the Sheriff's department and emergency response agencies. The plan called for deploying an AREDN mesh network consisting of radio communication links and IP cameras.

The AREDN project mission is to provide the Amateur Radio Community with a quality solution for supporting the needs for high speed data transfer in Amateur Radio and Emergency Communications.

Orange County Sheriff's Administrative Sgt. Joseph Cope noted that "This mesh camera system provided by RACES members was a very valuable tool for our command staff. As we were taking the calls, we could see the activity taking place in real time."

In a meeting with city staff, he also stated, "The parade was the safest in years. Incredibly, there was only one arrest for fighting, which just happened to take place in the cameras view." There were two incidences where an am-

balance response was needed. Each situation occurred in proximity to an IP camera, enabling the incident commanders to observe them in real time.

The parade cameras sent images across the radio network to the Orange County Sheriff's Department state-of-the-art Mobile Command Center (MCC). This MCC is a semi-tractor trailer with generated power and patch panels for video, data, and radio needs, including more than a dozen high-definition monitors positioned both internally and externally.

This quick deployment of a high-speed video data network provided valuable knowledge that both the RACES team and the public agencies can apply to future events and critical emergencies.



**Article continues  
on page 15**



For more info on Broadband Ham-Net mesh networks, go to:

<http://www.broadband-hamnet.org/>

OR

<http://www.aredn.org/>

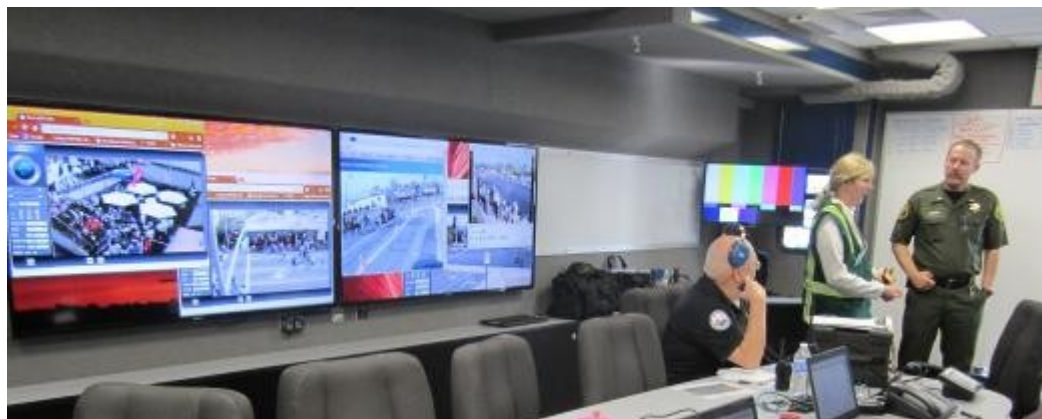


Figure 3

*From left to right: AREDN video feeds, WA6BJY RACES Net Control, CERT, San Juan Capistrano Chief of Police Lt. Scott Spalding in main work center of Command vehicle*

## Deploying AREDN

This article describes the details of how to build an AREDN™ network. A similar network was successfully deployed by Tri-Cities Radio Amateur Civil Emergency Services (RACES) to support the City of San Juan Capistrano, CA's annual Swallows Day parade. This configuration could be used to monitor events or emergency instances in almost any setting.

This configuration included six, high resolution IP (Internet Protocol) cameras positioned across the downtown area to provide live video to the Mobile Command Center (MCC). The Sheriff Department's Command and Dispatch Center monitored the video feeds enabling "extremely valuable" direct visual situational awareness of the event.

### AREDN RACES/CERT Sheriff Partnership

The Tri-Cities (San Juan Capistrano, San Clemente, and Dana Point) RACES and San Juan Capistrano Community Emergency Response Team (CERT) have actively supported city events for many years. Joe Lopez, W6BGR, Chief Radio Officer, previously took an interest in Broadband-HamNet™ (BBHN) and its successor, AREDN focusing on emergency communications. This interest led to a demonstration of four IP cameras deployed to the San Juan Capistrano Annual Tree Lighting Celebration in December 2014. This introduced the Sheriff's Department leader-

ship to the capability, which resulted in a closer partnership and further integration of all of these resources into the command center for the Swallows Day Parade, the city's biggest annual event.

### Equipment

The equipment used consisted of several Ubiquiti 5 GHz and 2.4 GHz AirMax 802.11 devices and antenna options. A typical station setup included:

- 10' pole or taller extension poles where height may be an important factor to achieve line of sight links.
- Clamp-on IP Cameras (ipCam) configured with single POE (Power over Ethernet) cat5 cable for both network and power connections.



## Deploying AREDN, Cont'd

- One (or two for relay station) Ubiquiti nodes with antenna choice for coverage area necessary at a given location.
- Power source for each device.
- Miscellaneous cat5 cables, power connectors, passive POE splitters, and Ubiquiti power bricks.
- Small network switch for three network connections in

“relay” stations with enclosure.

In the San Juan Capistrano setting, the downtown coverage area is within a square-mile area with numerous trees and two-story buildings. The primary consideration was how to design the aggregation of video streams to ensure sufficient bandwidth for smooth streaming video into the command center. Dual-channel antennas were selected to maximize data

throughput. High-gain antennas (e.g., large grid dishes) were not selected because of the close-in distance and the unwanted attention they would attract.

The stations were set up by selecting the Ubiquiti node (s), Antenna, and ipCam for rapid clamp on and assembly. By maintaining an inventory of these “building blocks” for future use, a station can be instantly assembled to meet the needs of a given situation.



Figure 4

*The W6SOI AREDN “Ruby’s” Station B with ipCam and Ubiquiti NanoStation M2 positioned over key intersection and across the street from the ‘Swallows Bar’, a known hot spot*



Article continues on  
page 18

## AREDN, Cont'd

### ipCam Config

The ipCams in use were high-definition 720p from SriCam with PTZ (Pan-Tilt-Zoom) capability. (A special note for the generous contribution of Don Hill, KE6BXT from Mission Viejo RACES, for his time and loan of four of these

ipCams and several Ubiquiti nodes.)

The mounting configuration included the following parts:

- Medical device clamp (found at a local swap meet)
- Electrical box (from local hardware store) with choice of several sizes

- Passive POE splitter (from numerous online sources)

Be sure to carefully confirm that all devices receive proper power. For example, the Sricam model we used will not function if plugged into higher voltages (e.g., from the Ubiquiti 24v power bricks).



Figure 5

*ipCam with clamp on mount*



Article continues on page 19

## AREDN, Cont'd Some More

### Switch Box

A switch is required when three or more devices are connected at a given station. This allows for multiple ipCams at a station, and also enables multiple AREDN nodes.

This configuration relieves contention for frequency space. Rather than a single node spending 50 percent of the time receiving data and 50 percent of the time sending data, two nodes allows one node to spend 100 percent of the time receiving data, and the other to spend 100 percent of the time sending data. The two nodes must be on different bands or separate channels to relieve frequency contention. Data is

automatically routed over a cat5 cable through the switch between the nodes with the Device-to-Device Link (DtDLink) capability built into AREDN.

The preferred switch is one compatible with 802.1q or VLAN capability. The Net-Gear GS105E switch is frequently used with VLAN capability. This “smart” switch can be configured to segment packets between designated nodes and devices. This enables an ipCam plugged into the switch to communicate only with the one node the switch is configured to talk to.

When a “dumb” switch is in use, all the devices plugged in see all packets from all other

devices. This requires special settings on the AREDN nodes—only one node should have the LAN DHCP turned on (a box checked in basic setup). When multiple nodes have the LAN DHCP turned on, the ipCam may receive an IP address from any of the nodes. It's inevitable that the ipCam will not receive an IP address from, and be able to, talk to the node preconfigured to advertise the ipCam across the network. Thus, when using a “dumb” switch, this extra step to turn off LAN DHCP on all but one node is necessary.

While the switch could be mounted in the open, a weather-proof enclosure is recommended.



Figure 6

*“Dumb” switch connecting two Ubiquiti nodes and one ipCam in weather proof enclosure (two passive POE splitters not shown in this picture)*

**Article continues  
on page 20**



## Mobile Command Center

The Orange County Sheriff's Department sustains two state-of-the-art Mobile Command Centers. These semi-

## AREDN

tractor trailer trucks are complete with generated power and patch panels for video, data, and RF needs. Over a dozen HD monitors are positioned throughout the vehicle internally and externally. There are 3 sections in the vehicle:

- Main work center for Incident Command, Logistics, Finance, and Media Relations
- Command Office
- Technology Center (patch panels, generator control, etc.)



Figure 7

*AREDN video feeds shown in the Sheriff's Dispatch Center (Command Office). Selected video feeds can be shown on any monitor in the truck.*

## Network Design

The downtown area of San Juan Capistrano included numerous vendors with tents setup in areas not on the direct parade route. Trees upwards of 60' and heavy foliage encased all green areas. The network design relied on

line of sight down the streets with two strings of three nodes each and respective ipCams, making six total ipCams. Refer to Figure 8 of the Google map showing station locations with the respective frequencies in use.

The video stream was combined and forwarded at relay nodes. For example, the

video from Stations G and H were combined with the video stream at Station F, and then transmitted to Station E.

**Article continues  
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Figure 8  
Station locations and  
path frequencies



Figure 9  
KE6BXT and W6BGR Station G with  
Rocket M5 and Bullet M2 relay



Figure 10  
The KI6IZE "Adobe" Station A with  
NanoStation M2 and hitch mount  
across the street from the Adobe Bar,  
another after parade hot spot



Figure 11  
2.4Ghz NanoStation Station D and  
5Ghz Rocket Station E with dual-  
channel flat panel antenna receiving  
video streams from two strings of  
ipCams across the San Juan  
Capistrano downtown parade route

Figure 11 shows the command vehicle external network patch panel, which was located just inside an easily-accessible right rear side compartment. After connecting two 25' cat5 cables, the Ubiquiti nodes were set up on a tripod in the parking lot. A network patch panel in the vehicle technology center connected the nodes to laptops at the main work center table. An opening below the tree foliage enabled line of site to the neighbor nodes.

## AREDN

### Lessons Learned

The setup and environment enabled high-quality video streams for five of the six ipCams. The video streams were smooth throughout the day for the five cams. There were several lessons learned:

- The environment can be unpredictable. Station A was unable to stream video through line-of-sight to Stations B or C with over 35 SNR signals from those stations. However, to our surprise, Station A was able to stream lower quality video directly to Station E (a NanoStation with sector antenna pointing in the opposite direction and heavy tree foliage blocking the path).
- Four high-quality video streams can be successfully received through a single node. In this case, through Station E, a NanoStation M2 with a dual channel antenna.
- Know your equipment. The ipCams were relatively new.

Sheriff's Department personnel made several requests to position, zoom, and focus the cameras. There were two fights, one arrest, and ambulances assisted two incidences. In each situation, the activity occurred in proximity to an ipCam and was keenly observed by commanders. Our ability to manipulate the cameras and keep images in focus had room for improvement.

- Prepare to maintain performance. One of our laptops was under-powered to handle the multiple HD video streams. This caused additional delay to remote control of the ipCams.

- Determine the video quality that is actually needed. 720p HD quality video was sustained for the event. A lower quality video stream may still be sufficient.

A follow up review with the Sheriff's Department is scheduled to discuss a long-term plan and improvements for future events. They

viewed the video service as "Extremely valuable," and that it is part of "the future of police activity."

### Summary

The event was enjoyed by all and allowed many of us to sit in the Command Center in a prominent role for the first time. We all look forward to expanding our capabilities for the next event.

#### Tri-Cities RACES

W6BGR Joe Lopez,  
Radio Officer

W6SOI Phil Greenberg  
KI6IZD Drew Holtz

KI6IZE Clark Croisette  
WA6BJY Gray Bickford

#### Mission Viejo RACES

KE6BXT Don Hill  
AE6XE Joe Ayers

#### Article by:

**Joe Ayers (AE6XE)**



## Orange Section ARES Letter

I want to first introduce John Shepherd, AD6NR, and Mike Anderson, W6OSO. John is the Assistant Section Emergency Coordinator overseeing operations in Inyo County and Mike is the Assistant Section Emergency Coordinator, overseeing operations for Riverside County. John has already been busy establishing a MOU between Inyo and Mono counties and the Nevada Section of ARRL/ARES. Mike is active with several different groups in Riverside County. Please give them both your support as they assist in guiding the growth of the Orange Section ARES organization.

The 5th Annual ARES Seminar and Training is scheduled for August 1st in the City of Perris. Scheduled thus far is Lecia Elzig, Chair of the Riverside County VOAD. She will be giving a presentation on the various agencies involved in VOAD. Riverside County VOAD has decided that ARES will be the “go to” communications group to support the various agencies involved in VOAD. Also scheduled is an interactive Table top exercise, “Vortex Mayhem” hosted by the Disaster Resistant Communities Group based in Tallahassee, FL. More information will be coming, but for now SAVE THE DATE, Saturday, August 1, 2015.

If you haven't heard, the ARES Manual has been updated. The updated and revised Amateur Radio Emergency Service Manual has been posted on the ARRL Web page in PDF format. Anyone that wishes may print the manual or save it to your own device for future reference. The manual can be found on the ARRL website at <http://www.arrl.org/ares>. The new ARES Manual includes several new additions such as the inclusion of ICS forms for ARES use; an expanded discussion on training resources; clarification on the role and purpose of RACES; and copies of all current ARRL MOU's. Please take a look at the new manual as it is the first update in over 20 years.

Anyone wishing to register for ARES may do so by going to the Orange Section website at <http://www.orange-arrl.org> and clicking on the Orange Section – ARES Registration/Login and create a user profile. This will enable you to receive any updates regarding alerts or announcements from ARES leadership. If you are already an ARES member, but have not registered please do so. If you are not receiving notices please check the database and verify your profile.

Stay safe,

73,

Bob Turner, W6RHK

Orange Section Emergency Coordinator

## OCARC

The June issue of the Orange County Amateur Radio Club "RF" Newsletter has been uploaded to the OCARC web site at:

[www.W6ZE.org](http://www.W6ZE.org)

NOTE: The next OCARC Meeting is on Friday evening June 19th 2015 (third Friday) at the Red Cross Building at 7:00 PM. The main presentation will be by Chip Margelli (K7JA) on the huge:

"Arecibo Radio Telescope in Puerto Rico....."

His presentation will cover the Arecibo dish that is the stuff of legends, having been used for a number of exciting discoveries, including one discovery that brought a Nobel Prize in Physics to Dr. Joe Taylor, (K1JT). Don't miss it.



Field Day is coming up fast at the end of June on Friday June 26 (set-up) and June 27 and June 28. Mark your calendar. See Page 3 through 10 of our newsletter for details.

Bob (AF6C) has a TechTalk article explaining "Choosing Disc Ceramic Capacitors:". See Page 17 of our newsletter.

Corey (KE6YHX) has prepared a continuing article on a "Lightning Protection Supply Checklist". See Page 15 of the newsletter.

Arnie (N6HC) is managing an Estate Sale for an OCARC SK that still has plenty of lightly used ham gear for sale. See Page 25. of the newsletter.

The ARRL South-Western Division Convention is coming on September 11-13th to Torrance. See Page 27 our newsletter for details.

This month Tom (W6ETC) was a club first time "rotating editor" of the OCARC newsletter. Tom is a "heck of a first time edi-

tor" and has prepared a newsletter packed with a huge amount of information for club members this month. Thanks Tom!!

The OCARC nets need your support....

On Wednesday evenings: OCARC 10M net (28.375 MHz) starts at 7:30 PM.

The 2M net starts at 8:30 PM on 146.550 MHz (simplex).

Hope to hear you on the nets.

As a final reminder, don't forget that the OCARC monthly combined-breakfast-and-Board-meeting is open to all members and visitors. The next breakfast is the first Saturday of the July, July 4th, at 8:00 AM.

The breakfast location for June is the Marie Callender's Restaurant at 2525 North Grand Ave, in Santa Ana, (North of 17th Street). See the page 2 of RF and the website for location information and details.

For a map to the location click the link [here](#).

....de Ken W6HHC  
OCARC WEBMASTER

The Chip (KJ7A) presentation will cover the Arecibo dish that is the stuff of legends, having been used for a number of exciting discoveries, including one discovery that brought a Nobel Prize in Physics to Dr. Joe Taylor, (K1JT).

**Don't miss it.**



## Fullerton Radio Club

The June 17 club meeting will include a presentation by David Holt (N6VZB).

David is an active electronic technologist with over 40 years of experience in electronic components, systems, and applications.

He holds numerous certificates in the field of electronics including a Masters in Electronic Technology with concentration in microprocessors. He is a licensed amateur radio operator holding an Extra class License, (N6VZB). David has held several positions in electronic applications, technical marketing and sales.

He is currently employed as a product development manager with B&K Precision headquartered locally in Yorba Linda, CA. B&K Precision provides a wide range of test and measurement equipment used by industry and hobbyists.

David enjoys the challenge of making difficult electronic topics easy to understand and applicable in every day life. He will target this presentation for people new to the hobby with something for the experienced engineers at the end.

### DC Power Supply Basics

This presentation will be beneficial to anyone new to electronics, amateur radio, or to those wanting to learn more about how electronic things work.

Attendees of this presentation will:

- \* Understand how household power is generated and the AC waveform it produces.

- \* Learn how DC power supplies change household AC outlet power into battery-like DC power.

Recognize what simple building blocks inside the power supply work together to change AC to DC power.

- \* How to identify basic components inside a common DC power supply used for amateur radio and other products.

- \* Recognize common schematic symbols used for power supplies and other electronics.

- \* Learn the differences and benefits of linear and switching DC power supplies.

- \* Learn about new power supply technologies and its benefit to hobbyists and industry.

This presentation features animated graphics and audience participation with hands-on interaction.

Mathematical theory is minimized and replaced with visual examples and discussions focusing on the benefits to the end user.

**NOTE: This will be a special meeting with B&K Precision providing a door prize for FRC club members, with value over \$100!**

FRC's meetings are held on the third Wednesday of each month at the Chapman Activity Center 2515 San Carlos Dr. Fullerton, CA

The next Regular Meeting Wednesday, June 17 at 7:00 PM. Dinner before the meeting at 5:00 PM at: Coco's Restaurant, 1011 N. Harbor Blvd. Fullerton.

Click [here](#) for a map to the location.

Visitors are welcome



## From Pub to Club—Starting a Ham Club

From Pub to Club, Starting a Ham Radio Club

Disclaimer: This paper was intended to be a brief overview to migrate an informal ham radio group to become an organized club with the intent to become an ARRL Affiliated Club but information for tax status and liability must be included as a guide to decision making. If you or your group have intentions of becoming a club, the information is helpful but you are on your own to study the legal issues to determine your course of action.

-----

You are meeting up with a bunch of buddies for coffee and lunch, some of the guys are bringing projects for a little show n tell so you have arranged for a large table at a pizza restaurant, hoping the other diners don't get scared of the weird contraptions at the table. These 'meet-ups' can last a few hours during which many topics are discussed from ham radio, micro chips, mentoring and answering repair questions to fix the vintage BoomWave amplifier. Each meet up has a wide range of topics and always lots of comraderie and conversation.

Why should this coffee group want to become a

ham radio club when the meetup group is successful?

There are no officers, dues or politics, no liability and the meeting time and location are flexible. On the opposite side, there is no public recognition for the club making it hard to recruit new members and its doubtful if the group would get donations or door prizes. Meeting locations could be a problem if proof of group liability insurance has to be presented but so far the restaurant manager has been cooperative and the food is good.

A Club is an organization for people who have a common interest in a particular activity or subject. An organization might have officers, a place to meet, scheduled meetings with materials or hardware to use or share. Without connection to a strong national organization the future of the club could be in doubt while an ARRL Affiliated club has benefits to help the club organize, advertise and grow and a voice thru their ARRL representative to voice an opinion or idea for the benefit of everyone. Reference the list of Affiliated Club benefits below.

It is possible your club will collect substantial revenue over a year and this is

where a grey area begins about reporting income to the IRS.

Two basic ideas behind incorporation is liability protection for individual members and not-for-profit tax status allowing monies collected to be used for club activities and not paid in taxes to the IRS. Each situation is different so the answer to incorporation is up to the club organizers to research and do what is best for their situation. The two web links below are sources for additional information on those subjects.

<http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/Exemption-Requirements-Section-501%28c%29%283%29-Organizations>

<http://www.irs.gov/Charities-&-Non-Profits/Other-Non-Profits/Social-Clubs>

The ARRL Affiliated Club application does not require incorporation but recommends a minimum of 4 members to fill the club officer seats, President, Vice President, Secretary and Treasurer.

**Article continues  
On page 27**



## Starting a Ham Club, Cont'd

Links follow where these questions are discussed, they should be very helpful to your group.

<http://www.eham.net/ehamforum/smf/index.php?topic=5252.0>  
<http://forums.qrz.com/archive/index.php/t-465008.html>

<http://smallbusiness.chron.com/would-club-become-incorporated-3937.html>

Applying for Affiliated Club status is not too difficult. Begin by accessing the following links for the application and contact your section manager as a heads up and assistance.

<https://www.arrrl.org/files/file/Clubs/Starting%20a%20New%20Club.pdf>  
<http://www.arrrl.org/clubs>  
<http://www.arrrl.org/affiliated-club-resources>

The next installment of this article will include more details to complete the application process by

using an actual application.

Until next month, Bill Prats (K6ACJ) ACC ORG section.

**Article by:**  
**Bill Prats (K6ACJ)**  
**ACC ORG Section**

### References:

**Incorporation:** One of benefits of becoming a non-profit corporation is that you can raise money, receive donations and apply for government grants. Non-profit status enables you to do things as simple as selling raffle tickets, holding auctions and selling old radio gear.

**Summary of the Benefits of Affiliated Club Status:**

- Mailing Lists at no or low cost
- Club Commission Program, receive club income for new ARRL

member subscriptions and renewals

- Liability Insurance Program up to \$2,000,000 coverage
- Ham Radio equipment insurance
- Library Book Sets
- E-Mail forwarding
- ARRL Annual Report
- Referrals of Prospective Radio Amateurs
- 50% discount in Club Advertisements in QST
- Assistance planning an ARRL hamfest or convention
- Advertise your events
- Special Services Clubs
- Club Call Sign assistance
- Amateur Reports for Clubs

