



# RF



## ORANGE COUNTY AMATEUR RADIO CLUB, INC.

VOL. L NO. 8

P.O. BOX 3454, TUSTIN, CA 92781-3454

August 2009

### The Prez Sez..... by Nicholas AF6CF



QST, QST, QST

August is here!

With the big event of Field Day and its fantastic results over, we now head into more fun with great speakers, many contests, the club auction in October and the Christmas party in December.

There are also lots of opportunities to serve in our community.

Speaking of events, the Orange County Astronomers has awarded our own Bob Evans, WB6IXN with a plaque and certificate of appreciation for being their Elections

Manager for the last 20 years. Our congratulations to Bob for a job well done!

The OC Fair was a great success with the attendance even higher than previous years. We are happy to be part of this and many other events. See page 13 for a related article.

I look forward to seeing you all at our next General Meeting. Until then.

73

DE AF6CF

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Check out the "Cheap HDTV Antenna" on Page 7. Now there is no more justification for those high cable fees...

HIHI

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### August Speaker

Brian Thorson - AF6NA of Southern California Edison will be our speaker at the August General Meeting.

*Brian Thorson, AF6NA, is an expert when it comes to Electro-Magnetic Interference. His presentation talks about ordinary appliances we use everyday, that create interference on our radio equipment. Also, he will be talking about the delivery system and support structures SCE uses to deliver power to our homes.\**

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The next general meeting will be:

**Friday, August 21<sup>st</sup>  
@ 7:00 PM**

We will be meeting in Room 208  
In the east Red Cross Building

**ORANGE COUNTY  
AMATEUR RADIO CLUB**  
[www.W6ZE.org](http://www.W6ZE.org)



**2009 Board of Directors:**

**President:**

Nicholas Haban, AF6CF  
(714) 693-9778

[AF6CF@w6ze.org](mailto:AF6CF@w6ze.org)

**Vice President:**

Kristin Dankert, K6PEQ  
(714) 544-9846

[K6PEQ@w6ze.org](mailto:K6PEQ@w6ze.org)

**Secretary:**

Kris Jacob, KC6TOD  
(562) 691-7898

[KC6TOD@w6ze.org](mailto:KC6TOD@w6ze.org)

**Treasurer:**

Paul Gussow, W6GMU  
(714) 624-1717

[W6GMU@w6ze.org](mailto:W6GMU@w6ze.org)

**Membership:**

Bob Eckweiler, AF6C  
(714) 639-5074

[AF6C@w6ze.org](mailto:AF6C@w6ze.org)

**Activities:**

Dan Dankert, N6PEQ  
(714) 544-9846

[N6PEQ@w6ze.net](mailto:N6PEQ@w6ze.net)

**Publicity:**

Ken Konechy, W6HHC  
(714) 744-0217

[W6HHC@w6ze.org](mailto:W6HHC@w6ze.org)

**Technical:**

Hank Welch, W6HTW  
(562) 697-2239

[W6HTW@w6ze.org](mailto:W6HTW@w6ze.org)

**Director-At-Large:**

Rich Helmick, KE6WWK  
(714) 343-4522

[KE6WWK@w6ze.org](mailto:KE6WWK@w6ze.org)

George Jacob, N6VNI  
(714) 639-2425

[N6VNI@w6ze.org](mailto:N6VNI@w6ze.org)

**2009 Club Appointments:**

**W6ZE Club License Trustee:**

Bob Eckweiler, AF6C  
(714) 639-5074

[AF6C@w6ze.org](mailto:AF6C@w6ze.org)

**Club Historian:**

Bob Evans, WB6IXN  
(714) 543-9111

[bobev@netzero.net](mailto:bobev@netzero.net)

**RF Editor (rotating):**

Nicholas Haban, AF6CF  
(714) 693-9778

[AF6CF@w6ze.org](mailto:AF6CF@w6ze.org)

**WEB Master:**

Ken Konechy, W6HHC  
(714) 744-0217

[W6HHC@w6ze.org](mailto:W6HHC@w6ze.org)

**Assistant WEB Master:**

Bob Eckweiler, AF6C  
(714) 639-5074

[AF6C@w6ze.org](mailto:AF6C@w6ze.org)

**ARRL Awards Appointee:**

Arnie Shatz, N6HC  
(714) 573-2965

[N6HC@aol.com](mailto:N6HC@aol.com)

Larry Beilin, K6VDP  
(714) 557-7217

[K6VDP@aol.com](mailto:K6VDP@aol.com)

**OCCARO Delegate:**

Steve Brody, N1AB  
(714) 974-0338

[stevebrody@sbcglobal.net](mailto:stevebrody@sbcglobal.net)

**Monthly Events:**

**General Meeting:**

Third Friday of the month  
at 7:00 PM  
American Red Cross  
601 N. Golden Circle Dr.  
(Near Tustin Ave. & 4<sup>th</sup> St.)  
Santa Ana, CA

**Club Breakfast:**

First Saturday of the month  
at 8:00 AM  
Jagerhaus Restaurant  
2525 E. Ball Road  
(Ball exit off 57-Freeway)  
Anaheim, CA

**Club Nets (Listen for W6ZE):**

7.086 ± MHz CW **OCWN**  
Sun- 9:00 AM – 10 AM  
Rick KF6UEB, Net Control

28.375 ± MHz SSB  
Wed- 7:30 PM - 8:30 PM  
Bob AF6C, Net Control

146.55 MHz Simplex FM  
Wed- 8:30 PM - 9:30 PM  
Bob, WB6IXN, Net Control

**VISIT OUR WEB SITE**

<http://www.w6ze.org>

for up-to-the-minute club  
information, the latest  
membership rosters, special  
activities, back issues of RF,  
links to ham-related sites,  
vendors and manufacturers,  
pictures of club events and much  
much more.

**Club Dues:**

Regular Members ...\$20  
Family Members\* ...\$10  
Teenage Members ..\$10  
Club Badge\*\* .....\$3

Dues run from Jan thru Dec and are  
prorated for new members.

\*Additional members in the family of  
a regular member pay the family rate  
up to \$30 per family.

\*\*There is a \$1.50 charge if you'd  
like to have your badge mailed to  
you.

## UPCOMING EVENTS

**August 21, 2009**

### “Electro-Magnetic Interference”

Brian Thorson - AF6NA of Southern California Edison will be our speaker in August. *Brian Thorson, AF6NA, is an expert when it comes to Electro-Magnetic Interference. His presentation talks about ordinary appliances we use everyday, that create interference on our radio equipment. Also, he will be talking about the delivery system and support structures SCE uses to deliver power to our homes.\**

\* From ARLAB website.

**September 18, 2009**



### “General Meeting”

The program for the September meeting is tentatively going to be a DXpedition presentation by Bob Grimmick - N6OX.



**October 3, 2009**

### Club Breakfast and Board Meeting

The club breakfast is normally held on the first Saturday of each month. It is an open meeting; members and visitors are welcome and encouraged to join us. For breakfast time, location and map [Click here](#).



October 16, 2009

## **“2009 OCARC Annual Auction”**

The annual club auction was held at our regular meeting time and place. Items are limited to radio and electronic equipment only. Registration begins at 7:00 PM.

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November 7, 2009

## **Club Breakfast and Board Meeting**

The club breakfast is normally held on the first Saturday of each month. It is an open meeting; members and visitors are welcome and encouraged to join us. For breakfast time, location and map [Click here](#).

November 20, 2009

## **“General Meeting & Elections”**

Gordon West - WB6NOA will tentatively speak at our November general meeting. The November meeting is also when the club elections are held. If you'd like to participate on the Board please contact one of the current officers. There are numerous starter positions that are neither hard nor time-consuming. Participation is a good way to support our club.

# OCARC General Meeting Minutes

July 17, 2009

The OCARC July General Meeting was held at the Red Cross complex in Santa Ana at 7:00 pm on Friday evening July 17, 2009. There were a total of 51 members and guests present. There was a quorum with all directors present.



Our guest speaker was Dennis Kidder W6DQ his program was "Radio Astronomy for Radio Amateurs." Dennis shared with the group his many years of radio astronomy giving a rich background of all the significant participants.



Dennis told us that 2009 is the International Year of Astronomy. The 400<sup>th</sup> Anniversary of Galileo in 1609. The International Astronomy Union is showing the "Universe is Yours to Discover".

A tidbit of info for you....

- Galileo-(1564-1642), Italian physicist and astronomer. One of the founders of Europe's scientific revolution, his main contributions include the application of the telescope to astronomy and the discovery of the laws of falling bodies and the motions of projectiles. American unmanned spacecraft designed to orbit Jupiter and send a probe into its atmosphere. Launched on October 18, 1989, from the space shuttle Atlantis.

Dennis' presentation was terrific showing the link between Amateur Radio and Astronomy.... Thank you, Dennis.

Paul W6GMU gave the Treasurer's report with balance on hand of \$5,100.00 and that the club is solvent.

A report on Field Day was an overall general consensus of FANTASTIC and that Field Day was a very good show.

Motion to adjourn made by Paul W6GMU, seconded by Larry K6YUI, meeting adjourned 8:40pm.

Raffle to follow.

Respectfully Submitted by:  
Kristine Jacob KC6TOD  
OCARC Secretary

## **Two OCARC Members Invited to Talk at ARRL TAPR Digital Communication Conference on Digital-ATV**

Ken-W6HHC and Robbie-KB6CJZ have been invited to make a presentation on Digital-ATV at the 2009 ARRL TAPR DCC conference that will be held in Chicago in September. Rather than fly to Chicago, Ken and Robbie will be making the presentation remotely, using Skype and WebEx to narrate a PowerPoint presentation.

### **2009 ARRL TAPR Digital Comm Conference**



### **Planning a DATV Station on DVB-S**

by

• Ken Konechy      W6HHC  
W6HHC@ARRL.net

• Robbie Robinson      KB6CJZ  
KB6CJZ@ARRL.net



# Cheap HDTV Antenna that works

Richard Thompson, WA6NOL \*



**Searching the Internet I found details to making a DB8 antenna from wire coat hangers.**

You can see a short video at this link  
<http://www.youtube.com/watch?v=EWQhImJTMzw> .

## TV Antenna Plans

### How to Make a TV Antenna for HDTV.

Commercial DB4 Antenna

TV Antennas do not need to be complicated or expensive.

There are some simple yet effective TV Antenna designs that can be built at home with parts you may already have around your house.

#### ***Build a HDTV Antenna***

One of the most effective "**Build Your Own HDTV Antenna**" plans is based on a design called the DB4. The DB4 is regarded as one of the better "general use" designs for pulling in HDTV signals in many situations.

DB4 antennas are available commercially starting around \$40 and up, but here I will show you how to build your own for much less than that.

#### Build your own HDTV Antenna Plans

Here's what you need to get started:

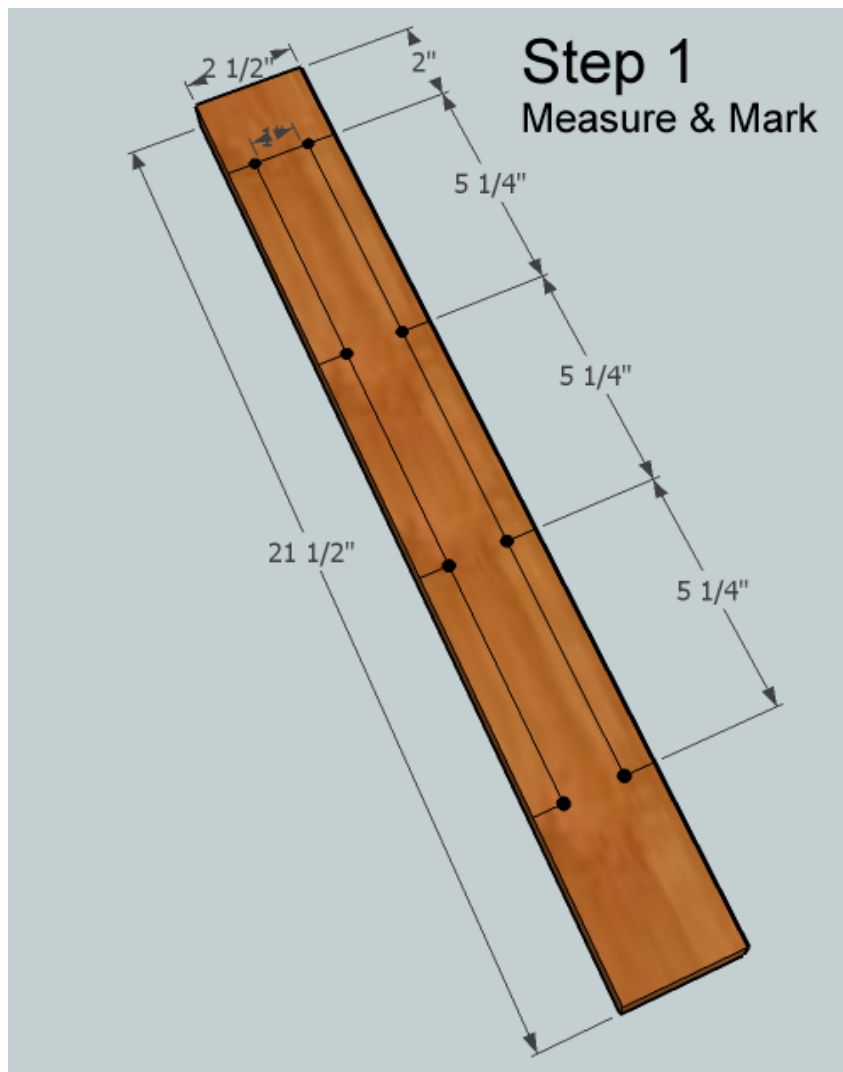
1. 22 inch section of 2x3 or 1x3 board
2. 18 Screws
3. 18 Washers, sized to fit on the screws to clamp down wire
4. 15 feet of wire. Roughly 5 feet of copper three conductor house wiring will do fine. Coat-hangers can work if stripped of paint at all connections.
5. Reflector grid (Mesh like reflective metallic material.) Two 15x9 grill screens work well for a few dollars.  
(See first video below.)
6. One Balun - A thing with a coax plug on one side, two wires with screw holes on the other. These are commonly used to attach old TV's to coax antennas (or cable.) They are inexpensive (I've seen them in bulk for as little as 30 cents each), and commonly available. My local dollar store carries them!

## Tools:

1. Drill
2. Screw driver, or screw bit for drill
3. Wire cutters
4. Pliers

**Step 1 - Find, Measure and Mark a piece of wood**

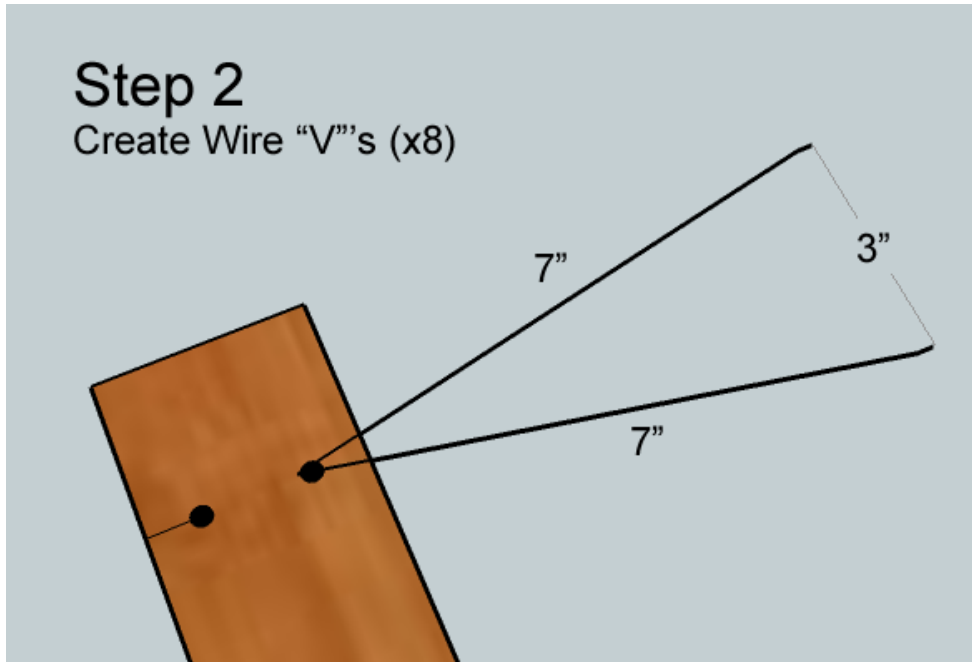
1. Find a board similar to a 2x3 or 1x3
2. Mark lines at the marks pictured below





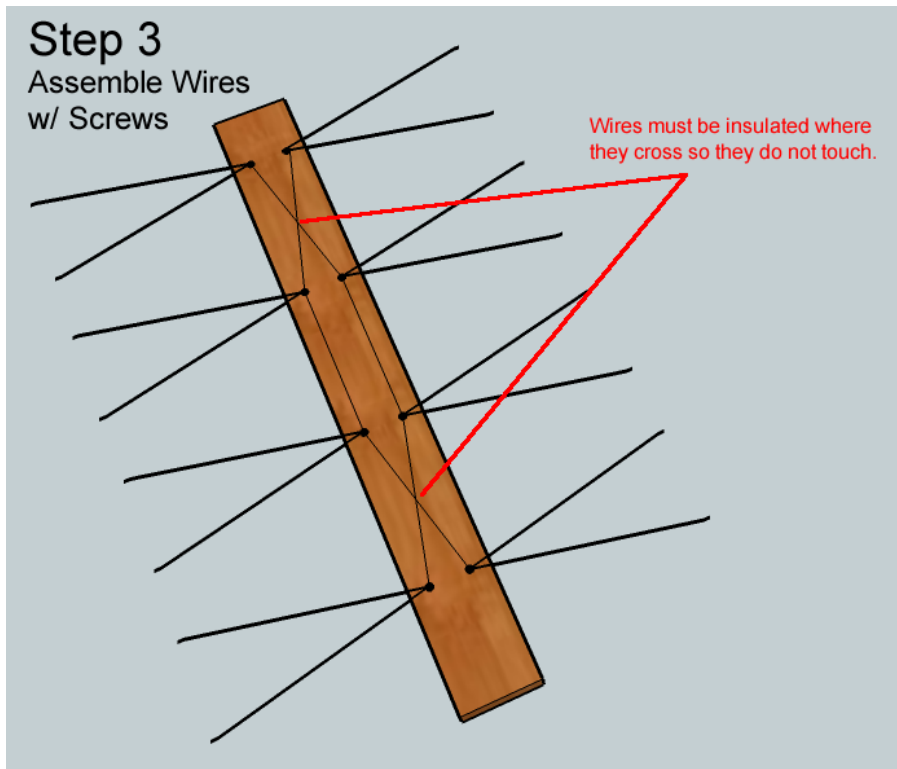
## Step 2 - Make 8 wire V's out of wire

1. Cut eight 14" long sections of wire.
2. Find the center, and bend each wire into two 7" long legs, with a 3" gap. (7" legs with a 3" gap is important!)



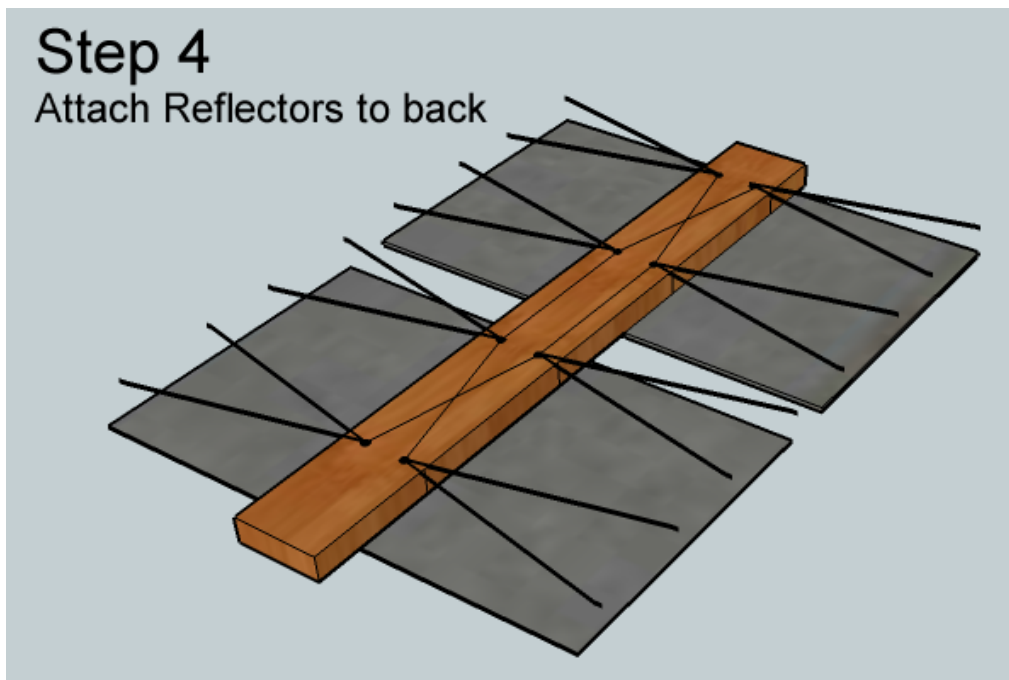
## Step 3 - Attach wires to board

1. Attach the "V" wires the to board using screws and washers, as shown in the image.
2. Zig-Zag the two connection wires down and across the center of the board as shown. It is important that when the wires cross each other, they do not touch.



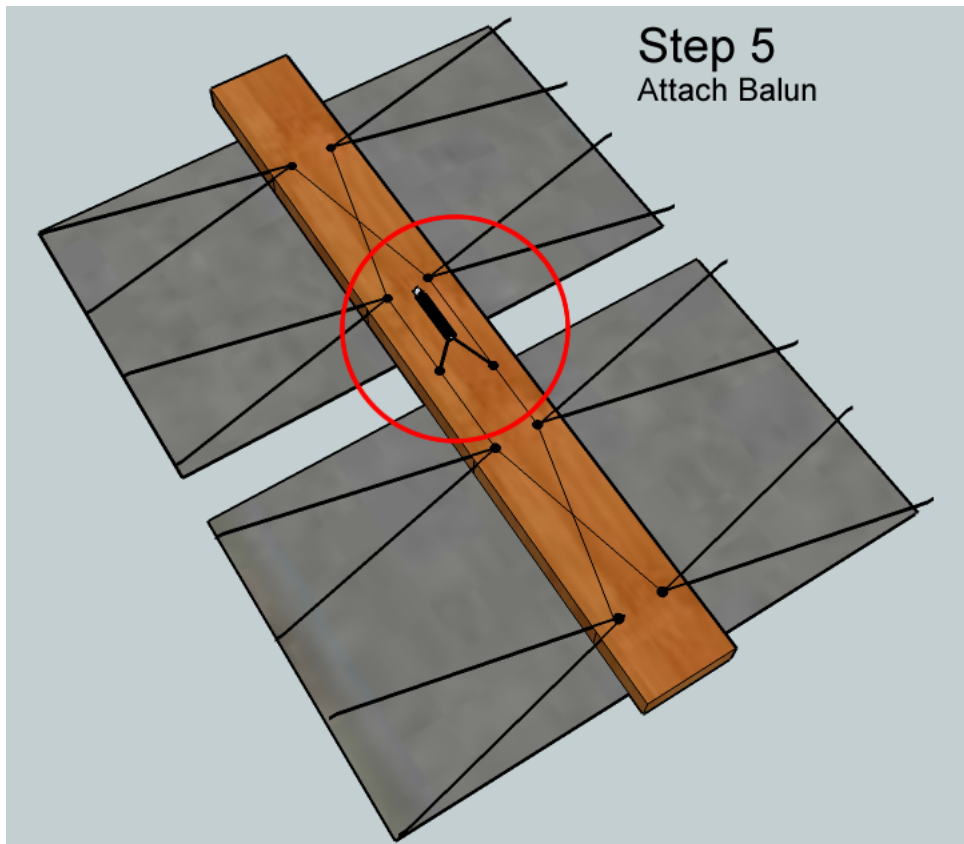
#### Step 4 - Attach Reflector

1. Attach the Reflectors to the back using screws. The Reflectors must not touch the "V" wires.



#### Step 5 - Attach the Balun

1. Attach the Balun to the two center sections of wire. Make sure the two connections do not touch each other.



### Step 6 - You're Done! Test your antenna!

1. Attach your antenna to your HDTV using a coax cable, and see how it works!

### These plans to ugly for you?

These plans are functional, but some people describe them as ugly...and they'd be right. The same core technical design and base measurements can be used in other ways. Here's one example I made:

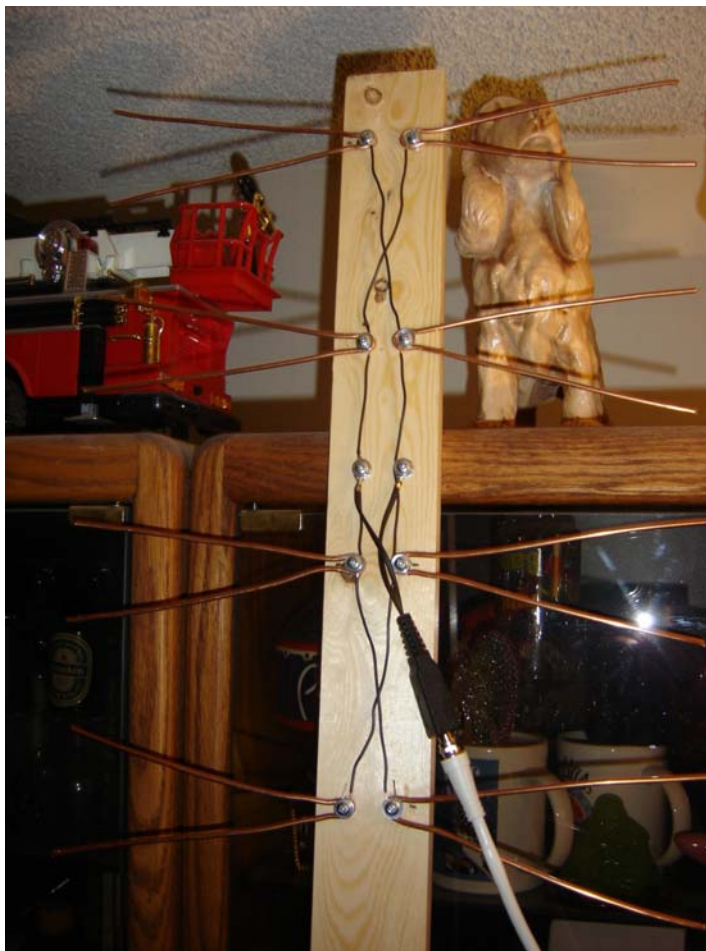


Here's the same core design, as a [mission style tv antenna](#).

***This is the one I built and it works great (below).***

***I used 18 gage wires house we only have plastic For the phasing network I wire. I cut the insulator in and slide apart and down with the balun. I did each connection to the punched the firing strip home improvement store. I about four inches from the it would not touch the buy the 75 Ohm to 300 Ohm Radio Shack ask for a 75 Ohm transformer because what a balun is.***

***After I connected my DB8 HDTV converter box I channels. The results were, than twice as many before. I got my \$40.00 amplified antenna they firing strip is cut down to inches then it could be attic on a small TV rotor.***



***because in my coat hangers. use hook up the middle screwed it the same for screws. I from my local only cut off firing strip so ceiling. If you balun from Ohm to 300 they do know***

***antenna to the scanned for it found more channels as back for the sold me. If the about 24 mounted it the***

***\*<http://www.tvantennaplans.com/>***

***Video <http://www.youtube.com/watch?v=EWQhlmJTMzw>***



## Orange County Fair Newsletter


### Article on

### Ham Radio Booth

The following article on the OC Fair Ham Radio Booth was written by Dan KI6X of OCCARO and front-paged in the OC Fair Newsletter called "IN THE LOOP":.

# IN THE LOOP

SUPER FAIR EDITION



Issue 21 - August 9, 2009

**TODAY @  
THE OC SUPER FAIR**

**PACIFIC  
AMPHITHEATRE**  
Three Dog Night  
8 p.m.

**ACTION SPORTS ARENA**  
Fiesta del Charro  
2 & 7 p.m.

**OC SUPER FAIR  
CLOSING 5K RUN/WALK**  
9-10 a.m.  
All grounds

**CLOSING DAY**  
10 a.m.-Midnight

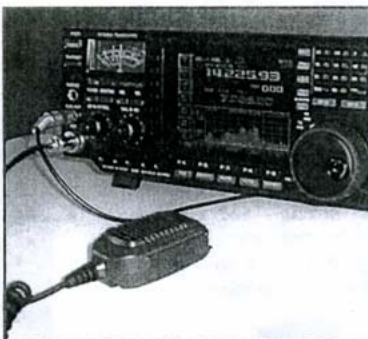
### THINK. HAM... RADIO

Ham radio, often known as amateur radio, is both a hobby and a service in which participants called "hams" use various types of radio communications equipment to communicate with other radio "hams." The OC Fair & Event Center is actually a regional emergency evacuation point, giving Ham Radio an important role when cell phone systems are down.

Every year, for the past 25 years, OC hams have staffed a booth at the Fair where they demonstrate various forms of emergency communications.

"We still use Morse Code, and kids love to send their names in dots and dashes at the booth," says Gordon

West, the booth chairman. "We have talked to nearly every state in the nation, and several foreign countries, with ham radio sets as small as a lunch box."







## OCARC

### Board Meeting Minutes

**2009-01-08**

#### **OCARC Board Meeting Minutes for: August 1, 2009**

The OCARC Board meeting was held at the JagerHaus Restaurant, 2525 East Ball Road, Anaheim, at 8:15AM Saturday, August 1, 2009. There were a total of 8 directors and visitors attending. There was a quorum of directors present, with the following directors absent: Dan N6PEQ, Bob AF6C, Rich KE6WWK, Hank W6HTW.

#### **DIRECTOR REPORTS:**

- Treasurer Paul W6GMU reported \$4865.99 and we are solvent.
- Kristin K6PEQ said speakers were covered through the end of the year; she is also looking into arranging for speakers for the first quarter of 2010 to assist the incoming Vice President. The August speaker is from Southern California Edison.
- Ken W6HHC reported for Bob AF6C that Bob reported 80+ members and is hoping to bring the number to 100. Ken also reported that there were 13 contributors to the Field Day pictures with many fantastic pictures of Field Day 2009. Ken also mentioned that he and Robbie KB6CKZ would be have their input on Digital TV, Radio TAPR republished through British Amateur Radio Magazine from England.

#### **OLD BUSINESS:**

- **RF Newsletter "Rotating" Editors**
  - August – Nicolas AF6CF
  - September – Paul W6GMU
  - October – Ken W6HHC

- November – Kristine KC6TOD
- **QSL Printing and Mailing** – the question was raised of having a contest
- **Guest Speakers** – Kristin has the remainder of the year covered and is looking into speakers for the first quarter 2010 to help incoming VP.
- **Morse code Class:** The class was a no show.
- **Field Day June 26<sup>th</sup>-28<sup>th</sup>, 2009**
  - Successful on all accounts
  - Food budget per Kristine KC6TOD was only \$44.00 over budgeted \$500.00 thanks to \$20.00 donations per person.

#### **NEW BUSINESS**

- Need to check into filing of paperwork with the State of California – corporation form. Kristine KC6TOD and Nicolas AF6CF to check into process
- Future Field Day opportunities:
  - Have data sheet
  - Checklist
  - Flow chart of information
- A listing of Club assets with locations needs to be created and kept on file
- Suggestion for refreshments for the September meeting with recommendations from Kristin K6PEQ and Kristine KC6TOD for cake and coffee. The logistics and expense for either pizza or sandwiches is not practical.

Meeting adjourned 9:10 AM

Respectfully submitted:

Kristine Jacob KC6TOD, Secretary



# SUBMIT AN ARTICLE

You don't need to write like William "Bill" Shakespeare in order to write an article for the RF Newsletter. In fact, we prefer articles without the words "Thy", "Whilst", "'Tis" and "Oft".

Do you have an idea for a newsletter article? Maybe you have acquired a new piece of equipment, designed or constructed a new antenna, took a trip focused around ham radio, want to share an amateur radio related experience or discuss a technical topic.

Why not write an article for the monthly RF newsletter? The article can be short or long, simple or elaborate, and can even include pictures!

The RF newsletter relies on articles from our members. So why not give it try? Write an article and send it to the newsletter editor. It's fun, and at the same time, your contribution helps support our club and hobby!

If you want you can also try your hand as the newsletter editor. We have a rotating editor monthly and would love to have someone new give it a try. There is a template and it is easy and fun!!



## PLEASE SUPPORT OUR SPONSORS

The following organizations support our club's events in numerous ways. Please consider them when making your Amateur

Radio and Electronics purchases:

### A&A Engineering

<http://www.a-aengineering.com/>

### ADI / Pryme Radio Products

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

### Burghardt Amateur Center

<http://www.burghardt-amateur.com/>

### The DX Store

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

### Elecraft

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

### Ford Electronics

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

### Ham 4 Less.com

<http://ham4less.com/>

### Ham Radio Outlet, Anaheim, CA

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

### Hamstore.com

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

### Heil Sound

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

### Hobby Radio stop

<http://www.bearcat1.com/scanners.htm>

### ICOM Elmer.Com

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

### M2 Antenna Systems

<http://www.M2inc.com/>

### MFJ Enterprises

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

### NGC Company / Comet

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

### Nifty Ham Accessories

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

### Photo QSLs.com

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

### Universal Radio

<http://www.universal-radio.com/>

### Vibroplex

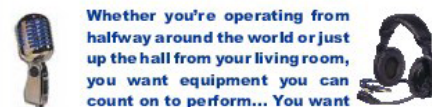
<http://www.vibroplex.com/>



**A & A Engineering**

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sales@dxstore.com

[www.dxstore.com](http://www.dxstore.com)



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