

APRIL 2010

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

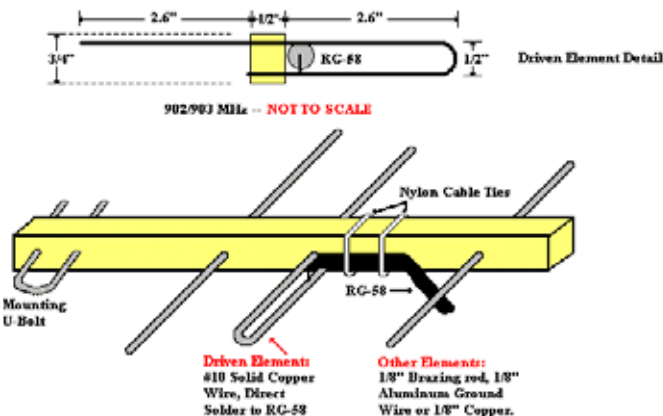
# SHORT SKIP



## EZ Build Yagis

Here are an assortment of the easy yagis in a variety of boom sizes, element numbers, and frequencies.

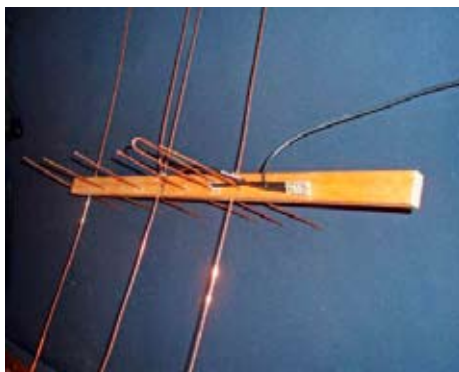
These should be passed around to show how simple it can be to build effective receive antennas for Arecibo moon bounce. (with the understanding that while materials seem rough, dimensions



are not. ) Some of these antenna photos are examples only, not of the band (432mhz) to be used, but examples of construction techniques.

Detailed dimensions and construction tips are here:

Here is the site of WA5VJB, with a lot of pertinent info on cheap yagi antennas:  
<http://www.wa5vjb.com/references.html>  
<http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf>



A hand held 6 element yagi on 432 may be adequate to hear Arecibo, if pointed at the moon.

A sound (RF/Antenna) check test from Arecibo is going to be done before the end of March. Showtime main event is April 16,17,18.

—73, de Pat Barthelow AA6EG

## Sustainability

The Santa Cruz County Chapter of the American Red Cross, SCCARC, is undertaking a new "sustainability preparedness" campaign.

"The Santa Cruz County Chapter will partner with the Santa Cruz County Farm Bureau and Agri-Culture to launch a County-wide preparedness campaign. Our goal: prepare every neighborhood in the County with the skills and equipment they need to survive a level 5 disaster (like the Loma Prieta Earthquake) by the year 2020. By combining the preparedness skills of the Red Cross with the sustainability skills of the Farm Bureau we will help residents learn to collect and purify their own water, grow small amounts of food, and generate their own power to create county resiliency to disaster."

And meantime today the Chapter also reports being short of funds, [http://www.santacruzsentinel.com/localnews/ci\\_14798584](http://www.santacruzsentinel.com/localnews/ci_14798584)

ARRL (the national association for amateur radio) and ARC both signed their new MoU, finally. That's good news.

Here's the online "press" from ARRL regarding the new MoU:

<http://www.arrl.org/news/stories/2010/03/30/11412/?nc=1>

The MoU document:

[http://www.arrl.org/news/files/ARRL-ARC\\_MoU.pdf](http://www.arrl.org/news/files/ARRL-ARC_MoU.pdf)

—73, Cap KE6AFE

**CLUB MEETING FRIDAY APRIL 16, 7:30PM**

## Treasurer's Report

The April 2010 Treasurer's Report presented to the Board of Directors showed that the SCCARC treasury had \$3,399.79 in cash and bank accounts. At that time all financial obligations had been met. The full Treasurer's Report will be available for review at the April 16 Club meeting.

—Kathleen McQuilling, KI6AIE

## Looking for a good deal on hardware?

If you are looking for a hardware discount, Fastenal is one of the new places in Santa Cruz that caters to the trades. SCCARC has been offered a 15% discount on all items in store, or in catalog items (over 700,000)! Guy-wires, crimp-on hardware, stainless steel nuts and bolts for towers, and a variety of hardware and tools are available in the store and catalog.

For those of you who have been in Santa Cruz a while, Fastenal occupies Frank Carol's (K6BDK) old place. The store front is located on Bulkhead St. around the corner from the 107 River St. address, the corner of Water St. and River St. will get you close to the location. They are open 8am- 5pm M-F. Parking meters are enforced!

How do you get the discount?

Simply bring in this coupon, or your SCCARC Membership card, and know that you get the SCCARC Trade discount. Pay by cash, check or credit card. And, this also works in the Watsonville Fastenal location. Just have them contact the Santa Cruz store for the account information.

How easy is it?

Use the online catalog [ <http://www.fastenal.com/web/home.ex> ], call in your order, and it will be ready when you get there!

—73, Don - K6GHA

E-Mail: [K6GHA@sbcglobal.net](mailto:K6GHA@sbcglobal.net)



The recent session was as varied and stimulating as usual and as before it was only possible for me to capture a small portion of the dialog. I am always sorry to miss so much.

It is a very satisfying feeling that we ride on the shoulders of such great individuals as Wayne Green who published a small volume on HF projects that has retained so much value. Another great who is very much alive and well is Wayne Burdick N6KR. We examined one of his early products the SST40; a truly beautiful piece of engineering. It's no surprise to know that Waynes technical expertise is behind the great line of Elecraft products.

One of our merry band pointed out an error in a table of data on log-periodic antennas and found this same error repeated in several other publications. The value of great observation cannot be overstated. One topic was diode detection of an AM signal and the importance of the carrier component. Other snatches of conversation included antenna field strength measurements (Ron suggested trying the free software called FSM written by a VK). Many things we now take for granted used to be so special, take the case of band-spread dials for instance,

Ron's Eddystone 888A tuning was a real treasure in 1960. Rather exotic subjects included non-linear pre-conditioning and it was mentioned there were patents in this topic coming from UC Davis. Ron became non-linear himself in his praise of LT Spice for modeling just about anything involv-

ing electrons. The name of "Dirac" doesn't show up often in ham circles, it is conceived as pulse of infinite voltage and zero duration. Clearly a theoretical concept but an approximation becomes a useful tool for analyzing the behavior of circuits. To see how your filter behaves with a 10 kV, 1ns pulse, try software like LTSpice

So there you have it CAKE includes everything from the sublime to the ridiculous.

—Ron W6WO





**Fastenal**  
107 River Street  
Santa Cruz (Enter on Bulkhead St.)

SCCARC Active Members  
Bring in this coupon or proof of  
membership for your

**15% Discount**



By Art Lee WF6P

## CHATTER

I just returned from a rainy and cold week at our daughter's home in Sacramento. While there, had a chance to work some CW on my spare rig. It had been six months since we visited so I had to check the antenna and connections. Fortunately, the several large Oak tree branches that had fallen missed my wire. It isn't an easy dipole to keep in place, it being hoisted up to eyebolts on the second floor and no ladder safe enough to reach that height. Winter rains and winds had taken their toll with moisture and non-use of the gear. After enjoying several QSOs from east coast stations on 40 meters, my dits were failing me on my Iambic Racer paddle. My dahs were faulty as well. After many "AS" transmissions, I cleaned the contacts. Dragged the old note paper across the points and was happy with the results. For a while, that is. Knowing that other operators thought I was feeble or incapable of sending good code, I finally shut the rig down. Turning the MFJ tuner upside down, I spotted my note: "New batteries installed, Jan 1995." After a few minutes spent on the screws with my Swiss Army knife, I opened the cover to see the good old leaking batteries. Aha! Slapping in two new "C" batteries restored the keyer to its normal state. Of course the patient operators I had worked never knew that I was back on the air with good dits and dahs. Oh well, maybe they copied my call sign wrong.

After watching an old movie on TCM, I checked Wikipedia for the bio of the famous dancer/actress, Eleanor Powell. She was popular from the early 1930s to the '60s. She danced to tunes of that era with Fred Astaire (after he was famous for dancing with Ginger Rogers). A reference was made to one of her movies (comedy) where she tapped out a Morse Code message to a spy. While I didn't (yet) find it, it will be interesting. She was an accomplished tap dancer since childhood.

## In Honor of the AR88

Bonaparte once said that the essence of winning any battle is communications. Fortunately the British understood this very well and had superior overt and covert capabilities. In 1805, with the future of the English-speaking world at stake, the Royal Navy used their technology to demolish the combined navies of France and Spain.

Fast forward to 1941, Britain is virtually alone and the future of Europe is in dire peril. The US took a courageous step, in effect betting on the survival of Britain by supplying state of the art technology.. One such item was the HF receiver

Now several decades have passed and with the active encouragement of a local ham (and would-be curator of WWII radios) this same engineer's emotions gave way and an AR88 was acquired. It will need some serious TLC but somehow the effort will be a tribute to that radio and the single moment in time 61 years ago. Maybe without the AR88 and everything that came along with it, the world as we know it today would hardly exist.

Thank you Uncle Sam hats off to the AR88. What a Beauty !!

—W6WO



made by RCA known as the AR88. One may well conclude that this receiver played a vital role in victory.

Step forward to 1949, a young boy visits a local ham and sees an AR88 in action, it was a moment never to be forgotten and it became a turning point in his life. Three years later the boy passed the stiff entrance exam and gained a radio amateur license. Another decade passes and now a young engineer was to be found traveling the dirt roads of West Africa with a ZD2 call, a Heathkit DX 40 and an AR88. Now it should be mentioned that an AR88 weights about 90 lbs which was enough to ruin the rear springs of any car.



## SCCARC Board - 2010

<b>President</b>	Bruce Hawkins	AC6DN	689-9923
<b>Vice President</b>	Greta Steinbruner	KI6NTL	325-9482
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	Rich Olsen	W1WUH	464-7474
	Cap Pennell	KE6AFE	429-1290
	Jeff Watson	W6NA	
<b>K6BJ Trustee</b>	Allen Fugelseth	WB6RWU	475-8846

## MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz (linked to K16EH) K16EH 147.945- PL 94.8 Watsonville (linked to K6BJ) K6BJ 440.925+ PL 123.0 Santa Cruz (not linked) • SCCARC Net Monday 7:30 PM 146.79- /147.945- /147.180+ linked • SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Net	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8 and 443.600+ PL 110.9 linked
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond • SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (linked for net) • LP ARES / LPARC Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL123 (linked for net) Monterey • Monterey Co. ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.8) • NPSARC Net Wednesday at 8 PM on K6LY/R
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem.org) • LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2) • Amateur Radio Newslines broadcast Tuesday

• Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)

**FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>**

## SCCARC Calendar of Events

ARES Meeting (prior to club meeting)	Friday	Apr 19
SCCARC Meeting	Friday	Apr 19
Cake Meetings	Sat	Apr 10, 24
Board Meeting	Thursday	Apr 22
Short Skip articles due	Mon	May 10
SCCARC Meeting	Friday	May 21

## MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the **THIRD FRIDAY** of the each month (except December). Meetings are at Dominican Hospital, Education Center, 1555 Soquel Drive, Santa Cruz.

## NET CONTROL SCHEDULE

(Subject to Change)

4/12	Greta KI6NTL
4/19	Phil KE6UWH
4/26	Chris KG6DOZ
5/3	Tom K6TG
5/10	Greta KI6NTL
5/17	Phil KE6UWH

Short Skip is published 12 times per year. Free to members.

**Santa Cruz County Amateur Radio Club, Inc.**

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Writer: Ron Skelton, W6WO

## QForms

QForms is a free "messaging" software for hams using MS Windows.

QForms supports ICS-213 General Message forms, ARRL Radiogram forms, and Simple format messages.

The QForms program allows entry of text into

an electronic form to create a message. The message is saved in an XML format.

The XML file is then sent (using any packet program) to a remote packet station that is also running QForms where it can be opened, displayed and printed (as a completed message Form).

Optionally, a text version of the message can be created, saved and sent to

a remote station (again, using any packet program you like). The text format can not be re-opened by QForms other than as a simple text file.

QForms requires Microsoft Internet Explorer 5.5 or later.

QForms1570.zip

<http://www.activeham.com/uploads/Main/QForms1570.zip>

—73, Cap KE6AFE



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