

CLUB STATION  
K6SON

# Short Skip

The Newsletter of

Sonoma County Radio Amateurs, Inc.

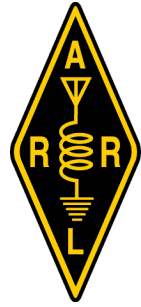
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REPEATER STATION  
W6SON

Volume 39, Number 8

August 2014



## August SCRA Update

by Pat Coyle, KG6JSL  
SCRA President

July was a relatively quiet month for activities for the Club, but August has plenty for everyone. Check out the Calendar on the Club website.

The SCRA/ARES Radio Programming Class on July 14 went well and maybe we will do it again if there is enough interest. Knowing how to program your radio, and more importantly, how to read and use your radio manual, is a substantial contribution to your radio competence and confidence.

The Mendocino Rally on July 26-27 is after the publication deadline but we will have a report and cool pics in the next issue.

The August program is Show and Tell night. This is an extension of the traditional Homebrew and Boat Anchor night. For August, bring your boat anchor, homebrew projects, mobile installation and anything else that may be of interest to Members and explain what it is and how you got it done. Mobile setups in the parking lot are welcome. This is always an interesting evening and more informal than most programs.

We need technical articles from the members. This is a technically oriented Club and passing along technical information is part of members helping members. Ar-

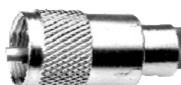
ticles of any length, from a few sentences to full length articles are welcome and appreciated. They can be on any subject from easy and simple projects, to how you solved a problem, a product review, to a theoretical discussion of electromagnetism as one of the four fundamental forces of the universe are welcome.

So far this year we have had Charlie, KZ6T, submit the ARRL article about Anderson Power Poles. This month Eric McHenry, AA6EM, has an article about his neat installation of a mobile setup in his truck. Articles do not have to be elaborate, and I am ready to help with writing and editing. So give us your knowledge and share it with the Club.

Craig, K6XLT, and Sutter, KI6ZON, have created a page on the website that permits easy, on-line sign-ups for Public Service events. First, Login to the Webpage. Go to the Public Service button under the Events button, and you will see a button for sign-ups. Pick the event you want and just sign up on-line. This is a slick deal and makes signing up for events quick and easy.

Enjoy the rest of the summer and thanks to all for contributing to the Club.

Pat, KG6JSL



## 2014 Club Officers

President	Patrick Coyle coylaw@sonic.net	KG6JSL
Vice President	John Felton	KE5RI
Treasurer	Mike Von der Porten	AD6YB
Secretary	Dave Harrison	W6IBC
Director	Doug Payne Jeff Tonelli	KF6LMB KI6PBF
Past President	Charlie Sikes	KZ6T

## Committee Lineup/Contacts

Activities	Darryl Paule, KI6MSP	ki6msp@arrl.net
ARES Liaison	Charlie Sikes, KZ6T	kz6t@arrl.net
DX/Contest	Kevin Alt, K6BSG	kalt@ieee.org
Education	Jeff Tonelli, KI6PBF	jeff.tonelli@gmx.com
Emergency Services	Charlie Sikes, KZ6T	kz6t@arrl.net
Field Day	Brian Torr, N6IY	n6iyy@arrl.net
License Trustee	John Felton, KE5RI	jrfke5ri@aol.com
Media	Sutter Laird, KI6ZON	ki6zon@me.com
Membership	Mike Von der Porten, AD6YB	mikevdpc@aim.com
Merchandise	Iola Beckley, KK6HRE	cope@srcity.org
Programs	John Felton, KE5RI	jrfke5ri@aol.com
Public Service	Craig Gaevent, K6XLT	k6xlt@sonic.net
Raffle	John Chavez, KG6PEP	kg6pep@arrl.net
Refreshments	Robert Jones, WA6NIV	wa6niv@arrl.net
Repeater	Jack Christensen, K6ROW	k6row@sonic.net
Volunteer Exam	Brian Torr, N6IY	n6iyy@arrl.net

## Short Skip & Web Staff

Editor	Donald Laird	WE4MOO
	we4moo@donaldlaird.com	
Webmaster	Sutter Laird	KI6ZON
	ki6zon@me.com	

SCRA E-Mail [skra@sonomacountyradioamateurs.com](mailto:skra@sonomacountyradioamateurs.com)  
 SCRA Web site <http://www.sonomacountyradioamateurs.com>

## Tuesday Night Net

Remember to check in to the SCRA net each Tuesday evening on the 147.315+(PL 88.5) repeater at 7:00 PM. Announcements are made of upcoming SCRA and other amateur radio activities in the broadcast.

## Short Skip Advertising Rates

Business Cards	\$12 per month
1st Quarter Column	\$13 per month
Each Additional Quarter Column	\$4 per month
Full page (one side)	\$35 per month
Pre-printed inserts (each)	\$35 per month

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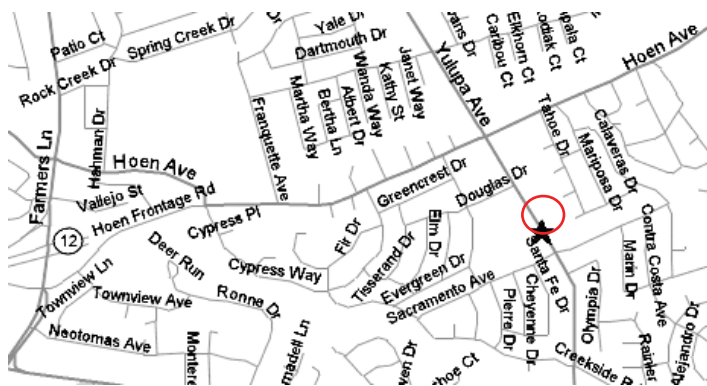


## SCRA Club Meetings

The club normally meets the first Wednesday of each month at 7:00 pm. Exceptions are holidays or other big events.

Meeting location:

Luther Burbank Art & Garden Center  
 2050 Yulupa Avenue  
 Santa Rosa, CA



All are welcome!

Please join us at our next meeting. Anyone interested in Amateur Radio may be eligible for membership. A membership application is included in this newsletter. For more information, contact any SCRA officer, director or member.

**Hungry before the meeting?**

**Join us for dinner! We Meet at IHOP restaurant, 4th and Famers Lane, Santa Rosa.**

**People start showing up at 5:15 PM.**

**No RSVP is required.**

**See you there every month except December.**

If you are not getting the ARRL San Francisco Section news by e-mail and you are an ARRL member, be sure to subscribe under your Members Only information or go to this Web site:

<http://www.arrl.org/Groups/view/san-francisco>



## Sonoma County Radio Amateurs Membership Meeting Minutes

July 2, 2014

Meeting called to order at 7:05 PM by President Pat KG6JSL.

Program: Spy Radio Night. Local author Jeane Slone and SCRA member Charles Christian W6CLC made presentations relating to clandestine and spy radio sets and operators. Ms Slone read selected passages from her recently published book: "She was an American Spy during WWII", and Charles presented information relating to well known encryption and coding methods. He also described a CIA listening post on Cyprus which was decommissioned many years ago. Dave W6IBC demonstrated his RS-1 Special Forces radio set, and also displayed PRC-74 and PRC-104 special forces radios.

Business Meeting began at 8:40PM after a break. A quorum of members was present.

Announcements: New members and visitors were acknowledged, including Doug AG6EG and his wife; and Donald AF6WL. Jim W6HNN said he was looking for a "bug" or an electronic keyer, and John WB6FRZ offered to help out. Doug KF6LMB talked briefly about the Field Day GOTA station and noted that David KI-6UGB was able to act as a control operator for the first time, while his daughter MaeveKK6HQY was active as a GOTA station operator.

Video: Webmaster Sutter KI6ZON presented a video of Field Day 2014 that was very well received and appreciated by the membership. The video will be posted to the website.

Minutes of June 2014 membership meeting were approved on motion by Doug KF6LMB, second by Jeff KI6BPF.

Activities Chair Darryl KI6MSP reported that SCRA will have a table at the Sonoma County Fair on August 2nd and August 9th in the Kraft Building. Volunteers should contact Darryl. He is also Comm Boss for the August 10th Tour de Organics and needs more SAGs. He hopes to use APRS in this event. The Space Museum in Novato will host NASA astronauts Dick Gordon

and Dan Bursch on August 2nd. Darryl wants volunteers for PCAM on September 21st. He also mentioned the North Bay Science Festival and an information booth at the Gran Fondo. Check the Activities page on the SCRA website for more information.

Repeater Committee Chair Jack K6ROW reported that progress continues on the voter receiver improvement. The link between Castle Rock and English Hill is operating, and the Castle Rock repeater is presently a slave receiver for English Hill using its standard PL of 156.7 Hz.

Education Chair Jeff KI6PBF reported that the next Technician class will be held on August 29-31 at the Bennett Valley Grange.

Public Service Chair Craig K6XLT thanked volunteers for their work at the Terrible Two bicycle event on June 21st. He also noted the upcoming Mendo Rally event. Pat KG6JSL reported that a practice will be held on Sunday July 6th at 10 AM at Youth Park. Craig also discussed SCRA support of the Santa Rosa Marathon on August 24th. This year, the MS Waves to Wine bike tour conflicts with the PCAM air show, but volunteers are needed for Waves to Wine. Contact K6XLT@sonic.net for more information or to volunteer for upcoming public service events.

Emcomm: Pat KG6JSL announced a second radio programming class on Monday July 14th at the Salvation Army Headquarters, 93 Stony Circle, Santa Rosa. This will be in conjunction with Santa Rosa ARES and will cover memory programming and other more advanced topics.

VE Liaison: Brian N6IYY reported the next open exam session will be Sunday August 31st at 3PM and will be in conjunction with the Technician Class at Bennett Valley Grange.

Merchandise: Iola KK6HRE reported that the new Tee Shirts are awaiting delivery. She needs 8-10 orders for personalized safety vests. She also displayed the new SCRA Table Cover used at Field Day.

Refreshments: Iola KK6HRE supplied pie, and Kerry Breckenridge supplied cake for the meeting.

**Continued on next page.**





## July Member Meeting Minutes, continued

There was no old business.

New Business: Charlie KZ6T reported that the Mini-DXpedition is set for August 15-17. Sign up on the SCRA web page. Ken AG6SV proposed a ham swap meet on August 24th in conjunction with the Bloomfield Fire Department barbecue, if members are interested. Pat KG6JSL sought volunteers for a club-sponsored DX award program. No one volunteered. The August membership meeting will feature Show & Tell: homebrew, boat anchor and cool mobile installations.

Net Control Assignments for July:

7/8 Andru KJ6YFD  
 7/15 David KI6UGB and Maeve KK6HQY  
 7/22 Matt KJ6LJI  
 7/29 Steve KI6TUR  
 8/5 Darryl KI6MSP

Meeting adjourned at 9:15 PM.

Respectfully submitted,  
 David Harrison W6IBC  
 Secretary

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## Sonoma County Radio Amateurs Board of Directors Meeting

July 9, 2014  
 Minutes

Regular Board Meeting called to order by President Pat KG6JSL at 6:07 PM at IHOP Restaurant, Fourth St at Farmers Lane, Santa Rosa. Board Members in attendance included President Pat KG6JSL, Vice President John KE5RI, Treasurer Mike AD6YB, Secretary Dave W6IBC, and Director Doug KF6LMB. Director Jeff KI6PBF and Past President Charlie KZ6T were absent. Other SCRA members attending included Brian N6IIY, Darryl KI6MSP, Iola KK6HRE, Jack K6ROW and Deb KK6HRE.

Minutes of the June 2014 Regular Meeting of Board were approved on motion by John KE5RI, second by Doug KF6LMB. There were no officer or director reports.

Activities: Deb KK6HRE reported attending the Ham

Radio Teacher Institute put on by the Dayton (Ohio) Amateur Radio Club. This was a first level course attended by 13 teachers over 4 days and covered electronics and kit building. Deb displayed a number of projects she completed and explained that the course expects the teachers to take the information received back to the classroom. She hopes to attend a Level 2 course at ARRL Headquarters, and plans to apply for an ARRL grant to set up and support a ham radio station at Santa Rosa Middle School where she teaches. She hopes to have a pilot program in place this next school year. During the course, Deb upgraded to General Class license. Darryl KI6MSP then explained his goal to extend the SR Middle School pilot program to other schools in Sonoma County. The Board expressed support for these activities and hoped that SCRA members would volunteer to serve as mentors, teachers and VEs, with primary leadership coming from the teachers and parents

ARES: Pat KG6JSL reminded the Board that SCRA is not an ARES provider, but serves as a resource and support for ARES and other emergency communications services like ACS and Santa Rosa COPE. SCRA's Repeater Usage Policy sets forth a priority of usage as follows: emergency communications, directed nets, SCRA member usage and non-SCRA related usage in that order.

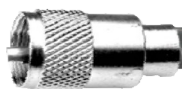
Merchandise: Iola KK6HRE displayed one of the 60 orange SCRA-Logo tee-shirts recently received. She also was able to locate a local source for small-size EmComm vests for our members.

Refreshments: Iola KK6HRE will continue to provide refreshments for next month's meeting.

Field Day: Brian N6IIY accounted for funds received and disbursed at Field Day. He wants photos of the activity for the ARRL submission. SCRA had fewer radio contacts than last year. The educational activity took longer than expected. Setup and tear-down went smoother than last year, due to the beam antenna assembly training class.

Membership: Mike AD6YB agreed to update the master mailer list to include new additions.

**Continued on next page.**





## Board Meeting Minutes, continued.

Repeater: Jack K6ROW reported that the 2-meter voter project is operational but needs some fine tuning which will happen in the next day or so.

There was no old business.

New Business: Pat KG6JSL appointed a committee to design and construct shelving for the club's "breadbox" trailer. Members include John KE5RI, Doug KF6LMB and Brian N6IYY.

On motion by John KE5RI, second by Dave W6IBC, the Board voted to hold an executive session.

(At this point the non-board members left the meeting).

At the closed session, the Board discussed club management issues. No formal Board action was taken.

With no further business the Board meeting adjourned at 7:45 PM.

Respectfully submitted,

Dave Harrison W6IBC  
Secretary

## Mark Your Calendars

SCRA picnic, Saturday September 13th, 11:00 AM.

Lee, KE6EAQ has generously offered the uses of his back yard and pool for the picnic. The picnic is not a potluck. The club is providing all the goodies. However if you wanted to bring something it is certainly not going to be turned away. Full details will follow in the September Short Skip.

Event chair person Jim Draeger, KI6REK

## Online Event Signup

Thanks to the miracle of the Internet, and the ingenuity of Sutter, KI6ZON, and Craig, K6XLT, it is now possible to quickly and easily sign up for Public Service events on the Club Website. First, Log in. Go to the Events button, then Public Service. A "Public Service Signup" button will popup. Go to the event you are interested in and sign up. That quick, that easy. This really expedites management of events.

## New Swap Net

SCRA is now sponsoring a SwapNet. This is a chance for amateur operators to sell or trade apparatus normally used in an amateur station to other amateur operators so long as it is not done commercially or on a regular basis.

The new SwapNet will occur on the last Wednesday of each month at 7:00PM on the SCRA VHF repeater, 147.315 + PL88.5. Your net control operators are Frank NQ6E, Gabe KK6HQW, and Charlie KZ6T.

To list items for sale or post a Wanted ad, you have two methods to choose from:

1. Email us a short description of the item that includes the price, method of payment, and your preferred contact method. Please email information to [kz6t@arrl.net](mailto:kz6t@arrl.net). We will read the information on the Net. If you include a photo, we will have it posted up to the SCRA website along with the description.

2. Check-in to the NET and let us know you have an item for sale. If time permits, you will get your chance to list the item on the air.

To make an inquiry or purchase an item, call in after we read the description. If the listing party is available, we will ask that you move over to a simplex channel or you agree to some other contact to work-out the deal.

So, get that stuff out of the closet, get the info to Charlie's crew, and join the Net.



## Public Service Roundup for May-June

It's been a busy May - nothing new! We started off May with Santa Rosa Cycling Club's Wine Country Century where once again the routine was a pleasant day for all. With very few crashes most radio traffic was simple stuff and not much to get exercised about. After last year's heat and death on the ride, a nice calm event was a relief to the host club as well as the hams. We had another great turnout from the club and as usual we were joined by our friends from Ukiah. Thanks to: K6BDH, K6XLT, KD6FIL, KZ6T, K6HKY, KI6MSP, N6IYY, N6GY, K6ROW, N1AL, N3SU, KQ6OB, AA6EM, KK6DPX, KI6MJC, KK6DPX, KG6JPU, KG6JSL, KK6LIW, KE6HID, K6KBS, and KK6GJW

Next up was the Human Race. My recollection is that Sutter reported that all went well though just a few issues with one APRS tracker.

June always brings us the Terrible Two - my personal favorite. The TT, for those that don't know starts up at 0530 and finishes right around 2300, so that make for one long day. The earliest ham shift though is 0700 and Calistoga and the others come on as the day wears on until finally at about 10 we've got a full on net going. This year we again used the K6ACS 2 meter linked repeaters (Sonoma Mountain and Seaview) which pretty much takes the challenge out of trying make that scratchy long-distance link. We had very few transmission problems during the day. And for the riders it went quite well - we started 153 on the 200 mile course with 113 finishing and everyone was in by 2300 - which meant the wrangler was home by 0100. We had a good sized crew, with some new folks, and thanks to all for your fine work: KE6EAQ, N6GY, K6BSG, KI6MSP, KK6GJW, N1AL, N3SU, AA6EM, WB6FRZ, K6AWA, AE6SF, KZ6T, KD6FIL, KJ6FAU, N6IYY, KK6DPX, K6KBS, KG6JSL, KI6MJC, KE6HID, K6ROW, KK6HRE, WB6JAO, KG6GEX, KK6HZS

By the time you read this, the Mendocino Rally will have been completed - we'll have to wait for the report from Pat KG6JSL next month.

Upcoming events: We've got a few. August 10 is the Tour d'Organics and the good news is that KI6MSP Darryl reports he has a full crew.

August 24th is the Santa Rosa Marathon. I'll be on vacation the week before this event, but I am doing the early organizing and Pat KG6JSL will step in to the comm boss duties day of. This a new event for us but easily fits the mold of the typical bike and run events that we do. This event will start at 0-dark thirty and finish around 1 p.m.. Runners will be starting and finishing at Julliard Park with runners reaching the furthest point away out at Oakwild and Woolsey Roads. We'll have the usual aid stations (8) and we'd like to staff 2 shadows (follows the race directors around).

Looming in September is Waves to Wine (20-21) - The general staffing plan for this event is unchanged from prior years.

And then we'll have Levi's Gran Fondo on 4 October.

If there has been one item that could make my job easier it would be online signups for positions. My wish came true when Sutter stepped forward with some of his web site magic - we now have an online signup web page. We're still working a few bugs out and do let me know if you have a problem with it.

I'm doing my best to keep the Public Service web page up to date on events - be sure to go there for more event information and now to sign up.

Craig  
K6XLT  
Public Service Wrangler  
k6xlt@sonic.net



Terrible Two Net Control, KD6FIL and K6ROW



## AA6EM F250 Ham Radio Installation

June, 2014, Eric / AA6EM

After becoming licensed in September 2013, I quickly resolved to do a clean, functional mobile radio installation in my 2010 Ford F250 diesel truck / tow-vehicle. Some of my goals were:

- Maintain the interior and exterior aesthetics as much as possible (it's connected to our 2010 Air-stream - and perhaps more importantly, co-occupied by my XYL).
- No tape, bungees or other "hacks" involved (although I did use some double-sided tape towards the end in an appropriate area).
- Maintain proper electrical and RF connections and procedures.

So with that in mind, here's what I eventually came up with. Of course I had a few "prototypes" or "proof-of-concept" tests along the way, consistent with my engineering background, but essentially it was a pretty linear installation.

Enjoy and Thanks to Jim N5RTG for his support and advice!

Eric / AA6EM

eric.mchenry@wbcci.net



### Main Equipment and Connections

- Yaesu 8800R dual-band radio with front-panel disconnect kit.
  - Front-panel is mounted on a RAM-Mount

"stalk" facing upwards towards the driver, providing easy access and visibility.

- Main radio body is located under the rear of the center console/seat.
- Larsen NMO 2/70 dual-band antenna.
  - Permanent mount, drilled through truck roof (when XYL was not present, I must confess). The antenna feedline runs between the truck headliner and roof, snaking down through the various hidden, interior wiring channels in the F250.
- DC wiring to truck battery through "Upfitter" switches built into F250 dash.
  - This provides an ignition-switched relay connection such that the radio is "off" when the truck is off.
  - In my case, I often travel to remote locations with no nearby vehicle support so it was critical I install the radio in a way that I cannot inadvertently drain my truck battery due to forgetting to turn off the radio. I realize I could have relied on the auto-off capability of the Yaesu, but did not want to risk even that.
  - I have also configured the 8800R to use external DC power through a "Y" Power Pole adapter - this allows powering the radio through an external battery (or even the truck cigarette lighter socket) if desired.
- External speaker mounted under center of dash. I found that although the Yaesu internal speaker was fine, it was challenging to hear when mounted under a seat and driving at highway speeds.

### Removal of truck seats (highly recommended)

Note: My initial wiring and wiring was done with the seats in-place. While this seemed the best approach at the time, I later realized removal of the seats was both extremely easy and allowed MUCH, MUCH easier wiring and mounting.

My F250 has three seats: driver, center and passenger "bench" seats. All three must be removed to get to the area under the center "bench" area. Once I located the correct tools (a T55 Torx was the only specialized tool), the process of seat removal took roughly 15 minutes. Basically just remove a combination of eight (8) bolts/nuts and disconnect the quick-connect seat power connector. I was amazed.





I also realized how much more comfortable it is working on a vehicle from inside, rather than on my stomach and knees. If there's one thing readers should retain from this article it is: Remove Your Vehicle Seats - it will save you time and enable a much better installation.

## Antenna Installation

Note: When first considering drilling into the perfectly fine roof of my relatively new F250 I had all the normal thoughts: "What if it leaks?", "Will it impact resale?", "I know I'll have to pull down the headliner (the interior ceiling of the truck) - can I put it back?", "Can I really route the coax correctly from the ceiling to the radio location?", etc. All normal questions, but I am extremely glad I decided on a permanent, rather than mag-mount.

Fundamentally I was convinced by my research and help from Jim N5RTG that NMO mounts are the norm for public safety vehicles. There must be hundreds of thousands of NMO-based holes drilled in law enforcement vehicles nationwide. They don't leak.

Some quick internet searches convinced my a) drilling a proper hole was easy, b) pulling down and re-installing the headliner was easy, c) a clean hole, capped by a NMO cap in the absence of the antenna actually looks MUCH better than a big mag-mount with a wire running along the top and back of the truck cab.

And finally, from a resale standpoint, a nicely capped hole in the middle of an over 6' tall truck roof is not noticeable. The antenna can even be accurately described as a place to put a cellphone or other antenna.

- The NMO mount requires one 3/4" hole. Two options:



Your local Ham club might have one you can borrow.

- Be careful and use a standard, no-frills 3/4" metal Hole Saw (\$15 or less)
- I used the cheap hole saw from my local hardware store and it worked fine - but I was extremely careful to ensure I didn't drill too deeply. A friend also used my hole saw for his roof mount with similar success.
- Installation Steps:
  1. Determine which side (passenger/driver) you will be running your coax to. In my case it was the drivers side. Pull down the vehicle headliner on that side enough to be able to reach the center of the roof, where your antenna feedline will emerge. In general the headliner snaps off with those plug-looking "snaps". Consult the internet for vehicle-specific information.
  2. Measure the hole placement carefully and measure again! Check the inside location (under surface of the roof) - will the hole unexpectedly hit a roof support strut? In my truck I had several that needed avoidance.
  3. Create as much separation between the roof and headliner as you can, to allow for the drill bit to come through. The more space you create, the better chances you are to NOT puncture your headliner.
  4. Measure again and drill from the top down. Be careful and do it slowly. The roof of a vehicle is surprisingly thin. Couple that with a new, sharp hole saw and you'll be through before you know it. Make sure you still have separation between your headliner and where the drill bit will emerge.
  5. Rough up the interior and top roof surfaces to ensure metal-to-metal (rather than paint-to-metal) contact. This is critical. Use some sandpaper or a file.
  6. Finish the mount installation and route coax (next section).
  7. Connect your antenna, take a break, grab a beer and enjoy how clean the mount looks! Pat yourself on the back - the stressful part is over.

- Buy or borrow an Antenna Hole Saw (\$60).







## Coax and Cable Routing

Notes: All vehicles are different. And it's MUCH easier to do the radio installation, cable and wiring routing with the vehicle seats removed - see above.

- On my F250 I routed my antenna coax to the drivers side, down the rear column behind the drivers-side rear seat and into the lovely, and easily accessible cable channel located under the gray plastic step-panel along each door step.
- The coax runs inside the doorstep forward, within the cable routing, area until it gets to approximately under the drivers seat. Then it takes a right turn and heads to the center of the vehicle.
- You can't really see the cable routing in the attached photos because they are all nicely tucked under the carpet. Which of course is the idea!

## DC power through F250 Upfitter Switch

Notes: Proper ham radio wiring requires wiring directly to the vehicle battery for grounding and good RF performance. I agree, but in my case I directly wired to the battery through the built-in "Upfitter Switches" in my F250. These are a bank of four (4) switches that are fuse-protected and relay-fed to the battery. This provides three benefits: a) the circuits are automatically cut when the vehicle is off, b) built-in fuses are already in place, and c) pass-through wires already go through the firewall - meaning no drilling of the firewall.



F250 Upfitter Switch Diagram (pdf) This document also includes the critical color-code identification and placement of the the wires that pass through the engine firewall.

As a bonus, I use my other three Upfitter Switches for GPS power, USB charger-block power, and CB radio power. Great stuff - I labeled the Upfitter Switches as well.

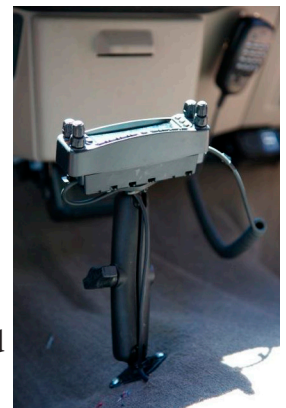
- For this project I used the 25A upfitter switch. In the engine compartment I connected the pass-through wire to the battery via a normal ring-terminal. In the passenger compartment, I connected the pass-through wire to the radio's power wire.
- For the purposes of brevity, I have not documented the Upfitter connections, other than in general as shown in the Ford Upfitter Switch PDF document. Essentially it's just finding the correct wires and making the connections.

## Remote head "stalk"

Note: my first prototype was with what I thought would be great but did not work well:

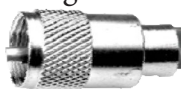
- RAM-B-316-1-238U consists of the RAM POD I universal No-Drill™ vehicle base, 18" rigid aluminum rod, single 1" ball socket arm and diamond base adapter.
- Unfortunately while it provided the right functionality, the "rigid" aluminum rod was not rigid-enough for my needs - I found it moved around too much for what I wanted.
- I replaced with the solid arm shown below and found it significantly better.

Ram Mount products are a wonderful, rugged set of interchangeable connecting parts that are designed for active vehicle use: I have used them many times on our motorcycles to mount smartphones, radios, GPS devices, emergency locator devices, etc. The mounts are extremely rugged - I highly recommend them.



A "mount set" consists of a base (to connect to a vehicle), an arm (to position the device) and some sort of mount to connect to the device. In this case I used a standard ball mount plate screwed to the Yaesu remote head bracket. It's rock solid - see parts list.

- I used self-tapping metal screws to mount the bot-





tom ball-base to the floor of my F250. Be SURE TO CHECK FOR WIRES running under the floor carpet before drilling. Not being careful can result in an expensive trip to the dealer.

- The radio head can easily be removed from the truck and/or put out of sight simply by disconnecting the remote head cable, unscrewing the Ram Mount nut (see photo).

## Radio mounting

Again I stress removing the vehicle seats!

- I cut the carpet and insulation away under the target radio location - roughly 2" by 4", enough to mount the radio bracket directly to the metal vehicle floor underneath the carpet.
- The radio is mounted to the truck floor using industrial double-backed tape on the bottom of the radio mounting bracket. It will NOT come off - this is great tape.
- I initially had planned to screw the radio bracket to the floor of the truck, but decided it was not necessary given the amazing strength of the double-sided tape and the specific mounting of radio nestled in the hole cut-out through the carpet.
- Most wires and coax are routed from the side-channel under the carpet underneath the drivers seat to the radio: RF feedline coax, DC power, speaker. The exception is the remote head cable which is routed directly forward to the remote head, also under the carpet.



- I used the two right-angle PL-259/SO-239 adapters to create an 180-degree coax routing. This was done to keep the vulnerable coax completely out of the rear passenger area and away from restless feet.
- Additionally I used Anderson Power Pole connectors to connect the radio to the DC source. This allows the radio a) to easily be pulled out and b) to be powered by an external battery if needed.

## Parts List

- Yaesu FT8800R
- Yaesu FT8800R front panel separation kit
- External speaker mounted under dash.
  - Note: I used an inexpensive, nice-looking CB speaker simply due to availability (Amazon.com), but if done again I might buy a better one from my local ham store.
- Larsen NMO 2/70 black antenna
- Larsen NMO-K roof mount (includes coax)
- RAM mount for remote front panel
  - RAM-201U-D long double socket arm
  - RAM-202U-12 1.5" diameter rubber ball connected at right angles to a 1" x 2" rectangular base. Note that any of the RAM 1.5" ball/bases can work (triangular, circular, etc).
- NMO cap (for use when antenna has been removed). Not critical for watertight, but it looks nice.
- (2) PL259 right-angle adapters. This directed the antenna coax forward, rather than rearward into the area vulnerable to foot placement in the rear-seating area.
- Assorted Anderson Power Pole connectors
- Assorted wire, zipties
- Two strips of heavy-duty double sided tape for mounting radio bracket to metal floor of truck. I used the Scotch Permanent Outdoor tape. Amazing stuff. Once it's stuck, it's stuck.





## CONTEST CORNER

by Kevin Alt, K6BSG

Hello testers. Several South African DX contests as well as state QSO parties in August. If UHF is more to your liking, try bouncing 440 MHz signals off of the moon in the 70 cm EME contest. Happy DX'ing!

1 Aug – **NS Weekly Sprint** – CW, 160-20 meters. See: [www.ncccsprint.com](http://www.ncccsprint.com).

2 Aug - **TARA Grid Dip Shindig** - PSK and RTTY, 160-6 meters. See: [www.n2ty.org/seasons/tara\\_grid\\_rules.html](http://www.n2ty.org/seasons/tara_grid_rules.html).

2 Aug - **European HF Championship** - CW/SSB, 160-10 meters. See: [lea.hamradio.si/~scc/euhf/euhfc.html](http://lea.hamradio.si/~scc/euhf/euhfc.html).

2-3 Aug – **Int'l Lighthouse-Lightship Contest** - all modes, 160-10 meters. See: [illw.org](http://illw.org).

2-3 Aug – **10-10 Summer Phone QSO Party** – SSB, 10 meters. See: [www.ten-ten.org](http://www.ten-ten.org).

2-3 Aug, **ARRL UHF Contest**, all modes, 220 MHz and above. See: [arrl.org/contests](http://arrl.org/contests).

2-3 Aug, **North American QSO Party** - CW, 160-10 meters. See: [ncjweb.com](http://ncjweb.com).

3 Aug – **South Africa DX SSB Contest** - SSB, 80-20 meters. See: [www.sarl.org.za](http://www.sarl.org.za).

3 Aug – **OK1WC Memorial Contest** – SSB/CW, 80-40 meters. See: [www.memorial-ok1wc.cz](http://www.memorial-ok1wc.cz).

6 Aug – **CWops Weekly Mini-CWT Tests** – CW, 160-10 meters. See: [www.cwops.org/cwt.html](http://www.cwops.org/cwt.html).

9 Aug - **Maryland-DC QSO Party** – All modes, 160 meters – 70 cm. See: [mdcqsoparty.w3vpr.org](http://mdcqsoparty.w3vpr.org).

9 Aug – **Fall VHF Sprint** – 50 MHz – All modes, 6 meters. See: [www.svhfs.org](http://www.svhfs.org).

9-10 Aug - **Worked All Europe** - CW, 80-10 meters. See: [www.waedc.de](http://www.waedc.de).

9-10 Aug – **Straight Key Weekend Sprintathon** – CW, 160-6 meters. See: [www.skccgroup.com](http://www.skccgroup.com).

10 Aug – **NJQRP Skeeter Hunt** – SSB/CW, 80-10 meters. See: [www.qsl.net/w2lj](http://www.qsl.net/w2lj).

13-14 Aug – **NAQCC Monthly QRP Sprint** – CW, 80-20 meters. See:

16 Aug - **SARTG WW RTTY Contest**, 80-10 meters. See: [www.sartg.com/contest/wwrules.htm](http://www.sartg.com/contest/wwrules.htm).

16 Aug – **Feld-Hell Gridloc Sprint** – Digital, 160-10 meters. See: [www.feldhellclub.org](http://www.feldhellclub.org).

16-17 Aug - **ARRL 10 GHz and Up Contest** – all modes. See: [arrl.org/contests](http://arrl.org/contests).

16-17 Aug – **70 cm Digital EME Championship** – Digital, 70 cm. See: [www.DUBUS.org](http://www.DUBUS.org).

16-17 Aug - **Russian District Award Contest** - CW/SSB, 160-10 meters. See: [rdaward.org/rdac1.htm](http://rdaward.org/rdac1.htm).

16-17 Aug - **Keymen's Club of Japan Contest** - CW, 160-6 meters. See: [www.kcj-cw.com](http://www.kcj-cw.com).

16-17 Aug - **North American QSO Party** - SSB, 160-10 meters. See: [ncjweb.com](http://ncjweb.com).

17 Aug – **Dominican Republic Contest** – SSB, 80-40 meters. See: [www.hi8ud.org](http://www.hi8ud.org).

17 Aug – **SARL Digital Contest** - Digital, 80-20 meters. See: [www.sarl.org.za](http://www.sarl.org.za).

17 Aug – **ARRL Rookie Roundup** – Digital, 80-10 meters. See: [www.arrl.org/contests](http://www.arrl.org/contests).

18 Aug – **Run For the Bacon** – CW, 160-10 meters. See: [www.fpqrp.org](http://www.fpqrp.org).

23 Aug - **ALARA Contest**- Phone/CW, 80 meters – 70 cm. See: [alara.org.au](http://alara.org.au).

23 Aug – **Kansas QSO Party** – All modes, 80 meters – 70 cm. See: [www.ksqsoparty.org](http://www.ksqsoparty.org).

23-24 Aug - **SCC RTTY Championship**, 80-10 meters. See: [lea.hamradio.si/~scc/rtty/rtty.htm](http://lea.hamradio.si/~scc/rtty/rtty.htm).

Continued on next page.



**Contest Corner, continued.**

23-24 Aug - **Ohio QSO Party** - CW/SSB, 80-10 meters.  
See: [www.ohqp.org](http://www.ohqp.org).

23-25 Aug - **Hawaii QSO Party** - All modes, 160-10 meters. See: [www.hawaiiqsoparty.org](http://www.hawaiiqsoparty.org).

24 Aug - **South Africa DX CW Contest** - CW, 80-20 meters. See: [www.sarl.org.za](http://www.sarl.org.za).

30 Aug - **Full Day of Hell** - Digital, 160-10 meters.  
See: [www.feldhellclub.org](http://www.feldhellclub.org).

30-31 Aug - **YO-DX Contest** - CW/SSB, 80-10 meters.  
See: [www.yodx.ro](http://www.yodx.ro).

30-31 Aug - **Colorado QSO Party** - All modes, 160-6 meters. See: [www.ppraa.org/coqp](http://www.ppraa.org/coqp).

**Next VE Session:**

Sunday, August 31

Our next VE exam session is scheduled for Sunday, August 31, from 3pm until 6pm. The location will be the Bennett Valley Grange Hall, 4145 Grange Road, Santa Rosa. Walk-ins will be accepted and all test elements will be administered. This exam session will also include students from a weekend-long Technician class that ends Sunday afternoon.

([http://www.sonomacountyradioamateurs.com/ve\\_testing.html](http://www.sonomacountyradioamateurs.com/ve_testing.html)) .

Please arrive by 2:45am to be signed in. Testing will begin shortly thereafter.

Directions: From Hwy 101, take Highway 12 East to Farmers Lane. Turn right onto Farmers Lane and then left onto Bennett Valley Road. Stay on Bennett Valley Road approximately 4.1 miles and turn right onto Grange Road. Bennett Valley Grange Hall is 0.5 miles from Bennett Valley Road on the right.

Candidates should bring the following:

- One (1) photo ID or two (2) non-photo ID
- FCC Registration Number (FRN, if you have one) or Social Security Number (if you do not have an FRN) If you have had any FCC license assigned to you, amateur or otherwise, or had any prior business with the FCC, you probably have an FRN.
- Original and photocopy of your current amateur radio license (if licensed)
- Original and photocopy of any valid CSEs (if applicable)
- #2 Pencil and eraser
- \$15.00 exam fee. Checks may be made payable to "ARRL-VEC"

Calculators may be used, but it must be demonstrated that all memories and programs have been erased. The calculator function in a cell phone or PDA may not be used! If you have any special needs, please contact Brian Torr, N6IYY in advance.

Good Luck!

Brian Torr, N6IYY  
[n6iiy@arrl.net](mailto:n6iiy@arrl.net)  
(707) 575-5871



## Field Day 2014 Recap

If you missed Field Day 2014, all I can say is “That’s too bad; you missed a great time.” The weather was beautiful, not too hot. Some of the bands also, unfortunately, were not too hot. But as true hams, we adapted.

Setup went relatively smoothly, much more smoothly than last year. The maintenance we did on the TH6 paid off. We added a 3-element 10-meter beam to the setup.

The SSB station got off to a slow start but ended up making about 20% more contacts than last year when the weekend was done.

The CW station indoctrinated several new operators to Field Day. They didn’t make as many contacts as the more seasoned operators that manned the station last year, but they had fun doing it.

The GOTA station gave several people, including a few unsuspecting passers-by, their first opportunity to talk via ham radio. A few, I’m told, practically had to be torn away.

The VHF/UHF station made about the same number of contacts as last year, but the satellite contact still eluded the team. We were able to hear our signal on the downlink, so we knew we were getting to the satellite. So close!

As for bonus points, the only one we missed compared to last year was sending a message to our Section Manager, Bill Hillendahl, KH6GJV. Bill did visit us in person, however.

Our Educational Activity was building a 3-element 2m beam antenna optimized for portable use and designed for quick deployment. It took longer to build these antennas than anticipated (that’s part of the education for the instructors!) and not everyone was able to complete them that afternoon. Those that were completed tested out just fine.

As usual, Pat, KG6JSL, did a wonderful job with dinner on Saturday evening. No one went away hungry.

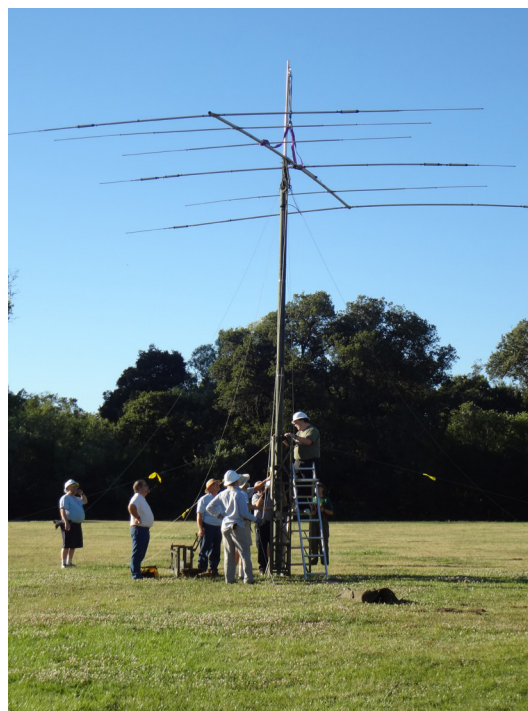
Sutter, KI6ZON, produced a wonderful video while we were there. You may have already seen it either at the

July meeting or from the SCRA website. A link to this video will be included in the Field Day submission.

We also enjoyed sharing the park with the Redwood Empire Live Steamers that were running their trains on both Saturday and Sunday. We

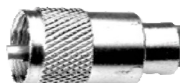
I want to thank all those of you who came out to help make Field Day 2014 the success that it was. We could not have done it without you!

73,  
Brian Torr, N6IYY  
Field Day 2014 Chairman





Field Day Photos





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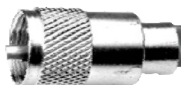
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