



CLUB STATION
K6SON

Short Skip

The Newsletter of

Sonoma County Radio Amateurs, Inc.

P.O. Box 116, Santa Rosa, CA 95402-0116 707-538-2931

<http://www.sonomacountyradioamateurs.com>

Repeaters:

English Hill: 147.315+ 88.5 / 224.480- 88.5



REPEATER STATION
W6SON

Volume 44, Number 8

August 2019

Is Your Battery Being Overcharged?

by Fred AE6SF



Figure 1: Jump-start battery pack.

It's wise to check the final charging voltage of any battery charger left connected indefinitely lest it overcharge the battery. Here's a case in point for a specific 12V battery.

Some hams use a jump-start battery pack for powering their radios in the field. The unit shown in Figure 1 has many useful features such as a 12V power outlet, USB charging outlet, state-of-charge indicator, flashlight, built-in 2-stage charger (accepting 120VAC or external DC power supply), charging mode indicator, and of course, attached cables for jump-starting a car. The powerful-sounding 600 Peak Amps are sourced by an internal 7 ampere-hour (AH) sealed lead acid (SLA) battery.

For long life, the battery should be charged in accordance with the battery manufacturer's recommendations, which for room temperature (25°C) are printed on the side of the battery and shown in Figure 2 to be:

- Cycle Use: 14.6-15.0V (Stage 1, bulk & absorption charging)
 - Standby Use: 13.6-13.9V (Stage 2, float or maintenance charging)
 - Initial Current: 2.10A (Maximum charge rate, 30% of AH value)
- o Note: some manufactures specify voltages 0.2V lower.

[Continued on page 15...](#)



VICE PRESIDENT’S MESSAGE AUG., 2019



Hopefully you’ve heard about the August membership meeting program on August 7, 2019. It’s a three-fer with something for everyone: Boat Anchor, Homebrew, and Auction Night. Hams lug in their Boat Anchors which

are vintage equipment from decades past that hams love to display, discuss and view... or use as a sailing accoutrement, it’s rumored. Vacuum tubes abound. Homebrew Night is a chance to show off anything you’ve constructed even remotely related to ham radio, be it an original creation, a kit, or something really oddball. Experimentation is one tenant of ham radio. All entries are welcome. And thirdly, there’s Auction Night. Generous people have donated quality ham equipment including transceivers that will be auctioned to benefit the club. New hams take note that good deals are to be had. But wait, there’s more! Members are welcome to bring in relevant items and conduct private sales, a la ham fest. However, you must remove from the premises anything you don’t transact. I wonder if there will be a Ginsu knife repurposed for amateur radio?

In celebration of the SCRA 80th anniversary, a special annual picnic will be held at Howarth Park on August 11, 2019. See within for more details. Several activities including a fox hunt are planned. Sign up for the potluck on the website. Thank you Iola KK6HRE for organizing this event.

Do you like to camp out (with or without an RV) and play radio? Then join us for the “Mini-DX” held August 15-18, 2019 at A. W. Way County Park between Petrolia and Honeydew. Contact Doug KF6LMB for details.

On the Public Service front, we need (radio) SAGs, particularly for the upcoming Tour de Fox Wine Country on August 24, 2019. If you can transport cyclists and their bikes in your vehicle, and if you have a radio, you can be a radio SAG. You will provide

important transportation for riders who can’t complete the event for various reasons. We also need a ham with radio to ride with one non-ham SAG. Sign up on our web site or contact me for more information.

- Fred AE6SF



AUGUST PROGRAM

Boat Anchor, Homebrew, and Auction Night

JOIN ARRL, THE AMERICAN RADIO RELAY LEAGUE

The ARRL is the national organization of Amateur Radio. It represents Amateur Radio at International Conferences and before the FCC. Get the monthly QST magazine, insurance for your equipment and too many other benefits to mention here. Click <http://www.arrl.org/membership/>



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>



2019 Club Officers

President	John Felton	KE5RI
Vice President	Fred Seitel	AE6SF
Secretary	Bill Dornbush	KM6BYD
Treasurer	Iola Beckley	KK6HRE
Director	Randy Hall	AA6RH
	Doug Payne	KF6LMB
Past President	Iola Beckley	KK6HRE

Committee Lineup/Contacts

Activities Programs	Jeff Tonelli, KI6PBF Randy Hall AA6RH	jeff.tonelli@gmx.com aa6rh@socorad.io
Community Outreach	Darryl Paule, KI6MSP	ki6msp@arrl.net
DX/Contesting	Doug Payne, KF6LMB	dougpayne1@earthlink.net
Education	Cornell Chesnik, W6HMN	w6hmn@sonic.net
Emergency Services Liason	Pat Coyle, KG6JSL	coylaw@sonic.net
Field Day	Brian Torr, N6IY	n6iyy@arrl.net
License Trustee	John Felton, KE5RI	jrfke5ri@aol.com
Loaner Program	Joe Fortuna, K6AWA	k6awa@yahoo.com
Website Manager	David Kraybill, KI6UGB	shortskipeditor@gmail.com
Membership	Dan Drummond, KK6VIQ	danjdrummond@hotmail.com
Merchandise	Dan Drummond, KK6VIQ	danjdrummond@hotmail.com
Public Service Coordinator	Iola Beckley KK6HRE	iolabeckley104@gmail.com
Refreshments	Open	
Repeater	Jack Christensen, K6ROW	K6ROW@sonic.net
Roster Editor	Bill Dornbush, KM6BYD	bill@dornbush.net
Volunteer Examiners	Brian Torr, N6IY	n6iyy@arrl.net
Weekly Email Blog	Pat Coyle KG6JSL	coylaw@sonic.net

Short Skip & Web Staff

Short Skip Editor	David Kraybill, KI6UGB	shortskipeditor@gmail.com
Website Manager	David Kraybill, KI6UGB	shortskipeditor@gmail.com
Web Staff	David Pearson, K6DBP	grecojava@gmail.com

SCRA E-Mail	K6SON@arrl.com
SCRA Web site	http://www.sonomacountyradioamateurs.com

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

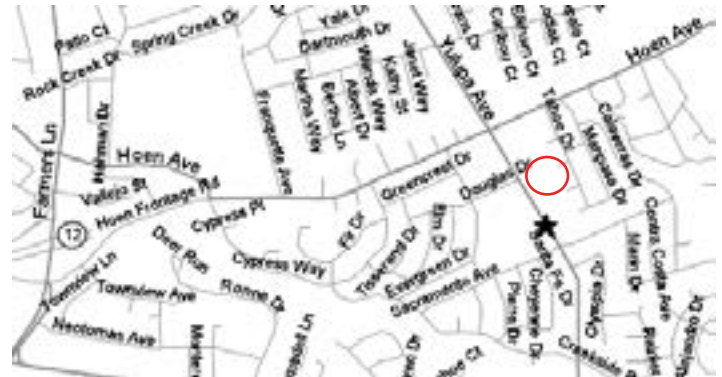
Short Skip is published monthly and copyright 2015 by the Sonoma County Radio Amateurs, Inc. Permission to reprint articles is granted provided the source is properly credited. Items printed do not necessarily represent the views of the SCRA or its editors. Letters, photos and articles sent to Short Skip are subject to editing and may or may not be printed.



SCRA Club Meetings

The club normally meets the first Wednesday of each month, socially at 6:30 pm, program starting 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 is 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 Farmers Lane, Santa Rosa. People start showing up at 5:15 PM. No RSVP is required.

Board of Directors Meeting

The SCRA Board of Directors will meet monthly on the Second Wednesday at the IHOP Restaurant, Fourth Street, Santa Rosa (in the Safeway/CVS Pharmacy center). All members are welcome to attend, no reservations necessary. Arrive around 5:15- 5:30pm for dinner. Meeting starts at 6:00pm.

LOANER RADIOS AVAILABLE

The Club has a variety of radios available to members to try out and improve their skills. We have a Kenwood T590 SG HF radio; Yeasu FT 2900 2 meter mobile; Yeasu FT1D, an analog/digital 2 meter and 440mhz HT; Yeasu FT 60, a 2 meter and 440 mhz HT; and a TYT TH-F5 VHF 2 meter HT. Trying these out is an excellent way to learn some radio and test before you buy. Contact Joe, K6AWA, at k6awa@yahoo.com with your request. Joe will forward an information form to you by return email.

UPGRADE TO GENERAL OR AMATEUR EXTRA CLASS

Get more privileges and enjoyment from your Ham Radio Hobby. [Mentoring assistance](#) is available. Contact Cornell Chesnik, W6HMN, SCRA Education Chair, at w6hmn@sonic.net.

Tuesday Night Net

The Sonoma County Radio Amateurs' net meets Tuesday at 7:00 PM on the SCRA repeater, 147.315, positive offset, PL 88.5.

All members and guests are invited to check in. The Net includes updates on SCRA activities, and News-line, the amateur radio community news service.

Anyone wishing to work as net control should contact lola kk6hre, at K6SON@ARRL.NET for assignment. Script and logs are available on the Website at <http://sonomacountyradioamateurs.com/wp/resources/net-script/>



The Weekly 160 Meter Net

Announcing the new 160 meter net which runs from 8:45pm to 9:30pm Tuesday nights, immediately following the 10 meter net hosted by Joe K6AWA. Tune your radio frequency to 1.900 Mhz. LSB. 160 meters requires a General or above license to transmit.

Your Tuesday Night Net Line-up

7:00pm Membership Net on the SCRA repeater, 147.315, positive offset, PL 88.5

10 Meter Net - starts at 8:00pm (new time) following the regular SCRA net Tuesday nights and ends at 8:45pm. Set your dial to 28,403.00 SSB, USB. Please note that all license classes (including technician) are welcome.

160 Meter Net - runs from 8:45pm to 9:30pm. Tune your radio frequency to 1.910 Mhz. LSB. 160 meters requires a General or above license to transmit.

Digital Mobile Radio Sonoma County Talk Group 31707!

The club's DMR footprint continues to expand! We established a beachhead on DMR and the BrandMeister network of repeaters and hotspots by adding a talk group for Sonoma County! We are using talk group number 31707 to keep in touch on DMR and be able to discuss local news and topics of interest. The use of a talk group like 31707 allows a wider variety of Sonoma County DMR hams to be able to consistently reach each other on the air. Best of all, the 31707 talk group can be reached on hotspots as well as repeaters, meaning you can tie into your local community wherever you are!

Sonoma County DMR Net, Moving to Thursdays at 6:30 PM PT!

We also started a DMR net for Sonoma County (using talk group 31707) that lets us practice a little bit of traffic handling, while also allowing us to get together and talk about ways we can integrate DMR into our normal operating habits! Currently Randy AA6RH runs net control. If you have a DMR radio, make sure to program it (or ask Randy to help you program it) to include talk group 31707 on any of the area DMR repeaters (there are at least four in Sonoma County!) and join us on Thursday evenings!

2019 SCHEDULE OF EVENTS

Check the [Club website](#) for details

Community outreach:

8/4 Space Festival
8/3, 8/10 County Fair
9/28-29 PCAM
10/26 Science Festival

Public Service:

8/24 Tour de Fox
9/21-22 Waves to Wine
10/5 Gran Fondo
11/2 SoNoMas
11/9-10 Santa Rosa bike trione

80th Anniversary

? Skunk train
8/11 Club Picnic
10/? Hamfest or swapmeet
12/4 Holiday dinner

OTHER:

8/15-18 Mini DX
10/19 JOTA
10/18-20 Pacificon

VE Sessions

9/14
11/16

CONTEST CORNER

Welcome to this edition of Contest Corner.

It has been said that contesting has more active participants than any other sport in the world. Those outside of the amateur radio world may not know this or even what the term entails. Every weekend throughout the year a variety of contests are offered for the ham radio operator. During the week there are other contesting opportunities with the occasional special event, club sprints or weekly challenges just to keep the contesters in shape. Overall contesting activity is less in the Spring and Summer months but picks up by Fall and runs full bore through Winter. A declining solar cycle also may not give you the best operating conditions on the bands but that fact does not stop the contesters. Year round operating continues.

The month of August has the North American QSO Party showing up twice; the CW portion on the 3rd and later in the month on the 17th SSB is on. The NAQP is one of the favorites so you can bet the bands will be active with rookies as well as the big time ops. The ARRL Rookie Roundup, RTTY is on the 18th and is also a great one to contest with RTTY at your station. There are several state QSO parties and other various challenges for those interested. And don't forget the SKCC monthly sprint for you straight key hams. Have fun!

Do not forget to check out <http://www.contestcalendar.com>

Contact nq6e@arrl.net for questions/comments/suggestions regarding Contest Corner.

72/73, NQ6E

Bruce Draper, AA5B, aa5b.corral@gmail.com

Contest Corral

August 2019

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

	Start - Finish		Bands	Contest Name	Mode	Exchange	Sponsor's Website
	Date-Time	Date-Time					
1	1700	1 2100	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	www.nrau.net
1	1900	1 2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
3	0001	4 2359	28	10-10 International Summer Contest, SSB	Ph	Name, mbr or "0," SPC	www.ten-ten.org
3	1200	3 2359	1.8-28	European HF Championship	CW Ph	RS(T), 2-digit year first licensed	lea.hamradio.si/scc
3	1400	3 1800	144	WAB 144 MHz Low Power Phone	Ph	RS, serial, WAB square or country	wab.internip.net
3	1800	4 0559	1.8-28	North American QSO Party, CW	CW	Name, SPC (if North America)	www.ncjweb.com
3	1800	4 1800	222 and up	ARRL 222 MHz and Up Distance Contest	CW Ph Dig	6-char grid square	www.arrl.org/222-mhz-and-up-distance-contest
4	1400	4 1700	3.5-14	SARL HF Phone Contest	Ph	RS, serial	www.sarl.org.za
4	2300	6 2300	3.5-28	G3ZQS Memorial Straight Key Contest	CW	RST, SPC, name, mbr or power	www.fistsna.org
6	0100	6 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
10	0000	11 2359	3.5-28	WAE DX Contest, CW	CW	RST, serial	www.darc.de/der-club/referate/referat-conteste/worked-all-europe-dx-contest/en
10	0800	10 1100	1.8-28	QRP ARCI European Sprint	CW	RST, SPC, mbr or power	qrparki.org/contests
10	1200	11 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
10	1400	11 0400	1.8-432	Maryland-DC QSO Party	CW Ph Dig	Entry class, county or SPC	www.w3vpr.org/mdcqsoparty
12	0000	12 0200	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
12	1200	14 1159	144	MMMonVHF/DUBUS 144 MHz Meteorscatter Sprint Contest	CW Ph Dig	Signal report	mmonvhf.de/ctestinfo.php
14	0030	14 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
17	0000	18 1600	3.5-28	SARTG WW RTTY Contest	Dig	RST, serial	www.sartg.com
17	0600	18 2359	10 GHz-light	ARRL 10 GHz and Up Contest	CW Ph Dig	6-char Maidenhead locator	www.arrl.org/10-ghz-up
17	0800	18 0800	1.8-28	Russian District Award Contest	CW Ph	RS(T), RU district code or serial	rdaward.org/rdac1.htm
17	1200	18 1200	1.8-50	Keyman's Club of Japan Contest	CW	RST, JA prefecture/district code or continent	www.kcj-cw.com
17	1600	17 1759	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
17	1800	18 0559	1.8-28	North American QSO Party, SSB	Ph	Name, SPC (if North America)	www.ncjweb.com
17	2100	18 2100	3.5-28	CVA DX Contest, CW	CW	RST, type/UF	cvadx.org
18	1400	18 1700	3.5-14	SARL HF Digital Contest	Dig	RST, serial	www.sarl.org.za
18	1700	18 2100	3.5-28	NJQRP Skeeter Hunt	CW Ph	RS(T), SPC, Skeeter # or power	www.qsl.net/w2lj
18	1800	18 2359	3.5-50	ARRL Rookie Roundup, RTTY	Dig	Name, 2-digit year licensed, SPC	www.arrl.org/rookie-roundup
19	0100	19 0300	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
24	0400	26 0400	1.8-28	Hawaii QSO Party	CW Ph Dig	RS(T), HI QTH or SPC	www.hawaiiqsoparty.org
24	0600	25 0559	3.5-28	ALARA Contest	CW Ph	RS(T), name, YL/OM/club	www.alara.org.au/contests
24	1200	25 0300	1.8-50	W/VE Islands QSO Party	CW Ph Dig	RS(T), USI/CISA Island Designation or SPC	usislands.org
24	1200	25 1159	3.5-28	SCC RTTY Championship	Dig	RST, 4-digit year licensed	lea.hamradio.si/scc
24	1200	25 1200	3.5-28	YO DX HF Contest	CW Ph	RS(T), YO county or serial	www.yodx.ro/en/english
24	1400	25 2000	3.5-50	Kansas QSO Party	CW Ph Dig	RS(T), county or SPC	ksqsoparty.org
24	1600	25 0359	1.8-432	YARC QSO Party	CW Ph Dig	Age, SPC	yarc.world/events
24	1600	25 0400	3.5-28	Ohio QSO Party	CW Ph	RS(T), county or SPC	www.ohqp.org
24	2100	25 2100	3.5-28	CVA DX Contest, SSB	Ph	RS, type/UF	cvadx.org
24	2300	25 0300	50	50 MHz Fall Sprint	CW Ph Dig	4-char grid square	svhfs.org
25	1400	25 1700	3.5-14	SARL HF CW Contest	CW	RST, serial	www.sarl.org.za
28	0000	28 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
31	1200	¹ Sep 1200	3.5-28	UK/EI DX Contest, SSB	Ph	RS, serial, district code (if UK/EI)	www.ukicc.com

All dates refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.

SCRA Merchandise QST

If you've come to an SCRA meeting to check out the shirts available at the merchandise table but didn't see a style or color in your size, there's now another way to get the SCRA shirt that fits your sense of fashion.

The SCRA/Halls webstore is on-the-air! Just tune your internet device to the website hosted by Halls Executive Gifts and Awards' at <http://scra.hallsapparel.com>.

This time, when you order a shirt, in the style, color and size of your choice, it will be available for pickup within a couple of weeks.

And now you also have the option to either pick it up from Halls yourself or pick it up at a future membership meeting.

The T-Shirts, short and long sleeve, are priced at \$25 each and Polo shirts at \$35 each. All major credit cards and PayPal are accepted.

The T-Shirts feature our 80th Anniversary logo printed on a 100% cotton fabric. The Polo shirts feature an 80th Anniversary text along with our Mic-&-Key logo embroidered on a 60/40 cotton/poly pique fabric. More specific product descriptions can be found near the bottom of each product webpage.



Most members have found that the shirt sizes fit as expected, but if you tend to run in between sizes, we recommend the larger size.

Since these shirts are produced one at a time as each order is placed, you will see that the single-item pricing is higher than the pricing during our April Apparel event, where we got a lower minimum-order-point pricing by purchasing at least 37 shirts.

Please email any questions and comments to merchandise@sonomacountyradioamateurs.com.

SCRA Membership QST

The SCRA membership stands at 206.



Welcome new and returning members:

- Rick Cowperthwaite KN6DDE (G) Santa Rosa
- John Pence KN6DJM (T) Santa Rosa



New call signs:

- Matt Branstetter W6STO
- Ed Tedrow KN6CWU
- Kimberly Susukida KN6DJP



License Class Upgrades:

- Richard Downing K6ZGN – Amateur Extra
- Johnathan Brown KM6VSA – Amateur Extra
- John Seigman K6UIT – Amateur Extra
- Matt Branstetter W6STO – General
- Barbara Schrock KM6URJ – General
- Ed Tedrow KN6CWU – General

Membership Count by License Class	
License Class	Count
Advanced	3
Amateur Extra	67
General	62
Technician	66

We have eight Associate members.

If you have recently achieved a new license class, obtained a new call sign, or changed your address, email or phone, please email membership@sonomacountyradioamateurs.com with your update. And don't forget to report your address change to the FCC!



2019 Mini-DX Ops Plan

August 15, 16, 17, 18



Ooh, ooh, I have a Question!

From the NEW 2019 -2023 General Class Question Pool:

G4C07 (D)

Why should soldered joints not be used with the wires that connect the base of a tower to a system of ground rods?

- A. The resistance of solder is too high
- B. Solder flux will prevent a low conductivity connection
- C. Solder has too high a dielectric constant to provide adequate lightning protection
- D. A soldered joint will likely be destroyed by the heat of a lightning strike

And What About This?

From the Extra Class Question Pool:

E1A03 (C) [97.301, 97.305]

With your transceiver displaying the carrier frequency of phone signals, you hear a station calling CQ on 14.349 MHz USB. Is it legal to return the call using upper sideband on the same frequency?

- A. Yes, because you were not the station calling CQ
- B. Yes, because the displayed frequency is within the 20 meter band
- C. No, the sideband will extend beyond the band edge
- D. No, U.S. stations are not permitted to use phone emissions above 14.340 MHz

New General Class Question Pool Goes Into Effect July 1, 2019.

The new question pool for the General Class Exam has gone into effect. You can find it at <http://www.arrl.org/general-question-pool>.

Objectives

1. Have fun
2. This is (in general) a multi-day/night radio operating social event. There are no structured elements. You are free to operate any band, mode, or schedule you wish. Please be mindful of others using the same band.
3. Be prepared to educate other campers in the Park. There always are interested people walking through.

Location and Directions:

1. A.W. Way Park is located along the Mattole River in rural Humboldt County. Nearest towns are Petrolia to the north, Honeydew to the south.
 - a. The address of the Park is: 36625 Mattole Road.
 - b. Coordinates are: 40d 16.0934'N 124d 13.8007'W
 - b. Maidenhead Gridsquare is: CN70vg
2. There are four routes you can take to reach the Park, three of which are paved. You can Wind an on-line Google map of the routes here. Google Map Link. Just click on any of the routes on the left hand menu bar to turn them on or off.
 - a. Most seem to take Route-1 in from Weott. It is paved but does have a steep switchback decent into the town of Honeydew. Those with trailers or RV's should be careful.
 - b. Route-2 is a good alternate for the Sunday drive home. 90% paved. It will take you through a very remote area of Humboldt County where you may experience a sweet aroma in the air.
 - c. Route-3 takes you along miles of deserted beaches and through the historic Victorian town of Ferndale.
 - d. Route-4 is only for the adventurous 4-wheel driver. In 2015 we rescued a driver who had not seen another soul in 6-hours of waiting for help.

Continued on page 9...

...Mini DX continued from page 8

3. A. W. Way Park information:

- a. They do not take reservations, however we have never had any problem securing multiple campsites together. The First to arrive will setup in a number of sites to help secure them for late arrivers. We usually secure the sites on the western edge of the Park.
- b. General Park information can be found here.
- c. Big picture general map can be found here.

Organization

1. This is not a structured event. This year it occurs on the same weekend as the North American QSO SSB Party and the International Lighthouse Lightship Weekend. There are many SOTA peaks in the area. Some easier to get to than others.
2. You are free to pursue any endeavor (radio or non-radio) you have in mind such as:
 - a. Biking (mountain biking or back roads)
 - b. Hiking
 - c. Swimming in the Mattole
 - d. Drive to the Beach
 - e. Tour the Redwoods
 - f. Lounging around
 - g. Stargaze (fog permitting)
 - h. Geocaching
3. Caravan
 - a. There will be an organized caravan for the trip up on Thursday morning. We will meet at the Windsor Walmart parking lot at 0730 and depart no later than 0800. Caravan travel frequency will be 147.55. For any stragglers, we will monitor English Hill until we reach Cloverdale.
4. Food and Beverages
 - a. Each individual is responsible for their own meals. (B.L.& D), except; Friday morning a club breakfast and that night we will have a pot-luck style dinner. Organization of that to follow.
 - b. Shade tents will be setup for family style group meals.
 - c. No restrictions on beverages.

Note: There is a pancake breakfast Sunday at nearby Mattole Grange 8-11

Operations

1. Frequencies
 - Talk in will be on simplex. 147.55 The caravan will be using the talk-in on the complete route. Once camp is set up, someone will be monitoring the entire weekend. For late arrivals, your 2m mobile should be able to

hit the camp when starting the last decent into Honeydew.

- IRLP: There is a 6m IRLP Node near the top of Mt. Pierce, which is 12 miles northeast of the camp. We have asked for permission to use the node during our event. The details are:
 - o Node 3572, Call sign N7HQZ
 - o Location 40.4229N 124.,09772W, Heading 33.16 degrees from camp
 - o Frequency 51.84, offset -500
 - o PL 114.8
 - The campsites are generous enough to allow plenty of room for setup and operations including tall trees with lots of branches to string 80m dipoles.
 - It is **STRONGLY** urged that you operate using battery, not generator. If you need to re-charge your battery with a generator, please be mindful of others who are trying to operate in a quiet environment. Those with solar panels should have no problem Winding enough sun.
2. The campground (A.W. Way Park) is a public campground. There will be other campers. Please respect the Park's quiet time rules and keep your radio's volume turned down.

Supplies:

1. For either route 1 or 2 you should re-fuel in Garberville, Ferndale for route 3.
2. Lunch in Garberville has always been an iffy thing. For a route-1 to route-2 detour, there is a diner in the town of Redway that is decent. (Excellent hotdogs). 3.5 stars on Yelp. Debs Diner
3. Honeydew general store has a decent inventory of supplies and groceries. Ice, soft drinks, snacks, etc., gas is sometimes available. Humboldt Gold seems always to be in stock or in use as well.

Campground Accommodations

1. Fees are \$25 per night per campsite. Pay the iron ranger upon entering the campground. Each campsite can accommodate 2-vehicles, so if you want to cut costs, share a campsite. \$2 senior discount (62 & over) per night.
2. Toilet facilities are a short (downwind) walk away. Bring your own towels. (No paper towels are provided)
3. Hot showers are available. 3-quarters is all you need. Bring your own toiletries and towels.

Continued on page 10...

...Mini-DX continued from page 9

4. Trash cans are setup around the campground. (Non-bear-proof type)

Miscellaneous

1. Bugs (mosquitos) can sometimes be an issue. Come prepared to do battle.
2. Dogs are welcome.

Sonoma County Radio Amateurs Membership Meeting Minutes Date: July 3, 2019

Board members present: Fred AE6SF, Iola KK6HRE, Doug KF6LMB, Bill KM6BYD, Randy AA6RH

Absent: John KE5RI

Call to order: 7:00 pm by Vice President Fred AE6SF

The vice president determined that a quorum is present.

New members: Ed KN6CWU

Guests: Ron, David

NET CONTROL: The following members are the net control stations for
July 9 - John WB6FRZ
July 16 - Charles KC6CTT
July 23 - Darryl KI6MSP
July 30 - Brian N6IY
August 6 - Dan KK6VIQ

Ham of the Month: Randy AA6RH presented the award to Carol KK6OLL but since she was not present, it will formally be presented next month.

Announcements etc:

Bill KM6BYD announced a new roster is now available and had copies for some

In August, the program is boat anchor, home brew, auction night

Randy AA6RH said the DMR net is moving to Thursday at 6:30 PM starting July 11
Kathy K6KDW bragged about her field day achievements including a Hawaii contact
Dan KK6VIQ encouraged people to join now that the price has gone down for the second half of the year.

Richard K6ZGN upgraded to Amateur Extra.

Radio loaner program: Joe K6AWA was not present. We have equipment to loan.

Program: Bill Dornbush KM6BYD presented "Amateur Radio Using the Raspberry Pi."

Approval of minutes: Iola KK6HRE moved, and Cornell W6HMN seconded approval of the June minutes as printed in Short Skip, and they were approved unanimously.

REPORTS

Treasurer report: Iola KK6HRE presented the income and expenses.

Activities: Iola KK6HRE discussed the 80th anniversary activity, the August 11 picnic at Howarth Park. Please sign up on the website.

Community outreach: Darryl KI6MSP informed us about Tour de Cure for American Diabetes Association that we supported. August 4 is the Space station museum festival where we will have a radio demonstration. International Lighthouse weekend is the same as the DX weekend. The Air Show is upcoming soon. Bay Area Science Festival is at the end of October. We will not be presenting at the Sonoma County Fair.

Education: Cornell W6HMN noted that the next class is July 12-14 6-9pm Friday, 8-5:30 Saturday, and 8-2:30 Sunday at the Graton Fire House. He is looking for more instructors.

Continued on page 11...



Minutes continued from page 10...

Field Day: Brian N6IY noted that the field day was successful. We did better than last year at the number of contacts including a satellite contact and worked all states. We received proclamations from the City of Santa Rosa and the County of Sonoma. John WB6FRZ thanked Charlie KZ6T for helping with the educational project.

Merchandise: Dan KK6VIQ noted that the Halls online store is online again.

Membership: Dan KK6VIQ said we have 204 members.

Repeater: Randy AA6RH noted that the DMR repeater will be moving to a new frequency pair no sooner than August.

DX Team: Doug KF6LMB reviewed the Mini-DXpedition on August 15-18 at A W Way Park. Saturday is the North American QSO Party.

VE testing: Brian N6IY noted that the last session was at Field Day, where 4 people passed

Technician exam. The next session is July 20 at the Bennett Valley Guild Hall.

Public Service: Iola KK6HRE noted that events start at the end of August with Tour de Fox. Bike Monkey wants to run SoNoMas on the date of Sagan Fondo.

Refreshment committee: Warren will be providing them for the next two months.

NEW BUSINESS - none
The meeting adjourned at 8:58 pm.

Respectfully Submitted,
Bill Dornbush KM6BYD



Ham of the Month
Carol KK6OLL

SCRA HAM OF THE MONTH RECIPIENTS			
Year	Month	Name	Call Sign
2019	June/July	Carol	KK6OLL
2019	May	Randy	AA6RH
2019	Apr	John	WBGFRZ
2019	Mar	Erin	K6ERI
2019	Feb	Fred	AEGSF
2019	Jan	Dave	KI6UGB
2018	Dec	-	-
2018	Nov	Iola	KK6HRE
2018	Oct	Dan	KK6VIQ



SCRA BOARD OF DIRECTORS MEETING MINUTES

Date: July 10, 2019

Call to order by John Felton KE5RI at 6:02pm. A quorum was present.

Board members present: John Felton KE5RI, Fred Seitel AE6SF, Iola Beckley KK6HRE, Randy Hall AA6RH, Doug Payne KF6LMB

Absent: Bill Dornbush KM6BYD

Others: Darryl Paule KI6MSP, Cornell Chesnik W6HMN, Jeff Tonelli KI6PBF, Dan Drummond KK6VIQ, Charlie Sikes KZ6T, Brian Torr N6IYY

Approval of previous meeting minutes: Minutes (notes) are in John KE5RI's hands, will bring to next meeting.

OFFICER AND DIRECTOR REPORTS

Treasurer report: Iola KK6HRE provided a mid-year report of the budget that she reviewed. Spreadsheet was provided. (Iola to provide electronic version for minutes). Dues received for 2019 is \$300 over budgeted income. \$200 from emergency services budget not likely to be used and can possibly be redirected. General feeling is the club will come in under budget. John KE5RI asked about \$25 donation check. Savings \$12,100.65, Checking (about) \$6,500. \$25 Network for Good. Fred AE6SF read the agreement that is attached to cashing the check. NfG sells services, but nonprofits are not required to use services. Iola read draft letter refusing the check. Iola moved to send the check back with the letter, Fred second. Doug KF6LMB agreed, John commented that it's too much trouble. Vote was unanimous to return the check with Iola's letter.

Iola read another letter from Lagunitas Donations for Events. Iola will follow up for door prizes and possible future events.

COMMITTEE REPORTS

Activities – Iola talked about flyer for August 11 picnic for club's 80th anniversary. Three signups so far. Please get signed up. John will put together a fox hunt for the event. Brian N6IYY agrees to help John, providing his fox transmitter.

Community Outreach – Darryl KI6MSP – showed official flyer for space festival. SCRA was added to flyer. Darryl has about 200 flyers, needs distribution to various places around the county. He is also interested in reprinting the flyer with the club logo on it, but will use what he has.

Membership – Dan KK6VIQ – 204 members, Dave

KI6UGB updated website for prorated membership price, more visible on sign up. Updated PayPal optional fields to collect call signs, phone number, and comment field. Dan is eager for someone to sign up to see what information comes in. Darryl mentioned the photo header on the site is outdated. Iola mentioned a group photo from 2018, Doug mentioned photo from this year's Field Day.

Public Service – Iola has no report for July

Merchandise – Dan has purchased everything in his budget and has \$600 left. He has been working with Hall's for hats (baseball, trucker, military style flat, "Fred" bucket hat, and "buff" for head and neck cooling. Possibly 80th anniversary coffee mug. Not all the details are worked out. He'd like to start the week of the meeting, then close it about five weeks later. T-shirt production was about three weeks turnaround, doesn't know what the timing would be for hat production. Pricing has increased slightly due to customs and tariffs. He will return with a proposal to the next board meeting.

Education – Cornell W6HMN - 10 students signed up for this week's class; next class is October 11, 12, 13. Dan requests that students who pass the test get their info updated in the registry.

Em Comm – No report

Field Day – Brian – More contacts than last year, satellite contact, elected official representative showed up. Some canopies got mixed up getting back to SRCC. Charlie mentioned problem in log where Charlie didn't get his call sign in the correct spot. Brian will process the changed log. Brian will schedule a FD debrief for July 27.

Brian had a meeting prior to FD with representatives from SR about new subdivision going in next to the youth park, whether the club would not want to have the event there. Brian looking perhaps at Piner HS. Eric AA6EM suggested A Place to Play. Brian concerned about the rental fee if club were to go elsewhere.

Programs – Randy AA6RH - August program is the "boat anchor/homebrew/auction" event. Fred said Dave Harrison will be the auctioneer, club should advertise in the weekly blast an inventory of donated equipment to sell, and solicit other donations to the club for the auction. Auction lots should be published on the website, Facebook, and the club email blast. September is tentatively planned as a talk about APRS for events. Comments from members further afield that we should get the upcoming program into the weekly blog as well as the Short Skip.

Continued on page 13...

BoD Minutes continued from page 12...

Website – No report

Refreshments – Warren K6WRP doing it for the next two months. Cornell to take care of October/November

Repeater – No report

Radio Loanout program – No report

Unfinished Business –
NEW BUSINESS

1. Tour de Cure (Daryll KI6MSP)
Daryll submitted letter to board about the event. In summary, Daryll recommends not working with this event organizer again. John moved to decline supporting, Fred seconded. Fred suggested the club gives the event organizers feedback in order to possibly engage in the future. Randy mentioned that it seemed that the event organizers don't even understand how to make use of ham operators. Brian mentioned that his rest stop was also chaotic. The observation was that there was a general lack of communication prior to the event. John, Iola, Fred in favor, Randy and Doug opposed. Motion passed, we will skip the opportunity in 2020. Brian asked that some manner of feedback would be provided along with the "dear John". Iola to communicate that.

2. Beam Antennas (Daryll KI6MSP)
Fred mentioned that the club has three Elk Log periodic antennas for public service use.

3. Major events such as Apollo 11 (Daryll KI6MSP)
Daryll believes the club should take advantage of special events such as these.

4. SoNoMas rescheduled to Nov 2, 2019, was Apr 6, 2019 (Fred AE6SF)

Membership approved doing SoNoMas from April, as well as the Sagan Fondo. Both events were cancelled for different reasons. Bike Monkey has rescheduled SoNoMas to be on November 2, the date of the Sagan Fondo. Fred will comm boss the new date and set up the event on the website.

5. Review expenses approved in 2018 and reimbursed in 2019 (Fred AE6SF)

Fred mentioned that the reimbursements are already approved, so it is an accounting issue, but as the expenses were already approved and budgeted, no board action needed.

6. Request pre-approval not to exceed \$100 to repair Byonics Micro-Trak AIO (K6SON-1) (Fred AE6SF)

Fred mentioning that the tracker is not reporting as often as the configuration is set. Fred asks for pre-approval to authorize repair of the device. Iola mentioned that public service has budget and this repair can come from that line

item. No board action needed.

7. Brian – crank up tower from FD, bag BG01 is falling apart, he's looking to find a replacement canvas tool bag, expecting \$50-60 expense. John mentioned his brother can possibly get his brother to sew it, Iola has similar seamstress contact who could do it for cost of materials.

8. Charlie's question (KZ6T)
Mini DX, Club participated in funding it (~\$300/year), the club reduced its funding over years. He suggests the club fund the Mini DX event for \$300. Doug mentioned that club has budgeted \$100 already. Doug moved to increase line item from \$100 to \$300 maximum for this year. Fred seconds. Board approved unanimously.

Dan mentioned that the DMR net information is not current in the SCRA email blast/blog, Randy to give Iola updated information.

Meeting ended at 7:28pm



Know The Difference

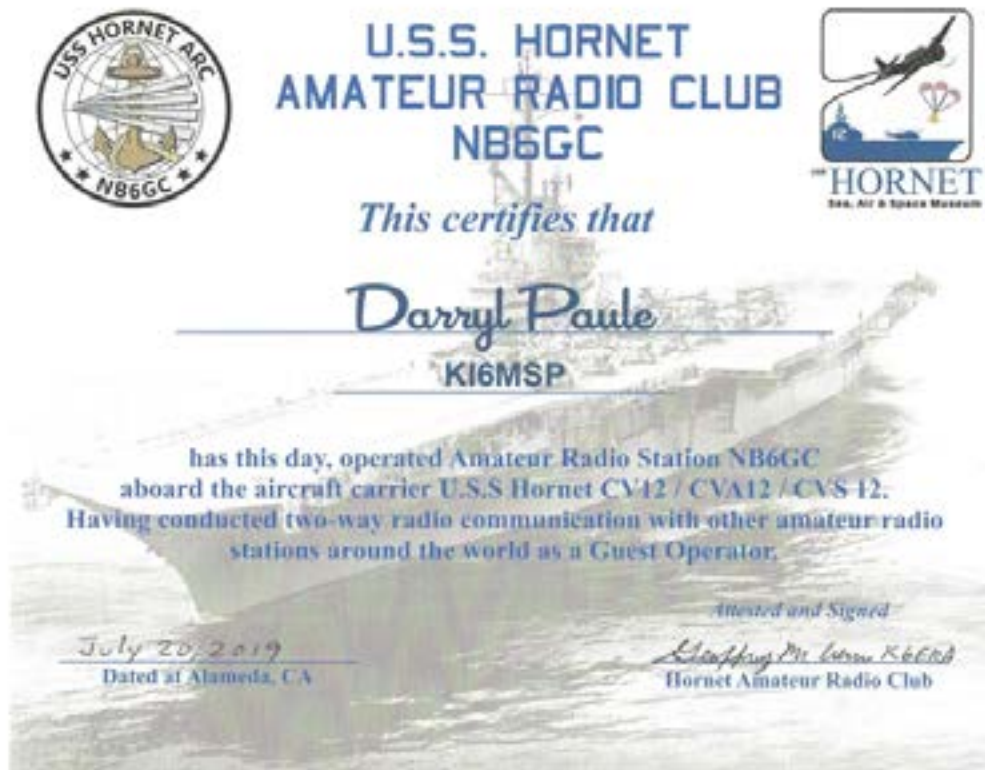


50th Anniversary of Apollo 11 Splasdown Recovery by U.S.S. Hornet



On July 20th I had the honor & privilege to operate the amateur radio station KB6GC on the USS Hornet since this was the 50th Anniversary of the Apollo 11. Darryl M Paule KI6MSP

Special Event QSL card commemorating the 50th Anniversary of the Apollo 11 Splasdown Recovery. [HARC amateur radio club.](#)



Battery Overcharged? continued from page 1...



Figure 2: Battery charging specifications.

In practice, the two-stage charger in this unit falls short of ideal. The first stage illuminated the “charging battery” LED and charged until the battery voltage rose to 14.4V. The second stage illuminated the “maintaining battery” LED, let the battery voltage drift down to 13.2V, then charged more slowly. During an eight-hour span, the stage-2 voltage rose to and settled at 14.4V, well above the recommended Standby Use range. Continued charging at 14.4V will overcharge and damage the battery. There is evidence this occurred.



Figure 3: What does not belong?

The three-year-old 7AH battery delivered only 1.5AH in use, and inside the jump-start housing the battery and surroundings were coated in a white powder (with remnants shown in Figure 3). It is possible the battery vented during overcharge, drying out its electrolytic paste.

The bottom line is, verify (measure) your charger’s voltage if you will leave it powered indefinitely. It’s easy to check battery voltage with a multimeter, or with a voltmeter that plugs into the 12V outlet (see Figure 4). If the voltage appears acceptable, check it again a few hours later and a day later. If not, unplug it for storage.



Figure 4: Voltmeter showing maintenance voltage

During storage, a rest voltage of 12.8V or higher indicates a fully charged battery. I suggest recharging if lower, after use, or every six months, whichever occurs first.

- Fred AE6SF

Community Outreach

NOVATO SPACE MUSEUM FESTIVAL

I was at the Space Museum Space Festival today SCRA had a radio demonstration station. Special event call K6A. No contacts on 20m.

There was a lot of interest in amateur radio, and getting an amateur radio license.



Astronaut [Al Worden](#) & KI6MSP

Greg H. Johnson
STS-125, 134

Al Worden
Apollo 15

Bob
STS-68, 82, 103, 110

Nau Brul
STS 51, 68, 77, 108, 111

ISS 4
Yvonne Cayama, PhD

Astronaut Autographs



S.C.R.A. 80TH YEAR ANNUAL PICNIC

SUNDAY, AUGUST 11, 2019

HOWARTH PARK, SANTA ROSA

Noon—4PM

Fox Hunt at 1:00 pm ~ Eat at 2:00pm

Enjoy: Fishing, Boating, Tennis, Fox Hunt, Comradery
ALSO ~ for the entire family: Train Rides, Carousel, Jump
House, Animal Barn.

NO CHARGE ~ Just bring a dish / appetizers, salad, desert
SCRA will provide ~ Deli Sandwich Platters, Rolls & Condiments
Water, Tea, Lemonade, Stella Artoise

Go to www.sonomacountyradioamateurs.com and sign up with your choice of dish

Howarth Park , Cypress A & B ~ Summerfield Road, Santa Rosa, CA



Countdown to W4DXCC

September 20th and 21st, 2019, Pigeon Forge, TN

Hello Friends and Club Officials

I want to ask that you pass along this announcement about this years W4DXCC convention onto your club members and friends, thank you in advance.

Hello from **W4DXCC 15 DX and Contest Convention**.

The response to this years event is just Awesome! Plan on attending today! The Website has been updated with the latest News Go Here [W4DXCC](#)

Friday is the Ham Radio Bootcamp where we do our best to provide the knowledge to New and Experienced Hams alike. If your new to some of the new digital modes like FT8-FT4 you wont want to miss Bootcamp. After dinner Friday evening we meet for a special Live Ask The Elmer session in the main convention hall. Come and ask those questions you have from A to Z.

Saturday is the main convention where we have 6 presenters giving you the inside scoop on what is going on. Following each presentation we have time for questions if you would like to know more.

We have all of the leading radio and equipment manufacturers setup in the lobby with the latest gear for you to twist the knobs or click the mice. More importantly you can have a one on one to ask questions about the gear with the company representative in a relaxed environment.

We have a fully operational Ham Shack setup where you can come learn hands on with an Elmer to show you the ropes and make QSO's in CW, Phone and different digital modes.

The Convention is a great place to meet with your friends. Coordinate with your friends to attend the convention and spend time with them reminiscing of the good old days.

We will have VE Testing on Saturday so get to studying for that test and also study for that Upgrade!

It is time to make your Hotel reservations for this years convention. Go here to the Website Hotel reservation page [Hotel Reservations](#)

The Convention admission includes Snacks and Drinks during Saturdays session and Lunch. Convention Registration is now Open including Online Ticket Purchasing. There is an evening Banquet that you can attend. When you purchase your Convention tickets also buy the Banquet tickets, seating is limited for the Banquet.

You can make your ticket purchase anytime by going here [Online Ticket Purchase](#)

Check out the Website and learn about the W4DXCC DX and Contest Convention. Go Here [W4DXCC Convention](#)

Best 73

See you soon,
Dave Anderson, K4SV
Convention leader
Dave@w4dxcc.com

©2019 W4DXCC DX and Contest Convention | 1271 Red Fox Road, Tryon 28782



**Sonoma County Radio Amateurs, Inc.
PO Box 116, Santa Rosa, CA 95402**

(Please print & fill out the form and mail it in with your check payable to SCRA.)
(Please check all that apply)

Date: _____ New Member: Renewal:
 1) Name: _____ Call Sign: _____ License Class: _____
 Address: _____ City: _____ Zip: _____
 Cell Phone: _____ Home Phone: _____
 Email: _____ Show contact info in Roster:
 ARRL Member:

SCRA Dues: The renewal date for SCRA dues is January 1st. Dues are \$20/year for individual, \$30/year for families, and \$15/year for youth (under 18).

*** Prorated Dues for New Members Only:** Reduced dues after the 1st quarter.
 2nd Quarter April–June: \$5.00 off — 3rd Quarter July–September: \$10.00 off
 4th Quarter October–December: Pay the yearly dues for next year and get the rest of this year free.

Family Membership Members:

2) Name: _____ Call Sign: _____ License Class: _____
 Address: _____ City: _____ Zip: _____
 Cell Phone: _____ Home Phone: _____
 Email: _____ Show contact info in Roster:
 ARRL Member:

3) Name: _____ Call Sign: _____ License Class: _____
 Address: _____ City: _____ Zip: _____
 Cell Phone: _____ Home Phone: _____
 Email: _____ Show contact info in Roster:
 ARRL Member:

4) Name: _____ Call Sign: _____ License Class: _____
 Address: _____ City: _____ Zip: _____
 Cell Phone: _____ Home Phone: _____
 Email: _____ Show contact info in Roster:
 ARRL Member:

I would like more information about:

- | | |
|--|---|
| <input type="checkbox"/> a) Public Service Events | <input type="checkbox"/> f) Training Classes |
| <input type="checkbox"/> b) Field Day (4 th Saturday in June) | <input type="checkbox"/> g) VE License Exams |
| <input type="checkbox"/> c) Contesting & DXing | <input type="checkbox"/> h) Field Trips |
| <input type="checkbox"/> d) Emergency Services | <input type="checkbox"/> i) Short Skip Newsletter |
| <input type="checkbox"/> e) SCRA Net Control | <input type="checkbox"/> j) SCRA Committees |
| <input type="checkbox"/> f) SCRA Loaner Radio Program | <input type="checkbox"/> k) Other _____ |

SCRA Dues: Individual \$20, Family \$30, Youth (under 18) \$15 (*see Pro-Rated Dues above)	\$ _____
Name Badge: \$10 each Please circle clasp type, either Clip or Magnet.	\$ _____
1) Call Sign: _____ First Name: _____ City: _____	Clip or Magnet
2) Call Sign: _____ First Name: _____ City: _____	Clip or Magnet
3) Call Sign: _____ First Name: _____ City: _____	Clip or Magnet
4) Call Sign: _____ First Name: _____ City: _____	Clip or Magnet
	SCRA Logo Patch: \$5 each \$ _____
	SCRA Logo Decal: \$2 each \$ _____
Please make check payable to SCRA.	Total Amount Due: \$ _____

HAM RADIO OUTLET

WWW.HAMRADIO.COM

MULTI-STORE BUYING POWER!

ICOM



IC-7600
All Mode Transceiver



IC-7200
HF Transceiver



IC-7100
All Mode Transceiver



ID-5100A Deluxe
VHF/UHF Dual Band Digital Transceiver



ID-51A Plus
VHF/UHF Dual Band Transceiver

KENWOOD



TS-590SG
HF/50MHz Transceiver



TM-D710G
2M/440 DualBand



TM-V71A
2M/440 DualBand



TM-281A
2 Mtr Mobile



TH-D74A
2M/220/440 HT

YAESU

The radio



FT-991A
HF/VHF/UHF Transceiver



FTDX1200
100W HF + 6M Transceiver



FT-450D
100W HF + 6M Transceiver



FTM-400XD
2M/440 Mobile



FT-60R
2M/440 5W HT



- **RETAIL LOCATIONS** – Store hours 10:00AM - 5:30PM - Closed Sunday
- **PHONE** – Toll-free phone hours 9:30AM - 5:30PM
- **ONLINE** – WWW.HAMRADIO.COM
- **FAX** – All store locations
- **MAIL** – All store locations

HRO is family owned and operated by active hams!

ANAHEIM, CA
(800) 854-6046

OAKLAND, CA
(877) 892-1745

PORTLAND, OR
(800) 765-4267

PHOENIX, AZ
(800) 559-7388

MILWAUKEE, WI
(800) 558-0411

WOODBIDGE, VA
(800) 444-4799

PLANO, TX
(877) 455-8750

BURBANK, CA
(877) 892-1748

SAN DIEGO, CA
(877) 520-9623

DENVER, CO
(800) 444-9476

ATLANTA, GA
(800) 444-7927

NEW CASTLE, DE
(800) 644-4476

SALEM, NH
(800) 444-0047

ONLINE STORE
WWW.HAMRADIO.COM

*Except 60M Band. **Frequency coverage may vary. Refer to owner's manual for exact specs. **Optional UX-9100 required. QST March 2017. The Icom logo is a registered trademark of Icom Inc. Toll-free including Hawaii, Alaska and Canada. Call will be routed to the nearest store. All HRO 800-lines can assist you. If the first line you call is busy, you may call another. AZ, CA, CO, GA, TX, VA, WI residents add sales tax. Prices, specifications and descriptions subject to change without notice.

SHORT SKIP ARCHIVES AVAILABLE

Mike, AD6YB, has set up archives for past and present issues of Short Skip. They are available on the Website, log into Members Area, Short Skip, click on the first sentence. Mike has scanned in the old paper issues and it is really interesting to browse through them to see what those guys were doing. There are historical photos as well. An important record of our history and ham radio in general. Good Stuff.

[\(Click Me\)](#)

DIDN'T FIND WHAT YOU NEEDED?

If you are looking for something more on a topic or your topic of interest hasn't been covered lately, let us know. Something you'd like to see in Short Skip?

Contact the editor, shortskipeditor@gmail.com or for general questions and /or suggestions, k6son@arrl.net

SHORT SKIP NEEDS YOUR INPUT

SHORT SKIP ARTICLES WANTED

Dave, KI6UGB, our Short Skip editor is always looking for articles of interest. They can be technical, a good (or bad) experience that other members may learn from, hints or kinks that worked for you in solving a problem, or just about anything ham radio related. Send your contributions to Dave at shortskipeditor@gmail.com

