



Welcome to SFARC, Auburn, CA

Sierra Signals

P.O. Box 6421 Auburn, CA 95604

December 2015

<http://w6ek.org> info@w6ek.org

At The Key of SFARC:

PRESIDENT

Tyghe Richardson, W6TJR
tyghe@tjrauctions.com

VICE PRESIDENT

Bob Brodovsky, K6UDA
k6uda@att.net

SECRETARY

Bruce Anderson, K6BAA
anderson51@wavecable.com

TREASURER

Richard Kuepper, WA6RWS
rkuepper@surewest.net

DIRECTORS

Birton Gilbert, N6UG
Robert Bell, W6RBL
Jim Jupin, WA8MPA

FIELD DAY CHAIRMAN

Mark Graybill, W8BIT

REPORTERS

Satellites: Greg, KO6TH
History: Gary, KQ6RT
Misc Radio: Fred, K6DGW
Sunshine: Richard, WA6RWS

WEBMASTER:

Birton Gilbert, N6UG

REPEATERS

145.430 (-0.6 MHz/PL 162.2)
440.575 (+5.0 MHz/PL 162.2)
223.860 (-1.6 MHz/PL 110.9)

CLUB NET

Thursdays, 7:30PM, W6EK/R
145.430

CLUB MEETINGS

Second Friday of the month,
7:30PM at the Auburn City Hall,
1215 Lincoln Way, Auburn CA

CLUB BREAKFAST

Last Sat of the month at Mel's Diner
1730 Grass Valley Hwy, Auburn 7:30AM

NET CONTROL OPS

Dave Jenkins, WB6RBE
Norm Medland, W6AFR
Bob Brodovsky, K6UDA
Al Martin, NI2U

NEWSLETTER EDITOR

Barbara Anderson, W6EVA
anderson51@wavecable.com

ARRL PIO:

Carl A Schultz, WF6J

VOLUNTEER EXAMINER

Al Martin, NI2U



Calendar of Events

**December 12th:
Club Christmas Party**

**December 25th:
Christmas**

**December 26th:
Club Breakfast**

Inside this issue:

- **From the Mic**
- **Christmas Party Reminder**
- **Miscellaneous Radio – Epilogue**
- **Board & General Minutes**



*"Thank you" Fred Jensen for all the
Miscellaneous Radio articles you have
written for our club newsletter
(See page 3 for his final article)*

*Enjoy your first Christmas in your
new home in Sparks, Nevada!*

We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing

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From the Mic

By Tyghe Richardson – W6TJR, President

December 2013 marked the start of a very enjoyable and rewarding experience; I have been honored to represent this club as president. In the last two years we have lost some good hams and have gained some exceptional new ones. Our old friends will be missed and our new friends will be enjoyed. I feel that this club is chalked full of enthusiastic hams!!

As a group this club goes the extra mile, from a super field day to an amazing swap meet. Hands down this club rocks! Every member of this club adds something to each event. Thank you all for making this club so great. Personally I plan to support and stay involved with the club in the coming years.

This is the last From the Mic for now,
so 73's my friends

Tyghe
W6TJR

	
Tyghe Richardson Broker-Owner/Auctioneer 530-320-5554 CalBRE 01908664 2600 Sunset Blvd, Ste 104, Rocklin, CA 95677	
Office: 888-408-9111 Tyghe@UCGreatWest.com	Fax: 866-513-6017 UCGreatWest.com

REMINDER:



The Christmas party is just around the corner. We need to know what you are bringing and who will be there. Please contact Wendy KK6HSK directly (via our website).

MISCELLANEOUS RADIO

Epilogue

Heraclitus, a Greek philosopher from around 500 BCE, is said to have said, “The only constant in life is change.” After 38+ years on the 5-acre Auburn Farm with a 2 ½ story house, “change” has happened for Andrea and I. We bought a 1 story home [about 2 years old] on a suburban lot in NE Sparks, NV, and sold the Farm to oldest daughter and son-in-law. She grew up there, and really wanted it.

The move occurred this summer amid many trips with the truck full of boxes and stuff, and for a time, our mean position suggested we were living at the Donner Summit Rest Stop. Movers finally came on 14 Aug, delivered on 15 Aug, and we formally departed the Golden State and became citizens of the Silver State getting drivers' licenses, NV tags for the vehicles, and registering to vote. As in California, I cannot get my call sign on disabled veteran tags in Nevada, but there are monetary advantages to the veterans' tags which trumps my call. They gave me A678, which I think I can remember.

We're not too far [but not too close 😊] from our youngest son and his family who have been here for 17 years and will be for the foreseeable future. Oldest granddaughter is a HS Junior, pitches for the school's softball team, and will attend UNR on a softball scholarship. Not quite totally unpacked yet, but we discovered that even after 38 years in Auburn, we hadn't exactly unpacked everything there either.¹

We have an HOA with perhaps ½ a ream of CC&R's. That said, the HOA is benign and benevolent, they seem to respond only to chronic complainers, and our community, which is very wide demographically, doesn't seem to have any of those. Younger granddaughter likes to come over to “help” us but it turns out that Isaac, the teen baseball player next door is in some of her classes, and we are not the real attraction. 😊 Such is grandparenthood.

I'm not going to propose to the benevolent HOA Architectural Review Committee that I want to put up a 70' tower with a tribander in my tiny back yard, but I can have a flag pole ... there are several in the community. Mine will be in back, I will fly the flags the troops we've adopted over the recent wars have sent us, and it will have an insulator at the bottom. I will remote my Elecraft KAT500 to the base and this will all happen next spring. I haven't done the RF Exposure calcs yet for 500 watts 10' from the bedroom, but I may have a KPA500 up for sale, unless Andrea is willing to walk around the house with a tinfoil hat.

So, what to do between now and spring? Well, this segues nicely into the Epilogue for Miscellaneous Radio ... “Where is Ham Radio headed in the next couple of decades of the 21st century?” The observation, “Predicting things is hard, especially if they're in the future” is ascribed to many, Niels Bohr being one.² I've been terrible at predicting the technology future, and after some thought I'm going to predict exactly one thing. I just did it successfully, and as a result, I'm back on the air on HF from home in addition to VHF/UHF FM in the truck.

Remote Radio: This is real now and is only going to grow. You can work VY1JA in Yukon Territory, but the operator is likely Dean, N6DE, warmly stationed in Silicon Valley. I have a little box on my Elecraft K3, about the size of a thin-ish paperback, and with it, I use my K3 to control a K3/KPA500 at W7RN, “The Comstock Memorial Station” [w7rn.com]. I have my choice of 23 [last count] really big antennas. I use my own call, I give W7RN's grid and QTH when needed, that's where the transmitter is. My K3 doesn't make any RF, but it operates just like it would if it did ... I do need to tune a little slower, there's about 70 ms roundtrip delay.

The secret of course is the Internet. The “little box” is a RemoteRig RRC-1258MK2 interface that talks to my K3 via the serial port on one end, and talks to our ATT UVerse wireless router on the other. It has an audio codec so I hear exactly what I would hear if I was physically at W7RN, an iambic keyer, and it just sits there until I turn on my K3. It creates CW sidetone locally here in Sparks, listening to your transmitted signal or the sidetone at W7RN is really disconcerting due to the slight delay.

Now, Tom, K5RC, who lives at W7RN, has set up a TV camera that looks at his K3/KPA500. I can access that camera, and all the antenna switching and rotators using a groupware thing called TeamViewer ... over the Internet of course. Unless someone else is using the remote, his K3 is off, display is dark. When I turn my K3 on, his lights up, the KPA500 amplifier goes to OPERATE, and when I tap the paddle on my desk in Sparks, I make 500 watts of RF near Virginia City NV. So far, I'm CW-only, but as soon as I find the adapter for my Heil Proset, I'll be on SSB as well.

¹ And it's here now 😊

² Often also ascribed to Yogi Berra, Philosopher and Catcher.

Trust me, this is happening now, and will happen much more frequently as time goes on. A number of DX and psuedo-DX stations have set up remote operations,³ and you don't even have to go to Jamaica to sign a 6Y call, although I can't imagine why you wouldn't want to go.

It's Not New: We've been sort of doing this for many years. 60 years ago, I remotely keyed a 5 KW transmitter 20 or so miles away from where I was sitting. Of course, the transmitter was on a fixed frequency, and I was at the receiver site where I had real receivers in front of me, and I could only key the transmitter, everything else was handled by the on-site transmitter engineers.

The Cactus Intertie system is a network of 150+ mountain top mainly 70 cm remote radios. They each have a controller [computer] and they are linked via other UHF and microwave radios, and in some cases voice-over-IP internet links. The controllers respond to DTMF codes, and each site has a prefix [aka address]. From a hand held radio, you can "control" any site from anywhere in the system – turn radios on/off, configure links, inquire about status, and the like. Cactus has been around since 1974, and is by no means the only such system.

But ... if you were observing while I operated W7RN remotely, you could not tell that there was anything involved but my K3. Every control and display does exactly what it would do if I really were generating RF at home. My S-meter repeats the signal strength on the remote S-meter, I can turn the pwr knob and the remote responds.

Two Approaches: There are two basic approaches. One resembles the FlexRadio concept where the "radio" has no knobs or controls. Control is in software running on a PC and emulating in graphics the controls on a normal radio, although not necessarily a normal radio that actually exists. The software creates a radio-like display, a spectrum and waterfall display, and it's just passing commands and information back and forth with the computer and radio at the remote site. One has to become familiar with the computer interface, but once you do, it works good.

The second, the one I'm using, literally connects two identical radios and everything you do on the control radio directs the remote radio to do the same thing. The remote radio in turn reports back everything to make the displays work. A variant of the concept has been around for quite awhile in the form of radios with detachable control heads. I have one in my truck ... an ancient IC-2800H. The radio has no controls and is under the back seat. The control head is up front, and they are connected by a cable terminating in RJ-45 connectors.

W7RN uses RemoteRig [RR] from MicroBit in Sweden, and RR will function with the radios with removable controls too. It acts as an electrical interface to the Internet, and 'just' passes the information on that cable back and forth to the remote. OK ... "just" in that last sentence involves a whole lot of electronic and software design, but it's 'in the box,' I don't see it. A benefit of RR for some is that you are operating a real radio, there's no PC involved. Radios without detachable controls, but which have a computer connection [CAT interface] are also supported by RR. A K3 controlling a remote K3, such as my case, is one example. Elecraft even makes a K3/O which is just a K3 control panel with no RF components for use as the control. It looks like a K3 and appears to function as one, it's just cheaper.

The Future?: I think we'll see more of it. Homeowner's associations and the restricted housing that results were unheard of in Los Angeles when I was growing up in So. Central LA. There were restrictions of course, living in Beverly Hills or Palos Verde was restricted to the very wealthy, but Don Wallace, W6AM, was very wealthy and built a famous ham radio site overlooking the Pacific in Palos Verde and didn't ask an HOA for permission.⁴ The growth of HOA's is Reason #1

Some hams [predominantly wealthy] derive a great deal of enjoyment from building so-called Super Stations. OH8X might be the poster station, but there are many others. W7RN is a US example. I've operated as a guest there several times, but I drove from Auburn to Virginia City Highlands to do it. Hams own stations in the Caribbean [P4, 8P, 6Y, ZF] that they rent to hams wanting a DX Experience. Getting there can be a little spendy, as the Oregonians put it, but the station is pretty much set up when you get there.

RemoteHamRadio [RHR] is a loose organization of these Super Stations, and is Reason #2 why I think remote operation is going to flourish in the near future. Basically, they "rent" remote operation to anyone who wants to sign up. Most do it by the operating time, but I've heard that basing cost on completed QSO's is being tried. No air fare and other travel costs, you'd be renting the DX station anyway, and it's gaining in popularity. Ed, K6CTA, is in a similar situation to me, and points out that while the meter is ticking away as he works for a Q in a pile-up, these are Super Stations with antennas that begin to make the VOA look a little wimpy, and it almost never takes him very long to get the Q. If you're the strongest one in the pile, you get called first.

³ RemoteHams.com

⁴ Well, in the interest of full disclosure ... realtors in our little enclave in So. Central LA in the 50's were united in not selling homes to certain ethnic folks, a great number of whom lived just across the tracks on Alameda St in what was then called Watts. That is illegal today. But, I could put up any antenna my Dad would let me.

That's been my experience with W7RN ... if I call a weak DX station on 10 meters with the 6 over 6 over 6 10 m stack, I'm usually in the first 3 or 4 he answers.

I'm sure there will be a whole array of new technologies in ham radio. 2.3 and 5 GHz local links are becoming common, Rick, K6VVA, has a dedicated 5 GHz link from his home in Morgan Hill [a self-described "RF Hole"] to Locust Peak, a self-named peak to his west that his family owns, with a remotely controlled, solar powered HF radio. Bluetooth devices are beginning to help us eliminate many of the wires behind our "wireless equipment."

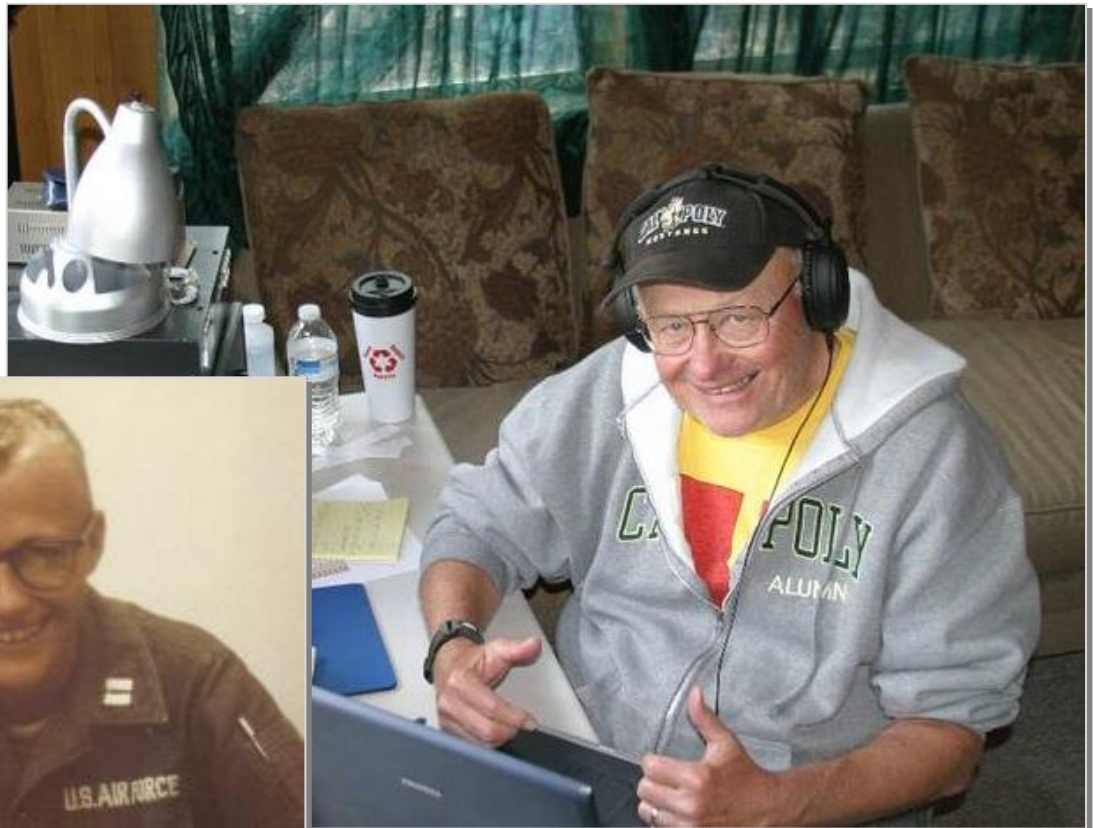
When Matt took over editorship from me and I had promised to supply monthly stuff, I approached it as a bit of a burden ... "Oh crap, nearing end-of-month, got to get something to Matt." It turned out that once a month wasn't all that much of a burden at all, since I didn't have all the other duties of Editor [which are numerous]. MR has prompted me to dive into some history which you all know I like, and to refresh my knowledge of a lot of things I was sure that I knew, but found I couldn't remember. It has been fun, and enlightening.


SFARC is thriving like I haven't really seen in four decades. Ham radio has been a great hobby and companion for me through a huge variety of life experiences and so it continues. I hope it does for all of you also.

This is the Epilogue to Misc. Radio, not my obituary. I've been a member of SFARC since it was resurrected in the 70's, and I'll likely stay a member. 38 years was a good run on the farm in Auburn, more exciting things to come now in a new place. And, thanks for all the support and input during my trips as Editor.

73,

Fred K6DGW
Sparks NV





Ryan Tollefson
District Manager

8025 Greenback Lane • Citrus Heights, CA 95610
P 916-722-8800 • C 916-775-3030 • F 916-722-2489
rtollefson@batteriesplus.net • www.BatteriesPlus.com

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BOARD OF DIRECTORS MEETING MINUTES November 13, 2015

The SFARC Board meeting for November commenced at 1800 hours at the Sizzler restaurant in Auburn.

Roll Call: All officers and Directors were present with the exception of Vice President Bob-K6UDA and Director Robert-W6RBL. Also present were guests Al-NI2U, Andrew-N6REW, Earl-K6GPB, Jef-N5JEF, Dennis-WU6X and Orion-AI6JB.

REPORTS and DISCUSSIONS

President's Report: Tyghe-W6TJR opened discussion by requesting \$100.00 for Christmas party plaque engraving costs. Jim-WA8MPA made a motion for the funding, Richard seconded and the board unanimously approved the allotment of \$100.00.

Secretary's Report: Bruce-K6BAA had no points for discussion.

Treasurer's Report: Richard-WA6RWS reported on the club finances and reported the club currently has 130 members. Richard also began a board discussion on raffle prizes for the Christmas party. Bruce-K6BAA suggested gift cards for HRO-Ham Radio Outlet; Earl-K6GPB suggested gift cards for non-hams and Richard countered there are prizes for spouses of club members. Tyghe asked that last year's Christmas budget allotment be carried over. Jim-WA8MPA made a motion for the allotment, Richard seconded and the board unanimously approved the allotment.

Ham Swap: Orion-AI6JB briefed the board and stated the swap meet is on track.

Elections: Dennis-WU6X led a discussion about the election process at the club meeting. Dennis then advised the board of the Roy Johnson donation of ham equipment; offering the items to be sold at the ham swap.

VE: Al-NI2U advised the board of his attempts to change the account at the Auburn Journal so the VE sessions can be updated on the newspaper's calendar. Birton-N6UG recommended the VE sessions should be directly affiliated with the club as it has been a good source of new members. Tyghe agreed to the affiliation. Birton also suggested it should be the duties of the PIO to update the Auburn Journal's account, that the PIO should be the point of contact.

Meeting adjourned at 1830. Submitted by Bruce-K6BAA, Club Secretary

GENERAL MEETING MINUTES

November 13, 2015



The SFARC General meeting for November commenced at 1930 hours at the Auburn City Hall Rose Room, President Tyghe-W6TJR presiding. All Officers and Directors were present with the exception of Vice President Bob-K6UDA and Director Robert-W6RBL. Tyghe led approximately 36 members and guests in a Pledge of Allegiance to the flag. An introduction of Officers, members and guests followed.

REPORTS:

Past minutes: Minutes were approved as posted in the Newsletter on motion.

President's Report: Tyghe briefly discussed the agenda and reviewed this evening's board meeting.

Secretary's Report: Bruce-K6BAA requested input for the club newsletter; advised a welcome letter was available for new members and guests, and a reminder to the membership to sign the attendance sheet.

Treasurer's Report: Richard-WA6RWS reported on club finances and reported club membership now stands at 130.

Elections: Tyghe immediately began the election process for the club officers and Dennis-WU6X administered the election which resulted in the following new officers:

President: Orion-AI6JB

Vice President: AI-NI2U

Treasurer: Sharron-KK6RGV

Director: Andrew- N6REW

Director: Bob-K6UDA

VE's Report: AI-NI2U introduced Gary-N6UWQ as a new General Class licensee. AI reported 11 candidates attended the VE session resulting in 6 new techs and 4 new generals.

Repeater Report: Richard-WA6RWS reviewed the repeaters status and future upgrades. All three repeaters are currently linked.

Sunshine Report: Richard-WA6RWS reported on Holly-KE6ETT's (SK) memorial service and advised former club member Chuck-AE6LR is recovering from surgery and is staying with his son in the Auburn area.

Refreshments/Drawing: Jason-KK6RXT reviewed items planned for the drawing. Scott-K6SVW reported on refreshments for the break.

Yahoo: Dennis-WU6X encouraged club members to join the Yahoo Group and reviewed the benefits.

Ham Fest: Orion-AI6JB advised the Ham Fest will be on March 12, 2016 and he needs volunteers.

OLD BUSINESS:

None

NEW BUSINESS: Richard advised he had a few Field Day t-shirts available for sale.

General Announcements: The Club Net meets every Thursday at 7:30pm; Board and General Meetings occur on the 2nd Friday, Board meeting is held at **Sizzler Restaurant** in Auburn, and General meetings at 7:30pm at **Auburn City Hall**. The Club breakfast is held on the last Saturday at **Mel's Diner** in Auburn; an Elmer Net is held the first and third Wednesday night at 7:30pm on the 2m repeater. See www.w6ek.org for more information.

The meeting adjourned at 2100. Submitted by Bruce-K6BAA, Club Secretary

SIERRA FOOTHILLS AMATEUR RADIO CLUB
P.O. Box 6421, Auburn, CA 95604

2016 MEMBERSHIP APPLICATION

SIERRA FOOTHILLS AMATEUR RADIO CLUB
P.O. Box 6421, Auburn, CA 95604

Name: _____ Call: _____ Class: _____ e-mail: _____
Address: _____ City: _____ State: _____ Zip: _____
Associate Name: _____ Call: _____ Class: _____ email: _____
Phone: _____ Cellphone: _____ Application is: (Circle) New Renewal

Dues / Donations:

Membership: yearly* \$22.00 or 20x _____ Name Badge: \$ 7.00 Yes (special name) _____
Associate: yearly* \$ 7.00 Repeater Donation: \$ _____
Auto Patch Donation: \$ _____ Newsletter Booster: \$ _____
Misc. Donation: \$ _____ Christmas Donation: \$ _____ ARRL member? (circle) Yes No

TOTAL: \$ _____ Please add \$1 if paying via PayPal

*Prorated dues for NEW Members/Associates Only

July	\$ 20/6	October	\$ 14/3 + following year
August	\$ 18/5	November	\$ 12/2 + following year
September	\$ 16/4	December	\$ 10/1 + following year

New---New---New---
Multi-year DISCOUNT Membership
****\$20 per year for 2 or more years (new or renewal)**

OFFICE USE ONLY:	DO NOT WRITE BELOW THIS LINE		
Date: _____	Treasurer: _____	Secretary: _____	Roster: _____
Payment: _____	Check Number: _____	Cash: _____	PayPal: _____