



Welcome to SFARC, Auburn, CA

Sierra Signals

P.O. Box 6421 Auburn, CA 95604

May 2019

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

At The Key of SFARC:

PRESIDENT

Orion Endres, AI6JB
AI6JB@ARRL.NET

VICE PRESIDENT

Brian Gohl, AI6US
AI6US@titaniumsattelite.com

SECRETARY

Michele Bauer, WH7QC
mickybauer2012@gmail.com

TREASURER

Jeff Morgan, KM6RGO
jamontrail@gmail.com

DIRECTORS

Greg Dolkas, KO6TH
Gerry Brentnall, WA6E
Dustin Yue, W6YUE

FIELD DAY CHAIRMAN

Gary Frerking, KC3PO

REPORTERS

Satellites: Greg, KO6TH
Sunshine: Richard, WA6RWS

GROUPS io

Dennis Gregory, WU6X

PIO

Scott Vogelsang, WA6YNE

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
Casey McPartland, W7IB
Bob Brodovsky, K6UDA
Al Martin, NI2U

NEWSLETTER EDITOR

Barbara Anderson, W6EVA
anderson51@wavecable.com

WEBMASTER: Herb Garcia, KM6JBI

VOLUNTEER EXAMINER

Al Martin, NI2U

Calendar of Events

May 4th & 5th:
Enduro

May 5th:
MS Walk

May 10th:
Club Meeting

May 25th:
Club Breakfast

May 27th:
Memorial Day

June 22nd & 23rd:
Field Day

Inside this issue

- *President's Message*
- *Show & Tell photographs*
- *Getting loaded (antenna-wise, anyway)*
- *Board Minutes*
- *General Minutes*



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

Sierra Signals is published monthly by the Sierra Foothills Amateur Radio Club for the information of its members and friends, and is distributed via E-mail and USPS mail. Opinions expressed are those of the authors. Newsletter exchanges with other clubs via E-mail are welcomed. Contact the editor to be placed on the E-mailing list. The contents of Sierra Signals are copyrighted by the Sierra Foothills Amateur Radio Club, and all rights are reserved. That said, we will gladly permit republications for non-profit uses of all text material. Photos require the consent of all persons pictured in them, and some of our material is copyrighted by others and published by permission. You'll need to contact them for permission.



President's Message

*By Orion Endres – A16JB,
President*

Field Day 2019!

By all accounts, Field Day 2019 is taking shape to the best yet!! Be sure to join us on June 22nd & 23rd, at the Blue Canyon Airport off I-80 near Nyack. Check out our website for additional information, www.W6EK.org.

If you want a T-Shirt to commemorate the event, Bob, K6UDA, and the Field Day team have designed a shirt that I think does a great job capturing the essence of W6EK Field Day 2019. Go to https://w6ek.groups.io/g/sfarc/topic/field_day_2019_t_shirts/30402048?p=,,,20,0,0,0::recentpostdate%2Fsticky,,,20,2,0,30402048 to see their FABULOUS design. Bob is taking pre-orders. Just follow the link and "Reply" with your order. If that doesn't work for you, email him at k6udaradio@gmail.com. Last day to order is our May General Meeting, May 10th, 2019. T-Shirts will be passed out at the June 14th meeting. Don't miss out. Place your order early!!

Help Wanted!

We have two events this year that need someone to organize.

The first is our **Annual Picnic** in September, date to be determined. If you are the lucky person to be the first to volunteer you can set the date. The picnic is always a club favorite and a great opportunity to meet with other members in a setting other than our monthly meeting room. You can expect plenty of help from other members, so you won't be alone. Please let me know if you are interested.

The other event is our **Annual Christmas Party** scheduled for Saturday, December 7, 2019, at the Auburn Veteran's Memorial Hall. Again, you can expect ample support from other members and me. Please let me know if you are interested.

Get Out There! Explore!

While I am a relatively new ham, I am amazed at all there is to do in Ham radio. At last month's meeting we had a Show and Tell session where members brought in items they had created. The depth of expertise of our membership alone is mind boggling. We had members who built their own radio as a kid, custom fabricated a case for their kit built radio, used a Raspberry PI to get into the digital radio world, demonstrated how you can build a spectrum analyzer with minimal cost, and pieced together an APRS station from equipment already owned. The creativity and ingenuity was inspiring.

Brian, AI6US, and I decided we wanted to dive into the world of Packet Radio and Winlink to help out at the Western States Endurance Run and the Tevis Cup. Neither one of us has vast experience here. However, with a point in the right direction from Joe, K6SAT, and help from the village, Brian is up and running with a TNC-X. I decided to go beyond my comfort and purchase the kit build version of the TNC—X. It is a work in progress. Look me up at the May 10th meeting to see how things worked out.

The point here is; Ham radio has all kinds of different pursuits surely to peak your interest. Even if you are unsure where to begin, let the Club know and we will help get you going in the right direction. The Club has a vast array of experts who are more than willing to share it with you in a fun and supporting way.

Get Out There! Explore something new in Ham radio and enjoy!!

Hope to hear on the air soon,
Orion, AI6JB
President

Show & Tell - General Meeting April 12th, 2019



SHOW & TELL

Bring an Object
Share Its Story



Getting loaded (antenna-wise, anyway)

By Dan Romanchik, KB6NU

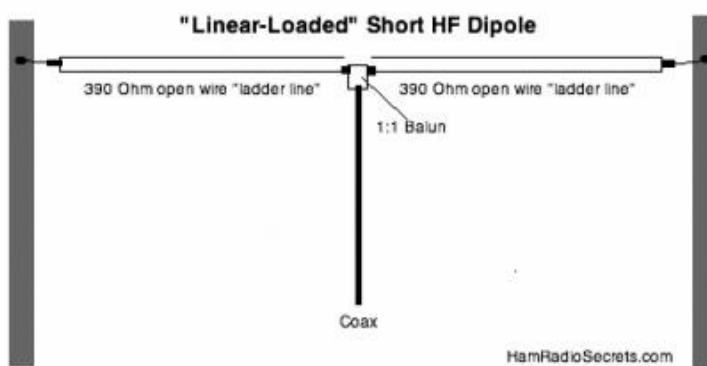
A couple of years ago, I homebrewed a "Cobra" antenna (<https://www.kb6nu.com/yet-another-new-antenna-the-cobra/>). It's a doublet antenna, meaning that it consists of two elements connected to a center insulator, where it connects to a feedline. The unique thing about the Cobra antenna is that each element consists of three parallel conductors connected in series.

My antenna uses a lightweight, three-conductor rotor cable that used to be available from Radio Shack. The feedline is 450 Ω ladder line that connects to an antenna tuner to give me multi-band operation.

Connecting the conductors in this way is supposed to provide "linear loading." Somehow, running the conductors in parallel is supposed to increase the antenna's effective length. My antenna is only 73-ft. long, but it easily tunes up on 80m.

The ARRL Antenna Book has a short section on linear loading. It says that linear loading is a "little understood" alternative to inductive loading that can be applied to almost any type of antenna. Furthermore, "...it introduces very little loss, does not degrade directivity patterns, and has low enough Q to allow reasonably good bandwidths."

As I mentioned, I've been using this antenna with good results for a little more than two years now. When I first put it up, someone mentioned the concept of linear loading to me, but not being an antenna guru, I didn't give it much thought. About a week ago, though, I ran across a link to the page Short Ham Antennas for HF (<https://www.hamradiosecrets.com/short-ham-antennas.html>). That got me thinking about the topic again.



This page describes a way to build a linearly-loaded dipole antenna with a feedpoint impedance of approximately 35 Ω . This allows you to feed it with coax instead of the ladder line that I use. The author uses 390 Ω ladder line for the elements. He says it's commonly available, but I don't think I've ever seen 390 Ω ladder line. You could probably use 450 Ω ladder line by adjusting the element lengths a little.

At that point, I started Googling. The next linear-loaded antenna design that I ran across is a design from M0PZT (<http://www.m0pzt.com/40m-linear-loaded-dipole/>). He built his elements from some sturdy wire and homebrewed spacers made from PVC pipe. He's used this design for the 40m elements of a fan dipole covering the 40m, 20m, 15m, and 12m bands. Only the 40m elements are linear-loaded.

I also found a design for a linear loaded vertical antenna for 40m and 80m:

(<https://www.qsl.net/pa3hbb/ll.htm>). This antenna is only 7.736m, or 25.4 ft. tall. Of course, it requires a good radial system to work well, but it will work a lot better for DX than a low doublet or dipole.

Finally, there's an eHam discussion on linear loading:

(<https://www.eham.net/ehamforum/smf/index.php?topic=84418.0>). Unlike a lot of eHam discussions, this one is quite civil. It's worth reading if you're interested in the topic.

So, if you're thinking of getting loaded, errrrr, I mean loading your antennas, here's a method for you to consider. It works!

=====

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the “No Nonsense” amateur radio license study guides (KB6NU.Com/study-guides/), and one of the hosts of the No Nonsense Amateur Radio Podcast (NoNonsenseAmateurRadio.Com). When he's not thinking about operating maritime mobile, you'll find him on 30m, 40m, and 80m.



BOARD OF DIRECTORS MEETING MINUTES

April 12, 2019

The meeting was called to order by Orion, AI6JB promptly at 18:00 at Mel's Diner in Auburn. There were 19 members present.

OFFICERS AND BOARD MEMBER REPORTS:

Orion, AI6JB announced that next year's HAM Fest will be organized by Alan, W6WN with Jim, WA8MPA assisting.

Brian, AI6US announced that our May's General meeting, Jordon, WC6J will be giving a presentation on "how to activate, how to SOTA".

Michele, WH7QC announced being gone during May's meetings and needing someone to take the minutes. Mike Perry, Kk6GLP very kindly offered to help out. Thank you, Mike! 😊

Jeff, KO6TH gave a big treasurer's report. In short, we had some rollover monies. Incoming funds are put into one account. The HAM Fest took in \$1,700, about \$700 over budget-yay! Concessions took in \$211, also more than last year's Fest. There were 1,300 raffle tickets sold and that is attributed to the great ticket pricing done by Doug, W2VX at \$2 each or \$10/10. Way to go, Doug!

COMMITTEE CHAIR REPORTS:

Greeter/Sunshine-Richard WA6RWS. It was announced that Peter Whittenberg, K2LRC has been in and out of the hospital, Sharron Griffith, KK6RGV has had back surgery, and Mary, wife of Gene Freeland, KG6CYA is in cancer therapy.

Digital Repeater-Richard, Bob, K6UDA, and Jeff, KO6TH reported that the Club was offered a Yaesu fusion repeater system by Jef, K6IOK. The repeater committee will meet to discuss infomenting on our system. We will need an additional controller if it will be tied into our current controller. They are talking to putting a Club 440 pair. These three plan to meet.

Webmaster-Herb, KM6JBI announced that everything is fine. Those of us who have seen his page for new members noticed it is very good!

Groups.io-Dennis, WU6X said that there are no changes and that there are now 126 members. The sub groups look good.

Social Media Officer (SMO)-Bob, K6UDA announced that Instagram is up. Instagram is the biggest thing on social media these days. We have 18 Followers. Please text pictures to Bob for posting. He has no keys for Facebook or Twitter. Items to be posted need to be sent to Bob.

Membership-Richard, WA6RWS said the short list is 102 dues-paid members with 24 on the list needing to pay.

VE Exam-Al, NI2U announced that 6 guys took the latest test with one new Tech and 3 new Generals (One person achieving his Tech and General).

Drawing Chair-Doug, W2VX has a nice variety of drawing items. He needs help for the June meeting as he will be traveling--business-related.

Field Day Committee-Herb, KM6JBI/Bob, K6UDA/Al, NI2U/Gary, KC3PO will do all ICOM Radio 7300's + one Flex. Maybe GOTA on VHF, maybe combined with HF. Discussed about some educational opportunities. Scott, KK7AIR is offering a radio for talk-in use on Field Day. We are looking for pilots for educating on aircraft communications. Greg, KO6TH giving a presentation on satellites. There will be a flight tracker on a big screen. We will check on Jim Nordstrom, KQ6VP to be our cook for the event. ☺ We need PIO contacts. Their next meeting will be on May 6 @ 18:00 @ Denny's.

CALENDAR OF CLUB EVENTS:

May 4-CERA (California Endurance Riders Association) Crazy Miner Enduro, Georgetown. Committee Chair-Mike, KK6GLP

May 5-MS Walk in Folsom. More volunteers needed. Committee Chair-Mike

May 5-Fool's Gold Motorcycle Enduro (CERA) Volunteers needed. Chair, Mike.

June 21-Field Day 2019 set up at noon, located at Blue Canyon Airport.

June 22-23-Field Day 2019 from 11:00 am on 22nd through 11:00 am 23rd.

July 20-ARRL North American QSO Party-RTTY. Committee Chair-Dennis, WU6X.

August 3-ARRL North American QSO Party-CW. Committee Chair-Dennis.

August 19-ARRL North American QSO Party-SSB. Committee Chair-Dennis.

September 13-Club Officer Nominations. Headed by Rich, AA6RS.

October 10-White Elephant Auction. Committee Chair-Tyghe, W6TJR & Bob, K6UDA (?)

October 26-CQ Worldwide SSB Contest. Committee Chair-Dennis, WU6X

November 8-Club Officer Elections. Headed by Rich, AA6RS.

November 22-CQ Worldwide CW Contest. Committee Chair-Dennis, WU6X

December 7-Club Christmas Dinner. Committee TBD

OLD BUSINESS:

Repeater Lease expired June 6, 2018. Committee-Richard, WA6RWS and Bruce, K6BAA. We are going to let it lay for a while.

Club Insurance: We are covered as volunteers, but not as a club and were asked to sign waivers. Gerry, WA6E said that our insurance company only covers our Radio Club events. He advised that we NOT sign anything until we know exactly what the waiver is about.

2018 Financial Report given by Mike, KK6GLP and Dennis, WU6X. It was stated that there are just 1-2 loose items; otherwise, the list is pretty much cleaned up.

Club Meeting Camera Lighting Proposal-\$200. Chair-Brian, AI6US said that there will be no recording at tonight's General meeting.

The meeting was adjourned at 19:00.

Submitted by *Michele Bauer-WH7QC, SFARC Secretary*

GENERAL MEETING MINUTES
April 12, 2019



The SFARC General meeting for April commenced at 19:35 hours at the Auburn City Hall Rose Room, President Orion, AI6JB presiding. We did our usual Pledge of Allegiance and introductions, and welcoming of guests. There were at least 58 in attendance, including a visitor from Scottsdale, Arizona along two visitor-children from Auburn. There was an unusually bigger crowd tonight which ended up being "standing room only"!

Greeter/Sunshine: Richard, WA6RWS announced that Sharron Griffith, KK6RGV had back surgery recently and Mary, wife of Gene Freeland, (KG6NYH) has been undergoing cancer treatments.

Carl First, N6CKV announced that Peter Whittenberg, K2LRC has been in and out of ER with high blood pressure. Please keep all these folks in your prayers!

VE Exam: Al, NI2U announced that we have 1 new Tech and 3 New Generals

Volunteer Events: Mike, KK6GLP announced the need for volunteers for the Sunday, May 5 events (MS Walk in Folsom & Fool's Gold Motorcycle Enduro).

Satellite: Greg, KO6TH gave a report.

Public Information Officer (PIO): Scot, WA6YNE announced that farmers need/want WiFi 900 frequency, which could be a problem for Amateur Radio.

Contest Chair: Dennis, WU6X announced that there is no contest this month.

Social Media Officer (SMO): Bob, K6UDA announced to the club that we now have Instagram. Sign up NOW for Field Day tee shirts, otherwise, no can do.

Membership: Richard, WA6RWS thanked everyone for joining/rejoining SFARC.

Refreshments: George, KG6LSB in charge of refreshments. Your donations are important! Proceeds finance our end-of-year Christmas dinner.

Field Day 2019 will be on June 22-23 this year up at the Blue Canyon Airport. There are plans for Jim Nordstrom, KQ6VP to be the cook. Set up for Field Day will be on June 21 at noon with the event running from 11:00 am on June 22 through 11:00 am June 23. ☺ The Field Day Committee has their next meeting on May 6 at 6:00 pm at the Denny's in Newcastle.

HAM Fest 2019: The attendance was not quite as high as 2018, perhaps due to the nice weather that day?! ☺ There is a great group picture which was shown on the big screen at the meeting. A breakdown of the various profit, expenses, drawing and so forth is as follows:

Profit: \$1747 with a goal of \$702

Expenses: \$852 with goal of \$905

Drawing: \$1,300 with goal of \$600 (Bargain ticket prices were \$2/1 & \$10/10-Thanks Doug! And many thanks too, to Bob Newburn, KM6YKX for purchasing 100 tickets in contributing to the cause!)

Club sales: \$248 with goal of \$150

Concession: \$211 with goal of \$250

Vendor sales: \$560 with goal of \$625 (there were 56 stalls)

Member donations: \$305 with goal of \$300

So, overall, the proceeds were very good!

This was Orion's last year to organize the HAM Fest. Many thanks for doing such a terrific job, Orion! Next year will be Alan, W6WN and Jim, KI6AZH. Thank you Alan and Jim!

Announcements:

Elmer Net is every 1st and 3rd Wednesday at 7:30 pm on the 2-metre repeater.

ARRL pins are \$6 each. You can pick them up at Field Day OR after.

Foresthill has asked for a Tech teacher.

Jim, WA8MPA has library materials to sign out for about a one-month period at a time.

Matt is looking for a Cross repeater.

Club Nets are every Thursday @ 7:30 pm (145.430, PL=162.2)

Club Board Meeting is 2nd Friday of each month, at Mel's Diner at 6:00 pm

Club Breakfast-Last Saturday of each month at Mel's in auburn

Calendar of Club Events:

May 4-Crazy Miner Enduro, Georgetown, sponsored by CERA (California Endurance Riders Association) with Mike, KK6GLP being Committee Chair.

May 5-MS Walk, Folsom with Mike, KK6GLP being Committee Chair.

May 5-Fool's Gold Motorcycle Enduro, Georgetown, also sponsored by CERA with our Committee chair-Mike, KK6GLP.

June 22-23-Field Day 2019 at Blue Canyon Airport.

Show & Tell Time:

There was a vast array of radio sets displayed and demonstrated. Among the impressive assortment was a handmade radio set that Rich, AA6RS brought in from his teenage years!

Our usual drawing was held and then the meeting was adjourned at about 21:30.

Next meeting will be held on Friday, May 10 at 18:00. See you then!

Submitted by *Michele Bauer-WH7QC, SFARC Secretary*



DENNIS H. GREGORY
Instructor/Technician

Computer Repairs and Support
Reasonable rates, free consultation
Placer County Business License #02311

Phone: 530-305-0180
Auburn, CA

Email: WU6X@hotmail.com
www.yourmissioncontrol.com



Macintosh Computer Repair

2905 58th Street
Sacramento, CA 95817

916 862-6802
support@carlschultz.biz

Carl Schultz
Hardware, Software, Network, Tutoring

SACRAMENTO RADIO EXPO



Doug Wilner
916.769.5016

4343 Marconi Ave. Ste. #2
Sacramento, CA 95821

sacramentoradioexpo.com

Batteries + Bulbs.

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

Independently owned and operated Franchise.

Memorial Day...

- is a day of remembrance of those who have died serving our country
- is considered the unofficial kick-off of the summer season
- is a time for family and friends to get together and have a picnic



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

2019 MEMBERSHIP APPLICATION

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

Dues / Donations:

Membership: yearly*	\$22.00 or 20x__	Name Badge:	\$ 10.00/15.00	Yes (special name) _____
Associate: yearly*	\$ 7.00	Repeater Donation:	\$ _____	
Auto Patch Donation:	\$ _____	Newsletter Booster:	\$ _____	
Misc. Donation:	\$ _____	Christmas Donation:	\$ _____	ARRL member? (Yes/No/Life) _____
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: _____

Rev. 11-13-2018