

P.O. Box 6421 Auburn, CA 95604

### **SEPTEMBER 2025**

https://www.w6ek.org

### At The Key at SFARC:

**PRESIDENT** 

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**GROUPS.IO ADMINISTRATOR** 

Aaron Bond (W1ATB)

**DROPBOX ADMINISTRATOR** 

Smitty (WB1G)

**ELMER LEAD** 

Greydon Hicks (KC6SLE)

**ADVANCEMENT / CLASSES** 

Chair: Orion Endres (Al6JB) Instructor(s): Orion Endres (Al6JB), Anders Rehnvall (NR6H), and James Goldstene (AE6JG)

WEEKLY CLUB NET

Thursdays, 7:30PM

**W6EK 2m Repeater @ 145.430 MHz** 

Primary Net Control Operators: Dave Jenkins (WB6RBE) Orion Endres (Al6JB) Chip Bautista (KM6MDF)

Smitty (WB1G)

COFFEE BREAK NET 365 Days A Year 7:30AM – 10AM

W6EK 2m Repeater @ 145.430 MHz

Primary Net Control Operators:

Brian Gohl (Al6US)

- Court Drantaell (MAC
- Gerry Brentnall (WA6E)
- Theta Brentnall (WA6EWF)
- Tom Newman (NN6H)
- Orion Endres (Al6JB)
- Jeff Morgan (KW6U)

Standby Net Control Operators:

- Smitty (WB1G)
- Don Hay (WB6LPJ)
- Aaron Bond (W1ATB)

**CLUB MEETINGS** 

Second Friday of the month, Confluence (formerly Crossroads) Church @7:30 PM

1101 Auburn Ravine Rd, Auburn, CA

### **CLUB EVENTS**

SFARC Board Meeting

September 11 @ 6 PM Online via Zoom

**SFARC Club Meeting** 

September 12 @ 7:30 PM Confluence Church or <u>Online via Zoom</u> 1101 Auburn Ravine Rd, Auburn, CA

**Fall Campout** 

September 18 – 21 Logger Campground Stampede Reservoir, Truckee, CA

**Breakfast Social** 

September 27 @ 7:30 AM Wings Grill & Espresso Bar 13595 New Airport Rd, Auburn, CA

**Radio Direction Finding** 

September 27 @ 9 AM

Location TBD

Visit our website for more information

### **REPEATERS**

145.430 MHz (-0.6 MHz / CTCSS 162.2)

AllStarLink: 51018 EchoLink: 4128 Wires-X: W6EK-2M-ROOM (62545)

222 000 MHz / 4 C MHz / CTCCC 440 0

223.860 MHz (-1.6 MHz / CTCSS 110.9)

440.575 MHz (+5.0 MHz / CTCSS 162.2)

AMS – Fusion C4FM & Analog FM Wires-X: NorCal Repeater GRP (43847) YSF: US-NorCalRptGrp (06040)

### In This Issue:

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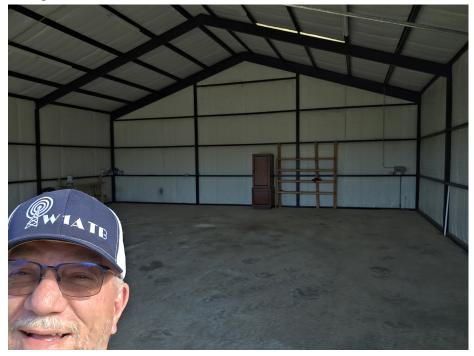
SFARC President | Aaron Bond (W1ATB)

Can you believe we're already 75% through 2025? Where does the time go?

I hope you've been enjoying your summer and getting on the air—whether that's activating a POTA or SOTA, joining a QSO party, or just making contacts from your home shack.

As for me, it's been a whirlwind. Not nearly enough radio time or RVing, but the XYL and I have managed quite a bit of travel and family visits this year—Idaho, Georgia, Montana, and Texas. These days I prefer driving, though flying sure does cut down the travel time. My

latest project? A hangar in Texas. Think: future remote hamshack.



#### Next up—the BIG ONE:

Our annual campout at Stampede Reservoir is coming up September 18–21. If you haven't signed up yet, there's still time! Head over to <u>campout.w6ek.org</u> to get all the details. It's going to be an absolute hoot!

#### And don't forget—September Breakfast:

Join us on September 27th at Wings (Auburn Airport) at 7:30 AM. This will be our last breakfast at Wings for the year; in October, we'll return to Mel's. August's breakfast was packed—nearly 35 attendees! Come grab a bite and catch up with the crew.

Looking forward to seeing you soon.

**73,**Aaron – W1ATB
President, SFARC

# **LOOKING FORWARD**

SFARC Vice President | Jim Zheng (W6JCZ)

Welcome to September! As the Labor Day weekend comes to an end we begin a month of exciting club activities, starting with a VE session on the 8th. We normally conduct our testing and mentoring session on the first Monday of the month, but this time it lands on a holiday so we've rescheduled it to next week. Unlike most ham exam sessions where people walk in and leave, SFARC members volunteer their time to act as Elmers (mentors) who help explain all that can be done in the amateur radio hobby, share ideas, and answer the crucial "What's next" question.



Our club meeting will be held at 7:30 PM on the 12th, and this month we are focusing on outdoor operation with John (KO6COW), Jayden (W6EFM), and Jimmy (N6FMD) collaborating for a talk all about POTA and SOTA operation. Many already have the mental image of ham radio being in an elaborate and sometimes messy radio shack with antennas and towers close by, but for many others radio plays very well with the great outdoors. Whether you're heading out to a park or scaling a mountain, there's unique fun and stunning experiences that just can't be had operating from home. Come join us as some of SFARC's most experienced outdoor operators discuss what goes into a successful activation, how to prepare for an outing, and what to look out for when operating in the field. We'll also get a glimpse of portable stations in the field, with plenty of pictures that show great examples of outdoor setups. Along the way we'll take questions and comments from others, whether they're seasoned outdoor operators or newly-licensed hams interested in radio beyond the shack!

As always, we'll meet for breakfast on the last Saturday of the month. It's quite a popular event, filling up the entire restaurant and great social time for those that might not otherwise see each other. We also hold a radio direction finding exercise following the breakfast, and it's interesting to see others' setups improve as they learn what works well and what others have built that help them catch the fox.

I'm really looking forward to the annual club campout, starting on the 18th and running through the 21st. Though I've heard many wonderful stories about the amazing time people have up there, I haven't been able to attend until this year. More than great food, fresh air, and excellent views, it's being able to relax with other club members that make events like this so exciting. I've already started preparing for the trip, and I hope to see you there, even if for a few hours!

73 de W6JCZ

# ELECTRICAL SERVICE TO YOUR HOME

SFARC Member | Greydon Hicks (KC6SLE)

I was sitting on the deck of the house in Tahoe enjoying a cold one thinking about an appropriate technical topic that would be of interest to Amateur Radio enthusiasts to kick off a new monthly feature article for the Sierra Signal called Tech Talk. For no particular reason I noticed the three wire overhead electric service service serving the house and thought about numerous questions on residential electric service I have answer as a HAM and a SFARC Elmer (mentor) in the past. As HAMs, most of us rely on the electric grid as our fundamental source of electrical power. Good to understand how it works.

One common question related to residential electrical service I have addressed in the past is "Why does the electric service from the electric utility only have three wires when within my main panel and house I have four busses and four wires: two hot, one neutral and a ground?" Good question. To answer this, we need to first understand how residential electric service works.

The standard residential service from the electric utilities in the US is 120 VAC for smaller load electrical appliances, and 240 VAC for larger load electrical appliances such as a central air conditioner, electric oven or electric dryer. To provide both 120 VAC and 240 VAC from a three wire service the utility uses a center tapped secondary winding on the low voltage side of its distribution transformers. 240 VAC is available across the full secondary winding, while 120 VAC is available from either end of the full winding to the center tap. Traditionally one end of the full tap is called leg one or L1, and the other end called leg two or L2. The center tap is called the neutral or N.

It is important to realize that the utility neutral (N) is held to zero potential with respect to the earth or ground by rigorous bonding (connection) through ground grids on the utility system and ground rods at each residential service.

Within your main or service panel you will have four electrical busses, an L1 buss, an L2 buss, a neutral buss and a ground buss. But we only have three connections from the utility, how does this work? The L, L2 and N connections are obvious. The N or neutral buss within the main or service panel is connected to the utility neutral. Here is how the fourth wire comes into play. The ground buss with the service or electrical panel is bonded (connected) to the neutral buss within the your panel. Note, the bonding of your neutral and ground systems should only be within the main or service panel. Never should the neutral and ground connect or meet anywhere downstream such as within a subpanel, outlet or appliance (refer to the National Electrical Code for more information on this). The reason for this is another topic and discussion for another day.

The ground wire within your home should never be used to complete a 120 VAC or 240 VAC circuit. The ground wire, when all is working properly, should never have any voltage potential or current flow. The ground wire is there solely for safety, solely to provide a safe path other that through a human body or structure back to the utility neutral should a fault (short) occur within your wiring or an appliance.

Hopefully this provides some insight on utility residential electrical service and answers the question of how three utility connections become four wires within your home.

It is also worth mentioning that 240 VAC large load appliances may only have three wires or connections, L1, L2 and ground (G). But I said earlier that the ground should never be used as a return path...where is the return path for a 240 VAC circuit or device with only L1 and L2? A true 240 VAC appliance does not need a separate return path such as the neutral as both L1 and L2 are both the supply and return in 240 VAC only circuit. The ground, the third wire, is again only there for safety during a fault condition.

But wait, you can have appliances that need both 120 VAC and 240 VAC such as modern electric dryers. To supply these devices, you need a true four wire circuit; L1, L2, N and G. When I do residential electrical wiring, I always run four wires of the appropriate amperage to all 240 VAC boxes/outlets. I may not need the neutral today and I just tape it off, but in the future, if its needed,it's an investment that can really pay for itself. Instead of a complex rewiring job you only have to change to the appropriate four prong female plug, connect appropriately and you are all set.

I welcome questions or comments. And please consider submitting your own Tech Talk articles.

73

Greydon KC6SLE

# ARRL PACIFIC DIVISION DIRECTOR VOTE

ARRL Pacific Direction Director | John Litz (NZ6Q)

Dear Sierra Foothills ARC members, ARRL Members and friends.

In about a month, ARRL Members in our Pacific Division will have the opportunity to vote for their next ARRL Director. That's something that hasn't happened in as far back as I can remember. If you're not an ARRL member reading this, I encourage you to join ARRL before September 11th so your vote can be counted.

Thank You for taking time to vote in this election. Your voice matters. There is work to be done both here and at ARRL HQ and we've only just begun. I have the skill to recognize our challenges; I have a plan; I have the energy to get the work done. I'm asking for your vote as your Director for the next 3 years.

Thanks to Amateur Radio, I have a lifetime of experience as a leader working with others both professionals and volunteers. My first career in public safety E911. My second as an Engineering Leader. I'm energized to give back to our great community.

ARRL isn't healthy today like it should be. The hobby is growing – ARRL should be too. We can fix things. I've already begun bringing in fresh ideas, common sense and collaboration to the board. Together we can make ARRL a leader in Amateur Radio again.

In our division, I have a plan for better connecting our clubs, sharing best practices, and connecting new hams to clubs like SFARC. Hearing you, listening to your ideas, amplifying your voice, connecting ideas to make them more powerful – this is what I bring to the Pacific Division as Director. I love amateur radio. I'm on the air every day. I'm in the field everyday – enthusiastically meeting hams, helping them explore new technologies, teaching others and listening – always learning. That's part of what's so beautiful about Amateur Radio - You're always learning.

The ARRL status quo of the last 10 or 20 years will not survive the future. ARRL knows this. The organization is thirsty for new perspectives, and fresh ideas. I have a plan for steering the ARRL into a new leader for the 21<sup>st</sup> century. I want to hear your ideas as well. Together we will shape the future of the ARRL and Amateur Radio and leave it better for the next generation.

I'm asking for your vote and help to shape the future of Amateur Radio.

73,



John NZ6O

### <u>MEMBERSHIP UPDATE</u>

**SFARC Membership Coordinator** | Jeff Morgan (KM6RGO)

# Congratulations to the newest members of SFARC who were voted in at August's general club meeting!





Gregory Roiles K6GAB

Samuel Johnson K6LGU

Jose "Tony" Gomez K06JUA

Robert Clark

### We have 7 new members to vote on at the next club meeting on September 12.

Jerry Kwong K06KQE

Adam Thomas K06KJJ

Jonas Clark KO6KIA

Thomas Chin KJ6NPV

Nina Keplac KD6QQL

Christopher Connoly N6UCR

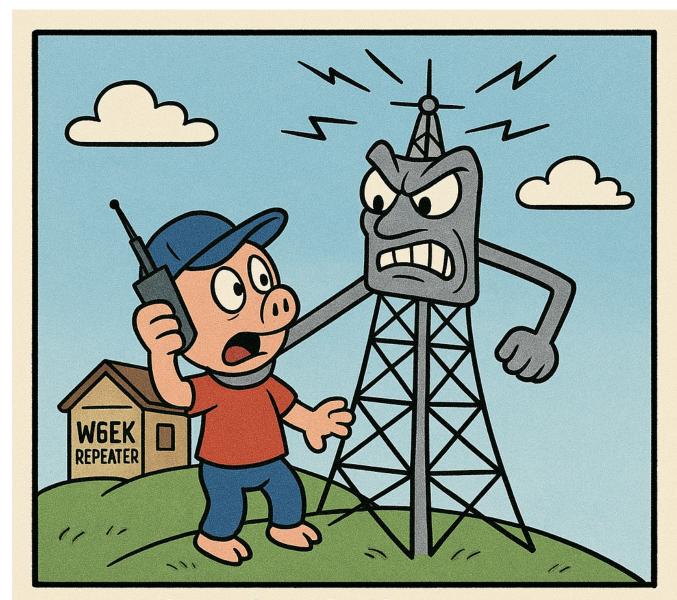
Christopher Bushman WB6EEQ





# PUBLIC SERVICE ANNOUNCEMENT

**SFARC Member** | Gerry Brentnall (WA6E)



Don't kerchunk the repeater.

# SFARC ON SOCIAL MEDIA

X (TWITTER) https://x.w6ek.com FACEBOOK https://facebook.w6ek.com INSTAGRAM https://instagram.w6ek.com YOUTUBE https://youtube.w6ek.org LINKEDIN https://linkedin.w6ek.org GROUPS.IO https://w6ek.groups.io













# **BOARD MEETING MINUTES**

**SFARC Secretary** | David McBrayer (N6OJJ)

#### **OPEN the MEETING 1803 PDT**

Call to Order Aaron - W1ATB

Approve previous month's Board Minutes

as submitted/amended: W1ATB – No requests for discussion—

Approved as submitted.

OFFICER AND BOARD MEMBER REPORTS

Vice Pres. Jim – W6JCZ Speakers tomorrow:

Bob, KD6QUD--DIY Go Kit;

Jeff, KM6RGO—Field Day wrap-up

Secretary Dave – N6OJJ Nothing to report at this time.

Treasurer Ron – KA6UAI Nothing to report at this time.

Director Greydon – KC6SLE Not present.

Director Jim – WA8MPA August member meeting will be in Lobby.

Director Mark – W2MWK Water quantity is okay.

others present: Jeff-KM6RGO, Greg-KO6TH, Brian-Al6US, Clyde-AB4CC, Dennis-WU6X, Smitty-

WB1G.

#### **COMMITTEE CHAIR REPORTS**

Repeater (Station Trustee) Clyde – AB4CC Repeater license renew in Sept., \$35.

Repeater Committee Brian – AI6US Back-up receiver install pending

Newsletter Jim – W6JCZ Newsletter posted

Webmaster Smitty – WB1G Web site ticking along; 1100 Facebook users.

Social Media Officer Smitty - WB1G

Information Officer Smitty – WB1G Campout promotion

Groups.io Aaron W1ATB/Smitty WB1G/

Dennis WU6X W1ATB - Nothing to report

Membership: Jeff – KM6RGO 325 currently +4 to vote in. Quorum will be

65. Will keep HamClubOn-Line electronic vote option going forward.

VE Exam Brian – Al6US Exam session: August 4. 5 exams given;

1 upgrade to General, 3 new

Technician's; scholarship to 1 student (\$14 Test fee + \$35 FCC fee waived

for 1 person)

Volunteer Events Coord Chip – KM6MDF Not present

Contest Chair Orion – Al6JB Not present / Al6US: Cal QSO in October

Scholarship Earl – K6GPB Not present

Drawing Chair Ray – KK6AM Not present

Refreshments Mark – W2MWK Nothing to add.

Nomination Committee Brian – Al6US Experiencing many rejections. Will present

nominees on October for membership

vote at November meeting.

Christmas Party Don – WB6LPJ Not present

Field Day Chair Jeff - KM6RGO

New people, more relaxed vibe.

Picnic Chair Aaron – W1ATB

Date – October 5 Location: TBD

Dues Investigatory Committee Being formed

**OLD BUSINESS** 

General Meeting Jim – WA8MPA pasta (spaghetti, mac & cheese), pasta sauce,

canned chicken, jams, jellies.

PCARES Scott – KM6RFB Not present

**NEW BUSINESS** 

Budget workshop Planning for week of August 18.

Smitty W6EK webstore: Spreadshirt: \$400, so far;

~\$70 pending to General Fund.

**EVENTS UPCOMING** 

Club Mtg August 8, 1930 Confluence Church lobby

Sat. Breakfast August 30, 0730 at Wings Grill & Expresso

Bar, 13595 New Airport Road,

Auburn, CA.

July-Sept.: at Wings Grill

Campout 2025 Oct 18-21 @ Stampede Reservoir

ADJORN 1919 PDT

### **GENERAL MEETING MINUTES**

SFARC Secretary | David McBrayer (N6OJJ)

**OPEN the MEETING 1946 PDT** 

Call to Order Aaron – W1ATB

Pledge of Allegiance

OFFICER AND BOARD MEMBER REPORTS

Vice Pres. Jim – W6JCZ Tonight's Programs

Secretary Dave – N6OJJ Nothing to report at this time.

Treasurer Ron – KA6UAI Expenses in alignment

Director Greydon – KC6SLE Nothing to report

Director Jim – WA8MPA Nothing to report

Director Mark – W2MWK Nothing to report

Welcome Guests/New Members/New Licensees

Guests: Carson Haines-WB6GON; Mark-KO6ITR

Quorum: Need 63 members "present" NOT MET (33 present)

**CLUB BUSINESS** 

New member introductions; Jeff KM6RGO

Motion by Mark W2MWK / Second by Ryan WU6H to hold an E-vote to:

1. Approve Meeting Minutes from July 11, 2025;

2. Accept the membership applications of: Gregory Roiles, K6GAB

Samuel Johnson, K6LGU

Jose "Tony" Gomez, KO6JUA

Robert Clark (no call sign)

The e-vote will be conducted via HamclubOnline to all current members of the Sierra Foothills Amateur Radio Club as of August 08, 2025. Results of August e-vote are at the end of this Minutes document.

Jim W6JCZ - Presenter introductions

**Program 1** Bob KD6QVD – DIY Grab and Go Boxes, Nina KD6QQL assisting

#### **Break**

#### **Program 2** Jeff KM6RGO – Field Day wrap-up

#### **COMMITTEE CHAIR REPORTS**

Repeater (Station Trustee) Clyde – AB4CC Not present

Repeater Committee Brian – AI6US Backup receiver installation next week

Newsletter Jim – W6JCZ Nothing to report.

Webmaster Smitty – WB1G Campout at Stampede Reservoir campground

Social Media Officer - WB1G

Public Information Officer - WB1G

Groups.io Aaron W1ATB/Smitty WB1G/ W1ATB – Nothing to report

Dennis WU6X

Membership Jeff – KM6RGO Currently: 325 members.

E-vote for accepting 4 new members will be

sent to all current members by HamClubOnline this weekend.

VE Exams Brian – Al6US August 4 session:

5 exams; upgrades to General: 1,

New Technician's: 3.

Next Exam session: September 8.

Volunteer Events Coord Chip – KM6MDF Not present

Contest Chair Orion – Al6JB Brian Al6US reports California QSO Party,

1<sup>st</sup> weekend of October.

Scholarship Earl – K6GPB Nothing to report

Drawing Chair Ray – KK6AM Nothing to report

Refreshments Mark – W2MWK Chips & water available

**Nomination Committee** 

Brian – Al6US / Ray KK6AM Need people to step up for President and

Vice-President

Christmas Party – Don WB6LPJ Not present

Date - October 5 Location: will be in

Auburn

#### **EVENTS UPCOMING**

Club Mtg Sept. 12, 1930 Confluence Church -

Sat. Breakfast Aug. 30, 0730 at Wings Grill & Expresso Bar, 13595 New Airport Road, Auburn, CA

Fox Hunt Aug. 30 w/Tom NN6H and Chase

Campout 2025 Sept. 18-21 @ Stampede Reservoir

#### **ANNOUNCEMENTS**

Club Net – Every Thursday @ 1930 (145.430, PL=162.2)

Elmer Net – Every 1<sup>st</sup> & 3<sup>rd</sup> Wednesday @ 1800 (145.430, PL=162.2)

All Node Net – Every Monday @ 1800 (145.430, PL=162.2)

In the Shack – Every 2<sup>nd</sup> & 4<sup>th</sup> Wednesday @ 1930 on ZOOM

Coffee Break Net – Every morning @ 0730 (145.430, PL=162.2)

Club Breakfast – Last Saturday / September @ 0730 (Mel's, Grass Valley Hwy at Luther Road, Auburn

Club Board Meeting – 2<sup>nd</sup> Thursday/month 1800 on ZOOM

Club Meeting – 2<sup>nd</sup> Friday/month @ 1930, Confluence Church Gymnasium

Any QST's from members? – Jim W6JCZ, 5<sup>th</sup> Wednesday

ADJORN 2127 PDT Results of new member e-vote conducted via HamClubOnline beginning 2025-08-10 at 15:43 PDT through 2025-08-17 22:00 PDT.

#### 1. Approval of Minutes for June 2025 Membership Meeting

Shall the July 2025 General club meeting minutes that were presented at the August meeting be approved as presented?

- 1. Yes Approve minutes as presented (102 votes, 88.7%)
- 2. No Do not approve minutes (0 votes, 0.0%)
- 3. Abstain (13 votes, 11.3%)

\_\_\_\_\_\_

#### 2. New Member Vote

This is a vote to approve the following applicants into the Sierra Foothills Amateur Radio Club:

Gregory Roiles, K6GAB

Samuel Johnson, K6LGU

Jose "Tony" Gomez, KO6JUA

Robert Clark

- 1. Yes Accept the new applicants into the club (113 votes, 98.3%)
- 2. No Do not accepts these applicants into the club (0 votes, 0.0%)
- 3. Abstain (2 votes 1.7%)

**Election Statistics:** 

115 ballots cast, 325 ballots sent = 35% voted

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SFARC members in good standing can request to have a business-card sized advertisement displayed in the club newsletter. Contact the newsletter editor for more information about how you can have your card in this space.