



Welcome to SFARC, Auburn, CA

Sierra Signals

P.O. Box 6421 Auburn, CA 95604

June 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
mickeybauer2012@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

June 14th:
Club Meeting

June 22nd & 23rd:
FIELD DAY
Blue Canyon Airport

June 29th:
Club Breakfast

Inside this issue

- *President's Message*
- *Recap of Enduro & MS Walk*
- *Dick – WB6EDR is in town on Sunday June 2nd*
- *Learning about batteries*
- *Club breakfast photographs*
- *Board & General Minutes*

June 21st
2019



Happy Summer Solstice!!
(The longest day of the year)

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 – AI6JB,
President*

SFARC Stepped Up in May

Volunteerism is alive and well, here in the Sierra Foothills ARC. May was book-ended with numerous community events where the Club participated to provide communications. It got started with the CERA Enduro on May 4th & 5th near Georgetown and the MS Walk in Folsom. The Club staffed net controls and numerous check-points or aid stations along the routes. The weekend was busy with lost riders and a medical emergency requiring a helicopter rescue. Mike, KK6GLP, organized both events and he says all told, over 10% of the Club membership participated. Way to go SFARC! And, thank you Mike for your hard work!

Several members support the Western States Endurance Run (WSER) each year in June. Joe Steinmetz, K6SAT, led WinLink training over Memorial Day weekend and comms for training runs. Greg, KO6TH, helped out at Net Control and Ken, K6KEC, and Brian, AI6US, ran aid stations. Thank you all for representing SFARC in our community!

SFARC Needs Your Help

We have a few positions to fill in the Club to ensure we can provide the features and events you so enjoy.

Drawing Chair – Thank you to Doug, W2VX, for running our monthly drawings, but unfortunately, his work schedule has changed. We need someone to take over. If you can help out, please let me know.

Club Picnic Chair – Each year our Club enjoys a BBQ & picnic. We need someone to chair this year's event in September. If you can help, please let me know.

Annual Christmas Party, 12/7/19 – This is the event where we have a little fun and enjoy some great food. We need someone to chair this year's event. If you can help, please let me know.

In every instance above, you will be supported by me and the members of SFARC. You will not be going it alone. There will be plenty of help. We are looking for someone to take point. So please, let me know as soon as possible if you are interested.

Field Day 2019 Won't Disappoint

This year we have a new location, it's only a mile or so away from the old, but never the less a new location. This year we will setup at Blue Canyon Airport. This site has level surfaces, none of the RFI from truck inverters and digital signals over power lines, and a great VHF view of the valley. It has the added bonus for our aviators to fly-in for the day.

Brian, AI6US, will be hosting breakfast Saturday morning, and Jim, KQ6VP, will be hosting the potluck dinner on Saturday night. Watch for sign-ups.

Technicians and new hams, this is your opportunity to get in on HF!! We will have stations setup running SSB, CW, and digital on the active bands. You will be able to get on the air with Club Elmers at your side in a supportive environment. **CAUTION! YOU WILL GET HOOKED!!** So, if you are not prepared to spend gobs of money on new equipment to upgrade your shack, you might want to think twice. All kidding aside, this is how I got the bug at my first Field Day. I have not regretted it.

If you ordered a t-shirt from Bob, K6UDA, please get with him to pay up. He was gracious enough to front the money, but his bank account is feeling a bit skinny. And, if you have been on the repeater, you know he has a Jeep repair to deal with. ☺ He will be passing out shirts at our June General Meeting.

Brian, AI6US, has ARRL Field Day pins available, so you don't need to order one. He will have them also at the next General Meeting.

If you are planning on attending, please bring tables and chairs. Our new site doesn't have picnic tables like the old. Be prepared for hot weather or even a chance of rain. Stay hydrated and bring lots of water. Sunscreen and a hat are a must for those spending a significant portion of the day.

For more information, be sure to come to our June General Meeting. The Field Day Team will be briefing us on all their plans.

Thank you to Herb, KM6JBI, Gary, KC3PO, Bob, K6UDA, and Al, NI2U for leading this year's event.

Club Officer Elections

In accordance with our Club By-Laws, each year our club holds club officer elections at the November General Meeting. It is time to start thinking about who will lead our club next year. Rich, AA6RS, has volunteered, once again, to Chair the Nomination Committee. He will submit nominations at the September General Meeting. If you are interested or know of someone whose name belongs in the hat, please contact Rich, AA6RS.

Holding a Board position in this Club has been the most rewarding and enjoyable experience. I encourage you to seriously consider a position. You will not be disappointed.

Hope to hear you on the air!

73

Orion Endres, AI6JB

President AI6JB@arrl.net

SFARC provided communications support to two organizations the weekend of May 4th and 5th

Saturday and Sunday we were with the **CERA (California Endurance Riders Association) motorcycle Enduro in El Dorado National Forest** east of Georgetown. We staffed net control, field stations, and a relay station. Scott KK7AIR dropped muffins from his plane to Orion and Brian below! Volunteers were Greg Dolkas KO6TH, Matt Pauly KK6YMJ, Gary Quigley KM6ZCQ, Ed Morell W6OSC, Orion Endres AI6JB, Brian Gohl AI6US, Les Green KG6NME, and Mike Perry KK6GLP.

Photos are posted here: <https://w6ek.groups.io/g/sfarc/album?id=90349>

On Sunday we were with the **MS Walk in historic downtown Folsom**. There were two walking routes, one and three miles, and we staffed net control and three field stations. Volunteers were Greg Dolkas KO6TH, Andrew Silvester K6OP, Dennis Gregory WU6X, Jim Jupin WA8MPA, George Simmons KG6LSB, and Gary Martinez N6UWQ.

Photos are posted here: <https://w6ek.groups.io/g/sfarc/album?id=90354>

Communications support to the community is an important aspect of amateur radio. Thanks to all who participated!

73

Mike KK6GLP



Hello all,

Our long time former member, Dick - **WB6EDR**, will be visiting Auburn Sunday June 2nd.



Join us for breakfast at Mel's Diner on Hwy 49
Sunday June 2nd at 9AM.

You don't have to RSVP however it would be a good idea so
we can notify Mel's and make sure we have enough room.

Please RSVP to Bob, WE6C at...
we6cbob@gmail.com



KB6NU's Ham Radio Blog

Learning about batteries

By Dan Romanchik, KB6NU

I often say that getting an amateur radio license is as much getting a license to learn as it is getting a license to operate on the amateur radio bands. Lately, I've been learning about batteries, LiPo batteries to be exact.

It all started when I purchased a Morserino (<http://morserino.info/>). The Morserino is a Morse Code learning aid that has a number of unique features. For example, in addition to helping you learn the characters, it's also supposed to help you learn how to copy in your head. It also has a built-in touch keyer function, and a LoRa interface that lets you send and receive code from other Morserino units. (<https://www.kb6nu.com/wp-content/uploads/2019/05/morserino-768x670.jpg>)

I'll be writing more about the Morserino in a future column, but let's get back to batteries. The kit did not come with a battery. Instead, it was suggested that one purchase a 600 mAh LiPo battery commonly used for powering drones. [I found this battery on Amazon](#) and purchased a six pack of them, thinking that I'd find uses for the other five in some project or another.

(<https://www.kb6nu.com/wp-content/uploads/2019/05/tattu-3.7v-600-mah-battery-768x522.png>)

Well, sooner than expected, I did find another application for one of the batteries. I'm building a little Arduino project for a client, and I reckon that this, or one with more capacity, will make a great power source for the project.

Now, I have two immediate challenges:

- Figure out how to charge the battery
- Figure out how to connect it to the Arduino

On the Morserino, the battery plugs directly into a connector on the bottom of the computer board (the white board with the LED display). I knew that connecting the 5V line from the USB connector directly to the battery was a no-no, but I'd lent out the Morserino to a friend, and I didn't have the schematics for the board. So, how they managed to charge the battery from the USB port was a bit of a mystery.

I emailed Willi, OE1WKL, the designer of the Morserino, and he sent me a wealth of information. There actually is a battery-management IC, the TP4054, on the board:

(<https://www.kb6nu.com/wp-content/uploads/2019/05/heltec-power-supply-768x327.png>)

He also gave me the part number for the battery's mating connector. He said, "The mating connector for the Molex connector on the battery is a Molex 51006. It is sometimes referred to by vendors as 51005 female, but 51005 is the connector on the battery." You can, of course, buy pre-made cable assemblies on Amazon (<https://www.amazon.com/gp/product/B07P54QTR8>).

You can also buy lithium battery charging modules:

(<https://www.amazon.com/gp/product/B01LZSC7I8>). These modules have a TP4056 on them, which is similar to the TP4054. It's amazing to me that you can purchase ten of these things for less than seven bucks.

So, that's where I'm at right now. Once I get the modules and cables, I'm going to hook it all up and get the Arduino system running from the battery. The next step will be to integrate a small solar panel and run the whole thing from solar power, hopefully.

=====

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). He often wonders if he can learn things fast enough.





BOARD OF DIRECTORS MEETING MINUTES May 10, 2019

The May 2019 SFARC Board meeting commenced at 1800 hours at Mel's Diner in Auburn.

Roll Call: Officers and directors present: Orion Endres/AI6JB (President), Brian Gohl/AI6US (Vice-President), Greg Dolkas/KO6TH (Director), and Dustin Yue/W6YUE (Director). Guests present: Mike Perry/KK6GLP, Dennis Gregory/WU6X, Al Martin/NI2U, Richard Kuepper/WA6RWS, Toni Graybill/KK6JPJ, Mark Graybill/W8BIT, Herb Garcia/KM6JBI, Doug Chandler/W2VX, and Gary Frerking/KC3PO. Officers and directors absent: Michele Bauer/WH7QC (Secretary), Jeffrey Morgan/KM6RGO (Treasurer), and Gerry Brentnall/WA6E (Director). Mike KK6GLP performed Secretary duties (minutes and attendance roll) for the Board of Director and General meetings. Richard WA6RWS performed Treasurer duties (collecting money) for the General meeting.

REPORTS and DISCUSSIONS

President's Report: Orion AI6JB submitted the agenda, which was approved, and asked for officer, director, and committee chair reports.

Vice President's Report: Brian AI6US - No report.

Secretary's Report: (Michele WH7QC absent.)

Treasurer's Report: Orion AI6US distributed the 2019 SFARC budget Jeffrey KM6RGO (absent) had written. Brian AI6US said members requested the food budget for Field Day be increased, the reason being the former Nyack site had a restaurant, while the Blue Canyon airport site does not. No change to budget was made. See Field Day Report below.

Director's Reports:

Greg KO6TH - No report. Dustin W6YUE - No report. (Gerry WA6E absent.)

Committee Chair Reports:

Repeater: Richard WA6RWS - No report.

Greeter/Sunshine: Richard WA6RWS - No report.

Newsletter: Orion AI6JB stated that the May 2019 Newsletter was published and distributed.

Webmaster: Herb KM6JBI said the website is working fine.

Groups.io: Dennis WU6X said the Groups.io site has 122 members. Photos for the recent MS Walk and CERA volunteer events were posted.

Social Media Officer: Members discussed that the old SFARC Facebook social group page was still on line and needs to be removed. Mark W8BIT said he will check into taking it down.

Membership: Richard WA6RWS said the club has 109 members. This time last year, there were 103 members.

VE Exam: Al NI2U stated that, at the May testing session, there were 10 elements, with 3 Technician and 2 General licenses earned. There were 6 examiners present. Also, the SFARC Scholarship for Students will be presented to new licensee William Lerma at the June 2019 meeting.

Volunteer Events: Mike KK6GLP discussed the two community events the club supported with radio communications the prior weekend. On Sunday, May 5, the club supported the MS (Multiple Sclerosis) Walk Folsom. Volunteers were Greg Dolkas/KO6TH, Andrew Sylvester/K6OP, Dennis Gregory/WU6X, Jim Jupin/WA8MPA, George Simmons/KG6LSB, and Gary Martinez/N6UWQ. On Saturday and Sunday, May 4 and 5, the club supported the CERA (California Endurance Riders Association) motorcycle enduro rides in El Dorado National Forest east of Georgetown. Volunteers were Greg Dolkas/KO6TH (Saturday), Matt Pauly/KK6YMJ, Gary Quigley/KM6ZCQ, Ed Morell/W6OSC, Orion Endres/AI6JB, Brian Gohl AI6US, Les Green/KG6NME, and Mike Perry/KK6GLP. Over 10% of the club volunteered for the events.

Drawing Chair: Doug W2VX said the drawing situation was in order. Orion noted he is looking for Doug's replacement.

Contest Chair: Dennis WU6X discussed upcoming contests, the Arkansas QSO Party and the CQ Worldwide CW Contest. Brian AI6US said he understands that our club needs to apply for a certificate for our logs to be uploaded to the Log of the World (LOTW) site. Dennis said he would look into this.

Refreshments: Orion AI6JB said the refreshments situation was in order.

Public Information Officer: No report.

Digital Repeater: No report.

Nomination Committee: No report.

Field Day Committee: Gary KC3PO said the May 6 planning meeting was cancelled due to sufficient progress being made. He discussed requests for more food on site. Orion AI6JB suggested a pot luck table be made available. Gary said he went to the Blue Canyon airport site on Monday, May 6, for a brief inspection, to consider where to place antennas. He said there will be porta-potties on site. Brian AI6US asked if wash stations will be made available, and Gary said he would find out. Gary said help is needed from the club's pilot members to get the word out to other pilots. A fly-in script should be developed for pilots. Brian mentioned printing flyers be sent to flight centers. The printing cost needs to be budgeted and the flyer should be coordinated with our Public Information Officer Scott Vogelsang/WA6YNE. Gary concluded by saying a date and time needs to be set for a detailed site survey.

CALENDAR OF CLUB EVENTS: Orion AI6JB reviewed the events listed in the agenda. He will get with Rich Snyder/AA6RS on upcoming officer nominations. The club picnic needs a chairperson. A location needs to be established for Jamboree on the Air - Orion will discuss this with the Scout Council.

Member suggestions for JOTA sites included the State Capitol grounds, Sutter's Fort, and McClellan Field.

OLD BUSINESS

Club Officer Duties Checklist Suggested: No activity since last meeting.

Repeater Lease Expired 6/2018: No activity on the expired lease since the last meeting. Dustin W6YUE asked if there is an alternate location identified if we lost this repeater site. Orion AI6JB answered no. There was a discussion on the condition of the pole. Orion said maintenance is needed and the school where the site is located needs to be advised. Brian AI6US mentioned other possible locations. Richard WA6RWS said the current repeater location is the best spot for Tevis and other canyon events.

Club Meeting Camera Lighting Proposal \$200: Item pending action.

Repeater Upgrades Proposal: Item pending action.

NEW BUSINESS

SFARC Ham Class: AI NI2U provided the information Ken Krouse/K6KEC obtained from the Benicia ARC about ham classes they conduct. Orion AI6JB asked if our club should invest time and money to run a class. The consensus from the ensuing discussion was that we are in favor of it, if it can be kept in budget. Orion tabled the matter, and a volunteer will be sought to head this up.

Add Winter Field Day to Club Calendar as Annual Event: Orion AI6JB will add this to the calendar.

Amazon Smile on Website: Orion AI6JB said that Carl Schultz/WF6J expressed concern that including Amazon Smile on our club website violates non-profit 503e rules. Dustin W6YUE said the ARRL website has the same Amazon Smile link. The board agreed that inclusion of the Amazon Smile link on the club website was allowed.

Meeting adjourned at 1900. Submitted by *Mike Perry KK6GLP*



GENERAL MEETING MINUTES

May 10, 2019



The SFARC General meeting for May 2019 commenced at 1930 hours at the Auburn City Hall Rose Room, with President Orion Endres/AI6JB presiding. Officers present were Orion AI6JB and Vice President Brian Gohl/AI6US. Directors present were Greg Dolkas/KO6TH and Dustin Yue/W6YUE. Officers absent were Secretary Michele Bauer/WH7DH and Treasurer Jeffrey Morgan/KM6RGO. Director absent was Gerry Brentnall/WA6E. Mike Perry/KK6GLP filled in for Secretary duties (taking minutes) and Richard Kuepper/WA6RWS filled in for Treasurer duties (taking money). The sign-up

sheet reflected 48 attendees: 42 members and 6 guests. Orion led the members and guests in reciting the Pledge of Allegiance to the flag. Then followed an introduction of officers, directors, members, and guests.

CLUB BUSINESS

April Minutes: Orion AI6JB asked for approval of the April board and general meeting minutes. Greg KO6TH said his call sign was incorrectly placed with the Treasurer in the April board minutes. Orion said this will be corrected, and the April minutes reconsidered for approval.

REPORTS

President's Report: Orion AI6JB discussed items from the board meeting. He said the club will go forward with providing a Ham Class. He discussed Field Day matters, and that the club will look in to sending our contacts to Log of the World (LOTW). He discussed the concern of Carl Schultz/WF6J about the club possibly being in violation of non-profit rules by including the Amazon Smile link on our web page, but the board considered this permissible. He said chairpersons are needed for Drawing, Club Picnic, and Christmas Party.

Vice President's Report: Brian AI6US said he enjoyed the CERA event of the previous weekend, and encouraged members to volunteer for community events.

Secretary's Report: Michele WH7QC not present.

Treasurer's Report: Jeffrey KM6RGO not present.

Directors: Directors had nothing to report.

Repeater (Station Trustee)/Greeter /Sunshine/Membership: Richard WA6RWS said he knows of nobody being ill. Please tell him if you know of an ill member. Membership stands at 109, compared to 103 this time last year.

VE Exam: Al Martin/NI2U reported that the last VE session had 10 elements, with 2 General and 3 Technician licenses earned. There were 6 examiners. New ham William Lerma, who earned his license at the May testing session (call sign yet to be issued), will be recognized as the first recipient of the SFARC Scholarship for Students, at the June club meeting. William was with his father Timothy at the meeting, and was applauded for earning his license at a young age.

Volunteer Events: Mike KK6GLP reported on the two community events the club supported the previous weekend. The MS (Multiple Sclerosis) Walk Folsom on Sunday, May 5 had 6 volunteers. The CERA (California Endurance Riders Association) motorcycle enduro, held Saturday and Sunday, May 4 and 5, at El Dorado National Forest east of Georgetown, had 8 volunteers. Total volunteers were 13, as Greg KO6TH worked CERA on Saturday and MS Walk on Sunday. Over 10% of the club membership volunteered. Mike recounted how Scott Herring/KK7AIR, flying his airplane over the CERA area, dropped a box of muffins to Orion AI6JB and Brian AI6US below, a first in the club's history. Mike asked volunteers present to stand and be recognized. (Photos of the two events are on the club's Groups site. A complete listing of volunteers is recounted in the Board minutes.)

Satellite: Greg KO6TH provided a satellite report.

Public Information Officer: Scott Vogelsang/WA6YNE said he is rebuilding the PIO contact list, and asked members to advise him of contact information they have for schools and ham clubs. He added that students show an interest in Morse code.

Website: Herb Garcia/KN6JBI said the website is running fine.

Groups.io Site: Dennis Gregory/WU6X discussed the extra access allowed to site members.

Contest Chair: Dennis WU6X discussed the Arkansas QSO Party and the CQ Worldwide CW Contest.

Social Media Officer: Bob Brodovsky/K6UDA said that while the club Facebook page is doing well, the club's Instagram site is not doing so well, so be sure to tag W6EK.

Digital Repeater: Bob K6UDA said he is testing a digital repeater that includes WIRESEX.

Nomination Committee: Orion AI6JB asked members to contact Rich Snyder/AA6RS if they are interested in a 2020 officer or director position.

Refreshments: George Simmons/KG6LSB discussed refreshments.

Drawings: Doug Chandler/W2VX discussed drawing items.

ARES: Carl First/N6CKV stated that the ARES net meets each Sunday at 1730 hours on the W6EK repeater. There will be an ARES exercise June 19 at Sutter Roseville hospital. He concluded with news of a fire this day by Sugar Pine Reservoir.

Field Day: Bob K6UDA said things are coming along, and that a site visit is pending.

Club Library: Jim Jupin/WA8MPA discussed the Club Library.

OTHER: Orion AI6JB provided general announcements, information on club weekly nets, and the time and date of the next board meeting and club breakfast. He reminded members to pay for the Field Day t-shirts and pins.

TECH TEN: Brian AI6US introduced Doug W2VX, who gave an informative talk on his project of Direct Digital Synthesis using an ESP32 (SoC) running MicroPython.

PROGRAM: Brian AI6US introduced Jordan Heichman/WC6J, SOTA (Summits on the Air) Manager for the Northern Sierra and Sierra Nevada Regions, who gave an informative talk on SOTA.

The meeting adjourned at approximately 2105. Submitted by *Mike Perry KK6GLP*

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



DENNIS H. GREGORY
Instructor/Technician

MISSION CONTROL

Computer Repairs and Support
Reasonable rates, free consultation
Placer County Business License #92311

Phone: 530-305-0180 Email: WU6X@hotmail.com
Auburn, CA 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
tollefson@batteriesplus.net • www.BatteriesPlus.com

Independently owned and operated Franchise.