

The Short Circuit

<http://www.k6ox.club>



The official publication of the Antelope Valley Amateur Radio Club

December 2022

President's Corner

George Becker KC6UVM

At the last check, there were 365 days in a year. About 30 or 31 days in a month. February for whatever reason only has 28 days except one more day in a leap year. Looking back about six months, it was stinking hot during field day. In about another six months from now, field day will probably happen during hot weather out here in the Antelope Valley communities of Lancaster, Palmdale and Quartz Hill. Best thing to do is prepare now for the next field day. Although, if you want to try something different, Winter Field Day <https://winterfieldday.com/> may be the answer. Winter Field Day is scheduled during the last full week of January and is probably about the same time for those that are going to Quartzite. You may need to bundle up for this field day. Hi, hi.

The above brings up the topic of photos taken during AVARC Club events over the last year. If you have any photos to share from recent club events, our new incoming president, Andy Gippetti, W2AJG, is seeking your help. Please feel free to forward Andy your photos he may need for the January 2023 State of the Club President's address.

Tis the season: The Holiday can be difficult time. The hustle, bustle and all the craziness of this time of year. Some tend to drop out of it all until it's all past. Others don't always do well to say the least. For some, this is a difficult time of year. While being kind to your neighbor should apply all year round, do your best to show your neighbor, fellow ham, man, woman and beast some kindness and cheer to make it through the month.

Just as a reminder, your club dues are now due if you didn't pay up during the November 2022 club meeting. Our Treasurer, David Haberman AK6DH will be taking your dues payment up until he decides to join us for dinner during the holiday party. Dinner is a potluck, so bring food. Doors open about 6:00 PM and dinner should start about a half hour later. As in years past, you will get one ticket for being a current member and a second ticket for paying your 2023 dues. The maximum tickets you can have will be two tickets per club member for the floor prizes after the speaker's presentation.

The AVARC club holiday party will be on Friday December 16, 2023, with our returning speaker Diana Feinberg AI6DF ARRL LAX Section Manager with her presentation after dinner. The location is at the Blend Christian Church on the SE corner of Ave J and 17th Street East.

Before signing off, I'd like to take this time to thank everyone for being your club president for the last two years. It's been a wonderful learning experience being your president. Lastly, I'd like to wish everyone a Happy Chanukah, Merry Christmas and a great Kwanzaa this holiday season.

73,

George KC6UVM

Meeting Notice

Friday, December 16, IN PERSON and also via the Zoom online video app. Note that this month's meeting is a week earlier than usual, due to the upcoming Christmas holiday, and will be on Friday instead of Thursday. The special one-time location is at the Blend Church on the SE corner of Ave J and 17th Street East.

The meeting will start at 6:00 pm. The room will be open at 4:30 for early set-up. If you can help with setup and/or cleanup afterward, it would be greatly appreciated. Membership renewals will be taken until 6:00. Be sure to mark this on your calendars!

This month's meeting will feature our traditional December potluck dinner. We have collected some mighty fine prizes for this year's Christmas Party Membership Raffle. So be sure to come to the Club Christmas Party, bring a dish to share, (we hope to get a few main dishes) and get in on the fun!

Our special guest will be our ARRL Los Angeles Section Manager, **Diana Feinberg AI6DF**, who is always a welcome visitor at our meetings.



Diana Feinberg AI6DF

From the Secretary's Desk



AVARC/K6OX General Meeting
November 17, 2022 19:00 hrs
Quartz Hill Library/Zoom

Those present;

President George Becker KC6UVM
 Vice President Andrew Gippetti W2AJG
 Treasurer David Haberman AK6DH
 Secretary Loretta A Smalls AJ6HO
 Board Member Dan Sherwood W6DAS
 Board Member Larry Mock KI6BKP
 Trustee Keith Hoyt K6GXO Ex Officio
 Mike Beckers K6YQO
 Short Circuit Editor Adrienne Sherwood
 WA6YEO Pat Okawa KJ6CJI Brian
 N6CVO
 Tom KN6GLI

Others present;

Chuck Higgins our presenter for this evening via Zoom, Alan KJ6ZYQ Betsy AJ6AF
 Don KK6RHO Keith N6VRZ Chuck W2QLH via Zoom.

The Presentation:

We want to thank Dr. Chuck Higgins for a wonderful presentation about Radio Jove, a project he founded with NASA. Dr. Higgins is part of the Department of Physics and Astronomy at the Middle Tennessee State University in Murfreesboro, TN. As the name implies, the 'Radio Jove', project is about radio astronomy, specifically radio emissions from the planet Jupiter. This is a perfect project for young people to get them interested in radio astronomy, and STEM in general. It does not require a ham license since it is a receive antenna only, and it started out as an educational outreach project. Many of our scientists, engineers, and Astronauts have ham licenses and they will probably tell you they got into the hobby because of their love of science and technology, and working with complicated

equipment.

First off, what is radio astronomy? It is another way to study and learn about the universe using different wavelengths and different frequencies depending on what you are looking for. For example looking for hydrogen one would use the 21 cm band to study hydrogen gas. This taught us a lot about the galaxy M81. Radio astronomy has led to many fascinating discoveries including learning more about the Cosmic Microwave Background, Radio Galaxies, Exoplanets, and yes, we learned a lot about Black Holes along with countless other discoveries. Using the GHz bands is how we can, as Citizen Scientists, gather data on Jupiter and Solar Activity, just as an example. There is so much more though, I know one of the things I learned was how they use microwaves to map water on planets. A wise person once told me that everything has a frequency including water, rocks, emissions from other space bodies, etc,, not just cell phones and radios. Radio astronomy can often show more detailed images than an optical picture can depending on chemical composition.

In Radio Astronomy there can be very distinguishable sounds that emit from a Solar Burst or radio emissions from other stellar sources. The RSP1A that is supplied with Radio Jove kit when using the SDRplay software can detect radio frequencies from 1.0 KHz to 2.0 GHz including the radio bands VLF, LF, MW, HF, VHF, UHF and L-band. Pretty cool stuff, and yes I was able to pick up radar sweeps with my Radio Jove. The kit also comes with documentation on the best way to set up the dual pole antenna system, additional help resources, and a helpful youtube video on the SDRplay. <https://www.youtube.com/watch?v=k8p106BpSXU>.

Dr. Higgins is also part of NASA's Heliophysics team which studies the Sun, and

how it affects Earth and our Ionosphere among other things. He discussed quite a bit about our Ionosphere and how radio emissions are affected by it. For example our amateur radio communications bounce off of the Ionosphere for the most part while radio astronomy uses wavelengths that go through the Ionosphere. Pretty interesting stuff and I would love to see our young folks get interested in Radio Astronomy to get them started in Science, Engineering, and Technology. <https://science.nasa.gov/science-activation-team/nasa-heliophysics-education-activation-team>.

For more about Radio Jove go to <https://radiojove.gsfc.nasa.gov/> it is here that you can order the kit and learn more about the project. You will also find links to the software for SDRUno and radiosky spectrograph. You will need this software to operate the equipment. You will also find the link to the easy to download and print out brochure; <https://radiojove.gsfc.nasa.gov/about/brochure.pdf>. Here are a couple of links for the software; <https://www.sdrplay.com/sdruno/> and <http://www.radiosky.com/specdownload.html> please note that downloading the spectrograph software is a bit tricky as most Windows programs will block it. You will need to 'run anyway' to complete the download. Here is a link to Dr. Higgins' other project; <https://science.nasa.gov/heliophysics>. If you go to the Citizen Science link it will direct you to some really cool projects.

This was a really cool presentation and we hope to see Dr. Higgins again, perhaps to discuss his research into Heliophysics. So much more to learn about Radio Jove and Radio Astronomy, and all the other facets of this element of amateur radio, much more than can fit into this newsletter. We want to thank Dr. Higgins for his stellar presentation and for his time, it was incredible.

(Continued on page 3)

Secretary's Desk...



(Continued from page 2)

Club Business:

Old Business:

Volunteers to do the Wednesday evening net are needed, at least for the second Wednesday of the month as well as someone who can do Newline Report.

New Business:

Membership dues are due. You can renew via Zelle, in person at the Christmas party, or you can renew via mail and send it to the P.O Box on top of the membership applications. Each member will be given one raffle ticket as well as an additional raffle ticket for renewing. So you get two free tickets for the raffle, and a chance to win a really cool prize.

Future Presentations:

January 26, 2023 State Of The Club Address will be given by Vice President Loretta A Smalls AJ6HO.

February 23, 2023 We will have a roundtable event for members to share their ham radio experiences including our Ridge Rally Event this past December 3, 2022.

March 23, 2023 Vice President Loretta A Smalls AJ6HO will give a presentation on the different fun ways for learning CW including Morse Code Ninja and CW Academy <https://cwops.org/cw-academy/>. CW Academy is free but donations are welcome.

April 27, 2023 We are fortunate enough to get a speaker from HAARP, with the University Of Fairbanks to do a presentation on their research, especially on their Moon Bounce and Jupiter projects. His name is Witham D Reeve with the Ionospheric research (HAARP) in Fairbanks Alaska.

May 25, 2023 We dedicate the month of May to our youth so we will try to find a youth oriented presentation such as JOTA or YOTA. This will also be pre-Field Day discussions.

June 22, 2023 This will be all about Field Day which begins Friday.

July 27, 2023 TBD as well as post Field Day discussion.

August 24, 2023 TBD

September 28, 2023 TBD

October 26, 2023 TBD

November 16, 2023 A week early due to Thanksgiving.

December 15, 2023 A week early and on Friday due to Christmas.

Other Announcements:

Short Circuit articles are due by December 11 so the board meeting minutes will be posted in January's Newsletter.

There were 16 members checking in tonight.

Short Circuit articles are due by Decem-

ber 11, 2022.

The 50/50 drawing was won by Brian N6CVO.

Next board meeting is December 12, 2022 via Zoom at 7:00 P:M.

Next club meeting will be Friday, December 16 at 'The Blend' Church on E. Ave. J and 17th St. E. Each club member will get a raffle ticket and for renewing membership they will get an extra one. Help setting up will be appreciated so if you want to help be there by 17:00 hrs. Members should start arriving by 18:00 hrs to get any renewals done by 18:30 which is when we start chowing down.

So far for the potluck we have;

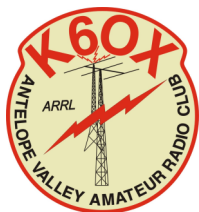
Tri Tip by Treasurer David Haberman AK6DH
Salad by Pat Okawa KJ6CJI
Pizza by Tom Kane KN6GLI and the Coffee by Secretary Loretta A Smalls AJ6HO

The club supplies the napkins, cups, soft drinks, cups and paper plates, etc.,,

Motion was made to adjourn the meeting by Secretary Loretta A Smalls AJ6HO and seconded by Board Member Larry Mock KI6BKP and approved by all. Motion carries and meeting adjourned at 21:20 hrs.

Antelope Valley Amateur Radio Club 2023 Officers

President	Andy Gippetti	W2AJG	433-2106
Vice President	Loretta Smalls	AJ6HO	350-7039
Secretary	Pat Okawa	KJ6CJI	718-3986
Treasurer	David Haberman	AK6DH	917-4594
Master-At-Arms	Tom Kane	KN6GLI	350-7039
Board Member	Brian Basura	N6CVO	943-6736
Board Member	Dan Sherwood	W6DAS	264-1863
Trustee	Keith Hoyt	K6GXO	533-4025
Ex Officio	George Becker	KC6UVM	488-6894



Antelope Valley Amateur Radio Club 2022 Officers

President	George Becker	KC6UVM	478-0818
Vice President	Andy Gippetti	W2AJG	433-2106
Secretary	Loretta Smalls	AJ6HO	350-7039
Treasurer	David Haberman	AK6DH	917-4594
Master-At-Arms			
Board Member	Larry Mock	KI6BKP	943-6736
Board Member	Dan Sherwood	W6DAS	480-5227
Trustee	Keith Hoyt	K6GXO	533-4025
Ex Officio	Michael Beckers	K6YQO	805-906-9555



AVARC board meetings are held on the first Thursday of each month. All members are welcome to attend, although they should let the president or another officer know that they are planning to attend, as the meetings usually include a pot-luck dinner at the home of one of the officers.

The club net is on Wednesdays at 8:00, on the Hauser repeater (146.73 MHz PL 100). The net includes Amateur Radio Newslines, and all members and guests are invited to check in.

The Antelope Valley Amateur Radio Club K6OX
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