
W6VIO Calling

JPL



Jet Propulsion Laboratory Amateur Radio Club
PO Box 842, La Canada CA 91012-0842

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Secretary (2017):	Matt W. Bennett KF6RTB	3-8200	W6JPL Trustee:	Eric Archer, N6CV	4-7350
Treasurer (2017):	Chuck Sarture, KG6NF	4-2706	WR6JPL Trustee:	Jim Lux, W6RMK	4-2075
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Upcoming Events:

- **Emergency Communications Net:** Every Monday at Noon, on WR6JPL 224.08/(-)/156.7 & 445.20/(-)/DCS-365 (or PL 103.5), and WR6AZN 223.96/(-)/156.7 & WR6AZN 447.20/(-)/94.8 on Table Mountain.
 - **JPLARC Regular Membership meeting:** Second working Friday every month from Noon to 1pm. Next are **October 20, 2017 and November 17, 2017**
 - **JPLARC Board of Directors (BOD) meeting:** Normally, the first working Friday, every month, from Noon to 1pm and. The next BOD meeting will be **Oct 6, 2017**. Call-in: **TBD**.
 - For more upcoming events, see the ARRL Los Angeles Section website: <http://www.areslax.org>
 - **JPL Retiree Nets:** Saturdays, 8:30pm on 1.990 MHz LSB and Sundays, 2:00pm on 7.185 MHz (or 3.850 MHz) LSB.
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In this issue:

Topics in this issue:

- BOD meeting Sep 8th
- Club Website Update
- Mesa Infrastructure
- Mesh Networking
- Field Day
- Emergency Communications (Formerly: JEARS)
- Future membership meetings & speaker topics

BOD Meeting, Sept 8

By Jonathan Cameron KF6RTA

The BOD meeting was held in B161-228 at Noon. Those in attendance were: Josh Miller KB3UUS, Gary Block KJ6IZX, Steve Townes WB4ILW, Jonathan Cameron KF6RTA, David Seidel KC6NRL, and by phone: Walt Mushagian K6DNS, Matt Bennett KF6RTB, and Chris Carson KE6ABQ. Although we had a majority of the

Board present, we did not have 5 regular members present, so a quorum was not present.

Membership Report: Secretary Matt W Bennett reported that we have 43 total 2017 paid-up members, with 37 of those being voting members and 68% of voting members being ARRL members.

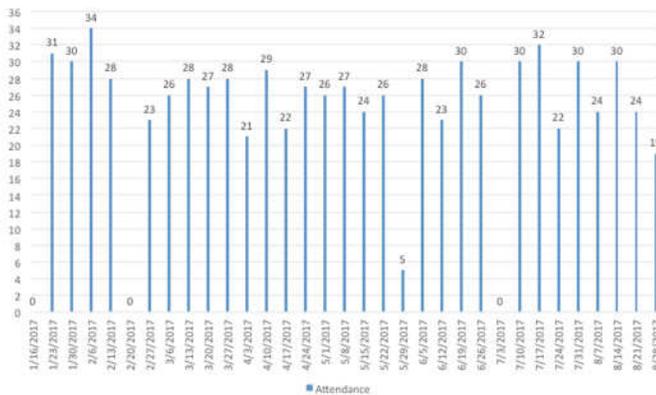
Treasurer's Report: Treasurer Chuck Sarture KG6NF submitted the Treasurer's report. Chuck reported that there was income of \$20 from membership dues and \$98 in expenses for the club mailbox. Thus, beginning balance of \$4,512.75 decreased to ending balance of \$4,434.75.

Guest speaker program update: Upcoming talks and potential talks were discussed (see the list of upcoming talks at the end of this newsletter). In the September 22nd General meeting we plan to devote some time to Software Defined Radios. If you have a setup that you would like to bring in to demonstrate, please contact Josh Miller KB3UUS or Matt W. Bennett KF6RTB. In the October 20th

meeting, we hope to have Jim Marr AA6QI present on RFI sleuthing.

If there are topics that you are interested in or something that you would like to give a talk about, please contact Josh Miller KB3UUS or Matt W. Bennett KF6RTB.

Net Check-Ins: We continue to have around 25 check-ins weekly on the Monday Noon net, including regular participation of several ALERT (ALtadena Emergency Response Team) members.



Net Check in stats

Club Website Update

<http://jplarc.ampr.org>: Jonathan Cameron, KF6RTA, shared that the club website and mail exploder reside on an old computer (probably over 10 years old) in B180-R6. Over the last year or so, we have had occasional glitches with the website that are probably hardware related. After the last problem, Jonathan did disk maintenance that did not seem to make much difference.

Just as a reminder, the web server computer has three functions (1) to serve the club web pages and newsletters, (2) to host an exploder for our club email list, and (3) to host our repeater IRLP service. We are in the process of splitting the IRLP onto a Pi-IRLP (a separate Raspberry-Pi based computer) that was purchased last year. We have arranged for a new hostname and IP address for it: jplirlp.ampr.org.

In meetings earlier this year, we had a member volunteer to help revamp our website and put it on a commercial web hosting service. That seemed like a good idea at the time, but it does not appear that will work for two reasons: (1) The volunteer has left JPL, and (2) the web server computer also hosts 'mailman' an email exploder software for our club email list. While almost any web hosting service can handle the web pages, it would probably require a more expensive service to handle the email list. Based on these considerations, Jonathan decided to purchase a small, low-power, low cost mini-PC to replace our current web server (once the IRLP service has been moved to the Pi-IRLP computer). Jonathan is now in the process of installing Ubuntu server LTS 16.04 on it and hardening it to serve web pages and handle the email exploder. The total cost of the computer is about \$310, which falls into the budget items for "Internet Services". The computer is a ZOTAC computer running an Intel Celeron N2930 quad-core computer with 8GB of memory and a 500GB hard disk.

MESA Infrastructure

Jonathan Cameron, Steve Townes and several others have made progress on terminating and routing the four hardlines going up to the main antenna on the Mesa into the junction box mounted on base of the antenna tower.

The next step is to connect the lower ends of the four hardlines into the B329 Shack. With help from Jim Marr AA6QI, Jonathan constructed 4 N-terminated 50 foot coax lines that will connect the hardlines through the conduit into the Shack.



Junction Box and hardline coax on the Mesa Tower



Construction Work near the Shack

Mesh Networking

Chris Gaylord W6YTB has purchased a Ubiquiti NanoStation M5 Loco mesh node for the EOC in Building 310. He also purchased all-weather Ethernet cable to connect it into 310 and a Grandstream IP Phone for use on the mesh network. We hope to get it all connected soon so it can be

used in the Great Shakeout Exercise on October 19th.

We're also tentatively going to have a presentation on "Getting Connected to the Mesh Network" at the regular meeting on November 17th.

Field Day

The field day operation with the Pasadena Radio Club (W6KA) and the Caltech Amateur Radio Club (W6UE) was held at the Art Center the 4th weekend in June. Five transmitters were on the air, running off the W6VIO generators. A total of 1457 QSO's were made: 521 phone, 52 PSK, and 884 CW.

This year, there were 85 contacts on VHF and UHF, compared to none in the previous two years. There were enough operators signed up to keep the CW station going all 24 hours, with most of the contacts on 40, 20, and 15. Even without operators to keep the HF SSB station on the air for the full 24 hours, we made 424 contacts.

