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# W6VIO Calling

# JPL



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

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Volume 40, Issue 2 [w6vio@arrl.net](mailto:w6vio@arrl.net); <http://jplarc.ampr.org> Feb 2017

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President (2017):	Jonathan Cameron, KF6RTA	4-1189	EmComm. Mgr:	Chris Gaylord, W6YTB	4-5584
Vice President (2017):	Josh Miller, KB3UUS	4-0835	W6VIO Trustee:	Rob Smith, W6GRV	3-7937
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
Director at Large:	Steve Townes, WB4ILW	4-7525	WR6AZN Trustee:	Bill Wood, W6FXJ	760-256-9576
Newsletter editor:	Jim Marr, AA6QI, email: aa6qi at arrl.net (your articles for the newsletter are requested - please)				

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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), or WR6AZN 223.96/(-)/156.7 on Table Mountain.
  - **JPLARC Regular Membership meeting:** Second working Friday every month from Noon to 1pm and usually in 180-703C. **JPL is transitioning the JPLWebEx system so see Jonathan's meeting announcement for call-in information.** Next is **February 24, 2017, Matt Bennett leading a JPLARC "Show and Tell"**.
  - **JPLARC Board of Directors (BOD) meeting:** Normally, the first working Friday, every month, from Noon to 1pm and usually in 180-703C. **The next BOD meeting will be March 10, 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:

- Regular Membership Meeting Jan 27<sup>th</sup>
- BOD meeting Feb 10<sup>th</sup>
- JPLARC Web Site Improvement
- Emergency Communications (Formerly: JEARS)
- ARRL Membership
- Future membership meetings & speaker topics
- JPLARC organization chart (still 2016)

**Reminder:** The JPLARC Bylaws state that dues for renewing members are payable to the club secretary by January 30<sup>th</sup> each year. They are now overdue.

The Membership application/renewal form can be found on the JPLARC web site, [jplarc.ampr.org](http://jplarc.ampr.org), at the bottom of the "Who We Are" page (see the button on the left column).

Return this application/renewal form with your dues to our 2017 Secretary, Matt W. Bennett, at JPL MS 321-364.

## Regular Membership Meeting Jan 27<sup>th</sup>

By Jonathan Cameron KF6RTA

**Present:** Matt Bennett KF6RTB, Gary Block<sup>†</sup> KJ6IZX, Jonathan Cameron<sup>†\*</sup> KF6RTA, Bob Cesarone WA9JIB, Bob Dengler NO6B, Jim Erickson<sup>†</sup> N6PGC, Chris Gaylord<sup>†\*</sup> W6YTB, Dave Gumpertz<sup>†</sup> KM6FCE, Mark Lysek<sup>†</sup> AG6TD, Rebecca Martinez-Rocha, Josh Miller<sup>\*</sup> KB3UUS, Mike Roche<sup>†</sup> N6XLK, David Seidel<sup>†</sup> KC6NRL, Eric Shalov<sup>†</sup> KJ6ARC, Rob Smith<sup>†</sup> W6GRV, Jan Tarsala WB6VRN, Steve Townes<sup>†\*</sup> WB4ILW, Lew Soloway<sup>†</sup> AC6LS, Mike Torode. **Phone or JPLWebex:** Chris Carson KE6ABQ, Kathleen Harmon KM6GBY, Jim Marr<sup>†</sup> AA6QI, Chuck Sarture<sup>\*</sup> KG6NF, Bill Weber<sup>†</sup> N6CI.

Note: <sup>†</sup> indicates a 2017 regular voting member (i.e., JPL/Caltech/Retiree **and 2017 dues paid**), <sup>††</sup> indicates an associate (non-voting) member, and <sup>\*</sup> Indicates a 2017 BOD member. For a regular meeting quorum, the JPLARC Bylaws require a majority of the BOD (four or more) and at least five other regular (voting) members. Present were six Board members, eleven other 2017 regular members, and 7 non-members (haven't paid

2017 dues yet) for a total of 24 attendees, so there was a quorum.

**2017 Officers Installed:** As per the JPLARC Bylaws (available on the [jplarc.ampr.org](http://jplarc.ampr.org) splash page just above the list of club officers), club officers were installed at this first regular membership meeting of the new year (officers are listed in the header of this newsletter). The only change in elected officers is that Matt W. Bennett KF6RTB succeeded Chris Gaylord as Secretary. Steve Townes WB4ILW was appointed as (continuing) Director at Large and Chris Gaylord W6YTB was appointed as Emergency Communications Manager, succeeding Chris Carson KE6ABQ.

**Membership Renewal:** Download the latest membership form from "How to become a Member" section at the end of "Who We Are" page at: [jplarc.ampr.org](http://jplarc.ampr.org). The PDF Form has been updated to be a "Fill-in" form so you can download it, fill it in, print it, and then mail it with your check to: Matt W Bennett, MS 321-364 (note the "W" since there are two Matt Bennett's at JPL). Thanks in advance for renewing soon.

**Presentations:** Upcoming regular membership meeting presentations were discussed (see the list at the end of this newsletter).

**Southern California Linex Expo (SCaLE):** The 15<sup>th</sup> SCaLE will be held March 2 through 5 at the Pasadena Convention Center. In addition to LINUX, ham radio has become a significant and growing component of SCaLE. Ham related events include: a special event station, N6S from PCC; a license exam; and an AREDN (Amateur Radio Emergency Network) booth.

Recall that AREDN writes firmware to move Ubiquiti and TP-Link wireless access points down into the Part-97 only portions of the 2.4 and 5 GHz bands. Users of AREDN code are creating local networks and providing resources (web sites, VOIP phone switches, webcams, etc) for hams and emergency responders to use.

SCaLE 15x registration page is at: [register.socallinexpo.ort/reg6/](http://register.socallinexpo.ort/reg6/). Rumor has it that "JPL" works as a discount code. There are also free passes available for folks who are willing to staff some of the ham events. See Jonathan Cameron, who will be helping at the AREDN booth, for details.

#### JPLARC 2016 Goals and Accomplishments:

- Goal: Rebuild Club Infrastructure: Partially accomplished. Towards this goal, there have been more than a dozen work parties. NEAR TERM: Building 329 (new shack) is fully functional (leaks repaired; B329 ends of hardlines grounded & fitted with connectors; VHF/UHF antenna mounted and connected; HF patch "panel" set up; HF antenna - an R7000 - mounted and connected; functioning HF station with FT-1000D radios in the shack).

HF longer term: Partially accomplished: restore/rebuild HF antennas on the JPL Mesa (the preliminary work of installing a junction box at the base of the Rohn tower has been completed); move repeaters back to Cerro Negro (haven't made much progress towards this yet).

- Support Emergency response: Accomplished. We had good JEARS Emergency exercise participation during this year's exercise.

- Club experimentation and fun hands-on activities: Partially accomplished. Building the JPL mesh networking system provided some of this.

- Collaboration with neighboring clubs: Accomplished. We held our joint Field Day with the Pasadena Radio Club (PRC) and the Caltech Amateur Radio Club (CITARC) and have begun collaboration with the Altadena Emergency Response Team (ALERT).

- Member education: Accomplished through our meeting guest speakers and our Extra training class.

- Recruit new/young members: Accomplished. This past year we have had several younger members and officers, some of which resulted from our participation in the JPL Affinity Group Fair. Total club membership at the end of 2016 was 58 members.

- Develop/extend a list of JPLARC frequencies and provide a badge card with club frequencies and common DTMF codes: Accomplished; cards available.

- Vary format of nets (more realistic): Accomplished & ongoing. We've had multiple net control operators; a new monthly check-in/check-out format; we did simplex nets, including a 220 MHz net; and have increased net participation.

- Encourage club committees to be more active: Partially accomplished. Fairly active committees included: Repeater; Station Facility; Field Day; and Membership.

- Field Day with Pasadena and Caltech ARCs at the Art Center. Accomplished, with excellent success.

- Update our equipment inventory: Limited accomplishment.

- Better HF communications with other NASA centers: Partially accomplished. Participated, with limited success, in a few regular SHARES nets; Coordinated with Armstrong Center in exercises; KF6RTA visited the JSC Radio Club.

- Support Great Shakeout via JEARS: Accomplished, with excellent participation.

- Digital repeater(s): Not accomplished.

- Quarterly off-lab lunch with off-lab members: Not accomplished.

- Christmas Banquet: Not accomplished.

**JPL Monday net Check-Ins:** Average number of weekly net check-ins was 22.8 (std dev 3.3), representing nearly 35% of the club. Max number of check-ins = 30; min = 16. Accomplished with seven net control operators.

**JPLARC 2016 Accounting Summary:** Figure 1 shows the overall 2016 JPLARC Balance Sheet, showing estimated income and expenses vs. actual income and expenses. As can be seen, we spent significantly less than anticipated/budgeted.

Item	Estimate	Actuals	Notes
Starting JPL ARC CITCU Balance:	\$ 4,853.69	\$ 4,853.69	As of January 01, 2016
Income to date:			
Member dues (est: 30 @ \$20; 10 @ \$5)	\$ 850.00	\$ 1,090.00	
ARRL Membership retained fees (est: 1@\$15; 2@\$2)	\$ 19.00	\$ 38.00	
Sale of current club assets (WAG)	\$ -	\$ 175.00	Sale of used equipment
Expenses to date:			
Actuals from expense worksheet:	\$ (5,133.00)	\$ (2,378.94)	
Current JPL ARC CITCU Balance:	\$ 589.69	\$ 3,777.75	

**Figure 1: JPLARC 2016 Balance Sheet - Estimates and Actuals for the total year.**

Figure 2 provides a summary of 2016 expenses. The most significant expenses were our new Honda EU2000i 2kw generator for Field Day and the club's new mesh network equipment.

Membership Cards (March)	\$ 38.68
Post Office Box (March)	\$ 70.00
Hardware for antenna mounts at new shack (May)	\$ 117.41
CommVan Yaesu FT-897 repair (July)	\$ 72.31
New FT-1000D TCXO (May)	\$ 146.75
IRLP-Pi/Echolink replacement (Jan)	\$ 279.99
Mesh network equipment purchase (Nov)	\$ 678.00
New Honda EU2000i 2kw generator (Field Day) (June)	\$ 975.80
<b>TOTAL:</b>	<b>\$ 2,378.94</b>

**Figure 2: Summary of JPLARC 2016 expenses.**

### JPLARC Goals and Plans for 2017:

- **Restore HF capabilities:** Get the hardlines up to mesa connected on both ends and working. Get at least some of the HF antennas on mesa operational.

*Near term (end of Feb):* connect one hardline feed into B329; refurbish the inverted V antenna on the Mesa telephone pole using USAR assistance in retrieving the part that is down the side of the hill, reconnect it and test it; connect a feedline from the inverted V to the connector box at the base of the Rohn tower.

*Summer/Fall:* Repair HF antennas on Mesa Rohn tower. This involves repairing/refurbishing the antennas and rotator; connecting and grounding the HF hardlines at the Mesa ends; connecting the B329 ends of the hardlines

into B329 and connecting the radios.

*B310 noise abatement:* Apply HF chokes to B310 HF antenna and rig to see if it helps with RF noise issues local to that building.

- **Purchase new HF radio.** Possibly a Yaesu FT-991A. Goal is to purchase this radio in March.

- **Improve repeater operations.** Upgrades to antennas and equipment.

*By summer:* raise existing Mesa UHF/VHF antennas to the top of the telephone pole in the Mesa repeater yard and install the 70cm M2 egg beater antenna to improve on-lab coverage.

*By summer/fall:* Investigate options to set up linked repeaters for 445.20 at other sites (now working 2 options).

- **Encourage emergency response activities.**

- **Support JEARS and Lab EmComm activities.**

- **Field Day with PRC/CITARC at the Art Center again.** 2017 Field Day Committee chairman: Matt W Bennett.

- **Update web and IRLP servers and club web pages.** By end of March: set up the IRLP-Pi server (already purchased) as a separate server from the JPLARC web and email server. Obtain and set up a replacement web and email server. Migrate/update the jplarc.ampr.org web pages to the new web server. Retain the existing repeater list server.

- **Establish emergency backup power for 180-R6.** Goal by end of April. Estimate power needs; Revive older NiCAD batteries from Cerro Negro repeater backup or obtain new batteries; build/obtain charging and cut-over circuitry; set up batteries in battery shed outside of 180-R6; and test.

- **Find a replacement editor for the JPLARC newsletter.** Goal: by March.

- **Expand the JPLARC mesh networking infrastructure and use mesh networking in future emergency exercises.** Set up a new Mesh network node in B310 and set up Mesh networking phone in the JPL EOC (before summer).

- **Participate in the next JPL Affinity Group Fair.**

- **Complete reorganization and inventory of club equipment by summer/fall.** Consolidate equipment from both new and old trailers into the new trailer; move active equipment into the new smaller storage unit near B329; and complete the update of the club equipment inventory.

- **Club facility tour (including the Mesa).**

- **Update the JPLARC Bylaws.** Goal: early in the year.

- **More participation!** We need help doing many club tasks so please plan to participate in work parties. Club officers plan to “share the load” in organizing work parties. We can make the club more fun for everyone if we can make some progress on some of the facility repairs and updates. If you have ideas, please make your suggestions to the club officers. Everyone would like to hear more about what folks are doing with radios, equipment, operations, conferences and niche interests.

**Proposed JPLARC 2017 Expenses:** Jonathan Cameron presented a preliminary version of a proposed 2017 JPLARC budget, including a list of proposed expenses and an estimated total year balance sheet. There were a number of suggestions for changes from the Board resulting in a revised version being presented to the Board at the February 10<sup>th</sup> BOD meeting (see later in this newsletter).

**A number of additional suggestions were made by attendees at the end of the meeting:**

- Investigate social media and modernizing the jplarc web page as a means of attracting younger members.
- Use an external web hosting service rather than maintaining our own web server.
- Develop a book “lending library” for ham radio related books. Chris Gaylord suggested that a bookshelf could be set aside in B310. Perhaps the JPL Library could do this for us?
- Provide an equipment “lending library” such as antenna analyzers or such. An equipment exchange on the club’s web site that could enable user sharing of equipment or expertise.

## BOD Meeting Feb 10<sup>th</sup>

By Jonathan Cameron KF6RTA

Present were: Matt W Bennett\* KF6RTB, Jonathan Cameron† KF6RTA, Bob Dengler NO6B, Chris Gaylord† W6YTB, Josh Miller\* KB3UUS, Dave Seidl† KC6NRL, Steve Townes† WB4ILW. On the Phone: Chris Carson KE6ABQ, Dave Hodges KI6PMB, Jim Marr† AA6QI, Walt Mushagian K6DNS, Rob Smith† W6GRV, Mike Torode.

Note: † indicates a 2017 regular voting member (i.e., JPL/Caltech/Retiree & 2017 dues paid), †† indicates an associate (non-voting) member, and \* Indicates a 2017 BOD member. For a BOD meeting quorum, the JPLARC Bylaws require a majority of the BOD (four or more) to be present. Present were five BOD members (plus 3 other 2017 regular members and five non-members who haven’t paid 2017 dues yet) so there **was** a quorum.

**Membership Report:** Secretary Matt W Bennett reported that as of February 10<sup>th</sup>, we have 29 total 2017 paid up members, with 24 of those being voting members and

79% being ARRL members. Renewals are rolling in rapidly.

**Treasurer’s Report:** Jonathan Cameron presented the Treasurers report for Treasurer Chuck Sarture KG6NF who was not present. Jonathan reported that there was income of \$215 from 2017 dues and no expenses. Thus, beginning balance of \$3,777.75 increased to ending balance of \$3,992.75. Secretary Matt Bennett reported that he had just recently sent Chuck \$400 of 2017 dues that has not yet been included.

**Guest speaker program update:** Upcoming talks and potential talks were discussed (see the list of upcoming talks near the end of this newsletter). Potential talks include: Using the IRLP system/setting up your own IRLP node; DXing and DXing practices; Working an amateur satellite; Microwave communications and new geosynchronous amateur satellite (uses C/X band up/down link).

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.

**Draft Proposed Budget:** Figures 3 and 4 show the proposed 2017 JPLARC expenses and balance sheet.

Category	Item	Budget Amount
<b>Miscellaneous Operating Expenses</b>		
	La Canada Post Office Box	\$ 70.00
<b>Equipment Maintenance &amp; Repair</b>		
	Equipment maintenance & repair	\$ 300.00
	Purchase new HF Radio	\$ 1,600.00
	Mesh Networking Equipment (approved in 2016)	\$ 800.00
	Misc (eg, backup power circuits for 180-R6)	\$ 400.00
<b>Field Day (assuming joint event at the Art Center with PRC again)</b>		
	Generator Auxiliary Fuel Tank	\$ 130.00
	Generator oil and gasoline	\$ 25.00
	Antenna materials (wire, guys, stakes, etc.)	\$ 100.00
	Logging Software	\$ 50.00
<b>Internet Services</b>		
	Hardware (CPU, Display, B/U services, cables, etc.)	\$ 200.00
	Software (linux, web hosting/maintenance, etc.)	\$ 200.00
		<b>Total: \$ 3,875.00</b>

Figure 3: Proposed 2017 JPLARC expenses

• <b>Beginning Balance:</b>	<b>\$3777.75</b>
• <b>Estimated Income:</b>	<b>\$1100.00 (55 x \$20)</b>
• <b>Expected Funding:</b>	<b>\$4877.75</b>
• <b>Projected Expenses:</b>	<b>\$3875.00</b>
• <b>Expected End Balance:</b>	<b>\$1002.75</b>

Figure 4: Estimated 2017 JPLARC Balance Sheet

**Net Check Ins:** Increased participation noted from ALERT (ALtadena Emergency Response Team) members.



**New Newsletter Editor Needed:** The club urgently needs someone to take over editing the JPLARC monthly newsletter beginning in April, as Jim Marr, who has been editing the newsletter since 2013, will not be able to continue following the March issue.

**Suggestions/questions from the January regular membership meeting:**

- Do we need a PO Box? Discussed but no decision reached.

- Lending Library: Proposed that a shelf be added in B329. A JPL Library option is also being investigated.

- PayPal account: The Board is planning to proceed with trying to set up such an account. This may require a Bylaws modification.

- Bylaws update: Work is proceeding on updating the JPLARC Bylaws.

**HF Radio Purchase:** The Board discussed the trade study that was conducted last year that recommended that the club purchase a Yaesu FT-991A transceiver. Jonathan went over the rationale for recommending the FT-991A over other options considered. This purchase has been included in the 2017 proposed budget that will go out to membership for approval shortly. Chris Gaylord indicated that the FT-991A is also being considered to replace the aging Yaesu FT-897 in the Comm Van.

**Tactical frequency designations:** Jonathan Cameron led a discussion about whether the tactical names of the various JPLARC frequencies should be included on the jplarc web site. Considering that in the case of a major disaster it would be unlikely that the JPLARC web site would be available, it was concluded that there wouldn't be sufficient value in publishing them there.

Jonathan reminded everyone that he has wallet cards available with the tactical frequency names. After some discussion, it was decided to mail out one of these tactical frequency cards with each 2017 JPLARC Membership Card when they are available.

**Varying Net Operations:** Jonathan Cameron led a discussion about how to make the Monday net more realistic through occasional variations in the way that the net is conducted. Options suggested might include: asking questions at checkout; simulating a repeater failure (forcing transition to an alternate repeater or simplex frequency); periodically scheduling the net to be held on a simplex frequency; etc.. Generally, those attending the Board meeting agreed that these types of things would be useful to do. Jonathan solicited additional suggestions for the kinds of things that we should consider doing.

**Updating the JPLARC Bylaws:** The JPLARC Board of Directors is currently reviewing and proposing language changes to the existing JPLARC Bylaws in seven areas:

- Clarifying officer transitions at the beginning of each calendar year;
- Correcting inconsistent language between sections;
- Correcting outdated language that no longer applies;
- Streamlining membership categories;
- Updating officer duties to match current practices;
- Updating and clarifying voting procedures;
- Clearly stating that the JPLARC is a not-for-profit entity.

Following discussions, a final draft will be prepared for Board review and approval. Once approved by the Board, the draft will be sent to membership for a vote.

The Board welcomes input from all members. Contact Jonathan Cameron or Chris Gaylord if you wish to participate in this review process.

**Work Parties:** Next up:

- Restore the Mesa HF inverted-V antenna (Steve Townes leading). USAR to do the repelling down the side of the hill to retrieve one leg of this antenna. JPLARC to do the hookup and testing.
- Provide a grounding frame for connections at the base of the Mesa Rohn tower. Need a volunteer to lead this.
- Install a bookshelf in B329 above the VHF/UHF radio. Need a volunteer to purchase the shelf and install it.

**Update of the JPLARC website:** Eric Shalov KJ6ARC suggested that the club should use a commercial web site to host the club website. Cost would be less than \$10/month with unlimited storage, allowing full resolution (uncompressed) .pdf versions of the club newsletter. Eric volunteered to be the webmaster for the site. Backup webmasters would also be needed.

Eric had prepared a presentation describing the features and improvements that the use of one of the commercial web site providers would enable but there wasn't sufficient time during this meeting to go through them. [*ed: See separate article later in this newsletter that provides Eric's slides.*]

Some participants in this discussion suggested that it should still be possible to retain the jplarc.ampr.org host name even with the commercial web hosting. This will need to be confirmed.

This plan should also include a transition of the club email exploder to a commercial service since the MailMan email exploder is hosted on the same computer as the current JPLARC web site.

**Southern California Linux Expo:** Will be held March 2<sup>nd</sup> through 5<sup>th</sup>, 2017 at the Pasadena Convention Center. There will be an AREDN/Mesh Networking Booth that Jonathan Cameron plans to help staff. Plan to attend if you can.

**Other nets/clubs:** (1) *JPL Retiree nets:* (a) 160m net: Saturdays 8:30pm-9:30pm on 1.990MHz LSB, and (b)

40m net: Sundays 2:00pm to whenever on 7.185MHz LSB (sometimes moves to 3.850 MHz if 40m conditions aren't very good); (2) *Pasadena Radio Club*, meets 4<sup>th</sup> Tuesday of every month at the Kaiser facility in Pasadena. See w6ka.net; (3) The Altadena *ALERT net* meets Mondays at 8pm on the W6MPH repeater (145.18, -, 156.7), followed by a simplex net on 147.480 MHz (ALTA1).

## JPLARC Web Site Improvement

By Eric Shalov KJ6ARC

The following slides were prepared for the Feb 10<sup>th</sup> BOD meeting to stimulate a discussion about moving the jplarc.ampr.org web site to a commercial service but there wasn't time to discuss them thoroughly during the Board meeting. Thus, they are provided here to stimulate discussion

Thanks in advance for posting your comments to the club via the jplarc at wr6jpl.ampr.org email exploder).

### Off Site Managed Hosting:

- No server / operating system to maintain/backup/upgrade/ etc.
- Shared-hosting providers are staffed to monitor for DDoS attacks, common security vulnerabilities, so you don't have to [as much]
- Just focus on the site design and content
- Generally better bandwidth/peering from off-Lab visitors. (Faster site loading = higher search engine ranking)
- Able to be managed by whomever the Board selects
- Affordable (DreamHost is \$8/mo., HostGator is \$4/mo., etc.) – Will pay for itself if it attracts more members
- SSL a good idea to protect members and to improve site ratings. (This may require controlling our own domain name.) Free SSL certs available from Let's Encrypt

### WordPress:

- Open source "content management system" (CMS), managed by a large team of volunteers
- Used by more than 26% of the top 10 million websites
- Effectively a "blog" where members can post amateur radio-related news, local ham event info, news about club activities, pictures/stories about members' RF adventures
- Current site content can be easily migrated
- Modern look will make JPL ARC appear less defunct to online visitors
- Allows for multiple contributors, so site won't get "stale" so easily
- Written in PHP, completely customizable
- WordPress has over 40,501 plugins available, providing almost any feature that you could ask for
- One-click backups, upgrades

### Possible new site features:

- Event calendar
- Members-only content like a Member Directory
- SoCal Repeater directory (Possibly port from existing website with MS Access DB)
- Club history page, with pictures
- Web-based chat room / message board
- News feed driven by RSS of online news sources, filtered for amateur radio

### JPLARC Facebook Page:

- Reach a more diverse audience with the effects of social networking
- WordPress plugins can automatically post new site articles to Facebook feed
- Attract new members and keep current ones better informed

### A Team Effort:

- A web site needs an organizer/custodian/administrator, but that person shouldn't be responsible to maintain all the site content nor be the only contributor.
- EVERYONE can contribute SOMETHING – make a quick post about an upcoming event, offer to maintain the site Event Calendar, post a photo from the last Field Day, show off an interesting QSL card, etc.
- No contribution is too small. Except for NO contribution!

### Learn more:

- <https://wordpress.org/>
- <https://www.facebook.com/pages/create>
- <https://www.dreamhost.com/hosting/shared/>
- <https://letsencrypt.org/>

**Email Exploder:** Recall that the jplarc.ampr.org web site, the jplarc at wr6jpl.ampr.org email exploder and the 224.08/445.20 repeater IRLP/Echolink interface are all hosted on a very old PC located in 180-R6. Bob Dengler, NO6B has prepared RaspberryPi-based replacement for the IRLP/Echolink interface and is waiting for a decision regarding the web site and email exploder prior to proceeding with installing it. Thus, these decisions are linked.

# Emergency Communications

By Chris Gaylord W6YTB

As you may have seen in the news, Louisiana was recently hit by rare tornados that caused widespread damage, including to the NASA Michoud Assembly Facility. While California also rarely experiences tornados, they are not unheard of and even with our normally mild weather other severe weather events can occur. Recent storms have caused a number of weather-related issues throughout California.

SKYWARN is a program operated by the National Weather Service to train a network of weather spotters in the recognition and classification of different severe weather events including thunderstorms, hail, lightning activity, and other conditions. Weather spotters who have been trained and certified by their local NWS office serve as additional eyes to help the NWS identify and track developing weather hazards in conjunction with weather radar and other forecast tools. The Los Angeles/Oxnard NWS office offers both the training and the certification exam free of charge online through their website at

<http://www.wr.noaa.gov/lox/spotter/>. Even if you do not want to become an official spotter, you can review the slides for your own weather education. If you wish to become a spotter, you can also complete the certification exam and upon receipt and review by the office (this can take several months due to staffing levels) you will receive a SKYWARN Spotter ID number and other informational materials on how to submit official weather reports to the NWS.

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*Club members who work on-Lab and are interested in providing communications support during emergency situations are encouraged to join the JPL Emergency Amateur Radio Service (JEARS). Prospective JEARS members must be currently licensed (any class) and complete four online FEMA courses. An online application and links to the courses are available at <http://goto/years> (only accessible from on-Lab). Emergency credentials and additional training will be provided after joining.*

*For more information, please contact Chris Gaylord W6YTB at [christopher.gaylord@jpl.nasa.gov](mailto:christopher.gaylord@jpl.nasa.gov) or (818) 354-5584.*

## ARRL Membership:

By Jim Marr AA6QI

As an ARRL affiliated club, we need to maintain at least 51% ARRL membership among our voting members.

While there are no requirements to maintain ARRL membership, there are some clear advantages to having ARRL membership. Some of these are:

- Receiving the monthly QST magazine and having access to all back issues electronically.
- Being able to subscribe to weekly ARRL news, propagation forecasts, and satellite ephemeris notifications.
- Being able to subscribe to the electronic monthly Amateur Radio Emergency Service (ARES) newsletter that may be of interest to members who wish to stay current on emergency communications.
- Member discounts on materials and training. For example, the ARRL Introduction to Emergency Communication Course is \$85 for non-members but only \$50 for members.
- You support ARRL, the only significant amateur radio advocacy organization in the U.S. that is fighting to protect our access to the airwaves.

Should those of you who are not already members and may wish to join, **please do so through the Club** rather than joining directly through ARRL. Why? If you join through the Club (new members), the Club retains \$15 of your membership fee to support Club activities. From your point of view, the amount you pay is the same either way. Even if you are a member who is just renewing, doing so through the Club nets the Club \$2, again without changing your costs at all.

To renew through the Club, contact the club Secretary (see the header at the beginning of this newsletter) who will help you with the paperwork (don't worry, it's really simple!).

Thanks in advance for considering joining ARRL or for maintaining your membership.

## Future Meetings

By Matt W Bennett KF6RTB

All JPLARC meetings are being held on working (i.e. non-RDO) Friday's from Noon to 1 PM in 180-703C (unless otherwise indicated). The BOD meets on the first working Friday each month and the regular membership meeting is held on the second working Friday of each month. When there is a third working Friday in a month, the Board can decide whether or not to hold an additional BOD meeting on that third working Friday.

Upcoming regular membership meeting talks (always subject to change):

**March 24<sup>th</sup>:** JPLARC Facilities tour.

**April 21<sup>st</sup>:** AMSAT Future (Patric Stoddard WD9EWK)

**May 19<sup>th</sup>:** Field Day discussion and planning (Matt W. Bennett).



# 2016 JPLARC Organization:

