



November 2014

ARCOver

A Community Service Organization Dedicated to Amateur Radio Since 1970

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Happy Thanksgiving!



E-mail: W6SBA@arrl.net



Website: <http://www.w6sba.org>

Hello W6SBA,

First off, I'd like to thank everyone who helped out at the JOTA event in October. Although I was out of town on business, I understand the event was extremely successful and I want to express my appreciation to the following members for their efforts:

Joe - WB6MYD coordinated the entire event on behalf of the club, worked with the Scouts to figure out our role and responsibilities, and then completed all the necessary paperwork to make the event happen. Joe was also there the whole time helping set everything up as well as tearing everything down.

Jerry - KJ6JJ set up a 440 radio frequency to automatically forward into an Echolink node. This was necessary because the terrain didn't allow for us to hit the club repeater from the east side of Palos Verdes. This took a lot of time to figure out and set up, so thank you Jerry for your ingenuity for making radio communications possible!

Tom - KI6RC received Jerry's Echolink signal, and then converted it back into a 220 RF signal which could then hit the club repeater! Thank you so much Tom for working with Jerry to figure this problem out and support the event throughout the day!

Chuck - K6CSH helped throughout the day and also did all the back breaking work by transporting all the heavy bulky equipment to/from the Cabrillo Scout center. Thank you Chuck for your help!!!

Scott - KK6MNM (one of our newest members) was there all day supporting the event and providing assistance at multiple stations.

Alan - KG6ZPL and Bruce - KK6BJ set up the HF station and were also there all day supporting the event!

Thank you all for your generosity and support of this event!

ELECTIONS:

As you know, November is election month and we will be voting in the new council for 2015! Last month, we voted in some new ByLaw changes. While there are still 7 official council positions (President, Vice-President, Secretary/Treasurer, Council Member #1, Council Member #2, Council Member #3 and Past-President), the last two positions are now optional. If you are able to serve, we would love to have you! We would really like to have someone fill the Council Member #3 spot. (Past-President is a non-elected position).

PROJECT CONTEST:

Right after elections, we will move into our annual project contest, where members bring in their ham inventions and explain what their device is, how it works, and then the members in attendance vote for the best entries. As a reminder, the winners get cash prizes - so finish up your amazing innovation and share it with us! We'd love to see it!!!

Until next time, this is Alex saying 73!

President

Alex Marko - KD6LPA

kd6lpa@socal.rr.com - 310-530-6614

Vice-President

James Murakami - KI6UPL

katsu442@yahoo.com - 310-480-7794

Secretary/Treasurer

Joe Lanphen - WB6MYD

jlanphen@ca.rr.com or w6sba@arrl.net
310-328-0817

CLUB OFFICERS FOR 2014

Activities Council Member

Bruce Jackson - KK6BJ

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Events Council Member

Ray Grace - WA6OWM

rgrace3@verizon.net - 310-370-1913

Information Council Member

Steve Wojtak - KJ6VWN

swihtaj@juno.com - 310-755-1688

Past President

Alan Parks - KG6ZPL

thermic72@sbcglobal.net - 310-558-8718



The program for November's meeting will be the annual Home Brew (Do it yourself) Contest. Members will bring in projects completed since last November and will present them to the audience. There will (probably) be two categories: Kit built and Scratch built. There will be a \$25 prize for the winner of each. Software projects are also eligible for prizes. The winner will be determined by audience vote. Please also bring in partially built or non-working projects as well. While not eligible for prizes, the membership will enjoy seeing your work. As usual the night's festivities will be moderated by Alan, KG6ZPL.

Colorado EOSS-202 Balloon Flight Carrying Amateur Radio Payloads "Awesome"



An Edge of Space Sciences (EOSS) balloon flight, launched on October 25 by students from Colorado and New Mexico, and carrying three ham radio payloads into

near-space surpassed its planned altitude. The mission, designated EOSS-202, took off under a clear sky from Deer Trail, Colorado. The Douglas County, Colorado, STEM School and STEM Academy and Spartan Amateur Radio Club, AB0BX, sponsored and coordinated the balloon flight.

"It was awesome," said Paul Veal, N0AH, a Rocky Mountain Division Assistant Director and AB0X trustee. "It was simply the best weather any of us could have hoped for. According to EOSS, our flight reached one of the highest altitudes they've had in years -- nearly 104,000 feet!"



- 1) What occurs twice in a lifetime, once in a year, twice in a week, but never in a day?
- 2) What kind of fruit conducts electricity?
- 3) If it takes one woman 4 days to dig 3 holes, how long will it take her to dig half a hole?
- 4) What would you call a young horse that has a brown and white coat with white spots?

Answers to last month's Quiz

- 1) Many of the Solar System's planets have similarities. *Which ones have earthquakes?*
Only the Earth. If Mars had quakes they would be marsquakes.
 - 2) What is orange and sounds like a parrot?
A carrot. Think about it.
 - 3) Where does yesterday always follow today?
In the dictionary.
 - 4) Why do the men of England own more shoes than the men of Scotland?
There are more men in England than there are in Scotland.
- Please send answers, comments, or whatever to Alan at thermic72@sbcglobal.net

Veal said a large number of young students participated "with great enthusiasm throughout the morning cold at sunrise throughout the heat of the day." Several of the more than 2 dozen students taking part in the project are radio amateurs.

The "AB0BX Spartan Space Sciences" mission carried seven student-designed payloads aloft. All payloads were retrieved after the balloon burst, at first tumbling and then descending gently to Earth borne by a parachute. Video from the ground was able to capture the balloon's burst as it attained its maximum altitude. The onboard ham radio payloads served to track the balloon during flight and recovery and also transmitted telemetry during the mission.

Veal said the only major snafu involved the onboard Go-Pro cameras, which were equipped with 8 GB cards. "We really needed 32 GB [cards], so we got awesome pictures but only up to around 80,000 feet. *Thanks to the ARRL Letter.*

Ham Radio Saves the Day in the Yukon



According to a Radio Amateurs of Canada (RAC) report, Amateur Radio bridged the gap recently for members of a search-and-rescue team attempting to locate a missing teenager in Canada's Yukon Territory. SAR team member Terry Hauff, VY1MAP, was

unable to contact the team's headquarters in Whitehorse during the September 21 activation. He was out of cell phone range, and the satellite phone the team had was not working. VY1MAP was, however, able to reach a 2 meter repeater from his mobile station.

Hauff reached out to Ray Fugard, VY1RF, and Ron McFadyen, VY1RM, on the 146.88 MHz repeater in Whitehorse, and they were able to relay a report on the search status from the SAR command center some 35 km north of Whitehorse at Lake Laberge. The missing teen was eventually located unharmed. According to the RAC report, this marked the second time in as many months that Amateur Radio and Yukon Amateur Radio Association members and repeater infrastructure had proved invaluable in an emergency. Vincent Charron, VE3XU, RAC's Director of Communications, commented, "Whether it's a natural disaster, major weather event, planned community event, or a missing person search, we at RAC receive numerous reports of Amateur Radio interventions when traditional communication systems fail. Ham radio is most certainly still relevant and provides a crucial communications back-up option, often in challenging/dire situations." -- *Thanks to Radio Amateurs of Canada via Mark Bowers, VY1MAB*

(Article from ARRL.com)

Submitted by Alan, KG6ZPL

ID-51A 50th Anniversary Limited Edition

Get yours while supplies last!

In celebration of Icom's 50th Anniversary, they are proud to introduce the 50th Anniversary edition of the ID-51A.

With an enhanced feature set and your choice of 5 colors including blue, green, red, white and black, this is sure to be one of the season's hottest items.



Special 50th Anniversary Edition Features:

- * Faster Data Transfer in DV Mode (Three Times Faster (approx.))
- * RS-MS1A Android™ Application (Optional OPC-2350LU cable required)
- * Long Antenna Supplied for Optimal Receive Performance
- * Additional Dplus Reflector Link Commands
- * DV and FM Repeater Search Function
- * Enhanced D-PRS Functions

Only 5,000 units will be available worldwide. Be sure to get your Anniversary Edition while supplies last!

Contact your local Icom Amateur dealer for details and pricing.

Steve, KJ6VWN



Two Free Amateur Radio Courses

FCC **“Technician”** course (entry level)

FCC **“General”** course (2nd level)

Each course is **2 sessions**

The sessions are on 21 & 28 February 2015

Technician 9:30 AM to 1:30 PM both Saturdays (bring your lunch)

General 2:00 PM to 5:00 PM both Saturdays

The FCC tests will be 10:00 AM to noon 7 March 2015

The Palos Verdes Amateur Radio Club will give a 30 minute presentation at 9:30 AM at the start of the 21 February Technician class on how to get further involved with amateur radio.

The location is the Fred Hesse Community Park,
29301 Hawthorne Blvd., Rancho Palos Verdes.

Confirm your attendance to Walt, KIDFO at waltordway@juno.com

There is **no fee** for either course.

Taking the FCC test is \$15.

Optional Material (sold at cost)

Gordon West books with all the FCC test questions,

\$22 for the Technician and \$26 for the General

- Paper copy of my Power Point charts,

\$20 for the Technician and \$20 for the General -

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who pass their examination at a PVARC VE test session will, upon application to the Club, be eligible for reimbursement up to a maximum of \$50 to cover the cost of materials and the examination fee.

Everyone who obtains their first ham radio license through a PVARC VE session, regardless of age, will receive a free membership in the Palos Verdes Amateur Radio Club for the remainder of the current calendar year.

Satellites Carrying Amateur Radio Payloads Among Those Lost in Launch Explosion (from ARRL.org)

The [RACE](#) and [GOMX-2](#) CubeSats were among more than 2 dozen satellites lost after an unmanned Orbital Space Sciences (OSC) Antares 130 vehicle exploded spectacularly shortly after launch at 2222 UTC on Tuesday, October 28, from the Mid-Atlantic Regional Spaceport on Wallops Island on Virginia's Eastern Shore. Both satellite packages carried Amateur Radio payloads. The Antares is a new medium-class launch vehicle developed by OSC. The rocket exploded about 6 seconds after launch, sending a huge ball of fire hurtling toward the ground, which set a massive fire at the NASA launch site.

The RACE (Radiometer Atmospheric Cubesat Experiment) CubeSat was a joint project between The Texas Spacecraft Laboratory ([TSL](#)) at the University of Texas-Austin and NASA's Jet Propulsion Laboratory (JPL). Built by a 30-student team, it carried a 183 GHz radiometer, a new science instrument designed by JPL. The spacecraft was equipped to transmit using GMSK at 38.4 k and CW telemetry on a downlink frequency of 437.525MHz.

TSL's Glenn Lightsey, KE5DDG, a UT engineering professor, oversaw the student project that worked hand-in-hand with NASA staff in creating a satellite that aimed to measure water vapor in Earth's atmosphere.

"It's unfortunate, but it is also part of the aerospace industry," Lightsey [told](#) the *Texas Statesman* newspaper. "The nature of building space vehicles is that it is not a 100 percent reliable process. Getting into space is really the hardest part."

The 2U GOMX-2 CubeSat was intended to test a de-orbit system designed by Aalborg University in Denmark. Karl Klaus Laursen, OZ2KK, is listed as the "responsible operator" on International Amateur Radio Union frequency coordination documents. The Amateur Radio payload proposed using a 9.6 k MSK data downlink on 437.250 MHz. Also on board was an optical communications experiment from the National University of Singapore. The mission also aimed to flight qualify a new high-speed UHF transceiver and SDR receiver built by an Aalborg University team.

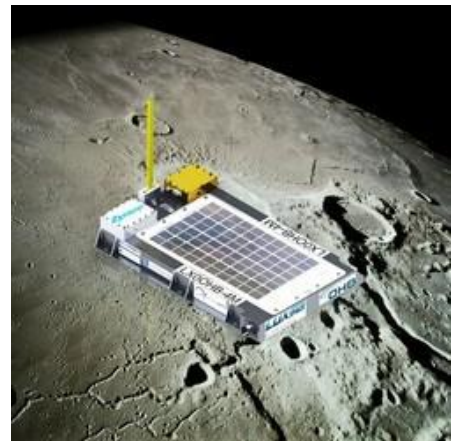
The Antares 130 launcher was on a resupply mission, carrying some 5000 pounds of cargo to the International Space Station. RACE, GOMX-2 and the other satellites onboard the rocket were to be launched into orbit from the International Space Station.

The Antares 130 also was carrying the Flock-1d array of 26 satellites as well as Arkyd-3 and Cygnus CRS-3.

4M Moon Orbiter Completes Lunar Flyby

The recently launched 4M (Manfred Memorial Moon Mission) Amateur Radio payload completed its loop around the moon on October 28 between 0030 and 0215 UTC. Among the 13-character onboard messages posted prior to launch was an encomium for Manfred Fuchs, to whom LUXspace dedicated the mission. Fuchs was the founder of LUXspace parent OHB. Roland Zurmely, PY4ZBZ, the first station to receive the 4M signal, was also the first to piece together the 158 JT65B 13-character messages comprising dedication, which described Fuchs as playing "an outstanding role in the European space industry over the last decades." Fuchs died earlier this year at the age of 75.

The LUXspace 4M payload superimposed over an image of the lunar surface. [LUXspace graphic]



The 4M payload downlink is on 2 meters (145.980±Doppler shift), transmitting continuously at a power of 1.5 W into a quarter-wave monopole. For its first 12 hours, the 4M payload was powered by rechargeable batteries. It then switched automatically to non-rechargeable high-energy density cells. Even as the spacecraft is on its return trajectory, receiving the signal requires a high-gain antenna. Stations in the Southern Hemisphere have the best chance of hearing the 4M payload. Radio amateurs have been encouraged to receive and report the spacecraft's signals. As of October 29, the spacecraft was some 255,000 miles from Earth. A [4M tracking calculator](#) and [payload blog](#) also are available.

"Here at LUXspace, we are really thankful and grateful to all in the radio amateur community who definitely [are] major actor[s] in the success of this mission," Ghislain Ruy, LX2RG, of LUXspace, said this week. -- *Thanks to AMSAT-UK via AMSAT News Service*



1. **Attendance drawing:** We had a winner. Alan-KG6ZPL name was drawn at our October meeting and he was present. Congratulations Alan thanks for being one of our most loyal attendees. Our November drawing will start off with the basic 20 dollar kitty. Thank you.

2. **New member:** Robert-WB6RHF has provided us with his application for membership. Please welcome Robert (Bob) Shaw as our new member. His amateur radio interest are many: HF, VHF, UHF, Microwave and Packet along with CW. He is interested in antennas/ propagation we hope to help him with that. Club activities he wants join us on the 220 SBARC Thursday night net and Repeater upkeep. 10M as well VHF net and club meetings. This sure looks like we will be the lucky ones for having us join us. Thank you Robert and welcome to the SBARC. Please talk to our other members for support and involvement with the club.

3. **Constitution and Bylaw amendments:** Alan ones again explained the reasoning for the amendments before the motion to accept was called. Secretary reported 14 eligible members present. Motion to accept the Amendments as had been published in the Arc Over and had been emailed as recorded properly. Motion by James KI6UPL to accept the amendments as had been published, 2nd by Betty-N6VZF and without further discussion was called. The vote was unanimous 14 yes, 0 no and no objections. Secretary recorded the acceptance of the new Amendments on October 16, 2014 General membership meeting at Torrance Memorial Medical Center.

4. **JOTA:** This was an huge success for as few members did participate with this public event for the SBARC. We had 10 members join us for a long day from 0730 hrs to 2300 hrs at the Cabrillo site with an additional 6 additional members monitoring at home. We saw numerous boy scouts make use of our set up which as it turned out to be very successful after the dinner time. We had numerous Echo link stations connecting from the Philippines, Australia and BC Canada to name a few. I mean boys talking to boys and not just other ham's which is what we had hoped for. Both Jerry and Tom worked so hard to make this possible and while it had its

problem we sure made it that evening. We even talked to Paul-KK6BY from Chicago attending his daughter's wedding. Yes we had our problems, we lost one of our power supplies right off and had some missing parts but otherwise it all went as well as can be expected. Numerous Radio Merit Badge application were also signed off which was no less due to the USS Iowa having provided the boys with Radio Contact Certificates for us to see. All in all this was a great day and we hope to have planted that little idea or feeling they, meaning the boy scouts, will further this as they continue their life's. I want to thank especially Jerry-KJ6JJ, Tom-KI6RC and our new rookie of the year Scott-KK6MNM for all their hard work. Yes I know others helped as well, Alan-KG6ZPL, Bruce-KK6BJ, Chuck-K6CSH for picking up supplies at my place early Saturday morning, Patrick-K6PDG, Mike-KI6LJM, James-KI6UPL, Russell-KI6HBG and yes John-AE6LK. Home stations Jerry-KJ6JJ, Tom-KI6RC, Arthur-WS6U, Steve-KJ6VWN, Kostek-K6MNA and Ray-WA6OWM from Hawaii. Unfortunately we never did connect with Ray. If I missed anyone, my apologies but please remember I myself carried the burden of it all and while not perfect you might say none of this apologies but please remember I myself carried the burden of it all and while not perfect you might say none of this would have been possible without all the hard work I did to make it all work as it did. Both Alan and Bruce with the help of Chuck ran the HF station which was a job all by itself. So Thank you one and all for making JOTA 2014 the huge success it was.

5. **Elections:** Others will write about this in this month issue of the Arc Over so I'll leave that part alone. What I do want to say is please come and join us to elect the new officers for 2015. I do want to mention that nominations may still be made from the floor just prior to the election. Nominate yourself if you wish. Thank you.

6. **DIY Project:** Do It Yourself project is intended to stimulate home brew of equipment and or other items to help with that. Yes we will have 2 categories with each project judged by your peers. The 1st is strictly home brew and the 2nd is completing a bought put it together yourself kit format. This you will see if you join us will be great and very interesting to say the least. So please join us this Thursday November 20, 2014 at TMMC, 2nd Floor, Room A.

CALENDAR

Council Meeting - 1st Wednesday of the month
Call Joe - WB6MYD (310) 328-0817

Club Meeting - 3rd Thursday of the month
November 20, 2014 - 7:30 p.m.
Torrance Memorial Med Center
West Tower, Room A

Club Nets - **W6SBA WEEKLY NET**
Every Thursday @7:30pm
(except the night of club meetings)
PVUSD EMERGENCY NET
1st Tuesday of the month
09:30 Hours on the W6SBA repeater

TRW Swap Meet Saturday,
November 29, 2014, 7-11 a.m.

VE Session - Contact: Joe WB6MYD
Phone: (310) 328-0817
jlanphen@ca.rr.com or w6sba@arrl.net

Social Event - Contact: Joe WB6MYD
Phone: (310) 328-0817
jlanphen@ca.rr.com or w6sba@arrl.net

Answers to Mr. Wave's face on page 5: Eyes = Amplitude modulation;
Mouth = Frequency modulation

CLUB SERVICES

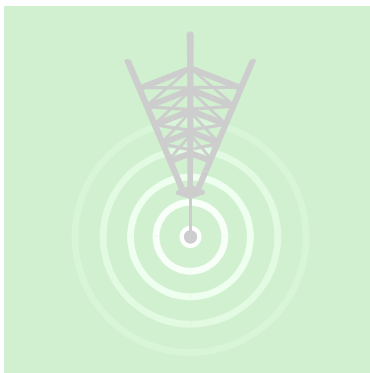
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
Swap Meet Chair	Joe - WB6MYD
VE Test Liaison	Joe - WB6MYD
VE Test Sessions	Joe - WB6MYD
Webmaster	Alex - KD6LPA
Editor	Glenda - KF6QFE Glenda.simpson@hotmail.com
Proofreader	Alex - KD6LPA

South Bay Amateur Radio Club Repeater
224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

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TO:



Address Correction Requested

A COMMUNITY SERVICE ORGANIZATION

W6SBA

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