



May 2019

ARCO *ver*

A Community Service Organization Dedicated to Amateur Radio Since 1970

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**SHOW SUPPORT FOR OUR
TROOPS—
COME OUT FOR THE
ARMED FORCES PARADE!**

E-mail: W6SBA@arrl.net



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

President's Message

Hello fellow SBARC Ham's,

This month's club luncheon was held at Joey's Barbeque at 25308 Crenshaw in Torrance. This was a new lunch venue for our monthly luncheons. We had a good turnout of club members. Joanne KM6BWB attended with a few moon rock samples. They were made available for a school science program she is conducting. Very interesting considering this is the 50th anniversary of the Apollo 11 moon landing.

Tom Essenpreiss-KB9ENS has resigned from the club. His VP position is being filled by the appointment of Alex Marko-KD6LPA until the regular club elections are held in November 2019.

2019 Field day planning is underway. We plan to utilize Ernie Howlett Park located at 25851 Hawthorne Blvd, Rolling Hills Estates, CA. This is another new venue for the club. Alex Marko is our lead for this year's field day. Radio wise, this site looks pretty good. I estimate the park sits at about 400 feet of elevation. The plans are still in the works if we go overnight or just make it an extended day event. Come out and lend a hand setting up our station.

For those of us owning radios that will allow computer programming for frequency management, I recommend taking a look at the CHIRP program. The CHIRP program radio library is continually growing. This program originated with an interest group that was looking for a way to program the Chinese radios. The Chinese software was pretty weak. I find CHIRP works pretty good. I am in the process of trying to learn enough about how it's coded to modify an existing similar radio file in order to program a 220MHz mobile radio I acquired some months back. This software is written in python. It's a new program language to me. I'll let you know if I can pull this software modification off.

Remaining activities in May, The club has its club meeting on the 16th followed by the TRW/NGC swap meet on Saturday the 25th. The swap meet proceeds benefit the club. The swap meet also offers another social opportunity afterwards. Those "breakfast or lunch" interested club members meet up about 11:30AM at the Denny's on Aviation and Artesia.

Keep testing the propagation!

73's...
Scott N6LEM



1) I have 44 hats. Is it possible to hang them on 10 hat racks so that every rack has a different number of hats on it?

2) I'm Fred said the boy on the right; I'm Bob said the boy on the left. A third boy says truthfully that at least one of the boys is lying. Is Fred on the right or the left?

3) 3) Re-arrange the letters, O O U S W T D N E J R, to spell just one word. What is it?

4) A couple have seven daughters. Each daughter has one brother. How many are in the family?

March 2019 Quiz Answers

1) I have coins in my pocket that can pay the exact price of any item ranging in price from 1 cent to a dollar. What are the fewest coins I can have and their denominations to be able to do this?

4 pennies, 1 nickel, 2 dimes, 1 quarter, 1 half dollar.

2) I sawed a dowel weighing two pounds into eight equal pieces. What did each piece weigh?

Less than 1/4 pound due to the loss of sawdust during the sawing.

3) I weigh nothing but you can see me. Put me in a bucket of water and I'll make it lighter. What am I?

A hole.

4) What has a head, a tail, no legs, and is brown?

A penny.



Dean Bouvier, N5DQ, will be discussing ham radio involvement with "The Great American Shake Out" at our club meeting on May 16th. Come join

us at 7:30pm in Room 1 in the Richard Hoffman Educational Center at Torrance Memorial Medical Center.

It's expected to be an "earth shaking topic"!

Low Audio for ISS SSTV Transmissions Raises Issue of Crew's Ability to Intervene

Reception problems owing to low audio levels plagued a recent round of Amateur Radio on the International Space Station-sponsored (ARISS) slow-scan TV transmissions from the International Space Station (ISS). Some clever operators on the receiving end were able to use software to bump up the deficient audio so the images would decode properly. But the matter raised questions concerning the ISS crew's ability to troubleshoot problems and to make adjustments to the Amateur Radio gear on the fly. ARISS-International Chair and AMSAT Vice President for Human Spaceflight Programs Frank Bauer, KA3HDO, subsequently posted an explanation of how Amateur Radio fits into the operation of the ISS and the astronauts' ability to service and operate it.

"Please remember that ARISS is not the prime activity on ISS," Bauer said.

"There are over 300 international experiments currently operational on ISS on this expedition." Bauer said the vast array of ongoing experiments means it's only possible to "occasionally get suggestions to the crew" to make changes relative to the Amateur Radio payload. "Any workarounds on any experiment/payload will compete with the crew's already fully booked schedule," he explained.

Bauer said that once ARISS has its Interoperable Radio System on board, it plans to augment the system with ground-command capability. "Once in place, we will be able to do many things with our radio without crew intervention, including mode changes to support SSTV, APRS, voice repeater, etc," Bauer said. "This capability will also be important if we fly ham radio on the Lunar Gateway, which will not have crew on it 24/7."



Patrick Stoddard, WD9EWK, was able to get acceptable SSTV images by tinkering with the received audio and then decoding.



Frank Bauer, KA3HDO. [Photo courtesy of ARISS]

Bauer pointed out that keeping ARISS afloat and able to implement new Amateur Radio capabilities requires "a great deal of funding," and he used the opportunity to note that ARISS has a fundraising activity under way to get the Interoperable Radio System ready for launch. "If you really want to see improvements in the ISS radio system from where it is today, please strongly consider donating to ARISS," Bauer said. ARRL Letter, 4/25/2019



Parade starts at 1:30pm along Torrance Blvd beginning at Crenshaw Blvd.

Military Exhibits on display starting at 3pm at the Del Amo Fashion Center parking lot.

Armed Forces Day Trivia

It is celebrated each year on the third Saturday in May and always has a theme. The theme for 2019 is "For the Nation. For the People." The theme of the first Armed Services Day was "Teamed for Defense." It is celebrated with military exercises on land, sea and in the air to honor members of the US military and to show off their state-of-the-art equipment to the civilian population it protects. Military installations are generally open on that day as it is not a federal holiday.

July 26, 1947 - President Harry S. Truman signs the National Security Act into law, unifying "four branches of the military under a single executive authority, the Secretary of Defense." The decision to unify the different services under one Department leads to the creation of the National Military Establishment in 1947.

1949 - The Department of Defense is created, replacing the National Military Establishment.

February 27, 1950 - Truman proclaims -- "Armed Forces Day, Saturday, May 20, 1950, marks the first combined demonstration by America's defense team of its progress, under the National Security Act, towards the goal of readiness for any eventuality. It is the first parade of preparedness by the unified forces of our land, sea, and air defense."

August 31, 1949 - Secretary of Defense Louis Johnson announces the creation of an Armed Forces Day to replace current, separate Army, Navy, Marine Corps and Air Force holidays.

May 20, 1950 - Armed Forces Day is first celebrated. B-36 bombers fly over the capitals of every state; 10,000 troops and veterans march in Washington, DC.; More than 36,000 participants in a parade in New York City.; Parades, air shows, receptions and other celebrations also take place.

AMSAT, ARRL Comment in FCC Orbital Debris Mitigation Proceeding

AMSAT has told the FCC that several proposed rule changes related to the mitigation of orbital debris would have an extremely detrimental effect on both the Amateur Satellite Service and AMSAT's ability to launch and operate new satellites, including AMSAT's upcoming GOLF satellites. AMSAT filed comments on April 5 on an FCC Notice of Proposed Rule Making in IB Docket 18-313. AMSAT argues that amateur satellites often have longer mission lifespans than other small satellites and that the FCC should take a mission duration of 5 to 10 years into account when determining whether or not an amateur satellite will meet the orbital debris regulations, either by transferring to a parking orbit or re-entering the atmosphere within 25 years of mission completion. Current practice is to assume a "zero-year" mission and to require that amateur satellites meet the debris regulations.

AMSAT also urged the Commission to consider alternatives to a proposed rule that would restrict to altitudes of 650 kilometers or less satellites in low-Earth orbit that plan to meet the orbital debris mitigation guidelines through atmospheric re-entry. AMSAT noted that, had this rule been in place, it would not have been permissible to deploy AO-85 and AO-91 in their current elliptical orbits with apogees of approximately 800 kilometers, even though both will re-enter within 25 years due to their low perigees. Additionally, AMSAT noted that current plans for the GOLF-1 satellite are to meet orbital debris mitigation guidelines through atmospheric re-entry by deploying a drag device that will ensure re-entry within 25 years, despite deployment at an altitude higher than 1,000 kilometers. This proposed rule would prohibit GOLF-1's deployment at that altitude.

The Commission's proposed rules would further require that Amateur Satellite licensees indemnify the government against any claims made against the US due to the operation of a satellite. AMSAT believes this proposal would end the ability of AMSAT, or any other entity in the US, to launch and operate amateur satellites and urged the FCC to consider alternatives.



In separate comments, ARRL said it supports "reasonable efforts to mitigate orbital debris" but that the FCC "must tailor its regulations for the Amateur Satellite service" and "not inadvertently impair the service's continuing vitality by applying rules crafted for commercial satellite services."



In this regard, ARRL supports AMSAT's positions, which suggest that "the nature of the modifications needed [should] achieve the Commission's expressed regulatory objectives without needlessly impairing the Amateur Satellite service."

ARRL said the FCC should exempt amateur satellites or otherwise ameliorate its proposed indemnification requirement and said that only telemetry "used to command onboard propulsion systems" should be subject to encryption.

ARRL also said amateur satellites proposed for disposal by atmospheric re-entry should not be restricted to orbital altitudes of 650 kilometers or lower, and that the longer duration of amateur satellite missions should be factored into the time required for a satellite to naturally de-orbit or be transferred to "a parking orbit."

Interested parties may file reply comments by May 5 via the FCC Electronic Comment Filing Service. ARRL Letter, 4/11/2019

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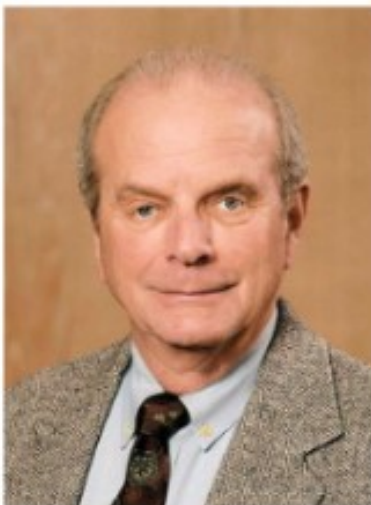


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ARRL and FCC Sign Memorandum to Implement New Volunteer Monitor Program

ARRL and the FCC have signed a Memorandum of Understanding (MOU) that paves the way to implement the new and enhanced Volunteer Monitor program. The memorandum establishes the Volunteer Monitors as a replacement for the Official Observers (OO) program.



Riley Hollingsworth,
K4ZDH.

Current OOs have been encouraged to participate in the new program.

"We are excited by the opportunity to codify our partnership with the FCC and to work together to achieve our mutual interests of protecting the integrity of our Amateur Radio bands," said ARRL President Rick Roderick, K5UR. "This Memorandum of Understanding will serve as the foundation for a new level of partnership on this very important issue."

ARRL has contracted with retired FCC special counsel and former Atlantic Division Vice Director Riley Hollingsworth, K4ZDH, to oversee the ARRL's role in the development and implementation of the Volunteer Monitor program.

Approved by the ARRL Board of Directors at its July 2018 meeting, the new Volunteer Monitor program is a formal agreement between the FCC and ARRL in which volunteers trained and vetted by the ARRL will monitor the airwaves and collect evidence that can be used both to correct misconduct or recognize exemplary on-air operation.

Cases of flagrant violations will be referred to the FCC by the ARRL for action in accordance with FCC guidelines.

The intent of this program is to re-energize enforcement efforts in the Amateur Radio bands. It was proposed by the FCC in the wake of several FCC regional office closures and a reduction in field staff.

"Under this program, the FCC will give enforcement priority to cases developed by the Volunteer Monitor program, without the delay of ARRL having to refer cases through the FCC online complaint process," Hollingsworth said.

Hollingsworth has committed to FCC and ARRL officials to ensure the adequacy of training for the new positions, to review the quality and utility of Volunteer Monitor submissions to the FCC for enforcement actions, and to advocate for rapid disposition of cases appropriately submitted to the FCC.

ARRL officials estimate that the first Volunteer Monitors will be in place and ready to begin their duties within 6 to 9 months. ARRL Letter, 4/18/2019



HAPPY
Mother's
DAY



Faster, More Contest-Friendly FT4 Digital Protocol Beta Version to Debut on April 29

A new, speedier, more contest-friendly digital mode is just days away, initially in beta form. WSJT-X developers say serious work on the new FT4 protocol began shortly after the FT8 Roundup held last December 1 - 2. The goal was a mode that could compete with RTTY contesting in terms of contact rates, while preserving many of the benefits of FT8.

"Over the past month, a small group of volunteers have been conducting on-the-air tests of FT4," the WSJT-X development group -- Joe Taylor, K1JT; Steve Franke, K9AN; and Bill Somerville, G4WJS -- announced this week. "The early tests



were very successful and helped us to make a number of important design decisions. We believe FT4 has considerable promise for its intended purpose."

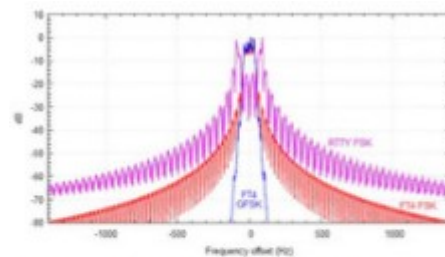
The developers say FT4 soon will be ready for testing by a larger group and they're seeking interested participants who can offer their "considered feedback." They suggest reading The FT4 Protocol for Digital Contesting first. A general release of the WSJT-X suite that includes FT4 is anticipated in July.

According to the document, FT4 is an experimental digital mode designed specifically for radio contesting that -- like FT8 -- uses fixed-length transmissions, structured messages with formats optimized for minimal contacts, and strong forward-error correction. Transmit-receive sequences are 6 seconds long, making it 2.5 times faster than FT8 and about the same speed as conventional RTTY for radio contesting. FT4 can work with signals 10 dB weaker what would be required to decode RTTY while using much less bandwidth.

Transmissions last for 4.48 seconds, compared to 12.64 seconds for FT8. Modulation uses four-tone frequency-shift keying at approximately 23.4 baud, with tones separated by the baud rate. The occupied bandwidth is 90 Hz.

"We plan to post downloadable installation packages for WSJT-X version 2.1.0-rc5 on Monday, April 29," the Development Group said.

"A few parameters and operating behaviors of FT4 are still being tested and optimized," the initial FT4 guide says. "It will be very useful to hold several more mock contest practice sessions, with a larger group of active participants." Even if these practice sessions reveal no serious bugs or inadequacies, the WSJT-X development group believes FT4 is still too new to be used in the ARRL VHF Contest (June 8 - 10) and ARRL Field Day (June 22 - 23). For that reason, release candidate WSJT-X 2.1.0-rc5 will "time out" on June 7. A general availability release is expected in mid-July. ARRL Letter 4/25/2019



Spectra of an FT4 signal transmitted with GFSK (blue), FT4 with FSK (red), and RTTY with continuous-phase FSK (purple).

ARRL has rolled back Outgoing QSL Bureau rates to 2011 levels.

Effective May 15, 2019, the new rates will be: \$2 for 10 or fewer cards in one envelope; \$3 for 11 - 20 cards in one envelope, or 75 cents per ounce for packages with 21 or more cards. For example, a package containing 1.5 pounds of cards -- 24 ounces, or about 225 cards -- will cost \$18. There are no transaction service fees. Any cards received before May 15 will be charged the current rate. There will be no adjustments for cards received before May 15 ARRL Letter, 4/18/2019



SPOT the INFORMATION

Joe, WB6MYD



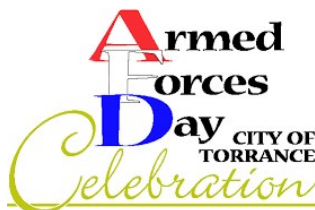
1. **Attendance Drawing:** This time we had a well deserving member being present collect the kitty for April. Joanne-KM6BWB was given the \$35.00 kitty. Congratulations Joanne. The kitty for the May meeting will be \$20.00. Be there and win.

2. **Thank you:** Tom-KB9ENS made his presentation on magnetic loop antennas. Wow what a presentation it was. Lots of charts and graphs which you can use for your antenna if you will and see exactly where you could use or adjust of course to where you wanted to use it. Thank you Tom for a presentation well done.

3. **Membership renewals:** we had a few more of our members renew, thank you so much: Donna Wilson 3282108 James KJ6RER 3282106 Linda KM6UMK 3282107 Norman K6UU 3282112 Ralph N6BXP 3282117 Glendee KJ6EBS 3282113 Greg WQ9P 3282114 Scott KM6FAX 3282115 Edward KM6NIQ 3282116 Scott KN6BLB 3282118 Stephen KN6BLA 3282119 Russell KI6HBG 3282120. Thank you so much for joining the South Bay ARC. We do really appreciate your continued support and it is really hoped you will support by participating in the many activities we have and are scheduled with you in mind. Thank you.

4. **Torrance Armed Forces Parade:**

As you know we have for many years assisted the City of Torrance with the staging of the various units participating in this annual event. The Parade is billed as one of the largest in the country. While not as large as it was when we started when Dick-W6ATT SK was with us. Never the less, it still is formidable and a pleasure to watch. By the time you get to read this all things will have been finalized and the parade will be going down Torrance Blvd from the starting Point at Crenshaw around 1:00-1:30PM. The names have been turned in as requested and we have some new members participating this year. Scott-N6LEM is taking the lead while lead and both Ed-KN6JN and Chuck-K6CSH with Glenda-KF6QFE as older participants will



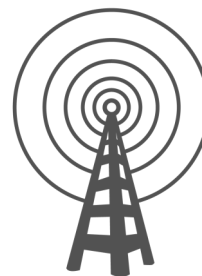
work with the new guys. Thank you so much for stepping up to the plate. I will not be there since on a trip to celebrate my birthday. Thank you all for supporting since this is one of the last civil or community events we do.

5. **Field Day 2019:** While not everything is finalized, our 2019 Field Day is undergoing some changes. We will not be at the hospital this year. For many factors we are going to what is thought to be a more public event location for exposure. We have a new Field Day co-chair Alex-KD6LPA and others, as was suggested last month, would check out other locations. This was by a show of hands at our last meeting. The plan is to try out Ernie Howlett Park in Rolling Hills Estate. This is relatively close and as easy to get to as De Portola Park we used for picnics and such. More info later on the location with maps as we get closer. Anyway, the other thing is at this point looks like we might only operate for the Saturday June 22nd only since no overnight parking and activities are allowed. The class will be 1A which is very beneficial. So I think this is a win win situation which is hoped to be enjoyed by one and all as well. Maybe no dinner or breakfast of course but that is ok too. These kinds of plans still have to be worked out. We look forward to your continued support and participation. We must remember that this is all about emergency communication set up needs should we ever be called to provide this service to our community.

6. **Membership renewal information:** I apologize but due my plans for the trip I've run out of time. I will as soon as I can compile the rest of the information and share this with you. I do want to thank you all for renewing your information or at least bring me as Secretary up to date. This is a big problem if you need to keep everyone everywhere up to date on membership information including yourself. I was really surprised about how few mistakes I had in the data. The one thing we need to set up now is the website with the membership roster.

Thank you.

Joe, WB6MYD



2019 CLUB OFFICERS

President: Scott -N6LEM, 310-530-9889 scottsimpson126@gmail.com

Vice President: Alex - KD6LPA , kd6lp@socal.rr.com

Secretary: Joe -WB6MYD, 310-328-0817 jmlanphen@gmail.com

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Council: Paul - KK6BY, 310-676-0212 kk6by@arrl.net

Council: Mark - KM6HQG, 310-612-0835 markvberbue@gmail.com

Council: Steven - KM6EMF, 949-690-3877 kf6jvt@aol.com

Past Pres: Ray - WA6OWM, 310-370-1913 wa6owm@arrl.net

CALENDAR

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

Club Meeting - 3rd Thursday of the month
May 16, 2019 - 7:30 p.m.
Room 1 in the Richard Hoffman
Educational Center at Torrance
Memorial Medical Center

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,
May 25, 2019, 7-11 a.m.

VE Sessions - Scheduled on Saturday of even months
Contact Joe, WB6MYD with questions
(All VE sessions are scheduled for Room 4 in the Health
Conference Center)

Social Event - Contact: Joe WB6MYD
Phone: (310) 328-0817
jmlanphen@gmail.com

CLUB SERVICES

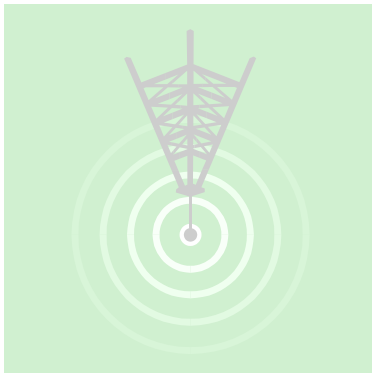
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
Swap Meet Chair	Tom-KI6RC, Chuck- K6CSH., Bill-KQ6Z
VE Test Liaison & Sessions	Betty Barch-N6VZF N6VZF@arrl.net (310) 545-6422
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South Bay Amateur Radio Club Repeater
224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

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Address Correction Requested

A COMMUNITY SERVICE ORGANIZATION

W6SBA

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