



PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

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Field Day Final Planning & Briefing

Field Day is fast approaching on June 24-25. We will be scheduling operators for the various stations, and ironing out other last minute details to help ensure a great Field Day experience. If you'll be joining us at Field Day, whether a first timer or seasoned veteran, your attendance at this meeting is highly recommended. We Hope you can make it.

WHEN: June 23-25, 2017
 TIME: 11:00am Saturday - 11:00am Sunday (Friday Setup Starts at 3pm)
 WHERE: James G. Gilleran Park, 24960 Felipe Road, Mission Viejo, CA

TALK IN: 147.645- 110.9hz

2017 SCHEDULE:

- Fri 6/23 3pm: Setup begins (towers, antennas, tents, radios, etc)
- Fri 6/23 6pm: Dinner
- Sat 6/24 8am: Battery box build (SOARA Saturday at Field Day/ Gilleran)
- Sat 6/24 9am: Field day site opens
- Sat 6/24 11am: Field day operations begins
- Sat 6/24 12pm: Lunch
- Sat 6/24 1pm: Education Activity
- Sat 6/24 2pm: ARRL-VEC Testing Session
- Sat 6/24 6pm: Dinner
- Sun 6/25 8am: Continental breakfast
- Sun 6/25 11am: Field day operations cease



what to expect, but I was truly amazed when I arrived at the site while set-up was in progress. I marveled at the teamwork, and the speed with which antennas and towers almost magically appeared, radios and accessories connected to them, operator positions created, and in a few short hours, a major complex with widely varying radio communications capabilities was created in a bare park.

As the years passed, I came to appreciate the amount of preplanning and preparations, often behind the scenes, that is necessary to have a successful, all encompassing FD. Many hours spent by key people are involved. This year, our FD Captain, Frank, KK6AWB has been diligently tracking the progress and coordinating the many moving parts, and things ate coming together very nicely. Thanks Frank!

Field Day is meant to be fun, entertaining, and educational. We strive to have activities for everyone, from the hopeful licensee, to the recently licensed, and the very seasoned contest operator. It's a fantastic opportunity to learn something new about Ham Radio, wherever you are on the experience curve. Let's not forget the real purpose behind FD. Field Day was originally begun in 1933 to train operators, and test hams' emergency capabilities. SOARA intentionally has selected a site, Gilleran Park, that allows us to operate in the event of a major emergency or natural disaster without the threat of building collapse, or other potential dangers resulting from the event. Public officials know we will be found there, and they can utilize our long range communications capabilities.

While the local public safety communications systems are hardened, and they may still function, although potentially limited, during, say a

(Continued on page 2)

ARRL Field Day, Something for Everyone

As you probably well know, ARRL Field Day (FD) is coming right up, on next Friday June 23, Saturday, June 24, and Sunday June 25. As we busily plan and prepare for this year's FD, I distinctly remember my first FD, over 20 years ago. It's something I will never forget. As a very newly licensed ham, I had no idea

Meeting

June 19, 2017
7:00 PM

NP Murray Center
Veterans Way
Mission Viejo



**ARRL
Field Day**
Jun 23-25

**SOARA
Saturday**
8am 6/24 at
Field Day

4th of July
Fireworks
Volunteering

**HRO
Ham Jam**
July 8

**SOARA
Picnic**
Aug 6

**VEC
License
Exams**

2pm—At Field
Day!

Please see our
[website](#) for
more info.

Walk-ins ok.

Extra | General |
Technician

What is Field Day?

Despite the Internet, cell phones, email and modern communications, every year whole regions find themselves in the dark. Earthquakes, fires, storms, tornadoes, ice and even the occasional cutting of fiber optic cables leave people without the means to communicate. In these cases, the one consistent service that has never failed has been Amateur Radio.



These radio operators, often called “hams” provide backup communications for everything from the American Red Cross to FEMA and even for the International Space Station. SOARA “hams” will join with thousands of other Amateur Radio operators showing their emergency capabilities this weekend.

Over the past year, the news has been full of reports of ham radio operators providing critical communications during unexpected emergencies in towns across America including wildfires, winter storms, hurricanes, tornadoes and other events world-wide. When trouble is brewing, Amateur Radio’s people are often the first to provide rescuers with critical information and communications. On the weekend of June 24-25, 2017, the public will have a chance to meet and talk with South Orange Amateur Radio Association’s ham radio operators and see for themselves what the Amateur Radio Service is about as hams across the USA will be holding public demonstrations of emergency communications abilities.

“The fastest way to turn a crisis into a total disaster is to lose communications,” said Allen Pitts of the ARRL. From the earthquake and tsunami in Japan to tornadoes in Missouri, ham radio provided the most reliable communication networks in the first critical hours of the events. Because ham radios are not dependent on the Internet, cell towers or other infrastructure, they work when nothing else is available. We need nothing between us but air.

At Gilleran Park in Mission Viejo, the South Orange Amateur Radio Association will be demonstrating Amateur Radio starting at 11am on Saturday. They invite the public to come and see ham radio’s new capabilities and learn how to get their own FCC radio license before the next disaster strikes.

Amateur Radio is growing in the US. There are now over 735,000 Amateur Radio licensees in the US, and more than 2.5 million around the world. Through the ARRL’s Amateur Radio Emergency Services program, ham volunteers provide both emergency communications for thousands of state and local emergency response agencies and non-emergency community services too, all for free.

*(Continued from page 1) - **ARRL Field Day, Something for Everyone***

major earthquake, the traditional longer range communications systems available to local government, like land line and cellular telephone, and internet may very well be crippled, either through overload, or major system damage. Bear in mind, telephone systems, either landline or cellular only have infrastructure to support about 1/3 or less of their subscribers. Experience has shown that these systems very rapidly become overloaded and crash. Although there are moves in progress to give public safety traffic priority over these systems that will help them overcome overload, there is no quick work around for heavily damaged system infrastructure. While City EOC’s are equipped and anticipate employing HF amateur radio to communicate with Sacramento, and out of the immediate area, these are typically located in structures that may become damaged and rendered unsafe in “the big one”.

This brings us back to SOARA’s FD, where we’re in a relatively safe location, that, in an emergency, gives us flexibility to move our setup location around both the upper and lower sections of Gilleran Park. It also brings me back to my original premise, and why we should all attend FD, for as long or little time as our schedules allow: There’s something for everybody.

Hope we’ll see you there, and bring a friend and introduce them to Ham Radio. All are welcome!

73 de Ray, AE6H



Membership Report

216 active members. SOARA Saturday is at FD and a 8am battery box build. The 40 & 10 meter nets are going well with good participation.

73, Ed
WA6ED

GOTA Station at Field Day

If you are a new ham, a Technician, or if you are a General or above and haven't been active on HF for a year or more, try the GOTA Station at Field Day. Coaches will be available to assist you with making contacts. Give it a try!

Silent Key— W6TM, Bill Boher

W6TM, also known as Bill Boher, was one of SOARA's founding members and also a very special person.

SOARA June Raffle

The \$5 raffle is FT8900R. It is a 4 band mobile radio that covers 10M, 6M, 2M and 440Mhz. We would have to sell between 65 and 70 tickets to complete the raffle.

For the \$1 raffle, I have a set of headphones, a speaker and clock. I will also pick up a prize or two from Harbor Freight.

73.....Hal WB6WXO



HRO Ham Jam

HRO's 6th Annual HRO Ham Jam is coming up!

Saturday, July 8, 2017 is the date, store hours are 10AM-5:30PM, and once again we will be hosting our local clubs and communications specialists in the store parking lot for another educational and fun event.

Come see local communications vehicles, learn about Hospital Disaster Services, and see how many of the local clubs make various activities available to local hams. We look forward to hearing from any local group who would like to reserve space for this event.

The Eagle Scouts will be providing a hotdog lunch again this year, and Mr. Gordon West and many manufacturer representatives will be available for questions. Seminars will be scheduled on various subjects, including D-Star, C4FM System Fusion, and other hot topics.

License testing will also be available most of the day; if interested in testing, please call Janet at the store at 714-533-7373 with name and contact information so that we may plan for appropriate seating.

Two prize drawings will be held during the day at 12 noon and 3PM. Winners will need to be present to win goodies from many of our suppliers who have donated some really great stuff!

Come join us for a fun-filled Saturday of ham radio; make it your goal to leave having learned at least one new thing and/or shared your own knowledge with at least one new ham.

Kind 73,
Janet Margelli, KL7MF
Manager
Ham Radio Outlet
933 N. Euclid St.
Anaheim, CA 92801
(714) 533-7373 Tel
anaheim@hamradio.com



The K7RA Solar Update 6/16/17

We saw four zero sunspot days over the past week, so the average daily sunspot number declined from 19.3 to 4.9 from the previous seven days.

Average daily solar flux for this reporting week (June 8-14) was 74.4, down from 77.1 the previous seven days. Average daily planetary A index increased from 5.6 to 7.3 and average mid-latitude A index went from 5.6 to 6.9. Yes, that is correct and not a typo; over the previous reporting week (June 1-7), mid-latitude and planetary A index were both 5.6....

Predicted solar flux is 77 on June 16-23, 72 on June 24, 70 on June 25, 75 on June 26 through July 7, 78 on July 8, then 78, 77, 78, 76 and 74 on July 8-12, 72 on July 13-21, 70 on July 22-23, and 75 on July 24-30.

On June 14 Space-weather.com issued a notification titled "A hole in the sun's atmosphere". It included a nice magnetic image. Check out: <http://bit.ly/2t4LESL>



[WM7D's Solar resource Page](#)

[DX Operations: www.nq3k.com](#)

[ARRL HF Propagation Charts](#)

FCC MODERNIZES PERSONAL RADIO SERVICES RULES

Posted date: May 18, 2017

Media Contact: Cecilia Sulhoff, 202-418-0587 cecilia.sulhoff@fcc.gov

For Immediate Release

WASHINGTON, May 18, 2017 – Today, the FCC took steps to update the Personal Radio Services rules, also known as Part 95 of the Commission's rules, in order to modernize them, remove outdated requirements, and reorganize them to make it easier to find information. Significantly, as part of this effort, the FCC addressed more than two dozen proposals submitted by interested parties. Today's action will result in a more consistent, clear, and concise set of rules that will better serve the needs of the public.

The FCC Personal Radio Services rules cover a wide variety of wireless devices that are used by the general public. These devices generally use low power levels, communicate over shared radio frequencies, and usually do not require an individual FCC license for each user. Some common examples of Personal Radio Services devices are walkie-talkies; radio control toy cars, boats, and planes; hearing assistance devices; CB radios; medical implant devices; and Personal Locator Beacons. The revisions adopted today reflect a comprehensive reform that will simplify, streamline, and update these rules. These changes will ensure that these rules reflect technological advances, recognize the 21st century uses of the Personal Radio Services, and are easy for the public to use and understand.

Specific reforms adopted in today's Report and Order include:

- GMRS/FRS Reform: The Commission will increase the number of communications channels for both General Mobile Radio Service (GMRS) and Family Radio Service (FRS), expand digital capabilities to GMRS, and increase the power/range for certain FRS channels to meet consumer demands for longer range communications.
- CB Reform: The Commission will update the Citizens Band (CB) rules, which are decades old and contain outdated requirements that are no longer needed, including labeling requirements and a limit on use of channels when conditions allow long range communications. The Commission will also clarify that hands-free devices can be used with CB radios.
- Overall rule reform: The Commission will remove outdated and unnecessary rules, change other rules to increase clarity and reduce potential confusion, and reorganize and streamline all Part 95 rules to make them easier to understand.

The Commission will also convert rules to plain language format to make them more user-friendly. Action by the Commission May 18, 2017 by Report and Order (FCC 17-57). Chairman Pai, and Commissioners Clyburn and O'Rielly approving and issuing separate statements.

WT Docket No. 10-119; RM No. 10762; RM No. 10844 ### Office of Media Relations: (202) 418-0500 TTY: (888) 835-5322

Twitter: @FCC www.fcc.gov/office-media-relations

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1974)

ARRL News

New Southwestern Division Vice Director

As announced on the ARRL.org web-site, Ned Stearns, AA7A, of Scottsdale, Arizona, is again the Southwestern Division Vice Director. Ned previously served as Vice Director from 2005 to 2007, so he is familiar with the position. He out-pollered two competitors, and assumed office immediately after the votes were counted.

Message From Past Vice Director, Marty Woll, N6VI

I want to thank the Southwestern Division members for the privilege of serving as your ARRL Vice Director for the past nine years. It has been very rewarding to have worked with Director Norton on needed changes in policy and practice at the League, to have helped address your individual questions, concerns and suggestions, and especially to have visited with so many of you at club meetings and conventions. I leave this position with a greatly expanded circle of friends and with an appreciation for the talent and dedication to advancing Amateur Radio and public service shown by club leaders, League volunteers and individual members.

I congratulate Ned Stearns, AA7A, on winning the seat I vacated and thank Grant Hays, WB6OTS, and Frank Westphal, K6FW, for stepping up and running for the position. The work Dick Norton has been doing is, in my opinion, essential to the future of the League as a member-driven organization, and I strongly encourage all of you to continue supporting his and Ned's efforts.

I appreciate having received regular courtesy copies of club newsletters and bulletins; they were helpful as I carried out my responsibilities.

I would ask that those who sent them now redirect them to our new Vice Director. Also, while I expect my arrl.org e-mail address to remain active, I suggest you use n6vi@socal.rr.com as your primary way to reach me. 73, Marty N6VI

Field Day - June 24 - 25

ARRL's Field Day weekend is the most popular Amateur Radio operating event of the year. Individuals and teams set up stations on hilltops, in parks, at schools and emergency operations centers, powering their equipment by means other than the commercial mains. Most will use temporarily erected antennas, and many will draw visits from members of the public.

Field Day locations are shown on a map at

<http://www.arrl.org/field-day-locator>.

Enter your zip code in the box at the top left. Field Day groups shown there welcome visitors, and often find new members for their clubs through Field Days.

You can visit any of the operations in your area. There may be a variety of approaches to putting up and operating a portable station, and you may have the opportunity to make contacts as a guest operator at the Get-On-the-Air, or GOTA, station. Technician licensees and even unlicensed individuals can make HF contacts across the country under the supervision and coaching of the GOTA control operator. You can also operate while mobile (entry class C), from home (entry class D) or from home but using back-up power (entry class E).

Division Outreach

Vice Director Ned Staerns, AA7A, and I both continue to welcome opportunities to address your radio clubs and ham-fests about ARRL national issues, and welcome your inputs regarding ARRL policies. The ARRL board meets next in mid-July.

ARRL Southwestern Division
Director: Richard J Norton, N6AA
n6aa@arrl.org

T-Hunt News

This month's hunt was short and sweet. Transmitter was hiding in plain sight (if you looked in the right direction) off the side of the parking structure in beautiful downtown San Juan Capistrano, running a full five watts into a horizontal quarter wave spike on the side of the transmitter box.

First into the area was Richard, K6RBS, and Mike, NM6X, who, after wandering around the train crossing finally entered the parking structure. Right behind him was Karl, KF6MDF. Both failed to look up to see the transmitter box above them while chasing the reflection bouncing off the exterior wall of the theater building across from them. Finally, Richard spotted it first making him the winner of the hunt. It took them just over an hour to find us. Dale, W8RRV, started late but it only took him about 30 minutes to make it into the area. He did provide a certain amount of entertainment searching the patio area between the parking structure and the theater building. A point here, very few people, when searching for something, look up.

Hope to see you next month,
Gray, WA6BJY



A picture of the transmitter hanging off the side of the parking structure.

A picture of the parking structure near the train depot in San Juan Capistrano. The transmitter was hanging off the left side where you see the post with the horizontal piece to the right of it. The patio area mentioned above runs along the side of the parking structure behind the blue awning.





From the Communications Director

My thanks to all of the operators who took time out to help with the "Orange County Marathon" and the "Laguna Hills Half-Marathon". We tried some new and different things this year and hope to improve on them next year.

Again, thank you very much to all of you.

Heiko AD6OI

Director of Communications for SOARA

Updated US Amateur Radio Charts Now Available:

<http://www.arrl.org/news/updated-arrrl-us-amateur-radio-bands-charts-now-available>

Historic KPH Maritime Radio Receiving Station and Cypress Tree Tunnel

One of the most photographed scenes in Point Reyes, the cape north of San Francisco, is a tunnel formed by two neat rows of Monterey cypress trees...



The trees were planted by Radio Corporation of America, which once operated a maritime radio station at the end of the long driveway. The station, KPH, was housed in an Art Deco building constructed between 1929 and 1931. In its heyday, KPH used Morse code to send weather reports, instructions for maritime commerce and other transmissions to ships at sea.

As American Morse code gave way to newer forms of communication, the station was closed in 1997 and acquired by the National Park Service a couple of years later. Rather than let it fall into decay, local maritime radio buffs persuaded the park service to let them restore it. Every Saturday, the volunteers fire up the radio equipment for a few hours and trade messages with ships that call in. The transmissions evoke nostalgia for an era eclipsed by email, Twitter and Skype. "We get very emotional letters from folks who say they've sailed every sea on the planet and they heard our station every day and they never thought they'd hear it again," said Richard Dillman, founder of the nonprofit Maritime Radio Historical Society, which sponsors the events. "But now they hear it rising up through the static and it's very emotional." If you have a shortwave radio you can listen in on the communications — or if you don't know Morse code, a mysterious symphony of "dits" and "dahs."

Grounding and Bonding for the Radio Amateur

New ARRL Book

Author: H. Ward Silver, N0AX

Proper Station Grounding is Important!

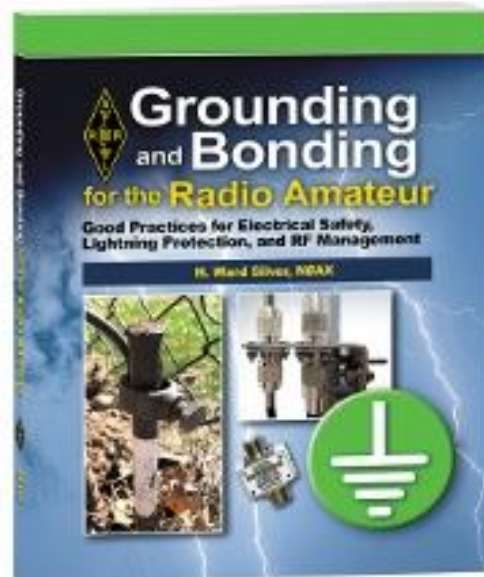
... Build your ham radio station with effective grounding and bonding techniques:

AC safety: protects against shock hazards from ac-powered equipment by providing a safe path for current when a fault in wiring or insulation occurs.

Lightning protection: keeps all equipment at the same voltage during transients from lightning and dissipate the lightning's charge in the Earth, routing it away from equipment.

RF management: prevents unwanted RF currents and voltages from disrupting the normal functions of equipment (also known as RF interference or RFI).

Grounding and Bonding for the Radio Amateur shows you how to make sure your station follows current standards for lightning protection and communication systems, not to mention the National Electrical Code. You'll learn effective grounding and bonding techniques for home stations, including condos and apartments, portable and temporary stations, as well as towers and outside antennas.



Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	23	27	20	17	15	19	17	21	18	16	20	-
Program	SOTA	DXp 3Y0Z 2018	EQ Tom Broz	You and SOARA	Spring Auction	Field Day Prep	TBD	SOARA Fair	TBD	TBD	Fall Auction	-
VE Testing	23	27	20	17	15	At Field Day 24	17	21	18	16	20	--
Educational Classes	21	25	18	15	13	17	15	19	16	14	18	-
SOARA Saturdays (9am)	28	Mar 4	25	22	20 Murray	24 Gilleran	22 Gilleran	26 Gilleran	23 Gilleran	21 Gilleran	25 Murray	-
SOARA T-Hunt	8	5	5	2	7	4	2	6	3	1	5	3
Board Meeting	30	Mar 6	27	24	22	26	24	28	25	23	27	-
Special Events	Quartzfest 22-28	Yuma Hamfest 17-18	Palm Springs Hamfest Feb 4	Visalia Intl DX 21-23	Ohio Hamven- tion 19-21	ARRL Field Day 23-25	HRO Ham Jam 8	SOARA Picnic 6		JOTA		SOARA Holiday Party TBD
Ham-Related Swap Meets	TRW 28 C.A.R.S. 21	25 18	25 18	29 15	27 20	24 17	29 15	26 19	30 16	21 28	25 18	30 16
Major HF Contests		ARRL DX-CW 18-19 CQWPX RTTY 11-12	ARRL DX-SSB 4-5 CQWPX SSB 25-26		CQWPX CW 27-28	ARRL Field Day 24-25			CQWW RTTY	CQWW SSB	CQWW CW	
Volunteer Events	OC Chili Run 21	Paws Fur Pink 26 OC Chili Run 25	OC Chili Run 25 Baker to Vegas 25-26	Desert Storm Rally 7-8	HD Trails 6 OC Mara -thon 7 Memorial Day 1/2 Mara- thon 29	ARRL Field Day/ Setup/ Ops/ Clean 23-25	4th of July Fire -works 4			Vision Quest		Run for a Claus

*Dates subject to change.

Check the [SOARA website](#) to verify locations and times.

April's \$5 Raffle Winner

xxx >

SOARA meets at the [Norman P. Murray Center](#), 24932 Veterans Way, Mission Viejo, CA on the third Monday of every month at 7:00 PM. For the months of January and February the third Monday is a holiday and the meeting is held on the fourth Monday.



License Exams: Amateur License Exams are given prior to SOARA meetings, except June. **Exams are at 6pm.** Prior registration is not required and walk-in applicants are welcome. For June, exams are held at Field Day. For further information, email Sean Reigle, AJ6B, at aj6b@soara.org.

SOARA Library: SOARA has many amateur radio related books such as hand books, books about electrical theory, etc. available to lend out to club members. Contact Heiko Peschel ad6oi@soara.org for more info.

Web Site: SOARA maintains a web site with current club information. The URL is: <http://www.soara.org/>

Repeaters: The Laguna Beach, San Clemente, and Trabuco repeaters are open. The Santiago Peak repeaters are closed. For details or questions on the repeaters contact the repeater director, or repeater@soara.org.

	2m — 147.645 — (110.9)	Laguna Beach
	2m — 146.025 + (110.9)	San Clemente
	2m — 145.240 — (110.9)	Trabuco
D-STAR	2m — 146.115 + (K6SOA C)	Laguna Beach
	220 — 224.100 — (110.9)	Laguna Beach
	220 — 224.640 — (pvt)	Santiago Peak. (C)
	440 — 445.660 — (110.9)	Laguna Beach
D-STAR	440 — 445.705 — (K6SOA B)	Laguna Beach
	440 — 447.180 — (pvt)	Santiago Peak. (C)
D-STAR	1.2G 1282.600 — (K6SOA A)	Laguna Beach

Nets:

UHF/VHF (447.180, 147.645 & 224.640): Tuesdays @ 8:00PM

D-STAR (146.115 C module):
Wednesdays @ 7:30PM

40 meter HF (7.200 MHz +/- for QRM), Sundays @ 8:00AM

10 meter HF (28.410 +/-)
Sundays after the 40m net.

Gordo HF (7.250 MHz +/- for QRM), Weekdays @ 8:30AM



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ae6sh@soara.org

Activities: *[Open]—Please contact us (board@soara.org) if you are interested.*

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