

Spurious Emissions



The Newsletter of the South Bay Amateur Radio Society



Volume 6 Number 4

Fall 2017



The USS Iowa (BB-61) is now a museum at the Port of Los Angeles. There is an amateur radio station aboard the ship, using the call NI6BB. A tour of the ship, including a visit to the radio room (not on the normal tour) and a catered dinner was one of the events at HAMCON 2017 in Torrance, CA September 15-17. HAMCON was also the 2017 ARRL Southwestern Division Convention. For a full report on the convention see Page 5.

John Wright, K6CPO

From the President's Shack

By John Wright, K6CPO

Another year is drawing to a close...

We're heading into the last three months of the year and I want to start out on a topic of great importance.

We are moving into the most dangerous part of fire season. October is the month in which the strongest Santa Ana winds occur in Southern California. As this is being written, there is an ongoing wildfire crisis in Northern California. That part of the state is being consumed by wind-driven fires that are still, for the most part, uncontrolled. So far, 26 people have died and numerous neighborhoods have been consumed.

Amateur radio operators in Northern California are assisting by providing communications at area hospitals. <http://www.arrl.org/news/ham-radio-bridging-the-gap-in-wild-fire-stricken-california>. The San Diego Section ARES Organization is set up to provide similar services to hospitals in San Diego County. Are you a member of ARES? If not, maybe you should be. It's a good way to give back to your community. San Diego ARES meets the second Saturday of the month at Scripps La Jolla Hospital. <http://www.sdgares.net/>

Even if you aren't a member of ARES or a similar organization, you should be prepared, especially if you reside in an area that could potentially be affected by a wildfire. Make sure your HTs are charged up, and your go-kit is ready to deploy. Have all the necessary frequencies pre-programmed into your radios and know who to contact in the event of an emergency. In the South Bay, the SOBARS repeaters are a good point of contact. There is also our simplex frequency, 146.445, that can be used in an emergency. In the event of an actual event, ARES will be on 449.440 (-) PL 107.2.

A lot of good, timely information about wildfires can be obtained from social media. I realize a lot of people don't like Facebook or Twitter, but virtually all emergency service organizations now have a presence on social media. CalFire is just one of many. Also, don't overlook pages such as the *Brush Fire Party Line*. In San Diego, there are Brush Fire Party Line pages for the North County, East County and for ham radio. A simple search will locate these for you.

This year marks the 60th anniversary of SOBARS' affiliation with the ARRL. To celebrate, we held a picnic in lieu of our regular meeting in September. By all accounts, it was a success and thanks to Jim and Karla Beckman for allowing us to hold the gathering at their house in Bonita. Congratulations also to Levi Wallace, KM6BMD, who won the Yaesu VX7R HT in the drawing held at the picnic.

In July, the IEEE held its annual International Symposium on Antennas and Propagation at the Manchester Grand Hyatt Hotel in San Diego. Section Manager Dave Kaltenborn, N8KBC, reports on the symposium in this issue.

September 15-17, 2017 marked the 2017 Southwestern Division Convention at the HAMCON 2017 event in Torrance, CA. This three-day event had something for just about everybody, including a tour and dinner aboard the USS Iowa, BB-61, now a museum in Los Angeles.

Looking forward, it is time to submit nominations for the Dick Cupp, K6SJA, Memorial Ham of the Year award. If you feel there is someone in the club worthy of this award, please nominate them. Nominations are due by the November meeting, Nov. 1, 2017. Guidelines and nomination forms are



1957

2017

**SOUTH BAY
AMATEUR RADIO
SOCIETY
(SOBARS)**

K6QM

PO Box 121132
Chula Vista, CA 91910

E-Mail: k6qm@sobars.org

Website: www.sobars.org



SOBARS is an ARRL-affiliated ham radio club with members from San Diego, National City, La Mesa, Chula Vista, Bonita, Imperial Beach, and San Ysidro, California.

OFFICERS

President: John Wright, K6CPO
president@sobars.org

Vice-President: Danny Lamb
AI6JN
vp@sobars.org

Secretary/Treasurer:
Fred Curtis, KI6GRO

secretary_treasurer@sobars.org

Call-Sign Trustee:

Jim Beckman, N6RSL

Emergency Coordinator:

Ramon Dueñas, KJ6QQK

Property Trustee:

Louie Vignapiano, KI6SRR

SOBARS meetings are held at the Chula Vista RV Resort, 460 Sandpiper Way, Chula Vista, CA 91910. See the website for dates & times.

Club Repeater: 146.085 (+)

PL: 100.0

Yaesu System Fusion®

CLUB NETS

Club nets are held every Tuesday evening on the following bands:

1830: (PT) 448.340 (-) PL 100.0

223.840 (-) PL 107.2

1900: (PT) 146.085 (+) PL 100.0

1930: (PT) 28.480 USB

7.240 LSB

at the end of this issue. The award will be presented at the December meeting.

Speaking of the December meeting, we will be holding our annual potluck dinner for members and families. There is a sign-up list on the SOBARS website. Please indicate what you will be bringing and how many people are attending. We will need this information by the end of November so we can advise the RV park how many people to set up the room for.

The SOBARS repeaters, both 2 meters and 440, are now back on full solar power. With the purchase and installation of two Bioenno Power 50AH LiFePo batteries,

we were able to remove the repeaters from main power. We encourage all members to use the repeaters and report any anomalies in their operation to the board.

Congratulations to Bob Garvin, KK6YLW, on passing his Amateur Extra examination recently. Section 3A of the SOBARS By-Laws provides for a free one-year membership for full members upgrading their licenses. The free one-year membership is available only on a one-time basis and is only available to those who have been a member for at least a year. ✈

IEEE International Symposium on Antennas and Propagation

By Dave Kaltenborn, N8KBC, Section Manager

In March The San Diego Section was contacted to provide an amateur radio presence at the IEEE International Symposium on Antennas and Propagation and the USNC-URSI Radio Science Meeting in San Diego. The event is the annual collective of educators, researchers and users of antennas. Kai Siwiak KE4PT, the editor of QEX, was aware of Michelle Thompson, W5NYV and her involvement with AMSAT, TAPR as well the GNU radio conference, and the section leadership. Kai introduced Dave Michelson VE7TSX to us. So we started to organize a plan for the event. Three of the goals of the organizing committee were to have a breakfast for registered attendees that have licenses, have an exam session for those interested in getting their license and have an ARRL booth in the exhibit area.

The conference committee organized the breakfast for the attendees that were licensed. For our part of the event, I contacted SANDARC VEC Greg Smith to see if an exam session could be organized. He was in favor and needed to know where it would be held and how many candidates would be taking a test. The candidates indicated if they wanted to take advantage of the opportunity when they registered for the conference. John Wright K6CPO, one of SANDARC's team leaders, organized a team of about 15 VE's from various parts of the county because we were given a list of 28 people had indicated they would like to take a free exam. Unfortunately, only one actually took the exam. But he PASSED! So the session was a success!

We did staff a booth in the exhibit

area with a volunteer amateur from the conference to assist explaining amateur radio to visitors. Michelle Thompson brought some 3D printed horn antennas for 10 GHz along with the article from QEX by Michelle and Kerry Banke N6IZW explaining the process. The antennas attracted a lot of attention and we had many questions about them and how they were made and how they worked, as well as many questions about amateur radio and the ARRL in general.

We attempted to set up a station in the exhibit hall, but due to hotel restrictions and the location of the room, it was not possible to set up any antennas.

Next year the symposium moves to Boston. ✈



Bill Liles, NQ6Z, explaining what he is doing during the eclipse in August.

San Diego Section Manager Dave Kaltenborn, N8KBC, and Dave Michelson, VE7TSX, talking to a visitor.





3D printed horns showing the exponential shape possible.

HAM? HAM radio? ham radio? Amateur Radio? amateur radio!

By Dan Romanchik, KB6NU

On the ARRL PR mailing list, we've been discussing the proper way to refer to amateur radio. What brought this up was an email from one list subscriber, Richard, WB-6NAH, who was (rightfully) proud of the work that his club—the Skagit Amateur Radio Emergency Communications Club—was doing. He noted that they were even featured in the police department's emergency preparedness brochure:

As you can see, the brochure refers to "HAM radio" and "HAM radio operators."

Referring to amateur radio in this way just drives me crazy. "Ham radio" is just a nickname for amateur radio, and "HAM" is certainly not an acronym for anything. I congratulated Richard on getting his club included in the brochure, but noted, "...it's not HAM radio! It's either 'amateur radio' or 'ham radio' (ham is not an acronym). I hate to be nitpicky about this, but as a professional writer, this usage just drives me crazy." He

replied, "I agree on Amateur Radio, or abbreviation." that was the city's call."

Another replied to the list:

The most correct term is "amateur radio" or alternatively "ham radio", both written in normal case. If using "ham radio", it is a best practice to first write "amateur (ham) radio" in the first non-header/non-title occurrence.

Some will write "Amateur Radio" in proper noun format (first letters in caps) and while this may be acceptable to many and in certain venues, anyone using a style handbook will say it is incorrect. Less correct is to write "Ham Radio" in proper noun format as this is a slang term, albeit a popular one. Of course either term may be written as proper nouns when part of a title or name of an organization.

BASIC Emergency Supply Kit

- ✓ First Aid Kit
- ✓ Water, one gallon of water per person per day for at least three days, for drinking and sanitation
- ✓ Food, at least a three-day supply of non-perishable food
- ✓ Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both
- ✓ Flashlight and extra batteries
- ✓ Cell phone with chargers, inverter or solar charger
- ✓ Whistle to signal for help
- ✓ Dust mask to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place
- ✓ Moist towelettes, garbage bags and plastic ties for personal sanitation
- ✓ Wrench or pliers to turn off utilities
- ✓ Local maps
- ✓ Can opener for food (if kit contains canned food)

Additional items for Emergency supply kit

- Prescription Medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes.
- Household chlorine bleach and medicine dropper
- Fire Extinguisher
- Matches in a water tight container
- Feminine supplies
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children

The Anacortes Police Department has a robust group of Citizen Patrol Members who are also available to assist during disasters. For information on joining the Anacortes Citizens Patrol, go to http://www.cityofanacortes.org/auxiliary_patrol.php#WWfsSFGluCg

You could also join our Anacortes HAM radio group, and become a certified HAM radio operator. HAM radio operators are dedicated citizens who can communicate and coordinate important events for our first responders. Go to <https://skagithamradio.wordpress.com/> for additional information including phone and email contacts.

Fall 2017 ATC

That kicked off the discussion.

One ham replied to me privately, "Thank you...I am continually trying to explain that it is not an acronym

is completely wrong, will drive many people bonkers, and should be avoided at all costs.

Ward, NOAX, offered this explanation:

To clarify where the capitalization originated, there is a long-standing ARRL Board Directive, decades old, stipulating that the words "Amateur Radio" be capitalized in ARRL publications and documents. Most non-amateur publications return it to the lower-case style that is used for non-proper nouns.

One guy got a little miffed that we were wasting our time discussing this at all:

You know, I've been reading this thread and I think people are getting too hung up on very minor details. The bottom line they got PR. So something wasn't spelled right or capitalized, so what. The message got out and IMHO that's the bottom line. Let's not waste any more bandwidth on this.

I agreed that it was great that they were included in the brochure, and that we were probably beating this topic to death, but I don't think these are minor details. I said that PR professionals pride themselves on getting the details right. So should amateur radio PR people.

I'll give the final word to Dan, AI4GK.

He wrote:

I don't think that standardizing what we call ourselves qualifies as getting hung up on minor details. If we don't have a standardized way of referring to us, how can we expect a public, who already is confused, to understand who we are?

I don't think that you can argue with this. Let's avoid confusion by using "amateur radio" when writing about our hobby/service. I'd even urge the ARRL to rethink their use of "Amateur Radio." Sometimes, it may be OK to use "ham radio," but it's just not correct to use "HAM radio" or just "HAM." ✍

HAMCON 2017

Article and Photos By John Wright, SWR 042

ARRL Southwestern Division Convention

The 2017 ARRL Southwestern Division Convention took place September 15-17, 2017 at HAMCON 2017. The event was held at the Torrance Marriott Redondo Beach Hotel in Torrance, CA.

I attended the event in my capacity as Section Public Information Coordinator for San Diego. Elected officials present at the convention were Division Director Dick Norton, N6AA; Vice Director Ned Stearns, AA7A; San Diego Section manager Dave Kaltenborn, N8KBC; Arizona Section manager Rick Paquette, W7RAP; Santa Barbara Section Manager Jim Fortney, K6IYK and Los Angeles Section manager Diane Feinberg, AI6DF, who was also the convention chairperson.

Numerous appointed ARRL officials were present as well.

The first event of the convention took place on Friday. It featured a tour of

the battleship Iowa, now a museum at the Port of Los Angeles. Convention attendees were allowed to do the self-guided walking tour and then were escorted, in small groups, to the ship's radio room. The radio room is not a part of the normal public tour. In the radio room, attendees were allowed to operate the ship's amateur radio station, using the call NI6BB.

At the end of the tours, a catered dinner was provided in the ship's officer's wardroom.

If one has never toured an Iowa Class battleship, it is heartily recommended. These ships are very unique.

HAMCON also featured two days of technical talks, covering topics from soldering to ham radio's role during the Vietnam War.

ARRL Assistant Lab Manager Bob Allison, WB1GCM, conducted HT testing for compliance with § 97.307(e)

of the amateur radio regulations regarding suppression of spurious emissions. A large number of the inexpensive Chinese-manufactured HTs were non-compliant with the FCC regulation.

There were three banquet meals available (at an extra cost) during the convention. Each had its own speaker with some very interesting topics. Saturday's luncheon speaker was Ned Stearns, AA7A, speaking on a recent DXpedition to the sub-Antarctic South Georgia/South Sandwich Islands. Sunday's breakfast event featured Bob Allison, WB1GCM, speaking on the future of ham radio equipment.

Perhaps the most fascinating talk came from Dr. Tamitha Skov at the Saturday evening banquet. Dr. Skov holds degrees in physics, physical chemistry, geophysics and space plasma physics. She is a Research

Scientist at Aerospace Corporation in El Segundo and is a recognized authority on space weather. Her presentation gave an insight on how the sun really effects radio wave propagation. Dr. Skov has a large internet presence and can be found

by searching for “Space Weather Woman” on the web.

For those with unlimited funds, there was a well-stocked vendor show featuring companies such as Yaesu, Flex Radio, Alinco, Ham Radio Outlet, Comet Antennas, and many others.

Unfortunately, the Sunday morning swap meet had only four sellers.

It was an enjoyable convention at a nice hotel with excellent facilities and services. ⚡



One of the ham radio positions in the Iowa's radio room.



The Iowa's steering station. This station is inside a conning tower with 17 inches of steel armor.



The interior of the Iowa's radio room.



Exterior view of a 5 inch 38 caliber dual gun mount on the Iowa.



Modern chaff dispensers installed when the ship was recommissioned.



Conning station on the open bridge.

ARRL Finally Realizes Status Quo Isn't Going To Cut It

By Dan Romanchik, KB6NU

An item in the July 2017 ARRL Board meeting caught my attention. It notes that a committee of staff members was tasked with identifying the challenges facing ARRL and possible solutions. The August 3, 2017 issue of the ARRL Letter ran the following report:

“ARRL Chief Executive Officer Tom Gallagher, NY2RF, presented the report of six Headquarters staffers who had been tasked with identifying the challenges facing ARRL and devising feasible solutions. Specifically, the committee addressed market research findings that have continued to reveal that only a small percentage of new hams join the League, and only about one-half of new hams actually get on the air.

“The committee began with the premise that ARRL must act in order to remain relevant going forward. It proposed instituting a Lifelong Learning Program to focus on developing a clear developmental path for all radio amateurs, from newcomers to established radio amateurs. The committee recommended the creation of new programs and services to increase the knowledge base of newcomers in order to get them active, as well as programs to keep experienced amateurs up to date with changing technology and practice.”

The board meeting minutes were a little more detailed:

“Mr. Roderick yielded the floor to CEO Gallagher who presented the report of a committee of staff members tasked with identifying the challenges facing ARRL and possible solutions. The members of the committee – Diane Petrilli, KB1RNF; Norm Fusaro, W3IZ; Becky Schoenfeld, W1BXY; Debra Jahnke, K1DAJ; Steve Ford, WB8IMY; and Sean Kutzko, KX9X, joined the meeting at 9:20 AM, to present this report. Their findings show the importance to ARRL of getting newly licensed

hams actively on the air and how that relates to continued growth of the organization. In order to achieve that goal, the committee proposed developing a lifelong learning department, which would address the needs of all amateurs with the focus being on developing a clear knowledge path for all amateurs. They proposed creating straightforward programs and services to enhance the knowledge base of new amateurs as well as to enhance their sense of community within the hobby.

“Another recommendation involved refocusing the priorities of the emergency preparedness department to address the current trends in public service.

“A third recommendation was to improve the value proposition of membership. The committee proposed doing a survey, which would include test material that is targeted to the interests of newer hams. The content would include a strong emphasis on serving communities, agencies, and partners; digital communications, and human interest. Projects would be simple. The survey would obtain information on new ham's interests and needs in the hobby. The survey would also try to determine the delivery system that might best meet the newcomer's desire for receiving this type information (print, digital, messaging, etc). The test material is proposed to be delivered to recipients in fall 2017.

*“From the committee's vantage point, **the status quo is no longer adequate: we need to have a vision of the future and convey it to our current membership** [emphasis is mine... Dan]. If we do not convey the need to change the paradigm, the ARRL's relevancy will not move forward.”*

The good thing here is that the ARRL finally realizes that there are some serious problems. I've written about

these in the past. I've challenged the ARRL to set a membership goal of 25% of the licensed amateurs in the U.S (<http://www.kb6nu.com/arrl-membership-is-25-asking-too-much/>). I've also encouraged the ARRL to play a bigger part in emergency communications research (<http://www.kb6nu.com/go-big-go-early-go-fast-smart/>).

Unfortunately, it appears that the ARRL is approaching this issue in typical ARRL fashion. That is, working on these issues in their little cocoon in Newington and then issuing these statements as if they expect everyone to just fall in line. I quote, *“From the committee's vantage point, the status quo is no longer adequate: we need to have a vision of the future and convey it to our current membership.”* That approach is doomed to failure. Any “visioning” or strategic planning that doesn't get the membership involved right from the start just isn't going to work.

The ARRL HQ staff just doesn't have the horsepower to pull this off properly. The staff is already pretty bare bones, and they still have to publish QST every month, keep Logbook of the World running, process thousands of license applications, etc., etc. The only way this is going to be a fruitful effort is if they get members—and lots of them—involved in this process.

If you agree with me, please let your director know. Contact your director and tell him that you want to be involved. The status quo of having the HQ staff not working with the membership “is no longer adequate.” That's how we got here in the first place.

Dan, KB6NU, is the author of the “No Nonsense” amateur radio license study guides and blogs about amateur radio at KB6NU.Com. You can email him at cwgeek@kb6nu.com.

Repeater Work

By John Wright, K6CPO

As mentioned earlier, the club repeaters were placed back on solar power with the purchase of a pair of 50AH Bioenno Power Lithium Iron Phosphate batteries. These batteries are superior to sealed lead

acid or Lithium batteries in that their capacity is greater for a given rating, they are lighter in weight and have protection circuitry built right into the battery.

Thanks to Dave Kaltenborn, N8KBC, Fred Curtis, K16GRO and Ed Flinn, WA6YVX for installing the batteries and making sure everything was operating properly. ✈



The 200 watt solar panels used to power the two repeaters.
Ed Flinn, WA6YVX



The two 50Ah Bioenno Power LiFePo batteries installed and connected.
Ed Flinn, WA6YVX



The repeater stack in its rack. Top to bottom are the now unused 2m Vertex repeater, the 2meter Yaesu System Fusion repeater, the 440 Yaesu System fusion Repeater and the duplexer cans for the 440 repeater. The 2 meter duplexer cans are out of sight behind the repeater rack.

Ed Flinn, WA6YVX



K6SJA Ham-of-the-Year Nomination Guidelines

Each year the South Bay Amateur Radio Society honors the memory and inspiration of Dick Cupp, K6SJA by awarding one member with the K6SJA Ham-of-the-Year Award. Many club members are good ambassadors for amateur radio. This is our opportunity to recognize and honor one of these unsung heroes. All it takes is some thought and a short letter to the selection committee.

The award is based on the following:

1. Someone in the club whom we think is worthy of the title "Ham Of The Year" and best reflects the spirit exemplified by K6SJA.
2. Someone who promotes amateur radio and uses good operating practices.
3. Someone who does more than asked.
4. Someone who works quietly in the background and is always there when needed.

Procedures:

1. Club members may nominate someone who has already received the award. Only current members are eligible to receive this award.
2. Club members must state the reasons why they are nominating the person.
3. Only one nomination per member will be accepted.
4. Club members must use the (yet to be developed) nomination form. E-mail nominations **will not** be accepted.
5. Nominations must be sent or delivered, in a **sealed** envelope, addressed to the nominating committee chairperson. Envelopes shall be opened by the chairperson when the committee meets for a decision. The current award winner will serve as the chairperson, and the last two preceding winners will serve as committee members. If any of the above are unable to serve, the next preceding winner or winners, as far back as necessary to establish full committee, will be used to make the current selection committee.
6. The committee shall meet in private to make their selection.
7. A copy of these instructions and nonimating form shall be included in the Fall issue of *Spurious Emissions*.
8. Selection will be made on **quality**, not the number of nominations.
9. Deadline for nominating letters is the November meeting.
10. Ham-Of-The-Year Award is presented at the December meeting.

NOTE: Any nominations not meeting the established guidelines or rules shall not be considered and the nomination shall be returned to the nominator with the appropriate explanation.

**SOUTH BAY AMATEUR RADIO SOCIETY
K6SJA MEMORIAL HAM-OF-THE-YEAR AWARD NOMINATION FORM**

I _____ nominate _____ to receive the

K6SJA MEMORIAL HAM-OF-THE-YEAR AWARD

for the year _____. My reasons are as follows:

1. _____
2. _____
3. _____
4. _____
5. _____

NOTE: YOU MAY ATTACH AN ADDITIONAL SHEET FOR REASONS AND EXPLANATIONS

This sealed nomination was opened on _____ by the current award recipient, _____ and in the presence of the last two preceding award winners: _____, and _____.

After careful review of this nomination our decisions are noted as follows;

1. _____ Evaluation score (0 thru 10) _____
2. _____ Evaluation score (0 thru 10) _____
3. _____ Evaluation score (0 thru 10) _____

Total score: _____

Name plate and plaque ordered on:(date) _____

Awarded on: (date) _____.

Nomination filed on (date) _____.

If this nomination is mailed, address it to:

**South Bay Amateur Radio Society
P.O.Box 121132
Chula Vista CA 91912**