

Spurious Emissions

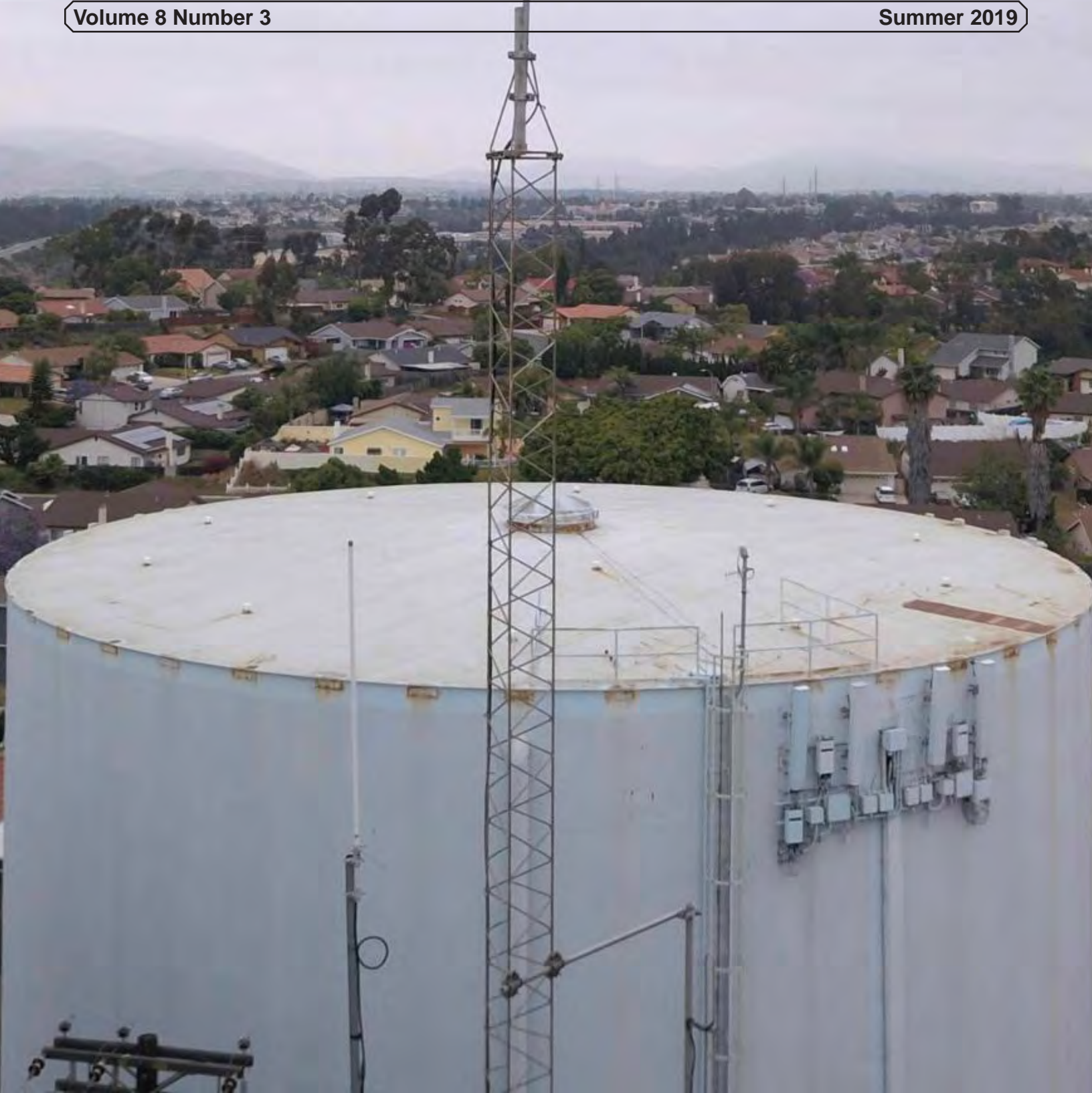


The Newsletter of the South Bay Amateur Radio Society



Volume 8 Number 3

Summer 2019





**SOUTH BAY
AMATEUR RADIO
SOCIETY
(SOBARS)
K6QM**

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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 Fire Station 4, 850 Paseo Ranchero, Chula Vista, CA 91910

See the website for dates & times.

Club Repeaters:

146.085 (+) PL: 100.0

448.340 (-) PL: 100.0

Yaesu System Fusion®

CLUB NETS

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

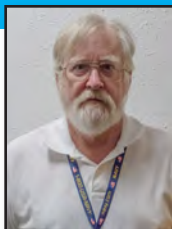
1830: (PT) 448.340 (-) PL 100.0

223.840 (-) PL 107.2

1900: (PT) 146.085 (+) PL 100.0

1930: (PT) 28.480 USB

7.240 LSB



From The President's Shack

By John Wright, K6CPO

Summer is upon us and there is more to report. The AREDN Project is proceeding apace and has reached the next phase. On June 16, Gary Richard, KK6YKC, Ed Flinn, WA6YVX and myself spent the morning at the repeater site installing three 2.4 GHz sector antennas on the tower. These antennas extend the coverage over a good portion of the South Bay area. The next step in the project is to install a powered switch at the repeater site to power all the antennas.

Gary Richard gave a presentation at the July meeting on the project's progress. There is a copy of the presentation on the SOBARS website on the Club Files tab under Miscellaneous.

The annual Amateur Radio Field Day was held the weekend of June 22 and 23. The scheduled ARES Field Day exercise was abruptly cancelled the preceding Thursday, leaving some of us at loose ends. After the regularly scheduled SANDARC license examination session in Bonita, Fred Curtis, KI6GRO and I visited a couple of the other field day sites.

Our first stop was at the Kearney Mesa Recreation Center Park where the Convair 220 Club was set up. There we learned not everything goes according to plan on Field Day. We witnessed the almost total disassembly of an HF radio because the tip had broken off a 1/8 " to 1/4 " headphone adapter and jammed the jack, rendering both the headphones and the internal speaker unusable. Unfortunately, it was impossible to access the jack from the back, because it was a sealed unit, not the typical headphone jack we're all

familiar with. When we departed for our next stop, the radio was still being worked on.



Convair 220 member Michael Feder, KK6GER, working on a broken radio on Field Day
John Wright, K6CPO

Our next visit took us all the way up to Escondido and the Dixon Lake Campground. The Escondido Amateur Radio Society, EARS, was set up in several of the campsites at the high point in the campground. Dixon Lake is an excellent spot for Field Day and a beautiful location for camping. I recommend it to anyone with an interest in camping.

SOBARS member Bill Honaker, N9LZ has put together a very nice WINLINK Go-Box. A copy of his layout can be found on the SOBARS website, again on the Club Files tab under Miscellaneous. It's worth a look.

We are always in need of members willing to be net control operators. Unfortunately, not all the current six net control operators can cover all the spots all the time. We could use several operators to fill in on a part time basis. This wouldn't mean a steady commitment, but someone who could take a net on short notice. If anyone is interested, please contact Fred Curtis, KI6GRO or myself and we'll get you started. ✈

The following reprinted by permission.

Fox Hunt Teaches Antenna Basics, Tactics

NAVAL AIR WARFARE CENTER WEAPONS DIVISION, POINT MUGU, Calif.

Several Naval Air Warfare Center Weapons Division employees can add “successful Fox Hunt” to their list of professional accomplishments after a two-day class held at Point Mugu June 11 and 12.

No, not that kind of fox.

In this case the fox is a small radio transmitter, and the hunters are armed with receivers, directional antennas, and a variety of search techniques. They use their antennas to sweep for the transmitter signal, then move and search again, attempting to triangulate the location of the “fox.”

For the class, participants also built their own Yagi antennas, a directional antenna that consists of multiple parallel elements arranged in a line. Older television antennas were Yagi designs.

“Building the Yagi antenna provides a great introduction to antenna design,” said Brian Hill, NAWCWD’s Collaborative EW Branch supervisor, who also arranged the class. “Every dimension has a connection to how the antenna will perform.”

Gaining a better understanding of antenna and signal behavior is one way to improve the practical understanding of some of the electronic warfare principles that underpin much of the work done at Point Mugu.

“We got to experience signal bounce off rocks and other surfaces, which is basically the bread and butter of what we do at Point Mugu with electronic warfare. It was very interesting to see that firsthand as an ESDP,” said Jesus

Ramos, mechatronic engineer. An ESDP is a participant in the Engineer and Scientist Development Program, a five-year program designed for newly hired NAWCWD personnel.

Another ESDP, computer scientist Alex Collins, joined the class because it sounded fun; he’d taken an amateur radio class late last year, and this seemed like an interesting follow-on, he said.

“However, while the instructor was explaining the best tactics to locate the transmitters, it reminded me of how the Navy uses very similar tactics to find foreign entities,” Collins added. “The class allowed me to get firsthand experience about how a receiver would be receiving line of bearings to triangulate exactly where the emitter entity is. It gave me a better understanding of some of the technology we use here at Point Mugu.”

The Fox Hunt event’s hands-on approach, coupled with classroom instruction and practical radio frequency handling exercises, helped people grasp the concepts better than they would through “death by PowerPoint,” Hill said. The hunt rewarded team-based problem solving while also encouraging competition between the teams.

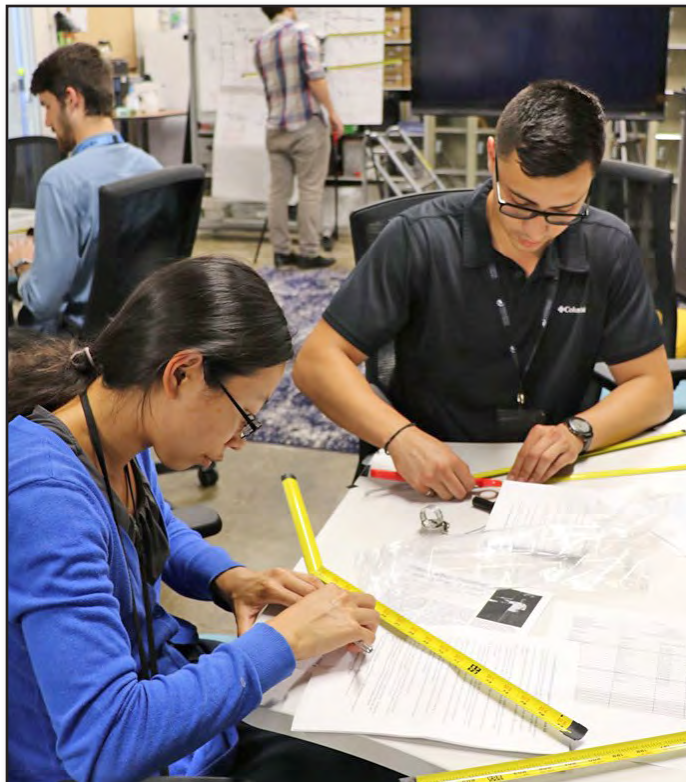
“That environment of teamwork and competition, tied to the types of electronic warfare missions naval aviation uses, could really spark some great ideas from the teams,” Hill said. “There’s no way to predict where inspiration might strike next.” ✎



T. C. Hentges works on his antenna during a Fox Hunt class at Point Mugu on June 11. (U.S. Navy photo by Kimberly Brown)



Phillip Porter assembles a made-from-scratch Yagi antenna during a two-day "Fox Hunt" class hosted June 11-12 by Naval Air Warfare Center Weapons Division in Point Mugu, California. The class helped participants gain a better understanding of antenna and signal behavior. (U.S. Navy photo by Kimberly Brown)



Diane Phung and Jesus Ramos assemble home-made Yagi antennas during a two-day "Fox Hunt" class hosted June 11-12 by Naval Air Warfare Center Weapons Division in Point Mugu, California. The class helped participants gain a better understanding of antenna and signal behavior. (U.S. Navy photo by Kimberly Brown)



Diane Phung, Thomas Hentges, and Phillip Porter hunt for a transmitter hidden on the beach in Point Mugu, California, using a homemade Yagi antenna as a sort of graduation exercise for a two-day "Fox Hunt" class hosted June 11-12 by Naval Air Warfare Center Weapons Division in Point Mugu, California. The class helped participants gain a better understanding of antenna and signal behavior. (U.S. Navy photo by Kimberly Brown)



Diane Phung, Thomas Hentges, and Phillip Porter hunt for a transmitter hidden on the beach in Point Mugu, California, using a homemade Yagi antenna as a sort of graduation exercise for a two-day "Fox Hunt" class hosted June 11-12 by Naval Air Warfare Center Weapons Division in Point Mugu, California. The class helped participants gain a better understanding of antenna and signal behavior. (U.S. Navy photo by Kimberly Brown)

SOBARS Represented at Chula Vista Firefighters Foundation Breakfast

Article and Photos By Fred Curtis, KI6GRO

SOBARS President John Wright, K6CPO, and Secretary-Treasurer Fred Curtis, KI6GRO, attended the 11th annual Chula Vista Firefighter's Foundation (CVFF) 4th of July Pancake breakfast. The event was held on July 4th from 8 am until 11 am at Chula Vista Fire Station #7 located at 1640 Santa Venetia Street, Chula Vista.

The annual breakfast is one of the CVFF fundraisers, that is held to raise money to support fire safety, community programs, provide support to those displaced by fires, and encourage fire suppression careers. The Board of Directors is comprised of firefighters and community business leaders that meet throughout the year to plan fundraisers, organize events in the community and distribute donated funds that come into the Foundation. The Foundation is a 100% volunteer based organization with all proceeds being donated. The CVFF is one of five volunteer groups (along with SOBARS) that is recognized by the cv Fire Department.

In recent years the CVFF has given thousands of dollars in scholarships to deserving local youths throughout the South Bay through the

[Roger Haley Memorial Scholarship Fund](#), assistance to The Burn Center to victims of regional and local disasters, and support of the Chula Vista Explorer Fire Cadet/Explorer program.

The event was well attended with several families from Chula Vista and the surrounding area. There were games and activities for the kids, along with freebies encouraging fire prevention. The food was plentiful and tasty and was prepared by members of CVFD, Chula Vista Fire Explore Post 2205, Chula Vista CERT, CVFF and other volunteers.

After filling up on the pancake breakfast and coffee, John and I checked out the various apparatus and talked with several people in attendance including 2 CVFD Battalion Chiefs, members of CV CERT and CAST (Citizens Adversity Response Team), cv Fire Explorers and Grace Knepper, CVFD Training Program Specialist. This is a great event and I encourage all to attend, especially if you live in the city of Chula Vista. For more information on the CVFF, go to <http://www.cvfirefighters.org/>. ⚡



AREDN Project Pictures

Drone Photos By Gary Richard, KK6YKC



The view of the water tank from 20 meters above ground.



(Cover photo.) The view of the water tank with a height of 24 meters. Note Mt. Miguel and Mt. Otay in the background.



Ed Flinn, WA6YVX, at work on the tower. The dish antenna is the 3 GHz backbone link to Mt. Otay.



The view of the antennas looking West. In the background are Point Loma and downtown San Diego.



The view looking North (bearing 010) showing the sector antennas just below the upper arm. The arms at left support the SOBARS 440 antenna.



A view of the repeater site not often seen. The small building houses the SOBARS repeaters and the AREDN routing gear.

SOBARS Historical Pictures

All photos by Ruth Chiles, W6JKE

I was recently the recipient of several envelopes of photos taken by SOBARS Life Member Ruth Chiles, W6JKE. I thought they should be shared with the membership, especially since some of the individuals pictured are no longer with us. I made my best effort to identify everyone in the pictures, but was not successful. If anyone knows who these people are, please don't hesitate to let me know.—*Editor*



Field Day, June 23, 2007, L-R: Ron Myers, KS6B, Al Schramm, WB6PYA, unknown, John Markham, KD6VKW, Dick Cupp, K6SJA. (SK)



Field Day, June 23, 2007, John Markham, KD6VKW, Jane Cupp.



Field day, June 23, 2007; Jim Beckman, N6RSL, Star News Reporter.



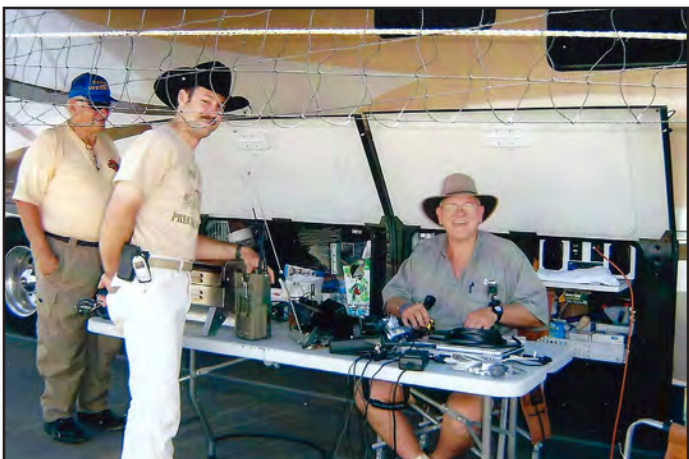
Field Day, June 23, 2007; Mark Williams, KF6ZBF.



Date and location unknown; Fred Curtis, KI6GRO, Doug Shaw, KI6MBO.



Date and Location unknown; Mark Williams, KF6ZBF.



Date and location unknown; Seated Al Fields, KE6LGE, others unknown.



November 2008 Earthquake Drill; L-R: Becky, Seay, KE6BUE, (SK), John Pfingsten, KD6ACV, Safety Officer, Lionel Mordecai, K6CEQ, Ron Floyd, W6EKO, Doug Shaw, KI6MBO.



November 2008 Earthquake Drill; L-R: Ron Floyd, W6EKO, Safety Officer, Jim Beckman, N6RSL, Becky Seay, KE6BUE, (SK)



November 2008 Earthquake Drill; L-R: Doug Shaw, KI6MBO, Ron Floyd, W6EKO, Lionel Mordecai, K6CEQ, Dick Cupp, K6SJA, (SK), Safety Officer.



November 2008 Earthquake Drill; Inside the Chula Vista Communications Trailer: Billy Kelley, KC6PAP, John Markham, KD6VKW, John Pfingsten, KD6ACV.



November 2008 Earthquake Drill; Inside the Chula Vista Communications Trailer: John Markham, KD6VKW, John Pfingsten, KD6ACV.