



July 2021

ARCO *vet*

A Community Service Organization Dedicated to Amateur Radio Since 1970

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JULY –
A MONTH TO CELEBRATE!

E-mail: W6SBA@arrl.net



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

SBARC members,

Hope everybody had an enjoyable 4th of July. We are now on our way to more open activities. The club has planned a radio in the park event. This is on the calendar for July 17th at De Portola Park, 25615 Lazy Meadow Dr, Torrance, CA. The club will furnish the basics, hot dogs and hamburgers. But feel free to bring your own favorites. We do need to get a head count in order to plan the food correctly. Bring your radio to setup or bring your radio stories. Look forward to seeing you on July 17th 11AM to about 3PM.

Then there was field day....June 26 & 27th. Myself, I worked 23 40m phone contacts. I was only available part of the time. From what I heard around the club, we were pretty lean on contacts. Sounded like some technical difficulties got in the way. Since this is a contest/drill it's not such an issue. But if we needed to be highly capable on the air it would be an issue. And, being at home should make it easier the assumption being your station would be better maintained. I think we need to have some internal classes to close the club technical gaps. For many years Field day has generally been an enjoyable activity for the club. We need to remember that in a real deployment it could be a challenging (I'll leave the challenges to your imagination.) event and operation. We need to reduce as much of the challenge as possible by more regularly checking out our equipment.

I have to admit I lost track of the balloon activities. But checking aprs.fi does not show any active flights. Following up on a past flight, the KM6BWB-1 made an unscheduled landing in the Grand Teton National Park. It transmitted a last altitude of 8225'. The word is it's in a difficult location to access. Maybe a backpacker will one day come across its remains. As it applies to ham radio ballooning and gambling, "better luck next time".

For our July club meeting, Peter Von Hagen, WA6HXM. Peter's presentation is on LTE telecommunications. LTE is a standard for wireless broadband Communication for mobile devices and data terminals based on the GSM/EDGE and UMTS/HSPA technologies. It increases the capacity and speed using a different radio interface together with core network improvements. Some of the features are Voice calls-Enhanced Voice quality. It should be very interesting and informative to hear from Peter about his experiences with LTE technology. Join us on July 15th, 2021 at 7:30PM. We are still on Zoom since our meeting room access is still on hold. Please let us know if you need a Zoom meeting link. (FYI: The Zoom links are the same for each month.)

Upcoming monthly club activities include, the SBARC virtual Zoom club meeting on July 15th at 7:30PM. And, the other things we use to do: The TRW/NGC swap meet remains cancelled until? (We are keeping an eye on this event to return.) After the swap meet a few of us use to head over to Denny's. These have all been suspended until after the COVID shutdown. Hopefully we are now inching closer to getting these activities to open back up.

As always, it's your amateur radio club, lets us know what you would like to see happening with your club.

73's...
Scott-N6LEM



CLUB OFFICERS

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Past Pres: OPEN

CLUB MEETING



July 15th at 7:30 p.m.
on Zoom

**JOIN US
ONLINE**

The presentation on LTE Radio Technology by Peter – WA6HXM, SBARC member, will be on this newer technology in communications.

First of all, Peter as a youngster was given a Hallicrafters SX-28A Receiver in 1954. He was listening to all the world wide broadcasts stations. This is when he discovered how to “Slope Detect the SSB Ham Radio signals using the BFO. During the summer between his graduation from HS and the start of his Freshman year at USC he studied and got his Novice ticket as WV6HXM in 1957. He has been working the bands ever since. The 6M band for some reason or another or as a Technician appealed to him, he bought a Gonset G-50 Transceiver, modified to put out 125 watts. This got him hooked on 6 M DX ing and bought a Clegg Thor 6 SSB transceiver and a Cushcraft 3 element beam. After graduating from USC and servicing in the US Army Signal Corps, got married to his bride and of course had her join the Ham community as WA6IBZ in 1964. In 1966 bought a home on Palos Verdes Peninsula close to W6AM Rhombic Farm. He set up his station, since wanting to play with the big boys on 20M, took down his 6M yagi and put up a KLM KT-34A Tri bander. Along with a Drake TR-7 along with an Alpha 76 PA KW Amplifier build up his count DXCC County Count up to 275 confirmed. Joined the Southern California DX Club, founding the Palos Verdes Amateur Radio Club, was forced to sell his home and moved to the Portuguese Bernd area. Many more activities, somewhat different from ham activity followed.

There is lot more but space limits this to what I put up here for now. Maybe we can get Peter to talk about the accomplishments in his life as a Ham.

Peter’s presentation is on LTE telecommunications. LTE is a standard for wireless broadband Communication for mobile devices and data terminals based on the GSM/EDGE and UMTS/HSPA technologies. It increases the capacity and speed using a different radio interface together with core network improvements.

Some of the features are Voice calls-Enhanced Voice quality. Frequency bands, Flexibility of use of existing and new frequency bands. Reduced cost per bit and allow for reasonable terminal power consumption.

All this from a kid starting out by listening to communications from all over the world a mere 65 years or so ago.

This will surely peak your interest and want to join us Thursday July 15 via Zoom to hear more about this Technology.

You will receive your usual notice and link for this meeting.

Joe—WB6MYD

FCC Reaffirms Nearly \$3 Million Fine for Marketing Unauthorized Drone Transmitters

ARRL.com 06/30/2021

In a *Memorandum Opinion and Order (MO&O)* released June 17, the FCC denied a *Petition for Reconsideration* filed by HobbyKing of a \$2,861,128 fine for marketing noncompliant RF equipment and for failing to respond to FCC orders in its investigation of the company's practices. In the same step, the FCC enforced its equipment marketing rules. The fine resulted from an FCC investigation initiated by ARRL's January **2017 complaint** that the HobbyKing equipment was "blatantly illegal at multiple levels."



"The *Forfeiture Order* is the final chapter of a story that started with a report to the ARRL Board by the EMC Committee in 2017, as a result of the discovery that aerial drone TV transmitting equipment was being imported and marketed without proper FCC authorization under FCC Part 15 rules," said ARRL Electromagnetic Compatibility Committee Chair Kermit Carlson, W9XA.

As spelled out in ARRL's 2017 complaint, the ARRL Laboratory had documented that the operating frequencies of these drone TV transmitters near the 1.3 GHz amateur band were dip-switch selectable for frequencies internationally assigned for use by Aeronautical Navigation, GPS, GLONASS L1, ATC Mode "S," as well as to both the interrogation and reply frequencies used for Air Traffic Control Air-Route Surveillance "transponder" radar systems. "Transmissions from these drone TV transmitters would have caused harmful interference to these essential Navigation and ATC Radar systems, presenting a real and dangerous threat to the safety of flight," Carlson said.

ARRL's complaint noted that given the channel configuration, these units would not have a legitimate amateur radio use, and that the marketing was directed at drone enthusiasts and not to licensed radio amateurs. "ARRL Laboratory tests did prove that only one of the seven available channels was within the 1.3 GHz amateur band," Carlson said.

"This is another example of ARRL not only affirmatively acting to protect our Members' interests, but also acting to protect the safety and security of vital services and the general public," Carlson said.

HobbyKing had denied that it was marketing its drone transmitters to US customers, but as the ARRL January 2017 complaint pointed out, ARRL Laboratory Manager Ed Hare, W1RFI, was able to purchase two drone transmitters from HobbyKing and have them shipped to a US address for testing in the Lab.

Hare and ARRL Lab staffers Mike Gruber, W1MG, and Bob Allison, WB1GCM, tested the units. Carlson, as well as the Electromagnetic Compatibility Committee he chairs, were credited in the complaint for calling attention to the issue and prompting ARRL's action.

"The FCC noted that Amateur Radio equipment used to telecommand model craft are limited to 1 W (1,000 mW), but three transmitters included in the FCC investigation operated at significantly higher power levels of 1,500 mW and 2,000 mW," ARRL said.

HobbyKing had told the FCC that it had no notice of the Commission's authorization requirements; that the Fifth Amendment relieved HobbyKing of its duty to respond; that the forfeiture amount was inappropriate because its parent company, Indubitably, Inc., lacked the ability to pay to the *Forfeiture Order*; and that the Commission was time-barred from taking action against ABC Fulfillment Services LLC because it was not part of HobbyKing's business.

"Upon review of HobbyKing's *Petition for Reconsideration* and the entire record, we find no basis for reconsideration because the petition fails to present new information warranting reconsideration,"

Continued on page 5

the FCC said in the *MO&O*. “Rather, HobbyKing again raises the very same arguments already considered and rejected in the *Forfeiture Order*.”

The fine reaffirms the monetary penalty sought in a June 2018 FCC *Notice of Apparent Liability* (**NAL**). The FCC said it found that dozens of devices marketed by the company transmitted in unauthorized radio frequency bands and, in some cases, operated at excessive power levels.

HobbyKing is the trade name of two US-based companies that include ABC Fulfillment Services LLC and Indubitably, Inc. HobbyKing has a New York office and customer service operations in the US, the FCC noted.

In its earlier *Forfeiture Order*, the FCC said it had made clear that “[d]evices used in the Amateur Radio Service do not require authorization prior to being imported into the United States, but “if such equipment can operate in amateur and non-amateur frequencies, it must be certified prior to marketing and operation.” The FCC investigation found that 65 models of devices marketed by HobbyKing did not have the required FCC certification.

Responding to the FCC, HobbyKing claimed to have ceased marketing the 65 models the FCC identified, but promised only to make “best efforts” not to market other noncompliant RF devices.

“HobbyKing has a continuing obligation to market only radio frequency equipment that is properly authorized,” the FCC said. “We therefore remind HobbyKing that continuing to market noncompliant radio frequency devices could result in further significant forfeitures.”

WISA Woodsat Successfully Completes Stratospheric Test Flight *ARRL.com 07/02/2021*

The world’s first wooden CubeSat successfully completed a test flight into the stratosphere in June. **WISA Woodsat** is constructed using birch plywood panels in a 1U configuration measuring 10 centimeters square. Nine small solar cells will power the satellite, which will orbit at an altitude of 500 – 550 kilometers. The novel spacecraft will carry several amateur radio experiments as well as photo downlinking, including selfies. A goal of the project is to determine how well wood products will perform in space.



During the recent test, a functional model of the WISA Woodsat climbed 19 miles into the sky tethered to a weather balloon. The satellite’s camera captured a “selfie” video of the balloon bursting. A parachute deployed to take the nanosatellite back to Earth, where it was recovered intact, lodged in a spruce tree.

The test satellite and a duplicate “spare” version, were manufactured at UPM Plywood’s Savonlinna, Finland, factory. The company sells its construction-grade panels under the WISA trademark. The panels were thermo-vacuum dried and processed on a CNC machining center.

The wooden satellite is based on a basic, versatile CubeSat format, Kitsat, which is designed with educational use in mind.

As the sponsor quipped, “WISA Woodsat will go where no wood has gone before. With a mission to gather data on the behavior and durability of plywood over an extended period in the harsh temperatures, vacuum and radiation of space in order to assess the use of wood materials in space structures.”

Once in orbit, Woodsat will be able to extend its selfie stick to capture photographs of the wooden box as it hurtles through space at 40,000 kilometers per hour (24,800 miles per hour). This will allow the mission leaders to monitor the impact of the environment on the plywood.

The satellite would downlink its telemetry and images from two cameras using amateur radio frequencies. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communication; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularize space technology.

INDEPENDENCE DAY RELATED FACTS

1. Statue of Liberty

The Statue of Liberty is America's symbol of freedom. The torch represents enlightenment and it lights the path to liberty and freedom. The official name is "Liberty Enlightening the World." It was designed by French sculptor Frederic-Auguste Bartholdi just in time for the centennial celebration of the Declaration of Independence. The tablet she is holding has the date **July 4, 1776** engraved on it.

2. Three Presidents Died on July 4th.

Thomas Jefferson – Jul 4, 1826; John Adams – July 4 1826; James Monroe – July 4, 1831

3. Two Presidents Died on the Same Day – July

Both John Adams and Thomas Jefferson signed the Declaration of Independence and both died on the same day. Weird.

4. Born on the 4th of July

President Calvin Coolidge was born on July 4th, 1872, putting him forever into the history books.

5. Fireworks

Each year Americans light about 200 million pounds of fireworks! And most of them are imported from China – \$247,100,000 worth.

6. American Flag

65% of Americans own an American Flag. And you guessed, most are made in China.

7. Road Trip

The First week of July is typically the busiest travel week of the year in the United States. (*Something tells this year will be quite different*) Popular American Road Trips are The California Coast, Route 66, Black Hills of South Dakota, the Florida Keys, and many more! Americans love a road trip!

8. Hot Diggidy Dog!

The favorite food for the 4th of July is the Hot Dog. America consumes about 150 million hot dogs on this date. (poor little piggies)

9. August 2nd 1776

Although it is widely believed that the Declaration of Independence was signed on July 4th, Only John Hancock and Charles Thompson signed it on July 4. The rest of the 56 delegates from 13 colonies actually signed the Declaration of Independence on August 2, 1776, to make it official. It was exactly a month after its declaration (July 2, 1776) , on August 2, 1776, that's when it became official. Why did they choose July 4th? July 4th was the day it was officially adopted and it had a couple of signatures.

ARRL Announces Partnership with Maglite

ARRL.com 06/21/2021  **MAGLITE®**

ARRL The National Association for Amateur Radio® and **Mag Instrument**, the US manufacturer of the MAGLITE® Flashlight have announced they have formed a partnership based on common interests in equipping people to be prepared for emergencies and to serve their communities in extreme situations such as natural disasters. ARRL members expand the reservoir of trained operators and technicians in radio communications and radio technology, and provide public service through the ARRL Amateur Radio Emergency Service® (ARES®). Maglite is the leading maker of U.S.-manufactured high-quality flashlights that have a deserved reputation for toughness and durability.

“Amateur radio operators, or ‘hams,’ help people in times of difficulty, often by supporting emergency communications when critical infrastructure is damaged, and by aiding first responders’ need to keep connected,” said Anthony Maglica, Founder, Owner and CEO of MAG Instrument Inc. “We manufacture a product that has been used in public safety for over 40 years, and we are very supportive of the incredible dedication of radio amateurs, so culturally this is a great alliance for both brands.”

“ARRL is delighted that Maglite recognizes the service and skill of ARRL members. This partnership will help us introduce amateur radio to more people,” said David Minster, NA2AA, ARRL CEO. Mag Instrument is creating a special laser-engraved Maglite® product collection for ARRL, as well as offering their members special pricing on a select line of Maglite gear. In turn, those purchases raise funds to support ARRL’s mission. Members can find details at www.arrl.org/benefits and by clicking “Member Discounts” in the left-hand navigation on that page.

Maglite is also promoting a special giveaway in recognition of 2021 ARRL Field Day (no purchase is necessary). Visit Maglite on the web for entry details and Terms and Conditions at <https://maglite.com/pages/the-maglite-arri-2021-field-day-giveaway>.

ARRL, headquartered in Newington, Connecticut, counts the majority of active radio amateurs in the US among its ranks. Since its founding in 1914, ARRL and its members have advanced the art, science, and enjoyment of Amateur Radio.

FCC Seeks Comments in Proceeding Involving 70 and 5 Centimeters

ARRL.com 06/24/2021

FCC Releases Further Notice in Satellite Launch Proceeding Involving 70 and 5 Centimeters

The FCC is soliciting a second round of comments on whether to authorize commercial space entities to obtain licenses for frequencies used exclusively during space launch activities. The proposals include parts of the 70-centimeter (420 – 430 MHz) and 5-centimeter (5650 – 5925 MHz) bands. The federal government is allocated this spectrum on a primary basis and routinely uses it during space launches, but commercial space companies must obtain short-term Special Temporary Authority (STA) authorizations from the FCC to use it for the same purpose.



The last decade has seen a dramatic increase in commercial space launches. In March, the Federal Aviation Administration (FAA) streamlined its commercial space launch and reentry licensing regulations. In April, the FCC adopted some of its proposals from 2013 and solicited additional comment in a Further Notice on the above proposals in ET Docket No. 13-115, "Allocation of Spectrum for Non-Federal Space Launch Operations." The proposals would allow private commercial space companies to obtain regular FCC licenses instead of launch-specific STAs in a number of bands, including 420 – 430 MHz and 5650 – 5925 MHz. The federal government, including the US Department of Defense, is the primary user of both bands. Amateur operations are allocated on a secondary basis. The FCC again seeks comment on whether it should give commercial space launch entities access to the same limited space launch uses already employed by the federal government on this spectrum.

Primary federal users heavily employ the 70-centimeter segment for radiolocation applications. Frequencies in the 420 – 430 MHz segment also can be used during space launches to send a flight self-destruct signal if a launch goes off course and poses danger to a populated area. The Commission's 2013 proposal, repeated in 2021, would permit use restricted to flight termination during launches by commercial space launch companies.

Primary federal users also make use of 5650 – 5925 MHz for radiolocation applications, with channels used during launches for radar tracking. The Commission proposes to permit use by commercial entities similarly limited to use for radar tracking of launch vehicles.

The Commission notes in its *Further Notice of Proposed Rulemaking* that since 2013, commercial entities have become established in space launch operations that were formerly the province of NASA. "To support these commercial space ventures, entities such as the New Mexico Spaceport Authority, the Virginia Commercial Space Flight Authority, and the Houston Airport System have established non-Federal spaceports," the FCC said, noting that five bands — including 420 – 430 MHz and 5650 – 5925 MHz — are commonly used for communication with and tracking of launch vehicles.

The Commission noted, however, that several commercial space launch providers indicated that they do not use either band for their operations. The FCC said that it has not granted an STA for the 420 – 430 MHz band related to space launches, and in the recent past only one operator obtained STAs to use the 5650-5925 MHz band for a small number of launches.

The Commission concluded that, "Given the limited current use of these bands during space launches [by commercial space entities], we are not convinced that there is need for new allocations for either band."

Comments are due on or before July 12, 2021; reply comments are due on or before August 9, 2021.

CALENDAR

Council Meeting - 4th Wednesday of the month
Call Joe - WB6MYD (310) 328-0817

Club Meeting - 3rd Thursday of the month
July 15, 2021 - 7:30 p.m.

Via Zoom

(look for email invite from
jmlanphen@gmail.com a few days before)

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 **Cancelled Until Further Notice**

VE Sessions - **Cancelled due to Covid-19**
Contact Betty, N6VZF, 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

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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

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