# **JAMBOREE ON THE AIR 2019**

SCOUTS BSA RESULTS OVERVIEW

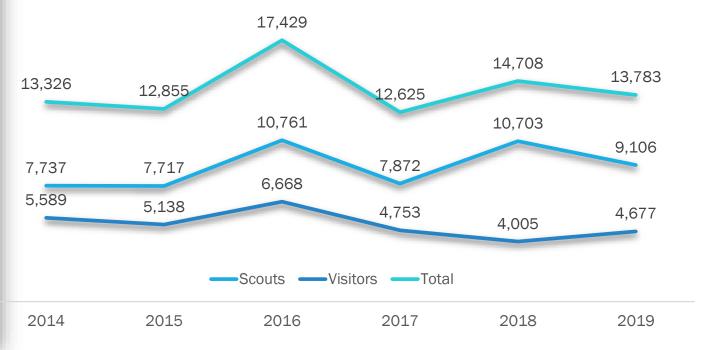


## **SCOUT PARTICIPATION**



#### INCREASED PARTICIPATION BY STATION

While the reported numbers show a slight fall in overall participation, our calculations show that each station averaged an additional 13 people in attendance over last year. This shows an aggregate increase of 24% attendance per station even with our reported stations being down from 266 in 2018 to 201 in 2019.



## **RADIO SCOUTING IN 2019**

#### GROWTH AND MOMENTUM

Radio Scouting this year has been busy and exciting with over 23 ARRL Service to Scouting Awards earned by our Radio Scouters. We celebrated the World Scout Jamboree coming to North America at the Summit Bechtel Reserve in West Virginia with a special callsign, NA1WJ, and a wonderful team of Amateurs running the program. The USA Radio Scouting net on Echolink continues to gain attendance and is always a great place to share questions and ideas for best practices in including Amateur Radio in Scouting. We continue to promote activations and activity on Amateur Radio Newsline, Facebook, Twitter, Scout Camps on the Air website, and our own website. Although we did see the end of the Amateur Radio Operator Rating Strip for the uniform, the Morse Code Interpreter Strip is still going strong and will be a focus of our operations in 2020. We look forward to continuing the momentum from this year into next with your continued support.













## HIGHLIGHT STATION REPORT

WN7BSA - CATALINA COUNCIL - TUSCON, AZ - REPORT BY JOE STATKEVICUS

On Saturday October 19th, 2019, WN7BSA volunteers kicked off the largest council hosted 2019 Jamboree on the Air (JOTA) with a US flag ceremony at the Double-V Scout Ranch south of Tucson, AZ. The flag ceremony was conducted by one of the many Cub Scout units attending the event and was immediately followed by the CBS Columbia Orchestra playing the National Anthem, by transcription.

Our expectations were met with about 140 Cub Scouts and 85 Scouts attending and bringing along many of their parents. The total crowd was estimated at 300 or more.

Our volunteers operated two on-the-air HF radio stations, three 2-meter stations, and one 33-centimeter UHF station. Only a few contacts were made on 20-meters, but 40-meters was fairly active. VHF and UHF contacts through local repeaters made up the deficit but the real "star" was DSTAR through the KR7ST repeater in Sahuarita. The VHF and UHF stations were primarily operated by Garrett, KG7DXH and Chris, KJ7DSX. Bill, AE7YQ and Jim, AC7JM hosted the HF stations.

We had a DMR setup that depended on a "hot-spot" to hit the JOTA Talk-Group. We had some issues with keeping the hot-spot going. We learned a lot about DMR so maybe better luck next year.

## **HIGHLIGHT STATION REPORT - CONTINUED**

WN7BSA - CATALINA COUNCIL - TUSCON, AZ - REPORT BY JOE STATKEVICUS

The Catalina Council and WN7BSA JOTA volunteers kept the interest of everyone by conducting several simultaneous events.

Jason, KI7BGQ and Dan, KJ7JFE moderating two different hands-on test equipment demos where scouts got to use oscilloscopes to view various audio waveforms and their own voice pattern. Each scout also used an audio oscillator to make some pretty horrific sounds. One of the setups included a Theremin. Talk about too much fun!

An old-time radio event featured vacuum tube radios and stereo amplifiers from the past as well as grandpa's or grandma's first transistor radio from when they were in high school. Scouts learned about vinyl records, the early years of rock and roll, the popularity of radio, and the world famous great vacuum tube giveaway. The youngsters, much to the chagrin of their parents, took home hundreds of vacuum tubes.

Scouts helped other scouts (scouts teaching scouts) with practicing their soldering skills by soldering some copper wires together and de-soldering some components from printed circuit boards. Sean, KG7RHH and Chris, KJ7DXI kept that activity smokin'.

## **HIGHLIGHT STATION REPORT - CONTINUED**

WN7BSA - CATALINA COUNCIL - TUSCON, AZ - REPORT BY JOE STATKEVICUS

The "Desert Falcon" a.k.a. Randy, KE7KDQ, conducted a roving hidden transmitter hunt.

This popular event scout patrols into two groups, the "Hunter" and the "Fox." It was very popular again this year.

No radio event is complete without a Morse Code event. This year's event was moderated by Dave, K6KYP, and Dave, KR7DH. Patrols were split into two groups. One group attempted to send a message to the other group using Morse code. We used low-power 10-meter transceivers. The groups were not be in sight of each other. What a circus!

But wait . . . there's more. This year the WN7BSA instigators added a "take it apart" activity where scouts got to take apart old electronic equipment like old Tektronix oscilloscopes, signal generators, 80-pound frequency counters, etc. Tyler and Carl, two Scouts, kept the "boat anchors" flowing.

During the day, Catalina Council volunteers kept the BB Gun and Archery Ranges open for the Cub Scouts. The Lion and Tiger Cubs also got to play with "slime" and soap carving projects.

## **HIGHLIGHT STATION REPORT - CONTINUED**

WN7BSA - CATALINA COUNCIL - TUSCON, AZ - REPORT BY JOE STATKEVICUS

Last but not least was our STEM astronomy events. During the morning hours a solar telescope operated by Jim Knoll of the Tucson Amateur Astronomical Association (TAAA) was very popular showing off the sun in hydrogenalpha light. Around 6 PM the TAAA conducted an evening star party that lasted well into the night. The star party kicked off with a lecture by noted astro-story teller James O'Connor about how the indigenous people of the American Southwest saw the night sky.





#### WHERE THE SCOUTS ARE...

We have received many comments about running the event outside of a normal scouting event like a Jamboree, a campout, or popcorn sales party. It's very hard to compete these days with family calendars that are filled with a ton of extracurricular activities of Scouts, siblings, and other family members. As amateur radio operators, we must always make this event an inclusive part of scouting. This not only means inviting Scouts, but actually bringing the JOTA event to where the Scouts are already planning on being. This is the key to success!



### SUN SPOTS

Thank you for your concern on the current conditions of the sun. Although we filed the correct paperwork in triplicate to get this fixed, our request was denied. Thankfully there was a ton of activity on Echolink and D-Star observed by many station reports.

### D-STAR REFLECTOR AND ECHOLINK USAGE

An issue was noticed with protocol using the reflectors on D-Star and the primary channels on Echolink (\*JOTA-365\* & \*JAMBO\*). While the use of these channels and reflectors are not specifically outlined, it was recommended that stations use them as if they're calling frequencies. Once a call has been established, you should move to a direct connection between stations (if possible) in order to open up the reflector/channel for additional connections to be made. We will research this and work on additional station guides using these modes in order to facilitate better practices that can increase the availability of the reflector/channel during periods of high activity.

#### Do You Believe In Unicorns?

K2BSA/6 reported to us that the most popular question of the day was this, and we have to answer emphatically yes! While this question doesn't exist on some of the standard question sheets handed to scouts for JOTA, we believe this one should be added without prejudice.

### SCHEDULING OF JOTA WEEKEND (CONTEST INTERFERENCE & BEHAVIOR)

It was mentioned by several groups about contesters and some behavior by this group. While we have participated in many JOTA over the years (which always falls on a contest weekend), I can happily say that no contester ever refused my 59 Montana. The QSO parties are not as well regulated as the Worked All Germany (WAG) contest that we have to share the weekend with every year. WAG established contest-free frequencies in order to coexist with JOTA. On HF we do have several bands that are contest free in general: 12m, 17m, and 30m. These bands do have propagation and offer a bit clearer frequencies, although they will still suffer from the same sun spot dilemma mentioned previously. Otherwise embrace the QSO parties, print maps, and collect counties. Some scouts will enjoy learning about and working some radio sport.

### CAMP SITES HAVE NO BATHROOM FACILITIES

A station reported a lack of facilities at a very crowded and too large of a scouting event. With 88 scouts participating in the JOTA event that ran all day and night, sometimes we forget about logistics like this. This is a great item to bring to the facility director or the planning committee that decided to host such a large event. In my planning of a few Jamborees, calling in the extra toilets and wash stations for the weekend is all part of the plan and expense.

### More Support and Promotion Needed From Local Councils

Several frustrated radio scouters included this as a must need. While we can't create more momentum at the local level like you can, we are working on providing more documentation on ways to improve your ability to get the message through to your council/district. Check out the K2BSA website for more resources on a Radio Scouting Committee and the nice article by W3LNE on applying ham radio to all scouting activities. The more present you are with your hobby and the inclusion in all scouting activities, the more you improve the signal to noise to those leaders in the council and district that observe and participate in the activities with you.

# JAMBOREE ON THE AIR - ART & MAGIC OF AMATEUR RADIO



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## **CREDITS**

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Photos, stories, and stats are from the annotated authors where appropriate. For additional credits and sources please contact the station control operator and/or station report author.

K2BSA Website: <a href="https://k2bsa.net">https://k2bsa.net</a>
SCOTA Website: <a href="https://scota.us">https://scota.us</a>

BSA JOTA Website: <a href="https://www.scouting.org/jota/">https://www.scouting.org/jota/</a> International JOTAJOTI Website: <a href="https://jotajoti.info">https://jotajoti.info</a>