The recently concluded 24th World Scout Jamboree was hosted by a North American Team consisting of Scouts Canada, Asociación de Scouts de México, and the Boy Scouts of America. There were 42,000 Scouts, male and female, attending from 152 countries.

The theme was “Unlock a New World,” which was easy to do at the Summit Bechtel Scout Reserve in West Virginia. Among many other activities offered by the reserve, the Jamboree program activities covered a wide range of options, from exploring cultural differences to working with robotics and technology to examining sustainability programs.

The NA1WJ Operation

Amateur Radio has been a part of the World Scout Jamboree experience since 1947 in France with F9CQ/JAM.

For 2019, the call sign NA1WJ was selected to demonstrate that this was a World Jamboree hosted by a North American team.

The operation was hugely successful. Thirty-three staff members from Australia, Canada, Chile, Finland, Germany, Japan, Liechtenstein, Malaysia, the Netherlands, Norway, Switzerland, Taiwan, the United Kingdom, the United States, and Zimbabwe came together to mesh different cultures and approaches to Scouting and Amateur Radio. As a result, we introduced Amateur Radio to over 3,000 Scouts from around the world and completed over 4,000 two-way contacts that covered 86 DXCC countries.

Demonstration Station

Scouts were given a brief overview of Amateur Radio and guided to an operating position, where a control operator took over to describe the equipment and the contact procedures.

At that point, many stations in the ham community were standing by to provide the other side of the contact. Each Scout was able to get on the microphone, fill out a logbook card with the details, and receive a commemoratey NA1WJ coin provided by Icom America on the way out of the tent.

We used the Icom IC-7300 for our HF stations, with their small footprint and easily viewed spectrum scope. We had separate stations for 40, 30, 20, and 17 meters. We also used Icom ID-5100As for 2 meters and 70 centimeters, working repeaters with Echolink and D-STAR. The IC-9700 was put in play for frequent satellite contacts.
Amateur Radio direction finding (also known as “foxhunting”) generated a great deal of interest among the Scouts.

Antennas, provided by JK Antennas, included a rotatable 40-meter dipole, C3S triband Yagi, and a special 20/17-meter dual-band Yagi. In addition, we used dipoles for 30 and 80 meters as well as a 6-meter Yagi.

**Amateur Radio Direction Finding — Foxhunting**

We ran Amateur Radio direction finding (ARDF), or foxhunting, activities, using directional antennas to find hidden transmitters. Over 200 Scouts gained instruction on 80 meters and 2 meters to complete our course. Our ARDF operation was co-located with the orienteering and geocaching activities.

**Pico Balloon Launches**

During the Jamboree, we launched four pico balloons — large, stretched polyester balloons with just the right amount of industrial-grade helium to provide the lift needed to fly at 28,000 to 32,000 feet to find the jet stream. The ultra-light Amateur Radio payload received GPS signals and transmitted position and telemetry on the 144 MHz band using APRS. Two of our balloons crossed the Atlantic Ocean, one ending near Madrid, Spain, and the other near the Algeria-Tunisia border. We were hoping they’d navigate at least once around the world, but this was a good result.

**International Space Station Contact**

Our big highlight was an Amateur Radio contact with the International Space Station. Despite some complications, 10 Scouts communicated with astronaut Drew Morgan, KI5AAA, an assistant Scoutmaster from Houston, Texas. The Scouts came from Australia, Bolivia, Iceland, Japan, Pakistan, Sweden, the UK, and the US. It was a once-in-a-lifetime experience for them and for many of those in the audience.

**Amateur Radio Discovery**

The Scouts came away with a superb hands-on introduction to Amateur Radio. We hope that we planted seeds that will encourage them to further investigate the science, technology, fun, and magic of Amateur Radio when they get home.

Mark your calendars for the K2BSA US Jamboree operation in July 2021 or the Amateur Radio operation at the next World Scout Jamboree in Korea in 2023.

All photos by the author.

Jim Wilson, K5ND, is a retired communications and publishing executive, serving in those capacities with Boy Scouts of America for more than 2 decades. He is a Scouting volunteer in all things related to Amateur Radio. He can be reached at k5nd@arrl.net.

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