

Amateur Radio and the National Scout Jamboree

K2BSA brings ham radio to life for Scouts at the National Jamboree

Bill Morine, N2COP

Ketchup and fries. Burns and Allen. Ginger and Fred. Amateur Radio and Boy Scouts. Some things just go together and this year marks 100 years of collaboration between one of the world's largest youth organizations and one of the world's greatest hobbies. The culmination of recognition for this marriage will be the 10 day extravaganza known as the Boy Scout National Jamboree, taking place July 26 to August 4 at Fort A.P. Hill outside Fredericksburg, Virginia.

The Jamboree will pull in 35,000 youths and 10,000 leaders, and overnight become Virginia's 14th largest city. At the heart of the Jamboree will be K2BSA, the official Amateur Radio station. Next to the annual Jamboree On-The-Air (JOTA), an international Scouting event held every October with up to 500,000 participants, the quadrennial Boy Scout National Jamboree show-

cases Amateur Radio to more youth than any other single event in the world.

The roots of Amateur Radio and the Boy Scouts intertwine back to their origins. William Boyce began the Boy Scouts of America (www.Scouting.org) in 1910. The nascent American Scouting movement encouraged youth to become familiar with state-of-the-art technologies, including Amateur Radio. The first *Boy Scout Handbook* published in 1911 contains diagrams for building a "wireless receiver and spark-gap transmitter," and the first Radio Merit Badge was offered in 1923. A working replica of the original 1911 wireless set will be on display at K2BSA in 2010.

K2BSA Brings Ham Radio to the Jamboree

Although Boy Scout National Jamborees have been convening every 4 years since



Figure 1 — The K2BSA flag flying over the station tent at the 2005 Jamboree.

1937, Amateur Radio first appeared as K2BSA (see Figure 1) beginning in the 1970s (The 2010 National Jamboree was delayed one year from its normal four year rotation to coincide with BSA's centennial). This year the staff of K2BSA will consist of 46 ham radio operators from all over the United States. Applications for one of the coveted slots begins 2 years before each Jamboree, with an applicant listing his or her (yes, there have been young ladies on the K2BSA staff) qualifications. The K2BSA chairman and director look for applicants having extensive experience interacting with youth, especially those who have been active with Scouting's annual Jamboree On-The-Air (JOTA) and in teaching the Radio Merit Badge. Although not a requirement, the majority of staff members are Extra class operators.

A half dozen positions are reserved for "Youth" staff, who are either Boy Scouts under age 18 or Venture Scouts between 18 and 21 and are licensed ham radio operators. These young men and women are active operators who have run nets or helped other Scouts to become licensed. Former Hiram Percy Maxim Award winner and current Rocky Mountain Division Director Brian Milesosky, N5ZGT, served as a K2BSA Youth Staff Member at the 2001 Jamboree. He'll return this year as K2BSA Station Manager. *QEX* magazine Editor Larry Wolfgang, WR1B, a frequent past K2BSA staffer himself, will be ARRL liaison.

Starting 3 days before the Jamboree opens, the K2BSA team members will arrive to begin setting up antennas and equipment. Local utilities bring cherry pickers to help lift Yagis onto telephone poles surrounding the station. Numerous wire antennas crisscross the site with bundles of coax coming into the very recognizable 40 x 20 foot red-and-white striped circus-like rental tent. Under the "Big Top," the 12 operating positions begin to take shape.



Figure 2 — Groups of Scouts wait their turns to tour the K2BSA tent. Many are curious about ham radio while others are already working toward their Radio Merit Badge.



Figure 3 — Some of the 161 new Technicians taking their license exam at the 2005 Jamboree.



Figure 4 — Clarke Monroe, KG4OQL, points to the photo of his 12 year old self with Shelly Weil, K2BS, on the cover of the 2003 *Radio Merit Badge* booklet.

This is where thousands of Scouts will witness Amateur Radio in action (see Figure 2). Because of the intense heat and humidity the side flaps of the tent are lifted during the day. Numerous floor fans drone in the background as staffers, glowing with perspiration, point out the operating positions. One requirement of the Radio Merit Badge is to carry on a 10 minute contact, so tent staffers take turns escorting groups of 8-20 Scouts around the tent before stopping in front of one of the positions so the boys can fill in their Merit Badge sheets as they participate in an actual contact.

During hectic moments, up to 60 staffers and Scouts can be compressed inside

the K2BSA tent. Somehow during the pandemonium of thousands of Scouts transiting through the tent over 10 days in 2005, K2BSA worked all 50 states and 109 countries, and staffers expect to contact the same or more in this centennial year.

It's Not Just About the Radios

Next to the Big Top are two other structures that house the other functions of K2BSA. While the stations and operating positions are the focal point, the Radio Merit Badge and licensing classes are also important parts of the ham radio experience at the Jamboree.

To the right of the main tent is a smaller tent that houses the licensing classes and VE testing. "For the first time, we are glad to be adjacent to the K2BSA main tent," says Dave Gaddis, KE4KPC, head of K2BSA's licensing and VE program. "At past Jamborees we held licensing and testing sessions sometimes miles from the main tent, so we're grateful for the new space."

Behind the main tent is a trailer with a large awning. Under its shade is an outdoor classroom. Here is held a short class that explains operating procedures for those working toward the Radio Merit Badge. Scouts taking the badge stop here before proceeding to the Big Top to learn about Q signals, prosigns and RST signal reports.

Inside the trailer are K2BSA's two repeaters. The repeaters operate on 145.17/144.57 MHz and 442.90/447.90 MHz and we hope we don't have to use a CTCSS tone. Often tinkering inside the trailer is K2BSA General Chairman Ed Dudley, WA4ISI. The repeaters are his and they perform several duties during the Jamboree. Many ham Scouts and leaders come to the Jamboree

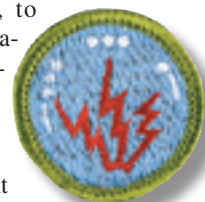
with their handheld transceivers to sample K2BSA as part of the overall Jamboree experience. During the 2005 Jamboree, a total of 366 licensed hams registered with K2BSA.

Both repeaters are busy during the Jamboree — so busy that a K2BSA staffer monitors the repeaters up to 18 hours a day. In addition to the traffic from hams at the Jamboree asking for directions and general questions, many hams call K2BSA as they drive by on adjacent I-95. Every evening at 7 PM, a 2 meter net is held. Some nights there are up to 70 check-ins. There are no IRLP repeaters near Fort A.P. Hill, but K2BSA hopes to use EchoLink repeaters in the area.

Merit Badge Midway

Fort A.P. Hill has 76,000 acres, but it is an active military facility, so the Jamboree is confined to a still spacious 3000 acre plot. Jamboree functional areas are grouped together. Classes for seven of the nine requirements for the Radio Merit Badge are conducted 2 miles from K2BSA at "Merit Badge Midway," a tent city where almost all 123 Boy Scout Merit Badges are offered.

Classes are taught continually from 9 AM to 5 PM on most of the 10 days of the Jamboree. (The hours are shortened on Sunday and evening show days.) K2BSA staff members have been working with APRS developer Bob Bruninga, WB4APR, to look for APRS applications at Jamboree, possibly including bus route information. Although there are established bus routes with frequent service throughout the Jamboree, most Scouts and leaders find the fastest way between two points is the tried and true "shoe leather express."



Over 800 Scouts begin the Radio Merit Badge and squeeze in the required elements offered at Merit Badge Midway with other badges they're seeking before circling over to the K2BSA tent for the remaining two requirements. With so much going on at Jamboree, you can forgive the almost 200 Scouts who don't complete the Radio Merit Badge. "Still, we're very happy with the completion rate, despite the obstacles of not having all the requirements in one location," says Bill Burns, WA6QYR, head of K2BSA's Radio Merit Badge training. About half of K2BSA's 2010 staff members will be assigned to the Radio Merit Badge program.

For those who catch the bug to get licensed, K2BSA offers classes to earn a Technician license, including some 1 day short courses. For eight of the 10 nights of



Figure 5 — Clarke Monroe, KG4OQL, acting as net control for the nightly 2 meter net held on the K2BSA repeater. Some nights as many as 70 check-ins join the net.



Figure 6 — Two Scouts participate in a contact as part of their Radio Merit Badge requirement.

the Jamboree, VEs administer FCC license exams (see Figure 3). In 2005, 161 new Technician licenses were issued.

What type of Boy Scout gets hooked on ham radio? A great example is Clarke Monroe, KG4OQL. At the 2001 Jamboree as a 12 year old Scout he became a K2BSA groupie, hanging out at the tent during his free time. His enthusiasm was so contagious that his picture was captured operating K2BSA with Shelly Weil, K2BS, and became the cover for the 2003 revision of the *Radio Merit Badge Series* booklet (see Figure 4). In 2005, Clarke returned to K2BSA as a youth staff member (see Figure 5).

For those looking to contact K2BSA, (see Figure 6) search near the standard JOTA frequencies (a list can be found at www.arrrl.org/jota-resources). K2BSA is

typically on the air 16-24 hours per day and operates voice, CW and PSK on 80, 40, 20, 15, 10, 6 and 2 meters and also 70 cm. K2BSA will also attempt satellite contacts. If you make contact and want a QSL card, send a stamped self-addressed envelope to K2BSA.¹

Amateur Radio and Boy Scouts of America — a century of dedication and cooperation. “Sharing the attributes of Amateur Radio and Scouting is a privilege,” says K2BSA Director Bob Wiemers, W5FIG. “We look forward to spreading the fun of Jamboree to the rest of the world from K2BSA.” To paraphrase what the Jamboree staff at Fort A.P. Hill are fond of saying,

“Hear you at Hill!”

For more information about K2BSA, look for it on Facebook or go to www.nsj2010ham.com or www.bpmlegal.com/k2bsa.html.

All photos courtesy of Bill Morine, N2COP.

Bill Morine, N2COP, an ARRL Life Member, was a K2BSA staff member at the 2001 and 2005 Boy Scout National Jamborees, which his Eagle Scout sons Reid, W4RSM, and Grant, W4GHM, attended. He is the North Carolina Section Manager and Chairman of the ARRL Public Relations Committee. He can be reached at 101 Windlass Dr, Wilmington, NC 28409-2030, n2cop@arrrl.org.

QST



New Products

TWO RADIO CONTROLLER FROM MICROHAM

◇The micro2R radio controller is designed for single operator, two radio (SO2R) operation with two transceivers and any control interface. It provides automatic or manual control of headphone audio and transmitter selection, and is compatible with the automatic modes of the most popular contest logging programs. The front panel has push button controls for headphone audio and transmitter selec-

tion, a speed control for the built-in CW keyer, and separate sound card drive controls for each transmitter. LEDs indicate manual or automatic operation, headphone audio source and selected transmitter. The micro2R uses either USB or LPT control, includes a WinKey 2 CW keyer, support for

either electret or dynamic microphones, a UART compatible FSK port for each radio and built-in support for the voice keyer capabilities of the most popular contesting software. Price: \$379. For more information or to order, visit www.microham-usa.com.

