



The Blue Ridge Echo .. Echo .. Echo..



Official Transmitter of the Blue Ridge Amateur Radio Club - W4YK -

MEETING MINUTES

The September meeting began at 7:00pm. The minutes from the last meeting were approved by the membership.

ATTENDANCE

15 people signed the attendance list passed around at the in-person meeting and 10 people attended via Zoom, for a total of 25 in attendance. There were two guests in person: John Waterman (W9FEK) and Ed Winstead (WD8RON), who joined at this meeting. Online guests were speakers Alan Thompson (W6WN) and Bob Hess (W1RH) and two additional logins shown as Kelly Combs and Geri.

TREASURER'S REPORT

August 1 – August 31, 2021

Balance as of 07/31/21		\$ 5,722.39
Plus: Dep: 1/2 -year Dues x 1	\$ 10.00	
Field Day T-Shirts (2)	<u>20.00</u>	
	Total Income	\$ 30.00
	Sub-Total	\$ 5,752.39
Less: Exp: Liability Insurance	\$ <u>200.00</u>	
	Total Expense	\$ 200.00
	BALANCE AS OF 08/31/21	\$ 5,552.39

ANNOUNCEMENTS

Tour d'Apple – Sept 6

Danny (NA4X) thanked all who helped yesterday with radio communications for the annual *Tour d'Apple* bike ride. The event was quite successful.

Ride Kanuga – Sept 19

The 9th Annual Off-Road Series will take place at Ride Kanuga on Sunday, September 19th. The *Tour d'Apple* bike ride went so well that Danny (NA4X) was asked whether the club could provide communications for this event, as well. It consists of three main events: Duathlon (5-mile run and 13-mile bike ride), Trail Run (5-mile), and Gravel Grinder bike events (13-, 25- and 42-mile routes). It will support the St. Baldrick's Foundation, to help conquer childhood cancers. Contact Danny to help: rector@bellsouth.net.



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BRARC Special Event Station – ~~Sept 25~~ CANCELLED

The Special Event Station operation has been cancelled, mainly due to concerns about having so many people at Sid's house. We still appreciate your dedication as longtime Net Control, Sid!

Fox Hunt Presentation – Oct 9

The club will hold its fourth *Fox Hunt* presentation on Saturday, October 9th from 2:00-4:00pm at Jackson Park. This one will be for a Girl Scout troop who saw the excellent online publicity for the first one we did this summer.

Club Officers for 2022

The club will elect officers for 2022 at the November meeting. Per the By-Laws, the Steering Committee is to prepare a slate of nominees in mid-October. Please let us know if you would like to be included, or if you know of anyone who might serve the club in this way. The current President has served two years and expressed the desire to be the new Shack Manager instead of President. The current Treasurer is filling in as acting Secretary through the end of the year since Doug Davis resigned for personal reasons, so we need a new person to be either Secretary or Treasurer. (I'm willing to do one or the other, but not both! – Steve)

PRESENTATION

"Phones, Fires and Failures" and "Radio for the Rest of Us"

Al Thomson (W6WN) joined us online from his home in California, along with Bob Hess (W1RH). Following the deadly Paradise and Camp fires in California in 2018, Al was working to provide satellite internet for T-Mobile. The fires took out all power, phone and internet cables and exposed other vulnerabilities to cell phone service that affect all of us. He pointed out similarities with the Gatlinburg 2016 fire and disaster services responses.

Al's presentation began with a 20-minute video made by Al, "Phones, Fire and Failures". Within 3 hours of when the Paradise fire first hit the town, all cell service was out. Part of the video included photos that showed "Why Telephones Fail", better abbreviated "WTF"!

The second part of the presentation was another video of Al's, "Radio for the Rest of Us". Phones fail without alternatives in all types of disasters, including in the currently-active Caldor fires. Al and his club suggest that rather than (or in addition to) concentrating on supporting individual agencies with possible redundant services, hams work to help their neighbors by setting up "Neighborhood Radio Watch" programs where hams and non-hams work together to be ready in emergencies when cell phones stop working. The video shows how the program has worked in California, using GMRS radio systems.

The third part of the program was a Q&A session where Al was joined by Bob Hess, the president of the amateur radio club which helped get the neighborhood programs up and running. They answered questions about the current Caldor fires, about protecting repeaters from fire and about the "Fire Tone Out" option on the commercial GMRS radios they use to alert users. Also mentioned was AT&T's "FirstNet" for first responders. Since it still depends on cell service, when Hurricane Ida hit Louisiana FirstNet was knocked out when cell service went down.

Danny Rector (NA4X) today was in Cruso, NC, at the site of the deadly Aug 17th flash flooding following up to 17" of rain. They had less than 2 hours warning of the flooding. A mudslide also backed up the river without notice, and campers were unable to escape. Danny stressed that if we are in a situation like this, as soon as we can we need to let friends/family know we're safe,



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to prevent unnecessary search efforts. We also need to know where medications, etc, are in our house, so that we can let responders know exactly where they are if they go in to get them for you. Danny also said to keep a stack of \$1 bills where you know they are in your house. You'll need them when credit cards are useless because power and communications are out.

Other suggestions were given. Be aware of how much gas is in your car. In Paradise, evacuees got stuck in traffic jams and ran out of gas sitting on the road. Bulldozers had to be sent to push them off the road so traffic could get through. Plan meeting points with family in advance, including backup options further from home. Have cash, since ATM's will be down. Have supplies that will be good for a long time. Even gasoline now only has a shelf-life of a few weeks due to additives. Consider dual-fuel generators, as propane has a good shelf-life.

Al has placed a document online with links to both videos and other recourses:

dropbox.com/s/yftym3na4ugg7rf/Phones%20Fires%20and%20Failures%20and%20Radio%20for%20The%20Rest%20of%20Us%20Resources.pdf

MEETING ENDED

The meeting adjourned at 8:50pm.

Minutes submitted respectfully by Steve Smith (KC5F), acting Secretary.

CALENDAR OF UPCOMING EVENTS

Date	Description
Sat, September 18	Informal Breakfast Get-Together – 9am, Ingles 625 Spartanburg Hwy.
Sun, September 19	Ride Kanuga – Bicycling and running event – volunteers needed!
Tue, October 7	BRARC Meeting - In person in Jackson Park. In addition, you can still attend virtually via Zoom. Latest instructions on logins are on the BRARC website. <i>(There is a possibility we will be meeting 100% virtually – stay tuned!)</i>
Sat, October 9	Fox Hunt - 2:00pm in Jackson Park.

FOR SALE

There are no items listed this month.

AREA HAM RADIO NETS

2 METER FM NETS		
BRARC Net (W4YK)	146.640 MHz / T91.5	Sunday 8:00pm
Henderson County ARES Net	146.640 MHz / T91.5	Wednesday 8:00pm
Slow Scan TV Net	146.640 MHz / T91.5	Sunday 9:00pm
6600 Net	145.190 MHz	Saturday 9:00pm
Oasis Shrine Net	145.190 MHz	Sunday 9:00pm
KI4ZEK Net	145.190 MHz	Thursday 8:30pm
Blue Ridge Traffic (SC)	146.610 MHz	Daily 9:00pm
Good Morning Net	146.760 MHz	M-W-F 9:00am



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Anderson Radio Club Net	146.790 MHz	Daily 8:30pm
Slow Scan TV Net	146.790 MHz (no tone)	Saturday 9:15pm
WCARS Information Net	146.910 MHz/ T91.5	Monday 9:00pm
Buncombe ARES Net	146.910 MHz / T91.5	Wednesday 9:00pm
Transylvania ARC Net	147.135 MHz	Thursday 8:00pm
WCARS Simplex Net	147.525 MHz	Tuesday 8:30pm
6 METER FM NETS		
6 Meter Net	53.130 MHz / T100	Friday 9:00pm
220 MHz FM NETS		
Mount Pisgah 220 Thur Net	224.260 MHz	Thursday 8:00pm
Mount Mitchell 220 Net	224.540 MHz	Monday 8:00pm

HF NETS		
QCWA Chapter 76	3.636 MHz	Saturday 8:45am
The American Preparedness Radio Network (TAPRN)	3.818 MHz or 7.24 MHz	Sunday 9:00pm
80 Meter Simplex Net	3.843 MHz	Thursday 9:30pm
NC Evening Net	3.923 MHz	Daily 6:30pm
Tarheel ARES Net	3.923 MHz	Daily 7:30pm
NC Morning Net	3.927 MHz	Daily 7:45am
K4UUQ Morning Net	7.225.5 MHz	Mon-Sat 7:00am
SATERN Net	14.265 MHz	Daily 10:00am
Get Up and Go Net	28.350/28.360 MHz	Sunday 9:00pm

DIGITAL MOBILE RADIO NETS		
DMR Net	WNC Net Talk Group	Thursday 8:30pm
DMR Net	WNC Local Talk Group	Monday 7:30pm
WNC Net	WNC System Fusion Refl YS24157	Wednesday 9:00pm
DMR PRN Net	PRN Local Talk Group	Tuesday 8:00pm

BLUE RIDGE AMATEUR RADIO CLUB OFFICERS

Title	Name	Call Sign	Phone	Email
PRESIDENT	Charles Webb	KN4KWA	828-698-1035	cwebb@hville.net
VICE-PRESIDENT	James Reed	KK4JFO	828-698-3609	jshreed@bellsouth.net
TREASURER	Steve Smith	KC5F	828-489-6637	kc5f@arrl.net
SECRETARY	(vacant – KC5F acting)			



CHOPMIST HILL MONITORING STATION

Tim Reimers (KA4LFP) sent this interesting article. Another site with more info and some pictures is at <https://stationhypo.com/2019/03/30/federal-communications-commission-comint-efforts-during-wwii/>

By Brian Wallin:

Darby Road in Scituate, Rhode Island, near the top of the 7th-highest point in the state (732 feet above sea level), is the site of what was once one of the nation's best kept secrets during World War II: the Chopmist Hill Monitoring Station. In March 1941, the Federal Communications Commission's Radio Intelligence Division (RID) set up a network of 13 top secret radio monitoring facilities designed to eavesdrop on German and Japanese radio traffic.

A top agent in the RID was a Bostonian by the name of Thomas B. Cave. He not only discovered the site, he was to command the monitoring station right through the end of the war. His initial assignment had been to set up a connection with an existing direction finding station in Bar Harbor, Maine (similar sites were being established along the Eastern seaboard prior to the entry of the US into the war). While traveling around New England, Cave discovered the 183-acre farm, owned by William Suddard, atop Chopmist Hill. It didn't take him long to figure out that this location could do a lot more than help triangulate a radio signal.

By an odd coincidence of terrain and atmospheric conditions, this particular property turned out to be the most effective of the RID's national network of stations. Suddard and his family obligingly leased their home and property to the government and moved out for the duration. A team of 40 radio operator technicians quickly arrived to set up shop in the 14-room farmhouse.

Narragansett Electric Company linemen were called in to set up scores of utility poles and string some 85,000 feet of antenna wire (about 16 miles worth). Over the next few years, they would be called back periodically to move some of the poles, sometimes by only a few feet. This wasn't easy since the poles were sunk deep into the ground to keep them below the tree line for security purposes.

The linemen were never aware of why they were performing the tasks. One company crewman, Charlie Weinert, said after the war, "If I had known what was going on I would have dug the poles all the way to Cairo!" The long wire antennas and other receiving antennae were connected to the farmhouse where technicians set up six rooms full of sensitive radio receivers and transmitters. A pair of outbuildings housed two sensitive direction finders. Chopmist Hill was in business.

"If I had known what was going on I would have dug the poles all the way to Cairo!" — Charlie Weinert

The farmland and buildings were surrounded by barbed wire and powerful security lights. An emergency generator provided backup power. Staff lived in bunkhouses on site. Armed guards patrolled the area. A warning sign on the approach road read, "In the event of an enemy attack on Rhode Island, this highway will be closed to all save military vehicles." Local residents figured something was up, but they had no idea what. Actually, the technicians themselves were not fully aware of the ultimate use of their activities and the material they collected (although they probably had a good idea once America entered the war and the scope and amount of information mounted up). Working in shifts 24/7, the technicians monitored signals broadcast in the clear and also copied down encrypted messages. All information was relayed by teletype to Washington for appropriate action, often immediately on receipt.

Right away, operators began to listen to transmissions by German spies in North Africa and South America and exchanges between German headquarters and military units in Europe and North Africa. Once the spies' signals had been identified, they could be rounded up and, in many cases, turned to counterespionage purposes. American intelligence agents' transmissions were also monitored and, if it was discovered the enemy was on to them, they could be warned. The Chopmist Hill equipment was so sensitive and the location so ideally situated that the technicians could pick up low power radio signals



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between General Erwin Rommel's Afrika Corps tanks and relay critical troop movement information to the British.

The Rhode Island station personnel also monitored weather reports that were key to enemy activities. Access to local weather information assisted the British and later, US Army Air Forces in setting up bombing missions. German strategic and diplomatic transmissions were broadcast on frequencies that could not be picked up by the British but did bounce across the Atlantic to Scituate. These were relayed to the British before and then after the US entered the war.

The station was also able to pick up Japanese transmissions from the Pacific. Then FCC Commissioner George Sterling, in an interview conducted long after the war was over, said he was surprised that the US was caught unaware at Pearl Harbor. He told a reporter that for several months before December 7, 1941, the Scituate monitoring station was routinely intercepting Japanese military transmissions that indicated some action was pending (US cryptanalysts had already broken the Japanese code). During the war, the Chopmist Hill station helped defeat Japanese attempts to bomb the US mainland with TNT-laden hot-air balloons equipped with small transmitters to help the Japanese keep track of their progress. Scituate picked up these low power transmissions thousands of miles away, relayed the information to Washington and US fighter planes were dispatched to shoot the balloons down. A few managed to reach the US, but their existence was kept a deep secret by the government.

At one time, Chopmist Hill even helped save the famed Queen Mary from being sunk with more than 10,000 troops aboard. The ship was in Brazil, about to sail for Australia. German spies in Rio de Janeiro had discovered the ship's sailing schedule and route around Cape Horn and radioed the information to Nazi headquarters. German U-boats were ordered to sink the liner at all costs. But, thanks to the Scituate monitoring station, the Royal Navy sent last minute secret course changes to the Queen Mary, and she arrived safely in the Pacific with her precious cargo of fighting men.

The head of the German Navy's U-boat service, Admiral Karl Doentz, thinking his transmissions were secure, kept up continuous radio contact with his submarines throughout the war, unaware that even with sophisticated encryption machines, his electronic mail was being read.

In yet another incident that demonstrated the unusual sensitivity of the monitoring facilities, receivers picked up a signal from a remote transmitter near Alaska's Aleutian Islands. It turned out to be a nearby Russian station and the location, at first thought to be a Japanese facility, was saved from a US air attack.

Chopmist Hill technicians also assisted in air-sea rescue missions, using direction finders to zero in on downed aircraft around the world. Among those saved were 22 wounded soldiers whose plane went down in Labrador and popular entertainer Kay Francis whose plane crashed in Florida while returning from a USO tour in Europe.

It does seem a little hard to believe that a spot in Rhode Island could play such a vital role. Army officials were skeptical, and so the FCC's Sterling guaranteed them his technicians could pinpoint the location of any transmission within 15 minutes. The Army set up a test, sending a signal from inside the Pentagon. Seven minutes after their message was sent, Scituate reported receipt and location."