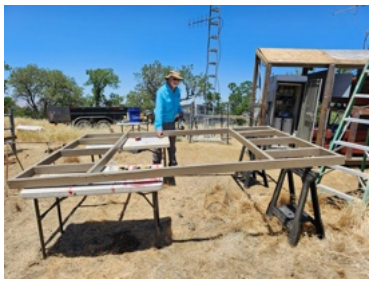
The San Benito County Repeater System
contributed by Ron Ross KD6ZXG
Part Four: Call Mountain

The San Benito County Amateur Radio Association operates a system of four interconnected VHF repeaters. When our organization was just forming, there were not any repeaters in San Benito County and cell phone coverage was non-existent in most of the county. So as you traveled south or east of Hollister you were definitely out of contact with the outside world. Our first repeater was in downtown Hollister which provided great coverage in the northwestern part of the county, but reception dropped off south of Tres Pinos. In order to expand coverage to along Highway 25 south, we constructed a second repeater in the Bear Valley area. In past newsletters, we discussed the history of the downtown and the Bear Valley repeaters in a three part article. In this newsletter, we'll continue the article with the Call Mountain repeater, the third repeater that we put on line.

Call Mountain, which is pretty much centered in the middle of the county, sits at 3,900 feet above sea level. The views from the location are far reaching, from the Sierras to the east and Hollister and Santa Clara county and the Santa Cruz Mountains to the west. Because of this, it had always been on our wish list for a repeater but its accessibility and distance made it a challenging task. In addition, its elevation and location meant that it would be difficult to find a 2 meter frequency that is not already in use by another repeater. The first task was to make contact with the landowner to accommodate us as the only access is over several miles of private ranch roads. Then we needed to conduct a systematic survey from the mountain top looking for an open frequency. When the survey was done only one possible frequency was found, but it was discovered later when consulting repeater directories that another repeater used this frequency in the East Bay hills. We engaged in discussions with the trustee of this other repeater and also with the 2 meter repeater coordinator for NARCC to determine if we could use this frequency without causing undo interference.

There was a lot of skepticism by others if this frequency could work for us but it was agreed that we could set up a temporary repeater at this location. The idea was to see if transmissions from this site would interfere in the coverage areas of other repeaters. We put together a couple of Motorola mobiles, an old repeater controller, some surplus batteries and a used duplexer that was obtained from swap meet. There was not a structure at the proposed location to house the equipment, so a seldom used pickup was left at the site with the equipment was placed in a camper shell on the back the truck. The testing went on for a few weeks. It involved monitoring from the East Bay users and also from us, testing where it worked and didn't work by driving over the region. The results were good: the East Bay users could not hear us and we had great coverage in many places in San Benito County. A bonus was that the repeater was also heard in the central San Joaquin Valley and more importantly it did not interfere with other systems.

Now the task was to build a structure to house the equipment, install some solar panels and get an antenna up in the air. The SBCARA's treasury was still in its infancy and we were between funding cycles from the San Benito County Office of Emergency Services (SBC OES). But just as with the Bear Valley repeater, the resourcefulness and contributions from the local hams allowed us to cobble a system together and get it up and running.





Pictured: Jack Krik W6KRK, Frank Wilson KK6UBR, Gary Cameron K5CHP, Brent Hawks KG6KPD, Alan Pagaran KJ6RTH, Scott Richards KK6UBR, Ron Ross KD6ZXG

During construction, space was left for a second repeater that eventually was used by the W6KRK UHF repeater. Soon after, we were able to receive funding from the County OES for all new equipment and since then the site has gone through a couple of renovations to improve performance and reliability. As expected, the expansion of our coverage area at this site was outstanding as we have gotten signal reports from Santa Cruz to the Sierras. In fact, one of our hams took his HT with him when he climbed Yosemite's Half Dome and was able to talk back to the Hollister via Call Mountain and through the link system to our downtown repeater!

While this repeater allowed us to expand our coverage in the county, there were still some areas that were out of reach of ham radio repeaters. One somewhat large area was the Clear Creek/Hernandez Valley area in Southeastern San Benito County. Among other things, this area is used by off-road and geology enthusiasts and was void of any radio or cell overage. But that is another story that will be covered in a future newsletter in part 5 of this series.