

Communications & Electronics Field Day  
At Onyx Cave  
2015 NSS Convention  
Waynesville, MO  
Friday July 17, 2015

The C&E Field Day trip to Onyx Cave, MO met near the campground entrance at 8AM Friday. We left for the cave at 9AM with Jim Cooly, who had the keys, and Cliff Gill, who was going into the cave to study biology. Onyx Cave is an ex-commercial cave now owned by the Forest Service. They require some sort of scientific purpose for the visit. Our purpose was to Radiolocate several points along the main passage and provide GPS coordinates. Our in-cave guide, John Beard, met us at the cave. There were 8 C&E members plus the local cavers. John Beard, Cliff Gill, Joyce Thompson, and John Kessler entered the cave with the remainder staying on the surface. Brian's 3496Hz diver beacon, with it's rod antenna, was first set up just beyond the commercial portion where a 110 ft shaft was blasted by Onyx miners. 440MHz radios loaned by Sam Rowe allowed us to talk to the cavers and test the beacon. Brian decided that the beacon should be left ON while the cavers traversed between locations to allow Brian to track them through the dense forest. Tracking will work even if the beacon is lying down in a crawlway, if the surface team is nearly over the passage. The cavers shared carrying the beacon. John picked 4 spots that could be easily located on the map where the beacon was set up on it's tripod for 7 minutes while Brian radiolocated. Each point was marked with the time, and a trail was flagged between them. Brian had them signal groups of 3 "beeps" when they were going to move, with 5 beeps after the last location. In retrospect, they should have given 2 beeps when they were first set up at a location. The surface was brutally hot with dense undergrowth on a sloping hillside. A machette would have helped. The surface crew did the flagging, marking, and obtaining UTM positions. One surface crew member walked into the cave as we were leaving the entrance and got locked in for almost an hour! One pickup truck had a flat tire. Jim Cooly took the locations. Cliff Gill had photos of a salamander that he had never seen before, above or below ground.