

## Hooked on Ham (Radio, that is)

Isaac Dontje Lindell, KD0BRD

This summer, I decided to get my amateur radio license. It started on the bike ride my dad and I went on to raise money for Habitat for Humanity. It was a fairly big deal, with 120 bike riders. There were 4 or 5 support vehicles (sag wagons), for people who got hurt or just needed a break. Now, these vehicles need some way to communicate. Cell phones would work, but those could get expensive. The handheld walkie-talkies you can buy for twenty dollars just don't have enough range. (Sometimes the bike riders were spread out over twenty or so miles.) So, all the sag wagons used amateur radios. It makes perfect sense. You can buy 5 radios for a one-time investment of maybe \$500. Then those radios can be used for many years with no extra cost.

The tricky part is that the people who operate these radios have to have a government issued license. Most of these volunteers already had their licenses. The few that didn't can get one fairly easily. The entry level amateur radio license, the Technician class, is a 35 question multiple choice test, covering very basic radio theory and amateur radio operating practices.

Enter Isaac. One of the seven days of this bike ride is a choice day. I had the choice of biking a seventy-mile route, working on a Habitat for Humanity house, or taking the day off. By this time, I was tired of biking (as was my rear end), so I thought I'd help build the house. However, I needed to be 16 years old to do that. So, I opted to take a rest day. Instead of lying around the school all day, reading my meager supply of books, I decided to ride along with one of the sag wagon drivers, Larry, and see how the volunteers in the bike ride spent their day.

Of course, I was also intrigued by the interesting looking radio on the dash.

Now it's time to explain a little more about amateur radio, or ham radio as it's informally called. As I explained earlier, to get a ham radio license, I have to pass a multiple choice test. Most people also think that you need to learn the very complicated Morse code. That used to be true, but beginning this year, the Morse code requirement was eliminated. There are three classes of amateur radio licenses. They are the Technician class, the General class, and the Amateur Extra, or just Extra, class. Each one gives the licensee more spectrum, or radio frequencies that they can use. When I get licensed by the FCC (Federal Communications Commission, which is the government agency that controls TV and radio licensing), I get a unique call sign. A call sign is a radio equivalent of a name. TV and broadcast (FM and AM) radio stations also get a call sign.

Back to the radio on the dash. The radios used by this bike ride used a radio frequency range of 144mhz (megahertz, which is a measurement of radio frequencies) to 148mhz. FM radio that you listen to in your car has a frequency range of about 87-108mhz. The 144-148mhz amateur radio frequencies are mostly used for shorter range (40-60 mile) talking. This is the frequency range that ham radio operators use to talk around town and in their cars.

Larry's call sign is N0WEU. This is what he used to identify himself to the other ham radio operators volunteering on this bike ride (and anybody he talks to on the radio). Our first job comes over the radio. We're going to drive at the back of the bike ride and make a list of the riders who are in the back so that we can make sure everyone gets to the rest stops and doesn't get lost. Once we have a list of the last five or so riders, we

need to call Susan, N0JND. Susan is the ham radio operator who is in charge of assigning the sag wagons where to go and what to do.

At this point, I didn't have an amateur radio license. However, the FCC allows unlicensed people to use amateur radio if a licensed ham is there guiding the unlicensed person. Larry explains to me the basic procedure, and then tells me to call Susan on the radio and tell her which riders are in the back of the ride. I'm excited, but also nervous.

Me: "N0JND, this is N0WEU".

Susan: "Go ahead, N0WEU"

Me: "I've got the last few riders for you. They are rider numbers 32, 56, 119, 3, and 45".

Susan: "Great! We'll keep an eye out for them here at the first rest stop. Why don't you guys come up here and help us check people in. See you in a few minutes. N0JND clear."

Me: "Sounds good. N0WEU clear."

Larry tells me that I've done a great job. I thought that that was really fun. I'm hooked on ham!

I got my General class license after studying for about 2 months. (I could have done it sooner, but that was when there was a testing session in the area.) My call sign is KD0BRD.

I learned even when I do something that maybe isn't very fun (like biking 500 miles in hot weather), you can often find something that is fun (like amateur radio).