

A Grid DXpedition in the Upper Peninsula

A recently licensed ham organizes
an activation of a remote grid
square in Michigan.





The K8B team, from left to right: Dan Brandner, N9DJB; Matt Okeson-Harlow, NM9O; Barry Arneson, K8SD; Thomas Baden, AC9BJ, and Troy Faulkner, KB9AZZ.

Sunset on Friday night after setup. Troy, KB9AZZ, is at the base of the mast, with visitors viewing on left.

Dan Brandner, N9DJB

As a new radio amateur, first licensed in August 2017, I always thought that large DXpeditions were too expensive and not feasible for the average ham, so I was searching for something closer to home, and at a reasonable cost. I was excited when I heard about the 2018 ARRL International Grid Chase, an event encouraging hams to activate rare or remote Maidenhead grid squares all over the world.

Making the Plan

After looking for a grid to activate, I decided on an expedition to EN67 — a grid square just 6 hours from my home and almost entirely over water, except for the tip of the Keweenaw Peninsula in the Upper Peninsula, just outside of Copper Harbor, Michigan. Operation could take place atop Brockway Mountain, a pull-off loop at the high point of Brockway Mountain Drive that follows the backbone of the Keweenaw Peninsula. I pitched the idea to my friend and mentor, Troy Faulkner, KB9AZZ, who agreed to be a part of the adventure. Thus, the planning began.

From researching online, we discovered that the location and grid is occasionally activated by intrepid hams, such as a group led by Tim Rush, N8DUY, who activated EN67 in 2015 as K8N. We contacted Rush for advice, who informed us that we needed special permission and a signed agreement from the local township to stay overnight. He also said that we needed to plan for the possibility of high winds on the exposed ridge and rocky soil that wouldn't be conducive to staking ground rods or guy lines.

We obtained the necessary agreement and permits after picking our operating dates — the weekend after Labor Day 2018. To make this an official expedition, we acquired the special event call sign K8B for the activation and set up accounts for K8B on Logbook of The World and **QRZ.com**. To promote our activation, we contacted *QST* to get the event on the magazine’s calendar and posted to two Facebook groups related to the ARRL Grid Chase.

Setting Up

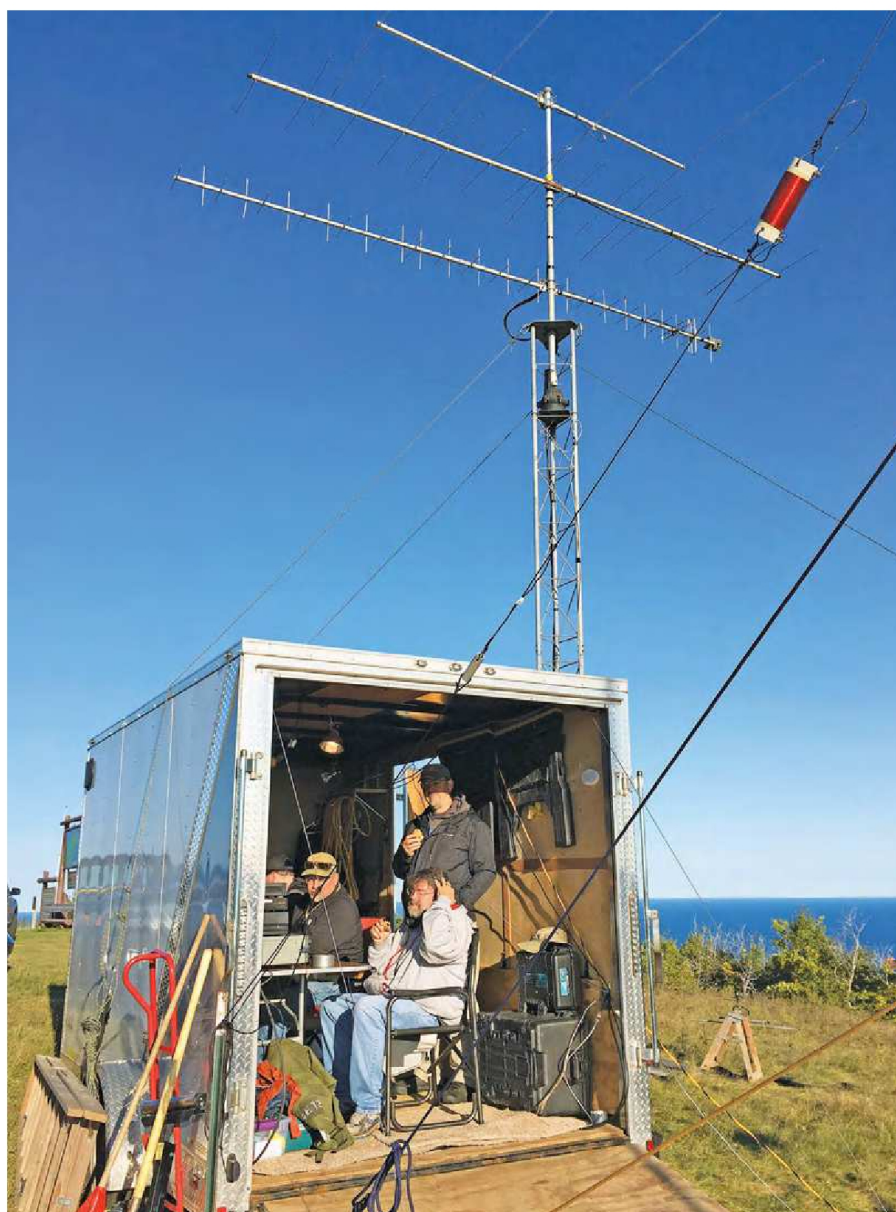
I’m a relatively new ham, but fortunately, Troy and the other operators have years of experience and piles of equipment to select from. The transceivers we decided to use were the Icom IC 7300, Kenwood TR-751A, Yaesu FT-857D, Yaesu VX-1R handheld, Yaesu FT-847, and Yaesu FT-625RD.

For antennas, we used an end-fed half-wave antenna supported on painter poles for 80 to 10 meters; a Hustler 5BTV for 80, 40, 20, 15, and 10 meters; a Collins Radio AS-2259/GR military antenna; a 35-foot guyed portable mast with a drive-on plate for inverted vs and raising the ends of long wires; a homebrewed KGØZZ 40/80-meter inverted-v dipole; a four-element 6-meter beam; a 14-element 2-meter Hy-Gain/Telex 214B-S beam; a horizontally or vertically switchable polarized 70-centimeter beam, and a horizontal 80-meter delta loop thrown together for this activation. Along the way, we made a low-cost 35-foot mast and drive-on mast plate. We also had to factor in extra rope for guying options, extra stakes for shallow soil, and the grounding grid.

Troy served as our technical support in erecting antennas and grounding systems. He also invited other ham friends who could help activate the VHF and UHF bands. Matt Okeson-Harlow, NM9O, provided IT, network, and logging capabilities.

Table 1
K8B EN67 Grid Activation — QSO Counts

Band	CW	SSB/FM	FT8	Totals
70 centimeters		8		8
2 meters	10	13		23
6 meters		2	40	42
17 meters			8	8
20 meters	1		201	202
30 meters	3		19	22
40 meters	2	21	332	355
80 meters		8	18	26
Totals	16	52	618	686



The operating station for the VHF/UHF team. From left to right, Troy, KB9AZZ; Barry, K8SD, and Thomas, AC9BJ.

Contacts Near and Far

By 4 PM Friday, we had the primary antennas up and were operating. We tried several different modes and bands, but a lot of our contacts were on FT8, as band conditions were not favorable. Days were beautiful and sunny with light winds (as we were warned), but it was nothing our setup couldn't handle.

I converted my 2004 Honda Odyssey van into a mobile operating station for the trip. With the antennas, generators, and fuel deployed outside the van, I had room to sleep alongside my clothes, food, and water supply. The other operators worked out of a trailer converted into an operating station and slept in their vehicles or headed back into town for the night. Despite band conditions, we had a lot of fun.

Visitors stopped by throughout the weekend and the sign we were required to post, per our agreement with the town, was useful in explaining our activity. Occasionally, a ham stopped by with a mobile

2-meter rig, Troy would use a handheld transceiver to make a contact, and we'd add them to the log.

We made 686 contacts (see Table 1) and, by the Wednesday after the event weekend, we were already receiving QSL cards in the mail. For a relatively new ham, this portable operation made for a more manageable and exciting "DXpedition" experience. By all measures, my team and I deemed it a success.

Photos by the author.

As a teen, Dan Brandner, N9DJB, was interested in everything science related, including electricity, magnetism, and electronics, and he followed that passion into obtaining a degree in chemistry and computer science. In August 2017, he passed both his Technician and General licensing tests in one day.

In January 2018, he retired from his career at Land O'Lakes, Inc., and was able to focus more on ham radio activities, particularly building and fabricating. He built the 35-foot mobile mast used in the 2018 ARRL Grid Chase, as well as the "Coil-Loaded 40/80 Meter Inverted V Dipole Antenna" project from Zed Zed's Workbench, which was used with that mast.

Dan Brandner's, N9DJB, operating position in his van.



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Erection of the 35-foot mast with drive-on plate and multiple guy ropes. On the side of the van is the banner created per the sign posting agreement, declaring the team's amateur radio activation of EN67 and the hours of operation.