

Worked All States: Single Rover

Bob Harder, WØBH, with Nelson Kilmer, NØLRA

The following material is a supplement to the main article that appeared in the February 2009 issue of QST.

The Dipole System

Nelson designed a modular dipole system made from an electrical outlet box and six SO-239 connectors. The box handles up to three sets of interchangeable wire radiators that attach to the box with PL-259 connectors. Number 10 AWG insulated electrical wire is a perfect fit for the center connector of a PL-259 and solders in easily. To put up the dipole, just toss a line over a tree branch, attach the radiators, feed line and ropes, then pull everything tight. (It helps to avoid confusion and incorrect assembly if the dipole halves are identified at the PL-259s with colored tape.) Nelson and I usually noticed a one or two S unit increase in signal strength comparing the dipole to the vertical. Thanks for a great idea, Nelson!



The NØLRA-designed dipole box in action.



A NØLRA-designed dipole box is easy to make out of common parts.

Photos from WØBH's Travels



Nelson, NØLRA, at his home station in Hesston, Kansas. Nelson is a professor of physics at Hesston College.



WØBH's 1969 Ford with 20 meter and 40 meter Hustler verticals and an overhead dipole at Ryan Park Campground in the Snowy Range in Wyoming. Lorna and black lab Windy are enthusiastic campers.



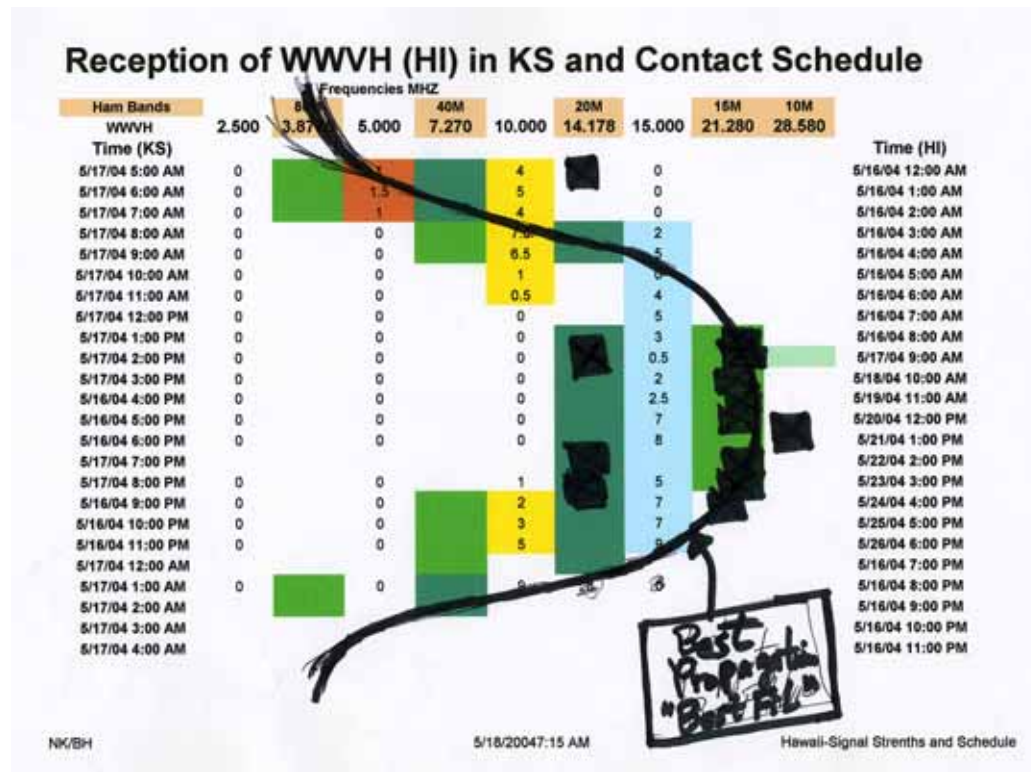
(Left to right) Lorna, JoAnne, NØQDE, and Nelson, NØLRA, getting ready to climb to our antenna site in Ketchikan, Alaska! The ham equipment was in the (heavy) maroon catalog case.



Contact #40 from the side of the road near Death Valley Junction, California. During our contact, two different tow trucks stopped to offer their services! It was a cool December day, but I guess we do look a bit "broken-down."



ARRL HQ is a must-see in Connecticut. And don't forget to guy your portable HF vertical from the inside so you can get out of the car in time for the tour.



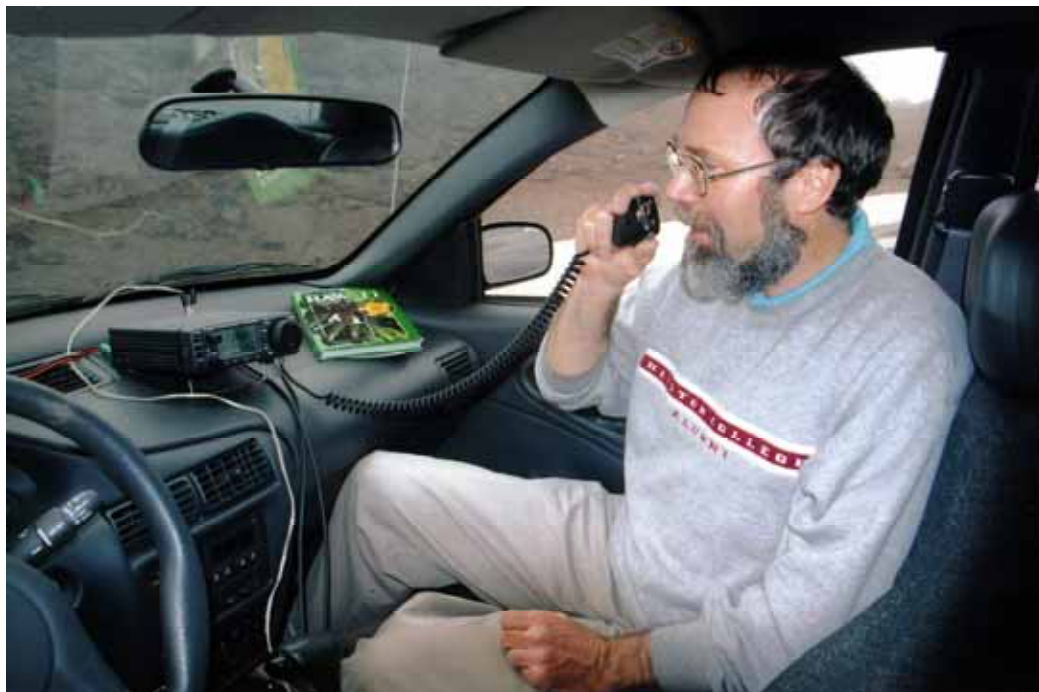
Nelson's WWVH predictions were right on target. The black squares represent actual contacts made. A 40 meter contact was also made, but is not indicated.



Here is a photo of the Haleakala Crater, Hawaii. At 10,000 feet, the top of the volcano remains well above the cloud layer over the Pacific. It is also possible to see the Mauna Kea and Mauna Loa volcanoes on the "Big Island" of Hawaii to the southeast.



Nelson was loud and clear on 20 meters from Bob's "shack" on the edge of the Haleakala Volcano. Bicycle riders, who took vans to the top then coasted 38 miles and 10,000 feet back down, often gave a friendly wave as they went by.



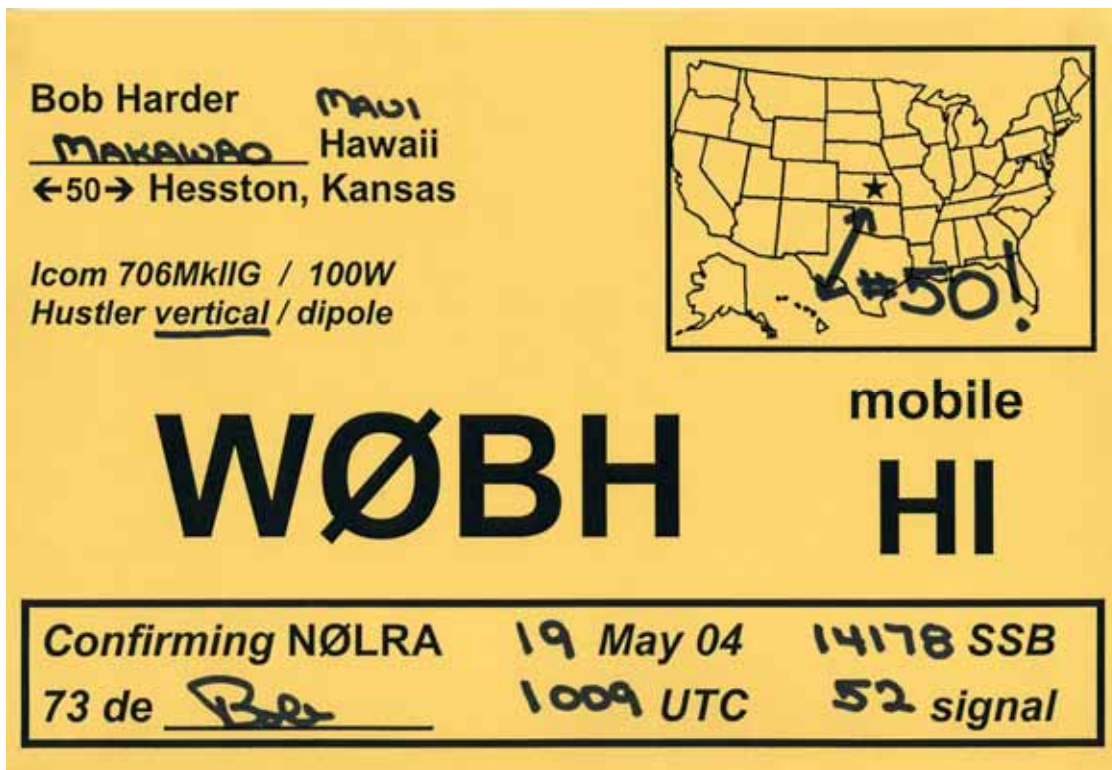
The first 15 meter contact from the top of Haleakala Volcano. Bob and Lorna "climbed" the volcano twice and made contact with Nelson both times. The ground clip attached to the ICOM IC-706MKIIG really improved tuning and performance.



Rivers of fog flowing downhill kept things interesting on a narrow, windy road through old lava flows on the side of the Haleakala Volcano. The photo also shows the usual antenna setup — 20 and 40 meters for HF and 2 m/70 cm for VHF/UHF.



Nelson, NØLRA (L) and Bob, WØBH, congratulate each other over a glass of Pog as Bob presents him with QSL cards representing the four-band Kansas–Hawaii contacts.



Contact #50 and WAS for Nelson. One needs to be an optimist for this type of project, so Bob made the cards in advance and just had to fill in the blanks.


WORKED ALL STATES

This is to recognize that Bob Harder (WØBH) and Nelson Kilmer (NØLRA) successfully made confirmed amateur radio contacts in all 50 states in the US.

The contacts were made with Bob Harder mobile in each of the 50 states while Nelson was at his base station at 210 S. Erb Street, Hesston, Kansas, 67062. The first state contact was made in Brinkley, Arkansas on August 4, 1993 and the 50th state contact was made at Makawao on the Island of Maui in Hawaii on May 19th, 2004.

Bob and Lorna Harder and Nelson and JoAnne Kilmer met on the Big Island in Hawaii to celebrate on June 23, 2004.

The WAS Award was issued on the 12th of August in 2004 recognizing the accomplishment.



There is currently no award for the Single Rover, but Nelson surprised Bob with one anyway!]

All photos courtesy Bob Harder, WØBH.

Table 1**The 50 Single Rover QSOs**

A list of all of the QSOs made between NØLRA (Hesston, Kansas) and WØBH in order to complete the WAS: Single Rover

QSO Number	Date	Time (UTC)	WØBH's QTH	Band & Mode
1	1993 Aug 04	0150	Brinkley AR	40 SSB
2	1993 Aug 04	1710	Roland OK	40 SSB
3	1994 Jul 04	2145	Ryan Park WY	40 SSB
4	1994 Jul 05	1920	Laird CO	40 SSB
5	1994 Jul 05	1931	Haigler NE	40 SSB
6	1994 Jul 05	2001	St Francis KS	40 SSB
7	1994 Jul 20	1727	Springfield MO	40 SSB
8	1994 Jul 20	2341	Cairo IL	40 SSB
9	1994 Jul 20	2353	Wickliffe KY	40 SSB
10	1994 Jul 21	2231	Clarksville TN	40 SSB
11	1994 Jul 22	2230	Maggie Valley NC	40 SSB
12	1994 Jul 24	2057	Mountain Rest SC	20 SSB
13	1994 Jul 24	2117	Satolah GA	20 SSB
14	1995 Jan 26	0000	Indianapolis IN	40 SSB
15	1995 Jan 26	2332	Chattanooga OH	40 SSB
16	1996 Jun 15	1649	Sioux City IA	40 SSB
17	1996 Jun 15	1654	N Sioux City SD	40 SSB
18	1996 Jun 15	1854	Bigelow MN	40 SSB
19	1998 Jun 19	2215	Jensen UT	20 SSB
20	1998 Jun 20	2233	West Wendover NV	20 SSB
21	1998 Jun 21	1830	Rogerson ID	20 SSB
22	1998 Jun 21	2340	Ontario OR	20 SSB
23	1998 Jun 24	0033	Westport WA	20 SSB
24	1998 Jul 03	0028	Troy MT	20 SSB
25	1998 Jul 05	0133	West Hope ND	40 SSB
26	1998 Aug 02	0201	Union MI	20 SSB
27	1998 Aug 03	0252	Beloit WI	40 SSB
28	1999 Jul 05	0431	Ketchikan AK	20 SSB
29	2000 Jan 04	0221	Gainesville TX	40 SSB
30	2000 Jan 04	1813	Alexandria LA	20 SSB
31	2000 Jan 04	2248	Kiln MS	20 SSB
32	2000 Jan 04	2345	Grand Bay AL	20 SSB
33	2000 Jan 05	2334	Port Charlotte FL	20 SSB
34	2002 Jul 26	0005	Portland ME	20 SSB
35	2002 Jul 26	0106	Portsmouth NH	20 SSB
36	2002 Jul 26	1630	Brattleboro VT	20 SSB
37	2002 Jul 26	1750	North Adams MA	20 SSB
38	2002 Jul 26	1900	Petersburg NY	20 SSB
39	2002 Jul 27	1504	East Benton PA	20 SSB
40	2002 Dec 19	2057	Death Valley Junction CA	20 SSB
41	2002 Dec 21	2025	Willow Beach AZ	20 SSB
42	2003 Mar 13	0414	Clayton NM	40 SSB
43	2003 Oct 13	2024	Danville VA	20 SSB
44	2003 Oct 14	0020	Brandywine WV	20 SSB
45	2003 Oct 14	2000	Baltimore MD	20 SSB
46	2003 Oct 14	2157	Newark DE	20 SSB
47	2003 Oct 14	2215	Deepwater NJ	20 SSB
48	2003 Oct 15	1804	Newington CT	20 SSB
49	2003 Oct 15	2117	Hopkinton RI	20 SSB
50	2004 May 19	1009	Makawao HI	20 SSB