

# The World Above 50 MHz

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## First EME Contact from Liberia

Assembling and operating a 2-meter EME station in a remote country can be quite a satisfying challenge. It often takes a good deal of ingenuity to transport antennas, rotators, masts, framework, a rig, amplifier, power supply, cable and all the other necessary gear, especially via commercial airlines. Some EME expeditioners, like W6JKV and K6MYC, have this down to a science. Others try whatever means are at hand. Eric Van Offelen, EA5GIY, met the challenge by involving young radio amateurs in Liberia in building and operating the station.

After making several business trips to that West African nation, Eric applied for a license and received EL2VO this past April. He then shipped four Tonna 11-element Yagis for 2 meters, an HF transceiver, transverter, brick amplifier, necessary coax and connectors with a batch of electronic equipment for a customer. Soon after, Eric met Father Joe Brown, EL2FM, director of the Don Bosco Polytechnic Institute and Peter Brenner, EL2CY, president of the Liberian Radio Amateur Association.

Eric learned that most of the Liberian hams had left the country during the recent period of civil unrest, and few of those who remained had home stations. They used an aging TS-520 and dipoles at EL2RL, the radio club of the Bosco Institute. Eric then proposed to the incredulous Liberians that they could assemble a station to bounce signals off the moon using the equipment he had brought and materials they could provide.

A group of enthusiastic young radio amateurs, including EL2AB, EL2DT, EL2JH, EL2JZ and Mr. Clinton, the teacher of metal works, soon constructed an H-frame with manual elevation and azimuth controls. Eric stayed in touch with EA2LU and others in the worldwide EME community. By May 14, everything was ready. The measured power output from the brick amplifier was 115 W when powered by a fully charged car battery.

Eric had difficulties checking into the 20-meter EME net, but the enthusiastic Liberian operators began calling CQ on 144.025 MHz anyway. A tropical rainstorm cut short the effort the first night, but the next morning was clear and the band was



Eric Van Offelen, EA5GIY, and some of the students of the Don Bosco Polytechnic Institute, assembling an array of four 144 MHz Yagis outside the school building in Monrovia, Liberia. EL2RL went on to make an EME contact with KB8RQ this past May. Eric hopes to return to Liberia and again put EL2RL on the Moon.

quiet. EL2DT started cranking out more CQs on the hand key, and much to everyone's surprise, KB8RQ came back loud and clear. The QSO was quickly completed amid great excitement. The group heard another station calling immediately afterward, but the rain started up again and they had to shut down. Eric returned to Spain soon after with his radios, but antennas, H-frame and cables are safely stored at the Bosco Institute waiting for another day.

Thanks to Eric Van Offelen, EA5GIY, for the story and the photographs. Jorge Raúl Daglio, EA2LU, wrote a longer account titled "Primer QSO via RL Desde Liberia" for his VHF-UHF-SHF column, which appeared in the July issue of the Spanish magazine *CQ*.

### ON THE BANDS

The most interesting openings for July involved the western states, whose loyal VHFers



EA5GIY (left) and EL2DT at the EL2RL operating position.

often feel left out of the exciting events that seem common in the rest of the country. Six-meter operators as far east as New Mexico had two chances to work Japan. Those in the Pacific Northwest found Hawaii on 50 MHz via sporadic E. Stations from Washington to Southern California enjoyed several days of tropospheric ducting into Hawaii on 144 MHz and higher. What a month to be on the West Coast! Conditions in the rest of the country were probably below par, but still exciting enough for many. Thanks to W1FIG, W1JJM, N1LQR, WB2AMU, KO4MM, W8RU, W9W1, W0OHU, N0LL, WP4O and SM7AED who contributed to the following summaries. Dates and times are UTC.

### 50 MHz and 144 MHz Sporadic E

There was sporadic E on the band somewhere in the US and Canada on more than 20 days of the month—at least five with double-hop conditions, but many reports complained that openings were generally scarce and of short duration. Spicing up the rather ho-hum conditions were a number of DX stations that could be worked via single hop, including ZF1DG, CO2OJ, KG4AU, KG4GC, VP5JM and XE1NVX (EK09). Puerto Ricans WP4O, KP4EIT, KP4IA, KP3A and possibly others made numerous stateside contacts as well during July, including some double-hop contacts to the western US.

The opening of July 12 in the eastern half of the US was remarkable because of the apparent intensity of the E-layer ionization. WA3WUL (FM29) was among those who noticed very strong backscatter-like signals. Bruce worked several stations this way while beamed south, including some to the north of him, with raspy and wavering signals. Most of these contacts were over paths shorter than normal single-hop distance but longer than ordinary tropo.

Two unusual double-hop openings linked Hawaii and the western states for the first time in many years. On July 4 at 0341, Lance Collister, W7GJ (DN27) in Montana, completed a contact with WH6XM for his fiftieth state. There were no other reports during this event, but plenty from the opening to Hawaii on July 15. As early as 2315, Colorado stations were working KH7FV and others in Hawaii. N5JHV in New Mexico made the grade by 0130.

This Month	
October 3	Western States Weak Signal Society (Santa Clara, CA)
October 3	Mid-Atlantic States VHF Conference (Willow Grove, PA)
October 4	Good EME conditions
October 10-11	ARRL EME Contest
October 15-18	Microwave Update 1998
October 22	Orionids Meteor Shower Peaks

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