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On the Cover:
Ashraf Chaabane, KF5EYY, operator at 3V8SS in Tunisia, with CQWW Contest certificate. Details on page 84.

Ux

CQ 240821 AUG 12
ROBERTO PIOL
ED ESPOFLORIDA AP 1-B FLORIDA
C NEBRIN CJON MAFALDA MALDONADO
CARACAS DC 1050
VENEZUELA

QRP in the South Pacific

BY CAM HARTFORD,* N6GA

This month we turn our attention to the South Pacific for a couple of QRP adventures. Remember the *Kon-Tiki*? (See opening photo.) It was the raft used by Thor Heyerdahl to sail from Peru to the Polynesian islands in 1947. His purpose was to show that the South Seas islands could have been populated by people who traveled from South America. To this end, he built the raft using materials and techniques that would have been available to the native population at the time, using balsa logs and other materials gathered locally in Peru. Heyerdahl permitted himself a deviation from the "original equipment" track by including some modern-day communications equipment. This consisted of transmitters for the 40-, 20-, 10- and 6-meter bands. These were tube-type rigs with about 10 watts input, which would fall pretty close to our current definition of QRP. The receiver they carried was a National NC-173. After the first 20 days of the trip, communication via ham radio frequencies was established and continued for the remaining 80 days of the voyage. An article describing the radio operation aboard Kon-Tiki was published in the December 1947 issue of *QST* magazine.

I was reminded of the *Kon-Tiki* adventure by Gary Davis, KD9SB. Gary wrote: "I have recently completed a 20-meter 1-watt output QRP transmitter for use on my sailboat (photo A). My transmitter was inspired by Thor Heyerdahl's 1947 *Kon-Tiki* balsa-raft voyage across the Pacific from Peru to Polynesia.

"The solar-powered transmitter has one sixth of the power output of the *Kon-Tiki* raft's 20-meter 6-watt transmitter. The transmitter has a loop-through connection for the receiver, weighs 5.5 oz., and has diode protection for high SWR. It can also be built for 40 meters, with 1.5 watts out. The inductors for the oscillator, RF amp, and PI output filter are off-the-shelf miniature parts from Mouser Electronics."

The schematic of Gary's transmitter is presented in fig. 1. For a complete parts list, contact the author at <gdavisKD9SB@sbcglobal.net>.

Gary uses a Yaesu VR500 pocket communications receiver with his homebrew transmitter. His best DX so far was with KD6JUI, a distance of 1886 miles. For an antenna, Gary uses a Zepp that is fed with window line. A full description of the antenna can be found in his article entitled "A 20 Meter Antenna for Sailboats," published in the October 2006 issue of *QST*.

CEØ/YV5IAL: A QRP Digital Portable Mini-Dxpedition

If *Kon-Tiki*'s path across the Pacific had dipped about a thousand miles to the south, it might have encountered Easter Island, from where our next story comes. Many of us dream of someday doing a portable operation from an exotic location. Roberto, YV5IAL, has done just that, and not from any ordinary, remote locale (photo B). Easter Island claims to be the most remote inhabited island in the world. Roberto journeyed there for a QRP mini-DXpedition. Here's his account:

"On the first days of January 2010, I made my dream come true—transmitting from an exotic DX entity in the middle of the Pacific Ocean. Easter Island is the most isolated island on the planet, thousands of miles away from anywhere.

Easter Island is more than 14 hours by plane from Caracas. The airfare is very expensive and the maximum weight of luggage allowed is less than 40 pounds per person.

Thor Heyerdahl sailed his raft Kon-Tiki on an adventurous voyage shared by hams around the world. National Radio provided the receivers and made sure everybody knew it, as seen in this ad from the September 1947 issue of CQ.

*1959 Bridgeport Ave., Claremont, CA 91711
e-mail: <qrp@cq-amateur-radio.com>

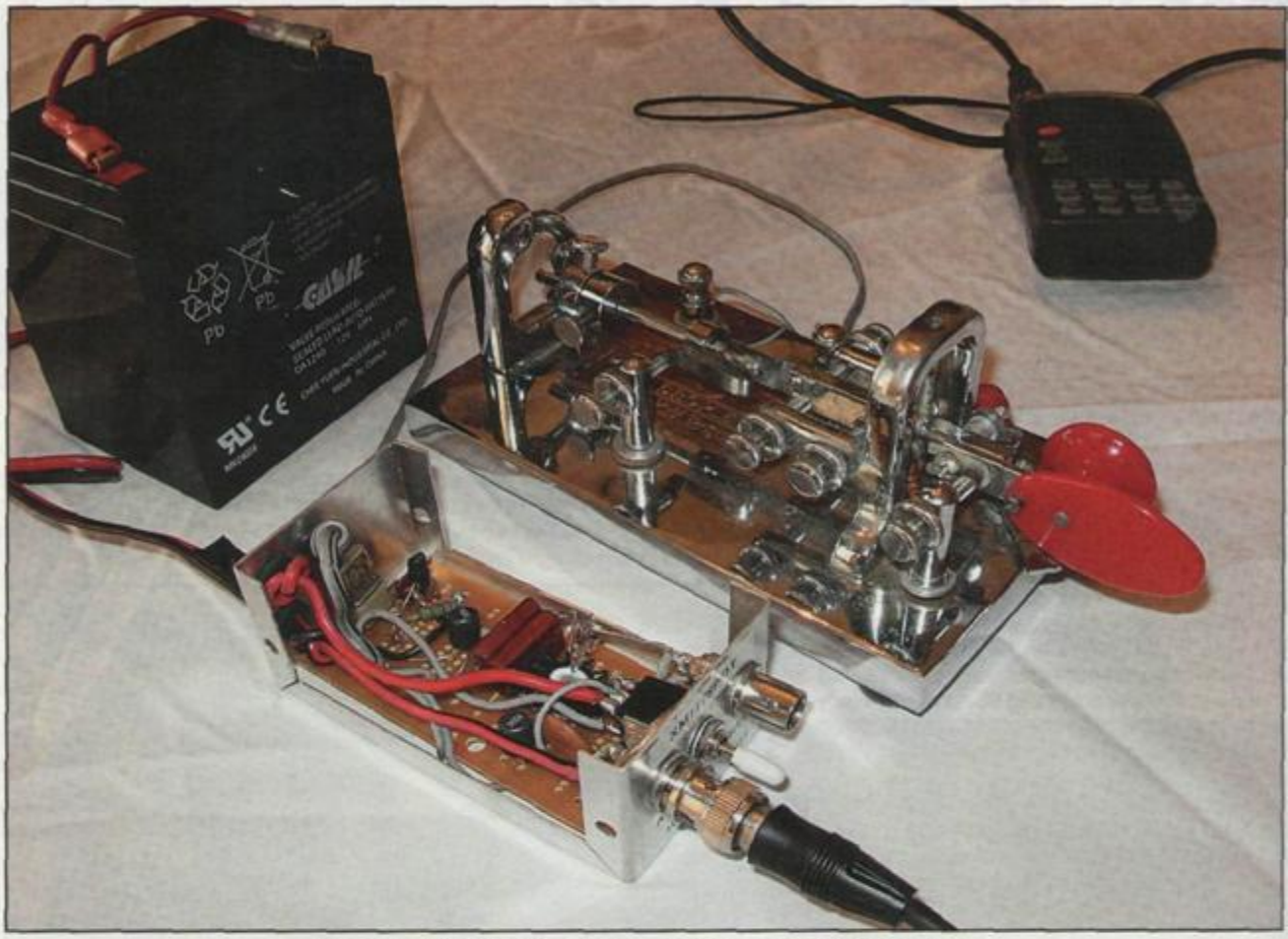

Photo A– KD9SB's Kon-Tiki inspired 20 meter CW transmitter.

I decided to work QRP, because the Yaesu FT-817ND, portable antenna, and accessories weighed less than 14 pounds, and the full station fit in two small bags (one for the radio and accessories and another for the antenna). I decided *not* to take the 100-watt station (Yaesu FT-857D and accessories) because the weight would have been twice or more. . . .

"After 20 hours of travel, I arrived at the hotel in Hanga Roa (the only town on the island). Immediately, I asked permission to install the antenna. Thirty minutes after, the Buddipole antenna was installed on the balcony and the radials (counterpoises) were spread all along the wood hotel room railings. CEØ/YV5IAL, QRP digital portable station was ready to start the First World Easter Island PSK activation (January 9 to 11, 2010).

Roberto's station components can be seen in photo C. His QRP PSK station consisted of an FT-817 and an HP 1910 IPAQ Pocket PC running PocketDigi software. Roberto continues with his observations about operating low power from a place where your signal has to travel for thousands of miles before it gets to the first available ham stations: "Wasting valuable time insistently calling DX will not work. Never forget that you're at a disadvantage. Only good antenna stations will be able to copy you. Avoid competing with another station, and wait patiently for the DX station calling CQ again."

When it came time to pack up and leave, Roberto's log included QSOs with the USA, Hawaii, Marshall Is., Uruguay, Argentina, Chile, Colombia, and Brazil. His most distant QSO: V73RS, 9750 km (6,058 mi) for 2437 km/watt. A very good show for a QRP rig and a portable antenna!

Flyweight Feedline

The subject of Flyweight Feedlines surfaced on QRP-L a couple of months ago. That prompted me to make a trip to the garage to retrieve some lightweight stuff with which I had experimented. My motivation for fabricating this feedline is now lost in the mists of time, but I think it had something to do with trying to make a portable antenna

Photo B– YV5IAL's QSL card from Easter Island.