

The
DX
Magazine
The Bi-monthly Magazine for DXers

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T3ØPY & T3ØSIX

T3ØPY/T3ØSIX A Dream Came True Brazilian Hams in Western Kiribati

by Alex Dalmasso, PY2WAS

In mid-November 2011, the idea of a great DXpedition to the island of Tarawa, Western Kiribati began to come true. The discussions were initiated by PY2PT, PY2XB, and PY2WAS, but immediately other notable names/callsigns of Brazilian ham radio operators joined with the idea that initially foresaw the formation of a team of approximately eight people.

From January 2012 on, conference calls via Skype started, occurring once a month with the purpose of discussing all details relating to the DXpedition, such as licenses, logistics, expenses, checklist, schedule of operation, press releases, etc. Although most of the DXpedition members had already participated in other events of this kind, it is no exaggeration to say that there had never been such planning and care regarding every detail, with the commitment of all participants.

Regarding the team members, we had three who had to drop out along the way, which was regretted by all: PY1KN Marcelo, PY2AAZ Fabio, and PP1CZ Leo. Each one had personal or professional problems that would not allow them to go, but the project had to move on. As such, the team was formed with the participation of PT2OP Orlando, PY2DM Mamiro, PY2PT Ricardo, PY2XB Fred, PY2WAS Alex, PY3MM Miguel, PY4BZ Fernando, PY5HSD Herminio, PY7XC Jim, and PY7ZY Ciro. As such, the T3ØPY team that would be on HF as T3ØSIX would operate on 6 meters directly from the island of Tarawa, Western Kiribati, between October 16–25, 2012.

In August 2012, after several conference calls, there was a large meeting with most of the team in the city of Mogi das Cruzes, at the site of PY2DM, in order to assemble and test all equipment and antennas that would be used on the DXpedition, providing a better division of freight to be transported by the participants. It was a very enjoyable weekend, and the team had the valuable help of PY2ZXU Thomas. That weekend the



Some of the team meet with the President of Kiribati

vertical antennas for 80m and 160m were put together and the two vertical SteppIRs were tested extensively.

In late September 2012, after all had been accomplished, airline tickets purchased, including donations from some DX clubs, companies, and many colleagues who supported the DXpedition, the trip began for some of the participants: PY2XB and YL, and PT2OP to New Zealand. The others followed by other routes from the U.S. to Australia. The meeting point, defined by the group, was in the city of Nadi, Fiji Islands, from Oct 10–14, 2012. Some participants also required licenses from the government of Fiji, so with the help of a local colleague, 3D2TR Tevita Rokobar, former minister of communications, they obtained the following licenses—3D2OP, 3D2ZY, 3D2XC, 3D2XB, 3D2PT, and 3D2AS—which were used sporadically during the stay in Nadi.

Despite the stress experienced by some regarding the difficulties with transport of luggage and payment for excess weight (e.g., Air Pacific allowed only one checked bag of 23 kgs), all of the team was ready for the trip to Tarawa Island, which, after two postpone-

ments by Air Pacific, occurred at 04:00 a.m. (in Fiji time), arriving in Tarawa Island around 07:30 a.m. (local time in Tarawa). To inform the reader, the time difference in Tarawa reached +15 hours relative to UTC.



Upon arrival at Tarawa, the team was greeted with flower garlands by Veronica (owner of Hotel Tabon Te Keekee), her team, and T3ØMK Melody. The heat on the island was impressive ... something like a "mix" of Sahara, Kalahari, Atacama, and Gobi in the summer!

PY2WAS and YL, PY4BZ, and PY5HSD were transported to Otintaai Hotel, while PT2OP, PY-2DM, PY2PT, PY2XB, PY3MM, PY7XC, and PY7ZY were transported to Tabon Te Keekee Hotel.



Team crossing the canal to arrive at Tabon Te Keekee

Both teams immediately started to assemble the vertical SteppIRs to put two stations on the air, which was effectively done. The task at Otintaai was easier with only one vertical antenna to be assembled.

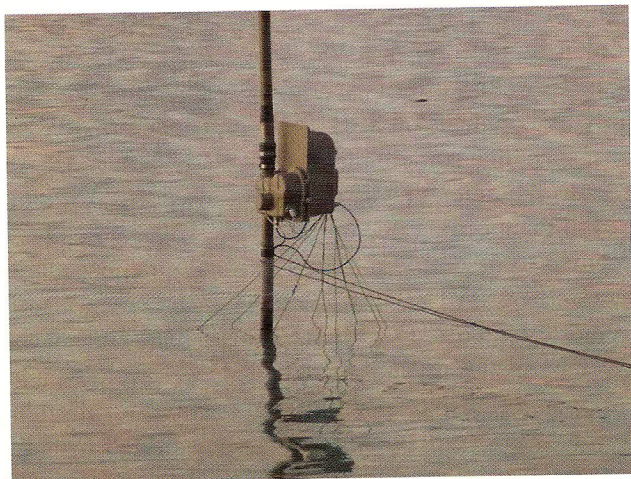
The tide was "friendly" for us, as it was exactly in the morning when it was low and permitted the team to walk over the bottom of the lagoon to fix the antenna mast. Nevertheless, in spite of the suitable SWR (1:1), there was a problem with the 80m coil, which drasti-

cally reduced the reception. Initially, the team was fooled by the proper SWR, thinking of bad propagation. However, after nearly four hours, operating with only five contacts on SSB, there was no alternative but to suspect that something was wrong. However, the access to the antenna was only possible during daylight and in the morning due to the tide. Therefore, the team decided to assemble the 20m vertical antenna, manufactured by PY1YB for the team that operated from Mayotte Island (TO2FH) in 2011. This antenna was taken by the group and given to T3ØMK Melody, a local operator, also responsible for a school for disabled people. This vertical antenna was assembled over the fence toward the lagoon. Despite the inappropriate position, as it was too close to the building, its performance was infinitely superior to the SteppIR, demonstrating that there were problems with the SteppIR. The next day, after checking the coax and connectors, we decided to do a by-pass in the SteppIR 80m coil and then it started to perform very well, up to 40m.



Antennas close to the water at Tabon Te Keekee

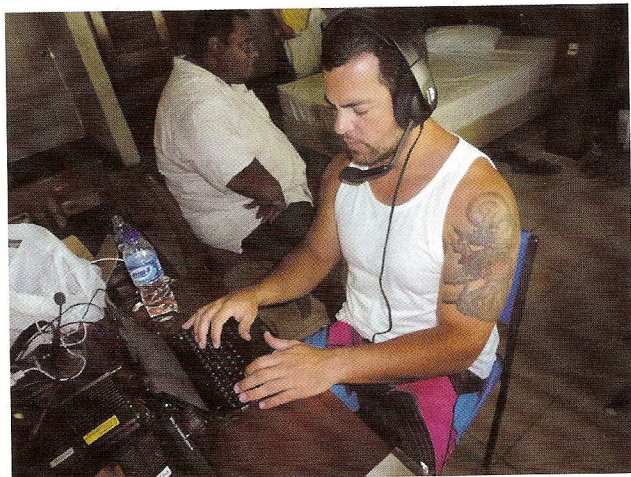
Meanwhile, in Tabon Te Keekee, the arrival of the group was rather more complex, since it was necessary to cross a canal, with the help of a boat, putting up all the equipment and antennas. The work was also much more thorough, despite the group being larger. It was necessary to assemble the vertical SteppIR, the vertical S9, the verticals for 80m and 160m using two Spiderbeam 18m masts, and one 7-el. antenna for 6 meters to attempt EME (Earth-Moon-Earth). Besides these antennas, an antenna for the reception on 160m was accomplished, which proved to be quite efficient. There were almost two days of exhaustive work under intense heat. All precautions were taken to prevent interaction among the RF antennas, and only during the digital mode operations was there was slight interference that despite all efforts could not be remedied. Two stations were assembled to work from 10 to



Closeup of the antenna at Otintaa

160m and one station was dedicated to work 6m only, which was used especially by PY2DM and PY2XB.

The idea of having two separate teams converged to remedy reducing the RF interaction among the stations, enabling even working CW and SSB on the same band at the same time. The straight-line distance between the hotels was 4km, while on land the distance was 11km. The work was done with discipline and determination by all participants, as each one was scheduled to work three hours and rest six hours. Although



PY4BZ in action

it may seem easy, the task became harder during the coming days, as, for example, the operator worked from 06:00 p.m. to 09:00 p.m. and returned to his room but was not able to sleep enough. At 03:00 a.m., in the dawn, he had to take the operating position and remain there until 06:00 a.m., when he literally was in "pieces," would rest, and barely blinked. It was already noon, having him take up his turn again ... and so forth. Depending on the intensity of the pile-ups and the energy used by the operator to discern the callsigns, three hours of operation could be quite exhausting.

Two days later, the group was visited by another local operator, T3ØTT Jake, preacher of a church in Tarawa. After that, Melody and Jake began to monitor the entire operation, at either the Otintaa or the Tabon Te Keekee. Both became great friends and admirers of the organization orchestrated by the whole team. In Brazil, PY1NB Filipe consolidated the logs sent by the teams from each hotel and uploaded them to Club Log. Filipe proved to be a great pilot station, very much helping the operation, which suffered from the shortcomings of Internet and inefficiency of radio communication by VHF between the teams.

Regarding the operation itself, it is important to highlight the following points:

- It was absolutely stunning the signals of the Japanese stations in Western Kiribati (T30).
- The propagation was great to all continents of the world, because depending on the band and time, we were able to contact all regions of the planet.
- It was a pleasant surprise to note the number of contacts with South America and especially Brazil, totaling more than 1000 QSOs of the approximately 40,000 QSOs made by the team (39,827 QSOs to be exact).

The most complex bands, as was expected, were 160m and 6m. On 160m we tallied 299 QSOs. On 6m the propagation was more generous, and 381 contacts with several countries were made.

The final ranking of contacts to T3ØPY is as follows (the contacts on 6m were accomplished by T3ØSIX and therefore are not displayed below):

First QSO: 10/16/2012, 00:05:21
 Last QSO: 10/24/2012, 12:00:38
 Total QSO's: 39,827
 Unique Calls: 14,112

Band	CW	SSB	RTTY	TOTAL
160	299	0	0	299
80	860	859	0	1719
40	1685	2579	51	4315
30	3191	0	330	3521
20	3312	4278	672	8262
17	1769	2438	228	4435
15	2272	4308	345	6925
12	1762	2085	270	4117
10	2145	3885	204	6234
Totals	17295	20432	2100	39827

The T3ØPY operation was the subject of an article in a local newspaper (The Kiribati Newstar) which detailed in the local language the odyssey of the Brazilian operators so far from home. Also on the morning of Oct 22, 2012, thanks to Melody and Jake, the President of Kiribati, Mr. Anote Tong, received part of the DXpedi-



Melody, T3ØMK



Team with Tevita Rokobaro

tion team, taking the opportunity to reinforce his friendly assumptions about Brazil and also to discuss the possibility of using amateur radio as an official means of communication among the several islands (some with only a few dozen people), given the impossibility of adopting a cellular phone system due to its high cost.

May/June 2013

On the morning of Oct 24, 2012, the team was forced to disassemble the vertical SteppIR at the Otintaai due to the tide, since our departure would occur during sunrise the day after and there would not be another chance to disassemble it during daylight. Thus, the Otintaai team only left up the 20m vertical antenna, which was used on other bands through an antenna tuner.

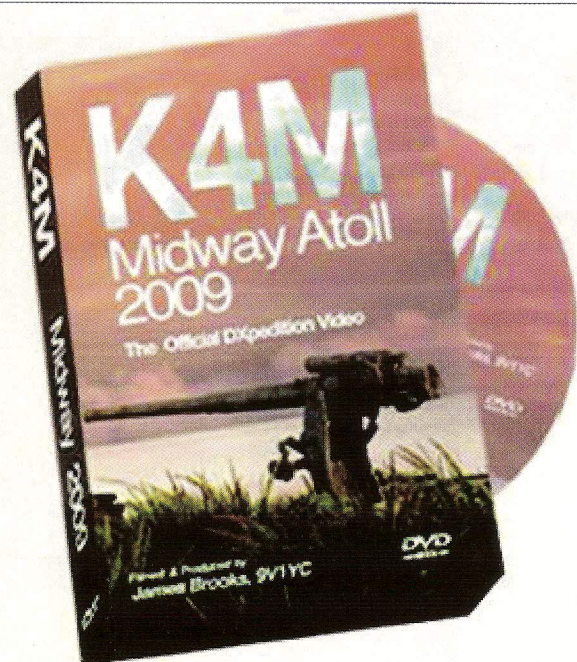
The team managed to extend the removal of the antennas at the Tabon Te Keekee to the end of the afternoon of Oct 24, 2012, leaving a station operating until almost midnight (local time in Kiribati).

The team took the chance to offer a Yaesu FT-897D transceiver, a Kenwood antenna tuner, one of the laptops used on the DXpedition, the 20m vertical antenna manufactured by PY1YB, and many coaxial cables to Melody and Jake.

On the way back, everyone was exhausted, but with the awareness that they gave as much of themselves so that the operation was an example of that with planning and organization, everything is possible.

Finally, the T3ØPY/T3ØSIX team thanks the Mediterranean DX Club (MDXC), all of those who contributed with donations, and especially Radiohaus (a Brazilian ham radio dealer), which has not failed to help us financially and made possible this expedition.

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