E51LYC from Pukapuka Atoll (OC-098), North Cook Islands

By Cezar Trifu, VE3LYC

I operated from Pukapuka Atoll between May 12 and 23, 2017. Located about 1200 km north of Rarotonga, in the North Cook Islands, this remote atoll counts toward the IOTA group OC-098, which was confirmed by only 8% of the IOTA members prior to this operation. Last activation from this group was in Jan 1995, more than 22 years ago, and it ranked at the time #30 on the IOTA Most Wanted Listing out of 1123 references. The atoll has three dry islets and a sandbank. The landing strip is on Motu Ko, which is uninhabited. The radio activity took place from the south side of Wale, close to the Pukapuka administration offices.



With Milan (E51DWC), Doug (E51DLD), and Andy (E51AND), left to right, upon arrival in Rarotonga.



Pukapuka atoll administration offices

I used an Icom IC-7000 with 100 W and a multiband wire vertical antenna. My luggage to and from Pukapuka was limited to 30 kg by Air Rarotonga, of which 20 kg against a fee. Propagation conditions were best during the first 3 days, May 12 to 14, when I was able to log about 3,400 QSOs. During the remainder of my stay I logged another 2,200, for a total of 5631 QSOs with 79 DXCC in 6 continents. More than 76% of these contacts were in CW, while the rest in SSB, using all bands from 40 to 10m. The number of stations and contacts logged per continent, and band statistics are shown in Tables 1 + 2.

Table 1. Continental distribution of stations and OSO logged.

CONT	STNS	%	QSO	%
AF	9	0.3	12	0.2
AS	1485	44.9	3064	54.4
EU	848	25.6	1077	19.1
NA	832	25.1	1263	22.4
SA	22	0.7	31	0.6
OC	114	3.4	184	3.3
TOTAI	3310	100.0	5631	100.0

Table 2. Distribution of QSOs by band and mode.

BAND	CW	SSB	TOTAL	. %
40	557	17	574	10.2
30	788		788	14.0
20	1741	921	2662	47.3
17	773	223	996	17.8
15	417	153	570	10.2
12	38		38	0.7
10	3		3	0.0
TOTAL 4317 1314		1314	5631	100.0



CQ de E51LYC!

One of the difficult paths was to Europe. During several days, 20 m band appeared reliable, providing some propagation between approximately 5 and 8:30 UTC to various areas of the old continent. While I did operate both CW and SSB at first, I settled for the former mode, because it seemed easier for my signals to be replied to. Every day I looked for possible openings to Europe between 12 and 16 UTC on various bands. While I was able to copy lightly some activity on the bands from 40 all the way to 17m during this period of time, I was only able to log some EU stations during this period of

time towards the end of my stay, on May 21 and 22, but only on 40 and 30 m. The top five DXCCs by number of stations were JA, K, UA, DL, and I, totalling 75% of all stations logged, followed by UA9, VK, VE, UR, and SM (Table 3).

Table 3. Top DXCCs by number of stations logged.

#	DXCC	STNS	%
1	JA	1367	41.3
2	K	747	22.6
3	UA	162	4.9
4	DL	116	3.5
5	I	89	2.7
6	UA9	70	2.1
7	VK	61	1.8
8	VE	59	1.8
9	UR	55	1.7
10	SM	54	1.6



Coconut water is rich in electrolytes and best for rehydration.

Given the fact that the propagation conditions were tough, I noticed that some stations decided to beat them using either remotes located closer to me, or outright third parties who called on their behalf. When signals from European stations were typically coming at S1 to S3, all with a certain QSB, and many of them with some flutter, it was impossible to accept that European callsigns whose signals came at S9+10dB or stronger, without any QSB or flutter, were legitimate. I removed from the log several QSOs which fell unquestionably into these categories. I believe that having kept them would have harmed the integrity of the IOTA Program. I later confirmed, by direct communication with the respective stations, that my suspicions were correct, and they had indeed used remotes.

Since propagation conditions to Japan were good for long periods of time during the day, many Japanese stations seemed compelled to compete with themselves and each other for who will log me on the most band/mode slots. This might have been acceptable in view of the Club Log's Super League competition, where hams can battle one another on the largest number of band/mode slots with various operations within

a moving 12-month time window. However, E51LYC was not among the respective operations! Additionally, North Cook Islands are operated from virtually every year, and the proximity to Japan renders this location rather common for the DXCC program. Moreover, this operation was clearly directed at the IOTA chasers and one contact would have sufficed for credit, regardless of band and mode.

However, since I never explicitly indicated prior to the operation that chasers should limit their QSOs, I went along with the above for a few days. Later on, however, I alternated periods of time when I accepted any call to periods when I would only take new stations, who never logged me before. The chasers understood my intentions pretty quickly, and acted accordingly. This allowed a total of 1367 Japanese stations (41%) to log 2866 QSOs (51%). Worth mentioning, 126 JA operators - or more than 9% of all JA stations - logged five or more QSOs each, totalling 27% of all contacts with Japan!



Cottages on the south side of Wale

I would like to thank Andy (E51AND) for his help with the logistics. I remain indebted to Milan (E51DWC) and his family for hosting me during my stay in Rarotonga. A huge thank you to Pio Ravarua for his invaluable assistance on the island, but also for sharing with me some of the local legends, myths, and facts of life. Johan's (PA3EXX) help at various stages of the project is also acknowledged. I wish to express my gratitude to the German DX Foundation, DX News, International Radio Expedition Foundation (IREF), Icom, Clipperton DX Club, CDXC: The UK Foundation, Swiss DX Foundation, RSGB, EUDXF, The Daily DX, and DX World who generously supported this project. I remain indebted to Al (W3AWU), Toshi (JM1PXH), and Mike (W5ZPA) for their exceptional support, to the top donors AB6QM, DL6DQW, JF4VZT, JJ8DEN, K9RR, KD1CT, KO8SCA, N4WW, PA3EXX, PT7WA, SM5NXS, VE7QCR, VK2DX, WC6DX, and many others who offered financial assistance.