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IOTA DXpedition

VE3LYC signs CE4A from
the Rock of Pupuya



CE4A DXpedition to the Rock of Pupuya

Activating a small rocky island off the coast of Chile for IOTA



Camp site, with Christian (left) and Cezar in the foreground.

PLANNING. In March 2011, Dino Besomi, CE3PG and I started to plan an operation from the rock of Pupuya, under the auspices of the Radio Club of Chile (RCCh). The island, which counts for the SA-095 group under the RSGB's Islands On The Air (IOTA) programme, is located about 1km from the mainland, a short boat ride from the fishermen's hamlet of Matanzas. Home to about one hundred people, this picturesque site is situated some 180km west-south-west of Santiago. This coastal region is one of the preferred windsurfing spots in Central Chile, due to its winds that commonly generate high waves throughout the day. Two previous attempts by other amateurs to activate Pupuya were unsuccessful due to its rocky shores and difficult, wet landing conditions.

After I received the radio licence from Subsecretaria de Telecomunicaciones, Dino applied on behalf of RCCh and we received the special callsign CE4A for a radio operation from Pupuya. A landing authorisation was also required from DIRECTEMAR – Pichilemu Harbour, Armada de Chile.

In charge of the transportation logistics to and from the island, Marisa Tobella, CE2MT quickly became the heart of this operation. Her enthusiasm, energy and commitment to the success of this expedition were second to none. She travelled to Matanzas and hired a well-respected local fisherman, Manuel Berrios. The local community had suffered a couple of fatalities and some major damage when hit by a tsunami in early 2011, following a large earthquake. Manuel's boat was destroyed in the process and he now had a new fibreglass

one named after his daughter, *Fernanda Olivia*.

At the end of October, Dino had to bow out from the landing team and was replaced by Christian Gerhard, CA3TAM. However, Dino remained instrumental in securing the landing authorisation before the start of the expedition.

EQUIPMENT. I was welcomed at the RCCh in Santiago by numerous amateurs on 19 November. I brought with me two

Icom IC-7000 rigs with two multiband, wire verticals (one of each as spares). Power equipment included three gel batteries and two gas generators (one as spare). Dry-bags and sealed, large waterproof drums were to be used for the transportation of the equipment, food, water, gas and various personal items to and from the island. All the equipment was carefully checked one more time before loading it onto two trucks, driven by Christian and Marisa. We decided that the table and chairs were inadequate and it was Juan Contreras, CE5PHI who took charge of finding replacements and bringing them to Matanzas.

START OF THE JOURNEY. I travelled with Christian and the trip gave us the chance to get to know each other better. Several members of the RCCh, some with their families, welcomed Marisa, Christian and I at OMZ, the local camp site, inviting us to a barbecue dinner. It was very late when Juan arrived with the operating gear. I was provided with a one-man



CQ, CQ de CE4A, SA-095 New!

tent and a sleeping bag, the same as I was supposed to use on the island. However, the night was so cold that without a mat, the flimsy sleeping bag on the cold sand made it very hard for me to sleep. I was up at the daybreak.

After a quick breakfast on 20 November, we got organised taking everything down to the beach and then bringing Manuel. Aside from him, the boat crew included Beto, Paolo and Manuel junior, his son. The CE4A team comprised Christian, Juan and I. It didn't take long for the large white rock of Pupuya to come into sight, with its rugged shores. Manuel gave instructions to his crew to secure the boat by anchoring it at three points, including one on a large rock that was part of the island. All of us, with the exception of Manuel, changed into wetsuits, filled the sealed drums with various gear and transported them by swimming the last 50m to the island. Protected by the wetsuit, the short swim in the 10°C ocean water was invigorating. Once the contents were unloaded, the drums were brought back to the boat for the next transfer until everything made it to shore. Everything and everyone arrived on Pupuya in good condition except for one of the gas canisters, which got just a little wet inside one of the drums.

SETTING UP. Christian and Juan put up the tents while I worked to set up the rig and antenna. The 10m vertical mast was installed as far as possible from a 20m sharp rising cliff. We were all curious to find out if this cliff would obstruct the propagation towards the Far East. CE4A was on the air shortly after 1800UTC and the first QSO was with 7Z7AA, AS-191! A little over a couple of hours later, JA1BPA was the first station from Japan in the log, coming over the long path. In the first 24 hours I was able to log over 1,250 QSOs.

CONDITIONS. During daytime, conditions on 10m appeared the best. The high maximum

TABLE 1

Continent	QSO	%	STN	%	DXCC
AF	15	<1	13	<1	10
AN	1	<1	1	<1	1
AS	479	20	378	21	13
EU	1313	54	950	52	38
NA	410	17	304	17	5
OC	31	1	23	1	5
SA	161	7	139	8	10
TOT	2410		1808		82
No.	DXCC	#QSO	#STN		
1	JA	405	316		
2	K	356	264		
3	I	244	166		
4	DL	218	145		
5	F	96	69		
6	UA	93	76		
7	UR	75	67		
8	PY	71	58		
9	EA	72	51		
10	G	62	45		

useable frequency (MUF) and solar flux index (SFI) values indicated that propagation on any other band below it wouldn't be nearly as good. Long CQs with modest results on 12, 15 and 17m proved just that. However, later in the day (and for some time after sunset), the 20m band was very rewarding, while at night 30 and 40m were wide open.

The first day was relatively calm but, as the night fell, millions of small flies would appear out of nowhere, attracted by the faintest source of light, such as the radio's LCD or my head-lamp. In a matter of minutes everything became covered in a dense layer of insects. I couldn't see, write or breathe. Since the operations tent didn't have a sewn bottom, nothing worked to keep the insects out until we were able to replace the white light of the head-lamp with red light, while keeping a white light lamp outside the tent. During the next couple of nights the weather got very windy, and the flies mostly disappeared at night. However, I continued to use the red light head-lamp to avoid any potential nuisance.

OUR LOCATION. Despite its small area of only 1 km², Pupuya is a very densely populated bird paradise. It has a colony of Guanay cormorants several tens of thousands strong, along with Inca terns, Peruvian boobies, Peruvian pelicans, turkey vultures and Humboldt penguins. Numerous sea lions lay on the rocks, rapidly moving toward the ocean when humans approached from afar. We were constantly under bird droppings and a fine powder, a mixture of dust and bird excrement covered everything! From more than 30°C under the daytime sun to barely 3°C at night, the huge temperature variation led to condensation, turning the fine dust into an oily and acidic fluid that adhered to everything inside and outside the operating tent.

The home-made, multi-band wire vertical antenna was tuned on all bands from 10 to 40m during manufacture so that it wouldn't require an antenna tuner. The aforementioned acidic fluid had a particularly adverse effect on it, rendering it off-tune late in the last night on the island. Cleaning the wires seemed a long and tedious job and I felt very tired. By waiting about an hour or so for the first rays of the morning sun, the paste dried quickly and allowed me to continue operation.

SUCCESS. We spent three full days on the island and 55 hours on the air. Setting up camp and taking it down took quite some time due to careful cleaning, packing and the numerous transports made to and from the boat. I only slept a total of five hours, in two sessions, but did take some time off on our third day to examine the amazing fauna from up close. Climbing the narrow rocky ledge to the south of the island, we were quickly atop the high cliff, right in the



View of Pupuya Island from the mainland.



On the way to the island.



Our operations tent.

middle of the cormorant colony. Unsure of our intentions, the birds moved away, leaving behind thousands of nests with their precious content exposed: two or three chicks or eggs adorned each nest! Once the cormorants realized that we were no threat to them, each pair went back to continue caring for their offspring. The entire colony made a loud and continuous roaring noise, rich in low frequencies. After taking a lot of photos and video clips, we returned to the camp with memories of an unforgettable experience.

On the morning of November 23, after Christian and Juan took turns to run 40m SSB for the Chilean amateurs, CE4A went QRT. The tally indicates that 2,410 QSOs were logged with 1,808 stations in 82 DXCC on 7 continents. About 73% of the contacts were in CW and 27% in SSB. The number of QSOs by continents and the top DXCCs are shown in **Table 1**.

GOING HOME. To extract us from the island, Manuel brought a very small inflatable boat. Beto and Paolo were in the water to guide it and, after the heavy equipment was transported, we rolled up our trouser legs and walked up to a large rock rising from the shallow water from where we stepped directly into the dinghy, one at a time. Aboard *Fernanda Olivia*, we circled the island at low speed, watching the northern shore being pounded by the ocean and the sea lions and penguins swimming along. A few minutes later the boat reached the sandy beach of Matanzas. It took some time to pull the boat out of the water and secure it on the shore, because the

battery of the tractor employed for the job was dead and the crew had to find an alternative solution.

THANKS. This DXpedition was carried out under the auspices of the Radio Club de Chile and, on behalf of the team, I would like to thank Dino, CE3PG and Marisa, CE2MT for their tireless effort to ensure the necessary logistical support. We remain indebted to Manuel, Beto, Paolo, and Manuel junior for taking us and the equipment to and from the island safely. Roger, G3KMA's prompt and competent support in every phase of the project remains unparalleled. Maury, IZ1CRR is gratefully acknowledged for designing and maintaining the DXpedition website (ce4a.yolasite.com) and George, VE3GHK for his dedicated and valuable technical assistance. QSL cards were designed, printed (www.printed.it) and donated by Alfio, IT9EJW, whose great work and unwavering support are highly appreciated. We thank our families for their love and unreserved support.

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