"XR0ZRC - The Robinson's Dream"

Written by

Vasily V. Pinchuk, R7AL

Everyone knows the story of Robinson Crusoe, a mariner from York, who lived many years in an uninhabited island. Much water has flown under the bridge since that time, but those brave and desperate people who travel to remote and inaccessible islands we call Robinsons.

As an active IOTA-activator and "Russian Robinson Club" member, I was dreaming to visit Robinson Crusoe Island, located more than 600 km. off the coast of Chile, for a long time. In summer 2018, I shared this idea with my good friends and companions – Vasily, RA1ZZ and Vlad, RK8A. They also like it very much and we immediately started the planning and preparations for the DXpedition to this legendary island, which is the part of Juan Fernandez archipelago – separate DXCC entity, ranked 68 in a Club Log Most Wanted list (March'2019).

I made contact with Marco, CE1TBN – well-known Chilean IOTA-activator, who agreed to help us with the licenses and logistics. We applied for XR0ZRC special callsign.

Travel to Robinson Crusoe is quite expensive, but it's not the main problem. All the flights to the island are carried out on small 12-passenger aircrafts with only 10 Kg. of baggage allowance on each person, and no any excess baggage at all.

But our plans were not for a holiday-style activity, but a full-scale expedition with high-power stations and effective antennas for all HF bands from 160 to 10 meters.

Here is an alternative way to reach the island – boarding the ship "Antonio", which brings cargo and passengers to Robinson Crusoe island from Valparaiso port. "Antonio" seats only 12 passengers and islanders have a strong priority, but Marco get in touch with "Transmarco" shipping company officials and they promises to hold two places for our team-members. So the final plan was to split the team. First part will fly to the island by the plane, with the minimal set of equipment; second will goes by the ship with all the remaining cargo.

We formed the team, which were consisting of five operators: Leo RW9JZ, Vlad RK8A, Wlodek SP6EQZ, Alexei RL5F and me, Vasily R7AL. Sadly, Vasily RA1ZZ was forced to abandon the expedition for some personal reasons, but on the other hand, Dima RU3GF expressed a desire to fly to Santiago with us. He did not plan to fly to the island, but really helped us with luggage delivery and all other organizational issues in Santiago and Valparaiso.

Russian part of the XR0ZRC team met at Sheremetievo International Airport 6-th of March, 2019. Wlodek started from Warsaw a day later.



XROZRC team before leaving from Moscow to Santiago

(L-R: Vlad RK8A, Aleksei RL5F, Vasily R7AL, Dima, RU3GF, Aleksei RW9JZ)

Almost a 24-hour flight by the French Airlines from Moscow to Santiago was successful. In airport we were met by Alejandro CE3ARU, who pick us up and brings to the hotel on his truck. Dima asked Alejandro to use his mobile 2 meter station, installed in a car, and made a dozen QSOs as CE2/RU3GF. There are many HAMs in Chile, but most of them are not making the DX QSOs and prefer to chat on 2 meters or 40 meters.

The flight to Robinson Crusoe was scheduled two days later, so we spent this time to discover the capital of Chile. Santiago is a beautiful and clean city, with

nice architecture, lots of green parks and good peoples. Everything was a little complicated by the fact that almost no one spoke English, even a bit, and some simplest things caused difficulties.

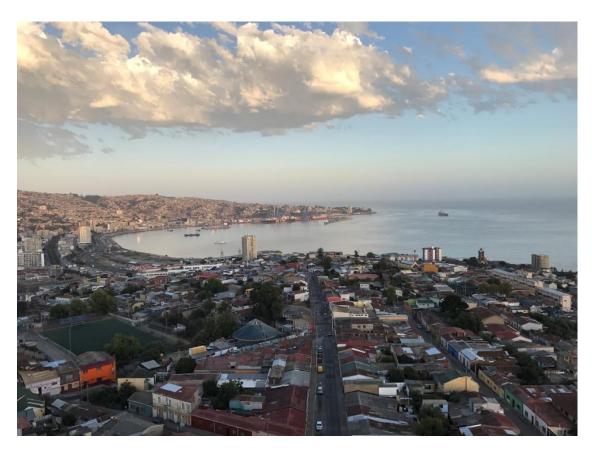


SP6EQZ, RL5F, RW9JZ boarding the plane to Robinson Crusoe

Our "flying" part of the team went to the island on March 9, as planned. The remaining members headed to Valparaiso, on the coast of Chile with 200 Kg. of expeditionary luggage. In Valparaiso we met with Matthias CE2LR and Dale CE2SV, one of the most active and famous HAMs in Chile. Dale invited us to his place – great apartments on 21-th floor with the opened terrace.

Next day, Matt introduced us to a great HAM family - Francisco CA2VMP and his mother Marcia CA2BRJ. They helped us a lot in delivering our cargo to a shipping company, all kinds of negotiations, buying the tickets, and much more!!

The ship went to the island in two days, but we had an unpleasant surprise – they said they could only provide one place onboard. We were forced to quickly change our plans. Vlad returned to Santiago and flew to the island by the plane, I stayed in Valparaiso and finally boarded the ship.



Valparaiso city – the biggest port in Chile



Dima CE2/RU3GF in a shack of Dale, CE2SV



"Antonio" ship carry cargo and passengers to Robinson Crusoe isl.

The voyage to the island took 55 hours and was very exhausting due to rough sea. The ship anchored in Cumberland bay at around 15-00, 17-th of March. Here it is – the legendary Robinson Crusoe Island!



Cumberland Bay (View from North)

Vlad RK8A and Wlodek SP6EQZ met me on the pier. I was really happy to be on the island finally, after the ten days since arrival to Chile. I was eager to see how the situation stands on the island.

Originally, I booked two separate bungalows, not so far from each other, to avoid the interference QRN from one stations to another – same as we did last year on Mozambique Island (C96RRC). When the guys arrived to the settlement they saw that there was no any access to the shore due to the construction of promenade and new sidewalks. Of course, no one told us about this when booking. Thus, the first bungalow turned out to be unsuitable for us due to lack of space for antennas. But the second one was really good, with a large area in front of it and some space behind. Our bungalow consisted of a hall, two bedrooms and a kitchen and was quite comfortable.

One of the two main stations, equipped with Elecraft K3 and Expert 1.3KF-A Power Amplifier, was in the hall, another (with Elecraft KX3 and same model PA) was installed directly in the kitchen. The third station was also in the hall and used mainly for FT8. Later we added second FT8 station, both with ICOM IC-7300 transceivers.

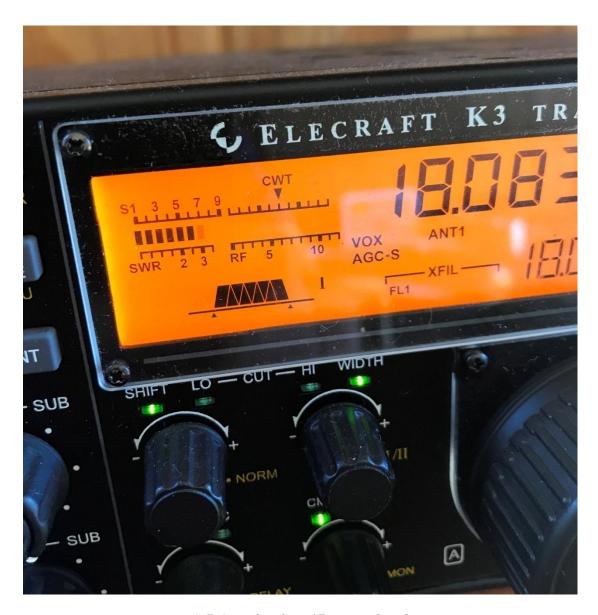
Of course, I could not wait and tried to work on 17 meters CW. The pile-up was great but I was upset because of the terrible S 5 to 7 noise level. It's too much for HF and makes the reception very difficult.

Guys told me that this is not a biggest problem. QRN-level in daytime hours not stable and changing from S-7 to S-0 points from time to time, which makes possible to receive normally. The biggest issue is a wide S-9 QRN, covering completely all the bands starting around 18-30, just during the local sunset, and lasting until the sunrise!!

They already checked all the potential noise sources inside the bungalow, including all the power supplies from TRXs and laptops, internal lamps, e.t.c., but the QRN was not detected.

So, I suggest checking the lamps on the street and the external illumination around our hotel. We were QRV before the QRN was turning on at 18-30 and then spent half the night trying to find something, but nothing at all.

Next evening, me and Leo RW9JZ made a simple portable antenna and goes to another corners of the settlement with the KX3, powered from batteries, to check the noise-levels.



S-7 QRN-level on 17 meters band

We were ready to setting down our position and change the current QTH, but with great regret we found that the QRN-levels on central and western sides of the settlement are even higher then we have. The best way out was is to find a good place outside of the settlement and set up portable radio camp. Off course, we were not ready absolutely for the portable activity and it was necessary to find tents, generator, fuel tanks and other equipment.

It should also be noted that Alexei RL5F had to urgently leave the island at 19-th March and fly back to Moscow due to business issues. So there are only four of us left on the island. However, we needed to keep at least two stations running at the same time, building the antennas, fixing the different issues, cook, and so on... Therefore we abandoned the idea of a portable operation and try to improve our receiving conditions at the present QTH.



We are checking the lamps outside of the bungalow

The only one way was is to try different types of antennas. It was some hope that the loops will work better in these noisy conditions and we made full-wave loops for 40 and 80 meter bands to try it as the receiving antennas. It was a big challenge to setting up 80 meters delta-loop, but Vlad RK8A, our SOTA-man, has climbed to the tall hill behind our QTH and set it between the high trees. It was much easier to install 40 meter one because of its smaller size, but also took some time. Looking ahead, I'll say that it brought good results and reduce the noise level on 40 and 80 meters.

High noise level was not our only one problem. One day we had faced another – the horses! In a high season islanders using them to ride tourists around, but now they walked wherever they wanted. One of them hooked a guy and broke the pole of 30 meter phased vertical. It's good that we were having two fiberglass poles for spare and repairing the antenna. But next day the situation repeated and

we have lost one more pole. Something needed to be done and we build protective shields around our poles using various items which we found in our garden.



Horses near our antenna field

I can say that the internet on the island almost not exists. It was impossible to browse any websites and upload our logs. The only one way was is to download adiffiles from the laptops to mobile phones and sent them to our pilots using WhatsApp, which worked very slowly and only at night.

We tried to focus on low-bands operation with two stations running on 160-80-40 meters all the night. 80 meters band was good and our delta-loop antenna works perfect, with 3 points less noise than the vertical. Finally we archived 4800 QSOs on this band, 2300 of them are with EU.

As for 160 meters, we knew that most of the previous expeditions to CEOZ were not having a success on top-band for EU and Far East and the demand was high. I'll say the true that we patiently struggled with the noise until the last day of expedition. We tried the Beverage sloping from the hill to the beach, as well as BOG, but they are both does not work better than TX vertical. Then we made a Frame-antenna and spent a night on 160 meters, putting a first fifty QSOs into the log. Later we got the message from pilot that our signal is good in Europe and we had 3 kHz pile-up. Next day we build a double-frame and moving it closer to the

beach. It helped us to improve RX a bit more and we were trying 160 meters all the remaining nights, logged 320 QSOs, 240 of them are with EU. I can't say it's good result for sure, but we really did our best and glad that some of top-band fans get their "new one".

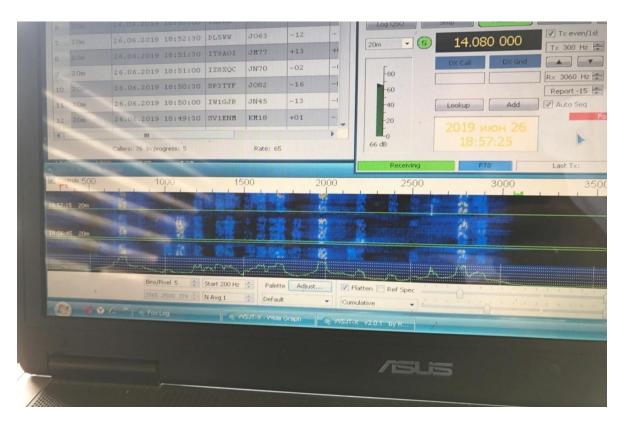


Vasily R7AL operating SO3R

Wlodek SP6EQZ leaves the island 24-th of March, as planned. Last week of the expedition we were only three operators: me, Vlad RK8A and Leo RW9JZ. We are already tired enough, but continued to handle the pile-ups, which did not decrease, especially on 30, 40 and 80 meters. By the way, we decided to concentrate only on CW and FT8 modes because of two reasons: SSB is not much effective in poor solar conditions, as well as our situation with the high noise levels; FT8 gives a good chance to low-pistols and helps to get more unique stations.



RK8A and RW9JZ moving Folding ant. (Spiderbeam on the background)



FT8 pile-up on 20 meters band

The life on Robinson Crusoe is quiet and measured and islanders are very friendly. With the mild oceanic climate, beautiful landscapes and nature, we were really enjoyed every minute of our stay on the island. Vlad RK8A cooked us delicious dishes of fresh tuna caught by local fishermen.



RK8A is preparing a dinner for the team

But all good things come to an end. The return flight to Santiago was scheduled 2-th of April. We left most of the antennas, poles and coax at "Transmarco" office ask them to sent all our cargo on a next ship to the mainland. Robinson Crusoe airport situated in a South-Western side of the island, about one hour boat ride from the settlement, so we enjoyed the beautiful views of the island on the way to airport and dreamed of returning here again.

On behalf of all team members of XR0ZRC, I express my gratitude to all Foundation, Clubs and all individual Donors for support!!!

Special thanks to our Chilean friends: Marco CE1TBN, Sebastian CE3GCA and Alejandro CE3ARU.

Very special thanks and warm regards to Francisco CA2VMP and his mother Marcia CA2BRJ for logistical assistance and invaluable help!!



Beautiful bay to the west from the settlement