

TO8FH

DXpedition to Mayotte Island by F6KOP team

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Selecting a target for the 2023 DXpedition by F6KOP was somewhat complex this time. The first idea was Guyana (8R). But learning that this country was also the target of a group of young German operators in early 2024 made the F6KOP team switch to plan B: Niger (5U). With a spacious location arranged and flight tickets on hand, the military coup turned this country into a bad idea for a DXpedition now. Plan C was needed and found to be Mayotte (FH). There was not much time for the required preparations until the targeted time slot in October. But Mayotte is closely related to France which made things much easier and avoided many problems in the first place. But Murphy is always good for the unexpected, as we will see.

Geographically, Mayotte belongs to the Comores Islands. This archipelago became a french protectorate in 1841. Unlike the other islands, the inhabitants of Mayotte decided in a referendum to stay a french overseas territory in 1974. Another referendum in 2009 decided that Mayotte shall get the status of a french overseas department, which was implemented in 2011.



It is possible to spend a lot of money on nothing but lodging in Mayotte. In general, life is not cheap there because most goods are imported. With „Pieds dans l'eau“ (feet in the water) in Bouéni, the team found a place with an affordable price and good HF

*Source: OpenStreetMap*

takeoff to most areas in the world. Located in the southeast corner of the main island, this place offers just enough rooms for the 12 operators. Full board is not generally available, but was arranged for us. However, space for antennas is somewhat limited.

Olivier HB9GWJ had to postpone his trip to Mayotte due to unexpected personal reasons. So the remaining eleven operators met on Charles de Gaulle airport in Paris on October 9 and had a smooth nonstop flight with Air Austral to Dzaoudzi international airport on Mayotte. The noticeable amount of luggage attracted the attention of customs officers. Mayotte is like France in many ways, but it is not part of the Schengen area. Hence the team leaders had to fill out the suitable customs form before we were allowed to proceed. A van took all our luggage and two of us, the rest of the team had to take taxis to the harbor. Mayotte consists of two islands and some islets. The airport is located on “Petite Terre”, the smaller island. A ferry took us in about 30 minutes to the main island “Grande Terre” and another taxi to our destination. Time allowed the assembly of some antennas (mostly the the hex beams) before it got dark.

The first operation in CW and SSB was quite bumpy. The CW stations had persistent problems with their USB keyer interfaces. The shack was actually a veranda with a view on the ocean, and almost all antennas... We suspected that this was a little too much interference into some USB cables. Extra ferrite chokes and a wire that connected the housings of the amplifiers removed this problem for the rest of our stay.

The second day was used to install the remaining antennas, i.e. the low band ground planes and the 6m beam. The 40m GP, initially installed on the metal roof of the main building, was moved to the beach after rather disappointing performance during the first night and did a better job there. The roof was now used for a 60m GP with better results. The 6m beam was initially installed below one of the hex beams, but it caused too much trouble there. It ended up hanging under a big tree branch with acceptable QSO results. We could see that our low band antennas were also going to have their “feet in the water” during high tide, so we took measures. But the swell removed most radials from their anchors, almost regardless of what we did. Moreover, the beach is public space and some locals passing by were not happy about the new snares on their way. Even Police officers came, but they had probably more important tasks and just asked us to request a formal permit from the local authorities.

Of course, we had prepared propagation forecasts. But as we all know well, theory and actual experience are not the same. In the late afternoon and evening, all bands opened to some area in the world. Bands above 20 MHz usually closed for some time at night, but on the other hand only these bands were really usable in the hours around noon. Consequently, the night was a rather busy time, while a shift at day time could be rather frustrating on bands below 20 MHz. Even when bands below 20 MHz were wide open, signals often suffered strong echoes and thunderstorm QRN, slowing down operation. One night it was really bad, another night it was much better. We assume that the echoes were caused by multi-path propagation. We just didn't have the space for the planned Beverage On Ground (BOG). We installed one for the second week of our stay, but its performance was poor. Lacking an effective antenna to listen on the low bands, the results in CW and SSB there were rather disappointing.

But even the conditions on the high bands were often changing. With two CW stations and one or two SSB stations side by side, we saw that propagation could change quickly. After running intensive pileups for some time, suddenly every active operator was relaxed because most of the callers were gone... Moreover, October was a busy time for DXers across the world because many expeditions were active on the bands. Sometimes, maybe our callers switched to the pileups of the expeditions in rare DXCC or IOTA entities when they started operating ?



After his late arrival, Olivier HB9GWJ *DL3GA* and the 30m vertical antenna immediately installed his QO-100 equipment and started operation. He ran many SSB QSOs himself, but made the station available to other SSB and CW operators as well. Even FT8 was offered. We achieved just over 1000 satellite QSOs in the end.

Traditionally, F6KOP's CW and SSB stations are part of a network, but the digital stations are not. Two ops spent a lot of time on the digital station with RTTY traffic and this went very well. But we repeatedly lost the log of MSHV on one station. Fortunately, we still had the log of the entire traffic (all.txt) on this computer. A friend in Guadeloupe supported us by extracting the completed QSOs from this file. Sometimes this delayed the upload of our complete log to Clublog because we didn't want to supply an incomplete log.

During our stay, we had two skeds to support public relations for amateur radio. Jean-Luc talked to 14-year-old kids of a school in eastern France and answered many questions. Olivier had an appointment with pathfinders in Luxembourg for their Jamboree. Both contacts were held via the QO-100 satellite.

Our hosts at Pieds Dans L'eau did a great job in many ways. They served three meals every day. While breakfast was rather standardized, lunch and dinner consisted of a variety of meat, fish, Manjok, bread fruit, rice, potatoes and much more. It came cooked, fried, grilled, baked, as a soufflé or stew. We were looking forward to food time every day. When ever we had a problem with the house, our hosts came up with solutions. A curtain was installed to avoid that the operators were blinded in the hour before sunset. The faulty fuse in a cable drum cut the energy for our shack, but a replacement was quickly found. In general, we were given a lot of freedom to install our equipment almost anywhere on the vicinity. This was a major factor for a successful operation.

Patrick F2DX created a great video of the TO8FH operation. Many drone takes give an idea of the location and maybe you can hear your QSO with us again. Use the internet search engine of your choice with "TO8FH video F2DX" and check it out. Log search and QSO statistics are available on Clublog.



The operator team consisted of (rear, left to right) Patrick, F2DX; Damien, F4AZF; Andreas, DL3GA; Stephane F5UOW; Xavier, F5NTZ; Jean-Luc, F1ULQ; Jean-Michel F4DLM; Julien, F8AVK; Olivier, HB9GWJ; Philippe, F8EFU; (front, left to right) Eric, ON7RN; Thierry F1DHX