VU7RI - Lakshadweep Dxpedition - October 19th - October 30th, 2019

By Shabu Ramakrishnan, MØKRI

I really enjoy remote portable operating and, having spent a couple of weeks operating holiday-style down in Burundi as 9U4RI, in 2019, I thought that I would like to go somewhere a bit more exotic. However, there were many considerations; where to go that was fairly high on the DX wanted list, when to go, with whom. what equipment to take, which antennas to use and the logistics of travelling to the remote site, to name the key ones. The germ of this idea was born in my mind during April 2019. Being originally from India, it made some sense to look at some rare, but familiar, locations around the Indian sub-continent, such as islands in the



Arabian Sea or Indian Ocean. The choice of location was Agatti Island in Lakshadweep (VU7), one of an inhabited group of 36 atolls and coral reefs off the coast of Kerala, India. VU7 was number 55 on the Club Log's "Most Wanted List". This location met most of the above criteria.

The Team

Having chosen my destination, I shared my VU7 enthusiasm with my old-time home QTH friend Sree, VU2OB, works for a national newspaper in Delhi. He seemed very keen on the idea but was uncertain if he would be able to join me for the two weeks because of his work commitments. However, he was very willing to help procure the VU7 licence and provide moral support. We really needed at least three persons in the VU7 team, so I asked my childhood friend Samson, VU3XTG. Sam was quite excited about the prospect of working a pile-up of stations from a remote island and made movements to help me procure local assistance on the island in terms of accommodation.



Unfortunately, owing to unforeseen personal circumstances Sam was unable to join the team for the DX-pedition. So, we invited Ashraf, VU3MTY from Calicut, who is a close friend of Sree. He is a passionate amateur radio operator and goes beyond the hobby, actively participating in disaster relief projects on an ongoing basis. So, he was an ideal candidate for the team. None of the team had any real "DXpedition" experience but they did have enough operating skills to form a good team. So, the team consisted of Sree, VU2OB, Ashraf, VU3MTY and me, Shabu, MOKRI (ex VU2CAC).

We had decided that October was a good month to go for several reasons, not least of which was that it coincided with the half term school holidays here in the UK, but also, the monsoons would be over and we would be able to enjoy blue skies all day (ideally), plus, we would expect HF propagation to be good.

The Licence

This is not just a matter of buying an airline ticket and travelling to Lakshadweep and operating. To secure a licence to operate from VU7, you need to obtain a "Notice of Variation" from the Ministry of Communications in Delhi, the Capital city. Secondly, even an Indian citizen needs permission and sponsorship to visit the island. This permission must be granted from Delhi. There are no regional or state level centres who would grant this, so, getting there and operating in VU7 is a long process. Samson, VU3XTG finally made a contact from Kavaratti Island who offered to help us and arrange accommodation and the local logistical support. However, we needed that contact to sponsor us and, in order to do this, he needed to regularly communicate with the officials. The sponsorship did not seem to be forthcoming; the contact person simply said, "You will get the help when you arrive." In other words, we needed to have official permission to go there and to have arrived before we would receive local assistance. At this point, Sree, VU2OB, said it would help our cause to have the Member of Parliament for Lakshadweep sponsor us for "entry on to the island". At this time, elections were taking place in India and we needed to wait to see who we could approach to request the sponsorship. Finally, the Honourable Member of Parliament, Mr P.P. Mohammad Faizal, helped us with this aspect. Sree was already in Delhi and was able to

obtain the temporary licence to operate as VU7RI from the Ministry of Communications. So, it all came together nicely in the end.

Equipment & Antennas

After the experience from my previous solo DXpedition to Burundi earlier in 2019, I had realised that it was important to carry an HF amplifier when visiting exotic places like VU7. If I were to make the most of the rare callsign, it was important that my signal should be heard using directional antennas and the legal limit of power. Naturally, there were weight considerations, especially as the small aircraft taking us from Kochi to Agatti Island in Lakshadweep would only allow 15KG maximum weight of luggage per passenger and it was unclear whether we would be allowed



to exceed this limit because of safety constraints. Therefore, large commercial HF amplifiers were out of the question. Fortunately, my good friend Fred, G3SVK kindly agreed to loan me his Expert 1.3 FA amplifier, which is considerably lighter than most other commercial HF amplifiers. We also decided to take a Kenwood TS-480 SAT, Icom IC706 MK2G, Yaesu FT-857D and a Furuno HF amplifier. We also carried a DX Commander and a G3TXQ Hexbeam as well as other off-centre-fed dipoles for FT8 low power digital operation, inverted Vee dipoles for 80/160M. Between us, Sree and I carried more than 60 Kg of equipment. So, after some careful negotiation, additional permission and the payment of 9 US dollars per additional Kg, we were allowed to take the extra baggage. This was in addition to the extra baggage fees I had already paid Gulf Airways for the flight from London to Kochi and return. A 100 Kg worth of accessories were co-ordinated by Ashraf, VU3MTY and sent using the cargo section of a passenger ship from Calicut in India a week or so prior to our travel. These accessories included all sorts of tools, earthing spikes, wires, cables, etc that were too heavy to hand-carry by aircraft.

Forward Planning

It was important that all the equipment should be tested prior to departure because once we were on the island there would be nowhere to buy additional cables, plugs or sockets etc. An inventory was constructed to ensure that we took everything we needed at the remote site. Laptops with logging software was a main priority along with power supplies and leads. We carried out some last-minute testing to ensure that the main rig would key the amplifier correctly through the CAT and ALC leads. This initially caused a bit of a headache as the CAT lead didn't key up the amplifier. Using a different lead cleared the problem, Phew!

We had set up a website giving full details of the DXpedition (www.VU7RI.com). This included a schedule setting out when we intended to be active on the various bands including CW, SSB and FT8. This schedule was designed to be flexible to accommodate local band conditions.

We were aware that there was no internet connection on the island, so uploading logs would be difficult. I was able to send texts from my cell phone and I was able to keep in contact with the outside world which proved to be very helpful at certain times throughout the DXpedition. My mobile bill increased by £150 that month to cover the cost of these texts.

Travel and Accommodation

The hotel owner is a well-educated guy. He has a "Master's Degree" in physics from Kerala University but had decided to help his father running the family business rather than taking up a career in physics.

Sawad, the caretaker, a friendly but sharp guy, referred the Special Branch police to me as they were a little suspicious about the 6m wide Hexbeam we had erected at the beach. I had to politely explain that this was only a hobby and nothing concerning security. I explained this very innocently and the policemen went away.



Our housemaids at the hotel were two girls who did all the cooking for us. The local people on Lakshadweep are very friendly, loving and caring. The local industry is mainly coconut processing and fishing. There are plenty of coconut trees on the island. Tourism is another form of income and local beach huts have been erected to take

tourists. Some of our local neighbours prepared snacks at their home and brought them to us. We even had a visit from the local policeman who has an interest in radio communication.

On 29th October we were able to give a radio presentation and demonstration to a group of 40 students and staff at the government-run high school. The idea was that we would introduce them to amateur radio in the hope that some might become amateur radio operators someday. The demonstration and presentation were well received by the staff and students and their appreciation was very evident. Thanks to Wilfred Master.

Radio Operation

As we were very tired after our long journeys, we decided that we would just erect a simple "off centre fed Dipole" antenna and make a start using FT8. We accomplished this in less than half an hour and we were "on the air" using the normal FT8 mode as I had only had a few weeks experience using FT8. After some excellent tuition from various articles, I soon got to grips with FT8 using DXpedition mode. I thoroughly enjoyed working more than a thousand stations in the first couple of days, at least until the clock on the laptop went of sync. This was a real challenge as we had to guess the accurate time in seconds and tweak the FT8 settings to bring it back in sync.



On the second day, we decided to erect the DX Commander multi-band vertical antenna that we had brought with us. The wind was quite strong, so we tied this to one of the nearby coconut trees. This worked OK although the top was swaying about causing the VSWR to fluctuate which affected the amplifier; mostly this worked OK.

We could hear absolutely nothing on the bands between 9am (local time) till 1pm every day. 15M started to open between 2pm and 6pm allowing us to use either CW or FT8 during this time. 20M started to open between 6pm till 10pm. So, there was not a very large operating window. We used SSB and some CW during this opening. 40M would be open from 2am till 7am allowing us to work some CW and SSB. Between 7am and 9am we could only work mainland India on SSB. We managed some 80M during the night. I was mainly operating on CW and FT8 keeping the bands busy as much as we could, while Sree was operating mainly SSB.

On our first excursion onto 40M CW, there was a very strong station pirating our callsign. It is likely he has been transmitting from the Indian mainland as his signal was very strong. He was working a pile-up of stations. I sent a text message to Fred, G3SVK, back in the UK, asking that he put the information on the DX cluster to alert stations that our callsign was being pirated. Fred did this straightaway and very soon the pirate stopped transmitting and I was able to resume my operation. From then we were able to keep to the schedule that we had advertised on our website.

Difficulties and Challenges

Our first obstacle was the fact that there was no internet coverage where we were based. The island does have internet at about 64kbps speed but not on every part of the island. So, using data modes was out of the question and none of our cell phones could connect to the internet either. Fortunately, I was able to send SMS spasmodically. I had to cycle to the local teacher's home on most evenings at 9pm to time-sync the laptop with his internet connection; this was very time-consuming.



We also had to rise to another challenge: There is a seasonal rainfall during the month of

October, which is usually "fairly light" and not as strong as the Monsoon during June and July. However, the "Thula Varsham", as it is called, was very different this year. The first cyclone to come, called "Kyarr", hit part of our island. This caused the antenna to sway wildly in the wind affecting our VSWR badly. Since we had no external antenna tuner it meant that we were unable to use the HF amplifier for several hours, so we had to resort to using QRP which meant that we could only work Europe on SSB. We were unable to do this for too long and so, our operation was limited to very low QRP and thus only FT8. Our other fear was that the high winds would blow down the coconut tree anchoring our vertical antenna.

The electricity supply was provided by the local electricity generator which runs on kerosene. The Indian Government must spend thousands of dollars per day to provide the kerosene so that the island has electricity. The power regulation was also quite poor, so we were restricted to only 400 watts RF power before the voltage

dropped and the lights would flicker in sympathy with the CW keying. Fortunately, we were the only tenants in the hotel, so this was not too much of a problem. On a positive note, we did not have to contend with local man-made noise problems and the band noise was relatively low.

Then, eight days into the operation, "Cyclone Maha" hit and was targeting Lakshadweep Island. We had early warnings of its approach. Winds were gusting up to 100mph which was quite frightening. Some of the plastic tables and chairs were blown hundreds of meters away from their position. We wanted to erect the "Hexbeam" but, while I was studying the construction details, the papers were blown nearly 200 metres away and I had to run after them before they reached the ocean; the island is only 200 meters wide where we were staying. Eventually we erected the Hexbeam and, in between cyclones, we were able to boost our QSO score a little.

Looking at the logs, we made a total of 1555 QSOs on FT8 and 1842 QSOs on SSB and CW giving a grand total of 3397 QSOs. This does not sound too impressive out of context but the two cyclones and time-sync issues on the laptop did have a huge impact on the total number of QSOs. However, it served as a wonderful experience and a steep learning curve for next time - when we hope to return to the island for a second DXpedition!

In Conclusion

Further drama was to unfold as we made our way home. The weather changed quickly, and we were faced with more heavy wind and rain. We were taken half-way across the runway in order to board the aircraft but, before we were allowed to board, the captain told us that there would be a delay. He explained, he was carefully monitoring the weight and would let us know how this would affect the flight. He decided that there was too much weight so some passengers would not be able to board this plane and would have to wait until the next day. We needed to be on that flight as I had pre-



booked a connecting flight for my return to London. Fortunately, we were classified as a "research team" and, wearing yellow T-shirts, looked more official than the other holiday passengers, so were allowed to go on that flight, but one of my main bags containing all the radios was taken off the plane because of the weight restrictions. I had to wait till a flight was available from the Island to return this important bag.

All three of us were on that plane on the first leg of our journey home looking forward to reunions with our respective families and a sense of comfort and calmness finally returned.

I believe that we fulfilled our "Mission Statement" which was "to make as many QSOs as possible on all three modes", at least we did so to the best of our ability in the face of adversity. Through those experiences we have learnt how we should do things very differently and better on our next visit. We will also benefit in future from the useful friendships that we had made there, and these will also help us to achieve our goals in the future.

Once home, all that remained was the task of QSLing to be completed. This aspect is very important to me. I was particularly proud of one photograph that I had taken on the island; it shows a group of local coconut climbers cycling along a road carrying the branches of a tree back to their home. This picture gives a more human perspective to the QSL card. Fred, G3SVK kindly offered to print the labels to stick on the reverse side of the QSL cards which has proven to be a huge labour saver. QSL cards have now been printed and all the direct and OQRS cards have been despatched. We now just wait for the batches of cards to arrive from the bureau.

It now remains for me to express my sincere gratitude to all those kind people and organisations who supported our DXpedition both financially and through the loan of equipment etc. I am indebted to them.

INDEXA, NCDXF, SWODXA, GMDX Group Scotland, Twin City DX Association, OKDX Association, North East Wisconsin DX Association and the many individual



sponsors. Also, thanks to Callum's DXCommander and Anthony's G3TXQ Hex Beam for their antennas at reduced tariff, Angelo, M0OJD for QSL Card design & Printing and to Fred Curtis, G3SVK for the loan of his Expert 1.3 FA HF linear amplifier. Thanks to you all for the QSOs. We hope that we were instrumental in providing some with a new DXCC entity. Namasthe & Happy New Year 2020 to all of you from the Greater London!