

YJ0X – The Quake Contesters DXpedition to Vanuatu

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The Quake Contesters

The Quake Contestersⁱ are a group of keen contesters in and around Christchurch, call sign ZL3X. We formed around the time of the devastating Christchurch earthquakes out of a chance meeting between Mark, ZL3AB and Phil, ZL3PAH. It started with an entry in BERUⁱⁱ in 2011 as the second ZL team and grew from there. Our meeting HQ is the Twisted Hop pub in Christchurch where we plan entry in the next contests. It doesn't take too long especially after a pint or two of their excellent ale before our conversation digresses to the topic of DXpeditions. Most of us had never been on one and your scribe remembers as a schoolboy reading about the exploits of famous DXers such as Gus Browning, W1BPD from exotic locations from around the world, so why not us too? So we started to seriously discuss a DXpedition of our own.

Where should we go?

We decided to look for a fly-in destination where we could carry all our equipment as hand and hold baggage, and with a DXCC that was wanted by much of the world. We spent significant time running through the most wanted list on ClubLogⁱⁱⁱ and finally decided on Vanuatu – number 97 on the list and a relatively easy journey from New Zealand, just 3 hours from Auckland. We researched the bands and modes most required by continent and significantly YJ is more wanted on SSB and RTTY than CW – probably because most DXpeditions operate CW as their primary mode.

The team

The team make-up changed as we started to plan, early on a possible member dropped out with ill health. Mark, ZL3AB had earthquake repairs looming and couldn't make it (next time Mark). But finally we had commitment from Paul ZL4PW, Geoff ZL3GA and Phil ZL3PAH. We felt that three was not quite enough and we needed a fourth op. About this time Phil won the prize crossword in the CDXC^{iv} magazine and was contacted by Gordon, G3USR who is CDXC treasurer and wanted to pay him the prize of 10 pounds. One thing led to another and before long, Gordon was on the team. Fortunately Phil and XYL Maggie were in London for a visit and were able to meet Gordon and XYL Julie to ensure that he was the sort of person who would fit into the group, i.e. been on DXpeditions before, with reasonable table manners and didn't slurp his beer. He seemed to fit in.

Once the team was set we started to hold meetings on Skype where everything was discussed and agreed. Inevitably it would seem that whenever two or more amateurs are gathered together the discussion will gravitate to antennas – each team member had his own views and we must have spent hours and hours on Skype talking about them.

A very cunning plan

It was obvious that we would all need a huge number of brownie points with our XYLs to get to go off to a pacific island for a week or two. But about this time we had a brainwave: they could come too! As they will no doubt read this we wish to make clear that our intention was not that they were there for domestic duties but to have a good time too. But thanks Maggie, Francie and Julie for the excellent meals, teas, coffees, beer and wine and keeping us slightly grounded as we babbled on about being called by FR4NT, the RTTY pile-ups, run rates and other trivia. And we believe that we may have pioneered a new style for DXpeditions, - it may look like a holiday style expedition but it is definitely deadly serious.

Planning - The Oceania Contest

We started some serious planning and at some point realized if we went in early October we would be able to operate in both SSB and CW legs of the Oceania^v contests. Here was a chance to have a crack at some records and at the very least have a target of new all time Vanuatu scores. So we decided on 12 days there, flying out on the 3rd October and coming back on 15th. That would give us two contests (we are after all a contest group) and plenty of time during the weekdays to satisfy the pile-ups and hopefully knock Vanuatu out of the top 100 most wanted for a couple of years.

The license

Phil was tasked with obtaining a license and with help from Joylyn Boe and Barnabas Boe at TRR^{vi} (Vanuatu Telecoms and Radio Regulator) we obtained call sign YJ0X.

The license cost 500 Vatu which is the local currency and sounds a lot but was about NZ\$7! We would like to acknowledge their help in understanding our need for a single letter call sign for the DXpedition.

The call sign had been issued before in the early 2000s but never activated, although it had a QRZ.COM page. Once we had the license we were able to replace it with our own entry. At the time of writing we have had almost 50,000 hits on our QRZ.COM page.

Location

Paul, ZL4PW took on the responsibility of finding a suitable QTH. We were looking for a ham friendly location with plenty of room for antennas, four bedrooms, plenty of living space (read shack), a beachside location for good sea take-off, and no local QRM, so not next door to a resort. Every night there would be an email from Paul with more locations to look at, maps came out and finally we decided on Villa Chelle^{vii} in Mele Bay on Efate Island (IOTA OC-035). Dates were booked and a deposit sent. We had explained that this was to be an amateur radio expedition and the booking agents were most accommodating.

Our man on the ground

About this time we made contact with Rod, YJ8RN in Vanuatu. Rod had much of the leftovers of previous DXpeditions, including poles, coax, wire and all sorts of other stuff, which he made available to us. Rod became the next member of the DXpedition and checked on the Villa for us, did lots of on the ground preparation for us and was a truly valuable resource. Once we arrived he collected some of us from the airport and helped set up antennas and provided bamboo poles (note: if you intend using the local bamboo poles, it is essential they are dry – if green, they need a month to dry out, otherwise they are **very** heavy!).

Equipment & transport

We decided to take four complete rigs. Paul would take his Elecraft K3 and KPA500 linear. Phil would take his K3 and SPE 1K-FA linear. Both Geoff and Gordon would take FT450s, one for a breakable 6m beacon and one as a back-up rig. We had band pass filters that we use at ZL3X to reduce interstation interference and those went on the list. Antennas were discussed ad nauseam. We finally decided to take Phil's folding hexbeam^{viii}, some 10m fiberglass poles and Paul would build some VDAs^{ix}. We would source the wire needed locally but we did take 200m of LMR240 coax with us. Phil built 9 baluns and was told to stop complaining about sore fingers. Tools and other essentials were listed, everything was weighed and spreadsheets prepared. Excess baggage was always an issue but sponsorship helped cover that.

Budgets were prepared; lists of additional items required were agreed and purchased. Flights were booked – we would fly out of Christchurch via Auckland on 3rd October to Port Vila on Air New Zealand and return on Air Vanuatu on 15th October.

Marketing and Sponsorship

Paul designed and put up a website^x and we started to produce occasional press releases which we distributed to DX organizations, DX news-sheets and various DXpedition websites. We were surprised by the level of generosity and very grateful for all the individual donations that arrived.

As is the case for most DXpeditions we paid for our travel and accommodation individually. However we had additional costs that were a result of running a DXpedition. It was Phil's job to raise sponsorship to cover as much of this as

possible. A proposal with details of the DXpedition was sent to many international DX organizations and produced offers of sponsorship from around the world to cover these additional costs. We are extremely grateful for the support we received. During the DXpedition we made a special effort to hand out QSOs to those countries and regions that had sponsored us. We hope you worked us. The sponsors are all listed on our website and QSL card.

Software

We decided to use N1MM^{xi} logger in DXpedition mode for the expedition, switching to contest mode for the Oceania SSB and CW contests. Geoff was in charge of all software aspects of IT for the DXpedition and we took three older Dell laptops (proven no QRM from PSUs) that we use at ZL3X. We created our own WiFi network that was then connected to the internet via the villa WiFi connection. This proved to be variable but our local network never let us down.

We had listed YJ0X as a DXpedition on ClubLog. It was our intention to post QSOs made in real-time to ClubLog. Unfortunately the internet connection proved too unreliable and so we turned this off and instead posted a log every day to ClubLog. Geoff had a lot of help from Paula, NX1P with this aspect and other software issues and she became a valued member of the team.

We also used Athena^{xii} which integrates into N1MM to show in real time how our QSO count was progressing against our goal.

After the expedition we used the ClubLog expedition tools to handle On Line QSL Requests (OQRS)^{xiii} which integrates with PayPal for QSL payment and donations, and which provides label and address label printing facilities. Thank you ClubLog for making this part of the process so easy.

The Recce

Geoff and XYL Francie decided to make a reconnaissance trip over a long weekend, a few weeks before we were due to leave. This has already been written up in Break-In^{xiv}. It was extremely valuable for many reasons. There they met Rod, YJ8RN who picked them up from the airport and were able to arrange such items as bamboo poles for antennas to be ready for our arrival. They were able to see the QTH and work out what the antenna site would be like. Geoff also discovered that earthing equipment in Vanuatu is somewhat different to New Zealand. The value of this trip cannot be underestimated from an expedition point of view although rumour has it that Francie thought it was to celebrate their wedding anniversary!

Geoff and Francie also met our two local bus drivers, Joey and Nono. Buses in Vanuatu are somewhat like taxis, except they are usually vans. You phone them and they collect and drop you off where ever you want to go and will collect you again and take you back home. This saved us the expense of hiring a car, which is expensive in Vanuatu and so reduced our travel budget.

The best laid plans ...

Everything looked set to go, the planning was finished and we were all very excited. We were flying out next Friday. But on the Sunday before we were due to leave Phil was struck down with a mystery illness and spent the next few days in bed and was in no fit state to travel. Gordon and Julie arrived from the UK via Sydney on the Tuesday before D-day. When Maggie picked them up from the airport Julie was on crutches and in a moon boot. She had broken her foot in their hotel in Sydney! However she was walking wounded. Phil could not even walk.

So Phil and Maggie stayed behind and rebooked to fly out on the following Friday, missing the first week. This meant that his K3 and linear did not make the journey to Vanuatu and the team was down to three radios and three operators. Phil and Maggie did finally get there about a week late and so did not miss out on all the excitement.

Arrive and set up

The somewhat reduced team arrived in the early afternoon and were met at the airport by Rod, YJ8RN and Nono. The XYLs settled in and the OMs started to set up the radios and IT infrastructure. The hex beam was erected on a 7m bamboo pole, and 40m vertical with two raised radials was put up on the decking extending in front of the villa. This antenna proved to be excellent on both 40m and 15m. Vanuatu is two hours behind New Zealand and we had arrived in the early afternoon but setting up takes time and by now everyone was ready for KickAss curry evening at the resort 70m down the road^{xv}. So the first QSO was made after dinner on 40m SSB with JH1PXH with Paul, ZL4PW at the mic.

More antennas were erected the day after the contest. By now, it was raining very heavily so they were built inside and rushed out for deployment.. We put up a VDA for 12m, a 17m vertical, a 6m delta loop with the FT450 running a breakable beacon, and an 80m antenna with a 13m pole and top-loading sloping section. The 80m antenna was very noisy and although we were being well heard, the noise level prevented us hearing much at all. The 40m vertical was moved further out from the villa,

The weather was atrocious. It was not meant to be the rainy season yet but no one had told the rain gods and we had torrential rain for the next few days. The hexbeam was turned by the Armstrong method and the best way to do this was to get into bathers (swimming costumes) before going outside.

The 6m breakable beacon had provided almost instant results with 4 x KH6s in the log on the first night and approximately 40 x JAs the next. It was still raining very heavily so installing the 6m beam borrowed from Rod didn't happen as soon as we'd have liked. The 6 el 6m boom antenna was huge and of industrial, cyclone-resistant strength and installed on the villa balcony aimed at the USA.

The other villa on the site was occupied by a group of Wellington girls with their personal trainer and judging by the bottles every morning they were going for some sort of record. We noted a technician arriving to fix the interference they were having on their TV. We wonder what caused that? It did not seem to spoil their enjoyment.

When they left at the end of the week we moved to 80m antenna closer to the sea and away from any noise sources and from then on 80m performed quite well for us. The 12m VDA was also moved closer to the sea and proved an excellent performer.

Finally on the air and the Oceania SSB contest

Operations started on the first evening on 40m SSB and the first contact in the log at 08:51 was JH1PXH. We had left Christchurch at 4am that morning and after a couple of hours on the air we shut down for the evening, being tired but pleased to be finally on the air after the months of planning. Operation continued next morning whilst the other contest-band antennas were erected.

At 08:00 on 4th we switched N1MM over from DXPEDITION mode to CONTEST mode for the K3 whilst leaving the other laptops running in DXpedition mode. We were up and running and calling CQ Contest. We operated as a multi-one for 24 hours and made 1406 QSOs. This demonstrated to us that being a wanted DXCC in a contest is a double-edged sword. The pile-ups calling us actually slowed down the QSO rate, but at least we were always being called!

Condx & pile ups

The weather didn't improve. The rain was torrential. But nobody cared as condx on the bands, especially the higher bands were excellent. And the pile-ups were huge. We operated two stations most of the time. The K3 and KPA linear were running 500W and the FT450D was running 100W. But the low power of the FT450D did not cause any reduction in the pile-ups. Initially we worked a mix of CW and SSB with attention being paid to where possible working those countries where DX associations had sponsored us. Then on the 9th we started to operate RTTY using just 40W on the FT450D. We used MMVARI with multi-rx enabled and it was just like shooting fish in a barrel! We continued with the mix of bands and modes to try and ensure as best we could that new band slots were given out. It is not possible to please everyone but we have had some very nice thank-you emails now we are back home so we must have been doing something right.

Phil finally makes it and the Oceania CW contest

Phil, ZL3PAH finally arrived a week late, determined to get out to Vanuatu after all the planning. We had decided that there was no need to bring his K3 and especially no need for a 1KW linear as everything was going well with the equipment we had and there were only four days left. Phil got stuck into some RTTY and then helped out in the Oceania CW contest. Again we made a multi-one entry. Now we had four ops there was plenty of opportunity to run a second and third station and so we continued to operate over the Oceania CW weekend outside of the contest with big pile-ups on 17m CW and 12m RTTY. Our final total for the Oceania CW contest was 1261 QSOs. The tally would have been much higher but running simplex made it very difficult to complete contest exchanges when other callers persisted in attracting our attention! It seems CW ops didn't understand the "TEST" in our CQs, at least the majority of voice ops in the SSB leg were more compliant with the need for a serial number. We are confident that we have set new records for Vanuatu for both legs of the Oceania.

We had set a target of 15,000 QSOs for the DXpedition in total. We posted to our website that we would be going QRT at 00:00z on 14th October. In the end we made 15,854 QSOs and the last two were made at exactly the same time by Phil with WR7Q on 12m CW and by Paul with AE7OA on 10m SSB. Thanks for all the QSOs, each one was appreciated.

We worked 129 different DXCCs. And whilst the bulk of QSOs were with North America (39.9%) and Asia (26.9%) we were very pleased with a large number of QSOs with Europe (20.1%). Oceania came in at 7.9%, South America at 4.6% and Africa at 0.7%. More analysis is available at the ClubLog statistics page^{xvi}.

The antennas came down quickly and the rigs and computers were packed up in a couple of hours. We had enough time to take a bus tour across the island once we had packed up. None of the party had seen anything of Vanuatu outside of the Port Vila supermarkets up to this point! We had the DXpedition dinner that evening with Rod YJ8RN and his XYL Ruth to thank them for the huge help they had given us. At four o'clock local time the next morning we were lining up to go to the airport, tired but happy.

What goes on tour stays on tour

There were some memorable moments during the DXpedition but mostly what goes on tour stays on tour. However we can share a few with you, but no names, no pack drill.

There was the op on SSB calling 'the JA station with J in the call please go now', and the op who called CQ on 17m on LSB and wondered why he wasn't getting any replies. And we won't mention the person who put PL259 connectors on both ends of the coax before trying to pass it through the tiny hole in the wall. Or the op with the only serious tummy bug of the trip who had to suddenly QRX the pile up a couple of times.

The rest we will keep to ourselves.

Back home but the DXpedition isn't over

We arrived back home and there was already a lot of airmail cards in the letterbox. We have set up the On Line QSL Request (OQRS) on ClubLog and the demand for cards is high. We would all like to thank those reading this who have used the OQRS and have made an additional donation along with the cost of the cards. We have all been amazed at the generosity of people, and also the many kind emails we have received complementing us on the DXpedition. By the time you read this article the cards should be back from the printers and in the post or at the bureau. We have had only a few emails regarding busted calls and have been able to fix all the genuine ones. We will be posting the log to Logbook of The World^{xvii} as soon as we are sure the log is clean.

One of the surprises has been the number of emails received beseeching us to visit a QRZ.COM page so that they can have Vanutau flag on their page. This does not seem to have anything to do with amateur radio and they have all been ignored.

What we learned

We learned a huge amount about planning an expedition, and would do many things differently next time (and there will be a next time). We would take more rigs, more operators and separate the phone ops from the CW ops. We would make a point of speed testing the internet feed during the recce. It was a great disappointment to have everything working so that we could upload QSOs as soon as they went into the log, only to find out that the connection to the internet was unreliable. We would send the IT guy out a day early. It gets hard to set everything up and troubleshoot with others around with different priorities. We have learned that simpler works well especially with antennas. We have learned that there is no such thing as enough coax. And we have learned that you cannot trust the weather to behave as it is supposed to.

But what we also learned is that DXpeditions are contagious, and we have caught the disease. Planning for the next one has already started and we are socializing various possibilities within the Quake Contesters.

How do we choose the location? It must be in the top one hundred most wanted DXCC list, we must be able to fly in with the gear – no boats for us, have good accommodation suitable for DXing with good take off. And there must be good shopping!

i	http://www.zl3x.com/
ii	http://www.beru.org.uk/
iii	https://secure.clublog.org/mostwanted.php
iv	http://www.cdxc.org.uk/
v	http://www.oceaniadxcontest.com/
vi	http://www.trr.vu/index.php/en/
vii	http://familyaccommodationvanuatu.com/about-the-villas/
viii	http://www.foldingantennas.com/gb.html
ix	http://www.f4bkv.net/antenna-vda.html
x	http://yj2014.wordpress.com/
xi	http://n1mm.hamdocs.com/tiki-index.php
xii	http://www.pc5m.net/projects/athena
xiii	https://secure.clublog.org/charts/?c=YJ0X
xiv	'A Hamcation in YJ' by Geoff Clark ZL3GA, Break-In Vol 87, Number 5, September/October 2014 p15
xv	

xvi ² <http://www.benjor.vu/restaurant>

xvii ² <https://secure.clublog.org/charts/?c=YJ0X#r>

² <https://lotw.arrl.org/lotwuser/default>