

A One Op DXPedition to the Republic of the Marshall Islands - a Cautionary Tale

The original plan was a fairly serious DXPed to KH8 for 2013. KH8 seemed nearly ideal with big plane air service, existing infrastructure (so no tents or generators), no active operators and much worldwide "need." So tentative dates, outside the early year cyclone season but in the 160 m season, were selected. Without highly public efforts (to cut down on dilutants and additional crazy guys), private email means were launched to recruit operators of similar mind and perhaps greater skill. To my surprise, the interest in such an exciting prospect to the level of commitment was nearly nil (one guy said he "might" be interested).

So the goal was reduced to one op to KH8 with a low band focus in Nov 2013. Plans and an announcement were made well in advance. Shortly thereafter an email appeared with a BTW WE were planning a KH8 DXPed with several people at that same time but not yet announced. Discussions of possible collaboration take place but in the end, my KH8 trip was dropped in favor of the grander ZL effort beyond the scope of my interest.

So all dressed up and nowhere to go. After going through the phases of grief, a search was made for an alternate location with some appeal as a needed entity, at least for some bands/modes, and with civilized access. A possible answer- the Marshall Islands. Of course V73NS has cw well covered on the high bands but there remain the low bands, 30 to a degree plus an RTTY need, especially for EU. So 160/80/30 cw and 20 RTTY are planned.



After some helpful email correspondence with V73NS, N3QQ, JA8VE and information from others, it is decided that V7 is a reasonable possibility. Licensing is required but, aside from ongoing problematic communications, apparently not a big issue (and free). And there are three flights a week from/to

Honolulu (and Guam) while the three main tourist hotels have been known to allow ham antennas and operation.

Before committing, efforts were made to assure licensing and a ham-friendly hotel. Under the guidance of JA8VE a license application form was found on the internet but not at any official site (RMIApplicationFinal.doc at www.qsl.net/v73ns). The form was filled in and emailed to the address provided. (Word to the wise – CALL THEM.) After a long wait, an email was received from (the yahoo account of) Mr. Darrel Jotai of the Ministry of Transportation and Communications saying all was in order if I would scan and email my passport information. That was done, followed by more silence. I called Mr. Jotai and was told all was in order but I needed to pick up the original license in person after arrival – BUT operation before getting the actual license was okay. Next a hotel -

JA8VE at www.w1vx.net/ja8ve has extensive information on the Marshall Islands Resort (MIR) Hotel which looked like a winner. Substantial efforts were made to contact the hotel to inquire about radio operation. No response. It turned out that they were fully booked and that might have accounted for their lack of communication, or not. When on the island I went to the MIR (for lunch) and looked at the possible radio site. There was a fairly large tree (not seen on old Google Earth image) at the very location where an antenna might have gone, maybe okay – but any antenna guys on the lagoon side of the sea wall might be problematic due that tide thing. High bands might work but low bands would be harder. One operator said he had started at the Robert Reimers Hotel but had moved to the MIR due to poor radio location. N3QQ had operated from the Long Island Hotel and that hotel did respond favorably by email (Sabrina is the manager). Investigation by Google Earth suggested that lagoon-side rooms on the west side of the hotel had access to a small beach and it was agreed I could put up an antenna at the edge of the beach. With that the DXPed was announced, the hotel was booked and plane tickets were purchased. Many preparations were then made, including purchases of 300' total of RG8X coax and a second Spiderbeam 18m fiberglass pole, and the final antennas were set up in the backyard and checked as possible. Things were going well. But then –

At 5 days before leaving, I get an email from a DL who belatedly, and without prior announcement, says he is going to V7 at essentially the same time as I, and after a brief exchange I find, planning to have a rather similar operation including the low bands. Time is short as he leaving in 2 days and he says he can't not go now for financial reasons. So I suggested we cooperate, perhaps share equipment, perhaps divide up bands/modes or find a way to make it work for both. He basically said that having a 2nd operator there would not add to his fun and gently declined to agree to any specific cooperation. Well *&%\$, grumble, grumble. It makes no sense for two stations duplicating efforts so my trip was postponed, maybe to be cancelled.

The operations of V73DL were monitored and he was mostly spread over the cw waterfront on all bands except for little/none on 160 and modest on 80 but fairly heavy on 30 and with limited middle of the night action. So it appears that there remains potential for 160/80 and 20 RTTY to EU but 30 is out. To make up for the loss of 30, plans are made for 17, perhaps SSB. The antenna lineup becomes 55' vertical on a spiderbeam pole (top segment cannot support much) with two drooping T top loading wires and two elevated radials for each band. A custom matching unit is fabricated. On 20/17 a dual nested

Vertical Dipole Array with a single direct feed (don't try this at home kids) is devised based on the F4BKV design for a single band VDA plus EZNEC. It is mounted on the upper 9 (of 12) segments of a second spiderbeam pole with a carbon fishing pole boom and shows decent F/B on both bands. Dacron guy ropes are precut and (empty) sandbags are included as possible anchors.

The equipment is then a K3, KPA500 amp, KAT500 tuner, a light weight 12V power supply for the K3 plus all connecting cables, antenna wires, guy ropes, coax, headset, key. MFJ analyzer, antenna matching unit, VOM, minimum tool set, tape and a few clothes. In addition there are two spiderbeam 18 m poles and two Jackite 31' fiberglass poles, the latter intended as possible radial wire supports as needed depending on the coconut tree placement. This is all packed up in two full size suitcases but not overweight, one carry on roller bag, one (personal) briefcase plus one oversize 40# package of the four fiberglass poles all securely taped together in their original boxes or tubes. Note that taking one spiderbeam pole costs the same for baggage as taking all four poles (i.e., \$400).



The flight to the Marshall Islands (MAJ) is Feb 21 from HNL at ~ 0730 local - arriving Feb 22 ~1030 local (see that IDL thing, which seems to be real) so need to have a short hotel layover in HNL coming from LAX. So, depart for LAX in the truck ~ 1100 Feb 20. Once Lot C was located, this works fine aside from the schlepping of 5 bags. Check in and pay \$470 for 2nd bag + 3rd (oversize) bag with bags checked through to MAJ.



I managed to avoid being forced to check my carry on (with the K3) on both flights in spite of being nearly last on (dreaded boarding group 5) and finally arrived at MAJ largely on schedule and anxiously waited for the checked bags to appear – and that works when they open up the walls and slide the baggage down the short metal ramps in light rain. The routine passengers know to grab a luggage cart ASAP since there are about 1/3 of those needed. Of course I was late off the mark and faced with moving luggage to customs one or two at a time. The customs officer was only interested in the big package of fiberglass tubes and ignored the expensive electronics although it was all declared on the customs form. After explaining my game and showing US license + RMI application, all was well and the bags were moved piecemeal to the zoo of the “terminal” proper.



Happily the Long Island Hotel bus was waiting and soon we were off to check in.



After inspection of the two hotel room options – older east wing with sea wall, trees, small courtyard then building versus the new west wing with beach, trees and building, pick the more expensive west bottom floor with lagoon (north) view. This allows access to antennas with 100' of coax via the sliding doors to the balcony. It also allows you to keep an eye on the antennas. Note coax on ground,



The immediate bad news is that the hotel restaurant is closed for renovation (never mentioned before). After whining, I accept a trip on the hotel bus to the nearest small grocery store to stock up on food-like things to sustain me until a better plan is developed, including a very welcome 6 pack of Bud (who knew Bud was good).

After “lunch” things are unpacked, the equipment plugged in and tested and the 20/17 VDA is put together and installed on the upper edge of the beach, with the brief assistance of hotel “security” personnel while working between/among rain showers. No time for the vertical today. At dusk, it is done and the MFJ says all is good electrically. Guys are one tree and two sandbags on the beach, one in the direction of the prevailing NE wind. The tides the first few days were mild mannered and in spite of rising above one of the sandbags, all was good.



Operations began slowly with 20 m RTTY with a test at 0600 Feb 22 UT, followed by rest and then more serious action at 1600 UT (that's 4 in the morning). So far so good.





Up with less sleep than desired but it is the day to put up the big vertical for 160/80. First a better evaluation of the location needed for the radials and so the 20/17 VDA will need to be moved west, not a huge deal. Slowly everything is laid out with four guys plus the radial elevation using the jackite poles. The 18m pole goes up with 2 helpers from the hotel and the guys are set, two with sandbags and two at trees.



A Tale of Two Hulls – There was a small catamaran on the beach and the mast looked like a great place to attach one of the Jackite poles for one radial support. I enquired at the hotel if that could be done and after some equivocation I was told that should be okay as the owner (who probably pays the hotel for security) was not on the island. And my hotel helpers (generously tipped) move the boat a bit. As preparations are considered to strap the pole to the boat mast, the owner shows up with his companion and says, as is his right, he is taking his boat out for the day. I make nice with Jim and when he gets back in the afternoon I gently ask if I can use his mast to brace the pole. He agrees provided the boat is not moved. That was good until a few days later when I found the pole (and its radial) taken down and laid across the boat with my strap tossed on the beach. Apparent the owner needed to put a roller under the boat after a high tide and fiddled with the pole without consultation. Upon discovery, it was returned to the original position, more or less.



Once the 160/80 vertical was in place and the radials positioned oddly in/among trees with the two jackite poles (using only ~ 25') it was time for positioning the ends of the radials and doing a rough tuning. The 160 radials were trimmed and routed until a KAT500 tunable SWR was reached with the hairpin match. Then the 80 m radials were also trimmed and routed until the 80 m series capacitor, manually switched in, could get a tunable SWR on 80. Extra wire was carefully terminated at a tree.



It is now dusk and I am beat. Set up the station and rest. Woke up ~1730 Feb 23 UT and had a test run on 80 with success. Full operations would start the next afternoon, Feb 24 UT. Now try to sleep but awakened at 1000 local by the cleaning ladies trying to break in the locked door.

After that the routine operation was to have a go at W EU at sunset on 80, which never produced an EU qso. Then did RTTY on 20 and/or 17 until time to try 80 and 160. Then generally alternated 80 and 160 for NA and JA ending with 80 for EU & JA in the hours before sunrise – or more RTTY if bands were poor. Several tries of 160 for EU got nothing. Often would do 20 or 17 RTTY in the 0200+ timeframe (afternoon local) to try to get worldwide coverage for those missing out at night. Sleeping during the daytime is hard and often paid for lack of it with late night daze. Often did short naps with alarm when a band faded at night.

Not every day cycle went according to the above planned schedule. On the 27th UT had to quit early due to thunderstorms. On Mar 1 (the tides were getting higher and higher) the 160/80 vertical was tilted over into a tree when my most lagoon-challenged sandbag drifted in the morning tide surf. No damage but had to make an Ace Hardware run for some pipes and a sledge hammer. The vulnerable sandbags were then pinned down with the pipes but no time to set up the vertical until the morning so no low band action on the 1st but had a good run on 17 RTTY.





On the morning of the local 2nd, a crazy hotel guy climbed onto the roof of the second story and freed one of the top load 160/80 wires from behind a gutter. Later my new buddy Jack K2UFA and his colleagues Scott and Ray, who were waiting at the hotel for the weather to clear so they could fly their three crop dusters to Guam (no ,really), helped to get the vertical back up right where it never wavered again so there was 160/80 action on the remaining nights. Note the medium tide level here – it did come a bit above the bottom of the pole at high tide. Jack is on left.



However on the night of the 2nd UT at 1641 after working a DF on 20 RTTY, the signals suddenly died. A visual check outside revealed that the pole of the poor VDA had been snapped in two, never to VDA again due to a drifting sandbag that I thought was safe - but that night's tide and wind was the worst of the visit and it washed the beach completely clean by pushing the usual debris past the top of the sand. That was the end of 20 m and, not until the 4th were there any more 17 m QSOs made when a 17m vertical dipole away from the trees was up and produced good results on the last night of the 4th.



Finally on 80 m JA4KEX had the last qso.

Some final stats: 2766 Q's plus 126 dupes (one X3 dupe), 2184 distinct calls, 160: 274 Qs, 80: 730 Qs, 20: 1127 Qs, 17: 635 Qs. And by continent EU: 1124, NA: 483 OC: 31 AS: 1114 SA: 8 and AF: 6.

March 5th was pack up day with an 0800 start to get the 4 fiberglass poles sand rinsed off enough to telescope and back in their boxes to be mailed home – happily the Marshall Islands (postal code MH) is a part of the USPS. For \$115 you can mail the package OR pay \$400 for the airline to bring it as oversize baggage. None of the wires taken or the matching unit (except for the C) made the return trip so the bags were relatively lightly packed on return.



That trip was uneventful after paying the \$20 RMI departure fee collected by “the tax man” and then being allowed to wait in the air conditioned (thank you, thank you) passenger departure “lounge” with a film loop on nuclear testing.

It took 3 days to recover but I’m glad I did it (but I’m also not doing it again). The effort to fill needs on 160, 80 and RTTY was satisfying as opposed to getting the maximum numbers of (often duplicated with others) Qs.

Lessons learned:

Certainly do take a tuner, especially for lower bands where antennas have to conform to the local environment.

Higher power is good – vital on 160 and even 80.

Sometimes you just cannot get noticed, self-spotting capability via the WWW may help

Be prepared for local weather including windy high tides – extra stable antenna guying is good

Operating 12 hours/day is very difficult especially when the middle of the night has best propagation

Take a buddy

A VDA on the beach seems pretty effective

Take the best antennas you can manage

Aside from high tide surf thing, sandbag guy anchors for a spiderbeam pole are good, and easily moved

Elevated radials are pretty good and with two, you can have a more or less 2D antenna for limited space

If there are a significant number of RTTY callers it is painful to pick out one call even with a wide pile.

Listening at the top of the pile for a bit tends to spread out the pile.

On CW it was usually possible to find even weaker callers IF they were not in the middle of the pile – a spread of 2 kHz should be plenty unless for extremely rare DX

160 m will be slow, get over it