AKAMA REPORT 18
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On 5 February, we made the 9-hour, 50-mile trip from PNG's Ninigo Islands to the Hermit Islands (01d 33m S 145d 02m E), also belonging to PNG. It would have been delightful, except that our hydraulic roll stabilizers have died, due to a leaking ram seal. So, we roll more than we should.

We arrived at the Hermit Islands just in time; the weather turned bad very quickly, with winds over 30 knots, choppy seas and lots of rain. For three days it blew like stink and we hunkered down in our relatively peaceful anchorage in the lee of an island, reading and doing a bit of maintenance. The biggest bit of maintenance was to pull the water pump off of the generator set, in preparation for getting it rebuilt, hopefully in Medang. Because we now have no generator, while at anchor we must run our wing engine most of the time to keep the batteries charged. Without the generator we cannot make water with the desalinator (fortunately there is lots of rain), nor can we use the clothes washer. Needless to say, we're anxious to get it fixed.

For you yachties contemplating buying a new generator, we have some advice. We are rather unhappy about our generator, which is made by Westerbeke. Not only have we had a lot of trouble with it, but the service from them and their Singapore agent has not met our expectations (no stock, not responsive...). Our latest gripe with KUT Diesels, the agent in Singapore, is that their inattentiveness resulted in receiving the wrong heat exchanger. Our latest gripe with Westerbeke is that we could cut parts off the old heat exchanger and weld them onto the new one and get this thing going as good as new, but they refuse to tell us what material it is made of so that we can weld or braise it properly. Their only proffered solution was to buy yet another heat exchanger from them, with no mention of taking the old one back. Still, we are anchored in what Jacques Cousteau classified as one of the great paradise spots, so enough whinging.

The Hermit Islands is a delightful place. It is quite different from the Ninigos, even though the people are intermarried and the two atolls are not far apart. Their village is very clean, although not quite up to the standards of the one we wrote about at Pihun. It appears to be a bit more prosperous, with a few more timber buildings. They even have a generator set hooked up to their church.

The villagers farm about the same crops that we described in Ninegos, except that here we don't see anyone eating mamy, which is a variety of coconut, apparently only grown in this area. What sets it apart is the fact that they eat the whole darned thing, except the outer green skin! The outside of most coconuts is fibrous, relatively dry and not very sweet. The mamy husk is sweet and juicy. They chop off a bit of the end with their bush knife (machete) and then using their teeth strip off the outer layer (strong teeth!). The inner husk is chewed, like sugar cane, and the fibre spit out. The inner nut has water and meat that is also consumed. In the Ninegos, we were told that the ancient voyagers put a big stock of these in their canoes before setting out, as the mamy provided both food and drink.

One of the 'habits' that the people have around here is chewing betel nut. They mix a little lime (usually ground coral) with the nut and chew away, spitting out the juice. The lime turns the juice brilliant red, which stains their teeth and lips. The Palauans also mix in a little tobacco when they have it, the people in the Hermits and Ninegos don't. We were amazed to see that not just the adults but young children, mostly boys also chew. Betel nut is a stimulant and a tonic, at least according to our Funk and Wagnals. Goodness knows what the lime does; it's highly caustic stuff.

Also in contrast to Ninego, most of the boats here are fibreglass, although the young folk do have small dugout canoes. There is a fleet of small Hong Kong-built fibreglass boats for catching and keeping live fish; but none are in use. Several explanations were given; one was that the outboard engines all failed; another was that there was some rivalry with the people from Ninegos and the market dried up. Neither explanation seems quite right; more than likely they simply fished out the area, used cyanide or bombs. Most of these boats are now used as containers or, inverted, as shelters for various other purposes. For fishing and inter-island travel they use 20 to 25-foot Japanese-designed fibreglass boats with 40-HP Yamaha outboards. These are open boats, fairly heavily built. To go to Manus, the nearest big town, about 130-miles away, they put two outboards on them and run for about 8-hours in the open ocean.

The villagers have several pet sea birds, which stay around simply because they are being fed. They also have a couple of brightly coloured parrots and a pet crocodile. Well, the crocodile is not really a pet, as eventually it will be killed for its skin. There are plenty of wild crocodiles around these parts and we have to enquire about their whereabouts before venturing in for a swim or to do underwater maintenance. Our current anchorage (1d 31.1m South 145d 04.8m East) is supposedly crock free.

We did some snorkelling, the first in a long time. The coral near the village is a bit worn, but there were some colourful fishes. One of the other yachties in the bay, the owner of a French boat called FOGO, reported seeing several small sharks. We were not so lucky and had to be content with sighting a turtle.

Here we are about 1400 miles from our last fuel-up and miles to go before the next one. Having enough fuel to get to the next port is a major consideration. A great number of things conspire to make it difficult to calculate just this; yet it is imperative to be able to make the calculation...and get it right.

The first problem is, knowing how much fuel there is. We can read each tank from the pilothouse, using a remote gauge. It is a pretty slick gadget; a puff of air is sent down a thin tube that goes to the bottom of the tank. The pressure of the fuel trying to rise back up the tube is proportional to the height of the fuel, and this pressure is measured by a contraption that is nearly identical to the bellows and escapement in a barometer. The gauge is calibrated in inches of diesel and we use a conversion table to convert the number of inches of diesel into the number of litres. It reads accurately to about 10-litres per tank, except if the boat is getting bumped around a lot in a bad sea.

A trawler is usually run according to engine speed, not boat speed. Under load, diesel engines burn fuel dependent upon engine speed. We ran tests and created a table of fuel consumption versus engine speed in RPM. For example, AKAMA uses about 5 litres per hour at 1000 RPM, 6 litres per hour at 1200 RPM and 13 litres per hour at 1900 RPM. So, we can calculate with reasonable accuracy how long we can run the engine.

Determining how far we can go in this running time is a much thornier issue, which is dependent upon the sea state, the wind and the tide. Through flat water, with no wind, at 1200 RPM, AKAMA moves at 5.6 knots. However, a moderately choppy sea will reduce this to 5-knots, and if it is really sloppy we might only achieve 4.5 knots. The wind has less influence although we have not yet been able to

compute its effect. Water currents further complicate the matter. As we write this, we are making 5.6 knots through the water, but only 4.2 over the ground. Finally, the weight of the boat is also a factor; but we have not yet calculated its effect. Full up, we carry a ton of water, several tons of diesel oil, and who knows how many tons of provisions and spares. Every ton depresses AKAMA about 3/4 of an inch deeper into the water, increasing drag.

The bottom line is that power boaters must be very tuned in to not just their boat and its performance, but also to the many environmental factors that affect fuel consumption. There are no filling stations in the middle of the ocean, and no towing services.

Our next stop, Medang, is not on our original itinerary, as it was not considered to be particularly safe. We have little choice now, as we have to go to a major centre to repair the generator set and the stabilizers, and Medang is the only one. Fortunately, recent reports from other yachts say that it is OK as long as we lock things up and do not leave the boat unattended. We'll see; we are on our way as we send this (4d 21m S 145d 44m E).