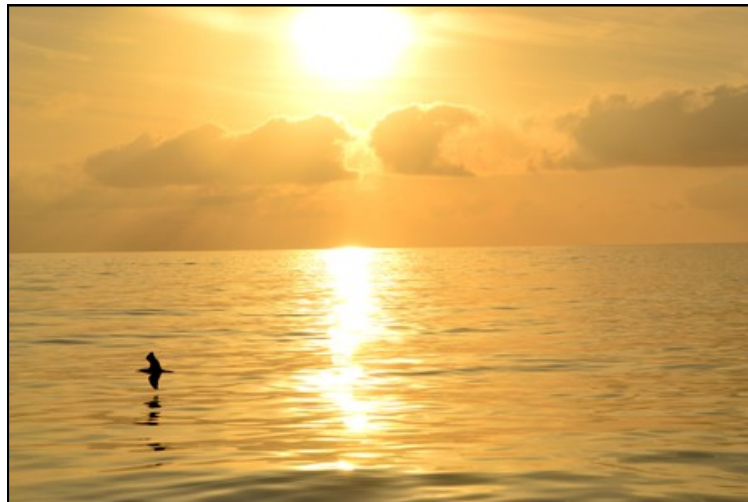

Pacific Crossing by Sailboat

Part 1- Panama to French Polynesia

Experience Report - www.sy-moya.de

Sabrina Kuttruff-Coqui - April 4 - May 10 2018



Summary

Together with our 3 and 5 year old boys, we crossed the Pacific ocean in 36 days. As a family of four we started our crossing in Panama City and made landfall after approximately 4000 nautical miles in Hiva Oa, French Polynesia. During the first leg of our passage winds and seas have been light to very light including dead calms as we passed through the doldrums. We crossed the equator at day 8, passed Galapagos to the south and had to tackle 1-2 knots of current pushing us to the north. After 14 long days, 350 nm south-west of Galapagos we finally hit the trade winds. Once cruising with the southeasterlies, winds were constantly blowing 12 to 20 knots with moderate seas from the south. Until 130 degrees west we have been sailing at approximately 6 degrees south to make use of the south equatorial current, which provided an extra knot to the west. En route we encountered only a few light squalls, all of them within the last 5 days prior to arrival. Living on board was enjoyable and worked well with the kids. After 4099 nautical miles we gladly arrived in Hiva Oa and herein report our crossing experience.

Preparations

Fuel, Water & Gas

Prior to departure we made sure that our fuel and water tanks are full and cooking gas was available for several weeks.

Provisioning

We obtained fresh produce from the farmers market in Balboa, Panama City. The market has fresh produce from the farmers, which are distributing their produce here to restaurants, supermarkets at large quantities but also to private people in smaller bundles. The products are of very good quality, fresh and not pre-cooled. We bought oranges, papaya, bananas, peppers, avocados, ananas, carrots, cucumbers, pumpkin, potatoes, plantains, onions, coconut, egg plant, broccoli, tomatoes, lettuce and cabbage. You can select from a large variety of local goods. The only produce we could not get were apples, which are imported to Panama, we bought those in the supermarket. We successfully stored most produce for up to two weeks, pumpkin, onions, potatoes, coconut, apples and cabbage lasted throughout our passage, more than five weeks.

Groceries can be obtained in large american style supermarkets. We stocked up on the Colon side in the Rey supermarket at Sabanitas. The supermarket delivered goods (if exceeding 400 USD) free of charge to Portobello, where we were lying at anchor before transiting the Panama Canal. Selection was good, but we learned later that Super99 is a little less costly with better selection at the same time. We did the rest of our shopping, mainly fresh products like meat, cheese and eggs in the Super99 at Albrook Mall, Panama City. The mall is large and accessible by bus or taxi within 30 minutes from the Playita anchorage. Generally, stocking up in Panama City requires long rides by bus or taxi as shops are not close to the anchorages or marinas.

We obtained a limited amount of meat (chicken and beef), but could only carry little as we don't have a freezer on board.

We washed and stored away fresh produce in vegi nets inside, as storage in the bilge wasn't working so well for us before.

While we had read a lot about preserving butter, cheese and meats at ambient temperatures, we did not do this as our fridge had sufficient capacity and we expected to be able to get respective goods upon arrival in French Polynesia. Especially the canned butter is a good alternative to fresh one, which is available on most of the islands in the

pacific. Flour, rice and cereals we sealed in vacuumed bags, which avoided spreading of bugs, in case the product was infested by bug eggs already when purchased.

Deck adjustments

We safely stored lines and fenders away under deck as we would not need them for some time. All screws were checked from our windvane and a safety line on each side of the boat was installed from the bow to the stern.

Weather

Making use of good internet coverage we downloaded two weeks weather forecasts covering the region between Panama and French Polynesia . We primarily used Grib files calculated by the GFS model (NOAA) and checked wind, currents, swells and CAPE index. We also double checked data on windy.com, which also computes data from the supplementary European weather model. As windy files cannot be used offline, we performed screen shots for every day until the end of the forecast. Both file sets have been the basis for our weather routing, which we performed ourselves based on Grib files and expected boat speed.

Rigg & Engine Check

Few days prior departure Christian climbed the mast and performed a full check of our rigging including stays, lines, toggles and sails. Also our UV protection of the genoa was renewed prior to setting off. We also renewed our antifouling.

The engine was checked for oil, cooling water and whether a maintenance interval was due.

Communication

We informed our family and friends about our ocean passage and shared off score contact details. Moreover Christian checked in the pacific cruiser network to inform them about our plans. Also we activated our prepaid satellite phone SIM.

Safety equipment

Prior to departure we checked that our grab bag was ready to go and renewed water and food contents. We also had a quick look on our flares and the life raft expiry dates. On deck we installed two security lines running from the bow to the stern, enabling working at the mast and front deck without untying.

Crew

We considered to take additional crew on board to share watches, household duties and have another hand for the kids, but decided against it as we would have to take a stranger and wouldn't be sure if things work out for several weeks in a limited environment.

Passage planning

We haven't been sure whether or not to stop in Galapagos as clearance procedures and things to do on the islands are expensive and given the difficulties of previous cruisers in clearing in. We finally decided against it to avoid paper work and/or being sent away by officials. Retrospectively, we heard only positive reports about clearance from other cruisers entering Galapagos this year and would decide to make a stop over in case we cross the pacific again. Reasons are that the very long passage is divided in two parts, which can be sailed faster as fuel is less an issue and one can wait for a better weather window at two locations.

Clearance

Finally we needed to get outbound clearance from immigration and port captain. Both we obtained in the Flamenco Marina (opening hours: 8am to 4 pm).

Passage Making - Generals

Communications

During our passage Christian checked into the pacific cruiser network from time to time via SSB radio. We also regularly uploaded files to our electronic logbook on our

website via SSB radio and received email (text only). But most importantly, we downloaded passage weather as GRIB files on a daily basis.

Our satellite phone was switched on daily, but was not used for internet connection and mainly reserved for emergencies.

Navigation

We mainly navigated based on GPS and electronic charts on open CPN, additionally we issued Navionics charts as backup on the tablet. Based on the daily obtained weather data we decided on the exact route to avoid areas of clams and make best use of prevailing winds. Generally weather forecasts between Panama and Galapagos within the doldrums have been not very accurate. Wind often calmed down or picked up unexpectedly.

Christian measured longitude and latitude daily with our sextant as he is interested in celestial navigation.

Watches

As we are a crew of two adults only, we needed to share watches 24|7. During the day we had no fixed schedule for watches, but mostly Christian was on watch, where I played with the kids, baked, cooked and performed other house hold duties. After having an early dinner, the children went to bed usually between 7 and 8 pm. Christians first watch began, while I slept until 11 pm. From 11 pm until 2 am I was on watch and again at dawn, starting around 6 am. The children usually shared my last watch. Between 8 and 9 am we had breakfast as a family.

During our watches usually the wind vane was steering the boat, except in exceptional cases when winds were so light that the vane was not working properly or in case we were running under engine, then the electrical autopilot was at the helm. Off score every 15 to 25 minutes we first (as eyes were adjusted to the dark) did a thorough watch out for navigational lights and dark clouds, then checked course, wind direction and AIS signals. In areas of traffic or in coastal waters, frequency was increased. If required we also switched on the radar (e.g. for checking for approaching squalls) or turned on the electronic compass, sonar or wind meter. Constantly, we only ran GPS, AIS and navigation lights during the night to save some energy. While we stayed most of the watch time in the deck saloon, we went outside for the look around. Between the single watch outs we spent time radioing, reading, cleaning or simply relaxing and always ran a timer reminding us for the next watch out, which was great for the peace of our minds.

If we needed to adjust sails during the night, we did adjustments if feasible during the watch shifts. In case sails needed to be reefed when winds increased both of us were required on deck, this luckily did not happen too often. We generally wore life jackets and life lines when working outside.

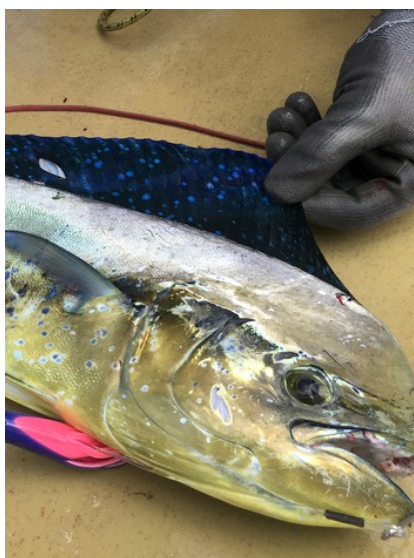
If no special working hours occurred during the night our watch schedule offered sufficient resting time, that both of us were fit for the next day without additional naps. Sometimes especially at the beginning when I had not had my sea legs, I had an additional nap during the day. Christian luckily is more robust and less prone to sea sickness.

Wind & Swells

Winds have been very light to light with dead calms in between during the first 13 days at sea. At day 14 we finally hit the trade winds blowing with an average of 12-15 kts mainly from E and ESE. Trade winds during our whole passage have not been up to their full force. Swells have been significant (2-3 meters according to weather forecast, which match with our observations) mainly coming from the S and later SE.

West of 130 degree W we encountered a few moderate squalls coming with rain a gusts up to 20-25 kts. Most of them we experienced within the last 24h of passage.

Fishing



We fished throughout the passage but didn't catch a fish within the first 14 days until south of Galapagos. One may speculate whether our boat speed was too slow during this part of the crossing. During the second leg we caught 5 fish, which was perfect as fresh produce was running low. Throughout the crossing we mainly fished either with our fishing rod or our hand line using different kind of lure. We lost several lure as large fish pulled out all fishing line or snapped of the wire leader, one even bit through a hook, which told us to use massive hooks for the future. In terms of lure we had biggest success with pink, yellow and white squids.

Living a board

Luckily our children don't get sea sick. Neither does Christian usually. As we had very little wind at the start of our crossing, we had no signs of sea sickness at all. Only after we hit the trade winds it took a day or two to finally find our sea legs. During this time the boys listened most of the time to audio books. Thereafter, the kids behave naturally and also securely walked through the ship in rough seas and played with their toys.

After finding our sea legs, our daily routine was reading or playing board games until having breakfast together. Breakfast was mostly freshly baked bread or cereals. Afterwards the boys often coloured books or played lego or did role plays, while we worked with the sails, fishing lines or house hold duties. For lunch we mostly only had something light such as fruits, soup or puddings. During the afternoon we often spent time together playing, creating, being outside or the children helped making water and securing lines. For dinner I always cooked a fresh meal.

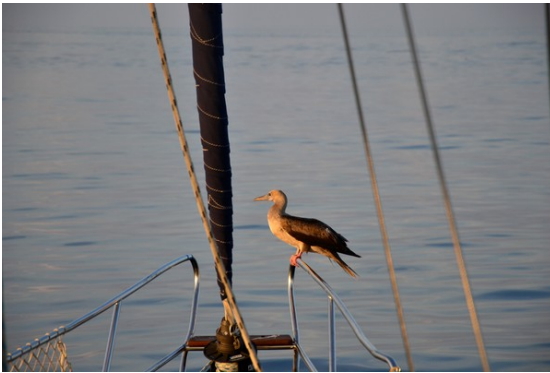
Passage Making - Along Route

Setting off - April 4

After stocking up and clearing out we pulled up the anchor in front of marina Playita, Panama city just after sun set. We hoisted main and genoa in light northeasterly winds to make use of remaining winds. Our choice was waiting for at least two weeks with predicted calms and light winds or go for it and expect a slow passage until south of Galapagos. As we were unsure when winds would increase and given the remote location of anchorages in Panama city, we decided to set off despite the poor wind prognosis. With the breeze from the aft and a weak favourable current we hoisted our cruising chute in the morning and sailed satisfactory 120 miles the first day before sticking in the doldrums.

Light winds & calms in the doldrums - April 5 - 17

Just after the first day winds died completely. As we were not planing to stop in Galapagos and had a long journey ahead, we decided to keep the engine shut and drift for the night. For the next days winds have been very light, thus our cruising chute was barely filled with wind and flapped in the little swell, before we hit a dead calm on day 5. The ocean was absolutely flat, we made use of the opportunity and the whole family took a



refreshing bath, thereafter we motored. At day 6 a light breeze from the south picked up, which strengthened to 20 knots the next day. We sailed upwind as close to the wind as possible. Short steep waves together with a northerly current slowed us down and made it a bumpy ride. After 7 days we have been 730 nm south of Panama and crossed the equator at day 8. We

expected to hit the trade winds soon, but due to the current against us and the prevailing very light winds (3-7 kts SE to E) it took another 5 days of sailing in very light conditions until wind finally picked up. During this time we passed Galapagos on its eastern side.

Cruising along the Trade Winds - April 17 - May 9



350 miles south of Galapagos, 14 days after setting off, winds gradually increased to 12 later to 15 knots from the E. Our cruising cutie ripped the last day during light wind period, thus we sailed with main and genoa for the rest of crossing. We continued to head south until reaching 6 degree south, then changed our sailing configuration for wing and wing dead downwind sailing and continued east to make use of the southern equatorial current. As the current is more pronounced at 5 degrees south, it might have been more favourable to tack downwind a bit further north and accept slightly lighter winds.

Landfall in Hiva Oa - May 10



9am May 10 we spotted Hiva Oa to the west. After rounding the eastern edge of the island we sailed into Baie Tahauku accompanied by heavy rain and increased winds. At 2 pm Moya was safely tied anchored in the inner harbour among 20-25 other boats. Swell in the harbour was acceptable. Tahauka is one of the two clearance ports on the Marquesas and has a number of small shops for provisioning, which works especially well after the supply ship arrives Friday every third week. There is also a post office, two little restaurants and a

bank. Hiva Oa yacht services is supporting clearance procedures, offering internet and laundry if required.

A few numbers

- Passage duration - 35 days, 22 hours from Panama City to Hiva Oa
- Mileage sailed - 3764 nm
- Mileage motored - 335 nm
- Days with light winds & calms - 13 (first leg)
- Average boat speed in lightwind zone - 3.97 kts
- Average wind speed in lightwind zone - approximately 5 kts
- Days in the trade winds - 23 (second leg)
- Average boat speed in trade wind zone - 5.18 kts
- Average wind speed in trade wind zone - approximately 12-15 kts
- Days with gale force winds - 0
- Best etmal - 154 nm
- Favorable current - average 1 kt
- Fish landed - 5
- Flying fish on deck - 28 plus 4 squids
- Days with fresh products - 36
- Bread baked - 18
- Produced water on passage - 943 liters
- Average water used per day (per person) - 28 liters (7 liters)
- Ship sights - 4
- Squalls - 12 most of them light and within last 5 days of the passage
- Time zones - 5
- Repairs - 5 (leaking window, ripped lazy jack, broken computer charger, broken switch, diesel leak)
- Beyond repair on board - 3 (lost gaff, broken cruising cute, broken outhaul)