

Wednesday, February 29, 2012

Sailing with Scott

Mark and Liesbet left us on Friday, but Scott's flight back to Princeton was only due on Tuesday. So after preparing Gudrun V for sailing on Friday we lifted the anchor on Saturday and sailed to Isla Tobago in the south where we tied to a mooring bouy and then listed to spanish disco music that wafted over from shore most of the night.

Scott at the helm

Village on Isla Taboga

Sunday we got up early nevertheless to sail around the little island in perfect weather - sun and 15kn of wind. We dropped anchor in a little bay on the south side where Scott went snorkeling. The water here on the pacific side is 8C colder than on the Caribbean side, and therefor 21C felt cold to my dangling feet. But, as Scott who is used to real winter temperatures assured me, it is not actually cold, and so I jumped in after a fe minutes consideration. I was quickly happy that I had done so. I haven't had a swim since early January in the San Blas islands. I inspected the propeller and hull of Gudrun and scraped of the first few barnacles that had already accumulated - after only three weeks. So much for the effectiveness of aluminium-compatible anti-fouling.

Lots of Pelicans around

Scott snorkeling

After lunch we slept some, then continued our circle around the island and then sailed back to the La Playita anchorage. On the way we cut 10m off the anchor chain, which is too long to fit comfortably into the tube and frequently jams on the last meters. We now have 50m left, which is ok for up to 15m of depth. For deeper water or in strong winds we have to throw in the spare Fortress anchor, chain, and rope that we keep in the cockpit locker.

Weight trim

Monday morning we went ashore because I had to order some parts, then Liz dinghied us back to the boat and left again to sit in a cafe and write while Scott and I went out again to sail. We set course downwind towards Isla Taboga again and tried different sail configurations. W then turned around to sail close-hauled towards Panama city. In 15kn of true wind and calm seas Gudrun set a new personal speed record to windward: 7.8kn at 60 degrees apparent wind angle. Fantastic!

7.8kn at 60 degrees apparent wind angle on a newly calibrated log

Parasailor

My old Gennaker from Vespina

Gennaker and Genoa

Posted by Axel Busch in Gudrun V at 08:11

Gudrun's Panama Canal transit

Our guests and line-handlers Scott, Liesbet and Mark arrived Wednesday morning within minutes of each other. Liz and I were still busy getting the boat ready, so Scott took a seat in the restaurant and Mark and Liesbet went to another sailboat for a pre-arranged visit to sell and install one of their wiries. By noon we were done and had lunch together, then I checked out of the marina and at 2pm we cast off and headed for the "flats" anchorage to wait for our adviser.

Mark fixing my wirie which I smoked accidentally by switching the wires

The adviser showed up at 4pm and we proceeded to the first set of locks, the Gatun locks. We were scheduled to transit them with the "Sargento Aldea", an amphibious assault ship of 12000 tons that Chile had bought second hand from France in December and which was on it's way to Chile. Shortly before the locks we tied up with two other boats and then entered the locks together, Gudrun as the port hull of the makeshift trimaran.

Approaching the lock behind the Sargento Aldea and two other sailboats

Entering the locks as a raft

As the doors closed and water began to stream in I played Wagner's "Ride of the Valkyries" on the cockpit stereo which I had installed for that purpose, and everybody broke into a big laugh. It took the edge of the tension that had built up among the three skippers and crew, and started a row of bantering between the boats about British and Germans in general, and beers and humor in particular.

We passed through the locks without incident and dropped anchor in the anchorage just behind the locks. After dinner (Pasta) everybody went to bed early because we were scheduled to receive our adviser early the next morning at 6am, just like on Venus and Mojomo the week before.

Breakfast table

Only this time we had to wait until twelve before an adviser showed up. Surprise, surprise. We then proceeded at maximum speed (up to 7.5kn) and soon left the other boats far behind us. Which was just as well, because we just made it to the rendezvous with "Sophia Z", a freighter with which we were scheduled to transit the Pedro Miguel locks at 4:30pm. As we learned later, the two other boats had to spend another night on the lake.

Sailing on lake Gatun

Approaching the Centennial bridge

Between the Pedro Miguel and Miraflores locks I noticed that less cooling water was coming out of the exhaust than usual. Lacking a temperature gauge I took a reading with the infrared kitchen thermometer and measured the engine block at 76C, 10C more than I measure normally. As far as you can call somebody who regularly points a kitchen thermometer at his engine normal. I left the engine cover open to help in the cooling and in the next lock Mark and I checked the salt water strainer and impeller, but couldn't find a fault. Mark suspected that something was jammed in the hose, but we didn't want to take it off the thru-hull with 10.000 tons of freighter 20m behind us. When I took the hose off the thru-hull later I found a piece of a plastic bag inside, which we must have sucked up in the lock.

Side-wall in front of Sophia Z

Not a lot of space

But we made it through the locks and then proceeded down the channel to the La Playita anchorage where we arrived at 9pm and dropped the anchor to everybody's relieve. Beers and vegetable soup followed and then we went to bed because everybody was really tired after a long and exciting day.

Last lock opening

The lock crew

Posted by Axel Busch in Gudrun V at 08:10

Friday, February 24. 2012

In the Pacific

Last night we arrived at nine in the La Playita anchorage at Isla Flamenco. Difficult internet, more in a few days. Will probably sail a bit with Scott.

Posted by Axel Busch in Gudrun V at 17:59

Thursday, February 23, 2012

Miraflores locks

We made it to the Miraflores locks. Only two more chambers until the Pacific.

Posted by Axel Busch in Gudrun V at 17:26

Panama Canal Crisis update

News from our canal agent came in that our advisor would arrive at 10:30. At 11 a boat arrived and dropped of advisors at the two boats that we went through the locks with yesterday. And then it left again.

So we are still waiting for an advisor, along with two other monohulls who came in very late last night, past 9pm. It looks like we've been reassigned to proceed with these boats, and I only hope that we're not going to go through the next locks that late. But it's all in the hands of the canal authorities now.

Posted by Axel Busch in Gudrun V at 10:27

Crisis continues in the Panama Canal

No official news yet on what is causing the lock-down on Gatun lake. All vessels coming in through the Gatun locks are dropping their anchors noisily, and we are now surrounded by three PANAMAX container vessels, a few smaller bulk carriers, and the cruise liner Zunderdam.

Channel 12 is still down, but Channel 16 is very busy, although no news is forthcoming. Have the Miraflores lock blown out? Have all lock operators been eaten by crocodiles?

Posted by Axel Busch in Gudrun V at 08:12

Panama Canal Crisis

Yesterday we left the marina at 2pm to pick up our canal advisor at the flats anchorage. We went through the first set of locks, the Gatun Locks, and dropped the anchor at 6:30 in Gatun lake.

According to schedule we were supposed to continue across the lake at 6:00 in the morning with a new advisor. Now it's 8:30 and nobody has showed up yet. Which gave us time for an extended breakfast, but now it would be nice if we could get going because we don't want to miss the cruiser's regulars table at la playita in the evening.

Speculations are running wild as to what is causing the delay. We tried to listen in on the canal channel 12, but it's busy with static. Very irregular. Is it the aftermath of Carnival?

Posted by Axel Busch in Gudrun V at 08:12

Wednesday, February 22, 2012

Ready for transit Panama Canal

Today's the big day: in the evening we'll go through the Gatun locks and into the Panama Canal. Canal rules require to have four line-handlers on board, who's job it is (surprise) to handle the four mooring lines, two at the bow, two at the stern, and make sure that the boat stays in the center of the locks and doesn't crash into a wall or another boat.

Sailboats in the Panama Canal lock

Two of the lines will be handled by Liesbet and Mark, once by Scott who is flying in from Princeton for the privilege, and the last by Liz. The original plan called for Scott's wife Marilyn at the 4th line, but unfortunately she can't make it. You'll be missed Marilyn, hope to see you in the Pacific! Because Liz will be busy with the lines she spend the whole night cooking and preparing food for our guests - and the canal advisor who will come on board. As we've already learned on Venus and Mojomo, the advisors can get very grumpy when they're not fed.

The question is: are we ready? Kind of. After two more days of work on the starter motor and electrical system we made it out of the marina yesterday and took Gudrun for a test run. The good news is that we made it out and back in and that we also managed to reach max hull speed by engine, which turned out to be 7.5kn. The bad news is that starting the engine is still somewhat unreliable, but it seems to be improving.

Liz at the helm during the test run

The starter motor which is causing trouble frequently

Well, you've got to work with what you've got. We'll make it through the Canal one way or the other, and then probably spend another week on repairs. Two of the solar panels aren't connected yet, and the desalinator isn't installed either. But the Silentwind is working, which makes me very hapoy. And we have music and light in the cockpit now, which makes us even more happy. So if all else fails we can just run engine sounds through the stereo on max vol.

Let there be light. And music.

And we thought that we would be done in two weeks. Now it's four weeks of uninterrupted work on the boat, and we're not there yet. Shame is that there is a very nice pool here in the marina, but we haven't made it there once yet. But as Stein commented yesterday: "If you want to know how long it takes to finish work on the boat, you have to multiply the original estimate by PI". Because there are always complications, and you loose a lot of time looking for parts or improvising. And the formula seems to work out very well.

Anyway, a big THANK YOU to Liz for your incredible patience, persistence, stamina, support, and love. You worked very hard the last weeks, uncomplaining, and your help and presence makes a big difference. Love ya.

Posted by Axel Busch in Gudrun V at 06:47

Sunday, February 19, 2012

Provisioning and cleaning

While I've been busy with repairs and installation and sorting through the contents of lockers, Liz was equally busy (if not more). She planned the provisioning, went shopping, organized the shelving space, and thoroughly cleaned the boat. Which included the bilge, which certainly hasn't seen that much cleaning in the last 30 years.

Provisioning spree!

Liz 1 : Dirty bilge 0

One of the weak spots of Gudrun is the permanently wet bilge, because of the mast that sticks through the deck. Any time it rains water runs down the mast and accumulates in the top of the keel. Any other items that fall through the cracks in the flooring also make their way there, as do any leaking fluids from the engine (e.g. when the oil cooler exploded). And of course it's hard to reach, e.g. my arms just don't fit through the crack.

Posted by Axel Busch in Gudrun V at 08:41

Happiness

Happiness is indirectly proportional to the number of things that you perceive to go wrong. The more things go wrong, the unhappier you are. When everything looks like it's going well, you're pretty soon maxing out on happiness.

When the engine doesn't start five days before the appointed Panama Canal transit, a lot of things seem to go wrong and happiness goes down the drain. Which is exactly what happened Friday morning. I wanted to start the engine and nothing happened. Click, click, click. No cranking, no stuttering. Just click.

Normally four days should be enough time to sort this kind of problem out. But outside North America and Western Europe marine engine parts are notoriously hard to get. And because on four of the five remaining days shops are closed because of Carnival it's easy to panic.

But feeling panicked is exactly the wrong state of mind for fault-finding or crucial repairs. So instead of throwing myself at the problem immediately I went off to find Greg, the local tinkerer. Every marina has a Greg: Somebody with a knack for mechanical repairs who once sailed there, then got stuck, and is now a permanent installation and busy everyday fixing other people's boats. Which means Greg is notoriously hard to find. So I left a message with his son, asking him to come over to Gudrun when he has some time to help me with the engine.

Then I decided it would be best to ignore the engine problem for a little while and work on something else: filling the fridge cooling circuit with refrigerant.

The new gauges and 134a gas canister were hooked up quickly, but when I looked at the gauges I realized that I had no clue how much gas I should put into the circuit. So I started with "a little" and stopped when the temperature of the evaporator got below zero and then some more. Which turned out to be 8psi on the low side (fridge turned on), and 38psi on the high side (fridge turned off).

With the beer being cooled down I felt slightly more in control of my environment and turned to the engine. After starting at the beginning (electrical connections) and then making sure that the solenoid is ok, the evidence pointed to a faulty start motor. So I removed that from the engine and took it apart. Only to find that it was pretty dirty inside.

Source of the problem: dirty collector on the starter motor

While I was working on it Greg came along. Together we cleaned the starter motor, put it back together, and mounted it on the engine. Turned the key and the engine started. Hurray! From unhappy to very happy in a fraction of a second.

After that Greg checked over the pressure on the refrigerant and declared it to be fine as well. As the sun set I took two cans of cold beer out of the fridge, and zzzzisch, everything was bliss.

Posted by Axel Busch in Gudrun V at 04:16

Thursday, February 16. 2012

Shopping, cleaning, engine

This morning we went shopping: Liz for snap-lock containers and food, and I for o-rings, 134a refrigerant and gauges, water filters, and \$500 more worth of necessary tools and parts ... aaaaargh!

It's interesting how we fall into the traditional roles on the boat. Liz takes care of the 'household', while I do the 'home improvement' part. But since Liz isn't much into fixing engines and fridges ...

Liz cleaning the bilge

Axel very happy that the engine runs without spraying oil all over the place and no warning lights coming on

So Liz does the provisioning and cooking, and I do the repairs, planning, and sailing. Tomorrow we want to go out to test the engine, and to teach Liz how to handle the boat under motor. My hope is that by the time we get to the Galapagos she can sail the boat on her own if need be. So far the weather at sea wasn't great for starting to learn. But the winds between Panama and the Galapagos are much lighter.

Posted by Axel Busch in Gudrun V at 21:07

Wednesday, February 15, 2012

Solar panels, oil cooler, and silentwind news

The solar panels are up and working, and the oil cooler is installed. Now I have to re-assemble the cooling circuit of the engine, but for that I need new o-rings. So off to colon tomorrow morning to go search for spare parts.

New oil cooler being installed

Did I mention that the fridge stopped working yesterday? I think I did. And today the shower pump stopped as well. It's really like that: for every item that goes of the list, another one sneaks in. Boats!

Unfortunately that means that we probably won't make it to Panama for Carnival on the weekend. But with a little luck maybe Tuesday for the big parade.

Another thing that arrived yesterday via FedEx was ... a replacement charge controller for the Silentwind wind generator. The executive manager of silent wind got in touch with me last week, was very apologetic and helpful and immediately send the replacement controller. I switched the controllers and now the wind generator is running again. Before it was always on brake mode even though the brake was off, the batteries half empty and solar panels and land charger disconnected. Will be interesting to hear what the problem was, as the display etc. worked fine.

I'll keep the air breeze as spare, in case the charge controller stops working again after the next 30kn gust. But I hope that the issue is fixed, and that I get to sell the air breeze again eventually. The silentwind is rated with 600W, and the air breeze only with 300W,

Actually, now that I have another charge controller capable of controlling a solar panel, I can hook up every solar panel to it's own controller. 2 panels to a BlueSky 2000E each, one panel to the Silentwind controller, and one panel to a Rutland controller that I still have on the boat. Wow, i feel so much in control

Solar panels now mounted on top of the (extended) bimini frame. Finally a good view out the back!

The top of the Bimini is not the perfect place for solar panels. First, because there's often shade from the main sail, and second because I can't angle the panels to face the sun. But it's very, very convenient. So to make up for lack of angular flexibility I added two extra panels.

Posted by Axel Busch in Gudrun V at 19:20

Video from the haul-out, solar panels

A short video of some of the work done on Gudrun while hauled out. I can definitely say that watching the video is more fun than doing the work ;-):

Thanks to our two trips to Panama I was able to get some 1" stainless steel tubing for the bimini. First trip I ordered it at Abernathy's in Flamenco Marina, and Sunday I picked it up. Uwe came to shore with Gisela and a saw, and I cut the two 6m long tubes into size for transportation. Then we had ice cream, yummy.

Monday morning I picked up the oil cooler at the cargo terminal of Tocumen airport. But the package came with a surprise - a customs inspector. His job was to make sure that the package actually is for the boat, and so I had to hire a taxi right away and drive with him the 1 1/2h to the boat, leaving Liz in Panama to complete her shopping. Incredible. But I got it! Hope to install it later today.

The rest of Monday I spent emptying the lockers and preparing for work on the bimini/solar-panel construction. Tuesday morning at 5:30am I started and at 5pm it was done: Bimini-frame extended to support the weight and the solar panels fastened on top. Then I started running the cables to the charge controllers. Each panel has it's own cable, the 85W panels the 4mm² (AWG12) that came with them, the 135W panels 10mm² (AWG8) left over from installing the wind

generator. Today I want to connect the two BlueSky 2000E mppt controllers and finish the installation. Each controller will handle two panels, one the two starboard, and the other the two port panels. This way I hope to eliminate most shading problems, but we'll see. Total output is rated at 430W.

So Tuesday went very well and it looked like I was ahead of time. But then the fridge stopped working again, so there you go. One item off the list, another on it. Boat life. Now our cheese and butter is in the fridge over at Didier's boat.

Posted by Axel Busch in Gudrun V at 04:55

Sunday, February 12. 2012

Through the panama canal - again

Once isn't enough, the last two days we went through the Panama Canal again. This time on our friend Matt's Privilege 495, a catamaran of 50ft. Sooo muuuch spaaace!

February 11th, 2012 - Panama Canal transit on SY Mojomo

Here's something special - a short timelapse movie of the trip:

I've mounted a GoPRO camera on the bow of the port hull and let it take a photo every two seconds. Later I cut the longer bits on the lake out, because it's kind of boring. The locks really are the interesting part.

Posted by Axel Busch in Gudrun V at 17:00

Thursday, February 9, 2012

Launch and Canal passage

The "splash" on Tuesday didn't happen since the travel lift operators were a little disorganized and run out of time before end of the day. But Wednesday morning we put Gudrun back into the water, and in the afternoon we left for the passage through the Panama canal.

Not on Gudrun of course - there's more work for at least another week, and the oil cooler is still stuck at the custom's office at Panama airport. We helped out as line handlers on SY Venus, the boat of our friends Gisela and Uwe.

Gisela and Uwe

Line-handlers Liz, Axel, and Didier

Going into the lock behind a container ship

Uwe at the helm at night

The skyline of Panama City

Well, I don't want to say too much about the trip through the canal now. Mark of Irie said that it would be boring and exciting at the same time, and Liz says he's right. I was too busy shooting and editing the video to get a real feel for it. But since we're helping Matt of Mojomo tomorrow as well, I'll have a second chance. Oh, and of course there's our passage on the 22nd as well. Btw, here's the movie of the last two days:

A little rough (and long) and without soundtrack yet, but all I could manage during the passage.

Posted by Axel Busch in Gudrun V at 21:50

Tuesday, February 7, 2012

The post doesn't deliver here

For three weeks now I'm walking into the marina office every day to ask whether mail for my boat has arrived. And every day the staff asks me by what courier, I answer every day "postal service", and they say no, there is no mail. And I leave. But the letter is now under way for four weeks, and that seems like a very long time even for Panama. So I asked yesterday, how often they get mail. And they say "We never get mail." And then the conversation went like this:

"What do you mean?"

"The post doesn't deliver here."

"Why didn't you say that earlier? For three weeks I'm asking for mail now."

He shrugs

"So how do I get my mail?"

"You have to go to the post office in Colon and pick it up."

"And what do I tell them?"

"You ask for mail for Shelter Bay Marina and they show you a box"

"Well, thank you. I hope the letter is still there. Maybe you should be a little more specific about the shipping options on your website. Because both UPS and postal service don't work, and how should anybody know that."

"Yes maybe".

Well, the good thing is that they actually really updated their website:

http://www.shelterbaymarina.com/services/shipping_packages_marina.html

Instead of only the address and their fees for receiving a package they now clearly say that both UPS and postal service can be problematic and offer alternatives. It's actually a very good page now. It's just my luck that my senders picked those two services. If I had known in advance, I could have told them and avoided all the trouble.

Well ... voyaging is fixing your boat in exotic places. And fighting to get the necessary spare parts.

Posted by Axel Busch in Gudrun V at 09:11

How to glue nylon fittings

What do you do when you need a reducer, say from 3/4" to 1/2", but only have nylon elbow fittings of either size? Take a knife and a glue gun and build your own reducer.

It's not pretty, but it is strong and doesn't leak

Nylon (and PVC) is notoriously hard to glue with regular glue, super glue or epoxy. On the other hand nylon is a thermoplastic, and bonds well with other thermoplastics when heated. Pattex hotmelt sticks are also thermoplastics, and when the glue comes out of the gun it's hot enough to melt the nylon and bond together very well.

Posted by Axel Busch in Gudrun V at 02:09

Monday, February 6, 2012

Ready for splash

Today we moved the supports to sand, epoxy, and paint the places of the hull that were so far inaccessible.

Moving the supports

Those spots have to be sanded and painted too

With the anti-fouling completed I turned my attention towards the propeller: inspect, clean, readjust, and grease. With the current pitch of 22 degrees the boat is a bit slow, so I wanted to increase the pitch by one setting to 24 degrees, which should give us half a knot more maximum speed at slightly lower rpms. Unless I made a mistake putting the thing back together and we go backwards instead of forwards or whatever. But I guess they can always lift us out again to correct that.

Propeller parts

Propeller re-installed with new pitch of 24 degrees. Go measure.

Posted by Axel Busch in Gudrun V at 21:49

Getting there!

Saturday and Sunday we had the help of a contract worker. He sanded, Liz cleaned, and I applied the epoxy. This way we could go around the boat without having to switch tools and that speeded everything up tremendously. After the epoxy had set we roughed it a bit, then washed down the hull and applied the anti-fouling paint (Seahawk Biotin). Today we can move the supports and finish that job, hurray!

Painting the hull

Other than the hull I'm working on the solar panels and the Katadyn 160E desalinator. At the moment the solar panels are mounted on top of the small davids and hang out of the back of the boat. That is not only a lot of weight beyond the water line, but also that we have to duck under them every time we leave and enter the boat. Also the davids are too small for our dinghy, so we can't use them. The idea is to remove the davids and move the two 135W solar panels on top of the bimini, together with the two new 80W solar panels I bought to help run the desalinator. Fresh water from salt water and the sun, I feel sooo green.

Liz demonstrating how to apply anti-fouling to the boat and herself.

The desalinator uses 18A per hour for 24l of fresh water, Usually we use 5 to 10l a day, but you know how it is: usage always expands to fit the available resources. I therefor expect it to run for about an hour every day. The two 80W panels should produce about 80Ah per day together, so after the desalinator is taken care of we can charge our laptops. On the boat 20l is enough water for two to drink, cook, do the dishes, and even shower. So water and power 'in abundance' ... luxury! Until one of them breaks down. Makes you really appreciate the water & electricity grid we can just plug into at home (not to mention internet and all the other infrastructure services).

Regarding the UPS shipment of the oil cooler my canal agent Roy Bravo offered to help and pick it up for me at the airport.

Posted by Axel Busch in Gudrun V at 06:05

Saturday, February 4, 2012

Not going so well

After pressure-washing and sanding down the boat we had a unpleasant surprise. In more than 500 little spots the epoxy coating had peeled off and the hull was corroded through electrolysis, especially above the propeller and along the water line.

Electrolysis above the propeller

Spots marked and partially patched with Loctite Hysol 3475

There are a number reasons for that. First, the painter in Las Palmas did a bad job preparing the hull for the epoxy coating. Second, the previous owner made a mistake when installing the electrical systems. The hull should be completely isolated, but it isn't, the ground is on the hull. And I think the one anode at the keel is not enough for the whole hull. It's easy to see that the corrosion is worse the further away it is from the anode. For us that means a few days of extra work: repairing all the electrolysis spots, adding another layer of epoxy, rewire the electrical installation, and if at all possible add more anodes. But we've planned for delays, so we should be still ok. I'm more worried about the fact that some parts haven't arrived yet, especially the oil cooler for the engine. First it sat for two weeks in customs, then I received an email from UPS saying "A CORRECT COMPANY OR RECEIVER NAME IS NEEDED FOR DELIVERY. UPS IS ATTEMPTING TO OBTAIN THIS INFORMATION". Which basically means "we have a shipment but we don't know what to do with it". So I called. Turns out, they cannot deliver the shipment for some reason they wouldn't mention, and I have to personally go to the airport, pick it up, and take it through customs. Only problem: the airport is 100km away and Panamanian authorities are not known for being super efficient. Which means it will take a full day to get that package and probably substantial taxi and other fees.

There seems generally to be a problem with deliveries here, since many other owners I spoke to have stuff that is held up, arrived at the wrong place, or was returned without delivery. But I need that oil cooler, and can't risk having it send back to the UK. So instead of arguing with UPS, all I can do is make the best out of it. Making the best out of it seems to be a recurring theme on the boat. Another shipment that hasn't fully arrived is the one from Marinewarehouse.net regarding the changes to the plumbing. I'm still missing an elbow fitting to connect the toilet to the thru-hull, which I need because the hose doesn't bend as much as it would have to. But they didn't send it, they don't know when they'll send it, and I couldn't find one here. So I had to make one myself from a straight fitting with the help of a hand-saw, sandpaper, and "Uhu Endfest 300" epoxy glue (I love that stuff).

Self-made elbow fitting (Marelon)

It was kind of a desperate measure, but it worked surprisingly well. First I tried to brake it in two, then I pressure-tested it by closing the sea-cock and pumping the toilet until I could pump no more. It held. Thanks dad for patiently showing me how to properly use a hand-saw and cut a straight line.

Posted by Axel Busch in Gudrun V at 05:25

Wednesday, February 1. 2012

Progress

Surprise, surprise, the sanitation jobs are done. The old holes are sealed up, the new hole is cut and the thru-hull installed. It was my first thru-hull installation, and I was a bit nervous. After all, if I do it wrong the boat will sink. But now that it's done I can say that there really isn't much too it: a hole, a backing plate, the thru-hull, a seacock, and marine sealant. But I can imagine that it was a major headache before the days of 3M's 5200 family of products, which provide great sealing and bonding.

I'm so glad this is done. In total I got rid of 6m of hose, the thru-hulls are where I can inspect them easily, and the seacocks where I can close them without having to take half the boat apart. So today we can start on the hull. First we have to remove the calcium deposits left by barnacle shells with acid, wash it down, lightly sand the hull, and after that paint the anti-fouling on it. This is certainly a time where you wished the boat was smaller. I hope that together we will be done by tomorrow evening, which gives the anti-fouling 2 1/2 days to set before we go back into the water on Sunday. In the meantime I can work on the propeller and shaft.

Posted by Axel Busch in Gudrun V at 04:43