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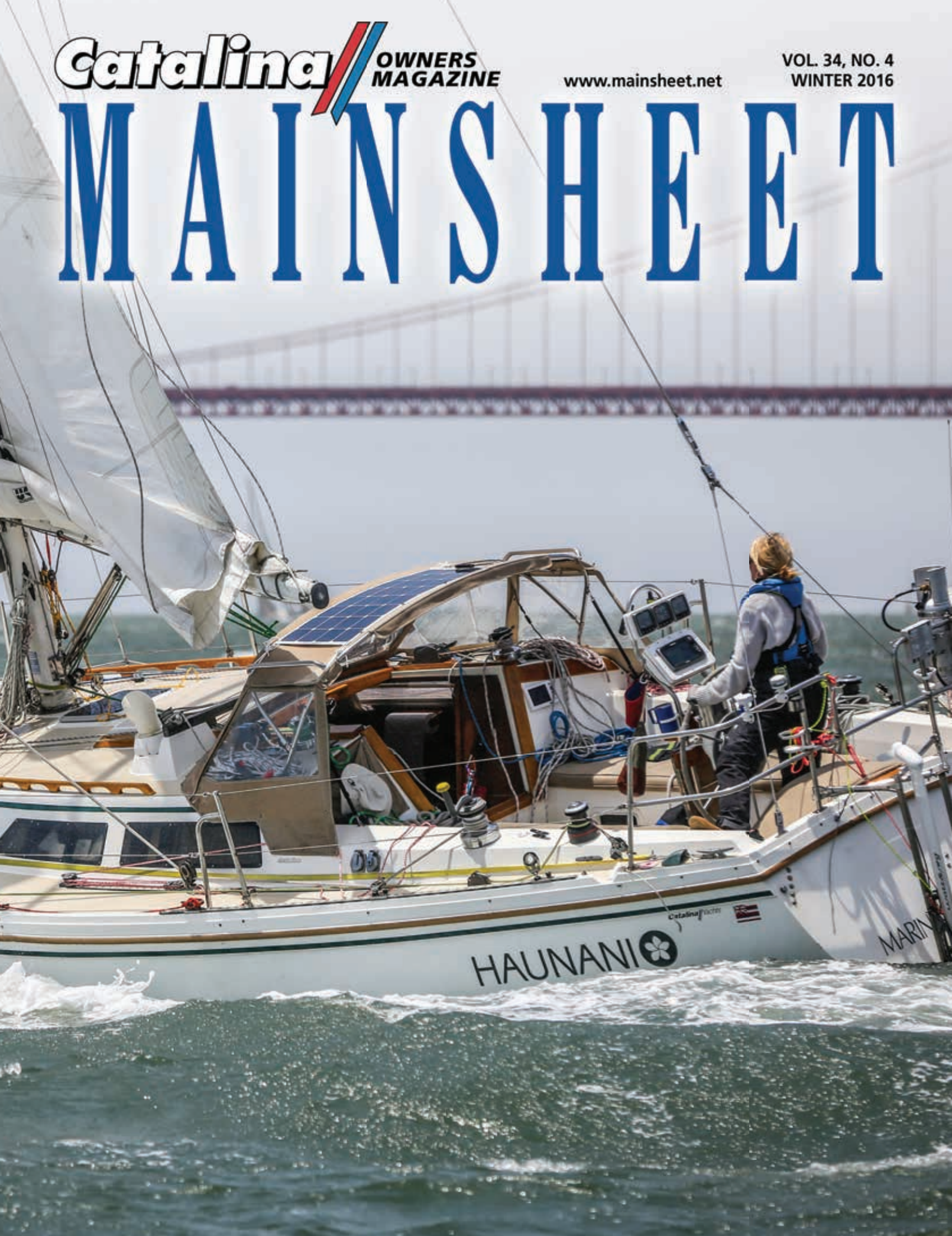
MAINSHEET



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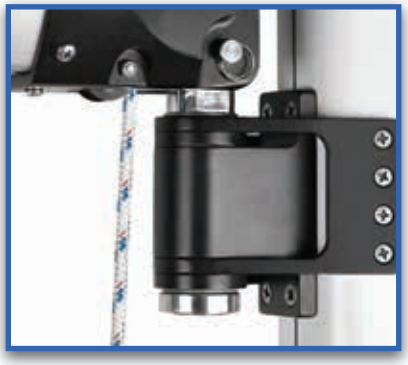

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PUBLISHER / EDITOR MESSAGE

Adventure And Beyond

I can't begin to relate the magnitude of two stories in this issue. If you have ever had the whim to do something really outstanding in a sailboat, these two articles will test even your most adventurous limits of sailing. The first article, "A Journey Back to Myself," is the account of a woman sailing the Transpac single handed in a Catalina 34, something most people would never even dream of doing. The second article, "Two Weeks to Windward," covers only a small part of a young couple's plot to sail from Seattle, Washington, to the Polynesia Islands and beyond. Both articles will test your imagination and internal stamina for hard-core sailing.

On a more down-to-earth note, this issue finishes up 34 years of *Mainsheet*. During these years we have seen some drastic changes in both technology of the publishing world and in the direction and content of *Mainsheet*. There have been many bumps along the way to say the least, rising costs, economic downturns, etc. However, we have persevered through it all and are still trying hard to cover all the bases. Many of the submissions for the association sections have been moved to the front as features or columns for all to enjoy. So if you don't find "your story" under association news, check out the front, it was moved for a reason. *Mainsheet* is an international magazine to promote associations, fleets, and Catalina sailing worldwide.

–Jim Holder
cv.jholder@mainsheet.net

ABOUT OUR COVER:

Photo by Chris Woods of his sister Margie Woods departing from San Francisco on the 2016 Singlehanded Transpacific Yacht Race.

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Change of Course:

Two Weeks to Windward

The Red Thread's Voyage to Rapa Nui

By Jessie Mackelprang-Carter & Neil Carter • CM440

Two thousand nautical miles of wide-open ocean stretched before the bow of our Catalina Morgan 440—inviting, intimidating, and impossible to resist. We were preparing to set sail from Galapagos to Rapa Nui (Easter Island), Chile, the longest passage of our Pacific crossing.

Before she became ours in May 2012, the prior owners of hull #33, the Maddox family, had sailed a 40,000-nautical mile Pacific loop and made landfall twice at Rapa Nui, once from the Galapagos and once from mainland Chile. Ours would be *The Red Thread's* third voyage to Rapa Nui. The Maddox's Galapagos-to-Rapa Nui passage had been the swiftest of their five-year voyage, and we set out with fantasies of two weeks on a beam reach. The reality would not be so idyllic.

The Galapagos are situated on the equator and are subject to the whims of the intertropical convergence zone (ITCZ), an infamous weather phenomenon characterized by doldrums and squalls, that straddles the equatorial band across the Pacific Ocean. We'd been monitoring the ITCZ patterns, watching intently as it widened and narrowed. At its most immense, the ITCZ can span over a thousand miles north-to-south, stretching to 8°S at its most southerly. We timed our passage to coincide with northerly movement of the ITCZ. If luck were in our favor, we'd pick up the southeast trade winds near 4°S. On March 12, 2016, we weighed anchor in Puerto Villamil on Isla Isabela and set to sea.

We blazed away from the Galapagos under sail at 6 knots, with pods of dolphins and short-finned pilot whales in the distance as our first day at sea faded to darkness. By early morning, our 75-horsepower "iron sail", maintained our pace in 1- to 2-meter seas and light, variable winds, as we hurried to reach the trade winds before they again shifted south. By evening,

Days into our passage, the beam reach we'd daydreamt of had not yet materialized; it never would. Close-hauled, we sprinted under a double-reefed mainsail and reefed genoa in 20 to 30 knots of apparent wind and 2- to 3-meter seas.

10 to 14 knots of breeze from the southeast filled our sails—our first taste of the trade winds—the grumble of our Yanmar was replaced by the gurgle of the ocean. It would be 12 days before we'd turn over *The Red Thread's* engine again.

Days into our passage, the beam reach we'd daydreamt of had not yet materialized; it never would. Close-hauled, we sprinted under a double-reefed mainsail and reefed genoa in 20 to 30 knots of apparent wind and 2- to 3-meter seas that walloped us abeam every 8 to 9 seconds. The trades had more south in them than we had anticipated, causing us to make far too much westing early in the passage, despite sailing 45° to 55° off the wind. Our autopilot system worked hard to keep us on course, and despite having 4 87-watt solar panels, overcast days denied us the daylight power influx on which we relied. Although we used our Honda 2000i generator to give our batteries a solid charge every couple days, we fought to conserve power and to gain every possible mile of southing by hand-steering during our night watches. During one 24-hour period, we hand-steered a record 15 hours between the two of us! *The Red Thread* buried her shoulders in aggressive, frothing seas, charging steadfastly onward with determination that at times seemed to exceed our own. The more the winds increased, the steadier and faster she became, covering one 150+ nautical mile day after another.

We caught sleep in increments of minutes, rather than hours, and cooking while heeled 20° to 30° to starboard was an Olympic sport. The passage was taking a toll on our physical selves, as well as our emotions. Nearly a week into our passage, amidst a dreadful stew of fatigue, frustration, and far too much westing, we began to reevaluate our course. It was becoming increasingly uncertain whether we could maintain a course that would allow us to reach Rapa Nui. That, coupled with the very real possibility that wind and sea conditions at the island might make stopping untenable, gnawed at our frazzled nerves. Turning tailand racing downwind toward the Marquesas or Tuamotus became an increasingly viable option; taking the wind and seas on our aft quarter would certainly be less arduous, even if the number of miles was greater. Changing course would also mean relinquishing our dream of making landfall at one of the earth's most mysterious and remote islands. We persisted. So did the challenging conditions.

During night 7, our headsail furling line chafed through at the drum of our Schaefer 3200 furler. During night 9, a second headsail furling line chafed, and we became more diligent about monitoring the position of the

(continued on next page)

NEXT STOP: The Gambier Islands of French Polynesia

Authors' Bio: After sailing from Seattle, Washington to Costa Rica between September 2014 and June 2015, Jessie and Neil docked their Catalina Morgan 440, The Red Thread, in Costa Rica for the rainy season. They returned to their boat in January 2016 and are currently on the hook in the Austral Islands of southern French Polynesia. Read more about their voyage at www.svtheredthread.com.

(continued from previous page)

line to ensure it was exiting the center of the drum, rather than the top, where the line could abrade against the upper lip of the drum. During night 11, a vicious 3.5-meter wave ripped the kayak from our leeward stanchions, sweeping it out into the Pacific. With *The Red Thread* blazing at over 7 knots and the wind blowing at nearly 30 in heavy seas, recovery was not an option, especially not at 2:30 am. Needless to say, we regretted not securing the kayak inside the lifelines for the long passage, despite the fact it had remained stable through 6,000 mostly coastal miles prior.

The expanse of ocean between the Galapagos and Rapa Nui was something of a liquid desert, devoid of the life we had grown to expect and appreciate during our travels along the west coast of the Americas. For 14 days, we didn't see another boat. Despite dragging two handlines that produced tuna and mahi mahi along the continent, our hooks remained bare. We experienced no sightings of marine life after day 5, save the misguided flying fish who littered our decks daily at dawn. Surprisingly, however, seabirds were plentiful; we welcomed the sight of at least one petrel, tern, or booby every day.

The expanse of ocean between the Galapagos and Rapa Nui was something of a liquid desert, devoid of the life we had grown to expect and appreciate during our travels along the west coast of the Americas. For 14 days, we didn't see another boat.

At dawn on day 15, the outline of Rapa Nui etched the horizon and the scent of flora lingered in the air. The craggy outline grew larger as the sun climbed to its zenith and then ducked behind a mass of heavy, leaden clouds. The vista exceeded images we'd conjured up in our imaginations. At the eastern and western extremes of the Rapa Nui stood two dormant volcanoes. The island was draped in hues of verdant vegetation, made vivid by afternoon drizzle. We could not contain the sense of satisfaction and relief we felt to see Rapa Nui larger than life before us. For the third time, our Catalina Morgan 440 had sailed to an island called on by fewer than 40 boats a year.

Within VHF range, we hailed the Chilean Armada to request special dispensation to anchor in the northern anchorage of Anakena, rather than continuing to the main settlement at Hanga Roa. Southerly and southeasterly swells were approaching three meters, and the forecast called for deteriorating conditions, with swell building to 4 meters in the subsequent 36 hours. The Armada obliged our request, more concerned about our safety than our legal status in the country, and encouraged us to remain in Anakena until conditions improved. Throughout our stay, the Chilean Armada proved themselves to be the most attentive officials we have met in our travels. They remained abreast of the locations of each vessel via VHF, warned us of impending weather changes, and encouraged us to shift between anchorages for safety.

We sailed the northern coast of Rapa Nui eastward along the base of Maunga Terevaka, the island's loftiest peak. Waves slammed into the volcanic coastal bluffs again and again, jetting ocean spray stories into the air in an interminable process of erosion. As we approached the anchorage at Anakena, we were surprised to find five boats hailing from five different nations. There, Rapa Nui's largest sand beach stretched golden below Ahu Nau Nau, where seven moai keep secrets of the islands mysterious past. Boasting the most protected anchorage and charming landscape, Anakena turned out to be our favorite of the three anchorages we would visit.

Days later, after conditions improved, we sailed with the small fleet of cruisers to the anchorage at Hanga Roa to clear into the country. We buried our 45-pound delta anchor in the sandy seabed 90 feet below our hull—the deepest anchorage we've ever experienced—and dumped all 250 feet of our 3/8" chain along with it. Landing our dingy at the fishing quay was a hair-raising experience we subjected ourselves to day-after-day in order to explore deeper into the island. The only way in is torace your dinghy between sets of breaking waves to the dog-leg turn that opens to the safety of the small harbor. We figured out the entrance to Hanga Roa, but the exit proved ever dicey. One boat had their dinghy flipped by the breaking surf, and we experienced the sensation of flight on more than one occasion as we launched from the crest of waves, racing their break.

During our time in Rapa Nui, we trekked the rocky trails along the coast between Anakena and Tongariki and then hitchhiked our way back; summited Rano Kau, the volcanic crater lake on the southern cliffs of the island and explored the clifftop ceremonial village of Orongo; and explored the island's enormous quarry at Rano Raraku, where the hundreds of moai on the island were carved centuries ago.

Conditions soured when a northesterly wind made Hanga Roa a lee shore. We moved to Rapa Nui's most isolated anchorage, Vinapu, on the southeastern coast. We traded a lee shore for heavy southerly swell that rolled us side-to-side for four long days, during which we acquired a case of cabin fever. Though nights were often rolly and sometimes very uncomfortable, they were a small price to pay for the opportunity to immerse ourselves in one of the more awe-inspiring places on earth. When the swells tempered and winds shifted once more to the southeast, we returned to Hanga Roa to complete our check-out formalities and to provision for our 1,500-nautical mile journey ahead.

Our passage to Rapa Nui tested our resolve with nearly two weeks of hard-to-weather sailing. *The Red Thread* delivered an intrepid performance, averaging 6 knots under reefed sails across nearly 2,100 nautical miles of demanding ocean, proving yet again her fortitude as a bluewater cruising vessel. During our passage, we were all-too-aware of the gamble we were making to try and reach the island at all. Tales abound of mariners who suffered the ache of sailing weeks off the beaten path to reach the extraordinary destination, only to find conditions untenable upon their arrival, with thousands of miles between them and their next landfall. We were gifted 18 remarkable days at one of the most spectacular and mysterious islands in the world, unquestionably one of the crown jewels in our voyage from Seattle thus far. If Rapa Nui is on your cruising bucket list, we can assure you the gamble is one worth making.

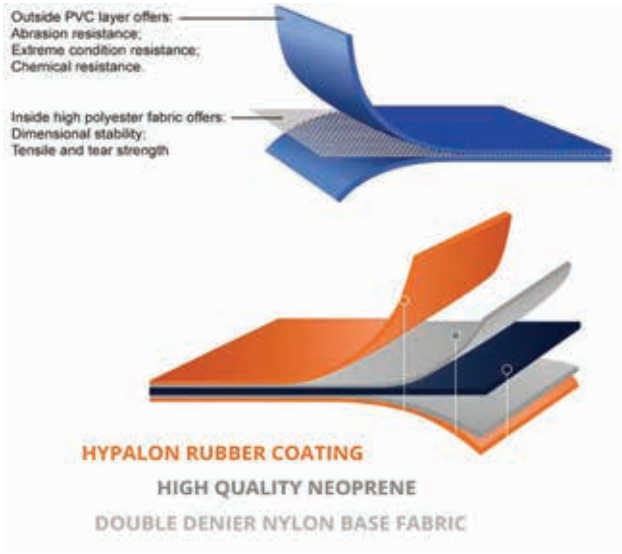
View from the Bridge:

For Praise of the Inflatable Tender

By Nick Caballero • C36 MkII Editor

First, I have to state that this may be my last article for *Mainsheet* as we have sold our beloved 2004 MKII *Whimsea* and thus no longer have a platform to proof technical articles. They say the happiest days for a sailor are when you buy and sell, but for us selling *Whimsea* was bittersweet. We sailors tend to choose our boats like we choose the loves in our lives - mostly with our hearts. *Whimsea* will continue to grace the harbors of the Northeast with her new owners and we hope to glimpse her from the shoreline from time-to-time.

So, instead of writing something specific to the 36 MKII, I've decided to impart some lessons learned from 25 years of inflatable tender ownership.



Ginger or Mary Ann?

There are really just two choices. Inflatable tenders are constructed using either PVC or CSM/Hypalon fabrics. Hypalon was discontinued by its manufacturer (DuPont) in 2010 and is now sold by other vendors under a slightly different formula and using the name "CSM" or Chlorosulfonated Polyethylene Rubber. We'll use the word Hypalon here as this is still the commonly used term.

Inflatable tenders made from Hypalon fabric are more expensive than those made from PVC fabric for three reasons: (1) generally more layers of material are used to make up the fabric, (2) the layers are made up of a more expensive

(continued from previous page)

materials, and (3) Hypalon seams can only be glued and this is a labor-intensive process. See Figure-1. PVC seams can be either glued or welded, the latter being less labor-intensive. The primary advantages of Hypalon over PVC are better resistance to sunlight, chemicals, and punctures.

Cost being equal, the clear choice is Hypalon over PVC, but the cost difference is pretty significant - usually at least 50% more for Hypalon. We have owned both types and obtained good service from both. But when we were on a mooring for several years and had to leave our popular name-brand PVC inflatable at a dingy dock, the fabric showed astonishing UV deterioration after just two years. The initial signs were the surface getting tacky and discolored, followed by failures of surface-mounted attachments. The advice therefore is that an inflatable tender be made from Hypalon if the duty includes prolonged sunlight exposure. For a PVC inflatable exposed to the same duty, a cover (or chaps) is a highly recommended addition.

Note that an important measurement of the quality of PVC is the density of the individual filaments. The term "decitex" is the general standard used to convey this. For a PVC tender, a decitex value of 1000 is considered good density. You'll sometimes come across the term "denier", which is simply 9/10ths of a decitex. Thus, 1000 denier = 1100 decitex.

Keels, floors, and transom

Keels can be inflatable or rigid. Floors can be rigid, high-pressure inflatable, or slatted. In a rigid keel model (RIB), the transom is part of a continuous form using the same material for the keel and floor. In all other tenders, the transom is usually glued to the keel and tubes and this is where some problems can creep in due to mechanical stresses and the material (usually wood) used to construct the transom. To avoid the weak points and to properly choose the best inflatable tender characteristics, it's best to think about three primary usage models:

Tender deflated and stored, or stored inflated in a rack or on-deck

This usage model is generally satisfied by tender with an inflatable keel and a high-pressure or slatted floor. When rolled up for storage, the tubes and the floor are deflated, or the floor slats removed, resulting in an easy-to-manage bundle. These tenders are also generally light enough to hoist on deck, especially if using a halyard to assist, and then a flipped, covered, and lashed. As long as the tender is cleaned, dried, and stored in the shade, a Hypalon or PVC tender will give good service.

Tender inflated and in the water most of the time; often hoisted on deck while inflated

This usage model is also best satisfied by inflatable keel with a high-pressure inflatable or slatted floor. These tenders are generally light enough to hoist on deck, especially if using a halyard to assist. The problem is that while in the water, not only is there sunlight degradation of the fabric, but also possible water intrusion into the floorboards or transom, mostly due to rainwater pooling. Another issue is marine growth, and so when hoisting on deck it's usually necessary to scrub the bottom beforehand.

The issue with sunlight degradation and rainwater pooling should be addressed by a cover that can be sloped a bit to allow rain water to flow off in all directions. Simply lashing a fender to the seat under the cover usually creates enough slope. For those choosing Hypalon tenders, the cover may be eliminated, if the floor and transom are made from materials that won't absorb water.

Tender inflated and either always towed or on davits; never hoisted on deck

This usage model calls for a RIB. RIBs generally have the advantage of a faster and drier ride, as well as keel, floor, and transom materials that are impervious to becoming waterlogged. RIBs are more expensive and heavier than other types, but for a tender that will be used for long distances, choppy conditions, and will be often beached, this represents the best of breed. For PVC, again the issue with sunlight degradation should be addressed by a cover or chaps.

While it is indeed possible to hoist a RIB on deck, doing so certainly requires the use of a halyard to assist and then at least two or three strong and agile people to maneuver, rotate, and flip into position.

Towing

Speaking of towing, a towing bridle is necessary in order to properly tow your inflatable tender. Do not tow the inflatable tender by connecting rope to the central D-ring. Instead, use a bridle attached to the towing D-rings on both sides of the tender bow. The towing line should not be fixed to the bridle, but instead should end in loop or a ring through which the bridle passes. This allows the towline to slew back and forth in the bridle, and provides for tension on both sides of the bridle.

Should the motor be left on the tender while towing? The tendency to do this is proportional to the weight of the outboard and the difficulty in removing it and storing it on the boat. There are a number of reasons for recommending against towing with the outboard on the tender.

First, there is the hazard to the outboard. In large seas the tender might

flip over and submerge the motor. It's also possible that violent motion in the seaway could cause the motor to fall off the transom. These things always seem to happen when you'd least expect them to, usually when a ten-foot sea is running! Another consideration is the additional tow load the extra weight of the motor will create. A completely empty inflatable is usually a very light craft and hence a very light tow load. When you add 70 pounds or more of motor and gas tank, you could very well be doubling the tow load.

The problem most likely to occur in towing the tender is shipping water aboard. It can quickly lead to failure of the bridle pad eyes, especially in those instances where the load is not being equalized. Even just six inches of water in an inflatable can weight hundreds of pounds.

A clean bottom is a happy bottom

There are bottom paints designed specifically for inflatables. They are effective, but they must be flexible and therefore are always the ablative type. This means that if you intend to hoist your tender on deck for passages, realize that you're going to get bottom paint on your deck. Most folks simply opt for an occasional scrape-and-scrub exercise. Depending on your area and how much the tender is stationary in the water, this could be something that needs to be done on a monthly basis. With our inflatable-floor tender, we removed all loose items, flipped the dinghy off the stern of our MKII, and just stepped off the transom onto the tender's bottom armed with a stiff scrub brush. On a hot day, it's not a bad way to spend 30 minutes.

For folks doing extended cruising, it's a common sight to see tenders suspended alongside, just out of the water on a halyard when moored or anchored. This not only serves to minimize bottom growth, but also helps with the rainwater pooling issue.

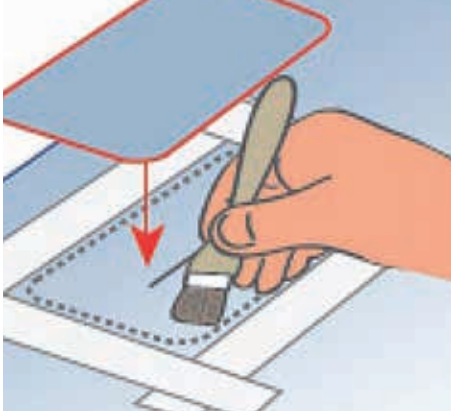
Other care tips

The other big enemy of inflatable tenders is incorrect inflation. Over-inflation should be avoided and can happen when inflated on a cool or shady day and then experiencing higher temperatures sometime later. Thus, pressure should be adjusted in accordance to temperature swings. Under-inflation in concert with movement where repeated flexing of the fabric is also to be avoided. This can be seen in many marinas where a sagging tender is on davits and left to flop around with each pitch of the boat.

For PVC, any fuel or oil spills should be cleaned up immediately with copious amount of water and wiped dry. The same goes for any suntan lotion or insect repellents. A more thorough cleaning should be limited to products specifically designed for your fabric. Do not put any automotive products on an inflatable tender. Do not apply anything that contains silicones or petroleum distillates. Although we never used it, many folks recommend 303® Aerospace Protectant™ for both Hypalon and PVC.

Repair

Contrary to popular belief, making a small repair in PVC and Hypalon is almost the same process, with the addition of the



patch area on Hypalon needing to be scuffed up a bit. Repairs beyond small holes and cuts should be done by a professional, but small holes and cuts are an easy DIY project. Since PVC is the more common material, we have used the following method with good results:

MEK is the recommended cleaning solvent, but Acetone may be used if that's all you have. Your inflatable tender likely came with a tube of one-part PVC glue. Ideally, humidity less than 70% and temperature between 64 and 77 degrees F. Above all, do not glue in direct sunlight. At least do this in the shade! Gather rags, pencil, masking tape, and a glue brush (chip bristle trimmed down to about 3/4"). Make sure any old glue is completely removed. Fully deflate the tube and cut your patch to extend beyond the damaged area by at least 1" in all directions. Make sure your patch has rounded corners. Position the patch, trace over its location, and then tape 1/4" around the outside perimeter of your pencil marks.

Scrub both mating surfaces (boat and patch) with solvent on a rag to clean. Be careful not to wipe the solvent on any other areas of the boat or patch as it will make the fabric sticky and shiny. Wait 5 minutes after the first solvent wipe. Apply two more solvent wipes with 5 minute waiting time between them. You are preparing the mating surfaces for glue adhesion. After the 3rd solvent wipe, wait 5 minutes.

Apply a ***thin*** glue layer with the brush to both mating surfaces, quickly working into each surface to be glued. If it looks too thin, it's probably correct! Wait 5 minutes. Apply two more coats of glue in the same way, with 5 minute waiting time between them. After the 3rd coat of glue, wait 10 minutes.

Join the surfaces, starting from one edge and slowly laying the patch down onto the glued area. Press out all air bubbles and wrinkles from the center to the edges. Rub hard with smooth tool, e.g. the back of a large tablespoon to force air out from between boat and patch. Careful not to scratch the fabric.

Wait at least 48 hours before inflation and use. The glue will continue to gain strength over the next week or so.

–Nick Caballero, ncaballe@Brocade.com

Safe Journey:

New Safety Items

By Bill Martinelli • C470

I have blabbered on for a couple of times about all the stuff we carry in our car or flying back to Mexico from the states. I know boring, who really cares!

Well, let me tell you a little story about some friends. In late April, *Sandpiper* sailed in to join us just north of La Paz at an anchorage called Playa La Bonanza on the southern tip of Isla Espiritu Santo. This is a shallow bay about two miles long with beautiful white sand beaches and close enough to La Paz to have cellular voice/data service. It's also one of the few anchorages that protects us from west and southwest winds. However, I digress.

We had a nice visit with Ed and Annette and then parted ways. A week or so later we were northbound near Los Gatos (70 miles north of La Paz) and they were heading south. We them on AIS, talked to them on the VHF and wished them a safe trip as always. Julie took a couple of photos and little did we know then that those were some of the last pictures ever to be taken of *Sandpiper*.

A few days later *Sandpiper* sailed down to an anchorage south of La Paz called the Bay of Dreams. Their plan (as many cruisers here do) was to sail from "Los Suenos" across the Sea of Cortez to Mazatlan where they would dock and leave the boat for the summer. They begun their crossing in early morning and as there was no wind they were motoring. It was a lovely warm day and they were in their swimwear.

When they were about 40 miles offshore they noticed smoke coming from their aft quarter berth. After expending two fire extinguishers, the smoke and powder dust made it impossible to breathe below. Retreating back up to the cockpit, the fire chased them up the companionway and burst the dodger, bimini, and sunshades into flames. With the canvas aflame they were not able to get the dinghy or the life raft launched. The captain was getting burned trying to do so, so they jumped overboard. They managed to grab some fenders when the fire burned through the lines holding them on deck.

Luckily they had decided to begin their crossing in daylight. After spending 1 ½ to 2 hours in the water, they were rescued by a sport fisher that had seen the smoke from about 25 miles away.

The entire episode from noticing the smoke to abandoning ship was less than five minutes! Scary, to say the least! Here's their blog for the full story, as they wish that fellow sailors will not have to go through an event like this www.sandpyper.blogspot.com

Along with all the normal things we gather up to bring back with us during our two month visit to the states, are some new safety items plus a new monitoring system for when we're away from the boat.

First on the list are some smoke detectors. When I had the boat surveyed last December the surveyor had suggested them. I am taking three, one for the aft stateroom (back of the engine area), one for the area over the engine and one for the forward stateroom over the generator. Also, I purchased a Weems & Plath SOS light; this is a USGC approved unit that replaces your flares. I have a bunch of old flares on board that are out of date, which I'll keep just case. Since I am driving, I could bring new flares but they are considered like a firearm in Mexico and are to my knowledge illegal to bring into the country. Even if allowed, crossing the border these days is something of a crap shoot as whether you will be stopped and what they may not like. Every crossing is different, what was okay last time, you may not be able to bring this time!

Voyager's Holiday Presents! (photo by Bill Martinelli)

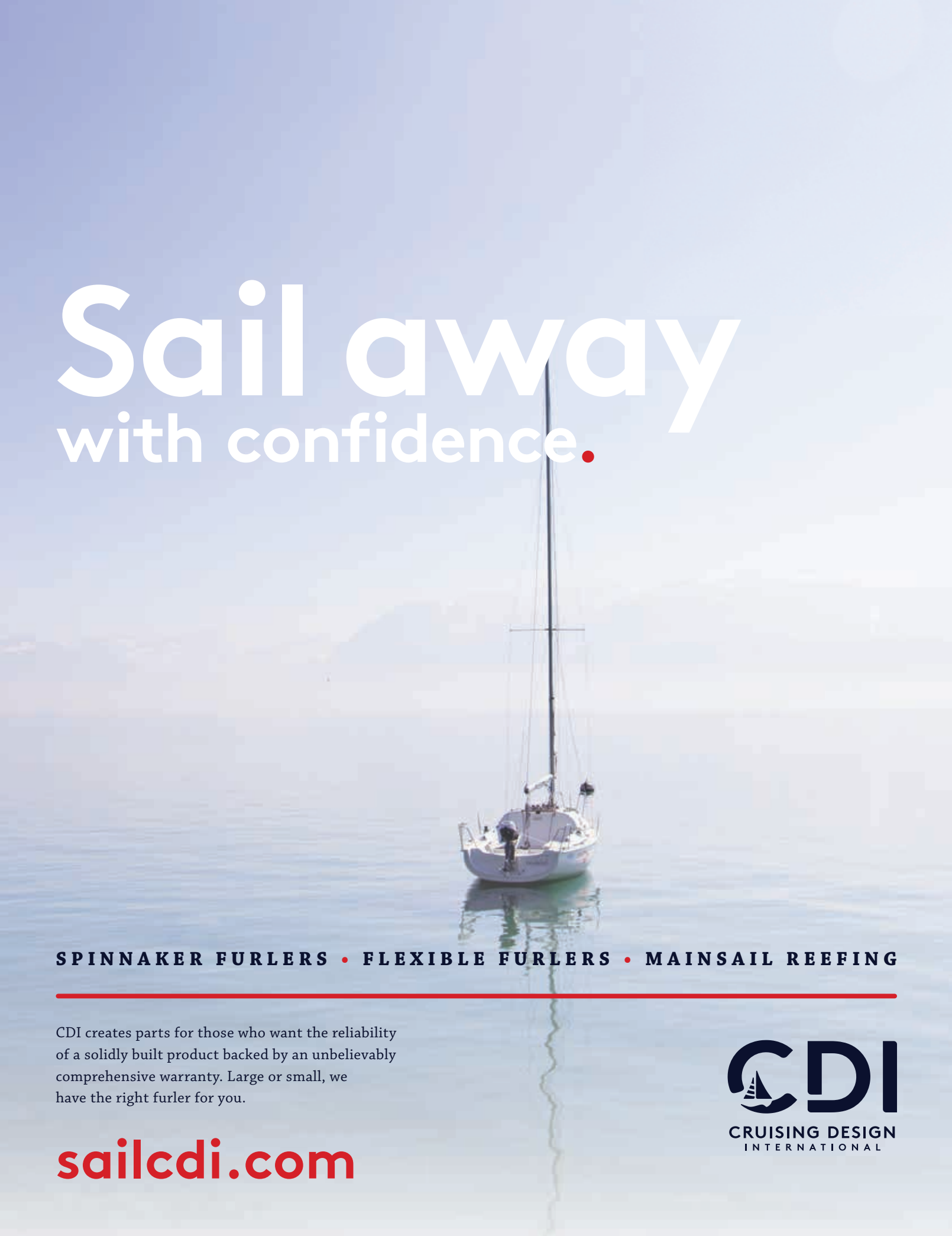
Also on the list, is a coiled water hose and fittings to attach to the fresh water system that I will store in the bilge. *Sandpiper*, in reviewing their fire, realized that the mattress had caught fire and their extinguishers didn't cool off the burning bits so they just re-ignited. In another boat I once had, I had an electrical fire and while the extinguisher initially put the fire out the wire insulation would start to burn again; pouring water onto it put it out for good. You need to cool stuff not just cut off the oxygen for a short period of time like powder extinguishers do. Hosing the fire down could have saved the *Sandpiper* and a number of second and third degree burns. Luckily our friends are recovering!

Now for when we are away from the boat, I came across a Bluetooth enabled monitoring system. We are off the boat about three months a year and have people watching it but - I still worry. This unit from Yacht Protector (www.yachtprotector.com) knows if someone has come on your boat, kicked your shore power plug out of the outlet, monitors battery voltage, and checks water level in the bilge. If you let someone use your boat it tracks where they are going, or somewhere they are not supposed to go! If someone attempts to steal your boat you can be alerted before they are out of the fairway. The info comes to you on your phone, tablet, or computer. It sends you, and others if you wish, a push alert whenever a parameter you have designated is exceeded and an email describing the alert every minute for the first ten minutes. After that it alerts a call center and they start calling folks on a list you've supplied. All the sensors talk to the core unit via Bluetooth, so it looks like it will be really simple to install! One real deciding factor in getting this is my insurance company gives me about a 12% discount on my policy. Woohoo!

I'll let you know how the installation goes in the next issue and how long it takes me. I am assuming if I have a beer while I doing the install and coast along on Mexican time it will take one to two hours. My kind of project!

Since the holidays are almost here, all the above items would make great presents for the vessel that has almost everything. But, I can always think of more things the Captain just cannot live without!

Introducing new safety items plus a new monitoring system for when we're away from the boat.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A Journey Back to Myself

Singlehanded Transpac (SHTP)

Six months before departing on the Singlehanded Transpac (SHTP), I was on the docks in Marina Del Rey shooting photos of a fellow singlehanded racer's very high tech carbon race boat. The dock was abuzz with the banter of interested racers. A friend introduced me to two of them and he spoke of my plans to race in the 2016 SHTP. They both seemed curious and maybe even secretly impressed (I could see visions of this lady sailor taking off alone on some fast slick boat dancing around in their minds). I bent down to rummage around in my camera bag for a lens when the inevitable question came: "So, what kind of boat do you have?" I answered casually, face still in the camera bag: "A Catalina 34." You could have heard a pin drop on the previously bustling dock. I stood up and took in the barely veiled shock on their faces, and with a big smile on my face, responded, "Well, THAT was an awkward silence." This brought some hearty laughter and also a quick change of subject.

In that moment, I felt a mixture of pride and protectiveness for my beloved *Haunani*, a 1988 Catalina 34. My Dad always said, when speaking about his sailboat, "She takes good care of me." I can certainly say that about my *Haunani!* Here is our story:

It's a bit like this poem by William Stafford:

"There's a thread you follow. It goes among
things that change. But it doesn't change.
People wonder about what you are pursuing.
You have to explain about the thread.
But it is hard for others to see.
While you hold it you can't get lost.
Tragedies happen; people get hurt
or die; and you suffer and get old.
Nothing you do can stop time's unfolding.
You don't ever let go of the thread".

I have always thought of my own life's journey as the following of a thread. I cannot tell you the number of times I have seen the look of bewilderment on the faces of my loved ones as I held onto the thread through things that didn't make any sense to them (many times it didn't even make sense to me). I still didn't ever let go of the thread. That thread is what led me to sail off alone under the Golden Gate Bridge towards Kauai on July 2, 2016.

Let me explain about the thread…

STORY BY MARGIE WOODS, *HAUNANI # 596 • C34/355* • PHOTOS BY CHRIS WOODS

I learned to sail from my Dad. He is truly my sailing hero. He is one of my biggest inspirations in life and for this trip. I think I was about eight when I first sailed off alone in a boat. She was a beaut! A little wooden sailing dinghy with a light blue sail. I will never forget the way I felt as I was spirited away into one of the greatest love affairs of my life: sailing. Sailing is my lifeline, and sailing alone even more so. I love sailing with others, and do so all the time, but sailing alone feeds me in a different way. t brings me the deepest sense of peace I have ever known. There is no feeling like it for me, and it doesn't even matter what kind of sail it is. It is the same feeling whether I go out for a couple of hours or (as I now know) sail off to Hawaii alone! I have never fully understood why, but on this trip, I think I finally figured it out.

When I am alone out there, I am truly myself! I fully and unapologetically embody my own strength and internal power. If you knew me well, you would know that I have an annoying habit of making myself small, especially when I'm around others whom I perceive to have more experience than I. When I am at sea alone, however, I feel no need to apologize for being exactly who and where I am. Out there, I have no shame in the full spectrum of my experience, which could range from heaving to in huge swells and wind to try and fix my autopilot, to having to reef in a squall at 3:00 in the morning when it's so rough I can barely hang on, to crying because I miss my dad, or to laughing at myself when I spill an entire pot of chili on my lap.

The most important part of that equation for me is the part where I don't doubt or downplay my skills, where I don't second guess myself, where I don't stay quiet when I know the answer, where I take care of business without asking anyone what they think first. Where I don't do any of that b.s., but instead fully trust myself. I was able to make this crossing alone because I trusted myself, and never once in 2500 miles did that trust waver. This revelation has inspired some deep introspection and a renewed commitment to integrating it into my daily land life, which to be honest, is harder for me than it seems. It is an old habit that singlehanded sailing is thankfully helping me to break.

Most people who do this race are a little bit, or a lotta bit, crazy (sorry, guys, but it is true). Most of these crazy people take a very long time to prepare, but, since I am my own special kind of crazy, I committed to this race with less than a year to prepare.

For better or worse, and no matter what the timeframe, I don't usually mess around once I decide to do something, and this endeavor was certainly no exception. For the last year, I lived and breathed all things sailing and *Haunani*. It was no small feat to take Haunani from comfy coastal cruiser to offshore racer. Nearly everything was either upgraded or replaced to the point where, apart from her trusty bones, *Haunani* was a new boat. The most notable upgrades were: an NKE autopilot, new standing rigging, a new elliptical rudder, a folding prop, AIS, and in-cabin repeater displays of my chart plotter and sailing instruments.

While we were preparing *Haunani*, I was able to participate in most of the Pacific Singlehanded Sailing Association races, as well as complete my first solo overnight sail around Santa Barbara Island (which was a huge milestone for me, because until then I had never even sailed through the night, let alone solo), and my 400-mile qualifying sail. With each of these steps that I took towards the race, I overcame fears, and learned and grew by leaps and bounds. Even my day sails each taught me something new, if it was only the simple reminder of the importance of slowing down. There were, of course, ups and downs, and I certainly had moments of doubt and fear, but I never wavered in my commitment to my goal to sail to Hawaii alone, and always held in my mind's eye my arrival in Hanalei Bay and into my dad's arms.

I am totally in love with my boat, now more than ever. She is a champion and was my valiant steed who performed better out there than I (or any naysayer) could ever have predicted. I have always felt that *Haunani* takes good care of me, but never more than as we barreled across the Pacific in huge, confused seas and wind that hardly ever dipped below 20 knots. She delivered me safely and swiftly to Hanalei Bay in conditions that would make even some blue water boats shudder. I am incredibly proud of her, and honored to be her steward. I cannot wait until she is back in fighting shape again (sadly, while being loaded onto a ship to come home, she had an accident at the hands of Matson Lines, and is pretty badly damaged).

I decided to go up to San Francisco a couple of weeks before the race to acclimate to the more challenging conditions. Since I had never sailed in the Bay before, my first solo sail was a real eye opener, to say the least. It was a quintessential San Francisco Bay day, and I quickly realized that we were not in Santa Monica Bay anymore! I adjusted to the conditions quickly, and by the time I left, I was in love with the changeable and challenging sailing offered by the Bay. The only thing I would have changed was the size of my headsail (I have a 145%). For those weeks leading up to my race, I was the most nervous I had ever been in my life. My nerves were severely exacerbated when about a week before my start, my autopilot failed on a practice sail. Nothing I could do would rectify the issue. I was completely stressed, to the point of tears and anxiety for days. I tried everything I could think of to troubleshoot and called in as many experts as I could. By the time I left, she was working again, but no one could ever really pin-point what was wrong or what exactly fixed her. I just prayed that whatever it was would stick, because without her, there would be no journey.

The day that I left San Francisco, I was surrounded by friends and family and, of course all of the other racers. It was quite a sight to see everyone milling around on the docks trying to act

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calm. I was doing a pretty good job of acting calm myself, but it was hard to do with a flip-flopping belly. When the time came for me to pull off of my side tie, I seriously thought I would faint. It was windy and we were in tight quarters. Plus, I was tied up to a beautiful boat with nary a smudge on her anywhere. I was terrified that I would have some serious docking snafu and be the laughing stock of the entire group. But I nailed it! I backed out without a hitch, and that is where my journey began.

From that moment on, I was in my element. The nerves that had been plaguing me for weeks fell away in an instant. I was simply sailing my boat, as I always do, one moment at a time. That's really what it took to sail across the Pacific alone: sailing my boat the best I knew how, one moment at a time. As those early moments ticked away, I was pleasantly surprised by how much I loved it out there. Even on the hardest days, I felt safe and at peace and I could always find joy.

To say conditions were rough is an enormous understatement. I would hear my dad's tales of his Pacific crossings - relaxing book reading sessions on the foredeck; peaceful sunset happy hours in the cockpit echoing in my brain as I, day after day, clung on to various handholds on my heaving vessel under stormy

As those early moments ticked away, I was pleasantly surprised by how much I loved it out there. Even on the hardest days, I felt safe and at peace and I could always find joy.

skies. No one said anything about being tossed about violently while flying along in 25-30 knot winds, where trying to imbibe a sip of water, let alone wine in the cockpit, would be a challenge. Still, I rolled with it, thinking that maybe I had heard wrong, or more accurately, maybe I was imagining the severity of it. Upon my arrival to Hanalei, however, the magnitude of the atypical conditions was promptly corroborated by two five-time veterans of this race. One said, "you sure picked the worst year ever to do this race." They both stated it was the roughest trip they had ever had. This was confirmation that I was not losing my marbles or exaggerating in my mind the intensity of what I had just gone through! When I look back, I am not sure how I ever questioned myself, because as evidenced by my tired and bruised body upon landfall, there really had been little respite from the rough seas for most of my trip.

I have never in my life felt a boat move and heave like that. It took every ounce of strength I had just to hang on and move small distances at a time. I used muscles I didn't even know I owned just to stay upright. The sounds that my boat made down below still escape accurate description. I sort of got used to them, but there were times it sounded like *Haunani* would break in half. Thankfully a friend had given me the tip to go on deck when the sounds became too much. Up there it always felt right and made sense. Down below was a horror movie soundtrack!

I don't want to dwell on the negative, but, as with life, this journey had its ups and downs, so I will mention a few lowlights: losing my last seven-gallon jug of drinking water due to a wave slamming into us; losing a battery bank; losing my electric bilge pump (I would wait until the sloshing in my bilge created the perfect amount of anxiety to motivate me, then I would swear and head out into the rain to manually pump her out); ferocious new leaks that drenched every cushion in the cabin so that everything started smelling horrible, and a dry sleeping spot was nonexistent; and more than a day of debilitating sea sickness.

Also unnerving was that due to a communications issue, I never received position reports from the race committee, so I never knew where the other sailors were. This made me feel a bit alienated. The worst thing by far that happened, was losing my autopilot about two days before my finish. She failed me in dramatic fashion. She disengaged and spun us in a violent donut straight into huge swells and then back around again when I was on the foredeck. I was finally able to heave to, so I could troubleshoot, and at the very least switch to my back up, but I never found the issue and was forced to use my backup wheel pilot. The backup performed ok, but was temperamental and high-maintenance in those conditions. I had to lash the wheel lock down to keep it working, and even then, it would stray sometimes. Once, it turned me in precisely the wrong direction in the middle of the night while I was asleep. There were even more challenges, but I will

spare those details and instead share some of the almost inexplicable beauty that I was blessed to witness.

Some of the highlights for me were: the seventeen sunrises over a moody sea; shooting stars across a velvet sky; the beautiful waxing moon lighting my way when she could find the strength to peek out from behind the cloud cover; the dramatic rainbows that would show up at just the right time and give me hope; the ever-changing textures and hues of the sea; the cobalt blue and backlit teal crests of the huge rollers that surrounded me most days; the first time I flew my spinnaker alone. The sensation of barreling along in the black of night at a pace that seemed impossible for my little boat; the 360 degree horizon that changed with every mood of the ocean but always surrounded me and beckoned me home; surfing down big rollers at up to 12 knots on the front end of a squall, laughing my head off at the sheer joy of it; hand steering my boat in the middle of a rainy tropical night as we plummeted along at ten knots; and, of course, the first sight of land.

I cried when I saw Kauai island for the first time. I cried even harder when I got close enough to smell the earth. There is no smell like rich Hawaiian earth for me, it is the smell of my childhood home. That day will forever be etched in my mind, from the way the sun came out after a wretched night to usher me in, to the ensuing rainbow that appeared like a welcoming gate framing that majestic island, to rounding the point at Hanalei and crossing the finish and hearing the words: "Congratulations, *Haunani*, on finishing the 2016 Transpacific Yacht Race."

The rest was a blur until I set foot on land. My first steps were more solid than I imagined they would be, but shaky, nonetheless. As I steadied myself, my beautiful family ran to me with gorgeous leis and much-anticipated hugs and kisses. The last person in the line was my dad. My breath left my lungs as I saw his face and rushed over to hug him. This was the moment that had been in my mind's eye for ten months, and it was finally here. I was, and

remain, humbled and in awe of this, one of the greatest moments of my 48 years!

I knew from the beginning that this trip would be a vision quest, a way for me to connect more deeply to myself and to something larger than me. Everyone has been asking me if I have changed as a result of this journey. As much as I feel transformed by sailing alone for 2500 miles across a vast and stormy ocean, I really feel no different than before. I was simply reminded of the strength and power that has been inside me all along. In the end, this voyage was a journey back to myself.

Tech Notes

Q&A for Your Catalina That's Been Factory-Approved for Accuracy

Tech Notes are also available at **www.mainsheet.net** in PDF format for printing or reading on digital devices. | Winter 2016 password: W344

CATALINA 470 NATIONAL ASSOCIATION

How to Deal with Bundles of Cables

C470 Association Technical Editor Joe Rocchio

For many C470s, fall signals the end of the sailing season and a transition to winter storage on the hard. This ritual is sad enough by itself but then there is often the need to un-step the mast, a royal pain. After many years of patiently working with the yard to deal with the wires from the lights and electronics that run down the mast and through the compression post into the bilge, Mike Yorke, C470-108, Certa Cito, decided there had to be a better way. Here is Mike's story:

Every fall, since new in 2002, *Certa Cito* is taken from her home mooring to the dealer's yard for winter storage. The dealer's Long Island Sound waterfront is located on one side of the county power lines. The storage yard is a mile away on the other side of the power lines. As a result, the C470 mast has to be un-stepped in the fall and re-stepped in the spring. To accomplish this, the myriad of cables that run up the mast have to be disconnected/reconnected at the bilge end and snaked back up/down the compression post. There are quite a few: radar, VHF antenna, TV antenna, hailer/horn, tri-color/strobe light, deck and steaming lights and the wind instrument. This turns into quite a thick bundle of cables.

As delivered from Catalina, all of these cables have connectors in the forward bilge. Once the cables are disconnected, and the mast lifted by crane off its deck step, the cable bundle has to be carefully pulled through the bilge exit, through a 90 degree turn into the compression post and then up through the compression post to the exit at the mast step. The compression post sits on its base upon a heavy hollow fiberglass box beam that is part of the integrated structural grid that makes the C470 hull so strong.

The difficulty is that the electrical cables must make a 90 degree turn inside this box beam on their way through the compression post. The exit hole from the beam into the bilge is about 2 inches in diameter and

The in-mast wiring access port is shown as installed on the starboard bow base section of the mast on C470-108, Certa Cito.

is roughly finished. This transition can result in connectors being pulled off and cables being cut while the cable bundle is extracted, no matter how carefully it is done. It is equally as difficult trying to re-thread the cable bundle back down the compression post and into the bilge when the boat is re-commissioned. Each spring I spend a fair amount of time repairing cables and replacing connectors.

In discussing the problem with the yard, we noted that a number of newer boat models from various builders, including Catalina, have an exit port cut into the bottom part of the mast. With such a port, the cable connections can be made at deck level outside the mast and the cables tucked inside the access port. When the time comes to disconnect and un-step the mast, the access port hatch cover is removed and the cables eased out and disconnected. Once disconnected, the bottom section of the cables is eased out of the bottom of the mast and the mast can be lifted away by the crane. The process is reversed when spring comes and re-commissioning takes place.

This spring, my dealer did a very nice job of cutting an access port into the starboard side of my mast. The hole is approximately 3 inches wide by 8 inches high with semicircular ends. The bottom of the port is approximately 8 inches above the base of the mast. The stern side of the port is about 1 inch forward of the foremost of the two longitudinal striations of the mast extrusion.

This size port and location was chosen for several reasons: it is small enough and far enough above the base to have minimal effect on the compressive strength of the spar; the rounded ends essentially eliminate places where stress cracks can initiate and grow; it is low enough on the mast to have the interior area clear of any in-mast lines; and this area of the mast is fairly flat enabling a cover to be snugly fitted.

A commercial access port cover (Selden, 540-1; for a 72 x 207 mm port opening) fits the hole and is held in place by built-in sliding latches at top and bottom. An umbilical of connecting cables was fabricated and run from the mast step to the bilge with connectors at the deck-end end that mate with connectors on the in-mast cables. **–Co-authors: Mike Yorke, Joe Rocchio**, jjr@onward.ws

CATALINA MORGAN 440 NATIONAL ASSOCIATION

Washdown Pump

CM440 Association Technical Editor Mike Simpson

One addition we've come to appreciate having is the washdown pump. It's handy for multiple uses. Not only can we rinse the anchor and chain and clean the deck of that unwanted bird poop bomb, but we can also rinse our holding tank.

Why is that important you ask? Well, down here in the eastern Caribbean, there are few to no pump out facilities past Puerto Rico. Something to consider before you come cruising down here. So, being able to keep your tank clean and (somewhat) fresh can be a very real problem. After discharging, we flush the holding tank with two or three good rinses from the washdown pump. We do this while we are underway so that the movement of the boat adds a sloshing effect to remove everything from the walls of the tank.

For those of you with the 440, adding the pump was relatively easy. There is ample room to add the pump of your choice under or in front of the forward water tank. I redirected our forward head's sink drain hose to the shower sump to repurpose the through hull for the pump. I installed the pump under the water tank, gaining access via the removed drawers. There is a nice wood frame already there, supporting the water tank that you can mount the pump. I installed wiring following the path of the depth and speed transducer cabling. There is a great conduit in the bilge right above the holding and fuel tanks perfect for the wire run that exits right near the nav station. I then used one of the auxiliary switches for the 15 A breaker.

I drilled a hole through the collision bulkhead so as to allow a PVC pipe to be glassed into the hole. I then added hose connectors on each side. Hose runs were easy to do and unobstructed.

A hose with sprayer was added in the anchor locker on the port side. There is a small line holder attached to the starboard panel protecting the windlass motor that keeps it all out of the way of the chain.

–Mike Simpson, mike@threesheetssailing.com

Fridge Fan

Is your fridge not getting cold enough? When we replaced our Isotherm fridge with a newer model, we saw that temps were not evenly distributed in the interior cabinet. Items would spoil prematurely after only a few days. Not cool - literally.

Easy solution! Add a fridge fan. Search online for Valterra A10-2606 FridgeCool. It's a small unit, about the size of a jar of pickles, runs on a couple of 8D batteries for about 50 days (our experience), and makes no noise. It moves air about the inside so that everything stays cool. It's very cheap, about $12-15, and best of all, it works.

Changing Out the Dual Direction Solenoid for the Maxwell VW800 Windless

C400 Association Technical Editor Olav N. Pedersen

C445 Association Technical Editor John Clements

The UP direction Maxwell footswitch stopped working. Of course this happened early one morning when we were ready to depart an anchorage in the San Juan Islands. With the way the VW800 is made, the solution that morning was to simply reverse the direction of the chain in the windless chainwheel and use the DOWN footswitch to raise the 150 feet of chain.

When we arrived back at our slip I unscrewed the wood access panel in the bow end of the V-berth where the solenoid lives. There it was, looking its age (around 1999).

Power was disconnected and I removed it taking care to first label all the cables going to the unit. I opened it up and it was not pretty inside. As the photo reveals, corrosion had been taking place for an extended period of time and a complete replacement was required.

This is one of those out-of-sight out-of-mind things. First of all, it's behind a wall. Secondly, just looking at the unit is not enough. You need to open it up to inspect it. None of this is difficult and it's not even that time consuming. So, even if your windless is working properly, it would be a good idea to open it up, inspect it and make a note in your logs for future reference.

The part number for the Dual Direction Solenoid is P19045 and it cost around $165.00 online at Anchor Express.com. When the new unit arrived it was slightly different than the old one. The F1 and F2 terminals had been flipped. Other than that, everything was the same. Before I installed it I spent a good half hour cleaning the heavy cable ends and adding a corrosion inhibitor. I also removed the end connectors to the 3 small cables going to the footswitches and replaced them with new ones. Installation was complete (see photo). When I powered it up it performed as it should.

This is one of those out-of-sight out-of-mind things. First of all, it's behind a wall. Secondly, just looking at the unit is not enough. You need to open it up to inspect it.

Damaged Solenoid

New Solenoid

This was a straight forward project and only took a couple of hours to complete.

While I had that compartment open I also inspected the rest of the cables and terminations and was pleased to find them in good condition.

Remember to turn off all power and mark all cables before disconnecting.

–Olav N. Pedersen, olavnp@gmail.com

CATALINA 42 NATIONAL ASSOCIATION

Replacing the Lifelines with Dyneema

C42 Association Technical Editor Gene Fuller

In this issue we highlight a safety maintenance item that many of us could consider. If you see the telltale dark stains at the ends of your lifelines, read on.

Terry and Carol Hogan are world travelers on their C42, *Common Sense*, which is a 2002 model. They are Australian, but they purchased their boat on the East Coast of the USA. They proceeded down the ICW to Florida, over to the Bahamas, then Bermuda, Azores and the Mediterranean. They have spent winters in Tunisia, Turkey, Sicily and Spain. They are now about to head back to the USA via Cuba. Their travels are in a blog called "Welcome Aboard Common Sense".

They recently replaced the lifelines on Common Sense. **–Gene Fuller,** gefuller42@comcast.net

Our original lifelines were looking decidedly shabby, and the tell-tale rusty patches suggested that the wire inside its plastic coating was not in great condition. They are called "lifelines" for a reason. It was time to replace them. We read an article by David and Marcie Lynn in *Good Old Boat* magazine, where the authors describe refitting their lifelines with Dyneema. This had immediate appeal, as Dyneema offers great strength for its weight, and it has very little stretch. It looked good, and we could do the splicing work ourselves.

We used CS Johnson fittings. We considered others but even though our boatyard in Turkey had a skilled stainless steel operator, who could machine stuff up quite well, the rod size was simply not available – his was all metric. We could have had a complete set made up but the cost of that plus pelican hooks was no saving at all. Also, as you may see from other articles on this project, it is possible to make eye-splices and then insert a shackle with a pin, which makes the splicing job quite easy. It is much more difficult to splice in a Johnson fitting, as you cannot simply pull the pin out, make an eye, then put the pin and shackle back in. Added to this is the problem that the Johnson fitting is quite long and the whole length of the unit needs to go back through the splice. Nevertheless, the final look of the CS Johnson lines is far more sleek and professional, and we thought it was worth both the cost and the added complexity in fitting.

The turnbuckles on *Common Sense* have 1/4-28 threads but, beware, the pelican hooks are 5/16-24 thread. The same may not be true on your boat, but it caught us. We had to exchange, which was difficult from Southwestern Turkey. In addition to that, even after the exchange we found the thread was different. We ended up by cutting the bolt ends from the old swage fittings and having them welded onto the CS Johnson fittings anyway. You need to take care here. Not only is the size in question, some available fittings have left-hand threads. Measure and inspect carefully.

Parts needed:

- 8 x 1/4-28 Johnson part 20-62 for the fore and aft turnbuckles.
- 4 x 1/4-28 Johnson part LS 3300 for bow to gate – this fitting has an eye that the Pelican Hook slips into.
- 4 x 1/4-28 Johnson part LS 3200 for stern to gate - this is a double-ended fitting that holds the rear (fixed) part of the gate.
- 4 x 5/16-24 Johnson part 20-64 that connects to the pelican hooks. (double check the size here.)

Line length:

The 12 lines should be measured individually, not just the total. The safety margin for errors is per length that we would need to cut. Three runs in each lifeline:- bow-to-gate, gate-to-inside-gate, gate-to-stern.

- Times 2 for top and bottom, which are not the same
- Times 2 again for each side.
- We used 5 mm steel grey Dyneema (STS 12-75) from New England Rope.

The total measured length needed was about 120 feet. An additional margin of 40 feet was added to account for splices (24 of them) and a fabrication safety factor.

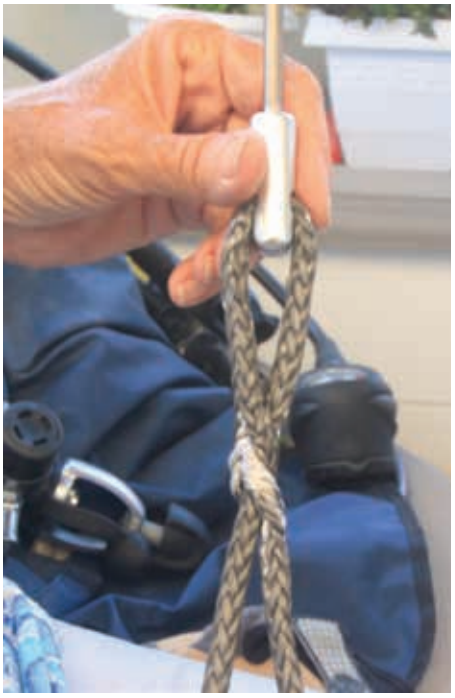
Fabrication:

A set of four nested fids made the job of splicing the lines much easier. A YouTube video provided instructions, and we found it very easy to follow. Dyneema is quite workable, with a slightly "slimy" metallic feel to it. The fibers work apart quite readily to allow you to get the fid through a line, or the line through itself, and the fact that it has no core means that you can finish a splice neatly by pulling the bitter end inside of the line itself. Working a fitting through the line is reminiscent of a python stretching to engulf its prey. This was actually a useful mental image as it encouraged patience and perseverance with a challenging task! Remember that Dyneema is very tough – you will need a very sharp knife and a means of re-sharpening it as you go.

1. Tape the bitter end to prevent fraying as you work. Thread the Dyneema through the fitting and double it back on itself. Measure 20 cm back from the bitter end and mark the other line at the corresponding point.

Inserting fid through line

2. Ease the Dyneema fibers apart at this point with your fid and thread the bitter end through. Leave enough of a gap between the fitting and the join to enable you to thread the fitting back on itself and through the line (this is much easier to follow on a video than in written instructions).



First pass completed

3. Now ease apart the fibers at a point on the bitter end, as close as possible to the join while still enabling you to feed the fitting through it. Feeding the fitting through the Dyneema is challenging – I found the end of a fid could be used shoe-horn style to help ease it through. Smooth the splice back on itself. When you pull the line tight at this stage, the splice is locked.

Working Johnson fitting through line

4. Now feed your fid down through the centre of the line, just below where the bitter end protrudes. Work it down for at least 10 cm, exit the line, then feed the bitter end through using the fid. This should create quite a neat finish with the end inside the line. Trim it if necessary.

Final tuck of bitter end

Make sure you keep checking the lines against their positions, keeping in mind that you will be using the turnbuckles to tighten the lines to their final tension.

The final result looks quite smart, compared to the rust-spotted wire that was there before. These will stretch and need replacing some time in the future, but then so would wire and at greater cost. Overall, we are quite pleased with the outcome. **–Terry and Carol Hogan**

Completed splices

CATALINA 36/375 INTERNATIONAL ASSOCIATION

Raymarine EV1 Below Deck Autopilot Installation in MKI Catalina 36

C36 Association
Technical Editor
Pre Mk II hulls
Larry Robcke

C36 Association
Technical Editor
Mk II hulls
Nick Caballero

Pre MkII Editor Larry Robcke

I hope this submission finds you all well and enjoying yourself rather it be sailing or on the hard! For this issue we have a Raymarine autopilot installation from one of our members, Les Troyer. I hope you find the article as interesting as I did, be sure to get the digital copy on our C36 website in the technical articles section. If you have a project or upgrade that you would like to submit for publishing, please reach out to me through our website. Until our next issue, Fair winds and following seas to all! **– Larry Robcke**, lrobcke@pace.edu

When I went for my acceptance cruise on my new to me 1983 Catalina 36 MKI I knew I was going to have to replace the autopilot. A Raymarine/Autohelm 3000 with the external motor and exposed belt looked like an accident waiting to happen. Existing electronics were all over the map, Furuno depth/fish sounder, Navico/Corvus water speed, Garmin GPS, Standard Horizon VHF with AIS and Raymarine MFD & Radar. I'm getting back into sailing after a 20-year departure and have no interest in racing – I just want to re-explore the San Juan and Gulf Islands when I retire. I decided to add a Raymarine EV1 with ACU200 computer and a below deck linear drive. I also purchased Raymarine wind/depth/speed instruments to compliment the autopilot (subject of another story). This story is my adventure with installing the Autopilot.

Network Power – In the wiring closet I installed a 3-spur network block – power to the SeaTalk^{ng} network is provided on one of the spurs, one heads forward to the EV1 with a 2M cable. Backbone connections head aft with another 2M cable to the ACU and forward with a too long 10M cable to the ITC5 (for water speed & temp, depth & wind instruments). I could have powered the network form the autopilot ACU, but decided against that as I didn't always want the autopilot on consuming precious battery power.

ACU installation - as shown in 2 photo I installed the ACU 200 behind the partition between the starboard aft quarter berth and navigation station seat. This provide a not too out of the way location and short network cable length to the equipment in the wiring closet. The device has several inputs/outputs, the unit specific SeaTalk^{ng} spur cable exits and goes up to a backbone "T", 10 awg duplex wire is run from a 30 Amp breaker on my DC panel. From the ACU, SeaTalk^{ng} network cable, 10 & 16 awg duplex cable and the rudder angle sensor runs aft to the lazarette and the linear drive. This adds quite a bunch of wires running aft and I don't think I can tuck them all behind the molding, I plan on adding some additional wood molding to hid all the wires. The network "T" runs forward in to the wiring closet and 3 spur block (I think Raymarine calls it a 5 position block – but you get 3 spur cables and backbone in/out).

Helm Station – From the ACU a backbone line runs to a coupling under the helm guard (this will allow me to add/change things without pulling the wires inside the helm guard. In Navpods attached to the helm guard are a P70 autopilot head, two i70 instruments, the e7D MFD and a FUSION Remote (connected with a NMEA 2K -> SeaTalk^{ng} cable).

EV1 course computer – This little device has lots of restriction on its placement. I've mounted it at the top of the closet just forward of the Nav Table. It only connects to the SeaTalk^{ng} spur cable running aft to the

wiring closet. It does not need to be on the centerline of the boat, but does need to point dead forward and be away from magnetic interference (wires, metal). It is far enough from magnetic interference in my case – but you may need to mount on the forward bulkhead if you have problems. Also note the boat is 33 years old – and I have no idea who did the hack job on the wood.

Edson Bronze tiller – expensive chunk of bronze. The tiller was mounted directly under the Edson radial quadrant. Edson knows the diameter of the shaft but wants you to measure it to be sure nothing has changed from the factory. For this I purchased an extra deep digital caliper from Harbor Freight. Normal 6" calipers could probably do the job but I read several accounts that it was difficult because of the limited throat depth. I must have gotten close enough as they said they would ship me the standard for the Catalina 36. Once the tiller is mounted and pointing in line with the rudder, you need to drill thru the back of the tiller thru the rudder post and out the other side of the tiller. I cut a notch in the aft bulkhead to give me access for the 3/8 drill bit and drill head. I kept the bit cooled with lots of penetrating oil (it's what I had on hand). After using two bits (I like them sharp) I almost made it through, but needed to take a break and find a 11" 3/8 drill bit to make it all the way through the tiller. A 5" stainless bolt and nut secure the tiller and rudder post for a final fit.

Type 1 Linear Drive (short) - This is where all the sweat and work is – unlike the MkII (Thanks to Larry Brant for his great article on the MKII) there are no swim steps to bolt my drive unit to. I fabricated a mounting platform from 0.25" 6061 Aluminum. I chose this because it is easier to weld than other aluminums and won't rust like mild steel. This was my first real project with welding aluminum (it's not as hard as everyone says). I pushed a 6" wide piece of plate as far to starboard as I could. Then I needed to go down about 3", so welded

an extension down. This has to be in line within 5 degrees of the tiller. In addition to going down it also needed to go to starboard about 6" so the arm would be slightly starboard of center when the rudder was neutral. Being slight to starboard allows me to use the threaded adjuster to make it perfect if I got the distances wrong. I actually did this in two phases: 1) first going down then 2) moving starboard. My first attempt at going down was way off, I was way too far down. After reviewing all the math, I concluded I forgot to account for the height of the mounting bracket. I cut it apart and re-welded and the mount was within a 1/16 of an inch – perfect. Now I welded on another chunk of aluminum to move me to the proper distance starboard. Now all I needed to do was drill a 12mm hole in the tiller to receive the drive arm. Edson makes a big point of needing to mount the arm between the tiller flanges. If I use the supplied fitting from Raymarine it would put the arm on top of the new tiller. The clevis is a 12mm diameter, I haven't found a stainless one yet and am using a 12mm bolt double nutted. Like most folks I ended up with a slightly smaller rudder throw – Raymarine wants 35 degrees each side (to prevent over stroking the Linear Drive) , my Catalina was more like 42, so I needed to fabricate a new stop block (this is the "new" wood in the photo above). My old 36's don't use wire stops – but rather have a post on the quadrant that hit a wooden block mounted above and on the forward edge of the lazarette. I fabricated new wooden piece for the stops and secured with 3" stainless wood screws.

Rudder position sensor – The last piece to install was the rudder reference sensor. I drilled and tapped the quadrant for a ball joint to be mounted to the underside. I then mounted an aluminum shelf to starboard for the sensor. Threaded rod is cut to mount between the sensor and quadrant. You can see the threaded rod in photo 4 as it pokes out under the stop block – then connects to the sensor. This rod needs to be cut so when the rudder is neutral – the sensor reads 0, you use the rod like a turnbuckle to make fine adjustments and get to zero. This worked great with one minor problem. Given the geometry of the lash-up, when turning to starboard the mount on the quadrant is on the top of the "Sin" wave and doesn't move much so I get false position reading on extreme starboard turns. This hasn't provided a noticeable problem with operation so far.

Conclusion – In all I've probably got in excess of 40 hours into the project. I had lots of fun and frustration. One thing I do know – it is 1000% better than the belt driven ST3000 version. It can be driven by the chartplotter and slaved to apparent wind. For long passages, that will allow me to relax more and really enjoy my upcoming retirement. **–Les Troyer**

On the Topic of Ports and Hatches

C350 Association Technical Editor Bill Templeton

As we age we may become weak, begin to creak and even leak….. no I'm not talking about our bodies (although it may be true there also) but our beloved C350s. Two issues ago I asked for any experiences with the opening ports leaking….Pete Travers was having some and I too had an occasional drip portside forward cabin. I suggested, at that time, the problem may be the "seal" between the lexan lens and its gasket… possibly dirty or having shrunk. This Summer on our cruise to Martha's Vineyard we had exceptional weather with only one or two rainy days, unfortunately that was all it took to soak the Admiral's favorite digital camera (on top of the hanging locker, starboard side forward). I finally followed my own advice and we cleaned the lexan and the gasket of all the opening ports. Thoroughly testing with a hose, no water came in! this may not solve all leak problems, I would strongly suggest not waiting until you have a leak but make cleaning the lexan and gasket of all opening ports part of routine maintenance. By the way, the camera seems to be "healing" after drying it, opening it and blowing it out with compressed air.

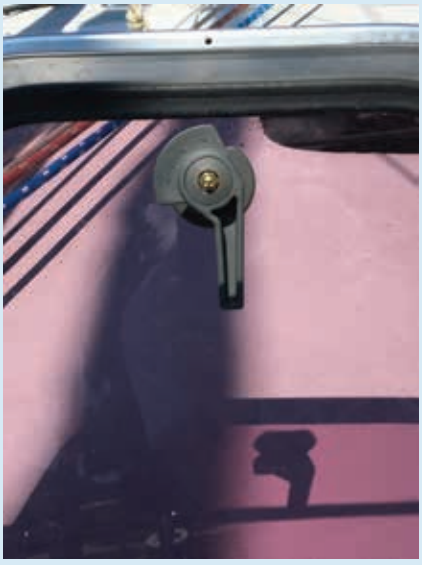
On the topic of ports and hatches, Nevile Edinborough has offered a repair and upgrade of the overhead hatch in the head.

Please see the following article.

Lastly, take a look at my repair of the anchor well cover on Makani Kai as completed this past off-season.

As always, please send me any and all "things 350" to share with our brothers and sisters out there. **–Bill Templeton**, pbtemp6816@verizon.net

Repair and Upgrade of the Overhead Hatch in the Head



During a recent sail we had the hatch covers on Irish Lady (C350 #413) open. When my friend closed the small hatch in the Head the handle came off in his hand. When I was able to get a good look at the cover it became obvious that the handle was simply glued to the acrylic. The other hatches have handles that attach with a solid screw. Not so for the small Lewmar hatch.

This appears to me to be very dangerous. A glue joint can fail. In fact, I am surprised that it held for the 10 years or so since manufacture. But, if the joint had failed during a severe storm the boat could take on an incredible amount of water.

I elected to re-do the handle using a through screw. Figure 1 shows the parts used. From left to right is the lever arm, the handle base, a 3" stainless #8 screw, an end nut and washer. The critical feature I was able to use was that the handle base is threaded. Normally a short screw attaches the lever to the base.

I drilled a 3/16" hole in the acrylic and inserted the #8 screw through and into the base. There was enough thread left that I could use the end cap to hold the lever arm to the assembly. The assembly is shown in Figures 2 and 3.

It is important to realize that the screw can be added without removing the base. So, you don't have to wait until the joint fails. I recommend that everyone should consider an update. **–Neville Edenborough**, C350 #413 *Irish Lady*

CATALINA 350 INTERNATIONAL ASSOCIATION

(continued from previous page)

Voids and Delamination in the Anchor Well Hatch

A few years after purchasing our 350 *Makani Kai* I noticed some crazing in the gelcoat of the hatch cover the anchor well. (see before photo) Along with the crazing was a flexing of the hatch cover itself. Suffering terminally with human nature I kept saying each Winter I would bring the hatch home and see if I could reinforce it from underneath…. perhaps add plies of cloth and resin. Finally, I brought the hatch home this last winter when I laid the boat up and covered her for the season. I discovered there were significant voids and separation of the surface laminate from the core primarily on the starboard side. Having relaminated sections of an Airex cored deck on my old LeComte Medalist I felt confident I could restructure the hatch. Using a mini "Dremel-like" tool I opened the cracks (crazes) and exposed the voids. Since I had a combination of voids and delamination to address from the exterior I opted to drill holes through the exterior laminate for injection of a polyester resin/fiber mix. If I did not have the voids I would have attempted to drill from underneath and eliminate the later step of re-contouring the affected areas of non-skid on the hatch cover. (see sepair photo) I mixed a slurry of polyester resin and West System 403 Microfibers to fill the voids and inject into all the holes…. placed weights on the non-skid surface and when my slurry was oozing up out of the holes I let it sit and cure. After curing, I used the same mini tool with a small cone shaped wheel to grind away extra resin and best-as-I-could recreate the non-skid pattern. A phone call to Catalina parts and I had some gray gelcoat on its way (do they still call it Butler Gray?). The gelcoat does not match what's on the boat…. don't know if it is a question of age or batch. (see after photo) Stomping around on the foredeck for a month in the Chesapeake and a couple of weeks up to Martha's Vineyard, my repair is solid and no longer flexes. **–Bill Templeton**

Where Did The Summer Go?

C34 Association Technical Editor John M Nixon

C34 Associate Technical Editor Ron Hill

As I sit here in my office on September 6th of 2016, I am still trying to figure out what happened to the summer. A quick look at my Google Calendar offers some unpleasant insight: I have been traveling on business as part of my engineering consulting business for 6 of the last 7 weeks, and I leave again tomorrow morning for another trip to another client for the rest of the week. Before that I was feverishly reviewing documents to support the certification of a new aircraft since early May.

As a result, I have no articles for this issue of the *Mainsheet*. It pains me, but in organizations such as ours we depend upon the efforts of volunteers to do basically all of the work. Volunteer work is rooted in love and passion, but it is still what gets done after all of the work and family responsibilities are met. Hopefully things will be a bit saner over the fall season and my long list of stacked up boat projects will get some long overdue attention and result in some new articles of my own.

As I regularly remind you our readers, we always want and need your ideas and your projects to share with our like-minded community of sailors. If you have something you would like to share, contact me and I will give you the things you will need to know to write your own article. If you have an idea about something that you wish somebody else would produce an article about, contact me and let me know your idea, and we can see what we can do about it. I look forward to hearing from you! **-John Nixon**, *Orta Vez*; Hull #728, c34hull728@gmail.com

As I regularly remind you our readers, we always want and need your ideas and your projects to share with our like-minded community of sailors. If you have something you would like to share, contact me.

The Inbox

I don't often share emails that I get from readers, but the following exchange was just too good for me to pass up the opportunity to do so. It made my day twice!

Harris Faigel Email Exchange

Harris C. Faigel <hfaigel@massmed.org>
To: c34hull728@gmail.com
Thu, Aug 25,2016 at 12:34 PM

John:

Last Thursday as we were rafting our 1997 C36 MK II in Menemsha on Martha's Vineyard my ST4000 separated the front from the back parts. Inspection showed that 2 inches of the belt had stripped the rubber from the wires. I was able to put things back together enough to use it to get home on Sunday.

Then when I looked at the mail that had come it while I was away, the latest issue of *Mainsheet* had arrived with your article on the problems with the ST4000 Mk I and how to repair it. 1A in Fig. 1 was exactly what my belt looked like. So even though mine is a C36, we have the same equipment and the same issue.

The new belt has been ordered from Poly tech and will arrive in a few days.

In addition, one of the rollers had broken off the pedestal and was free in the autohelm. The pedestal is 1/2 inch long. Yesterday, I bought a #6x3/4" flat head screw, drilled through the center of the base of the pedestal for 3/16" (with the washer in place the screw extended 3/16"). I put the new screw through the washer and the pedestal and then that assembly thorough the roller and screwed the entire assembly into the new hole in the base. The roller works.

When the new belt arrives, I will install that and will have a refurbished system.

Thank you very much for such a timely article. **–Harris Faigel**, *Even Keel*, C36 MkII

John Nixon <c34hull728@gmail.com>
To: "Harris C. Faigel" <hfaigel@massmed.org>
Fri, Aug 26, 2016 at 1 :56 PM

Hello Harris,

I'm glad the article was so timely for you! I always like feedback that any of the articles meet a need and we're useful. Thanks for taking the time to let me know.Regards. **–John**

Harris C. Faigel <hfaigel@massmed.org>
To: John Nixon <c34huIl728@gmail.com>
Mon, Sep 5,2016 at 8:19 AM

John:

I ordered the new drive belt from Poly tech and it arrived 5 days later. Back on the boat it took me 10 minutes to take the wheel off the hub, open the clamshell, remove 5 screws and click the cover off, swap out the belt, replace the cover, snap the clamshell back together and returning the wheel to the hub. Quickest easiest repair I've ever done on a boat. Thanks for your article in *Mainsheet*.

One thing I'd point out: Before taking the wheel off the hub, be sure to rotate it so that the key is on top, ready for replacement. Otherwise you risk having the key drop out of the slot and making it more difficult to get the wheel back on properly.

John Nixon <c34huIl728@gmail.com>
To: "Harris C. Faigel" ,hfaigel@massmed.org>
Mon, Sep 5, 2016 at 2: 1 0 PM

Hi Harris,

Nothing quite like having the correct part available:) Life is much simpler that way. Thanks again for the feedback. Regards. **–John**

Harris C. Faigel <hfaigel@massmed.org>
To: John Nixon c34hull728@gmail.com
Mon, Sep 5,2016 at 6:37 PM

You are right. Autohelm doesn't have the belt for the Mark I.

CATALINA 320 INTERNATIONAL ASSOCIATION

Installing a Second Shore Power Receptacle at the Bow

C320 Association Technical Editor Chris Burti

We recently finished a three-week cruise on the Chesapeake Bay and we found that when staying at a strange slip for the evening, arriving late on windy evenings with no assistance and privacy considerations suggested that 'bow in' slip tie up was often an easier choice than our usual 'stern in' preference. As a result of our docking experiences at various marinas, we determined that two modifications were in order to enhance our cruising comfort; 1. Adding a shore power receptacle at the bow would eliminate the shore power cord deck clutter and make it easier to deal with poorly located power pedestals, and 2. Adding lifeline gates at the bow would make boarding much easier particularly when loaded with purchases and dealing with tidal fluctuations. This article is about the process of installing the former and we hope to update you when we figure out a cost effective way of accomplishing the latter (although it might be time to simply bite the bullet and replace all the life lines with new ones that have gates fore and aft).

Major Caveat: Modifications of and additions to your boat's AC electrical system must be made in strict compliance with ABYC Standards using materials made and approved specifically for marine application and owners doing their own AC electrical work need some basic skills and knowledge in working with electricity. Using components designed for shore side use or taking shortcuts can result in fire, shock, burns or electrocution. It will also show up in a later survey and can result in a loss of insurability. This, in turn, can kill any resale if the buyer procures a survey or it can result in an eviction from your marina checking your insurance status (as most require the owner to maintain insurance). It doesn't cost much more money or effort to do the upgrade right, so don't cut corners, make sure you know what you are doing and get competent professional help if you don't know.

In the process of upgrading Commitment's AC electrical system to a SmartPlug shore power cord and receptacle, we also purchased a conversion kit for our existing cord which left us with an extra inlet receptacle. The only other required purchases for this project were 50-feet of tinned, stranded triplex, marine AC wire (10 gauge recommended) and the components necessary to provide, both, circuit protection for the new circuit, and circuit isolation between the two power sources. We stock consumables such as wire ties, wire loom and heat shrink crimp connectors as part of our maintenance kit, but you may need to purchase these as well.

Installation of a proper power source selection switch is critical and should be installed near the main breakers in a protective housing that can only be opened with the use of hand tools per the ABYC Standards. (selected portions are set out below). A simple source selection switch such as the Blue Sea Systems, 9009 120VAC 32A off, plus two position, switch provides protected switching, but does not provide circuit protection. It is not a substitute for a main circuit breaker which must be separately installed for each power source. Using this switch would require us to add a second master AC breaker and a secure housing for both.

We chose, instead, to replace the existing OEM master breaker with the Blue Sea Systems 8032 AC Toggle Source Selector. The new unit features, two double-pole AC main

circuit breakers (30 Ampere recommended) with lockout slide mounted in a traditional metal panel along with a red reverse polarity indicating LED and two green power available indicating LED's. It allows connecting two different AC sources to a circuit and prevents connecting both AC sources simultaneously. The panel comes fully pre-wired with all hot, neutral and safety ground buses installed, simplifying our installation and saving money as well. It also is wired with a 12/24 volt back light for the labels which we did not connect at this time, but may do so in the future. We replaced the existing OEM master breaker in the existing housing which is installed just before galvanic isolator with this unit. This choice really simplifies the installation and saves money as well. The new unit is approximately ½" taller than the existing hole, but it was a simple task to enlarge the hole using a powerful cordless Dremel tool with a spiral cutting bit.

We chose to install our new bow inlet receptacle in the anchor locker in order to provide additional protection from the elements and clumsy feet as well as effectively hiding it. We located it on the aft port side of the well which is a tight fit requiring careful measurement and cutting as far as providing a flat mounting surface. There is a better location on the aft starboard side, but that is where we located our wash down hose 'rocket launcher' storage. There is adequate space on the starboard side as well, however we opted to keep that area free for now. There is ready access from behind for all three locations by simply removing the four screws holding the lower panel in place at the front of the v-berth. We used the cordless Dremel tool to cut out this hole also and used the packaging card as a pattern.

There is a u-shaped wire race that streamlines the manufacturing process, facilitates subsequent owner initiated modifications

and upgrades, is relatively easy to access and is molded in running along the top of the hull liner behind the trim and cabinetry from the bow to the stern. In some places the trim must be removed for access, but the trim proved easy to remove and replace. The accompanying picture deals with a first section for illustrative purposes. I recommend using wire ties at frequent intervals, tying the new circuit to the existing 120-volt AC circuit as it is well secured by the factory and doing so facilitates keeping the new circuit in its place in the race even in rough weather. Fishing the existing wire out with my fat fingers proved challenging, but with persistence and patience, I prevailed. In the alternative, you can use hangers screwed into the overhead, but restricted access makes that a challenging process. A note of caution… several of the 12 volt wires for various fixtures are spliced in the channel and if you are not cautious, you could pull a circuit apart.

Additional wiring caveats: Make sure to use appropriately sized wire loom to protect and conceal the triplex wire where it crosses open areas such as the two port side cockpit lockers. Using ring terminals on the new lead is required by the standards and will minimize opportunity for the wiring terminals to come free and cause a short circuit if the terminal screws should loosen. We recommend using the heat shrink Ancor brand terminals for corrosion protection. Finally, the green AC ground wires should never be connected to the white common buss, nor should they ever be connected to the bonding system through a switch or breaker although doing so through the galvanic isolator is approved by the standards. There is a dedicated buss for the ground on the Blue Sea breaker and also one on the OEM galvanic isolator which also has a very substantial mounting stud for such connections. Therefore, we opted to connect the new inlet's green ground wire with the existing one on the isolator stud as was originally done by Catalina Yachts **–Chris Burti**, C320 Tech Editor, *Commitment*, #867, clburti@gmail.com

E-11 7/03 Requirements - AC

11.5.3.5. There shall be no switch or overcurrent protection device in the AC grounding (green) conductor.

11.5.3.6. When more than one shore power inlet is used, the shore power neutrals shall not be connected together on board the boat.

11.5.3.7. Individual circuits shall not be capable of being energized by more than one source of electrical power at a time. Each shore power inlet, generator, or inverter is a separate source of electrical power.

11.5.3.7.1. The transfer from one power source circuit to another shall be made by a means that opens all current-carrying conductors, including neutrals, before closing the alternate source circuit, and prevents arc-over between sources.

11.5.3.7.2. A means for disconnecting all power sources from the load shall be provided at the same location.

EXCEPTION: Exception to E-11.5.3.7 and its subsections: The grounded neutral from a polarization transformer, isolation transformer, generator or inverter may be permanently connected to the same main AC grounding bus (See E-11.7.2.2, DIAGRAM 5) and is not required to be switched.

11.5.3.8. Energized parts of electrical equipment shall be guarded against accidental contact by the use of enclosures or other protective means that shall not be used for non-electrical equipment.

11.5.3.8.1. Access to energized parts of the electrical system shall require the use of hand tools.

CATALINA 310 INTERNATIONAL ASSOCIATION

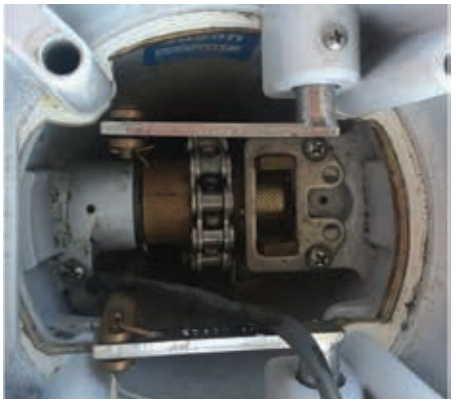
The Neglected Steering System

C310 Association Technical Editor Jesse Krawiec

The poor steering system on *Smitty* had been neglected. According to the manual from the manufacturer, Edson, there are certain maintenance activities that should be done annually. I know I have never done them and I doubt the previous owner ever gave it a second thought. This was the last project on my "must do" list before we headed out cruising.

This task starts with removing the compass from the binnacle. You will want to put up the cockpit table before you start otherwise the weight messes with the binnacle as you remove pieces. There are two screws holding the light onto the compass, after you remove those the whole metal collar around the compass can be lifted straight up. The compass light can be disconnected via a quick connect located under the metal collar. I then removed the compass by loosening a small clamping screw at the base. Don't set the pieces you remove on the table as the weight will mess you up later on.

Once the compass is removed you can turn your attention to the 4 bolts holding the compass base on. These are about three inches long and thread into the bottom metal stand of the binnacle after passing through the section that holds the gear shifter and throttle. One of my bolts was very tough to get out. It was under the Nav Pod for the chart plotter so you could get straight down on it and the flat head opening was starting to strip. It should really be a bolt here instead of a screw so you could use a ratchet or wrench on it. I tended up using my impact driver to get it started. I don't think Catalina used any anti-seize or corrosion agents when they put this together. Once I got the plastic base for the compass off, I set it on the cockpit table, this prevented having to cut and reconnect the compass light wires.



Note from Catalina Yachts: Catalina uses Lanacoat anti-seize on the fastener threads when assembling the pedestal components. –Gerry Douglas

I found the access was good enough for this task without removing the shifter and throttle section. I looked for any signs of loose parts or wear. I cleaned the chain with a rag, then sprayed WD-40 Specialist Water Repellent Corrosion Inhibitor and Lubricant (I would have used Boshield T-9 but I ran out and the box store I went to only had the WD-40, this Specialist is a similar product) on the chain as I moved the wheel back and forth. I lubricated the chain with motor oil. A common mistake is to try and grease the chain. The correct lubricant is 30-40 weight motor oil. I used 3-In-1 Oil Motor Oil, the bottle makes it very convenient for application in this use. When the oil in the bottle runs out I will just refill it with the same oil I use in the diesel engine. Again, I moved the wheel back and forth several times during the application process.

On either end of the shaft for the wheel there is a needle bearing. These need to be checked for play by trying to move the wheel shaft around. Mine was good and tight with no play. Edson says to grease these needle bearings with Super Lube Synthetic Grease. I get mine in the small 1 ounce tubes and you can easily push the tip into the holes on either end. Again turn the wheel while applying to get a good application.

The brass portion of the shaft in that looks like it has a grid pattern stamped on it is where the brake grabs. Be careful not to get any grease, oil or lubricant in this area. I checked over the shifter and throttle and lubricated those areas with spray lubricant while I had the area open. Then I just put everything back together. When it came time to put the 3-inch screws back in, I treated the threaded area with Lanacoat for corrosion

and anti-seize protection like I talked about in the Preparing Equipment for Life at Sea post I did a couple of months back. I caulk the heads of the bolts and the wire penetration through the compass base with some BoatLife Life-Caulk just to try and keep the area under the compass as dry as possible. It appeared that Catalina had done the same during the initial installation.

Next it was on to the below deck portions. The first thing you have to do was access this area by removing the fiberglass shroud. I actually did this last weekend to look at the plate at the base of the pedestal. Catalina had sent out an email warning of potential corrosion issues but I examined mine and found it to be in good condition. To remove the shroud I had to remove all the screws and then cut away the caulking that was put there to make this a water tight area. I used a utility knife to cut away some sort of white polysulfide caulking. I then clean off all the old caulking and prepped the area for new caulking with acetone.

For the maintenance, I checked all of the cables and idlers for play. The cable was taught but not like standing rigging. I check the steering radial drive and rudder for play. I also checked the alignment between the idlers and the steering radial drive. It took two people to really check this area over well. I was down below while my Bride was turning the wheel back and forth for close to an hour. No major issues were found. I found some surface corrosion on the idlers and the quadrant that was easily cleaned up a rag

and some WD-40. There is one area about the side of a pencil eraser of surface corrosion on the starboard wire that I don't like. I can see this area when the wheel is hard over near the water heater. I will continue to watch this area.

I oiled the wire with motor oil by dripping it on top of the wire as my Bride turned the wheel. I had to do this in several locations to get good coverage of the wire. I also ran a paper towel over the wire as I was lubricating it. I used the paper towel over a rag because if there where any fish hooks or other defects in the wire it would tear off little pieces of paper towel and indicate I had a damage and the wire needed to be replaced. I didn't see any paper towel pieces or other indications of problems with the wire.

I then checked the rudder bearing, packing gland, rudder stops and through deck fitting.

I had to open the top access panel where you attach the emergency tiller for part of this inspection. I didn't find any issues in this area.

The bolts for the packing gland were a little loose so I tightened them up a little. You don't want to over tighten these as that is the equivalent of over tightening a stuffing box.

Rudder stops on my boat are glassed into the hull where the deck drops down for the top portion of the rudder bearing. The stops look good and so does the stop that bolts onto the radial drive to make contact with the stops. Some later models have cables that are attached to the hull. Both styles should be checked to make sure they don't allow the rudder to go fully perpendicular to the hull.

I put a wrench on every bolt and nut in the steering system: the take up eye; the wire clamps; the bolts holding the quadrants of the steering radial drive together; etc. I checked everything to make sure there were no loose connections, no loose wire, no missing bolts or nuts. I feel pretty good about the steering system and it now turns smooth as can be. I am thinking about ordering a spare Edson wire and chain but at $300 I may not go for that spare. The most likely point of failure based on my inspection would be the wire. But that is 1/4 inch wire and I should be able to find that pretty easily throughout the Caribbean. I put the fiberglass shroud back over the steering components and recaulked it with some more BoatLife Life-Caulk.

Checking the steering system has now become part of my annual maintenance program on *Smitty*. **– Jesse Krawiec**, jessek65@gmail.com

Note from Catalina Yachts: Catalina specifies "pre-stretched" cable on all current models which reduces the need for cable tension adjustment. –Gerry Douglas

CATALINA 310 INTERNATIONAL ASSOCIATION (continued from previous page)

Cable Replacement

This technical article comes courtesy of Captain Manuel of s/v IEMAYA. Great work Manuel! All C310 owners are encouraged to send great articles like this to me at jessek65@gmail.com. **– Jesse Krawiec**

April 1st, 2016 started as any other nice Florida spring day. Our plan was to leave Gulfport Municipal marina and sail north to Tarpon Springs and our new home port in the Anclote River. The forecast called for south winds 10 to 15 knots with the winds lowering to 5 to 10 knots in the afternoon.

We had been keeping our Catalina 310 *IEMAYA* at Gulfport Municipal marina for almost a year now, with the express intent of sailing in Tampa Bay, and exploring the many anchorages the bay offers. We had cruised extensively to De Soto Point in the Manatee River, stayed at the popular Twin Dolphins marina in Bradenton and had finally exhausted all the places we had wanted to explore in Tampa Bay. It was time to move to new cruising grounds, and Tarpon Springs, with its proximity to the Anclote Keys, and its white sandy beaches were like the siren's songs to our ears.

By 10:00 in the morning, we were at the North Channel spider and headed north. We shook out the Genoa and pointed *IEMAYA's* bow towards Clearwater Pass. The first hint of trouble was as we were approaching North Channel from Boca Ciega Bay, winds were gusting to 17 knots and never dropping below 12 knots. Once the Genoa was opened and with a following sea, I had a very hard time maintaining a straight course. We would be on a course of 340 degrees, and suddenly a 3 to 4 foot wave would pass under the boat and our new heading would be 360 degrees. Trying to steer a steady course was becoming a chore, but we were doing 5 knots with the 135% Genoa alone, so we felt we could make our destination in pretty good time.

At 11:30 I noticed we were just north of John's Pass, a glance at the GPS showed the boat was trucking at almost 5.5 knots! That was fantastic, but the following seas still were large and difficult to control. I was feeling pretty good about our sailing, when all of a sudden, as I was trying to compensate for an unusually large wave, there was this loud crunching sound and I totally lost control of the wheel. My first impression was that the steering cable had come off one of the sheaves, but it was soon apparent the boat was at the mercy of the wind and waves!

We quickly switched to emergency mode, Maryellen took over the now useless helm, and I rushed forward to let go of the anchor. Lucky for us, we were in only about 20 feet of water, and the anchor grabbed quickly on the sandy bottom. The wind had climbed to 20 knots, and the waves were making us bounce like a cork. I realized it was time to make good use of the emergency tiller. This piece of equipment had been carefully stored at the bottom of the lazarette, and I had never given it much thought. This was the time to put it to good use! It took me a while to figure how to open the access port to the emergency tiller connection on the floor of the cockpit. With the emergency tiller in place, it was time to bring in the 60 or so feet of anchor 5/8th line and six fathoms of 3/16th chain. On the third attempt, I finally managed to get all the anchor rode and anchor aboard; I was totally exhausted and mentally drained with the whole situation.

With a small amount of the jib out and the motor at just over idle speed, we began the long trek to Clearwater Pass, just over six miles away. Our original goal of reaching Anclote Keys was totally shattered by now. I soon discovered that it is a completely unique experience steering with the emergency tiller. By its nature, the attachment of the tiller to the top of the rudder post is a sloppy arrangement, so there is a sizeable amount of play and you must anticipate the swing of the boat with the swells coming astern in order to try to keep the boat in as straight a course as possible. Needless to say, after more than one hour of this we were tired and frustrated. Lucky for us, Clearwater Pass was very close by this time.

After examining the entire steering cable assembly, I am convinced that what caused the cable to break was constant chafing due to improper cable tension. The cable crosses inside the pedestal, and if the tension is slack, there is a tendency for the cable to touch and create chafing. Also, a good amount of lubrication must be maintained so if there is any chafing, the lubrication will keep it to a minimum. I resorted to applying a generous amount of axle grease along the cable and spreading it as much as possible. In the future, I will be sure to check the cable tension and apply lubrication at least twice a year and hopefully this experience will not be repeated.

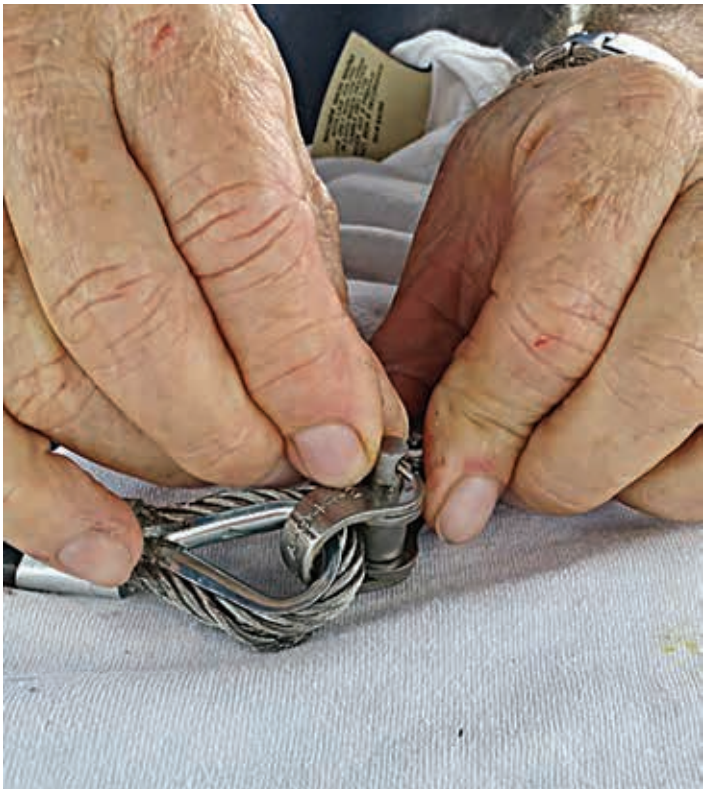
Before doing the cable replacement, I found a "YouTube" video in the Edson website about maintaining and replacing the steering cable on one of their pedestals. Unfortunately, the boat they used in the video was a 1980's vintage sailboat and the pedestal configuration was nowhere near what our pedestal was. If the cable does

not need replacing, I would suggest annual inspections of the cable by removing the steering and wiring cover under the cockpit. By carefully removing this cover and examining whatever might be at the bottom you can determine if there are any metal shavings from the steering cable. If you find metal shavings, replacing the steering cables is probably a good idea.

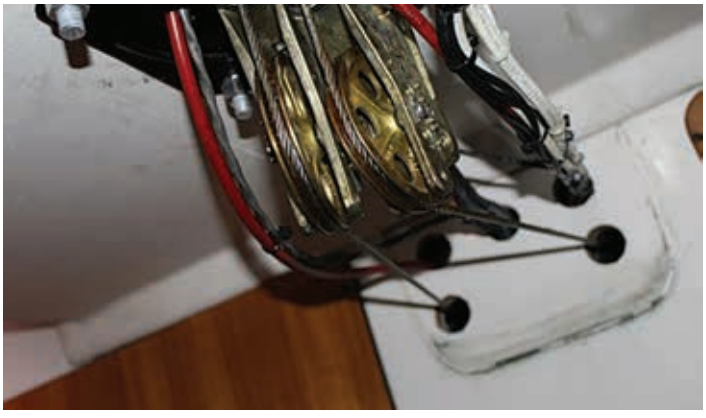
The first step in replacing our broken steering cable was to remove the chart plotter NavPod. Then the compass had to be unscrewed and pulled out. Where we encountered a big problem was with the screws holding the base of the compass to the pedestal. These screws were corroded and it took several days and lots of elbow grease to get them out. At this point, you can see the gear and chain that controls the rudder.

Pull the chain out; disconnect the cable

from the chain by removing the cutter pins, save them, since you will need them to attach the new cable assembly.



You can order a new cable assembly from Catalina, or Edson. When inserting the new cable, be sure to cross the cables under the cockpit and into the two sheaves otherwise your wheel will behave as a tiller. **–Captain Manuel**



CATALINA 30/309 INTERNATIONAL ASSOCIATION

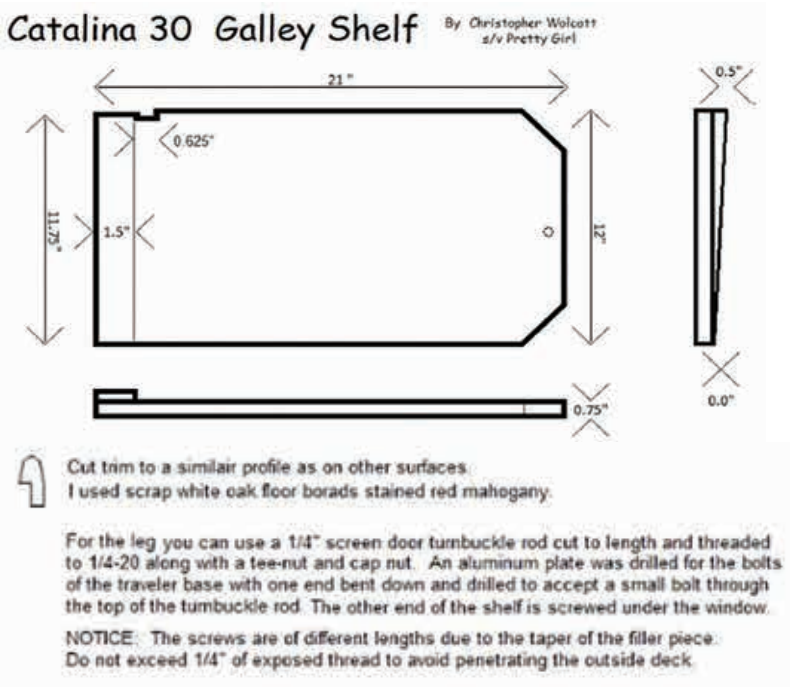
C30/309 Association Technical Editor Max Munger

Thanks Chris and Ronald for these galley shelf ideas. **–Max Munger**, maxmunger@verizon.net

OVER SINK - GALLEY SHELVES

We had wanted a Galley Shelf over the sink of our 1985 Catalina 30 MK I, so I decided to build one. It is 3/4" A-A grade plywood I had around trimmed with pieces made from some white oak floor boards I also had around. The shelf hangs from a 1/4" screen door turnbuckle that I modified for the purpose. I made an insert out of some 1/4" fibreglass I also had in the shop and put the pegs that hold the dishes in it. This way I can change it out later if we decide to change dishes or purposes without having holes in the shelf itself.

The deck is not parallel to the galley counter, so there is a tapered filler piece. This means the screws holding up that end are of different lengths. Be careful you do not use too long a screw or you will penetrate to the outside. This shelf only comes out as far as the sink faucet so access to everything is unhampered. We added an LED strip light under the shelf wired into the galley light. This helps with illuminating the galley counter a lot. **–Chris Wolcott**, chriswlctt@gmail.com



ANOTHER GALLEY SHELF

I made this shelf from 12" poplar (Lowes, Home Depot). With a clear finish, the poplar has very much the look of the 'butcher block" formica we mid-80's owners are all so fond of (lol). The shelf is rimmed with teak rail (Defender). The end of the shelf that attaches to the hull is neither level, nor parallel with the galley console. I made a pattern using a piece of Dollar Store poster board, and nibbled away till I had the correct angles. Stainless deck/bimini fittings are used to attach the free floating end. I used 4 SS screws/washers to attach the unit to the hull. After 3 years the thing is solid as a rock.

I store my Keurig coffee maker, coffee carousel, and napkin holder on the shelf..... The carousel and napkin holder are velcroed down, and the Keurig has a 3/4" nylon "Oar Clip" (Defender) attached to the side, which connects to the Stainless support. Perfect. This thing has never budged, no matter what angle of heel we have. On the underside, I strung an LED fixture to illuminate the sink area, as well as the obligatory stemware racks :) This is a great addition to the boat. Also visible in the photo are one of our Zarcor portlight blinds. Someone was asking about window coverings the other day. I have more projects where those came from. **–Ronald Waclawik,** C30 #3619, waclawik@ptd.net

Starter Inline Fuse

Max, I wanted to pass on this tip for owners of older boats like my 1984 C 30 with the Universal M25 engine. It is a brief but expensive lesson learned about keeping things simple when diagnosing problems such as slow cranking and/or intermittent failure to crank. Recently, while tracing an elusive and intermittent hard starting problem I had occasion to examine the in-line fuse that feeds the starter solenoid circuit. In my 16 years of ownership I had never looked at it.

When I pulled the fuse out, it was in excellent condition. A closer look showed some corrosion on the interior contacts within the fuse holder. A very close look revealed gross corrosion, enough to make electrical contact unlikely. Out of frustration I snipped the fuse holder out of the circuit and joined the wire back together without the fuse. I was then able to start the engine while maintaining power to the glow plugs which I haven't been able to do in years. My problem was solved. Of course this last ditch fix came after replacing, over the last two years, both batteries, battery cables, ignition switch, starter and alternator. But hey, they were getting old anyway.

The purpose of my note is to suggest to M25 owners that the inline fuse is in an area that can be wet at times and lives where corrosion is inevitable, especially since the contacts, unlike the fuse, are not made of stainless steel. It would be a good idea for owners of aging boats to inspect that fuse holder for corrosion periodically and especially if experiencing odd starting behavior. As I recall the Atomic Four gas engine also had this same fuse. **–Bill Crosby,** Mystic, CT C30 3721 t27boat@aol.com

Bill, I have also had my problems with this fuse over the years. Replaced it a few times. Perhaps the factory will respond as to its necessity. There is another fuse behind the cockpit panel that needs to be maintained too! **–Max Munger**, maxmunger@verizon.net

Correct Prop Size?

For the past six or seven years I have been using a 13" X 12" three blade prop which one could argue might be part of my recurring transmission problems. I really need the three blade as our end of season trip is all against the current in the Connecticut River which can be very significant. Is there any information about what others are successfully using for 3 blade props with the M25 diesel? Are there any write ups about someone actually installing the new transmission? Any information or direction would be appreciated. **–Bill Crosby,** Mystic, CT C30 3721 t27boat@aol.com

Bill, seems the replacement tranny is also a Hurth, current model #ZF5 or ZF6. Check their catalog for exact size and mounting. Hurth may also have info on prop sizing or query Michigan Props for engine/prop matches. Any readers please respond to Bill. **–Max Munger**, maxmunger@verizon.net

Mark III Steering Quadrant Cover

Hey folks - thought this might be of interest to other MK III owners. When I bought Elara, the cored fiberglass panel covering the steering quadrant had never been sealed properly and was completely rotten/de-laminated. I did a write-up of my repair job from cutting off the bottom skin, recoring, re-glassing and properly sealing the through-holes so there would be no further water intrusion. Hopefully this may be helpful for anyone else with a MK III with the same problem... http://catchingtheho-rizon.com/steering-quadrant-cover-repair/

Bimini Replacement

Several months ago I was faced with decision about what to do with my worn out bimini. I had a quote for $1450 to replace the existing bimini and to add an additional bow to extend it over the companion way. I decided to investigate a hard top and found a company in Michigan that had an interesting approach. After many questions and discussions I decided to give it a try. There were quite a few missteps but I think the results were worth it. **–Denny Fegan**, 3469 Quest, Kemah TX, SdennisF@aol.com

CATALINA 28 INTERNATIONAL ASSOCIATION

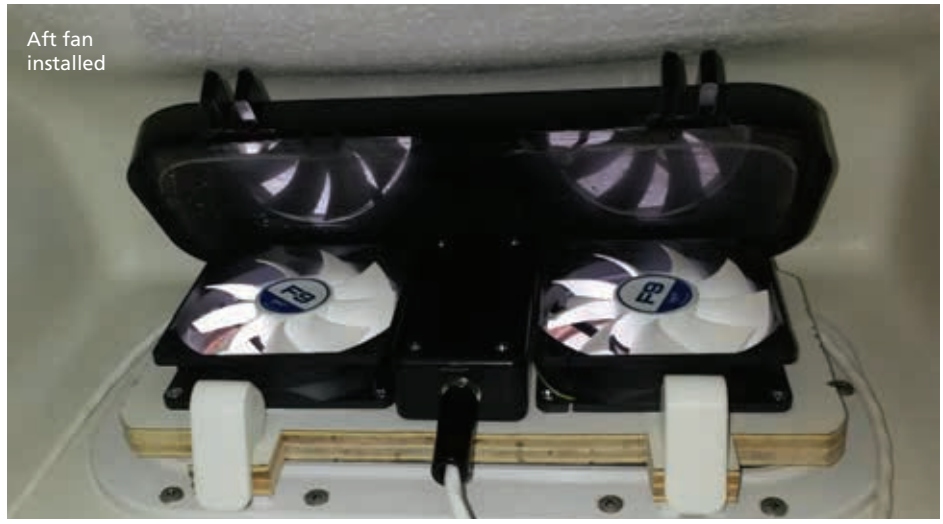
Changing the Air in Your Boat

C28 Association Technical Editor Dick Barnes

Mike Smalter, one of our frequent contributors, sails with his wife, Moira, on Lake Ontario, out of Shumway Marine in Rochester, N.Y. A long-time Catalina sailor, in 2006 Mike moved up to a C28. "I retired in 2011 and have been spending lots of time sailing and working on the boat," Mike writes. I'm now making minor adjustments to accommodate my two grandsons, ages 4 and 5." Here's Mike's latest project. **–Dick Barnes,** dickbarnes@earthlink.net.

Bare fan out of the box

Author Mike with his handiwork



Aft fan installed

My wife and I like sleeping in the aft berth, but when it's hot, it can be uncomfortable. My wife doesn't like fans blowing on her, so I built an exhaust fan for the opening port by our feet. I used two 92mm computer fans that move about 40 cubic feet per minute each. They draw minimal current and are very quiet.

Mounting

The aft windows on the Mk II 1997 have plastic frames on the windows and the windows are hinged at the top. They are dogged closed by two eccentric plastic latches. The latches are attached to screws which makes them adjustable. If you look at the picture of the fan assembly, you can see a solid tab at the top and two slotted tabs at the bottom. The upper tab slides between the window gasket/screen and the top of the open window. The bottom tabs accept the screws and the assembly pulls tight to the window gasket by adjusting and engaging the latches.

Fan control switch

Essentially, I built a replacement window that requires no tools or drilling to mount or unmount it. I used 5/8" material and will probably add some shims so I don't have to adjust the latching screws. It might be better to start with 3/4" material, but I used what I had.

Electrical

The bottom of the box between the fans contains a 1/4" stereo plug socket with Fan 1, Fan 2, and ground connections. That way I can remove the fan and leave the wiring in place if I want the window to be water tight. The wire goes to a small switch box mounted with Velcro tape next to the large window above the pillows in the aft berth. I put the switch box in that location because it will allow us to turn the fans on or off during the night without crawling down to the foot of the bed. There are two rocker switches to allow one or both fans to be on. The power comes from the dome light in the aft starboard corner of the berth. The fans draw 0.16 amps each, so 8 hours is 1.3 amp-hours each, which will be fine when not hooked up to shore power.

Cost

- The 92mm computer fans were about $5 each from Amazon
- Two project boxes were $4 each from Radio Shack
- Two switches were $3 each from Radio Shack
- ¼-inch plug and socket were $10 (for two of each) from Radio Shack
- Wire was about $10

So the total is about $44, which is more than I expected, but still worth it.
The fans move a lot of air. I calculated that it will change the air in the boat every 15 minutes. **–Mike Smalter**, Worlds Away, No. 539

Draining Trans Oil

Question: I've tried to remove the plug in the bottom of transmission to drain the fluid and replace it. It's impossible. I plan to pump the fluid out, but the bottom of the transmission will still hold residues, etc. Anyone have any suggestion how to get at the drain plug? **–Bob**

Reply: I have the M25XPB and have drained the fluid twice through the bottom plug. Yes, it is difficult. I think I used a 17mm open end wrench, rotating the open end every 1/12th turn. A 5'/8" might have worked, but I didn't have one on the boat. I think a socket will access it also, possibly from both the front and the back. If you drain this way, you need a very shallow pan to catch the tranny fluid, or since it is only 10 ounces, you could let it drain into the built in engine pan and mop it up with rags. Getting the drain plug reinstalled is also a pain. **–Mike Smalter**

Reply: A couple of thoughts from my "don't take things too seriously" pages. If we change the fluid every couple hundred hours or so there isn't going to be much "contaminated" fluid left behind. An engine is hard on its lubrication due to byproducts of combustion, but that's not the case for the transmission.

Back in the day, the instructor for my automatic transmissions class indicated that the only enemy of ATF is heat. If your transmission never overheats you can run indefinitely without a fluid change. You can literally smell the ATF on the dipstick and if there is no burnt smell and adequate fluid all is well. **–Tony Bacon**

Replacing Head Hoses

Question: I'm planning to replace the 1 ½-inch head hoses. What's the best way to thread the new hose into place? Attach the new hose to the end of the old and pull the new hose through as you pull out the old? Or tie a line to the old hose before removing it and use the line as a leader for the new hose? **–Mike Smalter**

Reply: I used a barbed connector to attach the new hose to old and pulled the new one through. It was not what I'd call easy, but it wasn't as miserable a job as it might have been. I found a heat gun worked well to get the hose over the barb. The hose can really be loosened up and will tighten in place.

To replace the piece going to the deck pump-out fitting, I found that removing the deck plate left a big enough hole to feed the hose down and behind the head cabinetry. Once completed I added and tightened the hose clamps through the door between the head and aft port locker. **–Denis**, Brazen Article, No. 108

Reply: Be careful with heat guns. You can easily overheat and distort the hose. I used a hair dryer when I did mine. It provided plenty of heat to soften the hose but not so high as to ruin it. Dish soap on the barbs helped too. I used Sealand sanitation hose and it has performed well for eight years. **–Bernie Noon**, Rum Monkey #293 1993

Reply: Heat the end of the hose with boiling water for a few minutes to soften the end. Put some liquid dishwashing detergent on the barbs on the fitting and it will all slide together with ease. I've even used this technique to get a 5/8-inch hose onto a ¾-inch fitting. **–Art Harden**, No.19, SeaQuence

Heat the end of the hose with boiling water to soften the end. Put some liquid dishwashing detergent on the barbs on the fitting and it will all slide together with ease.

CATALINA 25/250 & CAPRI 25 INTERNATIONAL ASSOCIATION

The Most Inexpensive C250 in the Country

C25 Association Technical Editor Paul Zell

C250 Association Technical Editor David Gonsalves

Special thanks to Kevin J. Kiely for submitting this article. **–David Gonsalves**

Sis·y·phe·an (adjective) (of a task) such that it can never be completed.

I should call the sailboat THAT! Actually, any sailboat would be appropriately named if it bore that moniker.

She is named Seraphin. In the fall of 2015, she was in a boatyard down in Plymouth, Massachusetts.

My wife and I were, at the same time, at the boat show in Newport, Rhode Island, just having dropped off our daughter for her final year at college there. We were owners, then, of a 1979 Catalina 25. However, with the end of tuition payments in distant sight, we had discussed the upgrading of capital items such as automobiles and, yes, the sailboat. Now, the in water boat show in Newport had the only things in Newport that cost more than my daughter's tuition, and we were not in the heavy wallet company that the show caters to. We were there with friends just to voyeuristically look. However, one of the dealers had a list and photos of boats not present there that they had for sale, one of which included a Catalina 250. "You should take a look at that" I said to my wife. She looked at the pictures, talked to the dealer, but, alas, it had already had an offer made and accepted, so we gave our contact info to the dealer in case the deal went south. A couple of weeks later, I wanted to show a friend the boat, couldn't find the card the dealer gave me, and instead figured I could find it with a Google search. Up came an advertisement from a broker, but a different one than the one in Newport, and for a different 250, much different.

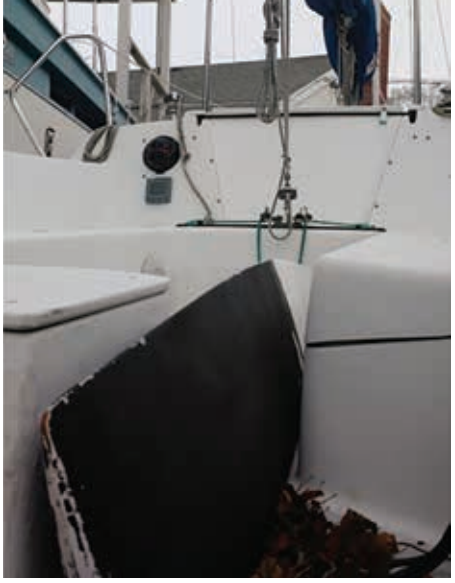
The advertisement listed her as the most inexpensive winged keel Catalina 250 in the country. There, of course, had to be a reason for this. The broker admitted that she had not been in the water in over three years. I was curious. It was a 1999 version, a little older than I had hoped to get but worth a look, I thought.

I sent Captain Bill Lee, AMS, owner and operator of the Ocean Reporter, a surveyor and Cape Ann's renaissance man, down to take a look at her, not for a proper marine survey, but just to see if it was worth even talking about.

He called me. "I'm on my way to Target." Huh? "Oh, I've seen the boat, I'm going to Target to get something to kill the yellow jackets that are calling the fuel locker home." This did not sound good. "The sails, shot, standing rigging, shot, running rigging, shot, engine, shot." I've wasted my time. "But, the boat itself is in pretty good shape." I brightened. He described the boat as well laid out, comfortable, with a big cockpit, down right huge. Thought the vessel could be rehabbed. At the right price. Problem with that, though. The yard was owed well more than the boat was worth.

Our thinking was this: when you buy a used boat, you take it, largely, as it is. That is to say, there are a few items that you may address immediately, but you usually have already spent a lot, and you are not going to change, say, the jib sheets if they are in good shape, just because you hate the color. But this boat had so many things wrong with it, obviously reflected in the price, that it presented an opportunity to rebuild it the way we wanted it right down to the jib sheet colors.

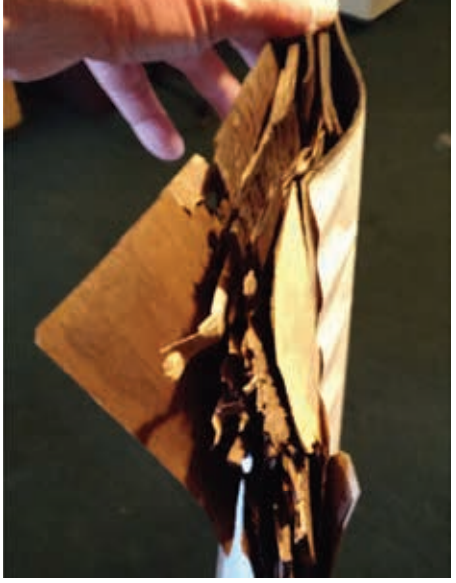
Negotiations ensued, and by late November the deal was done and Seraphin was on Granite Pier in Rockport, Massachusetts. Too late in the year to do any real work on her, we had to cover her before the weather got any worse. First, though, we had to pump her out. The winter of 2015 had been very snowy, and, since she had been uncovered, snow accumulated in her cockpit and melted into her cabin. There were several inches of water on the cabin floor, with



the vinyl flooring ruined and the plywood subfloor soaked. The hose leading from the bilge to the opening on the port side had become disconnected so we were pumping water in a circle. I have a Rule bilge pump hooked up to some long wires and alligator clips and attached this to a spare battery and was able to get rid of most of the water. We then pulled off the vinyl and unscrewed the subflooring so at least the vessel could start drying. The Port rear panel in the aft section had absorbed so much water that it became delaminated, but the subfloor is still intact.

The winter of 2016 was relatively mild, and we took advantage to do some small things. First, cleaning. She had so much dirt, there were seedlings growing in the hatch drains. Clear the anchor locker drain. Remove all of the debris and try and figure out what was worth saving. Remove the winches as they were not turning smoothly. Turns out, of all of the sailors I knew, only one had ever removed and serviced his winches. Luckily, like just about every other insurmountable task, it's been done before and uploaded to Youtube. We cleaned them and reassembled them in the house instead of the boat which is why there are tiny little springs all over the living room. The winches contain big gears, but it's the pawls and these ridiculously tiny, hard to handle, and easy to lose springs that give the mechanism the ability to be winched.

In March, we turned our attention to the rigging. I wanted to purchase new rigging, but they required that the old rigging be measured so we first had to raise the mast, tune the rigging, measure it, take it down and ship it to the West Coast. I'm not sure, exactly, why this all had to be done, but their website quotes Johnny Depp as Captain Jack Sparrow with the thrust of the point being that returns were not possible, so they had to have measurements. And, indeed, the 250 has had some various incarnations over the years, specifically with a Tall Rig that was apparently abandoned as a design early on. So we were looking at raising, lowering and raising again the mast. Now the 250 has, over they years, come with a mast raising system. By 1999, the system involved using



your trailer and a pole that came with it. Only this boat did not have a pole, nor, by the way, a trailer.

I did not plan on trailering the boat as it was to be wintered close to the water and put in by hydraulic trailer. But I needed to raise the mast...in March...what to do….

Our Catalina 25 rarely had the mast down. And when we raised it, we bribed a couple of buddies to help, but they increasingly had bad knees, hips, hair and breath, and we wanted to avoid trying to do it that way, considering we would have to do it twice in the Spring.

Technical assistance for this, and nearly all tasks, was found using the Catalina 250 Forum. In fact, not only did I use the search feature for specific questions, I tried to review all of the topics on all of the archived pages to try and find out what I knew I didn't know. (There are 141 pages, all with 25 topics per page; do the math, and forget a social life for several months. Some of the topics are multiple pages long, and often a poster would inquire, usually in response to a picture, about something completely unrelated to the listed topic, and the Fugawi tribe would wander of the reservation) And of course, if that didn't work, I could post a question with a good chance that the right answer would be posted by experienced and imaginative (and cheap) Cat 250 owners.

Deep into the dark crevices of the Catalina 250 Association forum we spelunked, reading all we could about mast raising systems, all of which seemed to rely on trailers or earlier designs that we lacked the design for. Then I found a post by Rick Swarthmore, PA (formerly known as the Rhythm Doctor, which begs a question, doesn't it), now owner of "Take Five". Rick was in the same proverbial boat, without a trailer and needing a way to raise his mast. He devised a solution using a simple 2x4, trailer winch, spare tire bracket, trailer winch straps, eye bolts and other stuff available in your basement. Not only that, he supplied a diagram that showed, through mathematical formulas that were well beyond my comprehension, that it would work. My wife was skeptical. But Rick had filmed himself using it and uploaded the film onto Facebook. I showed her the mast going up. Rick had accompanied the post with music, as well, Al Jarreau singing the Dave Brubeck standard, "Take Five". She was impressed with the mast raising system, but not his musical taste.

We used it with no difficulties, but Rick has had issues with the 2x4 cracking and has stopped using it until he figures out what might be wrong. Needless to say, mast raising is inherently risky, and no one who posts on the forum is accepting any liability for their designs. "Stuff happens", as juries in Essex County often say to tort lawyers.

One other problem raised by by posters was the inability to easily pin their furler covered headstay. This boat is equipped with a CDI furling system that blessedly unpins so that the furler can be raised exposing the turnbuckle to release the head stay tension.

While the mast was down, the wiring for the lights and antenna were changed as well as all of the lights. The mast boot had been riveted in and those needed to be drilled out to remove the boot so I could reach inside the mast and get to the existing wires and thread new ones though the mast. The rivets drilled out, but then I had to figure a way to keep the boot on and could not find a bolt the appropriate length, so had to cut down one so that the boot would still fit into the mast cradle. Messenger lines, electricians fish tape, and great patience were required. The running rigging was not a biggie. We just sewed new lines to old, and they came through without incident. The new radio wire was taped to the old and that came through the conduit ok. The mast wiring, was the most difficult. The conduit will accommodate the wiring and the radio wire, but just barely. There were many attempts and failures, but we eventually got everything through and danced the funky chicken.

One of the things I didn't know that I didn't know was how different the 250 is from its older cousin the 25 As a previous owner of a Catalina 25, my assumption was that the 250 was roughly the same with some updating. But the rigging is quite different and the tuning of said rigging is crucial to the performance of the vessel, especially in heavier weather. As opposed to the three shrouds on the 25, the 250 has just one upper and one lower, but it's the uppers that are crucial as they provide the force opposite to the forestay. The backstay and the lowers are secondary. The sails are different than a 25, with the 250 appearing to have a bigger and more fully battened mainsail.

Wiring and rigging done, mast up, we then turned back to the running rigging. We wanted to have two line reefing and further wanted everything brought back to the cockpit. That meant new and additional spinlocks on the port side, replacing the single one that came standard. Blocks were added to the mast cradle, with the front reefing line leading forward and down to the block below and then through a deck organizer back to the cockpit. Rear line was led up from the boom, through a block on the cringle, then aft to the end of the boom, through the boom and down to a block on the mast cradle, then through the deck organizer back to the cockpit. This was the existing line that came standard, operating as a single line reefing system.

Lifelines were replaced as we assumed that the existing ones were original equipment like the standing rigging. Like the rigging, it was recommended that it be replaced back in the Bush 43 administration.

The new engine was delivered and the new marine radio/GPS was installed. New mainsail and jib from Down's Sails in Danvers, Massachusetts were put on. We were supposed to launch the first week of May, but bad weather delayed us until the the 17th. Now that she is in, the work has not stopped. New porta potti needed to be installed. New propane tank, but, the stove still works. We are in the "what is that and why do you think it's right there?" stage. Writing about it, it sounds easier than it was and we've only begun. There was a lot of "two steps forward, one step back" in this project. I used colorful language on more than a few occasions. But at the end of a particular task, it is gratifying to know that you are now an expert at something you probably will never have to do again. **–Kevin J. Kiely,** Rockport, MA, 1999 C-250 WK, Hull # 407, *Seraphin*

Association News

News That's Specific To Your Catalina

Catalina Fleet Rosters Returning!

Starting next issue, we will be printing one point of contact for each fleet (a phone number, email address, OR website address). Fleets are a great way to learn about rendezvous, cruise ins, raft ups, tours, and concerts in your area. *Here is a sneak peek at how this will be formatted! Mainsheet Editors, make sure to submit your current info in this format next issue!*

INTERNATIONAL
ALL CATALINA FLEETS:

Catalina Owners without Organized Association Fleets:
Coming soon!

CATALINA 36/375 FLEETS:

#1, Santa Monica Bay, CA
ginny.lechler@gmail.com
#2, Long Beach
mbierei@pirnie.com
#3, Chesapeake Bay
wjhomes@zoominternet.net
#4, Puget Sound
rodj2@msn.com
#5, Long Island Sound
tjl2000@optonline.net
#6, San Diego
dmumby3@cox.net
#7, Lake Ontario
crew@ceibaone.ca
#8, New Jersey Coast
calypso36@comcast.net
#9, San Francisco Bay
m_joyce1664@yahoo.com
#10, Gold Coast (Ventura & Channel Islands)
jshapiro@kirkhill-ta.com
#17, The Netherlands
e.scheffelaar@marineobjects.nl

CATALINA MORGAN 440 NATIONAL ASSOCIATION

Sailing the Pacific Northwest around Vancouver Island

Here are some pictures of me and friends sailing the beautiful northern area of Vancouver.

–Judy Durnford, S/V *Paloma*, hull # 43

Navigating Dodd Narrows current

Dock party in Maple Bay...gotta love our great cockpits

Transient Orcas off Alert Bay, Cormorant Island

Resident Sea Lions on Pearce Island

CATALINA 36/375 INTERNATIONAL ASSOCIATION

Opportunities to Communicate

C36/375 Commodore Laura Olsen

Thankfully, by the time most of you read this, our Presidential election will be history. I know better than to wax politically here or most anywhere these days, so no speech from me.

However, just like in our great Country's national election process, choice and input from the members is the core of why and how our Association exists and functions.

Member Don Winchell comes aboard as our new website program manager and he shared some keen insight with me as we recently discussed the Association, websites, and new opportunities to communicate.

Specifically, he identified that we need to know where we are at now before we can decide where we want go. So, just as one would do before setting sail on a destination, we need to chart that course.

We absolutely must avoid bad storms analogous to stirring seeming conflicts between Association technical resources and the free flowing stream of internet posts such as Facebook.

Both resources, I believe are important and valid to access, but for different reasons. For example, Facebook can allow instant chats in real time from the water and across the globe. This could assist a sailor in distress or merely permit the view of a beautiful, live sunset view. However, it could possibly change part of the purpose in having vetted technical information that has been gathered and continues to be produced by and for Members via the website Forums and treasured Technical library.

I wish to emphasize these items can co-exist in peace, however, we can only chart that course when all our membership speak with their votes. So, please be on watch for ongoing survey, Forum, and Internet communications and weigh in!

Your Association cannot exist without your participation and in addition to this general call for member input, we also are seeking two Technical Editors and Vice Commodore positions.

Many thanks to Don for stepping up to help and continued thanks to Nick Tonkin for guidance in transition. **–Laura Olsen**, safetsuper@gmail.com

CATALINA 350 INTERNATIONAL ASSOCIATION

Fly Your Burgees with Pride!

C350 Association Commodore Neville Edenborough

We continue to be proud of the Catalina 350 as the premier cruising sailboat. The boat's interior room, ease of sailing and features, both standard and optional, make it what we believe is one of the best designs by Catalina and also one of the best in its class, period.

Another reason for pride, I firmly believe, is our International Association. Membership in the Catalina 350 International Association, (C350IA), represents an astonishingly high 41-47% of all Catalina 350 owners. Remember, this is an international association, and we believe this is probably the highest of any association of any sailboats. Our members continue to be loyal and active and refer new C350 owners to us.

We also have our burgee, and cap, which all of us are proudly flying or wearing. If your burgee has finally worn out (as has mine) please go to our website (catalina350.com) and order a new one. They only cost $25 and will allow you to thumb your nose at those other already envious owners of other boats. Some might say that is a small thing to do, but I say if you've got it, flaunt it!

In addition we, the *Bridge* of the Catalina 350IA would like to offer an incentive to C350 owners. Write and article about your C350, about its uniqueness, its travels, your travels on a C350, outstanding C350 talents and/or trips. Send it to the C350 *Mainsheet* editor who will then send it on to the publisher for consideration as an article in *Mainsheet*. If it is accepted, the *Bridge* will pay for one year of your C350IA dues! Each time you have an article published in *Mainsheet*, no limits! Does it get any better than that? **–Neville Edenborough**, nedenborough@yahoo.com

Photos Are, As They Say, Worth 1,000 Words

C350 Association Vice Commodore Henry (Pete) Travers

The Catalina 350 was introduced in 2002 and the line was discontinued in 2009 with the introduction of the 355. Based on hull numbers in the Association's database, about 500 of these cruisers currently ply the world's waters and approximately 45% of their owners belong to the Association. We believe that this is one of the highest percentages of owner membership in any of the Catalina associations.

While groups of 350 owners gather informally, organized rallies have been few. The Association's *Bridge*, recently reorganized under Commodore Neville Edenborough, now meets regularly via Skype and hopes expand the ownership experience in new ways. *Mainsheet* receives technical articles regularly from our Technical Editor, Bill Templeton, and the Bridge is looking to add other dimensions to his contributions.

This past year the Association sent well-designed sailing hats to all current members and provides a hat to each new member. They have been so popular that the redesigned Association web site, administered by Bruce Whyte, created a way for members to order additional hats for their crews.

Behind the scenes the Bridge has produced a revised constitution (available on the web site), streamlined the membership renewal process, improved our tracking of members and their 350s and explored ways to encourage membership. The 350 Forum, where members can post technical questions and share innova-

CATALINA 350 INTERNATIONAL ASSOCIATION (continued from previous page)

tions and improvements, is sent weekly to members requesting it.

Like the C34/355 Association, as noted in the Fall issue of *Mainsheet* by its Association editor, Jack Hutteball, we know our members are sailing to wonderful places, experiencing the excitement of wind-filled sails as well as the sometimes painful lessons every sailor encounters. We urge you to share those with your fellow members. Take a few minutes to send us a tale or two and, where possible, include a photo. Smartphones make cameras ubiquitous and photos are, as they say, worth 1,000 words. Technical articles need not be limited to big projects; little innovations often make sailing more pleasurable and safer. For example, we have all reached the point where the chain meets the nylon rode on the winch; how do you keep control of the rode during the transition? Let us hear about your

technique and much more! Send your stories to association_editor@catalina350.com or technical_editor@catalina350.com.

Your Bridge is not just looking to expand our membership, but to engage all 350 owners in an active community of sailors. Although it's corny to say, we're all in the same boat…… and judging by Pat Templeton's smile as she takes *Makani Kai* out Barnegat Inlet it's a pretty good boat to be in! **–Henry (Pete) Travers**

CATALINA 34/355 INTERNATIONAL ASSOCIATION

COVER STORY:

A JOURNEY BACK TO MYSELF

IN THIS ISSUE ON PAGE 12!

Secretary's Report

C34/355 Association Secretary Stu Jackson

"Sorry, no details at this time. I'm currently sailing up the west coast from San Francisco to Vancouver Island and will have more on this later.". **–Stu Jackson**, mraquaq@aol.com

Editor's note: Be sure to read this issue's cover story from this section.

CATALINA 320 INTERNATIONAL ASSOCIATION

The Ice Man Cometh

C320 Association Commodore Kirk Mueller

Greeting form the beautiful Eastern Shore of the Chesapeake Bay. As most of you have surmised these articles are written several months before they are published. This one is being written in mid-September just after completing our...

"Blast on the Bay"

2016 Catalina 320 IA National Regatta and Rendezvous

The event was a great success with nine boats and 38 members participating. This years event was hosted by the Coronado Yacht Club in beautiful Coronado, CA. We would like to thank the Commodore and all the staff at the club for their incredible hospitality. You would hard pressed to find a more beautiful setting and facility. For those unfamiliar with the association bylaws, the Regattas fall in the purview of the Vice-Commodore. This year VC is recently elected David Allred. Unfortunately I was unable to attend this years event. David did an excellent job of representing the board, including presenting a donation to the CYC club's Junior Program. When these events fall outside of the geographical base of the Vice-Commodore we look for someone to be the "boots on the ground" in the chosen location. This year, as he done in the past Dick Walker grabbed the baton. For those that have attended any of Dick's events will attest that his events are second to none. The Friday night technical presentation were very well attended and provided a gambit of incredibly relevant information. Saturday's race had seven out of nine boats and was won by Peter Hunting. Peter and all of his crew will receive 320 Association burgees. Sunday was a beautiful sail on Glorietta Bay and was the culmination of an outstanding event. If you had the pleasure of attending the Regatta please reach out to Dick and thank him for his outstanding contribution to our 2016 event. It is members like Dick that make this organization possible.

My thoughts now turn to the memories of some great summer sailing. To those who don't have the experience of putting their rides on the "hard" is say ENJOY the season. As you might remember I was born and raised in South Florida. Every time I travel to the marina in the winter I'm reminded that "The Ice Man Cometh".

As Commodore of the C320 International Association this time of year brings focus on some of the administrative functions. In mid-December of 2016 the Governing Board of the Catalina 320 International Association will be submitting nominees for Governing Board Officers for 2016. We encourage members to step up, put your name in nomination and join the board. This is your Association and it will only grow and prosper if we all participate in its evolutions. An electronic balloting process will be held in lieu of an annual meeting per Article VI of the Associations Bylaws

I'd like to extend my thanks to the 2016 officers for all they have done for our Association this past year.

Although the position of Commodore carries no huge burdens, it does carry much accountability to dues paying members. It is important that our association maintains it's sense of value to it's members. This requires thought, care, and administration in many areas. Some of the areas to which I hope to give guidance and leadership are: Transition to new technology, our C 320 section in the Mainsheet, membership growth and the continued involvement of new members in all the above areas. We are committed to the healthy growth of the C 320 International Association. We welcome any and all input and feedback. I encourage you to get involved. The organization is financially healthy but needs membership growth. Please be sure to encourage all C 320 owners that you come across to join the association by paying their dues. Word of mouth and person to person contact is the way other strong One-design associations have grown and remain strong. Please see yourself as our ambassador whenever you encounter a non member C 320 owner. And one last note. If you are connected to the Internet and have not joined our chat list at, please do so. This is the part of the C 320 community that has become the most active. Most activities are broadcast here first and most communication takes place through the chat list and website.

Your excellent team of officers is very interested in hearing about what you value in your C320 International Association membership, and what you would like to see in the future.

I would like to gather your inputs and work with your officers to plot out a course for the coming year. Together, we can make this an even better association designed around you.

I welcome all your thoughts… please email me. "Sail Fast….Live Slow" **–Kirk Mueller**, kirkm753@gmail.com

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CATALINA 310 INTERNATIONAL ASSOCIATION

End of the 2016 Sailing Year

C310 Association Editor Bob James

The 2nd annual Catalina 310 Rendezvous was held in Huron, Ohio On August 27th, 2016. Life seemed to get in the way of our Lake Erie' sailors and our attendance was down from last year but a good time was had by all who could make it. We hope to schedule our third rendezvous next August. Stay tuned for details.

During the rendezvous, our Commodore, Alan Clark, was on a cruise to Lake Huron and will give us all a view of that trip in the February issue. Our Technical Editor is still living his dream as he has settled in the US Virgin Islands for the time being. You can follow his blog at https://svsmitty.wordpress.com

Finally, my end to the 2016 season came abruptly on July 29th as the captain of *Winter Dream'n* (that would be me) proved that our Catalina 310's cannot sail in three ft. of water. Needless to say, she is on the hard for significant repairs to the keel. Part of the problem was my 2001 chart plotter that was not cooperating at the time we needed information. A new one is ready for installation next April.

Please send me your stories from the 2016 season and your plans for next year. Send Jesse any technical challenges and successes you have made to your boat.

As you read this, launch time for 2017 will be just around the corner. See you on the water! **–Bob James**

CATALINA 25/250 & CAPRI 25 INTERNATIONAL ASSOCIATION

Now is the Time to Plan for Next Year

C25/250 & Capri 25 Commodore Russ Johnson

For most sailors, the season has ended and your boat is on the hard.

Now is the time to plan for next year. We are also planning for the C25 Association and would like to hear from you. What are your plans for next year?

Are there boat projects, trips, or good stories you would like to share?

Are you a member of a yacht club or sailing club and want to get more involved?

Are you looking for resources to improve your sailing or racing skills?

Are you trying to get the most out of your Catalina 25, Catalina 250, or Capri 25?

For those who have mastered a project or have a great story, we are always looking for *Mainsheet* articles to help other members.

For those who are new to sailing or purchased a boat, we are here to help answer your questions and give you ideas for future projects.

Please visit our website (www.catalina-capri-25s.org). Our Sailor's Forum is where you can post your questions, search of answers, or post pictures of your projects.

If you have any questions or comments, please contact me. **–Russ Johnson**, commodore@catalina-capri-25s.org

Have a great story? We are always looking for *Mainsheet* articles to help other members. For those who are new to sailing or purchased a boat, we are here to help answer your questions and give you ideas for future projects.

The 2016 Officer Election is now complete.
Please welcome our volunteers as they begin their new officer term.

- Russ Johnson, San Ramon, CA, Commodore - commodore@catalina-capri-25s.org
- Sam Bruce, Gilbert, SC, Vice Commodore - vicecommodore@catalina-capri-25s.org
- Roy Hinrichs, Weatherford, TX, Treasurer - treasurer@catalina-capri-25s.org

We are also looking for volunteers for our open officer positions.

Secretary - open
Chief Measurer - open
Capri-25 Measurer - open

Please also welcome our volunteers who serve as staff members.

- Brian Gleissner, Woodbury, CT. Mainsheet Editor - mainsheet@catalina-capri-25s.org
- David Gonsalves, Duvall, WA, Catalina-250 Tech Editor - catalina250tech@catalina-capri-25s.org
- Roy Hinrichs, Weatherford, TX, Facebook Admin - facebook@catalina-capri-25s.org
- Paul Alcock, Margate, FL and Jeremy Duck, Hudson, FL, Web Master - webmaster@catalina-capri-25s.org

We are also looking for volunteers for our staff positions.

Catalina-25 Tech Editor - open
Capri-25 Tech Editor - open
Telltale Editor - open

If you have any questions or comments, please contact me.
–Russ Johnson
commodore@catalina-capri-25s.org

CATALINA 22 NATIONAL ASSOCIATION

The 2016 Catalina 22 National Championship Regatta

C22 Association Editor Rich Fox

Catalina 22 National Sailing Association Vice Commodore Bill Heirendt and the members of the Lake Worth Sailing Club are preparing to host the 2017 Catalina 22 National Championship Regatta the week of June 11-15 on Lake Worth located northwest of Fort Worth, Texas. The Notice of Race should be ready on the Association website very soon.

National Cruising Captain Floyd McKenzie is starting to think about plans for the 2017 Northern Gulf Coast Cruise. The 2016 Cruise had 27 Catalina 22s participate. Expect the same, if not more, for 2017. This is a fun and very exciting cruise that every Catalina 22 sailor should experience at least once!

Commodore Don Boyko has been very busy in 2016. In addition to relocating his household from California to Florida, Don participated in the Northern Gulf Coast Cruise, Catalina 22 National Championship Regatta, and Great Lakes Cruise. It must be nice to be retired. It is fantastic that our Association commodore is very involved in both cruising and racing activities.

And behind the scenes, Association Secretary/Treasurer Dora McGee continues to keep the business affairs of the Association in excellent shape.

Looking ahead to 2017, I am getting ready to publish the Catalina 22 2017 Technical Manual Update. It should be ready on January 1, 2017. The Update will contain technical articles from the last three years of MainBrace publications, and include approximately 100 pages of technical content. The 2017 Technical Manual Update will also feature more tips for sailors who own the Catalina 22 Mk-II and Catalina 22 Sport.

Fall is a beautiful time to sail with the colorful trees and golden sunsets.

Photo by Sheila Smith Krout, Indianapolis, IN

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CATALINA 22 NATIONAL ASSOCIATION (continued from previous page)

The Boomerang TackTick

By Marilyn Boemer

This is a story about a little solar-powered sailing compass-timer, and how it came back to me. It wasn't thrown, like a boomerang, but it must have missed its target, because it returned. It's also a story about sailboat racing, and the friendships made along the way.

I had been racing a Lido 14 centerboard boat for 10-plus years when I met my future husband, John. He had never been on a sailboat, but he grew up going to powerboat regattas, where his dad raced a home-built Yellow Jacket. Also, he spent a lot of time every summer water-skiing, so he was a natural when it came to any kind of sport involving being on the water. The two of us raced the Lido for a couple of years, but the Lido's drawback was sometimes dismasting in the gusty Texas winds.

I thought it would be great to have a small keelboat that would handle heavier air, and about that time the Catalina 22 Association approved the use of spinnakers. It wasn't too hard to persuade John that we should share the purchase of a Catalina 22, which happened to be 8 months before we got married (he hadn't even proposed yet!).

The Catalina 22 we bought was named Calypso, and we liked the name because of the association with Jacques Cousteau and his work, so we didn't change it. We started racing Calypso, eventually belonging to two sailing clubs and racing on Saturdays at one, and Sundays at the other, stepping and unstepping the mast twice each weekend. Oh, how much we both loved racing! And we could sleep on this boat too if we want to! After we bought a spinnaker for the Catalina, we settled on Grapevine Sailing Club, because there were about 15 plus C22's racing spinnaker on Lake Grapevine.

John and I trailered the boat from coast to coast, racing in some of the Catalina 22 National Championship Regattas. We never did win, but wound up with a couple of trophies and a host of friends who loved racing Catalina 22s.

We often had family members as crew; first John's two sons, then my son and daughter-in-law. (They changed their wedding date so they could go to Austin Yacht Club's Turnback Canyon Regatta with us). Later, my daughter's two oldest girls became our crew. They were 9 and 11 when they started racing with us. Now, as you can imagine, they weren't the strongest crew members we'd ever had on the boat, but they were the most fun. Jumping up and down in the cockpit and yelling "Yay" when we won a race made up for the lack of muscle power. They traveled with us to the Nationals at Lake Tahoe, and to Lake Hartwell in South Carolina.

Our sailing club and fellow Catalina 22 owners were our second family. This became more important to us after John was diagnosed with a chronic form of leukemia. His health was good for almost 10 years, when he finally had to have chemotherapy. We had been racing and fundraising every year in a local Leukemia Cup Regatta at Dallas Corinthian Yacht Club, and it was just after the regatta in 2007 that we went to Houston for his treatment at MD Anderson.

Chemo didn't stop him from racing, though, until fall of 2009 when he had a stem cell transplant. It was successful, and at first it seemed John would be back on the boat soon. Here's where the Tacktick comes in to this story. He bought it for me for Christmas of 2010; several of our fleet members had them, and we hoped it would improve our finishes. But sadly, that was not to be and infections and many hospital stays later, he passed away on Father's Day of 2011, which happened to be the start of the Catalina 22 Nationals at Lake Grapevine. So it was that our friends were in town to sail, and there are no words to tell how important those sailing friendships were to me. Just going to the lake and being with those sailors and my family helped me survive the worst week of my life.

So I kept on racing *Calypso*, although it's never been quite the same. And I tried to use the Tacktick as it was intended; it came with a mount to be attached to the mast. But the boom vang was always in the way and I couldn't see it, so I made a wooden mount for it, with slots so it could be attached to the handle on the sliding cabin top hatch. I thought I could fasten it on there with Velcro straps.

The following Memorial Day weekend I took *Calypso* to Lake Worth for a regatta. The sailing club is on the north shore of the lake, and in summer, the prevailing wind is south. When we were headed downwind toward the club after the last race of the day, I looked toward the cabin top and the Tacktick was gone! It had been hard to keep it upright with the Velcro straps so it could be seen, and one of my crew thought it had probably fallen into the cabin. He looked for it, but it was not there. I tried to keep my two crew members from seeing my tears----it wasn't so much the Tacktick itself, or how much it cost, but that it was the last Christmas present I would ever get from my husband, my sailing best friend, the love of my life. We docked the boat and went ashore, where we sat at picnic tables drinking some post-race beer. Suddenly, a crew from another boat jumped up and said, "There's a Tacktick floating in the water!" He and one of my crew ran down the shoreline till they found it at the water's edge. What were the odds of that happening? That I would mount it on wood, which kept it afloat, that it would come ashore at that particular place, that someone who knew what it was would see it? I know in my heart that John had something to do with it---he wouldn't have wanted me to lose that last Christmas gift.

I still have *Calypso*—after almost 34 years, she's one of the family. But I have half-ownership of Catalina 30 number 2666, which of course is in a slip on Lake Grapevine. How nice to get in a boat, turn a key to start the engine; motor out to the lake, raise the sails and race. No trailer launching and retrieving, no stepping the mast, and lots of crew, which means more sailing friends. And the Tacktick is now attached to a camera mount that fits beautifully right in front of the wheel. I know John would love this boat too, and how useful that Tacktick is there on *Sail la Vie*.

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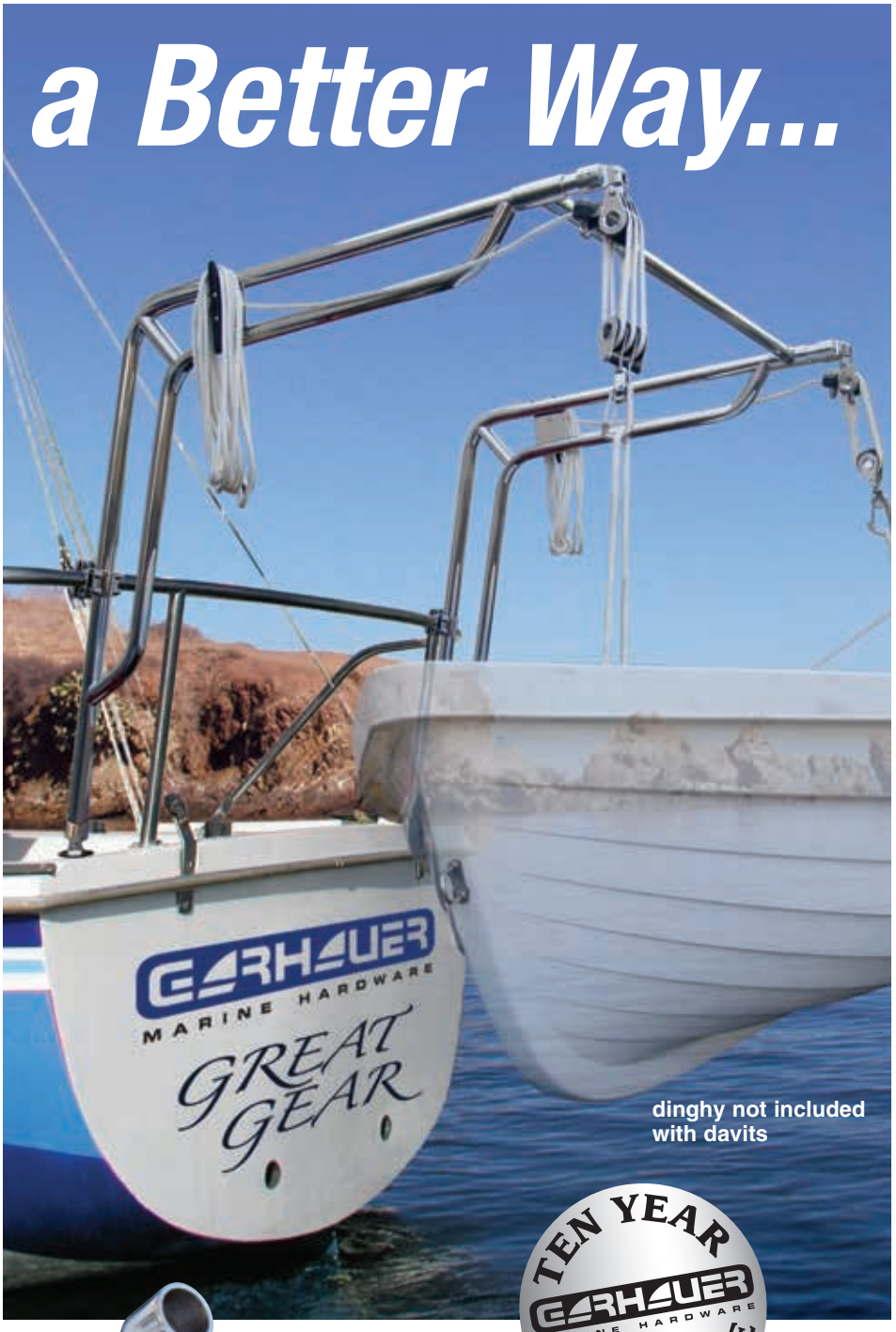

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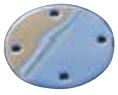

Stern Rail Davit Clamp

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