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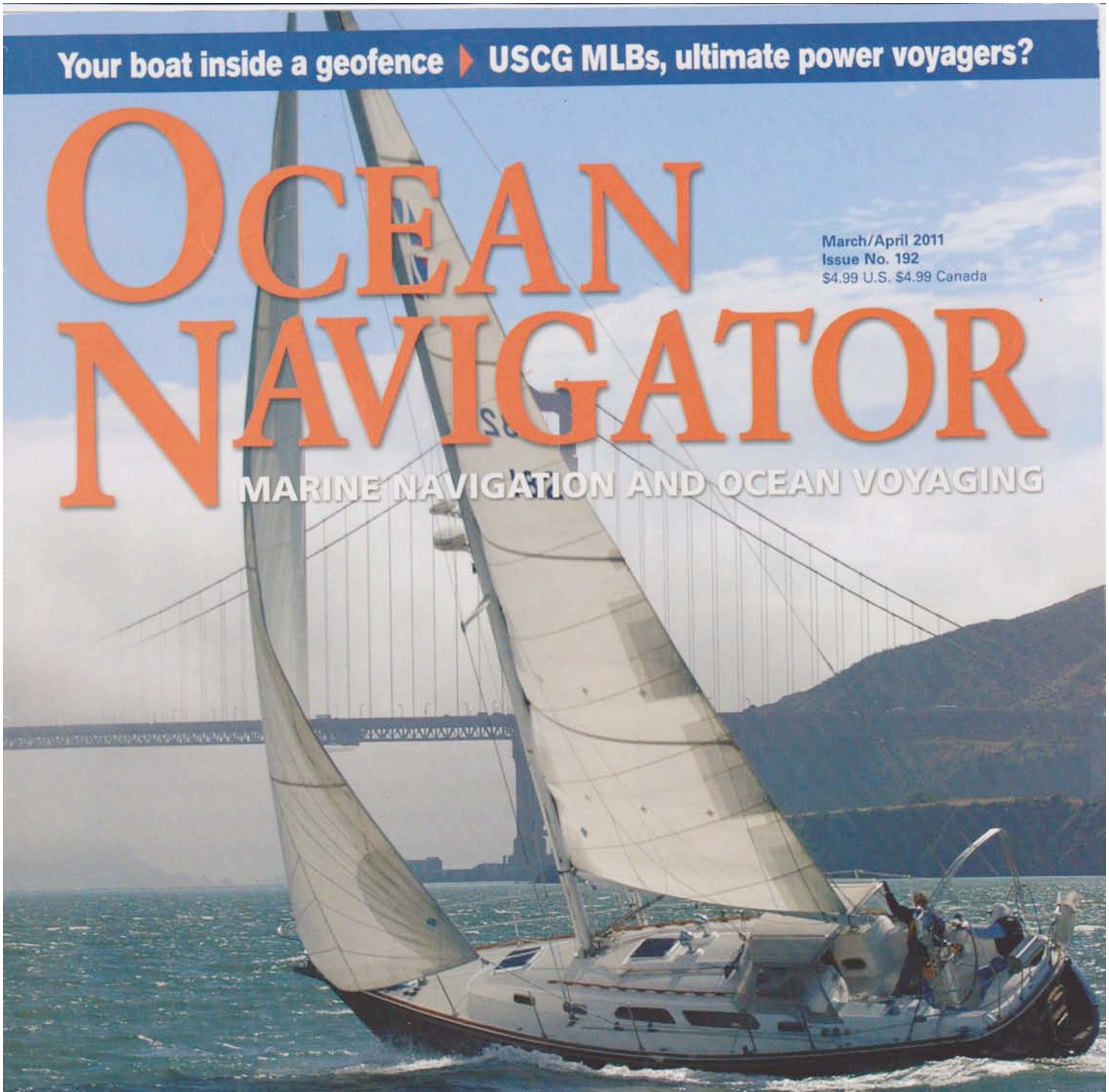

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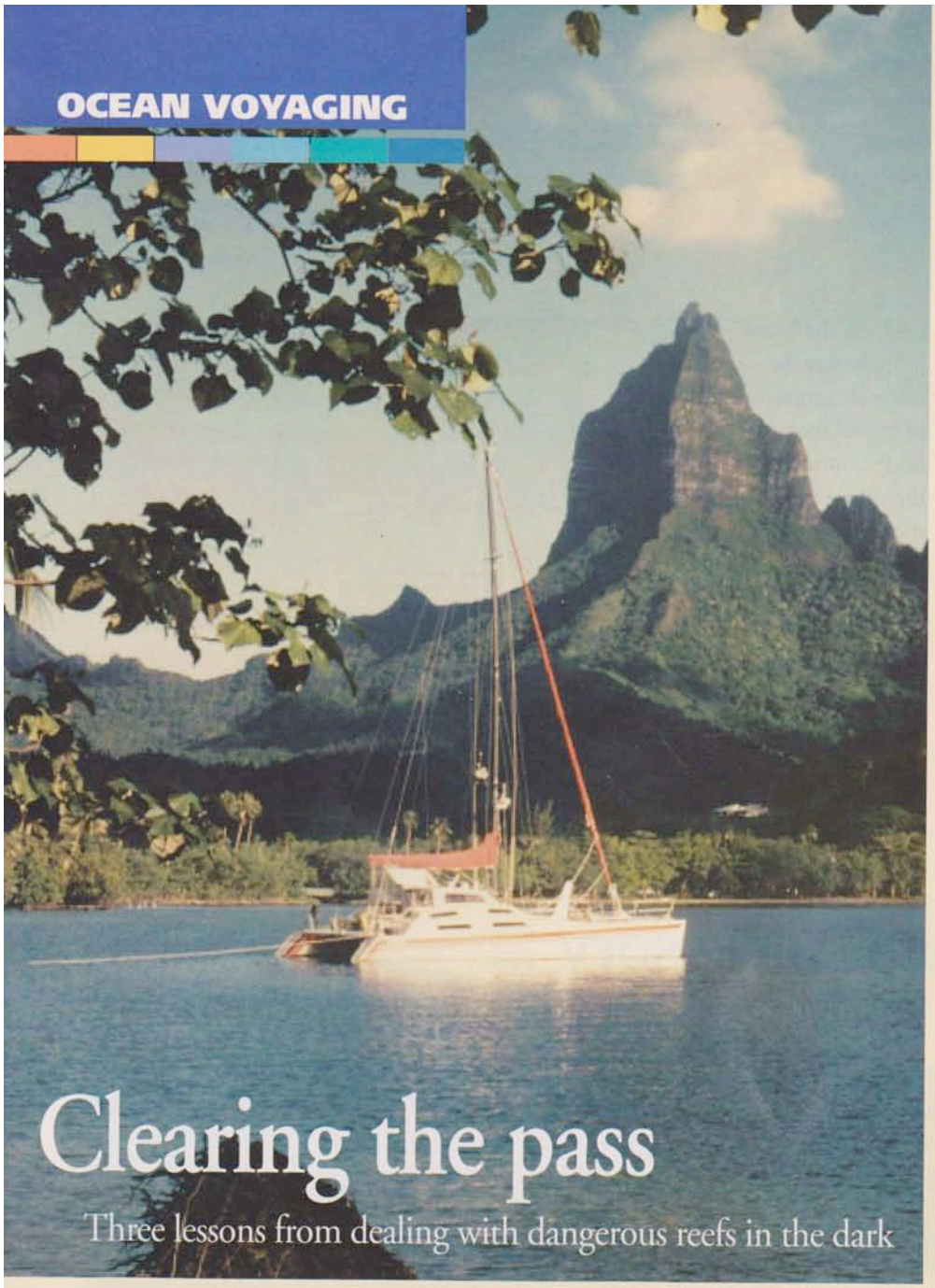


Clearing the pass

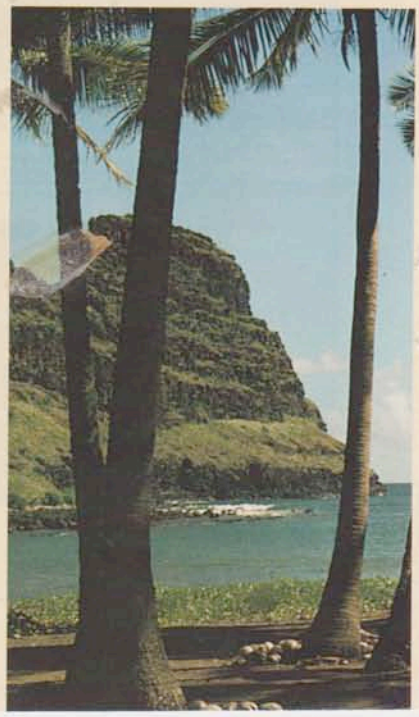
Three lessons from dealing with dangerous reefs in the dark

Story and photos by Josh Tofield

Ariel, Josh Tofield's 44-foot Crowther-designed catamaran anchored in Moorea in the 1990s.

On a sunny morning in February 1990, the VHF net started as usual in Zihuatanejo Bay in Mexico. One by one the cruising boats at anchor answered the roll call until a voice crackled, "Everyone that's going to the Marquesas Islands; let's meet on the beach this afternoon!" Eight crews gathered to meet their fellow adventurers, all headed to the South Pacific for the first time. There were couples young and old. There was a family of four aboard a 28-foot sloop. There was a fellow whose wife had just left saying she'd never set foot on a boat again. I was there with wife and two young children who were the crew of *Ariel*, our catamaran. And there were Charlie and Loretta, spirited, outgoing, and well-liked sailors, aboard *Wizard*. We shared a lazy afternoon on the sand, swapping stories, information, and dreams of our voyage.

Over the next two months five of the eight crews made their way 3,000 miles to Hiva Oa, but it was agreed that *Wizard* had the unluckiest trip of all. While we returned to Puerto Vallarta before jumping off, and had good winds the entire way, *Wizard* left from Acapulco and headed right into the notorious dead air region that can last for 1,000 miles. They kept following bad advice by radio to keep heading due south, ran out of fuel trying to motor into better wind and eventually had a 35-plus day trip to the Marquesas. All this, of course, was the pre-



cursor for events to follow.

The usual route for most boats from Hiva Oa was to cruise north to Nuku Hiva, reprovision, and prepare for the Tuamotu Islands, which lie directly athwart the route to Tahiti and the treasures of the heart of Iles Sous-le-Vent. Few of the boats had ever been through this type of pass into an atoll and anxieties were stoked by the stories of yachts wrecked on the coral bones of the Tuamotus. In those years, three to four boats were lost on the reefs each season. This was part of the reason the French authorities required all boats to post a repatriation bond: they were having to pay too much to send shipwrecked sailors home!

The Tuamotus are low atolls, with highest points of land perhaps 10 feet above sea level. Coconut palms, of course, are higher, but give indifferent radar returns. Currents in this area are renowned for fickle behaviour, often flowing against the normal trade winds. The passes into the lagoons are usually on the lee sides of the islands from the prevailing southeast trades. The current runs continuously out of the passes because of the inflow of water into the lagoon from the incessant beating of waves onto the weather sides of the reef. Worst of all is the presence of coral heads right in the middle of a pass. Therefore, you hoped to make an approach to a pass with a lookout positioned up the mast, with the sun not too low in your eyes, and on a day with not too much wind and current running against you, and with the motor working, too! Remember that in 1990 satnav (Transit) passes were intermittent, GPS worked half time, and celestial navigation was done at dawn, noon, and twilight.

In Nuku Hiva, I asked a Polynesian native which of the Tuamotus he recommended visiting. His unforgettable reply, "Monsieur, quand vous avez vu une Tuamotu, vous avez vu toutes les Tuamotu!" ("Sir, when you have seen one Tuamotu, you have seen them all!") That said, Ahe is one of the jewels of the Tuamotu islands, and one of the first islands one meets on the direct route from Nuku Hiva to Tahiti. The renowned sailor Bernard Moitessier lived there for years, scratching out a difficult subsistence. In his book *Tamata and the Alliance* (ISBN 0-924486-77-5) he wrote, "You either love an atoll from deep in your guts, or you don't love it at all."

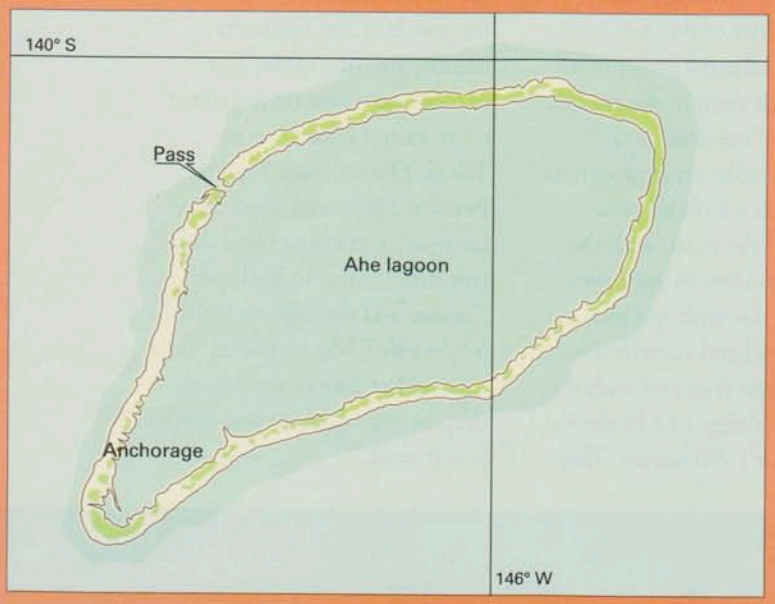
The Hiva Oa anchorage around the point from Atuona in the Marquesas. *Ariel* left from the Marquesas and made the passage to Ahe atoll in the Tuamotus.

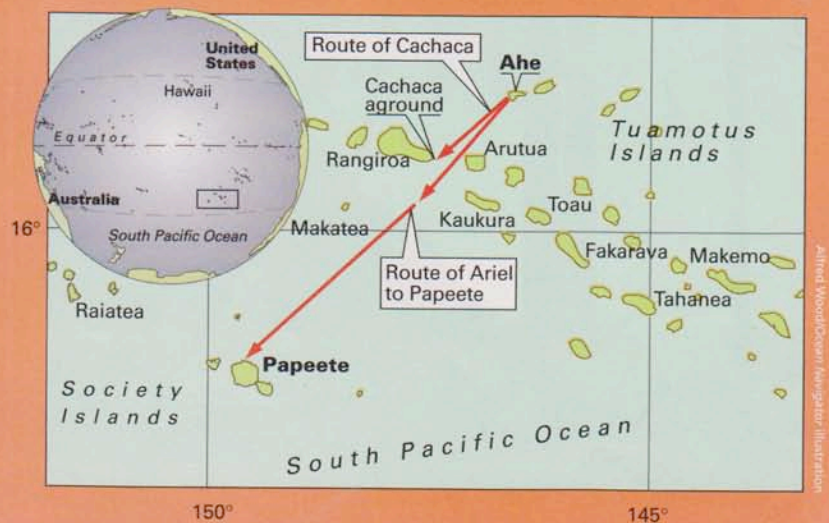
Top, after negotiating the pass at Ahe, boats need to make a right turn and head southwards in the lagoon to reach the anchorage area. Bottom, *Ariel*'s route to Papeete.

Ahe atoll

Ahe consists of a string of motu around the central lagoon. The village and small wharf lie on the southwestern quadrant of the atoll, and to reach the anchorage one must run several miles from the pass in the north, dodging coral heads before reaching the inner anchorage inside another nest of coral heads. In 1990 some of the heads were marked by simple iron stakes, which become important to our story because they provided marginal radar returns.

For our family and two other boats there, Ahe was the archtypical south seas idyll. Meeting the locals, shelling on the reefs, snorkeling around the coral heads, helping with the pearl oyster lines. Our children ran around with the native children finding octopi, shells, and fish and hosting big parties aboard our trampoline nets.





Then the Mara'amu winds began to blow. The Mara'amu winds are an accelerated trade wind condition that can last more than a week, blowing 25- to 35-knots non stop. At the beginning of the winds, two yachts entered. The first was the gorgeous Oyster 55 *Night Music* whose professional crew was doing a delivery. The other was a small steel sloop, *Cachaca*, with a Swiss couple and a cat on board. The woman, Marie-Claude, was six months pregnant. Her plan was to have the baby in Tahiti so the child would be a French citizen, and thus they would be permitted to buy land there and live happily in paradise.

The winds blew for four more days, big swells crashing on the reef, clouds roaring by overhead; then in the morning there was a knock on the hull. The husband of the pregnant woman had rowed over. Looking somewhat drawn and agitated he asked, "You are a doctor? Yes? My wife, she has pain in her stomach now for three days, and she is getting worse. Would you come see her?" She was lying in her bunk, feverish, nauseated, and complaining of pain in her right lower quadrant, exactly where one sees the

signs of acute appendicitis. She had never seen an obstetrician and had had no prenatal care whatsoever.

Needing advice

Now Ahe had no landing strip, and the nearest atoll that did would have been dangerous to reach under the circumstances. The island had no medical facility, and although I was a trained surgeon, I needed advice.

Enter the ham radio. A ham operator in Hawaii answered on 14313 KHz, the international marine net. He connected a phone patch to an obstetrician at a Maui hospital. That began the quintessential example of what's wrong with our medical system. The physician on call said that they could not give any advice over the phone because of fear of lawsuits. I exploded, "For God's sake, this is a pregnant Swiss woman on a French island with an American doctor. Who is going to sue whom??" He hung up.

By now the Hawaiian ham radio operator was angry as well. He said, "I will get you help." Fifteen minutes later we were patched to his wife's OB/GYN. We decided to treat her with antibiotics that I had aboard, let her drink clear liquids only, and hope for the best. Attempting an appendectomy on a pregnant woman with only local anesthetic would have been exceedingly dangerous if not foolhardy, other than as a last-ditch effort in extremis.

Crew of *Ariel* on the wharf at Ahe atoll. Bernard Moitessier, famous French voyager and author, lived on Ahe for several years. His experiences on Ahe are included in the book *Tamata and the Alliance*.

Forcing a passage

That late afternoon we heard a VHF call from *Wizard*. "We're getting close to Ahe and will be in later. We're about 10 miles or so out." Uh-Oh. It was going to be close. In these latitudes, when it gets dark, it happens quickly, there is no prolonged twilight. Further conversation revealed they had set out because the season was moving on, and they had the long passage from Mexico still in mind. They were getting beaten up and thrashed pretty badly in the Mara'amu and were very determined to get in. We and another crew gathered aboard the glorious Oyster for an afternoon party, and made it headquarters for welcoming *Wizard*.

An hour later, "We're five miles away."

At this point all aboard *Night Music* agreed there was absolutely, positively no way they could get to the island, navigate the pass, and make the miles inside the atoll before dark. I was designated the radioman.

"*Wizard*, *Night Music*. Guys, we strongly advise you get to the lee of the island and spend the night just going up and back in the lee. The swell won't be bad even though it's blowing 25 to 30."

"*Night Music*, this is *Wizard*. We are going to sleep at anchor tonight NO MATTER WHAT!"

"Look, we can try to guide you on radar and give you advice. If you make it down the lagoon we can help you anchor, but please reconsider!"

Another half an hour. "We see where the pass is."

Almost dark. "We're starting in; we have a drawing of the coral head's location in the pass."

Dead quiet aboard *Night Music* except for the wind gusting in the rigging, and the sound of the hull seesawing from side to side. Ten minutes later it is pitch dark, no moon.

"We're through!"

"*Wizard*, PLEASE STAY WHERE YOU ARE! Just keep the engine turning over and hold your position."

"NOPE, we're going to anchor where you are."

We could see them on the radar screen.

"In that case, turn right 90 degrees and hold that course until we tell you." I continued to give them instructions. "More to port." "More to starboard."

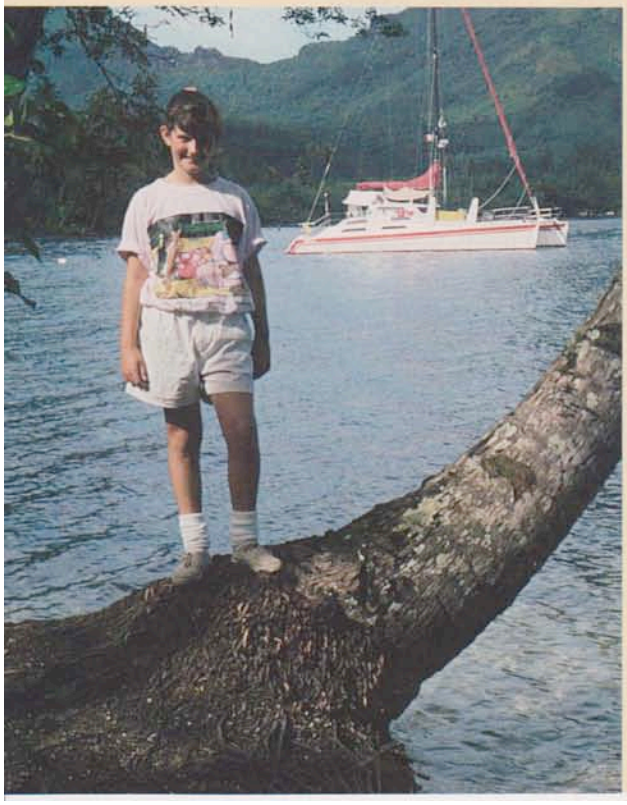
We had them on the radar, everyone there watched over my shoulder. We were airtraffic controllers giving instructions keying on the paltry returns from the iron stakes.

"Come to port 15 degrees."

"You will be passing the first coral head 100 feet to port. Immediately come to starboard 30 degrees."

"Slow down. Turn to port. Turn to starboard."

Nerves strung tight. They were now only one mile away.



Rebecca Tofield, age 10, in Opunohu Bay, Moorea, which Josh Tofield calls "one of the most beautiful anchorages in French Polynesia." *Ariel* has a bow anchor in deep water and a stern line ashore.

Another of the iron stakes slid by the radar screen.

Three things happened simultaneously. First, a strong gust slewed us 30 degrees off course, changing the radar display. Second, Capt. Ian reached down saying "Let's put the radar on closer scale," changing from three miles to one mile and totally disorienting me. Third, *Wizard* made an unexpected foray hard to starboard.

"*Wizard*, STOP, you're in the middle of all the coral heads there. You've got to make the tightest turn possible, 180 degrees to port and hold position into the wind."

Just then there was a banging on the hull. One of the fishermen had come from the village in his skiff. He had seen a red port light shining where he knew no boat should be. He asked in French, "Could you use some help?"

"Mais oui, mon ami, mais oui!!!!"

Capt. Ian and a crewman hopped into his skiff, and the three of them set off into the wind and spray and blackness toward *Wizard*.

In 10 minutes we heard from the VHF, "They're here." The entourage, expertly guided, made their way through the coral heads to the inner anchorage and *Wizard* dropped the hook.

Back aboard *Night Music* we all had a drink, and toasted Loretta and Charlie. Ian, in a very cultured British accent said, "I expected to find crew panicked out of their minds, but this woman calmly invited me aboard and offered to prepare us a cup of tea!"

Headed for Tahiti

The next morning back aboard the Swiss boat, Marie-Claude was feeling better, her fever was down and she started eating soft food. I decided that it wasn't acute appendicitis, but that she probably needed to get to Tahiti fairly quickly and see an obstetrician. So two days later, with winds still 30 knots and swells 10 to 15 feet, we set out for Tahiti, with *Cachaca* behind us as we ripped out the pass.

Because *Ariel* was faster, we made it to the very dangerous gap between Rangiroa and Arutua atolls just at dusk, got a satnav position and carried on. Despite all the winds, the current was running strongly counter to the swell direction. That night those same currents threw *Cachaca*, the hapless Swiss boat, up on the reef of Rangiroa. The couple got off with their cat, and nothing else, huddling on the inner part of the reef through a terrible night. In the morning, a fisherman spotted the mast of the now destroyed boat, and came to save them. (Much later we learned that the cat abandonded them for life on Rangiroa, but they were put

on a trading schooner in a week and got to Papeete, where Marie-Claude eventually had her baby.)

Twice through the pass

The next day was quite rough. The mainsail ripped in 40-knot gusts, but at 0300 we found ourselves off the narrow pass into Papeete. The harbor has a range marking the entry through the reef with green and white lights showing the way. We had the excellent French large-scale nautical chart of the entrance, so I announced that if we were 100-percent certain of the range, was is reasonable to attempt the entry? We were; we did, and just as we dropped the hook in the Shangri-La of our dreams, we heard on the VHF: "MAYDAY, MAYDAY, MAYDAY. This is yacht *Belleza*. We are on the reef at the harbor entrance, we are taking on water, the cabin is filling up!" We could hear the slam of a wave throwing the boat onto the reef over the open microphone. These friends of ours were in serious trouble.

No answer from the harbor to the mayday call.

I called, "Papeete Harbor, Papeete Harbor. This is *Ariel*, a boat has just gone up on the reef and is calling MAYDAY."

"*Ariel*, this is Papeete Harbor. And just what do you expect me to do about it?"

"Don't you have a rescue boat?"

David Tofield, at age 8, taking a noon sight just after crossing the equator on *Ariel*.

"Monsieur, I suggest you go out and help them yourselves!"

So we did.

Up comes the anchor, restart the engines, and out the harbor, reading the range backwards as we go.

No lights by the reef entrance. Nothing.

"George, Connie. We don't see you. Turn on your masthead strobe."

There they were. Two miles farther down. They had mistaken the green aero beacon of the Faa'a airport for the entry range and had followed that green light right up onto the reef. They had been slammed onto the reef three times, but with the fourth swell and tremendous good luck, backed off the reef. By then they had two feet of water sloshing over the floorboards.

"Is the water getting deeper? Are you sinking? We'll be there in 10 minutes."

"No, maybe it all washed in when we were on our side."

Soon we were alongside and lead the way back to the range entrance through the reef for the third time that night. We anchored next to each other. In the morning they were hauled out to fix some minor damage.

So the story of the three boats and their night time reef passes has become part of our voyaging DNA. In four days, one disaster, one near disaster, and one disaster narrowly averted. Some of the lessons are obvious, but the best summary comes from a line by Royal Robbins in his book on technical rockclimbing, *Basic Rockcraft* "...You better learn to see the world as it really is, and not what you want it to be, or one day you will see the ground coming up at you very quickly..."

That defines our job as voyagers: see our position and the sea as they really are, and not as we want them to be. ■

Joshua Tofield is a USCG licensed master. He and wife Natasha currently live aboard their Nordhavn 40, Samba.