

FEWER THAN 20 PEOPLE IN THE
WORLD CAN NAVIGATE THE SOUTH
PACIFIC USING ONLY GLOW STICKS
AND INSTINCT. AMONG THEM ARE

Hawaii's Last Wayfinders

STORY BY **Andy Isaacson** PHOTOS BY **Linn Morris**



Alenuihaha: The crushing seas.

That's what Hawaiians call this channel we're crossing between the Big Island and Maui. The passage funnels prevailing northeastern breezes, turning them into ferocious winds. We're sailing on instinct across this unpredictable water on a replica of a traditional Hawaiian voyaging canoe called *Hokule'a*. It's the middle of the night. We have no radar on board. No GPS. Not even paper charts.

"They all have their own personalities," Kalepa Baybayan says of the channels between Hawaii's islands that for centuries have been the adversaries of the world's best ocean sailors. "But this one has a mean streak in it."

Kalepa, a navigator trained in Polynesian wayfinding, tapes two small glow sticks to the wood railing, illuminating a 90-degree angle. A makeshift protractor. This is our most tangible navigational aid for a night in the crushing seas.

Kalepa peers up to the celestial sky to locate a data point. He finds the northern constellation of Cassiopeia, and then follows the two end stars of its configuration to locate *Hokupa'a*, the North Star. Maui lies 30 miles northwest of the Big Island, Kalepa says, so we'll need to sail on a 45-degree course from the North Star. Kalepa, who has a stout build and quietly assertive manner, sits unmoved at the back corner, eyeing the glow sticks to take a bearing.

"Steer down!" he calls out, meaning downwind, a feat requiring the full weight of three of us on the night shift leaning into the handle of a long wooden steering oar. My bare feet grip the wooden deck as the canoe pitches and rolls with jerky undulations, creaking in the darkness.

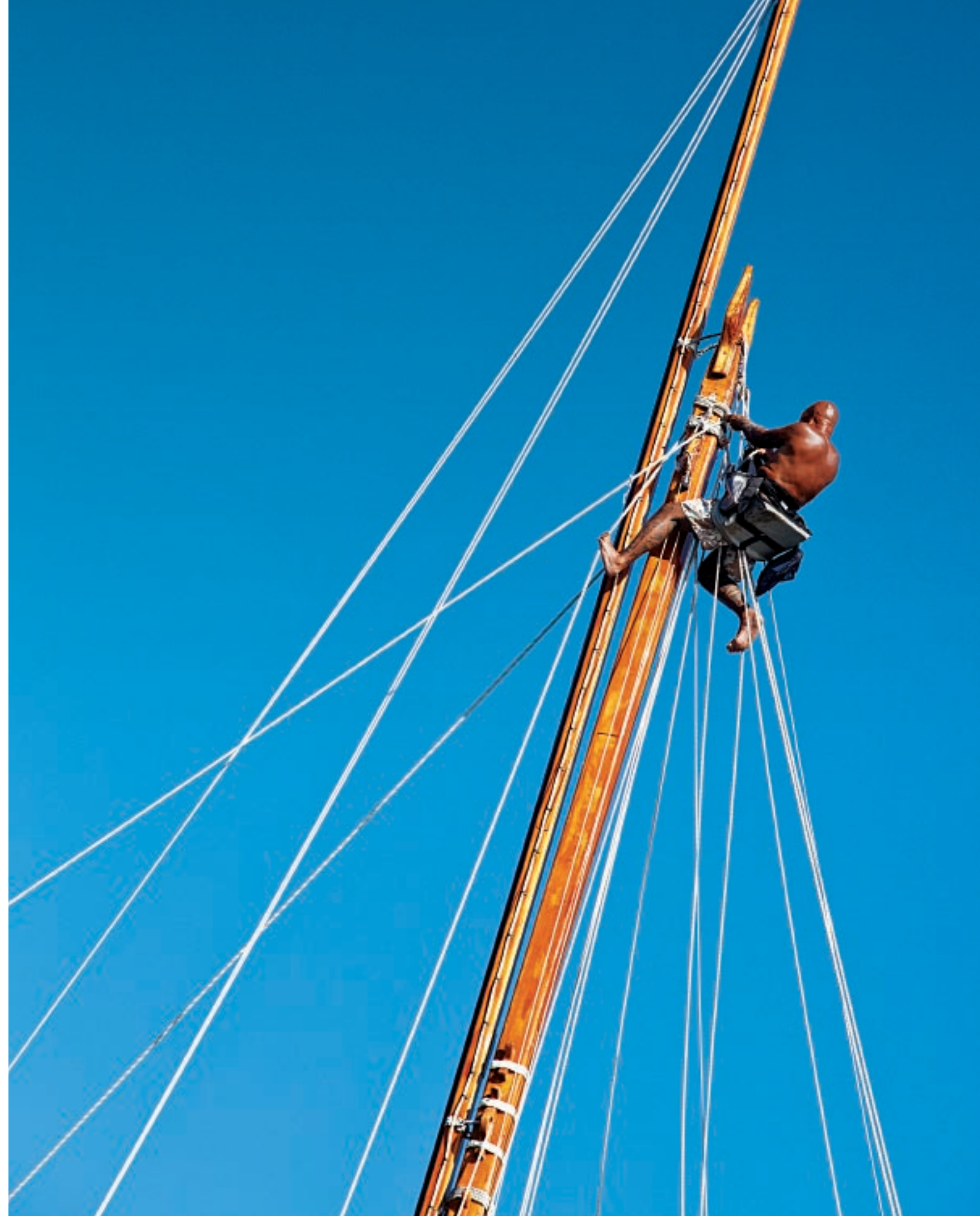
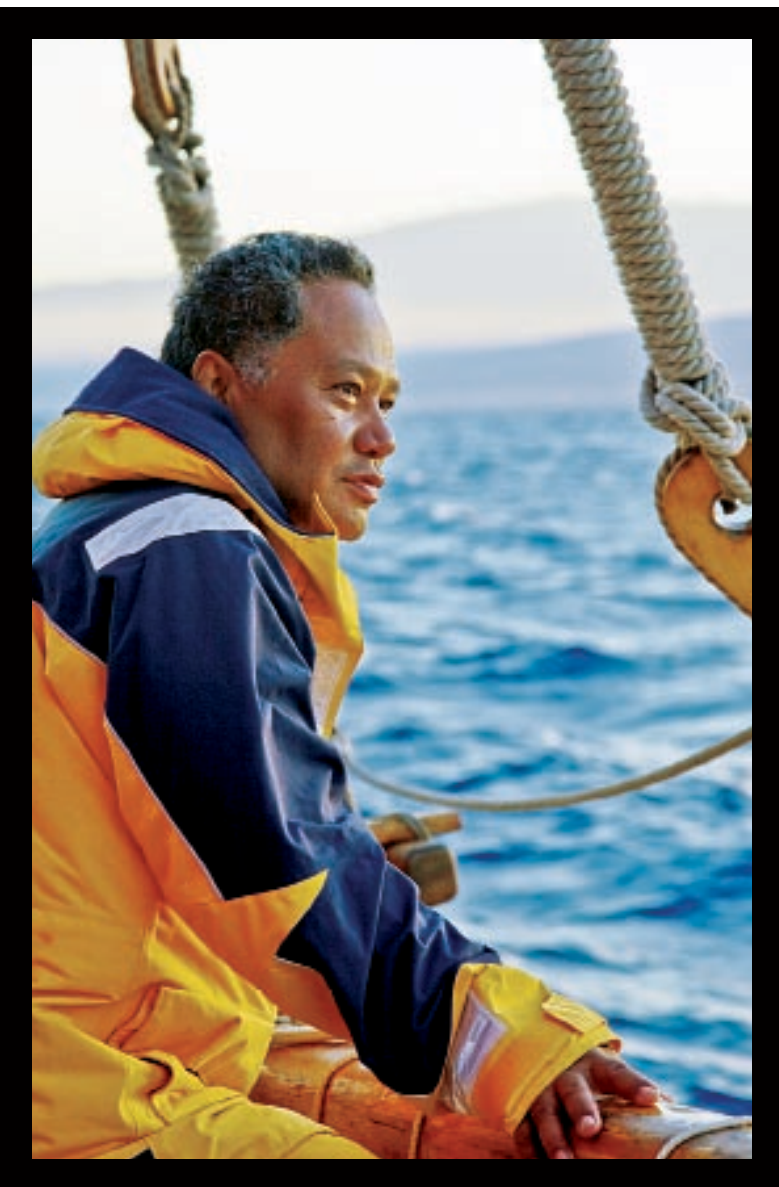
Half our crew of 16 — a mixed group of novice and veteran sailors, most of them Hawaiian — rest in cramped canvas sleeping nooks lining the deck. The night shift captain is a good-natured goateed character named Atwood Makanani ("Maka"), who mystifies me with long-winded raps on navigation and spirituality. Voyaging, Maka tells me, is "a world of magic, where the heavens come down to the earth and you actually get lifted and sail in the stars."

"It's like a dance," he says. "Who's leading and who's following? As the canoe goes up a wave, it does a little hula, and you go with it. Elvis was never the king of rock and roll — we've been rockin' and rollin' since time immemorial."

So we're dancing across one of Hawaii's most notorious waterways, just as Maka's Polynesian ancestors did. Without electronics. Reading the water's moves. Looking skyward for help. Modern Hawaiians may have known that their Polynesian ancestors rolled across the Pacific, but until *Hokule'a* was built 35 years ago they had only the haziest idea of how it could have been done. Our three-day voyage from the Big Island to Oahu is a tribute to how this ancient knowledge narrowly escaped the dustbin of history. It will also prove to me the power of instinct. How it can be sharpened, even recaptured, to overcome the most distant odds.

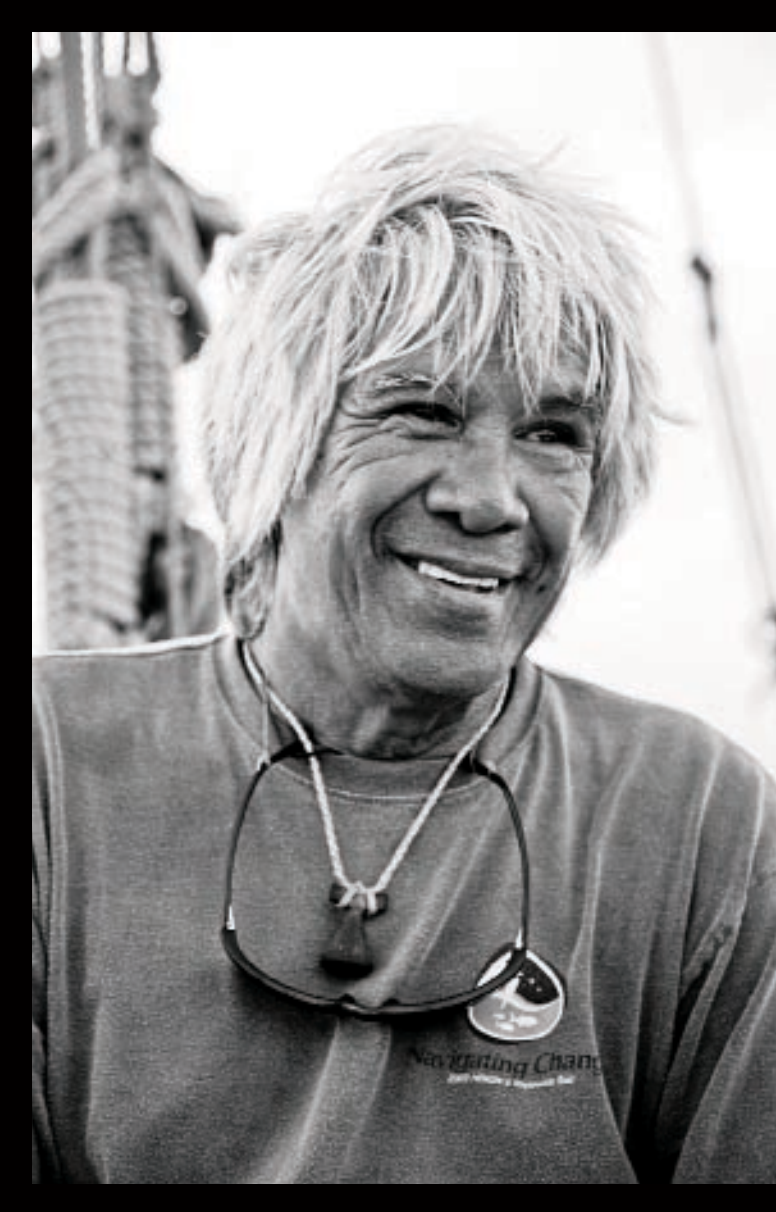
The Master

Kalepa learned how to read the seas and sky without the help of modern-day electronics, just as the original skill of wayfinding was about to die off.





The Viewpoint
“IMAGINE. WE’RE LOOKING AT THE SAME SHORELINE
THAT OUR ANCESTORS SAW FOR THE FIRST TIME ON THEIR
CANOE. YOU CAN ACTUALLY FEEL THAT CONNECTION.”



The Veteran

Known as "Snake," he was on *Hokule'a's* first Pacific voyage.



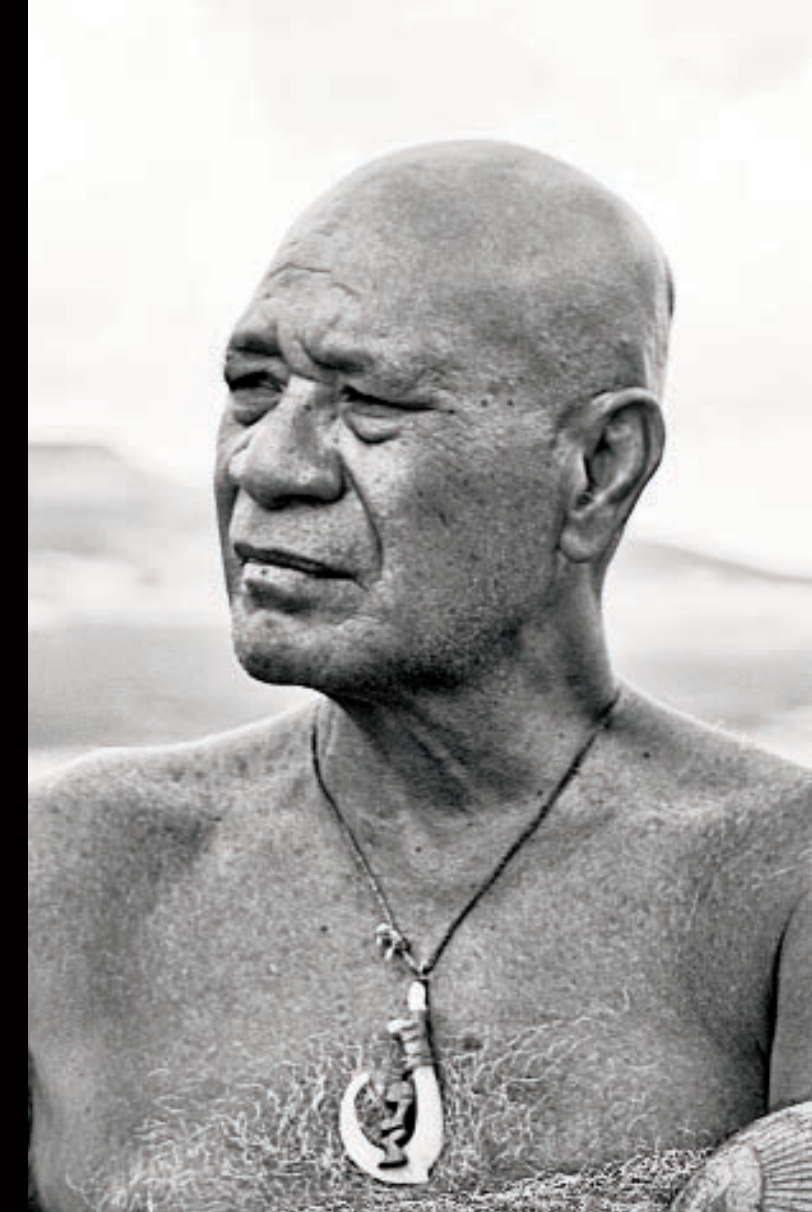
The Offspring

Kalepa's daughter, Kala, is learning how to navigate the ocean.



The Sage

Maka can find a dance metaphor in high seas or hard times.



The Fighter

Tava brings a boxer's toughness and carver's precision on board.

"When I first saw *Hokule'a*," Kalepa says, his voice rumbling through the sound of the wind, "it just grabbed my heart. It's had an extraordinary power to affect people's lives." The canoe has made nine long-distance voyages, including to Easter Island, the Cook Islands and Japan, and has spawned a voyaging revival in other Pacific nations.

"The ocean doesn't separate the islands," Kalepa says of the vast sweep of Pacific. "It's a bridge between our homes."

The first Polynesians must have believed the same thing. They began sailing out of Taiwan 5,200 years ago, scholars estimate, reaching Fiji, Samoa and Tonga first before migrating east to the Marquesas Islands. By the end of the 13th century, they'd navigated to all corners of the 16 million-square-mile "Polynesian triangle" — Aotearoa (New

Zealand), Rapa Nui (Easter Island) and the Hawaiian Islands. At a time when European sailors still feared falling off the edge of the Earth if they ventured across the sea — only discovering the Canary Islands off the African coast in 1336 — Pacific peoples had already reached islands unimagined.

The question later was, did they get there on purpose?

Their methods baffled Westerners for hundreds of years. When Capt. James Cook voyaged in the late 18th century, he was impressed by the speed of Polynesian double-hulled canoes. He brought aboard a Tahitian learned in astronomy and navigation who could plot a map of every major island within a 2,500-mile range from memory. The vessel we're in now is not unlike the ones Cook admired. And neither is our captain so different from Cook's ocean expert.

FAR RIGHT: ANDY ISAACSON

Kalepa tells me he was 17 when a Hawaiian sailor and an anthropologist began constructing *Hokule'a* to take the shape and weight of a traditional Polynesian boat, or *va'a*. The crew would test, once and for all, whether intentional two-way voyaging could have been possible. Their idea was to sail the 62-foot-long vessel from Hawaii to Tahiti and back without maps, sextants or compasses. But the Hawaiians had one problem: None of them knew how to navigate.

Then, Kalepa says, they found out about a Micronesian named Mau Pialug, one of six living navigators in the 1970s who knew the old Polynesian methods. As an infant Mau was placed into tide pools so he could learn to sense the ocean's subtle rhythms. At age 7, his grandfather dragged him behind the canoe to overcome seasickness. He

learned star trails across the Micronesian sky from maps carved into the sand. Mau agreed to teach a new generation of Hawaiian navigators, including Kalepa and Nainoa Thompson, his methods. In May of 1976 the group completed the 30-day voyage into Pape'ete. It was a watershed moment for Hawaiians. The old way was legitimized. Fused with modern astronomy, it became the new wayfinding.

Maka nods ahead toward the slopes of Haleakala. "We're looking at the same shoreline and mountain that our ancestors saw for the first time on their canoe," he says. "Imagine. You actually can feel that connection."

The early morning sun reveals a Maui with no trace of ocean-view rooms or Technicolor swimming pools. Even

when Wailea's string of beach resorts comes into view, the creaking of *Hokule'a* evokes the sense of an earlier journey.

"The canoe is a metaphor for a way that allows us to walk through space and time," says Maka, sailing off on another riff. "We build a simple canoe, as if it were a time machine. Have you seen *The Matrix*? Are you willing to go down the rabbit hole and click your heels twice?"

Fresh faces replace the bleary eyes of the night shift. Among the replacements is Tava Taupu, a 65-year-old master tiki carver and former lightweight boxing champion originally from the Marquesas Islands. He emerges from the sleeping quarters in a pink loincloth that exposes an impressive array of traditional tattoos along his arms and legs. A bleached-blond Hawaiian who goes by the name

Snake assumes the captainship at the boat's helm. Kalepa's daughter, Kala, lays out a breakfast of sugary crumb muffins and sautéed jerky sandwiches, prepared over a propane gas stove inside a metal box. Before eating I do something I've been putting off since before dawn. I clip on a safety harness to visit the open-water bathroom. (Maka: "Drop the kids off at the pool without hitting the diving board.")

Thankfully, the waters have calmed since we left the channel. Kalepa orders one of the crimson sails tied down. We drift slowly through the strait between Maui and Kaho'olawe, where Maka lives part time. Hawaii's smallest island is dry and denuded, a consequence of its tortured history as a battleground for warring chiefs and as a penal colony, a pasture for cattle and goats, and during the 50 years after the Pearl

ANDY ISAACSON

Harbor attack, a target for everything the U.S. Navy had in its arsenal: aerial bombs, torpedoes and 500-ton dynamite charges. (The crater one left behind is now habitat for two endemic species of shrimp.) But many believe Kaho'olawe was also where early Hawaiian navigators were trained, for good reason. For voyagers it marked a reliable directional bearing south. The channel between the island and neighboring Lana'i bears the name Kealaikahiki: "path to Tahiti."

"We've sailed the route so many times it's like an old trail for us now," Kalepa says casually, adding that danger arises when you begin to doubt. I nod affirmatively. "You have to always assume that you know where you are, because there's nothing on the ocean to get you back on track."

Position is determined through dead reckoning, a running

mental log of speed and direction. But we have no speedometer or digital compass. Kalepa shows me how they calculate speed: As we move along steadily, he counts out loud the time it takes bubbles to travel the length of the canoe.

"In good wind, we can sail up to 200 miles a day," he says.

The sun is a critical compass point at dusk and dawn, but at night Kalepa relies on celestial navigation. He says the Hawaiian star compass divides the sky into 32 houses. At any given location on the planet, a certain star will always rise at the same location on the eastern horizon; it will also set at the same location on the western horizon.

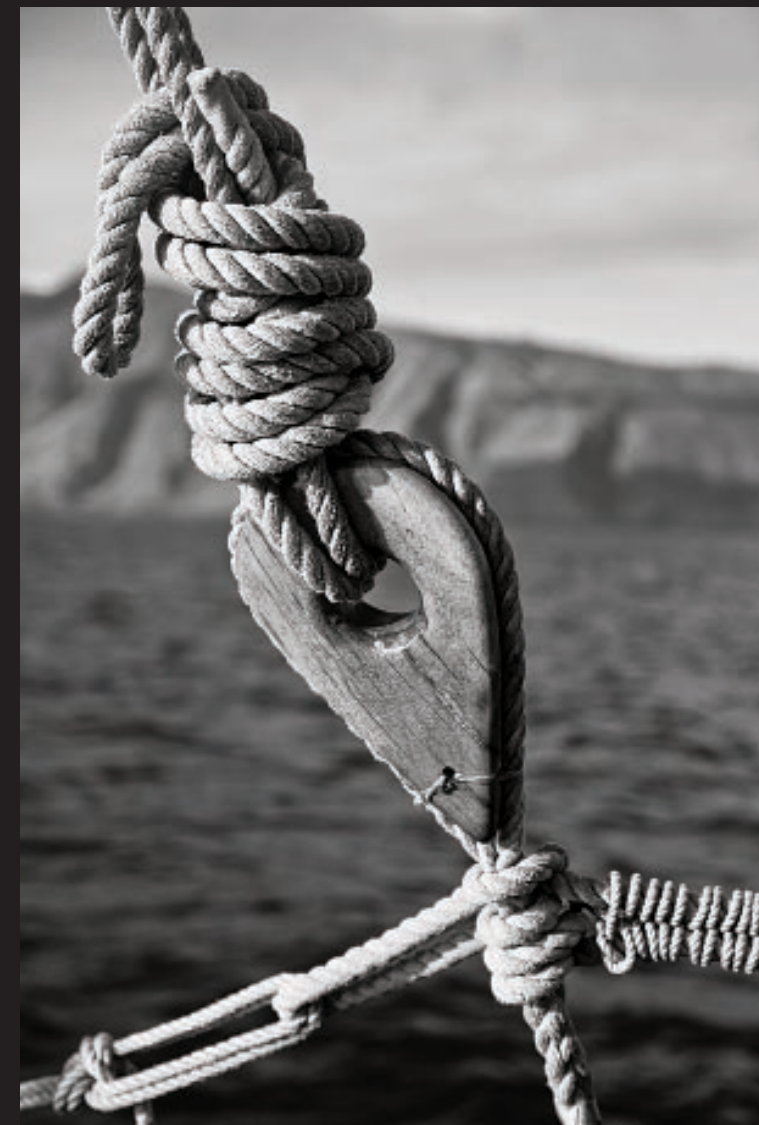
During this exchange Kalepa mentions that he carries in memory the rising and setting positions of over 200 stars.

He extends his arm to show how, by using his hand as

The Know-How

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BOAT SPEED. IN HIS MEMORY ARE THE RISING AND SETTING POSITIONS OF 200 STARS.





a sextant, he can determine latitude. Around Hawai'i, the North Star is situated 20 degrees above the horizon — the same as the latitude of the island. Under the clear sky Kalepa makes each calculation quickly, easily. But, I wonder, what if there's fog? Or cloud cover? Kalepa demonstrates by closing his eyes slightly to better feel *Hokule'a's* movements.

"You have to slow your body down to the rhythm of the ocean to detect subtle changes," he says. Hawaiians call this instinct *na'au*. I can see that Kalepa has it. From the stories I've read, Mau, the mentor, did whatever it took to achieve it. But he also possessed an exceptional eye for reading cloud patterns to forecast weather and wind direction. He taught Kalepa that an approaching squall bearing brown or low clouds usually brings strong winds; black or high clouds foretell weak winds. An isolated stack of rain clouds on the horizon can indicate land. Foraging terns, seaweed or coconut shards are also telltale signs of nearing landfall.

"He never imagined his canoe moving across the sea," Kalepa says about Mau. "He saw it holding a stationary position, the islands coming to meet him."

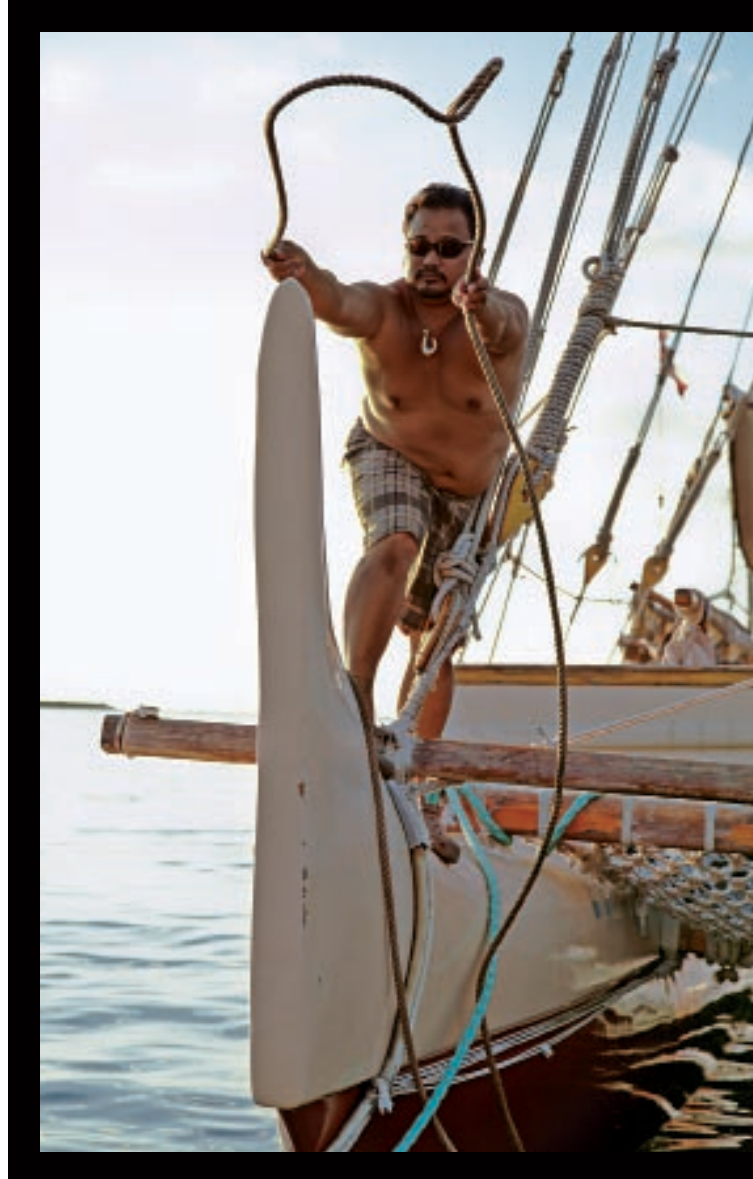
The sun is setting over Lana'i as we sail leisurely up the west coast of Maui. There's a calm vibe on deck as it becomes a floating patio, the crew reclining and chatting easily.

"The ocean brings uncluttered distractions," Maka says to me. "Our sense of perception is heightened. Get on a canoe and look at what is still here — and try to remember."

We reach Lahaina after dark. We'd been on the water for 20 straight hours, dancing to the ocean's undulating rhythm. On dry land now, the discordant vibration of vehicle traffic while driving the island's coast road feels as if the needle has been rudely lifted off a soothing record, our dance with the sea interrupted without warning.

The next day we sail across the channel from Maui to Moloka'i, and then on to Oahu. I watch Maka schooling a young first-time crewman from Molokai on how to coil a rope along the deck. A father-and-daughter team from Kauai are sharing duty on the steering oar.

"Wayfinding is more than navigation," Kalepa tells me. The canoe embodies a set of values, including *'ohana*, family, and *aloha*, respect for others. It teaches discipline and sets direction. Or, as Kalepa puts it: "It's a model for living life."



The Bridge

To these crew members, the canoe is more than a vessel. It helps recapture the memory of a distant era when there were no glowing screens on the dash or lampposts on the mountains, when life itself was directed by the waves and the stars.

As we sail past Lana'i Lookout, a promontory on the eastern tip of Oahu, someone tells me a story about an exchange that Mau once had with Nainoa Thompson, during Nainoa's training. As the two men stood on the rocky headland, Mau asked Nainoa: "Can you point to the direction of Tahiti?" Nainoa pointed south. Mau then asked: "Can you see the island?"

When I meet Nainoa later in Honolulu he recalls how that question had puzzled him. He contemplated it for a while, finally responding: "I cannot see the island, but I can see an image of the island in my mind."

"Good," Mau replied. "Don't lose that image or you will be lost." Mau might well have been making a statement about navigating existence in the world through dead reckoning. A people can only know who they are, or where they are heading, after discovering where they came from. ■ ISLANDS.COM/bigisland