

BUILDING A DREAM

By Gary T. Kubota
STAR-BULLETIN

THE two wooden koa masts came from a master canoe-builder on Maui.

The hull was made of layers of plywood covered with a protective shell of fiberglass, and the sails were canvas instead of traditional lauhala.

Despite having to combine modern with traditional materials, builders of the voyaging canoe Hokule'a kept as close as possible to the shape and weight of an authentic Polynesian voyaging canoe while fighting an uphill battle to gain financial support for their project more than 30 years ago.

Their objective was to sail to Tahiti from Hawaii using traditional Pacific wayfinding techniques that did not require western instruments, thereby refuting historians and archaeologists who argued that Polynesians were incapable of making long-distance navigated voyages.

"Our project was a hard sell," recalled chief designer Herb Kane. "Some people thought we were nuts ... But enough people believed in what we were doing."

What Kane and co-founders Ben Finney and the late Tommy Holmes did was build a 62-foot, double-hulled canoe that carried a crew of 15 people 2,400 miles from Honolulu Bay on Maui to Papeete, Tahiti, in 1976.

Also aboard were a dog, chicken, and a pig, along with 1.25 tons of water and a ton of canned, packaged and dried foods.

Finney said he was aware at the time that some people thought Holmes, himself and Kane — "two haoles and a Hawaiian from Chicago" — seemed an unlikely trio to launch such a project.

But the three who founded the nonprofit Polynesian Voyaging Society in 1973 demonstrated a love for sailing and a passion for showing that native Hawaiians were capable of traveling long distances on voyaging canoes using the intelligence gathered through their knowledge of nature.

Holmes, a member of the Outrigger Canoe Club, was an avid waterman and began sailing outrigger canoes at a time when canoe sailing was a lost art in Hawaii.

Finney, a University of Hawaii cultural anthropologist and former San Diego surfer, had built and tested a 40-foot version of a Hawaiian double-hulled canoe in 1965, as a first step toward developing a larger version to sail to Tahiti.

Kane, who had spent his late teens and early adult life in the Midwest, left his career as an artist in advertising and publishing in Chicago to return to Hawaii to pursue his goal of building a voyaging canoe.

Finney recalled Kane and Holmes coming to see him in the early 1970s.

"We each had our own vision of not only making a scientific and academic point of setting the record straight but also having the Polynesians themselves taking the lead in the process," said Finney, who was the founding president of the Polynesian Voyaging Society.

Later, the society, under new leadership from Myron "Pinky" Thompson, built the traditional Hawaiian voyaging canoe, the Hawai'iloa.

Some crew members of the Hokule'a formed a nonprofit on the Big Island and developed the voyaging canoe, Makali'i.

Along with Hokule'a, Hawai'iloa and Makali'i made the Hawaii-Tahiti-Marquesas voyage in 1995. Kane, whose grandparents were taro farmers in Waipio Valley on the Big Island, said he was aware of ancient chants describing the lore of voyaging canoes.

One of them was "Ei'A Hawaii" or "Behold Hawaii," known to be composed centuries ago by the navigator of King Mokuia after sighting the Big Island while returning from Tahiti.

"My primary motive was to establish the recognition that the voyaging canoe had to be the central artifact of Polynesian culture, because without the canoes there would be no Polynesia," Kane said.

THE PIONEERS

Herb Kane, Ben Finney and Tommy Holmes founded the Polynesian Voyaging Society in 1973 to build a deep-sea canoe to sail from Hawaii to Tahiti and back. This trio and several others were instrumental in advancing the vision of canoe voyaging.



Herb Kane, 78, native Hawaiian artist and co-founder of the Polynesian Voyaging Society, was the general designer and construction supervisor for Hokule'a.

Ben Finney, 72, cultural anthropologist and co-founder of the Polynesian Voyaging Society, recruited and supervised the training of the Hokule'a crew.

Tommy Holmes, 1945-1993, a freelance writer, was a co-founder of the Polynesian Voyaging Society.

Kawika Kapahulehua, a Nihaunai native who speaks fluent Hawaiian, served as the canoe's captain.



Mau Piailug, 74, Satawal, Micronesian islander, was the navigator on the historic trip to Tahiti and later was mentor to future Hawaiian navigators.

Myron "Pinky" Thompson, 1924-2001, was instrumental in laying the foundation for future ocean journeys by the Polynesian Voyaging Society.

Nainoa Thompson, 53, and Myron's son, became in 1980 the first native Hawaiian in centuries to navigate a voyaging canoe from Hawaii to Tahiti.

Eddie Aikau, 1946-1978, renowned big-wave surfer, was lost after the Hokule'a was swamped on a 1978 voyage. His devotion inspired others to continue sailing.

PHOTOGRAPHS BY MONTE COSTA EXCEPT EDDIE AIKAU, COURTESY OF AIKAU FAMILY

IN HONOR

A list of those who served aboard the Hokule'a on its first voyage to and from Hawaii and Tahiti. An asterisk denotes those who are deceased.

Mau Piailug, SATAWAL, MICRONESIA • Clifford Ah Mow, HONOLULU
Shorty Bertelmann, WAIMEA, HAWAII • Ben Finney, HONOLULU • Sam Kalalau, HANA, MAUI
Boogie Kalama, KEAAU, HAWAII • Kawika Kapahulehua, HONOLULU
Buffalo Keaulana, WAIAEA • John Kruse, KOLOA, KAUAI • Leonard Puputaiki, TAHITI
Dukie Kuaulu, HONOLULU • Billy Richards, HONOLULU • Snake Ah Hee, LAHAINA, MAUI
Kainoa Lee, WAIMEA, HAWAII • Kimo Lyman, HALEIWA • Gordon P'riana'i, HONOLULU
Penny Rawlins Martin, KAKAMAU, MOLOKAI • Maka'ala Yates, OREGON • Ben Young, HONOLULU
David Lewis, NEW ZEALAND* • Nainoa Thompson, HONOLULU
Mel Kinney, HONOLULU • Tommy Holmes, HONOLULU* • Dave Lyman, HONOLULU*
Rodo Williams, TAHITI* • Andy Espirto, HONOLULU* • Keani Reiner, LIHUE, KAUAI*



MONTE COSTA

"Hokule'a has rewritten our Hawaiian history in a way that has ... restored our culture, heritage and ancestry."

Nainoa Thompson

NAINOA THOMPSON - Navigator of the Hokule'a

Hokule'a captain Bruce Blankenfeld, above at right, works with crew members during a training voyage for the Rapa Nui trip as the canoe sails near Kalaupapa on the north shore of Molokai in 1997. Inset at right, Hokule'a is joined by New Zealand's Te Anere, background, during the 1995 Na 'Ohana Holo Moana or "The Voyaging Families of the Ocean" to the Marquesas Islands.

THE FIRST VOYAGE

COMMEMORATING HOKULEA'S HISTORIC 1976 JOURNEY

FRIDAY, JULY 7, 2006

This month marks the 30th anniversary of the historic Hawaii-Tahiti sail of the Hokule'a, which completed the 6,000-mile roundtrip journey on July 26, 1976. Mau Piailug navigated the canoe to Tahiti without western instruments, using only ancient wayfinding methods. Hokule'a has since completed 10 long-distance voyages. Six of the major ones are charted below.

Compiled by Gary T. Kubota, Star-Bulletin

1976



Hundreds of Tahitians swam out to greet the Hokule'a on June 4, 1976, after the canoe arrived in Tahiti. Some climbed aboard and rode the final distance to shore.

>> 6,000 total miles including 2,400 from Honolulu Bay, Maui, to Papeete, Tahiti, from May 1 to June 4. Led by master navigator Mau Piailug of Satawal, Micronesia, the crew of Hokule'a proved that ancient Pacific islanders could navigate thousands of miles of ocean using traditional wayfinding methods instead of western instruments. The voyage also proved that the double-hulled canoe was capable of sailing long distances and gave credence to the theory that Polynesians were sailing great distances long before European explorers. While Americans celebrated the bicentennial of independence from England, native Hawaiians and other Pacific islanders celebrated a renaissance of ancient cultural traditions including canoe-building and sailing.

1978

>> Hokule'a overturned in heavy seas in the Molokai Channel on an attempt to sail to Tahiti. The crew was rescued after two nights, except for renowned big-wave surfer and lifeguard Eddie Aikau, who had volunteered to paddle on a surfboard to Lanai for help. He was never seen again, but his valor and sense of duty gave birth to the popular saying, "Eddie Would Go."

1980

>> 6,000 total miles. Hawaii to Tahiti from March 15 to April 17. Nainoa Thompson successfully guided the Hokule'a thousands of miles, becoming the first native Hawaiian in centuries to navigate using Pacific island wayfinding methods. Mau Piailug was aboard as mentor to Thompson, who was the navigator on the return trip to Hawaii from May 13 to June 6.

1985-87

>> 14,000 total miles. Hokule'a retraced ancestral migration routes, entering into a "Voyage of Rediscovery," from June 10, 1985, to May 27, 1987. The canoe sailed from Honolulu, Hawaii, to Papeete, Tahiti, and back, with stops in Tonga, Samoa, the Cook Islands, Tahiti, and the Tuamotus before returning to Hawaii. The trips helped to reawaken pride in common traditions of navigation and voyaging among other Pacific island people. Nainoa Thompson was the navigator, accompanied by Mau Piailug.



Cook Island voyaging-canoe crew members celebrate after arriving in Tahiti, Nuku Hiva, Marquesas Islands, on April 14, 1995, during the "Na 'Ohana Holo Moana" or "The Voyaging Families of the Ocean" journey.

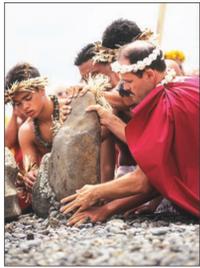
1992

>> 9,000 total miles. This voyage, "No Na Mamu: For the Children," was designed to train a new generation of navigators. From June 17 to Dec. 1, the canoe went from Honolulu, Hawaii, to Papeete, Tahiti, and then to Raiatea, Aitutaki, Rarotonga and back to Tahiti, with a different navigator on each leg. On the voyage back to Hawaii from Nov. 5-Dec. 1, the Hokule'a crew contacted the crew of the space shuttle Columbia flying overhead. The crews participated in conversations with students in Hawaii about the importance of exploration. On board Columbia was Hawaii-born astronaut and Punahou graduate Lacey Veach.

1995

>> 7,000 total miles. Hokule'a and Hawai'i'loa sailed to Papeete, Tahiti, from Hilo from Feb. 11 to March 4 as part of the Na 'Ohana Holo Moana or "The Voyaging Families of the Ocean." The voyaging canoe Makali'i sailed from Kawaihae, Hawaii, to Tautira, Tahiti, from Feb. 28 to March 27. On the voyage from Tahiti to the Marquesas, Hokule'a, Hawai'i'loa and Makali'i were joined by three South Pacific canoes. The journey celebrated the resurgence in the canoe-building arts. While preparing for the trip and building Hawai'i'loa, Hokule'a crew members reached a new level of awareness of the interdependence of culture and the environment when they were unable to find koa trees in Hawaii forests large enough to build voyaging canoes. Alaska natives offered the Hawai'i people the gift of logs for canoe-building.

>> 1,000 total miles. On May 15, Hawai'i'loa and Hokule'a left Hawaii on board a Matson container ship bound for Seattle and the "Northwest and West Coast Tours." On May 27, the two arrived in British Columbia, visiting with several native American tribes to engage in cultural and educational exchanges. Hawai'i'loa continued north to Alaska to visit Ketchikan and Juneau to thank Sealaska Corp. and the Tlingit, Haida and Tsimshian tribes for donating the two Sitka spruce logs for the canoe's hulls. Hokule'a went south to share its history with Hawaiians, native Americans, and others along the West Coast, with stops in Portland, San Francisco, Santa Barbara, Long Beach, and San Diego. In San Francisco, Hokule'a was greeted by 32 paddling canoes and showered with orchids from the Golden Gate Bridge. A crowd estimated in the thousands gathered to greet the canoe.



Holoua Stender and Kamehameha Schools students place pohaku (stones) from Hawaii during an Oct. 19, 1999 ceremony honoring the arrival of the Hokule'a at Anakena, Rapa Nui.

1999-2000

>> 12,000 total miles. From Hilo via Nuku Hiva and Mangareva in the Tuamotus, the voyage to Rapa Nui (Easter Island), June 15, 1999, to Feb. 27, 2000, undercut Kon Tiki explorer Thor Heyerdahl's theory that migration into the Pacific began in South America. Hokule'a showed that wind from the east shifted and became less pronounced at certain periods of the year. Hokule'a had reached the third and final corner of the Polynesian triangle—the other corners being Hawaii and Aotearoa (New Zealand).

2000-2001

>> Hokule'a's millennium statewide sail, entitled "Our Islands, Our Canoe" from Sept. 22, 2000, through May 20, 2001, celebrated the vessel's 25 years of voyaging by visiting students and families in two dozen communities on Kauai, Oahu, Lanai, Molokai, Maui and the Big Island.

2003

>> A cultural protocol group, Na Kupu'eu Paemoku, traveled to Nihoa aboard Hokule'a in the Northwestern Hawaiian Islands to conduct traditional ceremonies.

2004

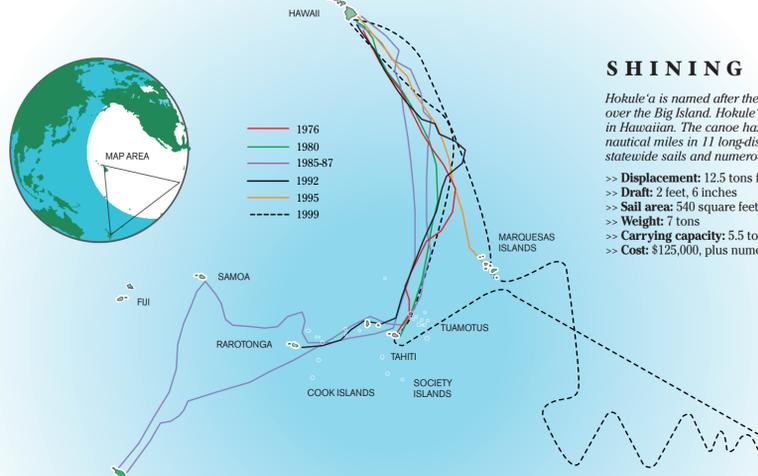
>> 2,500 total miles. Hokule'a sailed to the most Northwestern Hawaiian islands as part of a statewide educational initiative called "Navigating Change." The trip brought attention to the diverse environment in the Northwestern Hawaiian Islands, including 7,000 species in 4,500-square miles of relatively undisturbed coral reef. In a span of 18 days, a U.S. Fish and Wildlife Service educator on the Hokule'a spoke via satellite telephone to more than 1,800 students from as far away as Maryland and American Samoa.

2005

>> The cultural group Na Kupu'eu Paemoku sailed to Mokumanamana (Necker Island) in the Northwestern Hawaiian Islands to conduct protocol ceremonies on the longest day of the year, June 21. Hokule'a made 25 stops through the Hawaiian islands and was met by thousands of students from 30 schools. Also in 2005, the 30th anniversary of Hokule'a's launching, the canoe carried many of the original 1976 crew to Oahu from Molokai to be honored at the Malama Kailua Festival.



Thousands of students have learned about the Hokule'a and traditional navigation methods through programs run by the Polynesian Voyaging Society, including these elementary school students who pulled the canoe ashore at Kualoa in February 1997.



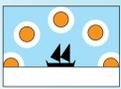
SHINING STAR

Hokule'a is named after the star Arcturus that passes directly over the Big Island. Hokule'a means the "Star of Gladness" in Hawaiian. The canoe has logged more than 110,000 nautical miles in 11 long-distance voyages, plus six statewide sails and numerous training voyages:

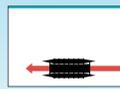
- >> Displacement: 12.5 tons fully loaded
- >> Draft: 2 feet, 6 inches
- >> Sail area: 540 square feet
- >> Weight: 7 tons
- >> Carrying capacity: 5.5 tons
- >> Cost: \$125,000, plus numerous donations

CROSSING THE VAST PACIFIC

Hokule'a navigators use a variety of natural elements to sail great distances across the Pacific. Here are some of them:



The sun
Twice a day, at sunrise and sunset, the sun gives a directional point to the traveler, rising in the east and setting in the west.



Ocean swells
Swell waves that have traveled beyond the wind systems that created them. The navigator can orient the canoe by using the direction of swells as a guide.

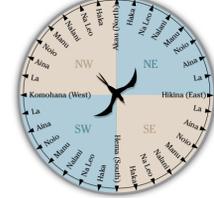


Clouds and birds
The shape, height and color of clouds foretell the weather, and they also accumulate over land. Also, the presence of seabirds indicates nearby land.

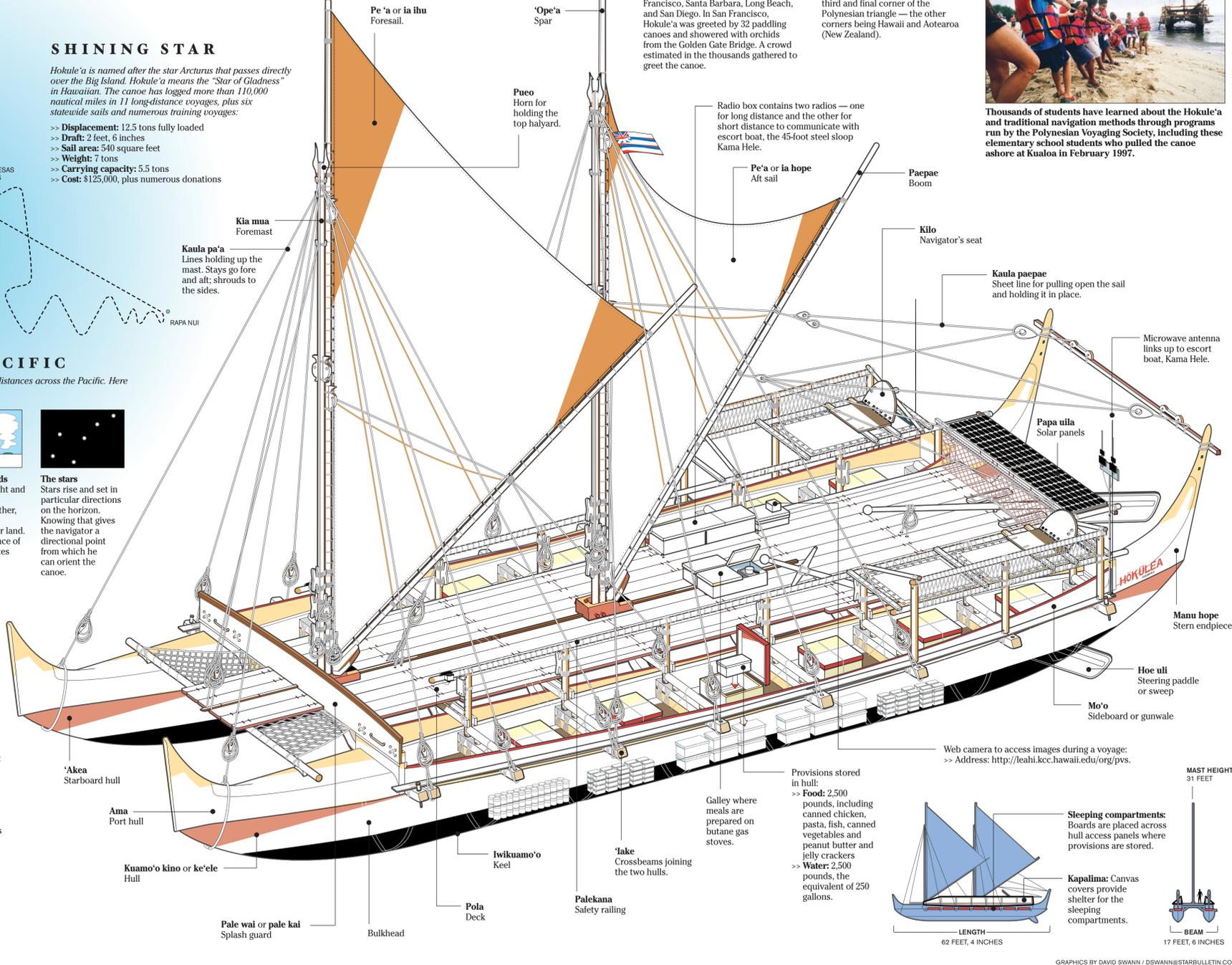


The stars
Stars rise and set in particular directions on the horizon. Knowing that gives the navigator a directional point from which he can orient the canoe.

Using the canoe as a compass
1 The handrails on the Hokule'a have eight vertical grooves carved into the wood, filled with bright red epoxy resin. These grooves are compass points, providing the navigator with references to use when viewing the stars in the night sky near the horizon.

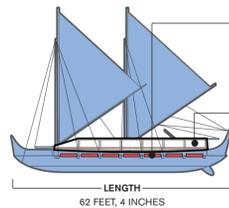


Non-instrument navigation
To guide them across the Pacific, ancient navigators created mental compasses that helped orient their ships to the rising and setting points of stars. From this, Hawaii's premier navigator, Nainoa Thompson, developed the Hawaiian Star Compass. It features 32 equidistant directional points around the horizon, with each point 11.25 degrees from the next point (11.25 degrees x 32 points = 360 degrees). It, along with other navigational elements like the sun, ocean swells, clouds and birds, are used during Hokule'a's journeys.



Web camera to access images during a voyage:
>> Address: <http://leahi.kcc.hawaii.edu/org/pvs>.

- Provisions stored in hull:
>> Food: 2,500 pounds, including canned chicken, pasta, fish, canned vegetables and peanut butter and jelly crackers
- >> Water: 2,500 pounds, the equivalent of 250 gallons.



LENGTH: 82 FEET, 4 INCHES

BEAM: 17 FEET, 6 INCHES

MAST HEIGHT: 31 FEET