

The Pathfinders

SEVEN PAINTINGS BY
HERB KAWAINUI KANE

EASTWARD INTO THE UNKNOWN, Samoans spearhead one of the great maritime ventures of all time—the exploration and settlement of Polynesia. In wooden canoes stitched with coconut-fiber rope and rigged with sails of woven leaves, these mariners who knew no instruments navigated 2,100 miles and made their landfall at Nuku Hiva in the Marquesas around the time of Christ.

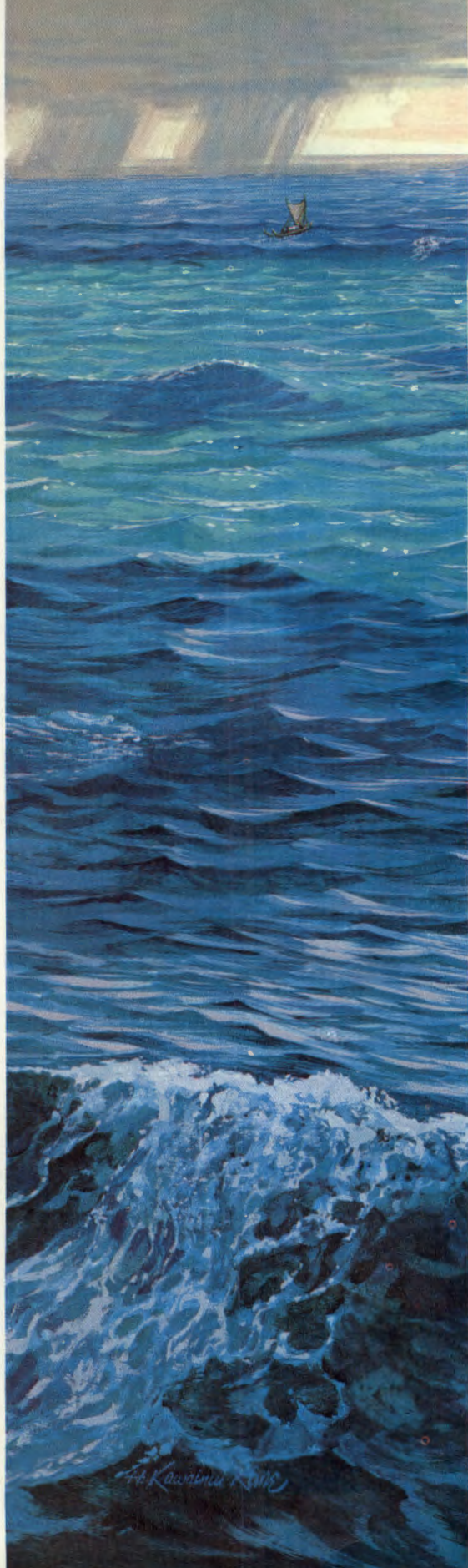
Within a millennium their descendants—homing in on undiscovered islands revealed by such slight cues as the flight path of a bird—had found every habitable speck of land in an area of the Pacific bigger than North America and Europe combined.

In this portfolio, Hawaiian artist Herb Kawainui Kane (KAH-nay) depicts Polynesian sagas of heroic exploration and vengeful battle; he also portrays the canoes and navigational techniques of Oceania in the map supplement, **Discoverers of the Pacific**, that accompanies this issue.

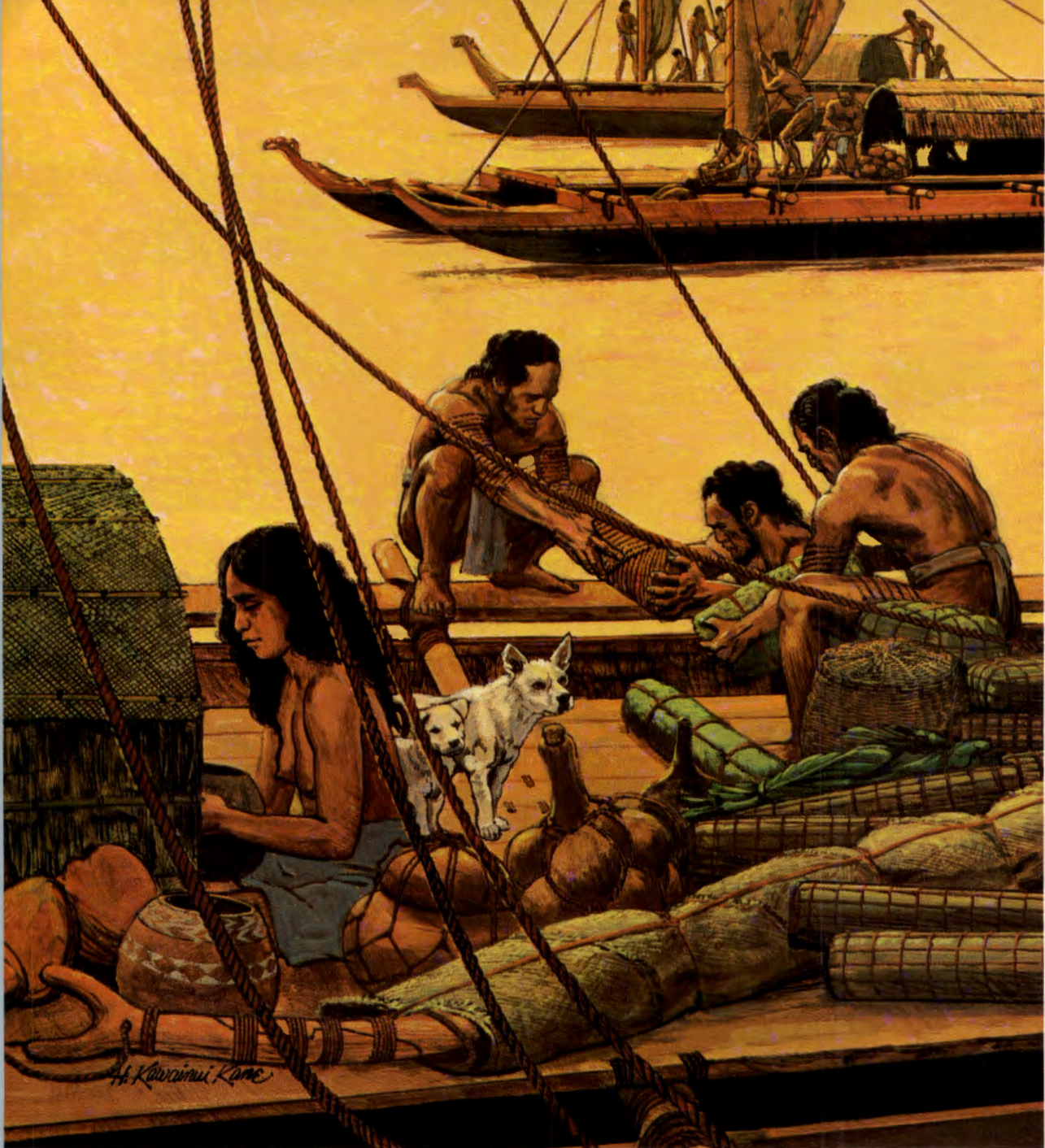
Limned in volcanic rock on Hawaii, a petroglyph (**below**) shows the sail used by ancient voyagers of that island chain.



WILLIAM R. CURTSINGER







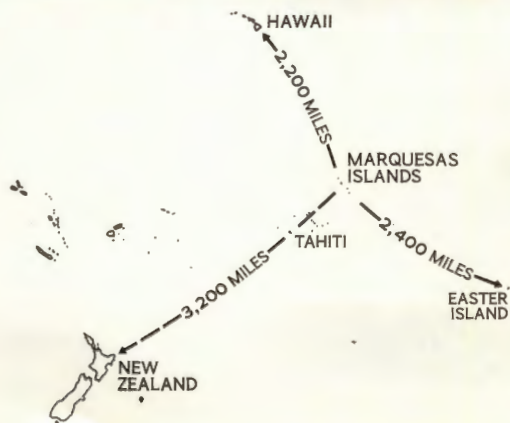
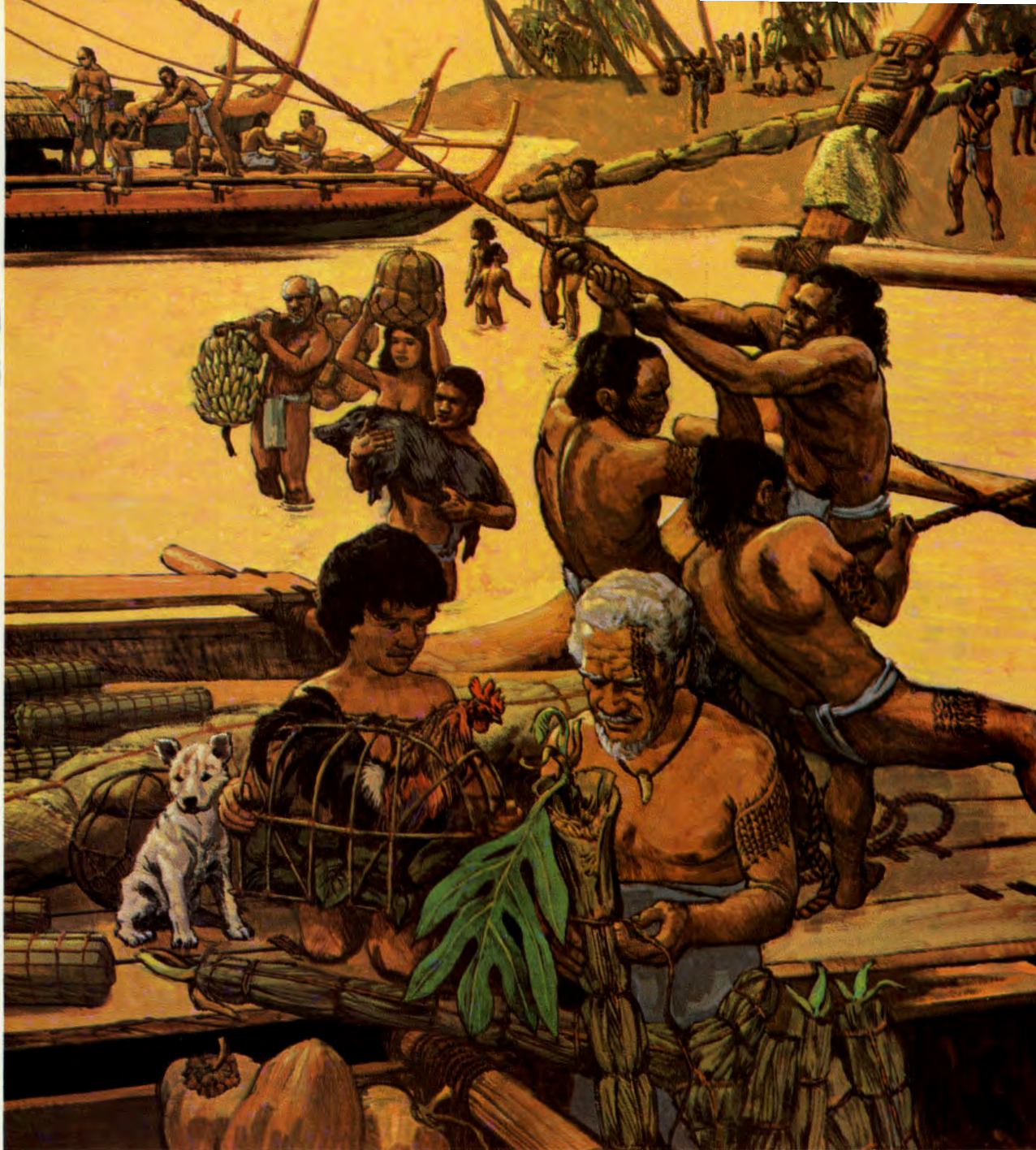
Desperate Marquesans take to the sea

FRUIT OF THE LAND provides rations for the sea as Marquesans begin the search for a new home. They stock double-hulled canoes with fruits, dried fish, breadfruit paste wrapped in pandanus leaves, and water in gourds. Domestic pigs, fowls, and

barkless vegetarian dogs accompany them.

Harsh necessity may have forced such departures. When drought struck and clans fought over food, the defeated often sailed in quest of new lands. Thus Polynesians of Marquesan culture found Easter Island, Hawaii, and—via Tahiti—New Zealand.

Similarities between ancient Marquesan fishhooks (middle two at right) and Hawaiian counterparts confirm a link between the two island groups, scholars believe.

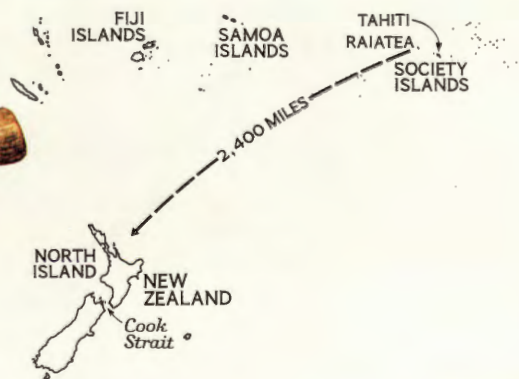


PHOTOGRAPH BY NICHOLAS DEVORE III; FISHHOOKS COURTESY BISHOP MUSEUM



This Tahitian war club is older than the similar patu of the New Zealand Maori, indicating a voyaging tie from the Society Islands to New Zealand.

NICHOLAS DEVORE III





An octopus leads Kupe to New Zealand

SURFING SHOREWARD on long Pacific rollers, the sea rover Kupe and his followers behold the mountainous coast of North Island, New Zealand. Their 2,400-mile voyage began in pursuit of a thieving octopus, tradition tells, and ended with the

discovery of Polynesia's largest landmass.

The octopus stole Kupe's bait while the islander was fishing near his Raiatea home. Kupe became so enraged that he set out in pursuit of the beast, which fled all the way to New Zealand. Kupe finally slew the monster in Cook Strait and returned to Raiatea to tell the people about the great island he had found. Others retraced his route, "to the left of the setting sun in November," and colonized the new land.

Ru selects a star and discovers a new land

CALM AND COURAGEOUS in the midst of a storm, the navigator Ru, arm outstretched, asks the sea-god Tangaroa (below) to clear away the clouds so he can see his guiding star and set a course toward a new island.

Descendant of seafarers, Ru was chief navigator of Raiatea at one of the times when population had outstripped food resources. "The valleys are thick with people," he told his family. "I have selected a star, and beneath that star there is a land that will provide us with a new home."

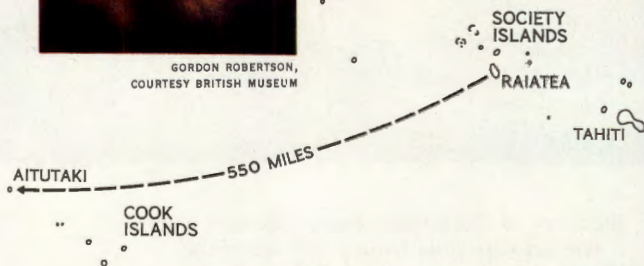
Ru's brothers and wives protested that they feared the perils of the sea. "That is woman's talk," he responded.

"I, Ru, know the ways of the sea. The winds and the currents are open and known to me. Fear not and I will take you to a larger and better land than this."

Legend does not record how Ru knew that he would find land, but his confidence calmed his family's fears. The clan departed in a newly built canoe called *Te Pua-ariki*—"The Chiefly Flower." With Ru and his relatives went twenty maidens chosen for virtue, strength, and beauty. At sea they encountered a storm that raged for three days and

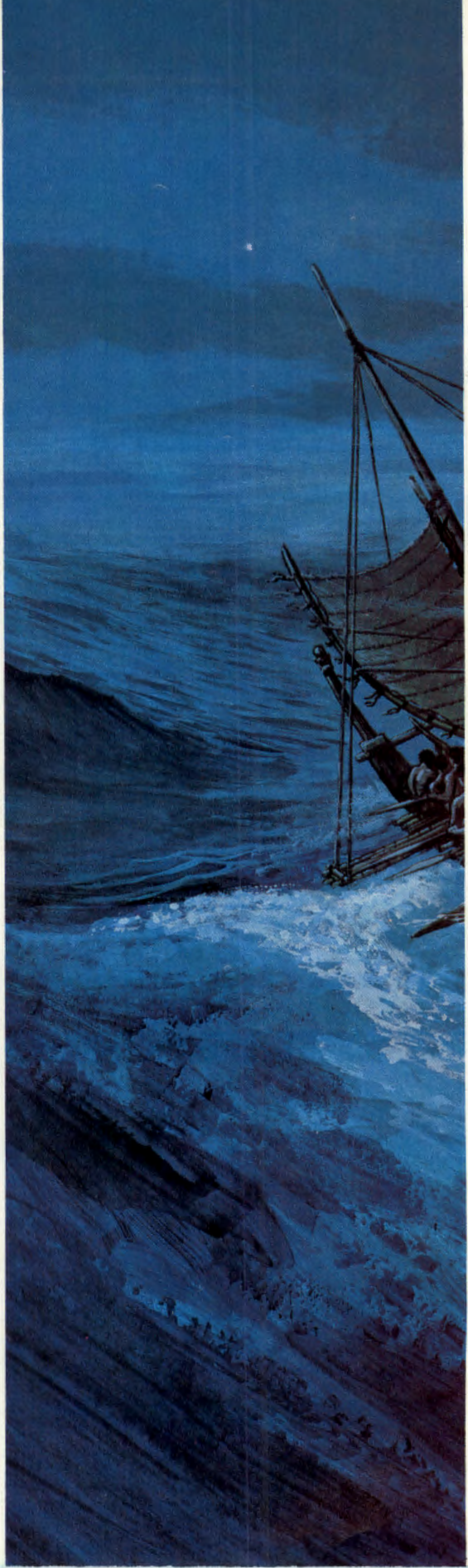


GORDON ROBERTSON,
COURTESY BRITISH MUSEUM



nights. With his crew near panic, Ru finally invoked the aid of Tangaroa to return his guiding star to view.

The clouds parted (right) and three days later, so the story goes, Ru and his company landed at Aitutaki, whose inhabitants still celebrate the achievement of the island's legendary discoverer in song and dance.







The "Relentless Pursuer" finds his quarry

SEeking REVENGE, the Tahitian chief Tutapu storms ashore at Rarotonga to battle his half brother Tangiia and the Samoan Karika. The dispute began, says the legend, when the brothers quarreled over hereditary rights. After a series of battles, during which Tangiia's two sons were killed,

his men stole one of Tutapu's gods. Tangiia then fled Tahiti, followed by his vengeful brother.

Grieving for his homeland and his fallen sons, Tangiia roamed the seas for years. After a skirmish, he and Karika became friends and settled together on Rarotonga.

There Tutapu, whose unremitting chase earned him the title of the "Relentless Pursuer," finally tracked his brother down, but was slain in the fight that followed. Tangiia and Karika remained to rule Rarotonga.



SAMOA ISLANDS

COOK ISLANDS

RAROTONGA

SOCIETY ISLANDS

TAHITI

Basalt adzes, unearthed at the Rarotongan village of Avarua, include a Samoan type (upper). It perhaps dates from the 13th century, about the time of the alliance between Tangiia and the Samoan Karika.



NICHOLAS DEVORE III, COURTESY COOK ISLANDS LIBRARY AND MUSEUM SOCIETY, RAROTONGA



Kamehameha battles for Hawaii

WAR CANOES COLLIDE in the crunch of combat during the battle of Mokuohai, a duel for power between the Hawaiian chiefs Kamehameha and his cousin Kiwalao. While the chiefs and their warriors engage each other on land, their fleets literally slug it out at sea.

Aboard one of Kamehameha's canoes, left,

a warrior whirls a canoe breaker—a volcanic stone lashed with sennit, capable of piercing a hull or smashing a skull. Unveiling the feathered visage of Kamehameha's war-god Kukailimoku, a priest directs the god's *mana*, or sacred power, against the opposition.

Clad in feathered capes and helmets, rival chiefs clash. One clasps in his left hand a dagger of *kauila* wood rimmed with shark's teeth, a fearsome weapon called *lei o mano*—ivory of the shark. Beneath, a brawny paddler parries a spear.



Kamehameha's canoes advanced in a line that stretched from headland to headland off a beach called Mokuohai, overwhelming the enemy. In the bitter fighting ashore Kiwalao fell, stunned by a stone from a sling. One of Kamehameha's lieutenants, himself wounded, dispatched Kiwalao by slashing his throat with a lei o mano.

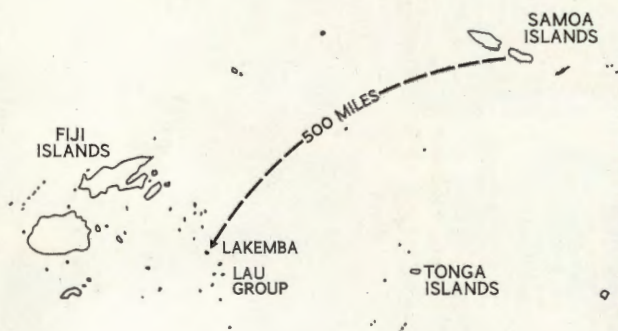
Victory in this 1782 battle spurred the ambitious Kamehameha to a quest for kingship of all the Hawaiian islands, a goal he finally attained in 1810.



“Tell the king we are in Fijian waters”

THE YEAR: about 1820. The event: the return of King Taufa'ahau to Tonga after a tattooing ceremony in Samoa that solemnized his coming of age. The location: somewhere south—or was it west or east?—of Samoa. No one knows. The king's navigators have lost their way. In dire puzzlement the navigators murmur among themselves.

In another canoe, the aged and blind Kaho—Tuita Kahomovailahi—a navigator of low rank, asks his son Po'oi, “What are they saying?” The boy replies that the navigators are lost. Kaho orders his canoe turned into the wind. As the sail luffs and the vessel slows, he climbs onto the starboard hull and,



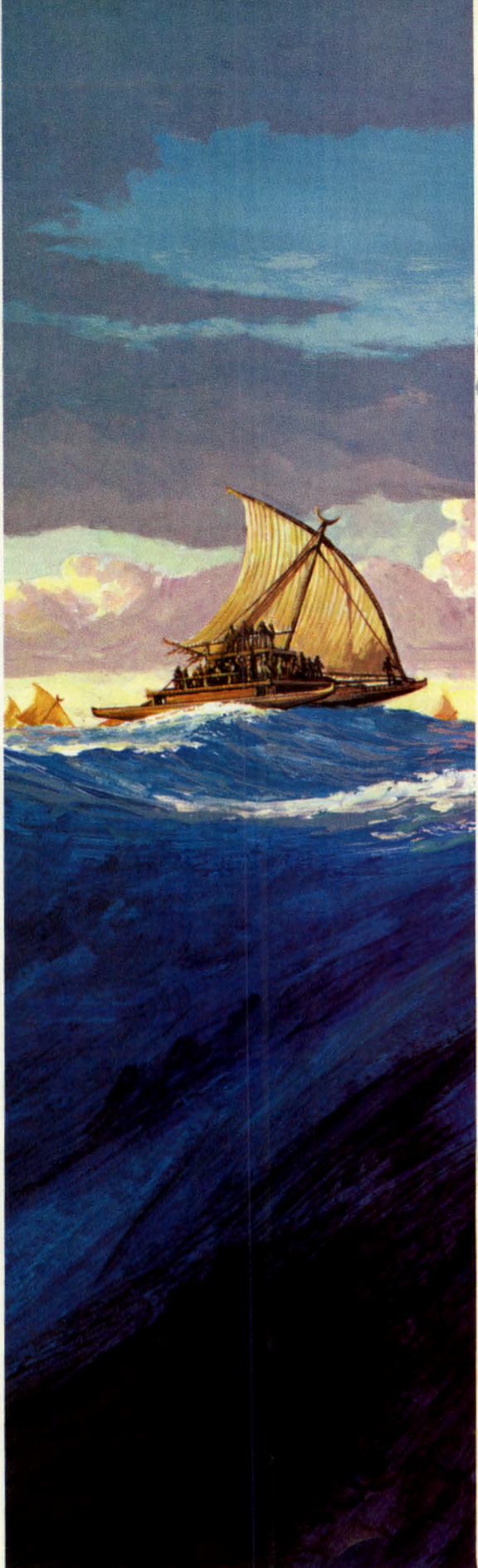
held fast by his son, dips his hand into the sea (right). Then he announces, “Tell the king we are in Fijian waters.”

“That is the old blind one,” the king's navigators scoff in disbelief.

“What should we do?” the king himself asks Kaho. “Our food and water are almost finished.”

Kaho requests the location of the sun. Then he says, “Tell the king that when the sun is in the middle of the sky he will see land.” A few hours later the flotilla reaches Lakemba, an island in the Lau Group east of the Fijis. In gratitude, the king makes Kaho his chief navigator and a noble. From this time, he and his descendants become known as Fafakitahi—Feelers of the Sea.

Almost 150 years later Kaho's great-grandson revealed that his ancestor's act of touching the sea was designed to impress the superstitious Tongans. Kaho knew land was near because his son had reported to him the presence of a fish-eating bird that never ventures far from land. □





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**CARIBOU, HARDY NOMADS
OF THE NORTH** 858

HERMAN MELVILLE once described the relationship between human genius and man's perception of it as a "shock of recognition." I like to think that Melville, who wrote so eloquently of the Pacific and its peoples, would have enjoyed this month's four-part presentation on the Pacific Islands—for it all began with just such a shock.

Author David Lewis made a casual inquiry of a Tongan about sailing directions through a reef-studded archipelago. "I was flabbergasted by his reply," he recalls, "for it meant that the age-old lore of the sea by which the Polynesians had populated the Pacific was still known—by a few, but known."

David devoted three years to the search for that ancient knowledge, and found it, an achievement that helped earn him the Gold Medal of the Royal Institute of Navigation and the Superior Achievement Award of the Institute of Navigation of the United States, a rare double, richly deserved.

To bring this epic tale to our members, our editors, photographers, and writers logged a combined 200,000 miles of Pacific travel—though not without hazard. Photographer William Curtsinger was attacked and twice slashed by a shark while swimming in the lagoon of a remote and uninhabited island. The fact that David Lewis is a physician and had a supply of antibiotics probably saved Bill's life.

His colleague, Nicholas DeVore III, found himself just in time to join a Micronesian crew for an extraordinary canoe voyage of 550 miles across the open ocean. Nick suffered from intestinal flu the whole way: "Nine days on a wet roller coaster." He was alert enough to notice, however, that the crew had added a new element to the ancient navigational repertoire of wind, wave, star, and bird—jet contrails, marking the Pacific sky and pointing the way to land.

Artist Herb Kawainui Kane, who grew up in the steep Waipi'o Valley on the "Big Island" of Hawaii, combines the talents of artist, sailor, and amateur anthropologist. "All Polynesian culture relates to the canoe," claims Herb. He and his friends in the Polynesian Voyaging Society hope to underline that point when they sail a 60-foot double-hulled canoe to Tahiti and back in 1976, using navigational techniques that the world thought were long forgotten.

Several times this past year we had the pleasure of "pulling out all the stops" for an article we thought deserved it—the world-ranging and timely story on gold, the survey of American wilderness at a crossroads moment, the achievement of our frontier in space, Skylab, our account of the glory of the Phoenicians, and that mind-dazzling summary of our new knowledge of the universe itself.

At the moment, our writers and photographers are sailing in the wakes of Columbus and Drake, ranging the new Alaska, exploring the remains of Maya and Celtic civilizations, probing the archives of the American Revolution—but we will let their work speak for itself in forthcoming issues.

It seems a shame that our popular associate in geographic adventure, the award-winning National Geographic Society television series, will be represented by no new programs this year. Word that we had been unable to obtain a commitment from the networks for prime viewing time reached my desk just before the news that one of last season's documentaries had won two coveted Emmy awards. In this case, the shock preceded the recognition.

Silvestro Brown

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December 1974

ISLES OF THE PACIFIC

I—Coming of the Polynesians 732

Recent research, says famed anthropologist Kenneth P. Emory, finally allows us to reconstruct one of the great explorations of all time—the discovery of the Pacific Islands.

II—Wind, Wave, Star, and Bird 747

Putting away his compass and charts, veteran voyager David Lewis rediscovers the "lost" arts of the Polynesian navigators. Photographs by Nicholas DeVore III.

III—The Pathfinders 756

Two thousand years of Pacific seafaring spring to life in the paintings of Hawaiian artist Herb Kawainui Kane.

IV—Problems in Paradise 782

Even the idyllic South Seas face growing environmental hazards, conservationists Mary and Laurance Rockefeller learn. Photographs by Thomas Nebbia.

SUPPLEMENT: *Islands of the Pacific and Their Discoverers, distributed with this issue.*

The Enduring Pyrenees 794

Robert Laxalt, himself of Basque descent, and photographer Edwin Stuart Grosvenor travel through the sequestered mountain domain of the French-Spanish border.

The Columbia River 821

Writer-photographer David S. Boyer traces the river that, more than any other in North America, has been tamed to work for man.

China's Newest Treasures 848

A shroud of jade and a flying horse highlight the trove of Asian art now touring the Western World. Photographs by Robert W. Madden.

Caribou: Hardy Nomads of the North 858

Jim Rearden tells of Alaska's still-immense herds of barren-ground caribou—the "buffalo" of the last U. S. frontier.

COVER: "Eyes full and sparkling," wrote Bounty mutineer James Morrison of Polynesia's women. Photographer H. Edward Kim confirms the observation in this portrait of a girl of Bora Bora.