

Shipwreck

by Jackson Kuhl

"Steady as we go!"

As with all ships, those of the VOC faced the constant threat of storms and sudden gale-force winds.

On the evening of June 9, 1727, the Dutch ship *Zeewijk* was sailing about 40 miles off the coast of western Australia. The ship was on its maiden voyage, bound for the Dutch East India Company (VOC) port of Batavia in Java.

At the helm, the steersman held the wheel. Above, perched on the topmost yard of the foremast, was the lookout. The steersman probably grumbled as he worked. Against his protests—and against company orders—the captain,

Jan Steyns, had directed him to set an easterly course for the western shore of Australia.

Calamity Strikes!

With a thunderous sound, the ship came to a dead stop—*Zeewijk* had struck a reef. If only the lookout had been sharper. He later admitted to having seen waves breaking against the reef, but ignored them, thinking they were a reflection of moonlight on the sea.

Zeewijk

For a week, the ship lay on the reef, helpless, the late autumn swell washing over the *Zeewijk*, making it impossible for sailors to lower the long boat and escape the wreck. Finally, they were able to put the boat in the water and evacuate to a small island about two-and-a-half miles away. There, on Gun Island, they were able to find fresh water and vegetables, birds, and seals to eat.

As the *Zeewijk* did not break up immediately, the survivors were able to ferry the food from the ship's hold—meat, bacon, butter, cheese, and even wine and brandy—to the island.

With only the single long boat available, the survivors decided to send a team of 11 men, led by the first mate, to Batavia for help. Somewhere along the way, they vanished.

A New Boat

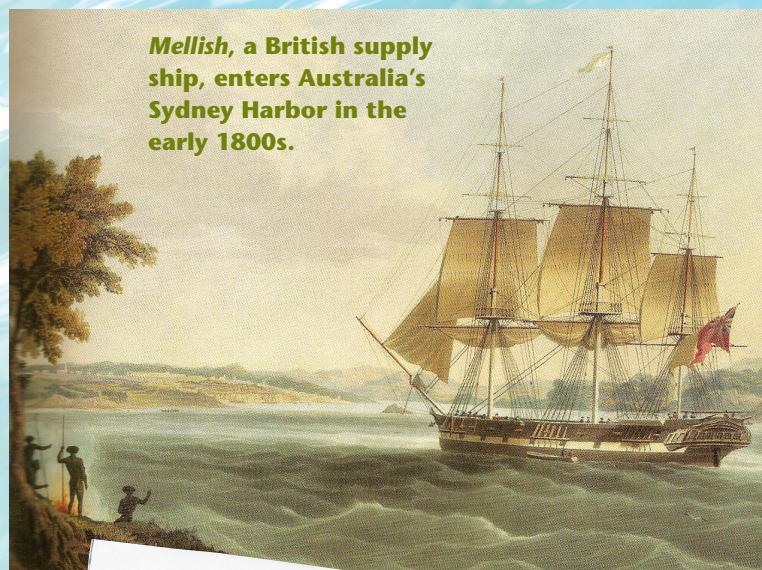
Marooned on tiny Gun Island, which is only a half-mile long, the remaining crew began building a new boat in October, using wood salvaged from the *Zeewijk*. The sloop, which they named *Sloepie*, was ready by the following year, and in March 1728, the survivors set sail to Java. They arrived about a month later. Of the original crew of 208 men who had left the Netherlands, only 82 lived through the ordeal.

The company directors had good reason to warn ships away from the Australian coast. In 1629, the VOC had lost its flagship, the *Batavia*, on a reef off the western shore of Australia. Further, a century of Dutch exploration had discovered little to interest the company, only deserts without fruit,

spices, or other potential commodities and with few sources of fresh water.

But Australia was sometimes

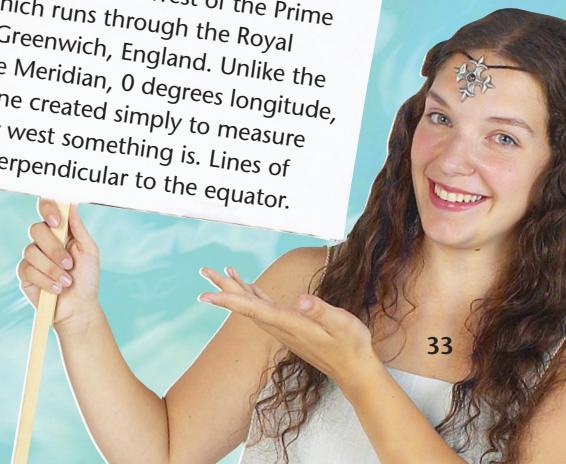
difficult to avoid. Beginning in 1613, a common tactic for VOC ships was to sail down the western coast of Africa and reprovision at the Cape of Good Hope. From there, ships would launch themselves into the "Roaring Forties," winds that blow



Mellish, a British supply ship, enters Australia's Sydney Harbor in the early 1800s.

Calliope says: **Latitude** is the angular distance, measured in degrees, north or south of the equator. Lines of latitude run parallel to the equator, which is 0 degrees latitude. The North Pole is 90 degrees north; the South Pole, 90 degrees south.

Longitude is the angular distance, also measured in degrees, east or west of the Prime Meridian, which runs through the Royal Observatory in Greenwich, England. Unlike the equator, the Prime Meridian, 0 degrees longitude, is an arbitrary line created simply to measure how far east or west something is. Lines of longitude run perpendicular to the equator.



**"I'm all that's left after
a violent gale struck
my mother ship!"**



from west to east within 35 and 45 degrees latitude south of the equator. These winds would propel the ships across the southern Indian Ocean. This was called "running the easting down." Then, all the ships had to do was turn north at around 105 degrees east longitude and sail to Java.

Using 'Dead Reckoning'

But following this route was not always easy to do. Sailors of the time could accurately determine latitude using sextants, nautical instruments that measure position based on the location of the sun or stars. This meant that mariners usually knew how far north or south of the equator they were. However, there was no way to gauge longitude, that is, how far east or west they were. Sailors could only guess based on how long it had been since they had last made landfall and then multiply that by their best estimate of the ship's speed. The answer would tell them how far they had traveled since leaving the last known point of land.

This technique is called "dead reckoning." Yet without clocks (which did not become widely available until the mid-18th century), a captain's

calculation could sometimes be hundreds of miles off. Failing to turn north at the right time is what led the *Batavia* and perhaps the *Zeewijk* onto the Australian reefs.

According to Remmelt Daalder, curator at the Nederlands Scheepvaartmuseum in Amsterdam, the drawback of being a sailor for the VOC was not the conditions aboard the ships, even though they could be difficult. "The ships were not the worst," says Daalder. "The length of the journey was the hard part. Sailors could be six to eight months at sea."

Or longer. The 82 survivors of the *Zeewijk* arrived in Batavia a year and a half after departing the Netherlands. And they still had to sail back to Europe!

Found at Last!

For centuries, the wreck of the *Zeewijk* lay undiscovered, although several expeditions in the 1960s found cannons and other artifacts from the ship. In 1968, author and journalist Hugh Edwards found the main site just outside the reef where the *Zeewijk* had wrecked 241 years earlier. 

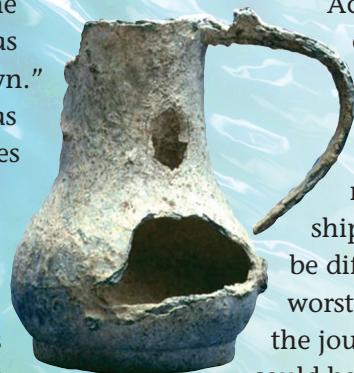
Jackson Kuhl writes about archaeology, history, and science.

Above middle: A pewter jug recovered from the *Zeewijk*

Below: A cannon recovered from the *Zeewijk*



An underwater view of the *Zeewijk* wreck site



Let the Winds Set the Course



Ancient sources credit a Greek mariner named Hippalus, who probably lived during the first century A.D., as the first Westerner to learn how ships could use the southwest and northeast monsoon winds to their advantage.

Easterners had been taking advantage of these winds for thousands of years to navigate the Indian Ocean. Arab traders also knew well the monsoon wind patterns and used them to aid travel on the waters between India's Malabar Coast and the Arabian Peninsula. When the southwest winds blew between April and October, they filled the sails of ships traveling from west to east. When the northeast monsoon blew between October and April, travel from east to west, from India to the

Arabian Peninsula, was easier. By riding the monsoons, traders shortened the length of sea travel considerably.



KNOW YOUR SPICES

by Charles F. Baker

Trade in spices drove the VOC market, but traders had to know which was which. Can you match each spice below to its name?



a. **peppercorns**

c. **nutmeg**

e. **cinnamon**

b. **cloves**

d. **mace**

f. **allspice**

