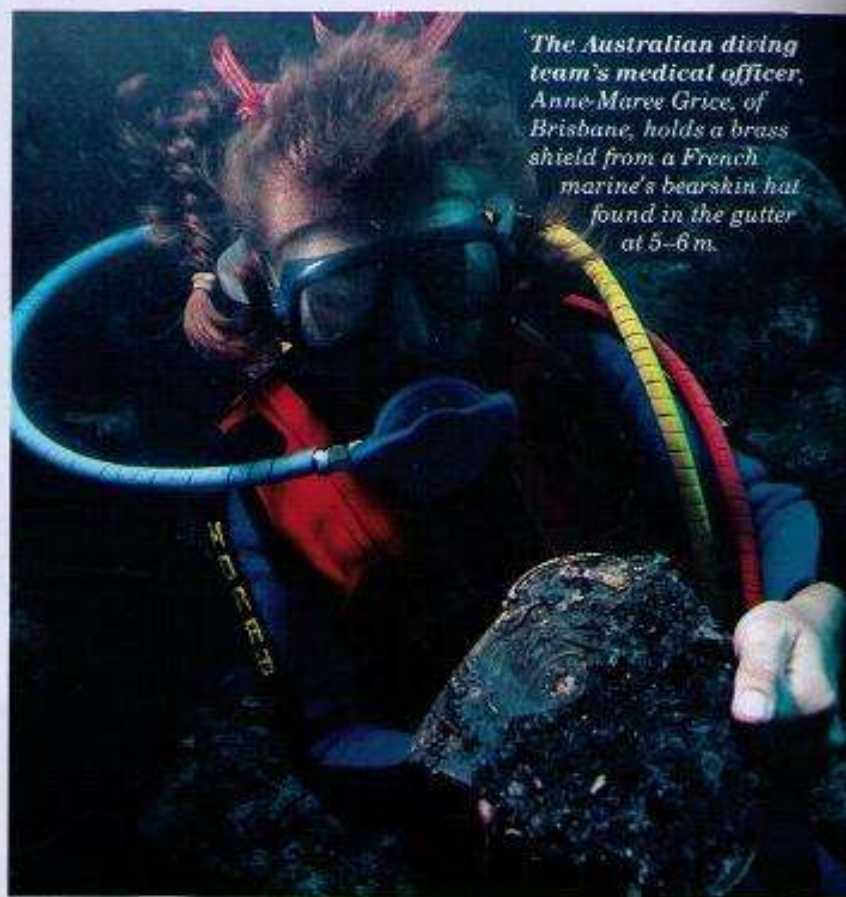


hidden somewhere on the island? We had only two weeks in which to find some of the answers.

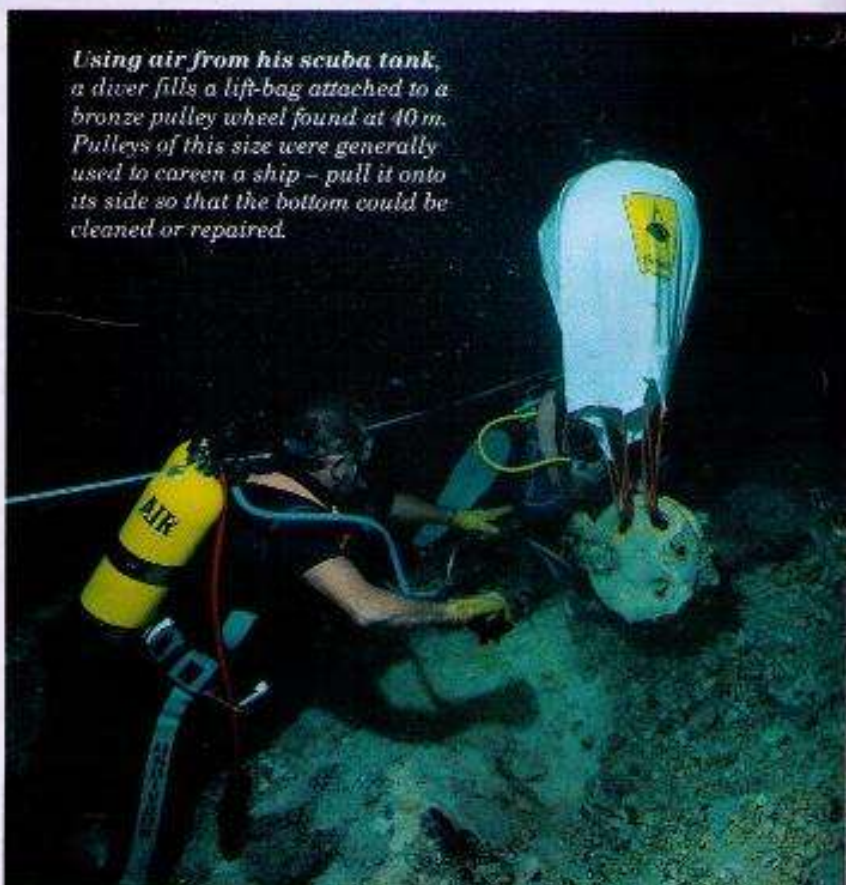
MY team of Australians were the only divers in the expedition with underwater archaeological experience. Some had worked with me on the wreck of the *Pandora*. Others, like Scott "Slippery" Sledge, had extensive experience on wrecks in Australian waters and elsewhere. Scott would co-supervise the underwater work with Alain Conan, President of the Association Salomon. John Keopo, field archaeologist with the Solomons National Museum, was with us as an observer and to supervise the study of the survivors' campsite and the surrounding area. Chris, eldest son of Ben Tua, the paramount chief of Vanikoro, represented the islanders and liaised between us and them. On 14 April 1986, two days after the *Mantaray* reached Vanikoro, the *Parenthèse* arrived. We were ready to begin.

The wreck site opposite Peu lies mostly in a narrow straight-sided gutter on the outer edge of the reef and virtually in the breaking surf. At its shallow end the floor of the gutter, which is strewn with cannons, anchors, lead and copper sheets and iron bars encrusted with sand and coral, lies in 10 m of water. From there it slopes down to a depth of 18 m at the face of the reef, which drops steeply to a broad ledge 60 m below the surface. Beyond that is black nothingness.

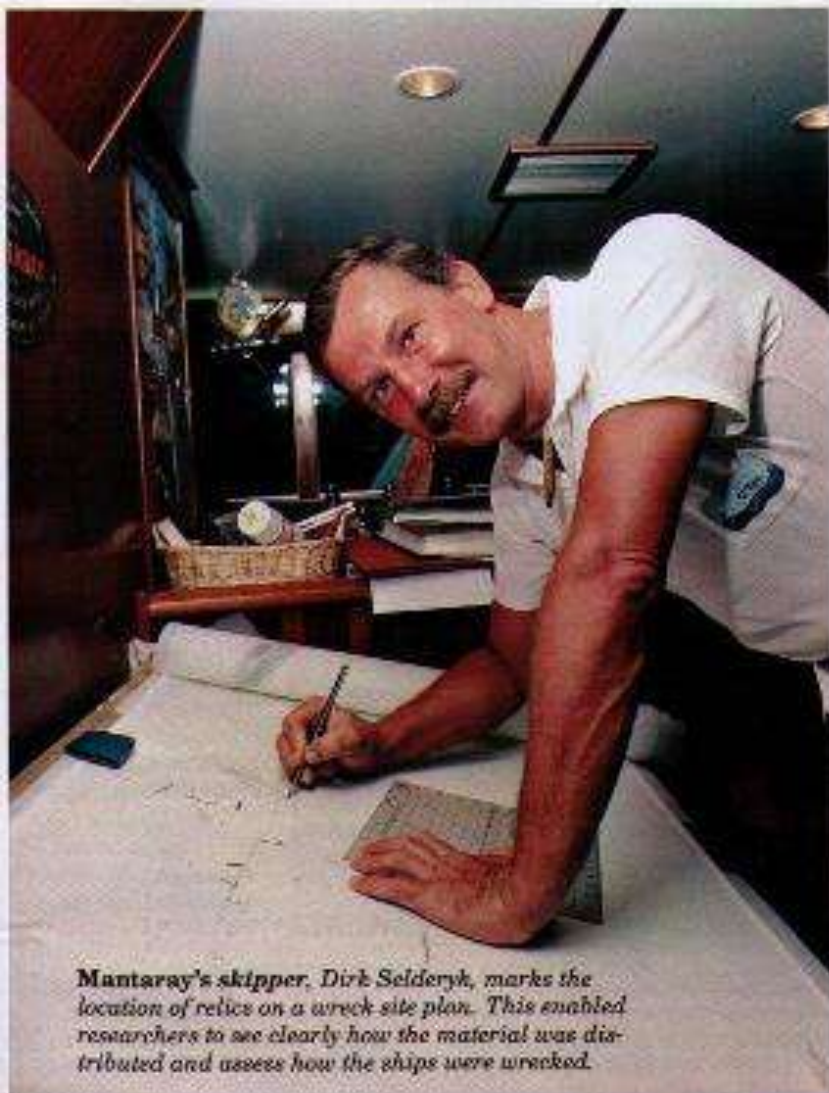
Across the mouth of the gutter we stretched a heavy chain to which we could moor our Zodiac inflatable dinghies and then the divers got to work. First they laid a graduated survey line down the centre of the wreckage to a depth of 42 m. The position of each find would be recorded in relation to this base-line so that we could create a model of the wreck site on our shipboard computer. Next a water dredge, linked to a pump on a Zodiac, began to gently vacuum the coral rubble and sand from a likely spot near a large anchor. Within minutes broken china, silver Spanish pieces of eight, bronze medallions, a silver candlestick, multi-coloured glass trade beads, shoe buckles and many other exciting relics were uncovered. I was on *Mantaray* and when



The Australian diving team's medical officer, Anne Maree Grice, of Brisbane, holds a brass shield from a French marine's bearskin hat found in the gutter at 5-6 m.



Using air from his scuba tank, a diver fills a lift-bag attached to a bronze pulley wheel found at 40 m. Pulleys of this size were generally used to careen a ship - pull it onto its side so that the bottom could be cleaned or repaired.



Mantaray's skipper, Dirk Selderyk, marks the location of relics on a wreck site plan. This enabled researchers to see clearly how the material was distributed and assess how the ships were wrecked.



the finds came aboard I was thrilled. Because we weren't the first to explore the site, I hadn't expected so many relics of this kind to be left. But I was thankful that the average diver concentrates on the more impressive remains, such as cannons and anchors, and leaves the smaller details of history for people like me. As far as I'm concerned, they are much more important.

As the days went by, the small trench we were digging yielded more and more marvellous material. A ceremonial brass helmet worn by French dragoons and once festooned with a cockscorn of feathers was brought to the surface. It had taken Scott nearly three painstaking hours to extricate it from the coral. The French divers were ecstatic. They insisted on spending more and more time below, sometimes staying down for four hours at a time and often not returning from the reef until after dark. When you stay down that long you lose a lot of body heat and if you're doing it seven days a week you begin to suffer serious fatigue. I began to worry that they were overdoing it, but unnecessarily, as it turned out.

The evenings on board were spent registering and packing the day's finds, filling scuba tanks, viewing the underwater videotape of the day's work, updating notes and records and planning for the next



Vacuuming with extreme care to avoid sucking up tiny relics, Brooke Batley, an archaeologist's assistant with the Queensland Museum, uses the water dredge, dubbed the Vankaro Express, to expose wreckage. The dredge is operated by a pump on a Zodiac and deposits the sediment (above) some 10 m away.



Expedition leader Ron Coleman examines a fragment of porcelain recovered from the gutter site. Hundreds of such shards were collected.

Relics found in the gutter site include (clockwise from top left) a dragoon's brass helmet, a silver plate, Spanish pieces of eight, the brass shield from a French marine's hat and a brass sextant frame.



History in a tub... Porcelain and pottery fragments are left soaking in water. If relics immersed in seawater for a long time dry out quickly, the salt that has permeated them crystallises and might damage them.



day. At first light each morning, the French divers would join us on *Mantaray* for a briefing and we'd start again.

Then came the most exciting discoveries of all: some of the mineral, fossil and botanical specimens gathered by the La Pérouse scientists, and a small cask containing a seashell collection. Since 1788 these collections had been thought irretrievably lost. The French divers couldn't understand my excitement over these finds at first but when I explained their significance they began to share my elation. The cask gave us food for thought. It was found on top of a human skeleton and might have been the cause of the unfortunate sailor's death.

Not long afterwards the French divers, who had been working farther down the site, found the remains of a second skeleton. We tried to imagine the violence that could pound a ship to pieces with her crew trapped inside.

Jacques van Alphen and Riquet Goiran, who had both worked with

Jacques Cousteau, and Raymond Proner, a professional diver from Noumea, formed a unit of heavy-duty divers we nicknamed the Swat Team. Their task was to explore the deep end of the site, down to 60 m, clearing away blocks of coral weighing up to a tonne ahead of the other divers and raising heavier relics with air-filled lifting bags.

Ashore John Keopo explored the site of the survivors' camp at Peu. Helped by a group of islanders, he dug a number of trenches where we surmised the small boat might have been built. In the walls of two of the trenches John found the remains of a row of logs. Were these part of the palisade the survivors built, as they did at Botany Bay, to protect themselves from the islanders?

TOWARDS the end of our time at Vanikoro some of the divers were sent farther north to explore the second wreck site. We had left this until last because we really didn't expect to find much there. The site is inside

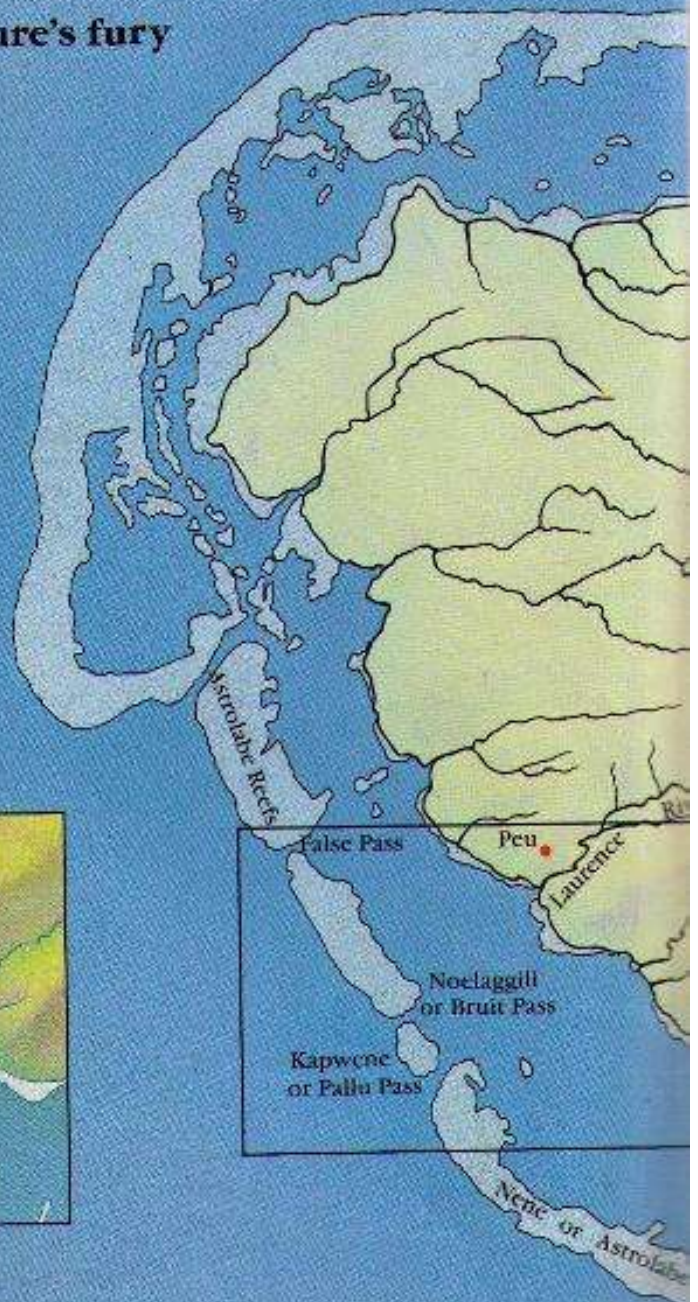
a shallow break in the reef called False Pass, through which very strong currents run. There we found concentrations of small relics, many of which related to the list of trade goods loaded in Brest. They included pewter plates and mugs, glass beads, cut-glass "gemstones" from cheap jewellery, more bronze medallions and brass gorgets, or throat armour. A brass compass housing and parts of navigation and scientific instruments also came to light, but there was nothing that related to the collection of specimens. Two heavy millstones, used for grinding grain on the voyage, were raised with the air-bags and towed 4 km back to *Mantaray* where they were winched on board.

We would soon have to leave Vanikoro but already the information we had gathered was beginning to fall into place. The wreck in the gutter was producing materials one might expect to have been carried by La Pérouse's flagship. If this is correct and these are the remains of the *Boussole*, La Pérouse probably did

Expedition succumbs to nature's fury

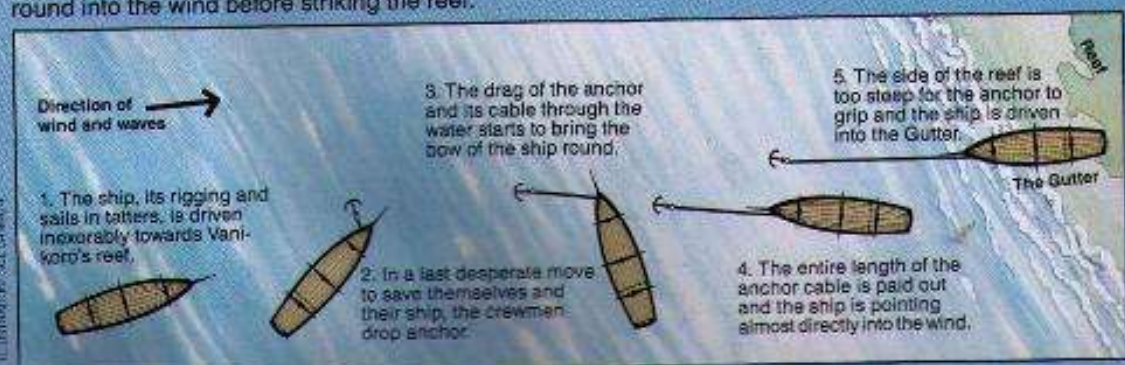
With the sea surging beneath them and hurricane-force winds shrieking through the rigging above them, the French sailors stared in dread at the approaching line of seething white water that marked a reef. In desperation one of the two ships dropped anchor, but although its drag brought the bow round into the wind, the reef was too steep for the anchor to grip. The second ship, meanwhile, was making a run for a gap in the coral to reach the safety of the lagoon. But False Pass is aptly named ...

All the evidence indicates that this is how La Pérouse's ships met their end, but no inanimate relics could ever bring to life the events of that fateful day.



The last gamble that failed

How one of the expedition's ships was brought round into the wind before striking the reef.



Expedition succumbs to nature's fury

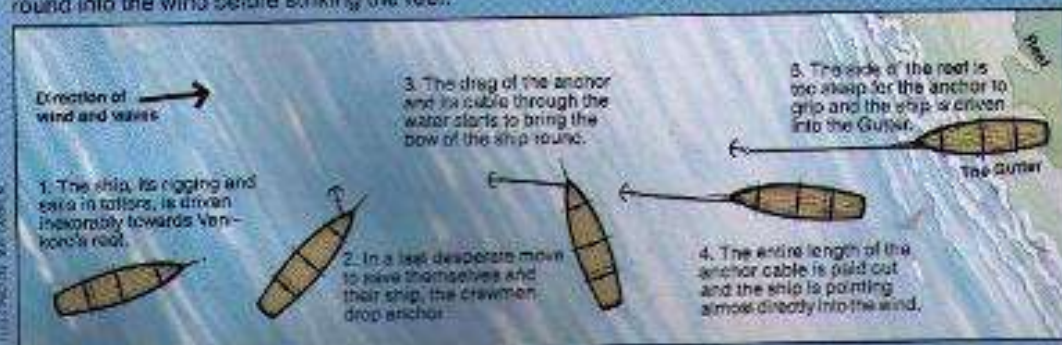
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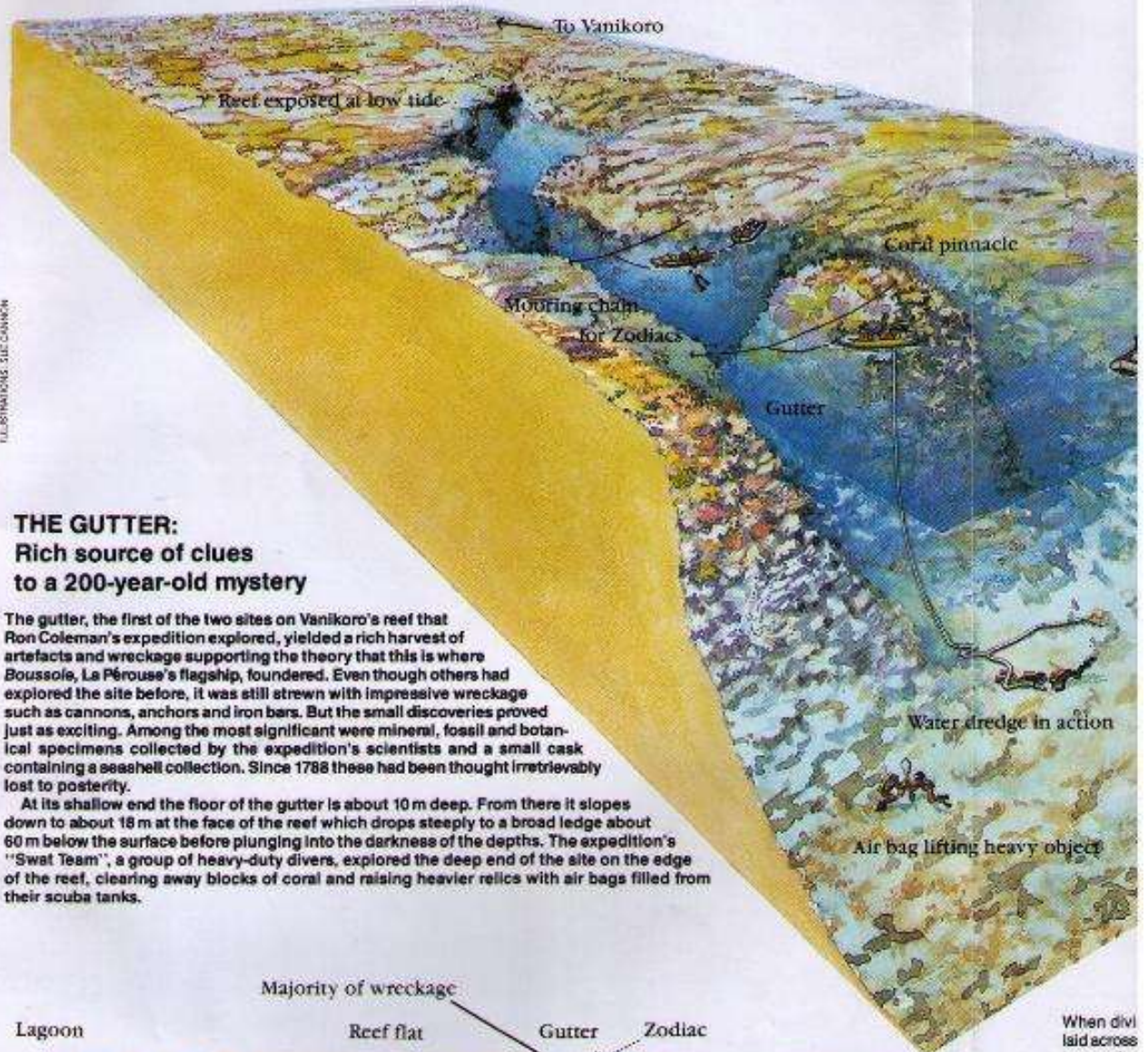
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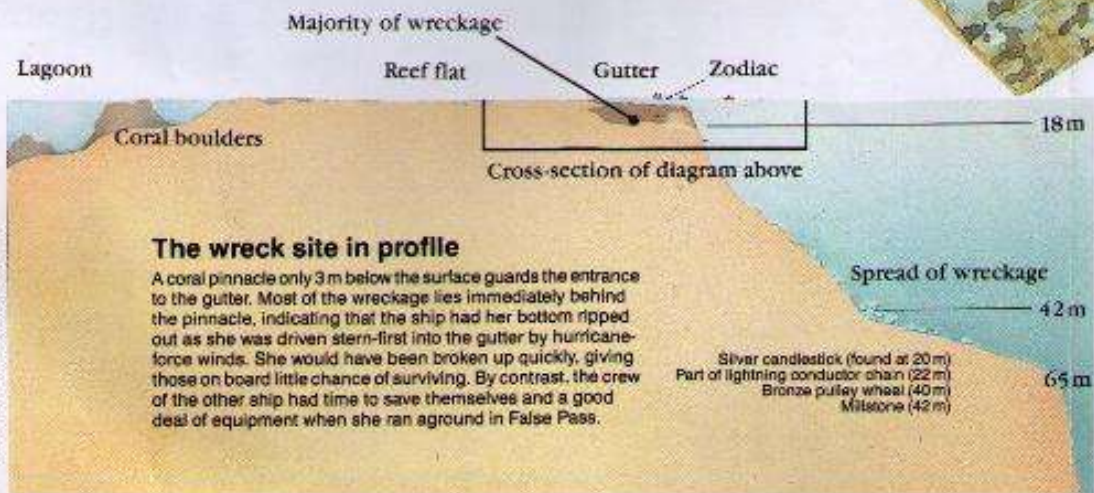


ILLUSTRATIONS: SUE CANNON

THE GUTTER: Rich source of clues to a 200-year-old mystery

The gutter, the first of the two sites on Vanikoro's reef that Ron Coleman's expedition explored, yielded a rich harvest of artefacts and wreckage supporting the theory that this is where *Boussole*, La Pérouse's flagship, foundered. Even though others had explored the site before, it was still strewn with impressive wreckage just as exciting. Among the most significant were mineral, fossil and botanical specimens collected by the expedition's scientists and a small cask containing a seashell collection. Since 1788 these had been thought irretrievably lost to posterity.

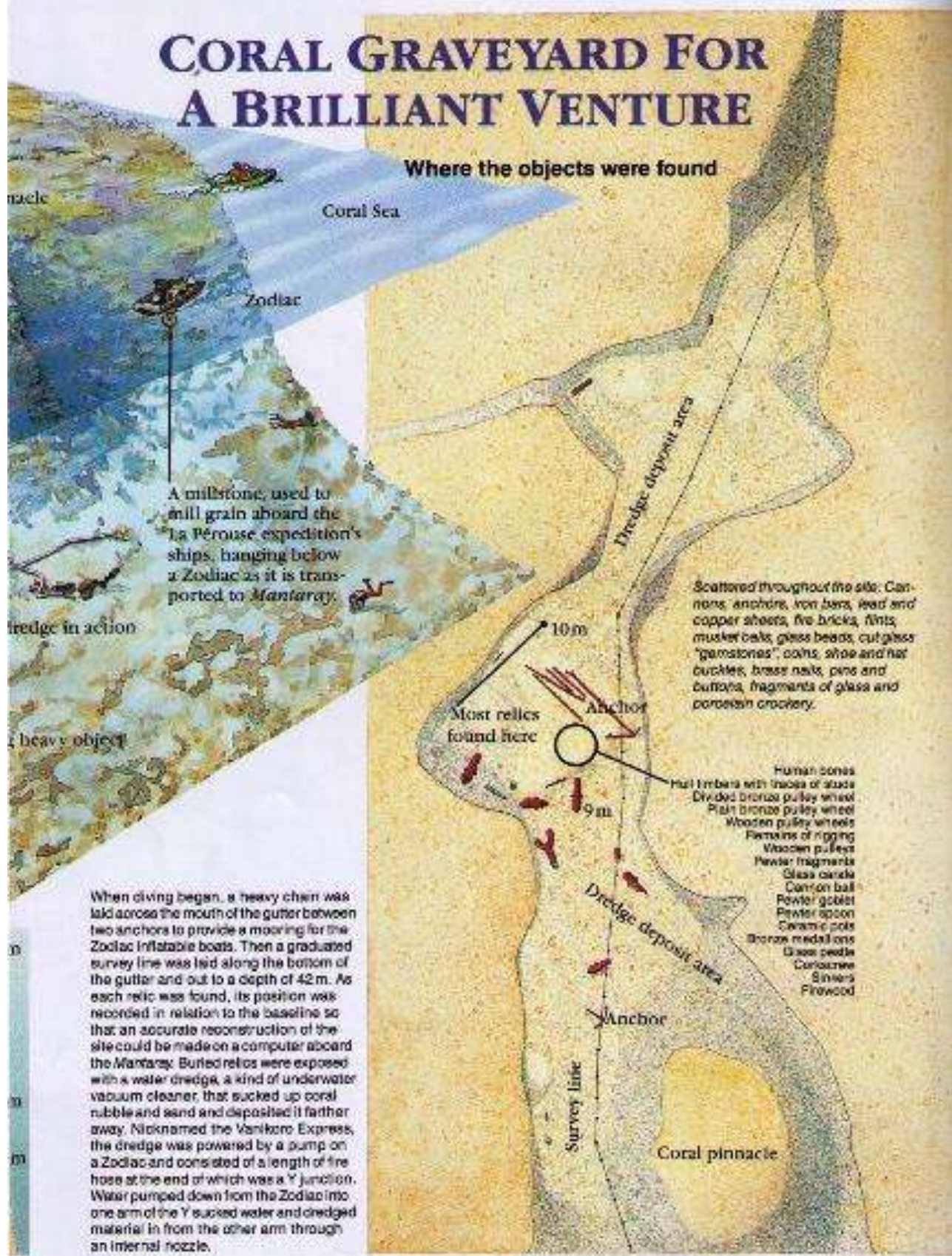
At its shallow end the floor of the gutter is about 10 m deep. From there it slopes down to about 18 m at the face of the reef which drops steeply to a broad ledge about 60 m below the surface before plunging into the darkness of the depths. The expedition's "Swat Team", a group of heavy-duty divers, explored the deep end of the site on the edge of the reef, clearing away blocks of coral and raising heavier relics with air bags filled from their scuba tanks.



COMPILED BY AUSTRALIAN GOVERNMENT

CORAL GRAVEYARD FOR A BRILLIANT VENTURE

Where the objects were found



pinnacle

Coral Sea

Zodiac

A millstone, used to mill grain aboard the *La Pérouse* expedition's ships, hanging below a Zodiac as it is transported to *Mantaray*.

dredge in action

a heavy object

Scattered throughout the site: Cannons, anchors, iron bars, lead and copper sheets, fire bricks, flints, musket balls, glass beads, cut glass "gemstones", coins, shoe and hat buckles, brass nails, pins and buttons, fragments of glass and porcelain crockery.

10m
Most relics found here

Anchor

- Human bones
- Hull timbers with traces of staves
- Divided bronze pulley wheel
- Pish bronze pulley wheel
- Wooden pulley wheels
- Remains of rigging
- Wooden pulleys
- Pewter fragments
- Glass candle
- Cannon ball
- Pewter goblet
- Pewter spoon
- Ceramic pole
- Bronze medals
- Glass pebbles
- Caribbees
- Silver
- Pine wood

9m

Dredge deposit area

Anchor

Survey line

Coral pinnacle

When diving began, a heavy chain was laid across the mouth of the gutter between two anchors to provide a mooring for the Zodiac inflatable boats. Then a graduated survey line was laid along the bottom of the gutter and out to a depth of 42 m. As each relic was found, its position was recorded in relation to the baseline so that an accurate reconstruction of the site could be made on a computer aboard the *Mantaray*. Buried relics were exposed with a water dredge, a kind of underwater vacuum cleaner, that sucked up coral rubble and sand and deposited it farther away. Nicknamed the *Vanikoro Express*, the dredge was powered by a pump on a Zodiac and consisted of a length of fire hose at the end of which was a Y junction. Water pumped down from the Zodiac into one arm of the Y sucked water and dredged material in from the other arm through an internal nozzle.

RELICS THAT BRING HISTORY TO LIFE

The effects of violent shipwreck and nearly 200 years under the sea have not tarnished the significance of these relics, each of which tells its own story. The study of such material, whatever its condition, can bring history to life. We only have to see them to realise that they were actually touched and used by real people who hitherto were known to us only through lifeless words on dry pages. Many of the items recovered were gifts and trade goods loaded aboard *Boussole* and *Astrolabe* in France; others were specimens that the expedition's scientists collected around the Pacific.

CHEEKBONE Was there a woman aboard *Boussole*? Forensic scientists believe this human cheekbone, recovered from the gutter, is female. Women often masqueraded as men on ships in the 17th and 18th centuries, which might explain this intriguing mystery.



DAGGER AND ARROWHEAD These two copper items, which La Perouse describes in his journal, were made by Tlingit Indians in Alaska. La Perouse charted the Alaskan coast in 1786 and spent a month at Lituya Bay where he lost 21 sailors in heavy seas. A hundred years later an American anthropologist discovered that the tragedy had become part of the Tlingit *toklone*.



BOTTLE OF MERCURY The mercury in this bottle might have been intended for repairing scientific instruments; in the 18th century mercury was also used to treat venereal disease, common among sailors.

PLANT SPECIMEN This plant specimen, as yet unidentified, was probably collected by 24-year-old Jean-Nicolas Collignon, protege of King Louis XVI's gardener and botanist.



FLINTS Flints were the matches of the 18th century. Called strike-a-lights, they were often used as gifts and trade goods.



SHELLS Part of a collection of sea-shells in a wooden cask found resting on a human skeleton. Was the sailor trapped below decks and crushed by the cask in the terrifying chaos of the shipwreck?



GORGET More than 100 of these brass gorgets – throat armour – appear on the expedition's cargo list. They were popular ornaments among Pacific natives and as late as the early 1900s were still being awarded to Australian Aborigines for heroic deeds.



BUCKLE Ordinary sailors seldom wore brass shoe buckles like this, suggesting that it belonged to a more affluent member of the expedition, perhaps an officer or a scientist.



HELMET Fifty-two of these dragoon helmets, once adorned with leathers and horsehairs, were intended as gifts for native chiefs.



FOSSIL This fossilised mollusc was probably collected by Jean Honore de Lamanon, the expedition's naturalist killed by Samoans in December 1787.



COINS These Chinese coins might be those mentioned by La Perouse as having been taken from a burial site on the Chinese coast in 1787, and the silver pieces of eight were probably the proceeds of the sale of sea-otter pelts bought in Alaska and sold in Macao.



Dugout canoes are still Vanikoro's main means of transport. These fragile craft, whose design has not changed for centuries, are used for inter-island trips that sometimes cross hundreds of nautical miles of open sea.



not survive. He often complained about the condition of his ship's rigging in his journals. The distribution of the wreckage suggests the ship struck the reef stern-first. In a cyclone a ship with rotten rigging could easily have been dismasted, lost its sails or otherwise been disabled. In such a situation the normal procedure was to drop anchor and hope the ship would be brought to a stop before going onto the reef. However the reef face at Vanikoro is too steep for an anchor to grip. Nevertheless the drag of the anchor and its huge hemp cable would have swung the ship's bow around into the wind so that she was carried onto the reef backwards.

The second ship, seeing the first in trouble, would naturally have attempted to give aid. She appears to have tried to penetrate the reef to help from the calmer waters of the lagoon. False Pass has every appearance of a safe entrance but in fact the bottom slopes steeply and is not deep enough for a large ship. Its name is appropriate.

The second ship ran aground on the coral bottom of the pass and stayed there. The archaeological evidence indicates that she entered

the passage intentionally and did not suffer the ravages of the sea as the other did. This gave the survivors time to salvage most things they needed for their escape from the island.

Further reconstruction of the events will be possible with more extensive study at Vanikoro. It's like piecing pages of a book together from jumbled words. Once that's done, the pages have to be put in order. Even if it's not possible to put together a full account of the event, the study of the relics, in the context of a late 18th-century scientific expedition, has enormous potential.

WE left Vanikoro for Brisbane aboard the *Mantaray* on 27 April, hoping to return in 1988, the bicentenary of both the founding of Australia and the disappearance of La Pérouse. All the human remains we recovered were returned to France where they were intensively studied by the Academies of Science and Medicine. They were to be buried near the La Pérouse monument at Albi, La Pérouse's birthplace.

The other relics are undergoing conservation treatment and study

at the Queensland Museum in Brisbane. They are the property of the Solomon's Government but will form part of the Queensland Museum's exhibition during the Australian Bicentennial celebrations in 1988.

The tragic loss of his ships has clearly overshadowed La Pérouse's remarkable achievements. The magnitude of the loss to posterity can be gauged by the fact that Cook and La Pérouse have rightly been compared. But though La Pérouse, unlike Cook, did not return, the study of the remains of his expedition may give us historical insights not previously possible.

Before he reached his first port of call, La Pérouse began his account of the voyage with the words: "The ancient spirit of discovery appeared to be extinct". The tenacious sailor-explorer went on to prove that it most certainly was not.

Members of the Vanikoro '86 expedition would like to thank EastWest Airlines and Castlemaine Perkins for their assistance with the venture. Special thanks to our referee, Ronald H. Pearson, and Angus & Robertson Publishers.



Helped by islanders, John Keopo (far right), field archaeologist with the Solomons National Museum, excavates the site of the French survivors' camp.



Melanesian charm shines from the face of this pretty girl. She was one of the Peu villagers who regularly paddled their dugouts to the expedition boats with gifts or to trade.



The La Pérouse monument at Peu was built in 1959 by members of Reece Discombe's second expedition.