

Computer links Cousteau ship with the world

By Hillary Hauser
News-Press Staff Writer

Veteran sailor and world explorer Jean-Michel Cousteau stood amid the fancy gear that runs the unique windship Alcione — and talked computers.

"The interesting part is the computer that works on the engines and sails," he said as crowds thronged the Santa Barbara Harbor Sunday after the arrival of the distinctive vessel.

"I tell the computer I want to be in San Pedro at 9:30, traveling at 10 knots. After that, I could drive to Los Angeles and meet the boat."

The captain of the Alcione, Philippe Rueff, had programmed the ship's navigational computer so it would arrive in Santa Barbara from Ventura exactly at 10 a.m.

Right on time

And the Alcione was right on time — waiting five minutes before entering the harbor while the Navy Pier was cleared of equipment.

Soon after the flag-draped Alcione tied to the pier, crowds of curious onlookers thronged the harbor for a close look at the two-stacked windship.

Little boats circled the Alcione on the way in, and they continued to cruise by the ship where it was tied — all day long and far into the night.

On the pier, someone said the ship looked like Two Mile Island, with its tall, cylindrical stacks. Somebody else wanted an autograph from "Jean-Mike."

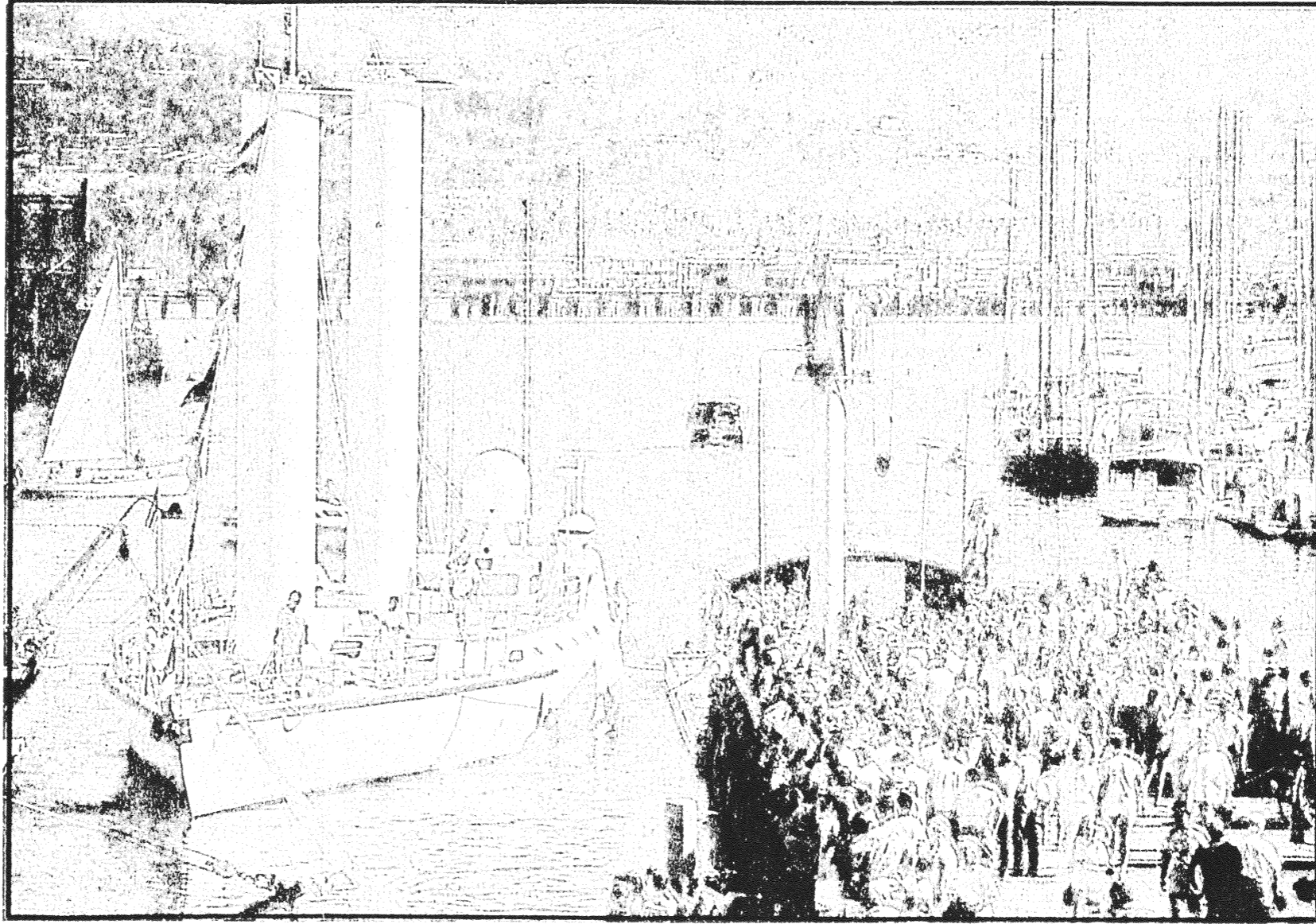
A Cousteau Society truck parked on the pier, where the curious picked up literature about the society and the Alcione. Nearby, working fishermen unloaded their catches and complained to Cousteau about sea otters.

Alcione's wares

On board, Cousteau talked about the wares of the Alcione.

He pointed out the small boat launching ramp at the stern of the ship, where divers in a Zodiac inflatable boat can power up onto the ramp while the Alcione is under way.

Inside the cabin, two parallel hallways are arteries through a



News-Press photo by RAFAEL MALDONADO

Thousands crowded Santa Barbara's harbor area Sunday to greet the Alcione, Jacques Cousteau's unique windship.

row of staterooms, computer room, dive equipment room and heads.

The computer room provides for the operation of the ship. There is color radar, depth finders, sonar, Loran.

The turbosail system that powers the Alcione is to illustrate a "way to save energy," Cousteau said. "It's not to replace the sail or engine."

The wind propulsion stacks of the propeller-driven ship save 30 to 40 percent in energy costs, he explained.

"That means money," Cousteau said. "If you tell people we're ecology minded, they will walk away. But if you tell them that a 30 percent saving in fuel consumption means money, they listen. Ecology and environment is the same as economics. 'Ecos' means to 'manage your house.' We're talking about managing the planet."

Across the hall from the computer room is the dive equipment room. Cousteau pulled out a flat, silver-gray backpack, which holds long, thin scuba tanks that hold twice the amount of pressurized air found

in a tank more than twice their size.

Cousteau's divers wear silver and black wetsuits and a space-age silver helmet with a light over the forehead. The helmets contain communication devices, which allow divers to talk to those aboard the ship.

At the stern of the Alcione is a large shark cage. The cage, Cousteau said, was used by the film crew in the Farallon Islands, off San Francisco. The Farallons, infamous for their resident population of great white sharks, had not produced

a shark for the cameramen working inside the cage.

He'll be surprised

"It cost us a lot in chum (bait)," Cousteau said.

But certainties and guarantees are not what Cousteau seeks in making a documentary. He said the subjects of the filming to be done in the Channel Islands during the next two weeks will be a surprise to him — which is the way he likes it.

"If we know what we are going to film in the Channel Islands, we wouldn't go," Cousteau said.

teau said. "I don't want to see the same things. I'm into surprises."

The travels of the Alcione to the islands of the Pacific coast, from Vancouver to Mexico, will be part of a new Cousteau television series, "Rediscovery of the World."

Today, the Cousteau crew was scheduled to work at Anacapa Island. On Tuesday, weather permitting, the Alcione will move to San Miguel to film, and toward the end of the week to Santa Rosa Island.

Oct. 17 completion

Cousteau said he planned to have the exploration of the four northern Channel Islands completed by Oct. 17. After that, the Alcione will move to the southern Channel Islands — Catalina, San Clemente and San Nicolas.

"It will be intriguing to me," Cousteau said. "At first I thought these islands were barren, but as soon as you start looking underwater, you see the uniqueness of the flora and fauna. We will get into the geology and history, the Chumash."

He called the islands "treasure islands" — because they're protected by their distance from the mainland.

He said the public needs to be educated to the delicate ecological balance in the islands.

'Unique' islands

"The Channel Islands are unique," Cousteau said. "If we are successful in managing the resources of these islands, we can apply this to the planet. The islands are a good test case."

Cousteau will be among the filmmakers aboard the Alcione while the northern islands are being documented. Today, however, he was to leave for Washington, D.C., to meet with NASA officials about upcoming documentary projects.

Satellites will enable a filmed communication between Cousteau and his father, Captain Jacques Cousteau, who is working aboard the Calypso on a documentary in the South Pacific.

The perspective of space is important in considering the islands. See Page B-3, Col. 5

Tracking Cousteau was an adventure for this reporter

By Hillary Hauser
News-Press Staff Writer

As the twin stacks of Jacques Cousteau's revolutionary windship Alcione moved slowly out of the Ventura Harbor on Sunday morning, thousands of Santa Barbarans were having their morning coffee and thinking about greeting the ship when it arrived at the Navy Pier in the harbor.

And I, one of a few people invited to sail aboard Alcione from Ventura to Santa Barbara, was busy getting a speeding ticket on the freeway.

Officer, officer, I said. Let me go. I'm missing the boat.

"Lady, a lot of people were pointing at me to get you," said this laughing patrolman. "Do you have any idea how fast you were going?"

"Fifty-five miles an hour," I said.

"Try again," he said. "It doesn't pay to tell a lie."

"Fifty five and a half?" I said.

"Fifty five and three-quarters? Officer, help. I need an escort to the harbor. Don't you want to see the Cousteau windship? Come, turn on your red light so we don't have to stop on the way down there."

'Can't let you go'

"Ha, ha!" said the laughing officer. "I can't let you go. I'll be nice to you, I'll write you up for 65."

When I got to the Ventura harbor, I was just in time to see the Alcione stacks glide by the breakwater.

I ran down to a marina next to the Channel Islands National Park headquarters, where sauntering up one of the docks was Joe, captain of the charterboat Kingfish.

Help, help, I said. Can you run me in a boat to that ship just going out of the harbor?

There was a rapid exchange of money for fuel, and in about two minutes, Joe and I were speeding in a fairly fast launch

toward the wake of the Cousteau windship.

Not fast enough

Except we weren't fast enough. As the Alcione passed the breakwater, it began a wide turn up the coast. The two 33-foot-tall cylindrical aluminum sails turned toward the wind and thus began the engineering/aeronautical magic that swept the ship from our grasp.

Alcione, named for the daughter of Aeolus, Greek god of the winds, was proving her mettle. It was a warm, santa ana day, with breezes just enough to work the giant wind stacks that propel the ship.

The stacks of Alcione are actually two "aspirated" wind cylinders that propel the 109-foot vessel at speeds of a conventional sailing vessel. The cylinders work on a 19th century theory known as the "Magnus effect."

The "effect," named for the German chemist Heinrich Gustav Magnus, is essentially that a lift arises from the lateral force of an air current on a cylinder. Moveable shutters exposed to the wind, together with a fan that sucks wind through the vents into the cylinder, provide lift and propulsion for the boat.

Cuts fuel consumption

The wind-propulsion design cuts fuel consumption by 35 percent to 40 percent.

From our little launch, I admired the unusual look of the ship — flat and wide, with those two tall cylinders.

"We'll never catch her now," Joe said.

Thinking fast, he took a sharp starboard turn, toward a commercial fishing vessel that was lumbering out of the harbor alongside us.

This was the good ship Garibaldi.

The Garibaldi is bright orange, just like the ocean goldfish of California seas that

See Page B-3, Col. 1

Reporter found no speedy way to catch Cousteau's windship

Continued from Page B-1
bears the same name. It is the workboat of the Garibaldi Commercial Fishing and Diving Co. of Ventura, which will un snag a propeller or catch you a few fish.

Aboard the Garibaldi were three gillnetters, partners for the past three years. Jay and Frank Kemsley and Bob Love agreed immediately to take me aboard.

Throttled up coast

They throttled the Garibaldi up the coast, toward the Alcyone.

Sometimes it'd look like we would catch the ship, but other times it seemed like a lost cause.

Jay went to the radio and called the windship.

A French voice came over the radio. It was Capt. Philippe Rueff.

Jay told him he had a reporter on the Garibaldi who was trying to catch up with him.

Rueff said Alcyone was on a computerized course and could not slow down. (Later, Rueff said, he thought some mad photographer was trying to get a picture of the boat.)

Jay steered the Garibaldi toward a fast-moving lobster fishing boat working in the area.

The lobster fishermen said they were worried about getting their traps up before the winds hit.

By now, we were some distance outside the Ventura Harbor, about three miles out. I realized I hadn't thought of what I would do if I ended up in the position I was now in.

"Looks like you're going fishing with us," said Jay. "Are you good at pulling in nets?"

They'd be finished at about noon or 1 o'clock in the afternoon, they said.

The three gillnetters got into their slickers and were soon hooking the line of their first net.

The catch was kingfish, a type of croaker. The Garibaldi boys said they sell the kingfish to a San Pedro buyer, and on this day they planned to bring in about 1,000 pounds.

Remove fish

I watched them as they removed each fish by hand. They explained how the gills of the fish reveal its freshness: red gills mean the fish is good, black gills mean they've been in the nets too long.

A sailboat came by, but not close enough.

Jay held up a clear, gooeey, tear-drop shaped blob, which

hung on a piece of kelp.

"Squid eggs," he announced.

A spider crab hit the deck. Bob picked it up and threw it overboard.

About this time, a massive gray boat appeared on the horizon. It was moving fast in our direction.

"Fish and Game," Jay said.

"They'll probably get you for \$500, for being on a commercial boat without a license," Bob said.

Patrol vessel

The boat was the Albacore, a fast-moving patrol vessel used by state Fish and Game Department wardens.

Jay left the net and went to the marine radio. He told the captain of the Albacore that he had a reporter stranded on board.

The Albacore agreed to come over and check us out — as soon as it went to the aid of the lobster fishermen we had talked to previously. They were now dead in the water.

When the Albacore came around, the captain, Gene Martin, exploded with laughter. What was I doing aboard the Garibaldi, he wanted to know.

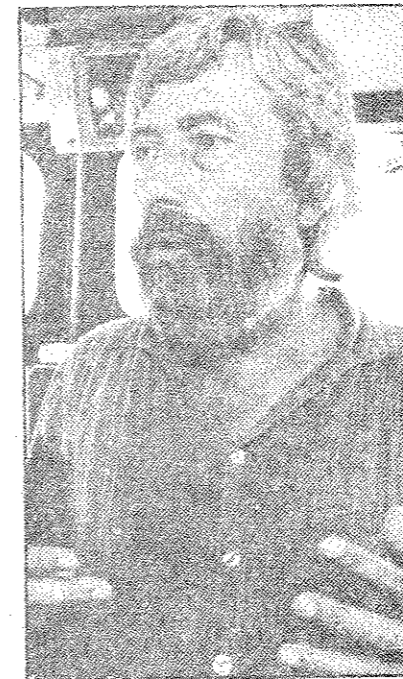
He said he'd take me back to the Ventura Harbor — which we did at 22 knots. I was back at the dock within a half an hour.

On the freeway, I spotted the happy officer. He was now writing up some other speeder. I beeped and waved at him as I went by, and he looked up and waved back.

On time

It was exactly 10 a.m. when I arrived at the Santa Barbara Harbor, and Alcyone was waiting to pull up to the Navy Pier — on time and ready to greet the crowds of people that had gathered to greet the ship.

Jean-Michel Cousteau, stand-



Jean-Michel Cousteau

'Managing the planet'

ing near the forward wind stack, was wearing a green shirt. He saw me, and gave me a scolding sign.

Later, aboard the Alcyone, I told Cousteau and the others my story — about Joe in the skiff, the gillnetters aboard the Garibaldi, the kingfish with their black gills and red gills, the Fish and Game rescue, and the happy cop writing out tickets.

They said, forget our trip, that's the story, write it.

Cousteau ship makes a home at the harbor

Continued from Page B-1
planet, the younger Cousteau said.

Can see the planet

"If we pull away from the planet, we can see the planet, that it's not a bad place to stay," he said.

Cousteau said he well remembered receiving news of the Challenger space shuttle disaster. At the time, he was on a mountaintop at the tip of Cape Horn, filming.

"There were people there of all nations," Cousteau said. "We all cried together. There were no barriers."

Unity of mankind is one of the themes of a new Cousteau project in Paris — the Cousteau Ocean Center.

The center will be like a space and underwater Disneyland, Cousteau explained. It is one of his pet projects.

Before taking over administrative duties for the society ("I still do too much of that, I'd rather be out exploring"), Cousteau worked primarily as a marine architect.

The Cousteau Ocean Center will be a compilation of his ideas — architectural, philosophical and biological.

He envisions a moving walkway that would take visitors from inside a teardrop, where a mime act points out the fact that humans are 75 percent water, to outer space, where the planet Earth is seen as a water planet. In another exhibit, people would be able to move inside a whale, traveling first into the mouth, over the tongue, and then into the heart, blubber and body of the animal.

The ideas continue, and Cousteau said although his father has been asked if "Rediscovery of the World" is his last major film effort, the question is "completely stupid."

At the Navy Pier, an appreciative public showed its admiration for the Cousteau efforts, visiting the Alcyone non-stop throughout the day and long after dark.