

BOAT'S OUTLOOK SUNNY AFTER STAY IN HAWAII

By Angus Phillips
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FREMANTLE, AUSTRALIA, JAN. 15 -- Dennis Conner remembers with less than reverie the 10 months he spent in Hawaii training for the America's Cup, but he wouldn't trade it.

"We didn't have much money, so we stayed in old Navy housing," he said. "I won't say it was bad, but let's just say you wouldn't leave your shoes outside the door to dry. They might not be there in the morning."

The accommodations were not what lured him, anyway, but the isolation and the proximity of big seas and winds, in which he could secretly test the theories he felt were keys to regaining yachting's top prize.

Now, as Conner's Stars & Stripes holds a 2-0 lead over New Zealand in the best-of-seven challenger finals, the Hawaiian training looks smart.

"If we win the Cup," he said, "the biggest single reason will be the decision to stay in Hawaii."

What Conner and his Stars & Stripes team did there, from October 1985 to August 1986, was to laboriously figure out what makes the new breed of winged-keel 12-meter go fast upwind in a straight line.

"I remember those days," said crewman Stuart Silvestri. "You'd leave the harbor in the morning and head straight for the horizon. Every once in a while you'd stop, turn around and discuss what you'd learned. Then it was off again."

"Nobody trained like we did," said Bruce Deeter. "These boats are completely different from the old 12-meters, and it took a long time to understand them. We just went and went. It was boring, but because of that work, Dennis sails better now than anyone else."

Conner's theory was that the old standards of 12-meters -- the boats were similar, and differences in sails, crew work, maneuverability and boat-handling meant the most -- were out the window.

Australia II's 1983 Cup victory convinced him that if you came to the regatta with a faster boat, the rest would follow. And the door suddenly was open to design a significantly faster boat.

"For the first time," said design chief John Marshall, "we had two major variables to play with. We had the weather, which dominates yacht design and was different from any 12-meter regatta ever before, and we had the new hull and keel concepts generated by Australia II."

The enemy was time, and Conner and Marshall agreed that the course other Cup competitors chose -- to come to Fremantle for the 1986 world championships in February, see the weather patterns first-hand and check in with the opposition -- would be a waste.

"You don't go to Maine for one winter to learn whether it snows," said Marshall. "You could get an abnormal year. We bought 15 years of weather data instead, to get a historical perspective."

So armed, they went sailing for the horizon in Hawaii, looking for a faster boat and trying variations of weight, keel configurations, hull shapes and sail plans in 15 to 25 knots of breeze, the historical average here.

They sailed by numbers, following computer-generated performance "target" speeds for various wind strengths. After a while, the feel of the boat when it was making the best progress began to burn into Conner's mind and hands.

And with huge stores of information gathered from onboard monitors, Marshall began polishing a computerized velocity prediction program that could estimate effects of hull changes on boat speed before they were made.

By the time Stars & Stripes '87, the third and final new boat in the program, was built, the velocity prediction program was reasonably trustworthy. A good thing, because by then there were only days left to test the boat before it was time to pack up for Fremantle and the America's Cup.

Lack of practice in the new boat and lack of attention to traditional details such as sails, crew work and first-hand familiarity with local weather cost Stars & Stripes early success in the trials, when it took a few losses it shouldn't have.

But the theory was working. By refining boat, sails and crew work as he went, Conner came up with an improving boat that is hitting a peak now.

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