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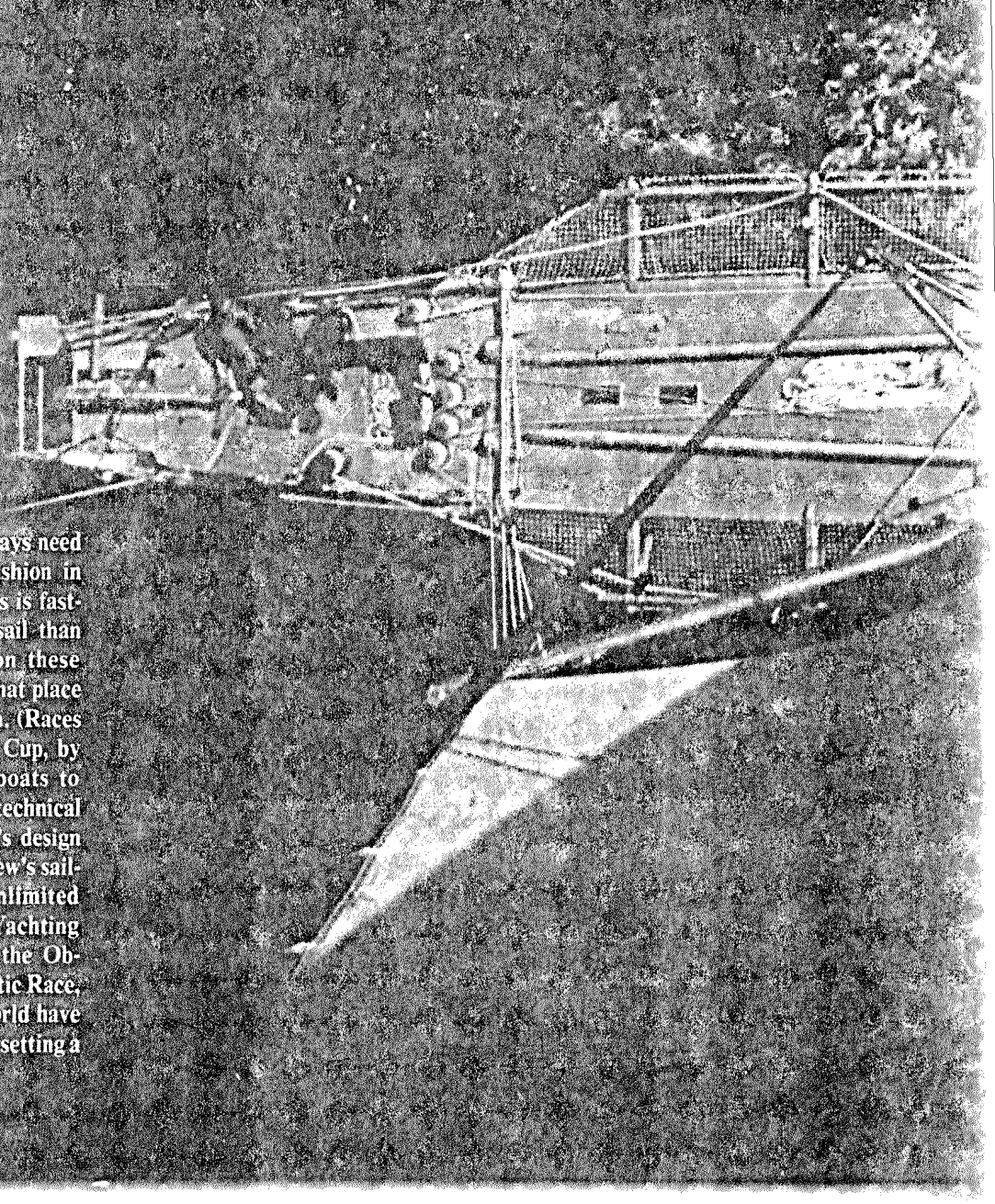
Sailboats for the Fast Crowd

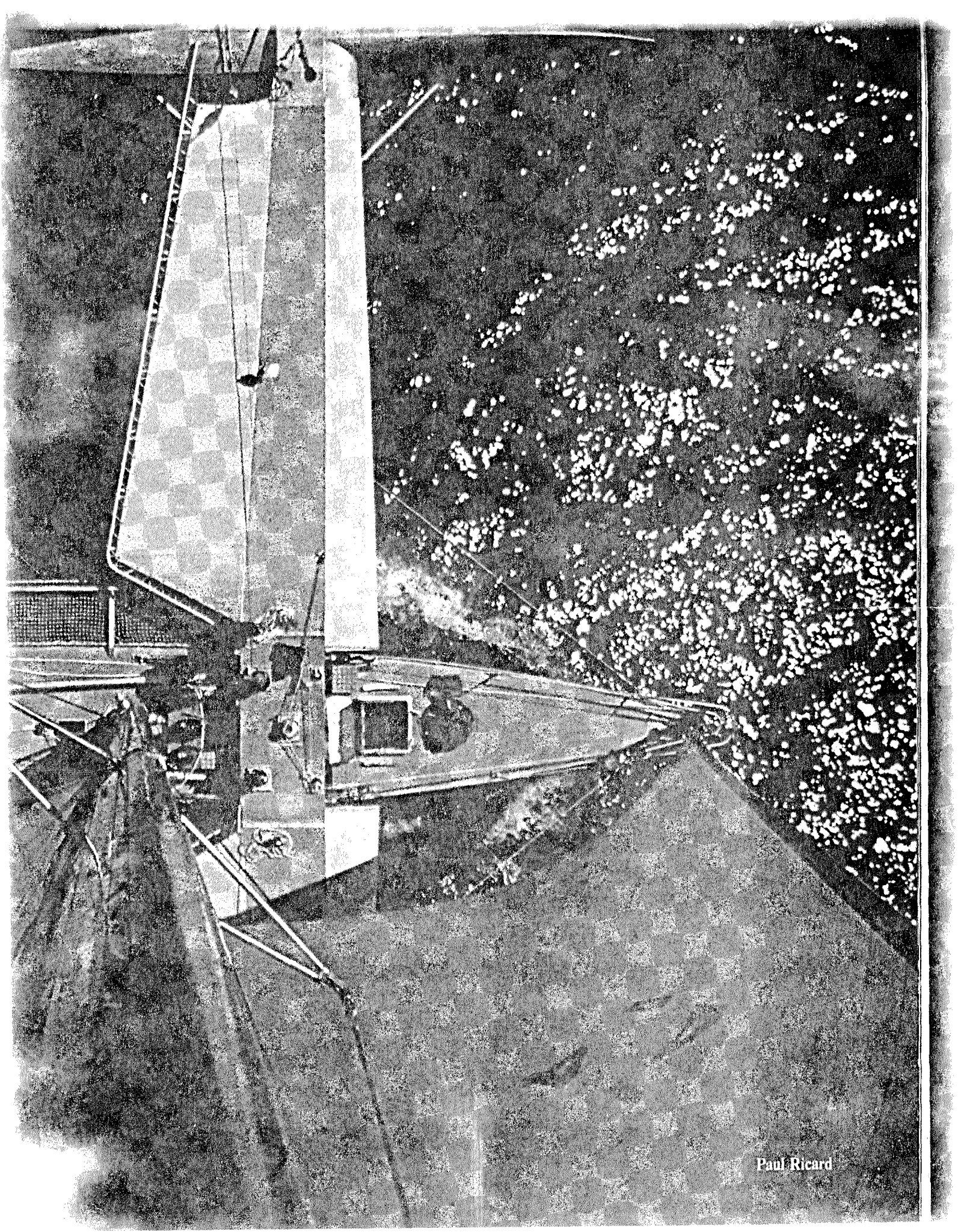
Part sailboat, part guided missile, these racing craft can sail past you like a plane taking off.

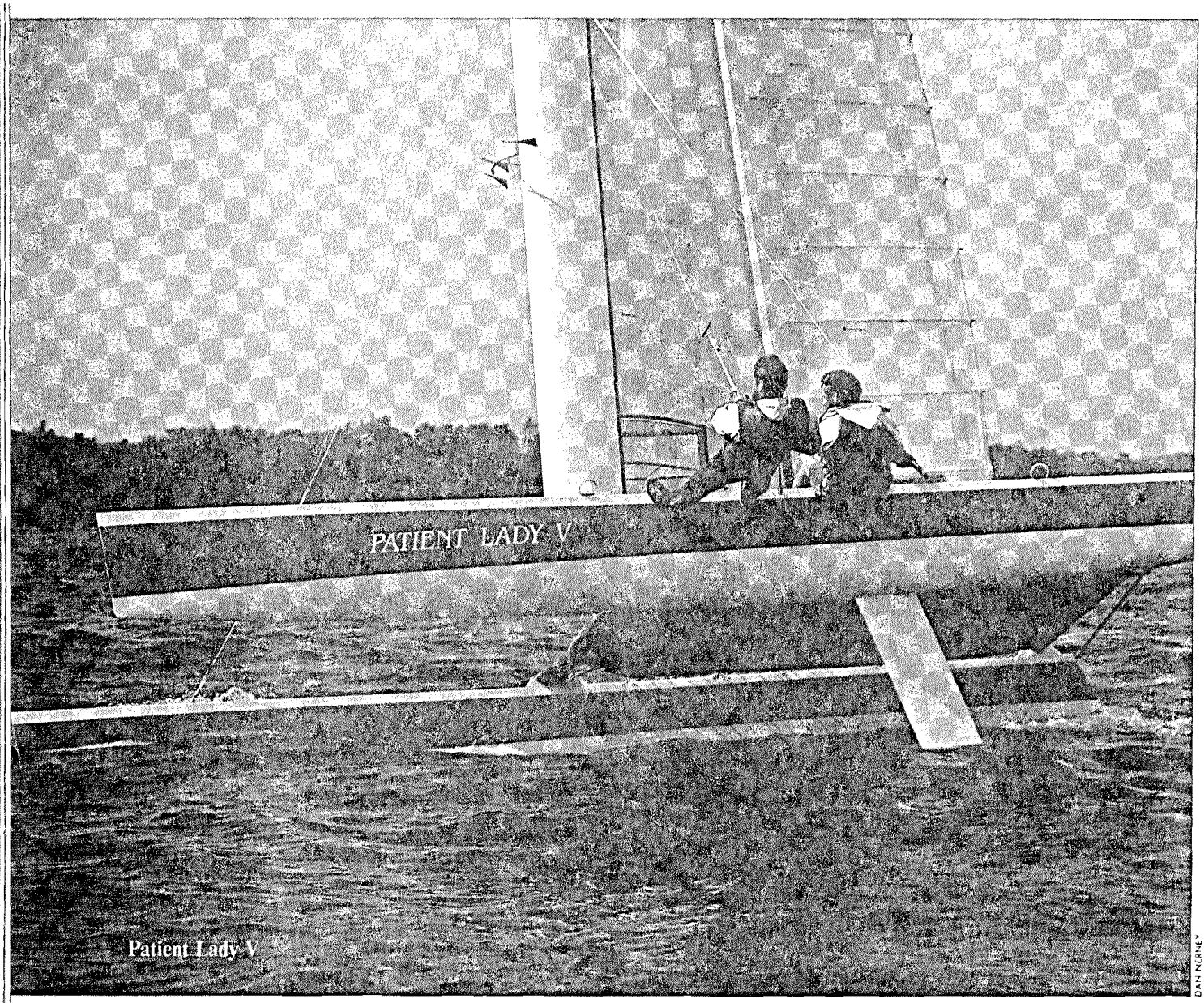
by David Schwab



In boat racing, you don't always need gasoline to go fast. The fashion in sail-powered speed machines is faster, lighter, and harder to sail than ever. Most of the sailboats on these pages were designed for races that place few if any limitations on design. (Races like the one for the America's Cup, by contrast, require competing boats to comply with a strict and highly technical formula that minimizes a boat's design advantages and highlights its crew's sailing expertise.) Spurred by unlimited competitions like the Royal Yachting Association Speed Trials and the Observer Singlehanded Transatlantic Race, go-fast designers around the world have built a fleet of machines that are setting a host of new speed records.

JEAN GUICHARD/SYGMA


Paul Ricard

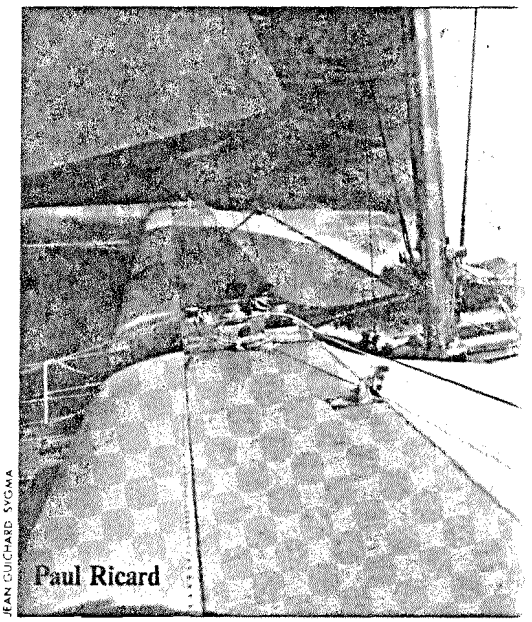


Patient Lady V

DAN NERNEY

Patient Lady V

A fixed wing, not a fabric sail, powers the 25-foot C-Class catamaran *Patient Lady V.* The wing's cross section resembles that of an airplane wing. When the boat sails upwind, the wing's adjustable flaps are trimmed like those of an airplane taking off; downwind, like those of a plane landing. Capable of providing 30 percent more drive than a fabric sail its size, the wing can push *PL V* along as fast as 26 knots. "She's so fast," says David Hubbard, one of the boat's designers, "other sailboats seem to move like islands."

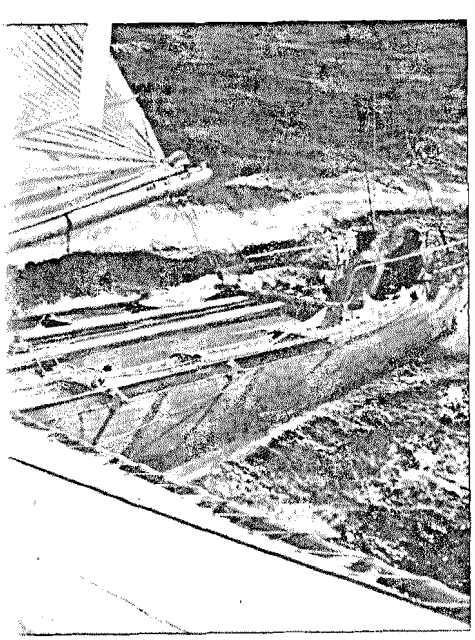


JEAN GUICHARD SYGMA

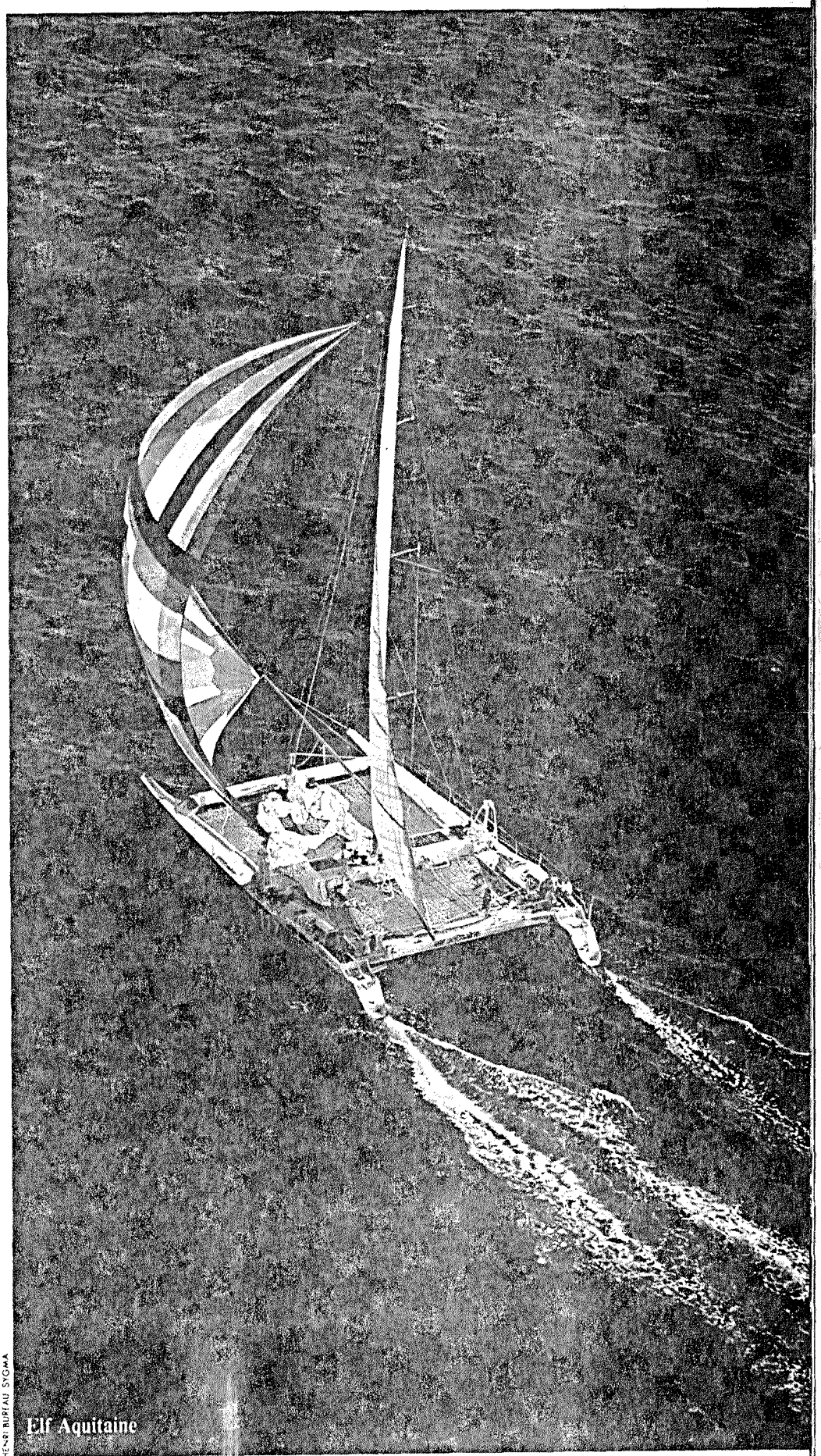
Paul Ricard

Paul Ricard, Elf Aquitaine

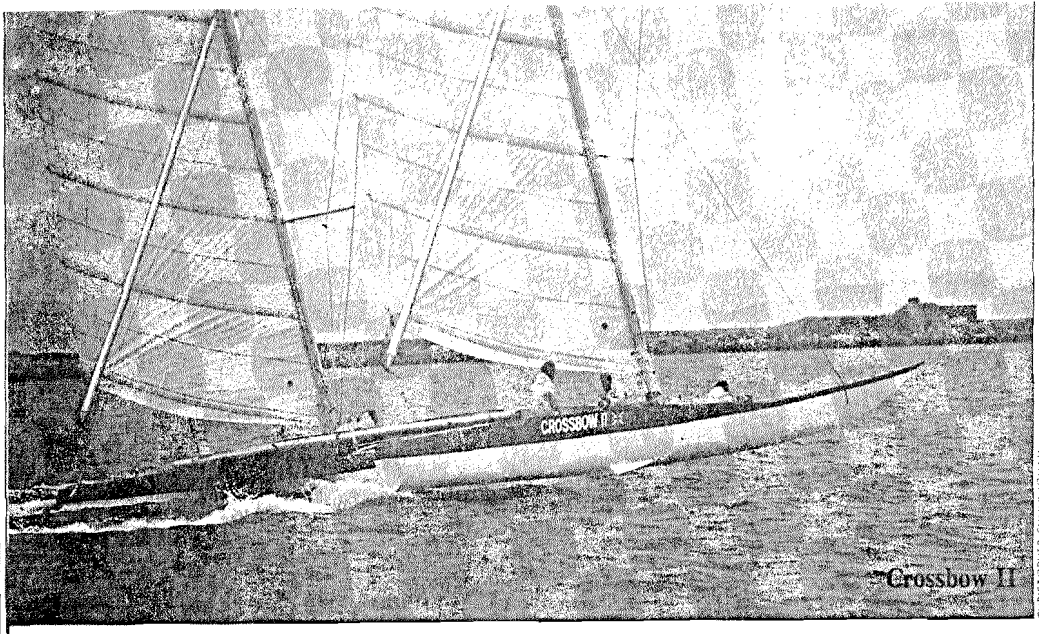
When the wind blows, monohulls keep their masts pointing up, thanks to their heavy lead keels. Multihulls stay righted because of the platform provided by their light but wide-set floats. This difference enables a multihull to carry more sail area per pound than a monohull. Little wonder that many of the best times in long offshore races have been turned in by such boats. In 1980 and 1981 the west-to-east Atlantic crossing record established in 1905 by the American schooner *Atlantic* was broken twice, both times by French multihulls. In the summer of 1980 the trimaran *Paul Ricard* crossed in 10 days 5 hours 14 minutes, nearly two days faster than the 185-foot *Atlantic*. The 54-foot-long, 56-foot-wide tri was one of the first multihulls to use hydrofoils mounted under the floats for heel control. The following summer, helped by perfect winds, the 60-foot monster catamaran *Elf Aquitaine* crossed in 9 days 10 hours 6 minutes.



HENRI BUREAU SYGMA



Elf Aquitaine

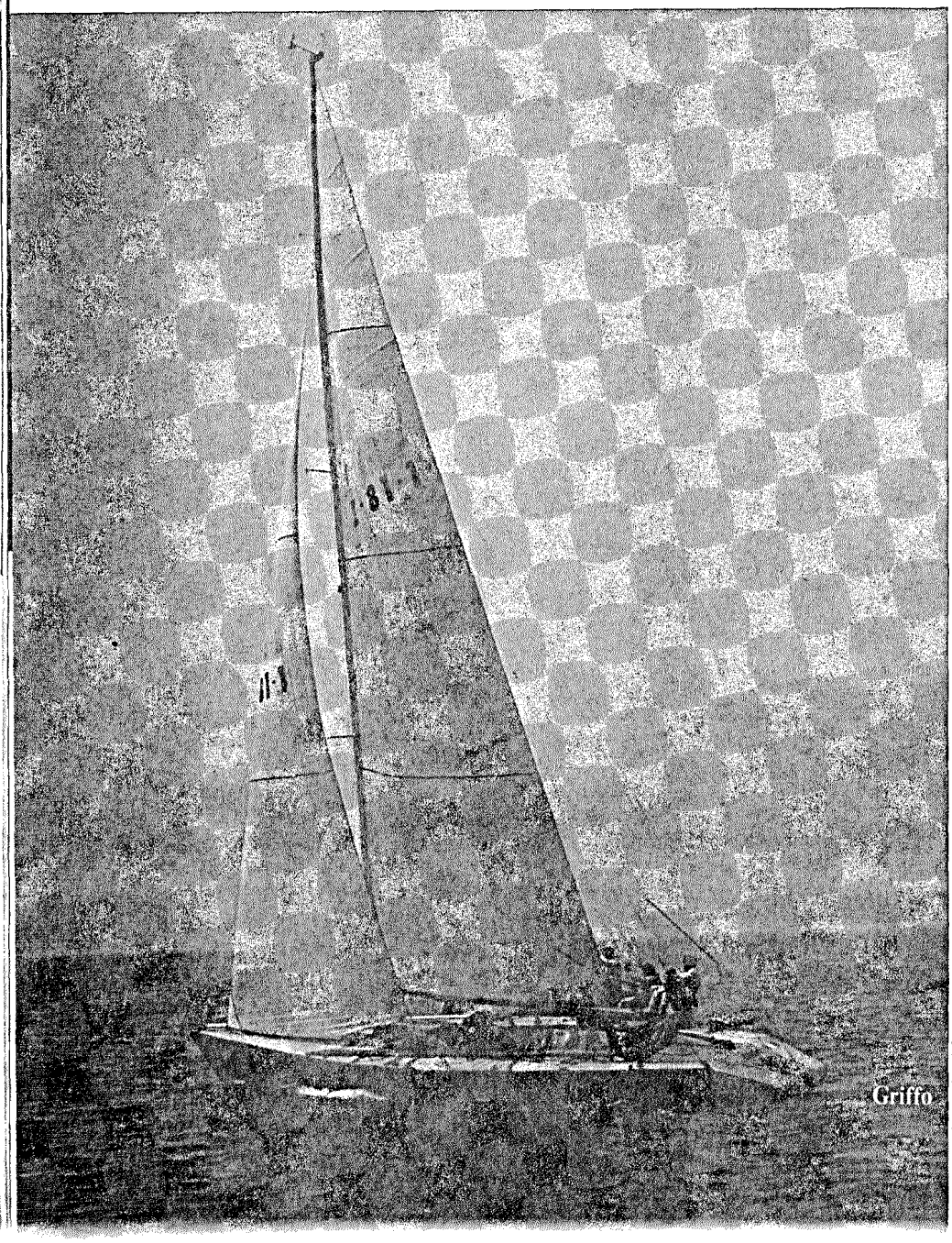


Crossbow II

CHRISTOPHER CUNNINGHAM

Crossbow II

At the Royal Yachting Association Speed Trials in 1980, *Crossbow II* became the world's fastest sailboat, sailing a 500-meter course in England's Portsmouth Harbor at an average speed of 36.3 knots. *Crossbow II* is an asymmetrical catamaran: The boat planes on two parallel 60-foot hulls, but the port hull is staggered 13 feet ahead of the starboard hull. (Asymmetry isn't a problem when a boat is designed to race only on starboard tack.) When airborne, *Crossbow*'s starboard hull provides enough stabilizing leverage to offset the heeling effect of the wind on the boat's large sail area. The weight of the whole package: a tender 3,000 pounds.

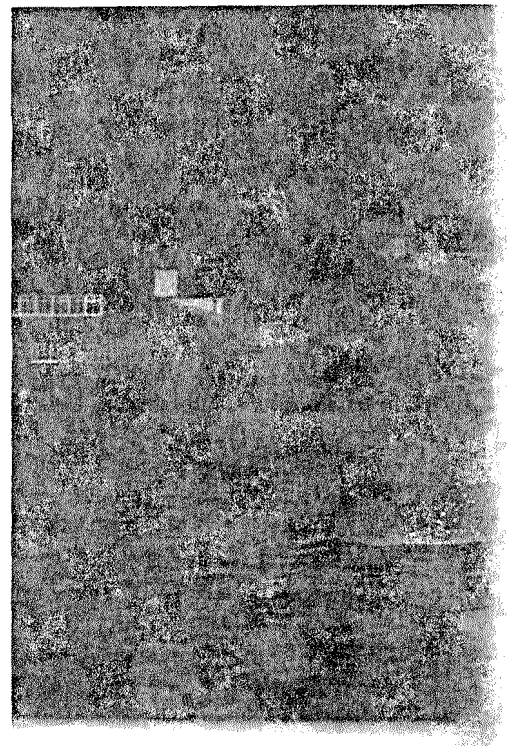


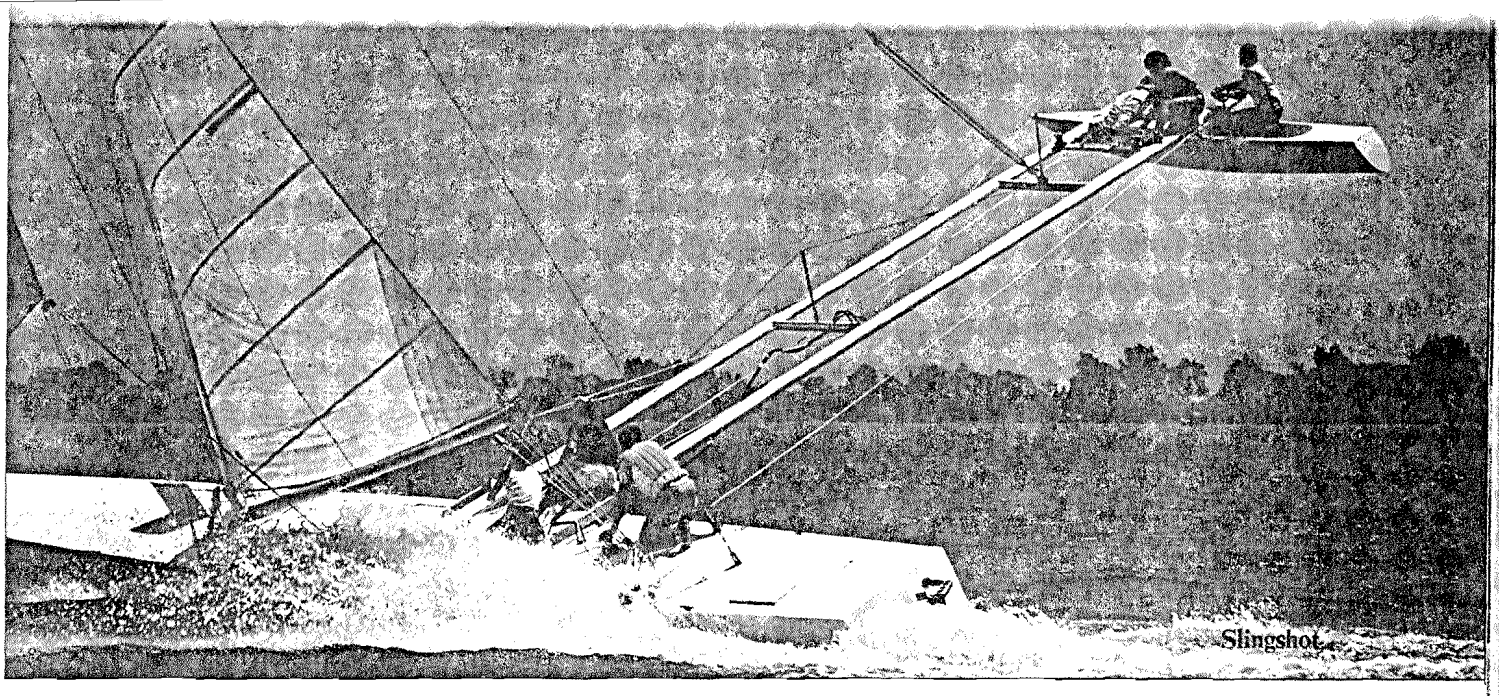
Griffo

FARR INTERNATIONAL

Griffo

Griffo, one of the world's fastest monohulls, was designed for the Centa Meglia, a 70-mile race on Italy's Lake Garda. Outfitted with a modified planing hull (rather than a displacement hull), a feature more common on a dinghy than a 44-footer, *Griffo* was designed to skim across the water instead of through it. To offset the force of the wind on the boat's unusually large sail area, seven of the eight crew members must sometimes hike out on trapezes to prevent capsizing. In one race last season *Griffo* averaged 20 knots over an hour's run.



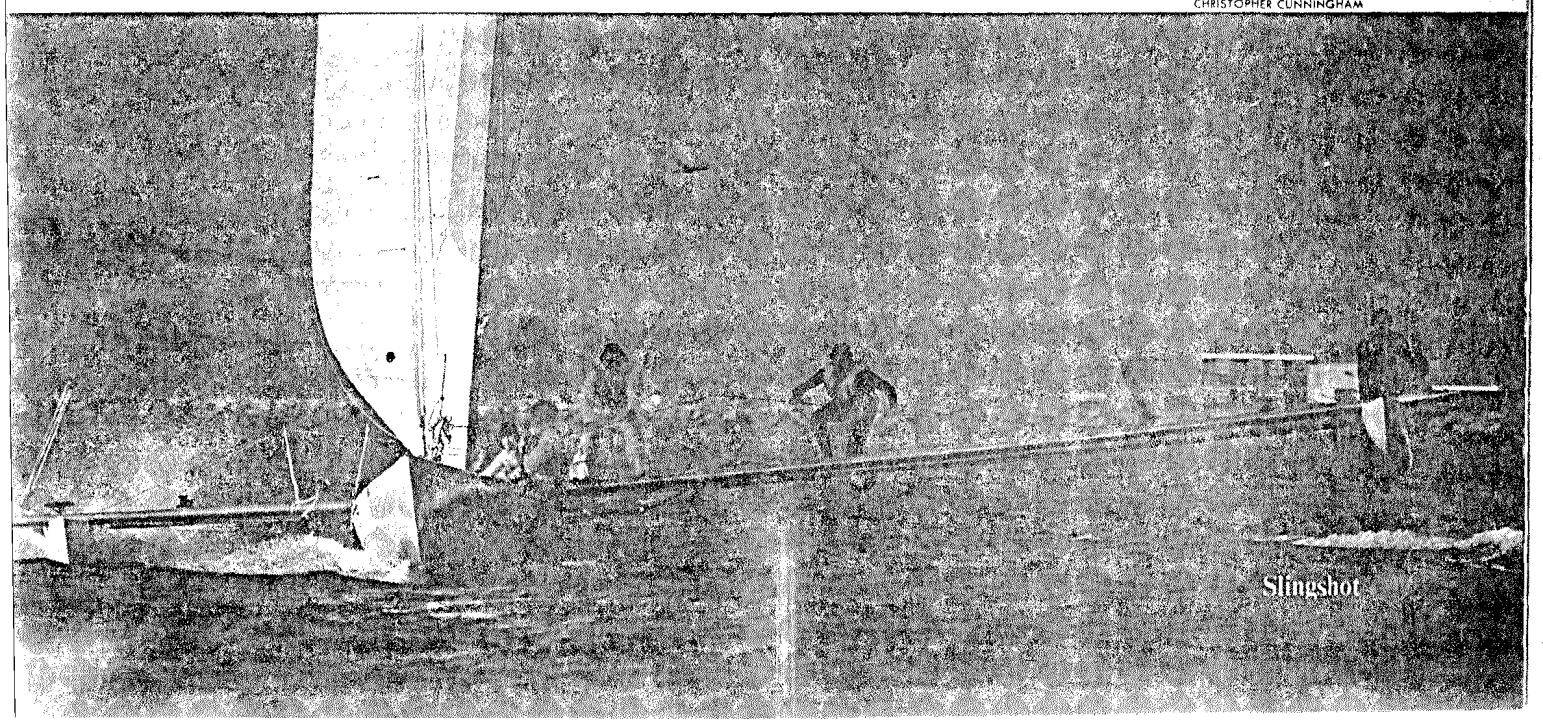


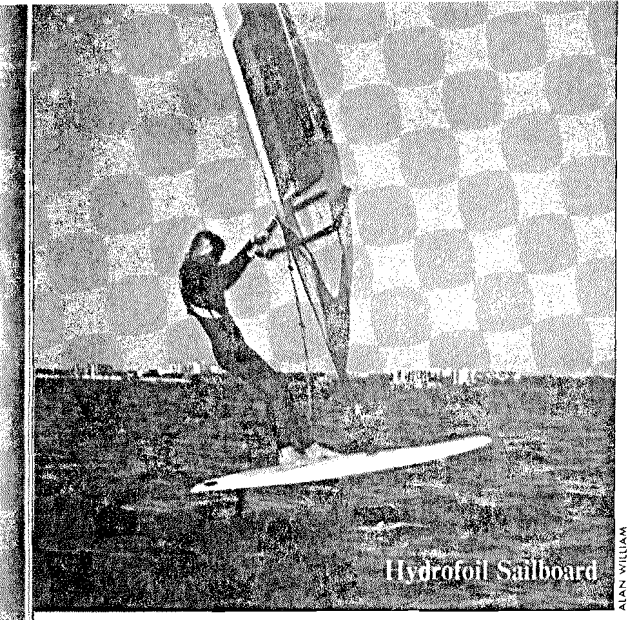
CHRISTOPHER CUNNINGHAM

Slingshot

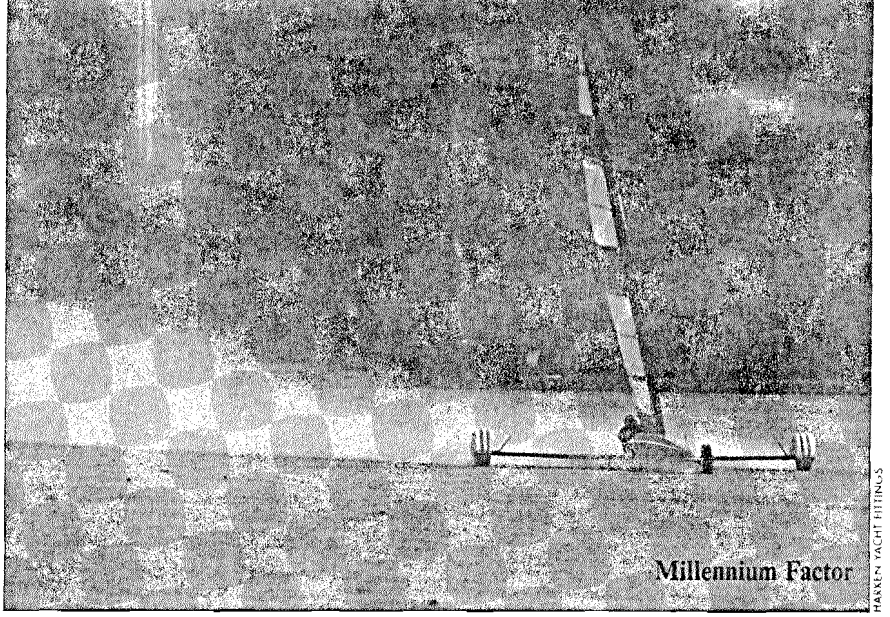
Capable of speeds above 25 knots, *Slingshot* is a seagoing dragster of rare dimensions. Weighing only 1,800 pounds (1,200 less than *Crossbow II),* the craft sports a 60-foot main hull intersected by a huge, movable outrigger. When the craft begins to heel excessively, a daredevil crew member clambers up the 40-foot outrigger to ballast the airborne pod, which may be soaring 20 feet over the water. *Slingshot*'s gimballed mast can be tilted as far as 30 degrees to windward to help right the boat and lessen the friction of the hull sliding through the water.

CHRISTOPHER CUNNINGHAM




Hydrofoil Sailboard

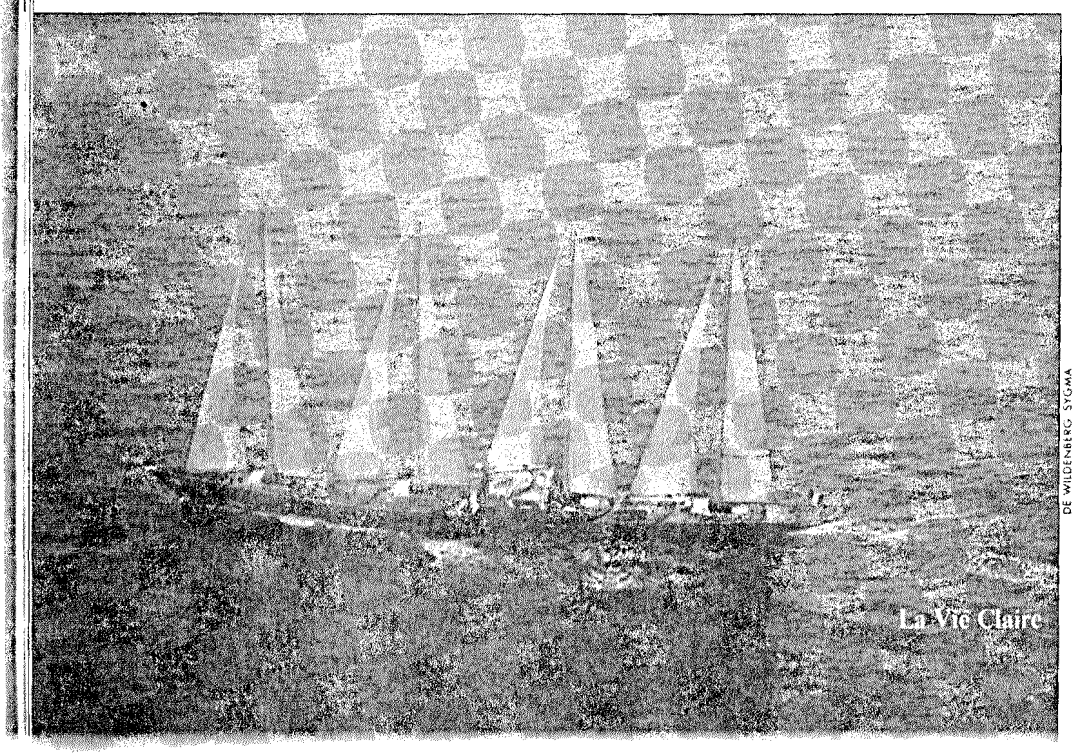
ALAN WILLIAM


Millennium Factor

HARKEN YACHT FITTINGS

Sailboard hydrofoils

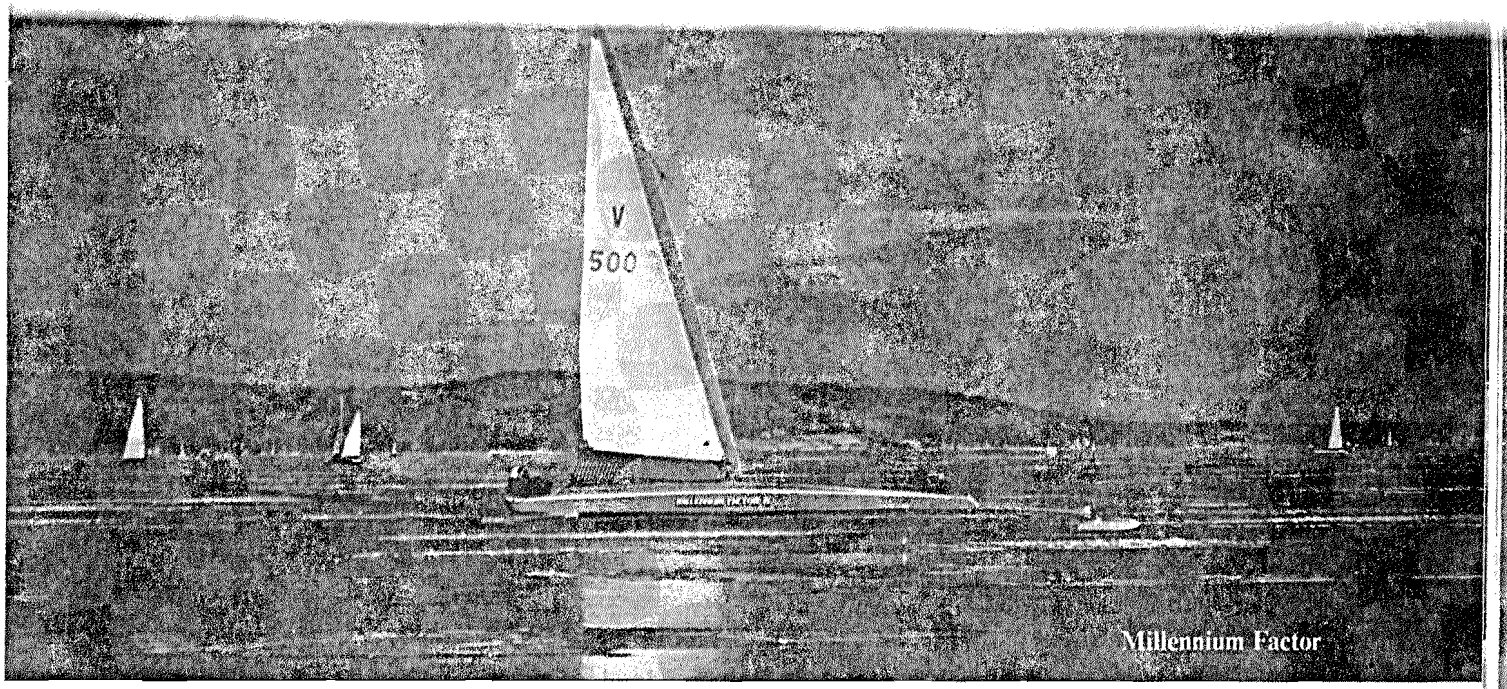
When Dr. Walter Bradfield designed his hydrofoil *Neither Fish Nor Fowl (NF²)*, his work with foils led him to try something even more unusual: a hydrofoil sailboard. The single foil fits the slot in the board intended for the dagger board. The sailor steers by shifting his weight on the board. On a broad reach and in light to moderate winds, the foil-borne board can sail 1.3 times the speed of the wind. (A foilless board can sail no faster than the wind's speed.)


La Vie Claire

DE WILDENBERG SYGMA

La Vie Claire

La Vie Claire, formerly *Club Méditerranée*, is one of the true curiosities of the sailboat-racing world. The vehicle weighs 250 tons, is 236 feet long, and has four identical 105-foot masts carrying a total of 10,758 square feet of sail. The keel alone contains 70 tons of spent uranium (uranium being denser than lead). But even more remarkable, *La Vie Claire* was designed to be sailed single-handed. In the 1976 Observer Singlehanded Transatlantic Race, the late Alain Colas of France, a veteran of offshore racing, guided the craft from Plymouth, England, to Newport, Rhode Island.



HARKEN YACHT FITTINGS

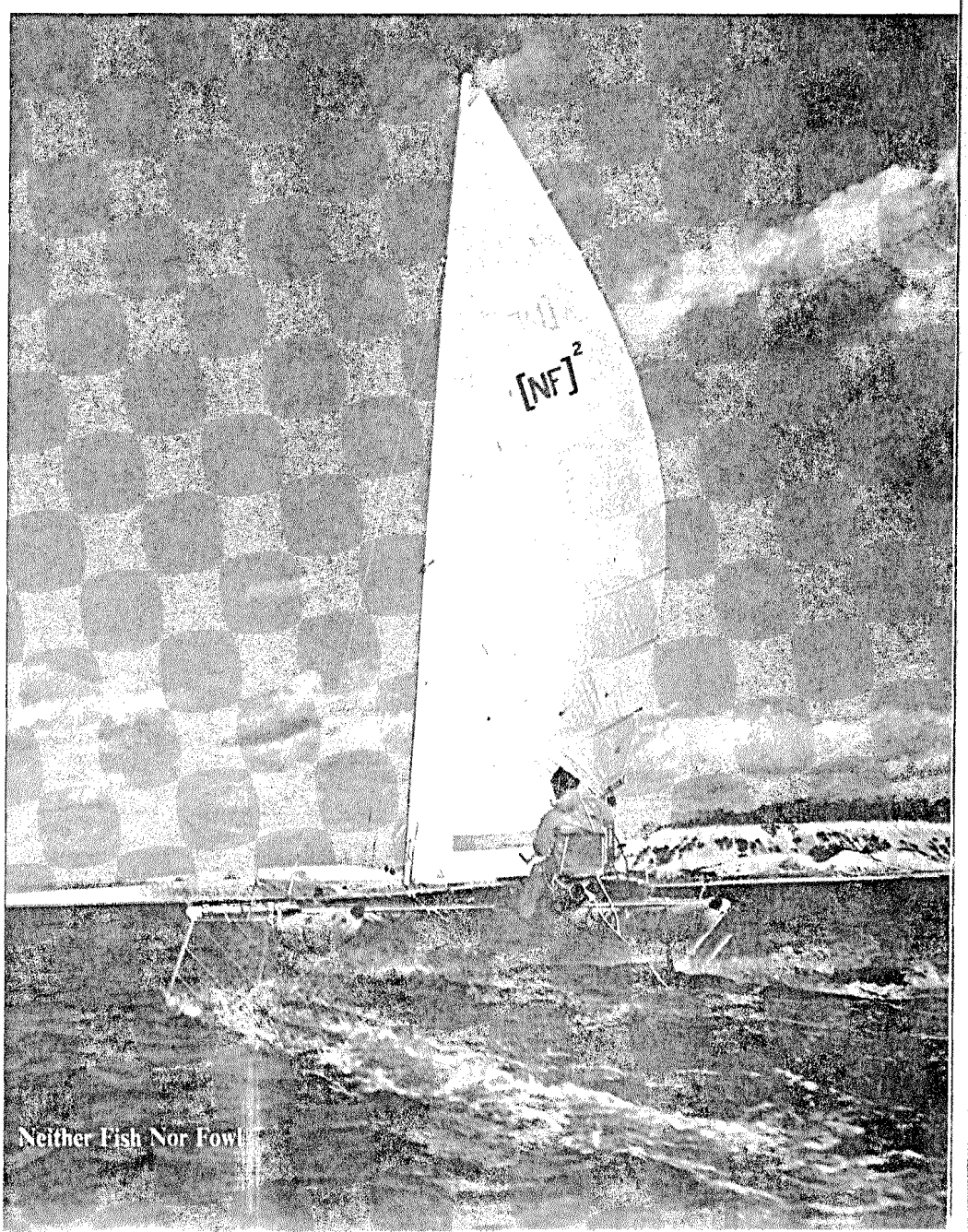
Millennium Factor

Millennium Factor

Racing against other E-Skeeter class iceboats around a nine-mile course, the 30-foot single-seater *Millennium Factor* often averages over 100 miles an hour—generating a perpetual hurricane for the intrepid crew. When the wind and ice are right, the boat can shoot across a frozen lake at 140 miles per hour. "It's like hanging on to the tail of a mad dinosaur," says one veteran of the 52-year-old class. Experiencing little resistance from their metal runners, E-Skeeters use just 75 square feet of sail to achieve their phenomenal speeds. With blades off and wheels on, *MF* has topped 90 miles per hour on a desert course.

Neither Fish Nor Fowl

One of the world's few wind-driven hydrofoils, *Neither Fish Nor Fowl* (NF^2) has been officially timed at 24.4 knots, until recently a world record for sailboats with 300 square feet of sail. It has three sets of aluminum foils that rise out of the water in winds of 15 knots or better. The foils create little drag because of their minimal wetted surface, and their shape provides an effective platform for the boat. Using a joystick, a solitary sailor steers NF^2 by adjusting the angle and pitch of the foils. At rest and while taxiing for takeoff, NF^2 stays afloat and upright thanks to rubber pontoons.



CHRISTOPHER CUNNINGHAM

Neither Fish Nor Fowl