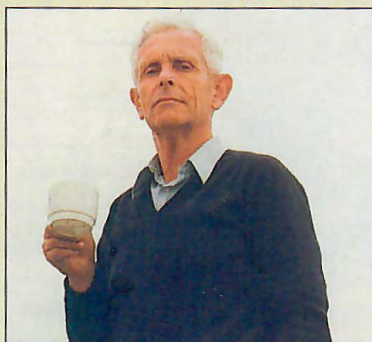


# E.G. Van de Stadt—plywood pioneer

by Nic Compton

**S**TORMVOGEL was the biggest in a series of pioneering boats that started when Kees Bruynzeel wanted to demonstrate the suitability of a new type of waterproof plywood for building boats. What better way to do this than to build a new class of boat, and what better person to design that boat than his neighbor and fellow wood merchant's son, E.G. "Ricus" Van de Stadt?



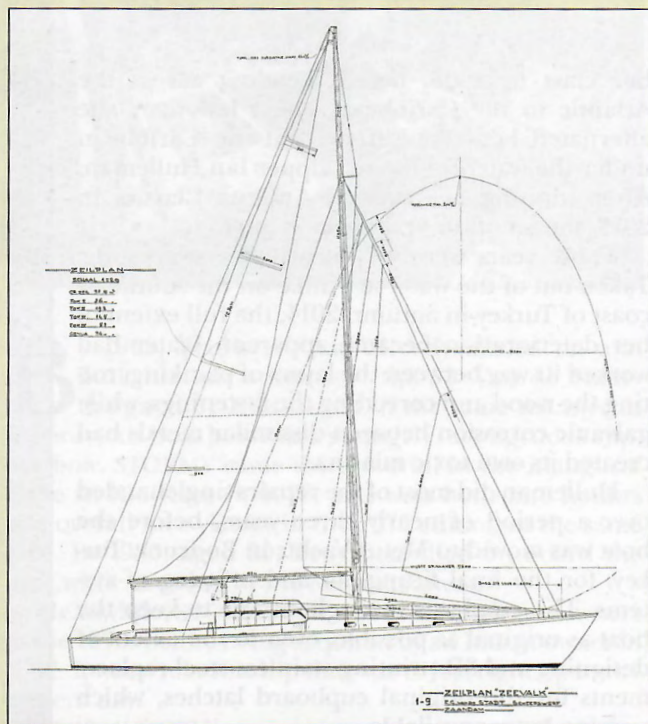
**Ericus "Ricus" Gerhardus Van de Stadt (1910–1999) began designing daysailers in the 1930s. His company, Van de Stadt Designs, still operates in The Netherlands.**

Growing up on the west bank of the River Zaan just outside Amsterdam, Van de Stadt started boating from a young age and was cofounder of a local canoe club. His first design was a sailing canoe that he drew while still at school; he sold the plans for 25 Dutch cents plus postage. After training in naval engineering at a college in Haarlem, he worked briefly at a yard building steel-hulled boats before setting up his own yard in Zaandam in 1933, specializing in wooden boats.

The yard got off to a slow start building canoes—Olympic O-Jolles, Dragons, and a practice skiff Van de Stadt designed himself. His big break came in 1938 when Bruynzeel employed him to work half-days for six months at his kitchen-cabinet factory to design a boat that could be built from three sheets of plywood, one that would be "faster than the existing competition classes, stable and spacious." The result was the 21' 4" Valk (Falcon). With its hard-chined hull, cast-iron bulb ballast keel, and spade rudder, it was like nothing else around and was an instant success, with 100 hulls built in 1940 and 150 more in 1941, before World War II closed down production. It's still one of the most popular classes in Holland, with many of the original boats still sailing.

Van de Stadt used the war years constructively, developing his design concept with the help of a tank-testing project at the Maritime Research Institute in Wageningen.

"The short keel with free-hanging rudder makes great sense," he later said. "You have a hull, keel, and rudder. The hull must have little resistance, the keel serves only to keep the ship upright and to reduce leeway. The wetted surface of a keel should be as



**With her light plywood hull, bulb keel, and trim tab, the 1951 ZEEVALK was at least a decade ahead of her time.**

small as possible to reduce drag. This is how we arrived at the short keel and the free-hanging balance rudder. A free-hanging rudder requires a solid rudderstock of the correct diameter. If these two conditions are met, it will not break."

After the war, he tested his ideas by building a trial boat for himself called, appropriately enough, TRIAL.

The 29' sloop had a hard-chined hull, with a cast-iron bulb keel fitted with a separate spade rudder and a trim tab on the aft edge of the keel. Belowdecks, she was absolutely basic, with "dog cages" covered with waterproof covers to act as bunks, and a plywood box to keep clothes dry. Unusually, she was steered using a pair of upright levers, one on either side of the cockpit, and the crew sat facing forward while operating the levers.

TRIAL proved exceptionally fast, winning numerous races in Holland



**Where it all began: the 21' gaff-rigged sloop VALK was designed to promote Bruynzeel plywood but soon took off as a popular racing class.**

ALL PHOTOS COURTESY OF VAN DE STADT DESIGN



and abroad, including the Antwerp–Ostend (twice) and surviving a Force 10 storm between Dover and the Hook of Holland.

Van de Stadt used the same principles when Bruynzeel asked him to design his next boat: a lightweight plywood ocean racer capable of competing in RORC races. The 41' ZEEVALK (Sea Falcon) was a truly groundbreaking yacht, with the characteristic hard-chined hull, a 6'10" deep bulb keel that held half the 5-ton displacement in ballast, a deep spade rudder, and trim tab. Launched in 1949, she was said to be the first planing ocean racer in the world, and she won her class in the 1951 Fastnet Race, coming second overall.

The success of ZEEVALK finally established Van de Stadt as an outstanding designer of a whole new breed of boat. More commissions followed in the same vein, including FAIR MEG in 1955 and BLACK SOO in 1956. In its design pages, *Yachting World* magazine described BLACK SOO as the most extreme in the series, with a lower displacement-to-length ratio than ZEEVALK (94 instead of 113), a fin keel that had reached "what surely must be the limit of narrowness" and a wetted surface that is "possibly the minimum attainable."

Also in 1956, Bruynzeel commissioned his third boat from Van de Stadt: the 30' ZEESLANG (Sea Snake), a narrow cruiser-racer that reached 12 knots in sea trials. ZEESLANG went on to dominate local racing in Cape Town, where Bruynzeel was by then based—so much so that a new racing class was formed based on her near sistership, BLACK SOO, which became known as the Royal Cape One Design.

Other trailblazing designs followed, including the 49' cold-molded sloop VOORTREKKER, which not only won the 1968 OSTAR but 15 years later came second

**ZEEVALK was only Van de Stadt's second official design, but she launched his reputation as a radical thinker by winning her class in the 1951 Fastnet Race.**



in the inaugural BOC round-the-world race, right behind the brand new CRÉDIT AGRICOLE. "She's the fastest, most uncomfortable, prettiest 50-footer around," said VOORTREKKER's skipper, Bertie Reed.

Not all of Van de Stadt's designs were so radical, and starting in 1954 the yard produced a line of round-bilged cruising yachts for the American market. The 24' 8" Junior Holiday and the 30' Holiday 30 were both built in Holland and exported to the United States, with a reported 150 Holiday 30s being built.

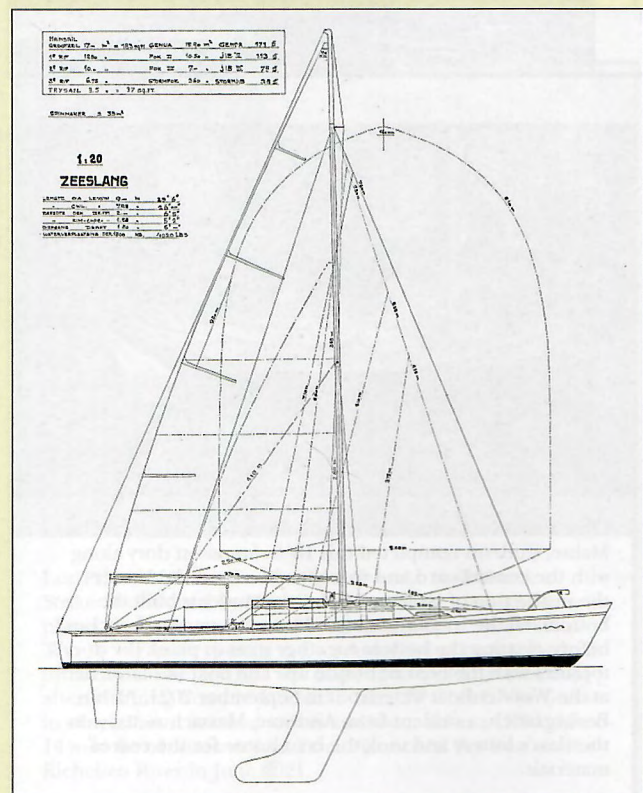
Van de Stadt was also at the forefront of the home-building movement. In 1951, he produced drawings for a hard-chined, plywood pocket cruiser, the 22' 3" Juno. The success of that design led to the slightly more seaworthy 23' 3" Primaat, which was sold as the Buccaneer in the U.K. and soon acquired a worldwide following. Over the coming years, about 40 designs were produced for home builders, ranging from 11' to 49'.

With his penchant for innovation and his belief in democratizing the sport of sailing, it's perhaps not surprising that Van de Stadt was drawn to fiberglass construction. In 1955, he designed the 14' Stern, the first fiberglass production boat in Holland, which was followed by the 24' Pioneer, closely based on the ZEESLANG. Both were enormously successful and no doubt earned him more than any of his previous designs. Nevertheless, it was clear where his heart lay.

"When the real polyester period started, the fun went out of it a bit," he said. "Every day a Stern was built, and you could set your clock to that. I didn't like that. Before then, I spent a lot of time in the workshop. I could still go there with those polyester boats, but it didn't really interest me anymore. You knew what was going to happen."

By the time Van de Stadt retired from the company in 1978, he had produced about 340 designs, accounting for 22,000 boats. He died on January 1, 1999.

—NC



**ZEESLANG, which was even more extreme than ZEEVALK, gave birth to a whole class of yachts, the Royal Cape One Design, after Bruynzeel took her home to Cape Town, South Africa.**