Soon after World War II, whife the nation was still adjusting to peace, the famous Soapbox Derby was invented and achieved great popularity. All across the country thousands of children, in partnership with their parents, built and raced "soapbox" cars. But in Florida someone said, "This is a water state; what we need is a soapbox boat!" A gentleman named Clark Mills, from Clearwater, was asked to design one. He came up with a small plywood pram which could be built by a 10 year-old with the help of a parent and about \$40. Because of his sponsors. Clark named his creation the Optimist Pram and donated plan rights to the Optimist Club of Clearwater.

The Optimist was an unqualified success. It is one of the outstanding trainers of all times and today is an International racing class, with fleets all around the world.

But children grow up and within a few years there was a sizeable demand for a boat which could also be homebuilt but would be of such performance as to bridge the gap between the Optimist Pram and the Olympic racing classes.

In 1953 Mills designed an advanced, simply constructed, frameless plywood sloop of 15'6"LOA: the Windmill. It was a boat that a 15 year-old, with or without parent, could build with non-professional tools for around \$400. It turned out that the boat had a delightful turn of speed and a responsiveness that amazed the teenagers of Clearwater. It was a boat that was really ahead of its time for it had very light displacement—only 198 pounds. Light weight, coupled to a beautifully conceived planing hull set this boat apart in an era when planing was still a novelty.

By 1957, over 200 home-built Windmills were sailing Florida waters. It was, of course, inevitable that the news would spread of this low-cost build-it-at-home introduction to high performance para-



dise. And spread it did, first to Alabama and then to Georgia, and then to the rest of the continental United States.

Another curious thing happened. For whatever reasons, the Windmill actually exceeded the design performance criteria set down by Clark Mills. So much so, that the parents who were helping their children in the building were demanding equal time sailing their creation. Today, the 'Mill is sailed competitively by as many 50 year-olds as 15 year-olds.

With such an exploding popularity it was easy to see that an organization was needed to channel all this enthusiasm. So in 1960, the Windmill Class Association was formed and the Windmill became a legitimate, official One-Design Class.

But there were doubters and antagonists to this new upstart boat claiming high performance with low cost.

These doubts and questions were answered quite well in 1963, when Yachting magazine sponsored a "One-of-a-Kind" regatta in which every one-design class was invited to compete (with a simple handicap formula to cover length, sail area, etc.). Held in Miami in over 25 knot winds, Windmill skipper Dave Posey finished third in the non-trapeze centerboard event, bested only by the 17' 3-man Thistle and the Olympic Finn.

In 1966 the event was repeated, but this time Ron Krippendorf finished first over 32 competitors in the non-spinnaker series. The mill had come of age—but the best was yet to come.

To the surprise of many (because the Windmill has no foredeck), she became an outstanding specialist in heavy weather sailing. This was brought home forcefully in 1967, when Yachting sponsored a Heavy-Weather One-of-a-Kind Regatta in San Francisco Bay. No races could be started unless the winds were 25 knots or higher.



Incredibly, in winds gusting to 40 knots, the Windmill, ably skippered by Ray Drew, slogged through high seas, dodged, capsized, and dismasted competitors, and won the regatta.

Just to prove this was no fluke, 10 years later current Windmill champion Dennis Fontaine creamed the best of the centerboard, non-trapeze contestants to take a solid first in the 1977 One-of-a-Kind Regatta.

The Windmill is a true one-design craft. Only close attention to measurements and construction can assure a quality boat which matches its sisters in all respects. Whether home-built or pro-built the Windmill is governed by a very tight set of specifications with construction tolerances which are reasonable but very finite. When completed, every boat must be measured by a certified measurer at over 80 different points before it can be certified as a Windmill. The quality of construction must also be certified; they don't want boats falling apart in heavy seas.

There are several unusual features of the Windmill that are worthy of mention. For one thing, there are no frames. The 1/4" plywood hull is constructed on a building jig with longerons forming the hull shape; the longerons are stiffened by two thwarts and the transom piece. The result is a strong but extremely lightweight hull.

The eye quickly notices that instead of a conventional centerboard the Windmill carries a high aspect ratio daggerboard. The responsiveness imparted to the boat by this pivot-point lateral resistance is incredible. She dances—and at a flick of the wrist.

Also extremely important is the full-length flotation on each side (mandatory on fiberglass versions and strongly recommended on wood versions). The Windmill is a self-rescuing boat. Any unweighted wood boat such as the Windmill will float if capsized and filled with water. It is unsinkable. However unsinkable, a normal boat filled with water will have the stability of a round log; it may even prefer the turtled position. Although it is possible to sail it away semi-submerged (no higher than a broad reach) it is aggravating and slow going. In short, to get home you must be rescued.

With a self-rescuing Windmill there is less of a problem. If the boat is dumped the crew frees the sheets and the 'Mill, with its high side flotation, lies on its side with a natural waterline only halfway up the flotation. The skipper swims over to the 5' long daggerboard and pushes gently (there is no need to jump on it). The boat rights with little water inside, which is quickly removed by the automatic bailers, if you are smart enough to have them.

Another pleasant attribute of the boat is that at 198 lbs. the Windmill can be easily lifted by two people for car-topping.

The Windmill is versatile. Fora family of four it can be a good daysailer by putting the kids on the forward thwart and the picnic cooler on the floor. For a

second honeymoon leave the kids at home and put champagne in the cooler. If you're a fisherman, put an outboard on the 3/4" ply transom.

But the Class survives and grows mainly due to the racing contingent. As a trainer for the Olympic classes and as a high performance class on its own, she is really in her element. With a sharp forebody, flat surfaces aft, and light weight, the Windmill goes on plane at about 8 knots of breeze. Only those who have experienced the exhilaration of a "screaming plane" can truly appreciate the expression.

In sum, these features have proved so popular that over 4,600 Windmill registrations have been made. Putting it all together is the Windmill Class Association who controls, supervises, and promotes all class activities. Fleets in most major sailing communities are bound by Regional (District) Commodores to the National format. Action culminates in a National or biannual International Championship. There has to be a lot of love for the people and the boat in an organization like this; otherwise your friendly author who placed 45th out of 46 boats last year wouldn't be invited back again. But, tell you what—get yourself a Windmill and I'll see you in Helsinki!

Randall H. Rice Past President Windmill Class Association

