In the 1970s when the Space Shuttle was being developed, NASA’s Shuttle prime contractor Rockwell International saw a need for a new type of personnel safety net; several such nets would protect workers building the Shuttle Orbiter, preventing a fall through an open cavity to the ground.

Rockwell turned to West Coast Netting Inc. (WCN), Cucamonga, California, an established firm with 30 years experience in developing nets for sports and circus performers or other specialized nets. Rockwell wanted something more than an ordinary net; it had to have a tensile strength twice the government standard for safety nets, and it also had to be fire resistant and ultraviolet resistant.

WCN met the requirement with a net of Hyperester™ twine, made of three strands of fiber twisted together by a company-invented sophisticated twisting machine and process that maintain precisely the same tension on each strand. The resulting twine offers higher strength and improved abrasion resistance.

The WCN nets met all specifications and went into service with Rockwell. The technology that created the Hyperester supertwine has found spinoff applications, first as an extra-efficient seine for tuna fishing, then as a capture net for law enforcement agencies. Now there is a new one: as a deck for racing catamarans.

In the past, various materials were used to support the area between a catamaran’s two hulls. In racing, netting was preferred because it allowed water to pass through and offered no solid surface that the wind could lift. As catamarans became larger and the span between the hulls wider, the nets’ ability to support the crew became a problem. The Hyperester twine net became the solution; it has been used on most of the high performance racing catamarans of recent years, including the America’s Cup Challenge boats. In the top photo is a view of the net from the mast down on a catamaran and in the bottom photo is a view looking from one hull toward the other.

Gino Morrelli of Gino Morrelli Design, one of the leading U.S. competition sailcraft designers whose boats are among the most competitive in the world, has been using Hyperester nets for the past three years. “We have had great success with these nets,” he says, “and we specify them for use on cats from 20 feet to 70 feet long. They are tough and hold up well in the continual exposure to sunlight and saltwater.”