THE DEAN OF DEADRISE

Naval architect C. Raymond Hunt's innovative thinking continues to influence boat design

By Gary Reich

At one time, making a journey in a powerboat was generally an unpleasant, slow one—especially when the wind piped up. As marine engines grew exponentially more powerful during the 1940s and '50s, powerboat hulls were not able to fully utilize the increased power. And, if you wanted to go fast in nasty conditions? Fuhgeddaboudit.

Then Charles Raymond 'Ray' Hunt, a native New Englander, came along with a tinkerer's mind and a keen understanding of the way boats move through water. The mid-century powerboat prototypes he developed led to the creation of the deep-V hull, which allowed powerboats to perform well at speed and in less-than-ideal conditions. That hull is widely recognized as one of the most important innovations in boat design history.

Perhaps one of the most influential naval architects of our time, Hunt is credited not only with creating the deep-V hull but also with designing dozens of power and sailboat hulls and conceiving numerous marine technologies that were revolutionary. His efforts continue to impact the world of boat design today, as new models coming to market showcase some of Hunt's best ideas.

Left to right: C. Raymond Hunt; *Moppie*, one of a number of deep-V hulls Hunt designed for Richard Bertram; a Grady-White Canyon 456 with Hunt DNA in its hull

Above: One of Ray Hunt's early sailboat designs was the Concordia Yawl.

FORMATIVE YEARS

Charles Raymond 'Ray' Hunt was born in 1908 in Duxbury, Massachusetts. A sharp sailor throughout his youth, Hunt in 1923 stormed the boating scene by winning the prestigious Sears Cup in Marblehead Harbor at only 15 years of age. It was the first of two times he'd take home the celebrated trophy.

"Ray was a highly respected helmsman and sailor throughout his life," says Winn Willard, who is the president of Ray Hunt Design in New Bedford, Massachusetts, where he has worked since starting as a draftsman in 1970.

This passion for sailing led to Hunt's many famous sailboat designs. His portfolio included the International 110, 210, 310, 410, 510 and 1010—a series of sleek, one-design, double-ended racers, hundreds of which were built over the years with many still racing. There was also Hunt's 12 Meter, *Easterner*, Olympic gold medal winner 5.5 Meter, *Minotaur*, and many others.

Hunt's sailboat opus, however, was the Concordia Yawl, a gorgeous, fast and seaworthy passagemaking sailboat that has won innumerable racing trophies over the years, including many Bermuda races. Hunt joined the storied Concordia Company and Waldo Howland in 1932, when he was only 24, and the yawl hit the scene in 1938. There were 103 of these boats built, 102 of which reportedly are still sailing.

In the '40s, as World War II raged across the globe, Hunt served in the Coast Guard. "Hunt's time in the Coast Guard was a formative period in his design work," Willard says. "This was around the time when he started messing around with powerboat design, which ultimately led to the development of the deep-V hull he is famous for."

The first of many deep-V prototypes came out in 1946. The Huntform 37, which in many ways resembled a lobster boat hull, was the first. Next came the 50-foot-long *Sea Blitz*, which was designed and built in 1949 and powered by a 1,500-hp Packard engine.

In 1957, about 11 years after *Sea Blitz* took to the water, Hunt worked with Dick Fisher and Bob Pierce to conceive the Boston Whaler 13. "Fisher wanted to build a super-stable boat using foam coring and fiberglass," Willard says. The 13-footer they developed was based on the Hickman Sea Sled, which had an inverted-V hull. Hunt proposed adding a hull in the middle, which led to the cathedral hull Whaler used for decades to come.

Hunt's 12-Meter design, *Easterner*, took to the water in 1958, and she was raced in the America's Cup defender trials in 1958, 1962 and 1964. But Hunt was still toying around with powerboat prototypes. "He'd been fooling around with water ballast in some of those prototype powerboats, among other things, but what he eventually came up with was a 23-foot, deep-V powerboat with a 24-degree deadrise," Willard says.

The boat was used as a tender for *Easterner* and caught the eye of famed boatbuilder Dick Bertram during the America's Cup in Newport, Rhode Island. It was a snotty day, and Hunt's powerboat easily sliced through the steep chop at speed, leaving most onlookers with their mouths agape. "Powerboats did not behave well at speed in bad weather those days," Willard says, "so it was really quite extraordinary for this boat to perform the way it did."

Hunt took Bertram on a demo ride the next day, and Bertram almost immediately asked him to design a 31-foot version he could use in Florida. The result was *Moppie*, a 31-foot, deep-V powerboat with a full-length, V-shaped hull and a 24-degree transom deadrise.

The boat would win the 160-mile 1960 Miami-Nassau Race, which took place in what was described as the roughest conditions in its history. Bertram drove *Moppie* to the lead, and by the time the crew arrived in Nassau, the boat had beat the previous record-holder by four minutes. Most of the entrants finished the next day. Bertram quickly set to work on a production model based on Moppie's hull.

Above: The Hunt Ocean 63 was designed by Ray Hunt Design.

"The hull was used as a plug for the first fiberglass Bertram," Willard says. And with that, the Bertram 31—one of the most iconic powerboats ever built—was born. It was 1960.

Just after the first *Moppie* was built, in 1961, Hunt formed C. Raymond Hunt Associates in Boston, Massachusetts, with business partner John Deknatel, who today is the chairman of the current design firm, Ray Hunt Design. "Hunt spent a lot of time trying to secure patents for the deep-V hull around that time," Willard says, "but a technicality meant the patent was not granted, and other designers soon started copying the deep-V design."

THE LEGACY LIVES ON

Willard was a young draftsman at C. Raymond Hunt Associates when he first met Hunt in 1970. "Hunt lived on a farm up in New Hampshire," Willard says. "Ray was an insufferable tinkerer. He was always messing around with something trying to make it better. Anyway, one day he drives up in his Lincoln with his dog, a water spaniel, and then comes in the office. I wasn't sure if the smell was from Ray or his dog. He was definitely an eccentric guy—a mad scientist of sorts.

"He came up to my drafting table, which had a freshly drawn design on it, and dumped this paper sack full of crap on my drawing," Willard says. "Before I know it there are sticks, leaves and seed pods on my table, and Ray's explaining to me how we should design rudders a certain way or how sail battens fit inside sails—all based on shapes found in nature. That was Ray, in a nutshell—always thinking and tinkering."

Despite the eccentricity, Willard admired Hunt for his ability to think outside the box. "He was fearless when it came to pitching new ideas," he says. "His solutions to ordinary problems were not ordinary solutions. Ray was totally unencumbered in his thinking—nothing would embarrass him. He would propose the most outrageous solutions that most designers would never consider. In a way, that's what made him such an innovative designer."

Hunt passed away in 1978 at age 70. "He smoked a lot and was a drinker, as many people were in his days," Willard says. "He didn't take very good care of himself. His body just gave up."

That same year, The Pilots' Association for the Bay and River Delaware approached the firm to design a fast pilot boat with a deep-V hull. "The pilots were looking for a boat that could travel very quickly from shore in any weather and then meet up with the larger vessels for the pilot transfer." Today, pilot boats and commercial vessels make up a significant portion of the work the firm does.

Twenty years later, the firm got into the boatbuilding business. "We'd acquired a number of different hull molds from our clients over the years, so we decided to use a 33-foot design that we had the mold for," Willard says. "We built the first Hunt 33 hull and immediately

Top: A 96-foot motoryacht concept by Ray Hunt Design
Below: Ray Hunt Design chairman John Deknatel (l) and president Winn Willard (r)

had three orders. That was the beginning of Hunt Yachts; we were in the boatbuilding business."

Hunt Yachts built many successful and smart-looking boats over the next 15 years—everything from large, offshore motoryachts, to smaller, sharp-looking day-boats and center consoles. Hunt Yachts was acquired by Hinckley Yachts in 2013.

The Ray Hunt Design offices today are located in New Bedford, Massachusetts. The firm has served a vibrant and varied client list including Grady-White, Southport Boats, Regal Boats, Cruisers Yachts, Four Winns, Camper & Nicholsons, Hunt Yachts and Hinckley. "We've got a lot of designs out on the water, and our commercial-based business is pretty robust at the moment," Willard says.

"All of these boats use a variation of the deep-V hull that Hunt pioneered in the '40s," Willard says, "and we continue to tweak and improve the deep-V with every boat we design."

A current trend the firm is trying to address is why large motoryacht builders (boats between about 85 to 150 feet LOA) have all but disappeared in the United States. "Much of that business has gone to Europe and Asia," Willard says. "We have brokers with clients who want an American motoryacht with classic lines who are buying old boats and fixing them up versus buying a new boat. Speed is also an issue. Owners want to cruise around 16 knots, and a lot of the round-bilged boats from foreign builders simply can't do that."

So, recently, the firm showed off three traditionally styled motoryacht designs ranging between 85 and 140 feet that they hope will provide some inspiration for an American client or builder. "We thought about this a lot and decided to focus on three designs with tuned-up, V-bottom, hard-chined hulls and classic good looks," Willard says. "Each one of these designs has a speed-to-length ratio between 1.5 and 2.0 to 1. That's virtually impossible to do with a round-bottomed boat, which is what some motoryacht builders are trying to do. The motoryachts we designed are far more efficient in many ways."

Willard is grateful and humbled by the legacy Hunt left behind and feels it drives what they do at the firm today. "How the firm survived for all those years when most designers are lucky to go ten, maybe twenty years, is, I think, because of the diversity of designs that we have done. That's a legacy from Ray," he says. "And then there were the custom yachts. We did work worldwide. Many patrol-boat and pilot boat projects. Today, we still have a good mix with a foot in both the recreational and commercial markets."