

The Deep-V Refined



Mark Ellis's powerboat designs owe much of their success to his experience in the Hunt design office, his affinity for classic aesthetics, and his good business sense.

by Robert Mazza

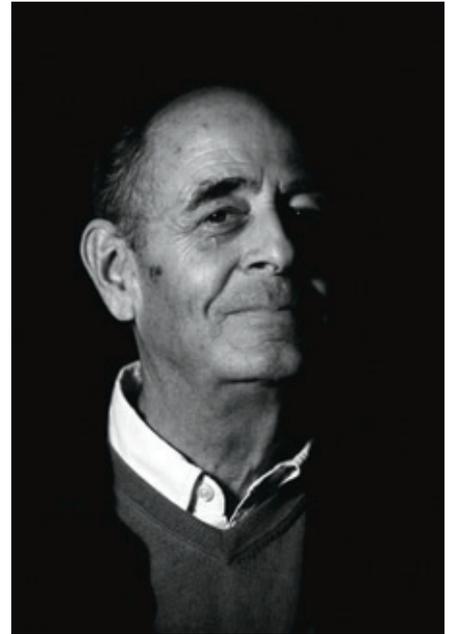
**Photographs courtesy of
Mark Ellis Design**

Above—Mark Ellis designed the Blue Seas 36 (now the Bluestar 36.6) in 2002; it and the earlier Blue Seas 29 (now the Bluestar 29.9) are developments of several custom designs and the Legacy series of Downeast-style express cruisers. The 36.6 (11.2m) is still available from Bruckmann Yachts in Ontario, Canada.

Yacht designer Mark Ellis is now almost as well known for his powerboat designs as for the remarkably successful sailboat designs that define his early career—the Nonsuch line of wishbone-rigged catboats, and the Niagara line of cruising cutters from the 1970s and early '80s. During the next decade, Ellis capitalized on the success of his Limestone brand of deep-V, Canadian-built, production powerboats to develop a new breed of power cruisers, featuring ever increasingly wide chine flats for improved lower-speed planing performance.

A talented designer, Ellis, now 68, has an uncanny sense of future trends in the boating industry: in the late '80s, well before the tradition-inspired

express cruiser became a common type, Ellis was already developing his line of Pilot power cruisers. Indeed, the client who already owned a classic round-bilge lobster yacht commissioned the preliminary Pilot design, a 46' (14m) vessel that was never built. The marriage of classic style and modern hull form was not new to Ellis. For his Nonsuch, he played off classic catboat aesthetics and applied a modern fin keel and spade rudder underbody to create a new hybrid of classic aesthetics with modern performance. In designing the Pilot line of powerboats, he incorporated traditional commuter yacht aesthetics and an underbody influenced by modern deep-V configurations. Combined with lightweight cored composite



Above—Mark Ellis, 68, hung out his own shingle in 1974, after employment at a remarkable series of design studios that included Phillip Rhodes, Ted Hood, C. Raymond Hunt, and C&C Yachts.

Left—Perhaps Ellis's most successful designs, in terms of numbers built, are the cat-rigged Nonsuch line, built by Hinterhoeller Yachts.

construction, those attributes established the original Pilot 39 (11.9m) as a new power cruiser concept that possessed classic good looks and improved higher-speed performance. It is not surprising that these boats appealed to yachtsmen brought up on classic sailboat aesthetics.

Designed primarily as a spray deflector and possibly as an upper lift strip—Ellis's preferred term for the three longitudinal flats that run aft from the bow—a narrow chine flat is meant to help get the boat on to a plane and provide control in banked turns. The purpose of Ellis's greatly enlarged chine flat is to push the hull to get onto a plane quicker at a much lower speed and horsepower, without first depressing its back end. It also

provides more maneuverability and stability in a following sea.

As a point of full disclosure, it should be mentioned that I worked with Ellis during the early days of C&C Yachts in the early 1970s, and worked directly for him between 1984 and 1991 at Mark Ellis Design in Bronte, Ontario, Canada. (For a complete history of C&C Yachts, see *Professional BoatBuilder* No. 92.)

The Traditional Deep-V

Ellis's powerboat-design philosophy owes a lot to his early experience working with John Deknatel at C. Raymond Hunt Associates (New Bedford, Massachusetts), while attending Boston University. Even Ellis admits that his classic deep-Vs with



Left—With the *Limestone 24* (23'6"/7.2m), built by Medeiros Boat Works in Ontario, Ellis began to experiment with increasingly wide chine flats on deep-V hullforms.

Below left—In this photo dated April 22, 1994, Ellis sea-trials the prototype of the *Limestone 17* (5.2m), elated that it planed at just 9 knots.



their “chine out” configurations (out of the water all the way aft) are more reminiscent of the original Hunt designs than are current deep-V configurations, which are almost always “chine in” (immersed aft). Ellis’s designs tend to be wider than the norm. For example, the *Limestone 24*—actually 23' 6" (7.2m)—has an overall beam of 9' 2" (2.8m). Because of this additional beam, Ellis’s deep-V configurations are inherently more stable than narrower hulls, which are often designed for 8'/2.4m-road transportation restrictions. On those hulls, the chine-in configuration is still desirable to achieve the required static hullform stability.

Ellis is also a strong believer in the radiused center section, a feature that makes for a well-behaved deep-V at high speed. In Ellis’s words, “As you progress from the sharper forward

Development of the Ellis Aesthetic

Brought up in Watertown in Upstate New York, Mark Ellis spent summers mucking around in boats at the family cottage in the Thousand Islands of the upper St. Lawrence River near Kingston, Ontario. At a young age, he was exposed to the classic good looks of Six-Meters racing on nearby Chaumont Bay. At the time of his father’s death in 1958, young Mark Ellis was already following the return of *America’s* Cup racing in Newport, Rhode Island, in 12-Meters. His design philosophy tended toward the classic rather than the modern. In the 8th grade, when he had to prepare a “career book,” his was based on yacht design. In 1963 he submitted an entry to a *Yachting* magazine design contest: a three-man racing sailboat. Not surprising, says Ellis, “Mine looked an awful lot

like a 5.5-Meter, since I had been sailing on one that summer!”

During summers, after a short stint at Syracuse University, Ellis worked briefly at the Derecktor yard (Mamaroneck, New York). He recalls fearing for his life as Bob Derecktor had him greasing the sheaves at the top of the famous crane high above the yard as boats were weighed for their CCA ratings. He then took a job at the Minneford Yacht Yard (City Island, New York) under Paul Coble (see “A Man for All Trades,” *Professional BoatBuilder* No. 88), building a wooden Sparkman & Stephens-designed motorsailer. At that time, the Minneford yard was staffed by a lot of people from the old Nevins yard, and all possessed extraordinary abilities in wooden yacht construction. Under Coble’s tutelage Ellis joined every gang in

the yard. At a time when his contemporaries were acquiring formal engineering education in naval architecture at schools such as the University of Michigan, Webb Institute, Massachusetts Institute of Technology, or even Westlawn, Ellis obtained a degree in business administration from Boston University while working part time in Cambridge for the C. Raymond Hunt design office, then, as now, managed by John Deknatel. Although the Hunt office had previously produced sailing designs under Deknatel’s leadership, while Ellis was there all the projects were power.

Upon graduation from BU in 1968, Ellis audaciously knocked on the door of Philip Rhodes at 40th and Lexington in New York City, with a letter of introduction from a mutual friend—and got a job. His timing

sections into the centerline radius, you transition through this cone shape.” In Ellis’s opinion, the often-seen sharp V at the centerline intersection of the port and starboard bottom panels on a deep-V hull bottom are the reason many deep-V hulls flop from one side to the other. He says a true deep-V needs a generous centerline radius in section to maintain running stability.

Ellis prefers to locate an engine midships. He says this results in a more seakindly ride in rough conditions, because the engine weight represents a large portion of the overall displacement and influences the position of the longitudinal center of gravity. Medeiros Boat Works (Oakville, Ontario, Canada) offers the Ellis-designed Limestone 24 with the engine either aft or midships. Comparing the two, Ellis has observed that the aft-engine boat will get on a plane faster and run at a higher speed, but the driver will be forced to throttle back sooner in rough weather to make the ride more comfortable.

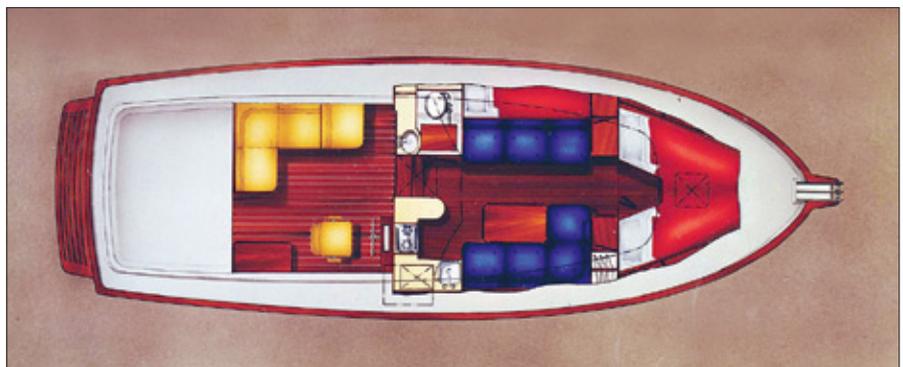
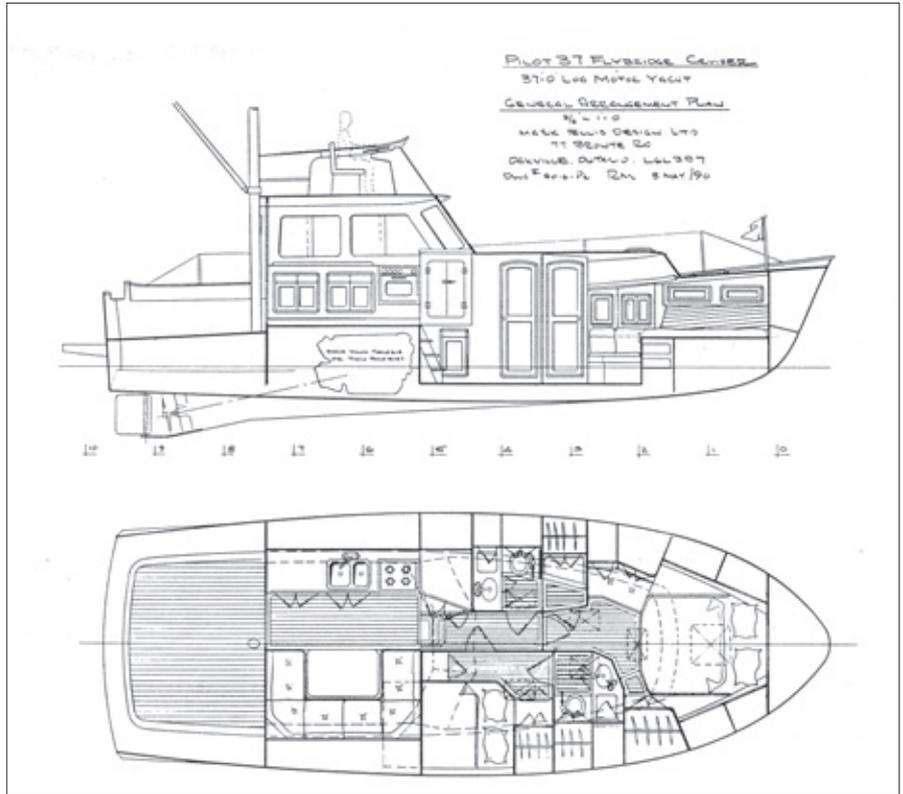
In Ellis’s judgment, a classic deep-V configuration is the best hullform for running at speed in rough weather. To a large extent, this is due to the fine entry, which transitions to a constant deadrise of between 20° and 25°. Not unlike dihedral on aircraft wings, the V hullform provides increased directional and running stability, with the deep-Vs taking this to the logical extreme.

Transition From Deep-V to Wide Chine Flats

Early on, Ellis wanted to marry the excellent seakeeping qualities of the forward section of a deep-V with improved lower-speed performance. He wanted to know how to reduce power demand without sacrificing handling and directional stability. Ellis initially confronted this challenge while refining the Pilot 37 (11.3m)

preliminary drawings. Required to be a single-engine, fuel-efficient cruising boat, the Pilot 37 needed to provide better performance than traditional trawlers. “If you run the boat constantly over 20 knots, deep-Vs make a lot of sense,” says Ellis, “but at speeds in the teens, they *don’t* make sense.” At those slower speeds, the classic deep-V will often squat. “The obvious thing is to generate more lift at the

back end with ‘super lift strips’ in the form of wide chine flats, and keep the hull at a reasonable running angle,” he says. The Pilot 37 preliminary drawings appeared in the February 1992 *Yachting* magazine in a design review by Chuck Paine. Incorporated into the prototype Pilot 39, the wide chine flats remained an important feature of the Legacy 40 and 42, built by Freedom Yachts (Middletown,



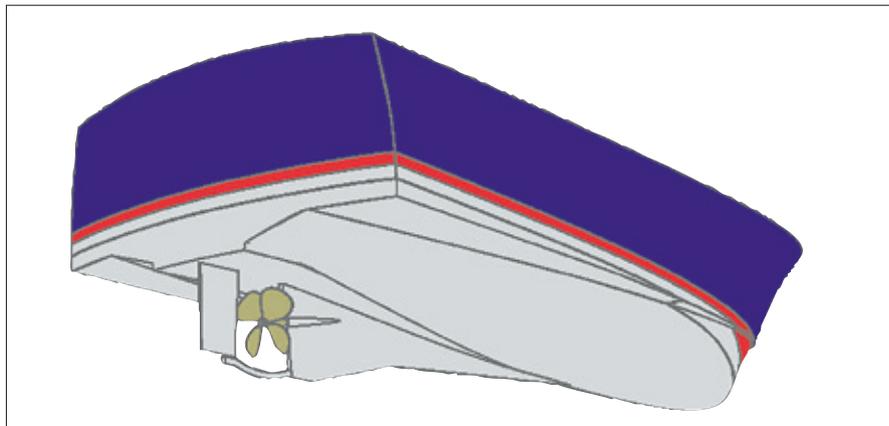
Top—Ellis not only incorporated wide chine flats in his smaller deep-V designs, but also in larger cruisers, such as the preliminary custom Pilot 37 (11.3m), which Chuck Paine reviewed in *Yachting* magazine in 1992.

Right—After this version of the Pilot 37, with no flybridge, the form evolved into the Legacy express cruiser built by Freedom Yachts.

The perspective drawing of the bottom of the Legacy 32 (9.8m) clearly shows how Ellis increases the chine flats as they move aft, and incorporated the skeg and propeller pocket.

Rhode Island), which bought the Pilot tooling.

Because these models were Ellis's first iterations of the concept, there was nothing extreme about his approach, the widest chine flat being about 12" (30cm). With the Limestone 17 (5.2m) designed for Medeiros Boat Works, that changed. This boat was more radical, with 26"-wide (66cm) chine flats on a boat of 8' beam. To better evaluate and prove the concept before committing to tooling, Ellis convinced Al Medeiros to build a plug for the 17, which they ballasted to designed displacement and ran at speed. In a smaller and lighter boat than the Pilot and Legacy designs, its forward sections were slightly flatter so the hull would not dig in at the anticipated 35 mph (30.4 knots) running speed. The extreme chine flat configuration proved very successful, and later Ellis emulated it in his Holby 24 (7.3m) design for Holby Marine (Bristol, Rhode Island). In the next



was excellent, since Rhode's son Brody and Jim McCurdy had just left the office to set up their own design firm, McCurdy & Rhodes. The 23-year-old Ellis was hired at \$140 a month and soon was winging his way to Germany to supervise the construction of three aluminum ketches—two 67' (20m) and one 98' (30m). Back then, says Ellis, the designer was the arbiter between the builder and the customer, and the design office often purchased a good part of the hardware for the boat and shared the commission with the customer.

Married and about to become a father for the first time, Ellis called on the Ted Hood design office (Marblehead, Massachusetts), where he was soon designing rigs and accommodation plans under the watchful eyes of Walter Wales and Dieter Empecher. The previous year, he had written to designer George Cuthbertson. The response finally caught up to Ellis at his new home

in Marblehead, offering him a design position with the rapidly expanding C&C design office (Port Credit, Ontario). So in 1970, Ellis drove across the Canadian border to start a yacht design career that would last more than 40 years.

At C&C Yachts, he utilized the skills he learned at Hood to design the rig details for *Sorcery*, the first C&C 61 (18.6m), and for the C&C 30 (9.1m), and C&C 43 (13.1m), while also doing early International Offshore Rule (IOR) rating calculations. Ellis soon found himself concentrating more on the business aspects of the boating industry, working under C&C Custom Shop builder Erich Bruckmann as the custom-boat sales manager.

In 1974, due to some expressed differences in opinion with regard to the management of C&C Yachts, Ellis went out on his own, and made the decision to hang out his own shingle as Mark Ellis Design, in Oakville, Ontario. Even though his design

background is traditional, and he adheres to hand-drawn lines and drawings, his office has worked with computer-aided design since the early '90s. He utilizes Fast Yacht and other performance-prediction programs through the design office of Steve Killing, another C&C alumnus. In 2011 he moved his home and his office to Essex, Connecticut.

Designs that combined traditional approaches with modern developments and technology are the hallmark of Mark Ellis Design, and the results, if not numerous, are nonetheless impressive. Ellis is proud of the fact that he has never had a "clunker." Granted, some designs were more monetarily rewarding than others, but all have worked successfully as designed, and all have met their owners' requirements and expectations, none more so that the innovative wide-chine-flat classics of the Pilot and Legacy lines of single- and twin-engine power cruisers.

—Rob Mazza

project, the Legacy 34 (10.4m), the chines were scaled back but still were wider than those introduced in the original 39' hull.

"It's a matter of judgment with regard to the area and angle in profile, as to how that's going to work out," says Ellis. "The Pilot 39 was pretty conservative with flats and down angles."

[It should be noted that Ellis is not the only designer incorporating wide chine flats. For instance, the Dutch aluminum pilot boat and sportfishing boat builder Striker Boats (www.strikerboats.nl) also incorporates its own configuration in what it calls the pentapolymeric hullform, developed in the 1950s—Ed.]

Single-Engine Deep-Vs

The Tadenac 22, now the Limestone 22 (6.7m), was Ellis's first attempt at a single-inboard-engine deep-V. In order to mount an inboard propeller and shaft on centerline in a deep-V, the prop must be brought into the hull by means of a pronounced propeller pocket. Although the boat performed reasonably well (maneuverability in reverse was virtually nonexistent), there was no question that the transom-mounted sterndrive on the unaltered hullform far outperformed the inboard configurations with pockets. Pockets on twin engines have less of an impact on performance due to their smaller relative size. Pockets are still required on the single-engine inboard, wide-chine flat configuration; but because the hull centerline does not have the virtually horizontal run from amidships aft—as on classic deep-Vs—and instead tends to rise as it comes aft from amidships, a shallower pocket depth is required to achieve the same or less draft and shaft angle. However, with the increased chine flat area and the loss of the deep-V deadrise aft, directional stability becomes a concern.



The Limestone 22 (6.7m), originally the Tadenac 22, was Ellis's first attempt at designing a single-engine deep-V; the inboard engine required a pronounced propeller pocket that affected performance.

Consequently, Ellis incorporated a significant centerline skeg, even on twin-engine inboard installations, which also acts to protect the props in the event of grounding.

Since budgets did not permit tank-testing, computer modeling, or preproduction prototypes, most of Ellis's design theories such as the wide chine and skeg ideas could not be proven before production. So when the client for the first Pilot 39 questioned Ellis's assumptions on performance, especially the ability of a deep-V configuration to get up on a plane with a single engine, his reply was, "Come, let's step out on the edge together!"

In early 1994, Bruckmann Yachts (Oakville, Ontario, Canada) started construction, but work soon fell behind schedule. Realizing that the boat would not make its planned debut at the Newport (Rhode Island) International Boat Show, Ellis convinced Mark Bruckmann to launch the boat in a partially finished state and ballast it at full designed displacement so they could run it at speed to confirm the design and performance parameters. Ellis knew that there would be disbelievers and skeptics. If he could not have the first finished Pilot 39 at Newport, he could still prove the concept with photos and performance data. Hull Number One performed as predicted, easily and quickly getting on to a plane with only a single inboard engine.

It is worth noting that the design of a deep-V hullform intended to operate with a single conventional inboard engine installation is fraught with challenges. It is no coincidence that the early deep-V designs with inboards usually employed twin-engine installations to move the props off centerline and higher up on the deadrise of each hull side to allow a shallower prop draft. It was not until the development of the sterndrive that a deep-V could be powered and maneuvered successfully by a single engine. This was the approach

that Ellis took on the original Limestone 24.

In building the Ellis-designed B-28 (8.5m), Bruckmann installed off-center twin inboard engines with propeller pockets. However, Ellis felt strongly that the deep-V configuration, when combined with wide chine flats, would allow this hullform to easily get on to a plane with a conventional single inboard engine. Due to the centerline location, he specified a skeg to allow the installation of the shaftlog, to provide protection for the prop, and to hold the lower rudder bearing. The boat also had a pronounced propeller pocket cut into the hull on centerline aft of the skeg to allow the prop to be raised higher, reducing the shaft angle and overall draft. It was the widening of the chine flats and the incorporation of a skeg and pocket that made it possible for this single engine inboard deep-V to quickly and easily get up on a plane at lower speeds and reduced horsepower.

When twin-pod configurations (such as the Volvo IPS and Mercury Marine Zeus systems) were being considered in the Legacy line (see below), Ellis eliminated the centerline skeg, but only after running a pod-driven sportfisherman into the Fort Lauderdale inlet in rough weather to confirm in his own mind that the pods provided enough lateral plane.

Series Production

Ellis was not the only one making the transition from sail to power. While introducing the Pilot 39 concept at the 1994 Newport International Boat Show, Ellis renewed his acquaintance with Paul Petronello of Freedom Yachts. The two had sailed together on the C&C 43 (13m) *Rampage* out of Rochester, New York, during Ellis's C&C days. Petronello was looking to broaden Freedom's model lines with a powerboat that would complement the looks of the Freedom sailboats. Because Ellis owned the rights to the design, and with Mark Bruckmann's agreement, the Pilot 39 quickly became the Legacy 40 (12.2m) and production was started at Freedom's plant in Middletown, Rhode Island. The Ellis-designed Legacy 34 soon followed, as did the Legacy 42 (a stretched version of the 40), and the Bill Langan-designed Legacy 52 (16m). In February 2010, Tartan



The custom Abaco 40 (12.2m) is one of Ellis's most recent projects, currently in build at Bruckmann Yachts.



the Blue Seas 29 (8.8m), followed by the Blue Seas 34 (10.4m). Both models continue to be built by Bruckmann.

The zenith of Ellis's work in powerboats is the Bruckmann-built custom 55' (17m) *Ventana* designed for John Labatt. This boat most closely resembles the 1988 preliminary design that initiated the wide-chine-flat concept, and it is the largest example to date. Designed for the business partner of the owner of the first Pilot 39, this boat represents everything that has made Mark Ellis so successful: exceptional design concept, a strong business sense, and a close personal relationship with the client.

Most of Ellis's successful projects were brought to him by innovative individual clients. The Nonsuch was commissioned by well-known Canadian yachtsman Gordon Fisher; the Limestone by Fredrik S. Eaton

Yachts (Fairport Harbor, Ohio) acquired Legacy Yachts, which had bought the C&C brand in 1996.

Along with developing the Limestone line, Ellis designed the twin-engine, deep-V B-28 for production

by Bruckmann, who built several of these boats for private customers as well as for law enforcement. Eventually, dealer Grove Ely incorporated the design into its line of Blue Seas powerboats. The B-28 became



Perhaps Ellis's most elegant motor yacht is the 56' (17m) Ventana, built by Bruckmann Yachts and launched in 2002.



*The Bruckmann 50 (15.2m) pilothouse on starboard and port tacks, making 11.5 knots, **above**. The design brief was to improve (remove) the stigma of motorsailers by offering better sailing performance combined with capacious accommodations.*

(not to be confused with his son Fredrik D. Eaton of Object Two Skiffworks and C-Class catamaran fame; see “Object Lesson,” PBB No. 134). Also in that vein, the 42’ (12.8m) North east 400 motorsailer, eventually built as a production boat by Cabo Rico Yachts in Costa Rica, was initiated by Ellis’s friend Jim Eastand, a long-time Nonsuch dealer in Essex,



Predecessor of the Bruckmann 50 was the Northeast 400 (42'/12.8m), conceived by Jim Eastland of Eastland Yachts in Essex, Connecticut, as an improvement of the motorsailer genre.

Connecticut. Eastland thought that the old concept of a motorsailer was ready for rebirth, and suggested that a transitional type between pure sail and pure power would suit a new market niche. With motorsailers, of

course, the compromise is they never sail as well as sailboats or power as well as powerboats. Basing the Northeast 400 hull lines on a modification of the Nonsuch with a flatter run to improve performance under

power, Ellis was able to provide a displacement, trawler-type power configuration with excellent performance under power and quite acceptable performance under sail, taking into account the only slightly reduced sail-plan and shoal draft always associated with this type. After proving the concept in the 400, he introduced a larger 50' (15m) model in 2005.

The Business of Yacht Design

Mark Ellis maintains that successful yacht design involves equal parts good design knowledge and design sense, and the right business structure and principals. During his years at the C&C custom shop, Ellis developed an excellent rapport with his clients, who were among the elite of the Canadian and U.S. yachting establishment—and who were more than willing to help when he started his new solo design venture in 1974. Clients who had sailed SORCs, Bermuda Races, and local club races came forward to commission first the Aurora 40, and then the famous Nonsuch catboat. Working



In addition to the popular Nonsuch line of catboats, Hinterhoeller Yachts built the Niagara 35 (10.7m) and Niagara 42 (12.8m) to Ellis designs; the smaller model, introduced in 1978, is shown here.

on spec, Ellis designed and promoted the Niagara 35, built by Hinterhoeller Yachts after George Hinterhoeller, too, parted company with C&C to go out on his own.

When it came to powerboats, it was Ellis's relationship with Fredrik S. Eaton that determined the direction of his design career. Ellis and Eaton had known each other since Eaton's

involvement in Canada's Cup challenges and defenses through the Royal Canadian Yacht Club and C&C Yachts. Eaton bought one of the early Nonsuch 30s. In 1985, when the two men were having drinks on Ellis's Nonsuch 30 *Lotus* at the RCYC, Eaton said he was looking for a new powerboat to replace his aging Bertram 25, which he kept at his cottage on

Georgian Bay. He was looking for something slightly smaller than the Bertram, single engine, with improved performance, but of similar design aesthetics, and still capable of handling rough water. Eaton called Ellis the next morning to confirm that this was a real project, not just cocktail conversation, and the Limestone 24 was soon born.

Recalling his own design experience at the Hunt office, and remembering the excellent performance of one of the first Bertram 31s designed by Ray Hunt on Lake Ontario, Ellis knew there was no question that this new 24-footer would be a deep-V configuration. It would also be far more East Coast in its aesthetics than were most mass-produced powerboats in cottage country at that time.

Volunteer is a custom 46' (14m) design for Fredrik S. Eaton that anticipated the resurgence of the gentleman's daysailer concept popularized by Hinckley Yachts and Morris Yachts. The builder was Mark Bruckmann.

In a land of outboards and bowriders, the Limestone 24 would be a distinct departure from shallow-V hullforms, reverse sheers, and highly swept windshields.

Following on the Nonsuch project, Ellis contracted with the new Hinterhoeller shop to build the first Limestone. Ellis overcame Hinterhoeller's early misgivings about the project by assuring him his client would finance the tooling and buy the first boat. Once again, that rare combination of good design sense, strong business practice, and excellent social contacts worked for Ellis.

The typical Ellis design contract has been an advantage on the business side. It stipulates that the ownership of the design always resides with the designer, with the builder having



the right to utilize that design upon the agreement to pay royalties on all hulls produced. Indeed, the preliminary design has already been paid for by the client, with that fee being applied to the final design contract once that is entered into, and the cost of final design is funded by the builder in the form of royalties in advance. So, before the boat goes into production, the financial relationship between the client, designer, and builder is always well defined.

In addition, the Ellis design office often holds the right to the product name, be it Nonsuch, Niagara, or Limestone, and the office is heavily involved in the marketing and promotion of the product. It also has the right to act as a dealer for those boats as well, and the builder's ads for the boat must specify that it is a Mark Ellis design. This is far from the way many naval architects and yacht designers operate, selling lines plan only, and seldom putting themselves into a

position to negotiate royalty payments or even be associated with the design in advertising or promotion. In this respect, Ellis enjoys the old advantage of the designer and client initiating the project and shopping it to a builder, as opposed to a builder or dealer initiating the project and then shopping for a designer and then customers. He who initiates the project and establishes financing determines who controls the project.

In hindsight, Ellis says his only regret is that he was not even more involved in the marketing of the boats he designed. However, he has been very successful at creating a concept and then taking it to production and construction. In fact, he has built his career on it.

The Tadenac 22 (6.7m) for Adam Zimmerman, the Osprey 22 for Jay Gould, and the B-28 evolved in the same way. Ian Bruce's Performance Sail Craft (builder of the Laser and the Byte) built the Tadenac; Ontario Yachts, builder of the Sonar and Etchells one-design racing sailboats, took on the Osprey; and Bruckmann

Yachts built the 28, which later evolved into the Blue Star 29.9.

Ellis had already designed the Medeiros 20 for Medeiros Boat Works, so when Hinterhoeller and Performance Sail Craft went under in the 1990s, thanks to Ellis's ownership of the design and thus control of the tooling and the Limestone trade name, these two designs were rolled into the Medeiros production and all renamed and remarketed as the Limestone 20 (6.1m), 22, and 24. By retaining ownership of the design, Ellis was able to rescue his projects from faltering builders and continue production with other shops.

Legacy

In the early 1990s, the boating industry suffered the devastating effects of a combination of the luxury tax, a severe recession, and in Canada, the results of the North American Free Trade Agreement (NAFTA). These influences slowed the development of Ellis's powerboat designs, but industry did not slow its return to more traditional aesthetics.

Future yachting historians can argue about whether Ellis planted the seed of this change, or whether there was simultaneous development of this trend by several independent sources. The fact remains that when the concept of the classic cruiser was developed in Ellis's Bronte Road office, there were no other production builders manufacturing this product, and no other designers promoting it. But after *Yachting* magazine published the Pilot 37 preliminary drawings in February 1992, a number of similar models appeared from multiple manufacturers. Once again, as he was with his earlier Nonsuch design or the classic daysailer Volunteer, Ellis was ahead of the curve in developing new boating niche markets. **PBB**

About the Author: *Rob Mazza is a naval architect and professional engineer with a long design background with C&C Yachts, Mark Ellis Design, and Hunter Marine. Mazza has recently been involved with structural core materials with ATC Chemicals (Corecell) and Baltek.*