

SUNSATION

CLASS ACTION

On the water or at the dock, the 32 Innovator is a high-tech, visually stunning head-turner

by Mike Burns

Main photo: beauty on the prow. Insets, clockwise from opposite page: our test boat was equipped with twin Mercury Racing HP500 EFI engines; the dash has the majority of the Gaffrig by Livorsi gauges mounted ahead of the co-pilot, in true race boat fashion; PRA test writer Mike Burns at the helm; innovative engineering on this new Sunsation includes the hinged dash which, at the touch of a button, automatically opens to reveal the cabin entrance, and the aerodynamically sculpted engine hatch cover. For quick access, a single ram raises both the hatch and the rear bench seat.

Buying the right performance boat – or any boat, for that matter – involves making a number of important decisions. What's more, the perfect poker run entry must have a special "look at me!" appeal. Which definitely applies to Sunsation's high-tech, visually dynamic Innovator 32.

Not only is it guaranteed to turn heads - on the water or docked – this new Sunsation is a solidly built, well appointed boat that delivers exhilarating performance.

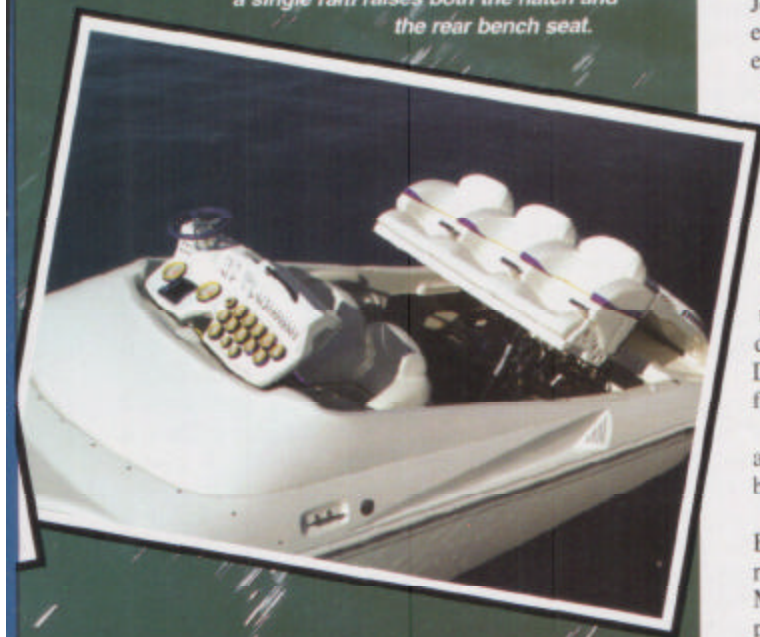
Founded in Algonac, Michigan in 1982, by brothers Wayne and Joe Schaldenbrand, Sunsation Powerboats' first "factory" consisted of a 21x21-foot garage. Discovering at this early stage that several performance boats they had purchased promised more than they delivered, they began their quest for quality.

They soon found themselves constantly strengthening, retooling and repairing boats they paid for with their hard-earned money. Shortly after, they figured that they would be better off developing their own high quality product. This led to the birth of the 16-foot Sunburn. It proved to be a good move, and they quickly sold 13 of them.

In 1985, they moved into a new facility and began manufacturing the 24-foot Rocket. Sales continued to increase and production expanded. In 1992, production began on the 32-foot Dominator – the model that eventually became the inspiration for the 32 Innovator.

Today, the company builds four high quality models in the 28 and 32 foot range. There is also a new "flagship" on the drawing board - the SS396, which will be in production in the near future.

I recently hooked up with Wayne at the Miami International Boat Show. He explained that the 32 Innovator came about as a result of several key players in the industry including Michael McLeod, founder of the company that manufactures the highly praised seating systems found in many of today's performance and race boats.





The cabin features a U-shaped lounge, and a seven-foot V-berth forward; close-up of raised dash panels that enable access to the cabin.

McLeod had been working closely with the Sunsation Factory 2 race team that has been running the APBA Offshore circuit in a 32 Dominator. This close association gave McLeod the vision of developing a new interior setup that offered the feel of a true racing machine, yet had a practical application as a poker runner.

In an offshore racer, side-by-side seating is a must. To accommodate this setup, the cockpit sole was lowered by 3 inches and the stand-up bolsters were moved 10 inches forward. To withstand the extraordinary forces exerted on these bolsters, particularly in high speed turns, the base of the bolster system runs clear through the cockpit liner and is securely fastened to the lower portion of the hull – a design concept inherited from the race team.

In true race boat fashion, the Innovator's dash has the majority of the Gaffrig by Livorsi gauges mounted ahead of the copilot. The captain has only two large tachs and a centrally mounted GPS unit to contend with. A second GPS unit with a large analog display is predominately mounted amidships, above the dash, for all to see. Rocker switches for the drives and the Kiekhaefer trim tabs are within easy reach.

A unique, and very well thought-out feature is the placement of a small discharge vent on the upper part of the dash that is hooked into the bilge blower system. With the blower on, you will be quickly made aware of any gas fumes that may be present in the bilge without having to stick your head in the engine compartment.

Gaffrig by Livorsi engine controls are centrally mounted between the bolsters so the copilot can easily take over the throttle duties. Aft of the controls, unique aircraft style ignition switches are just another example of what an experienced design team can accomplish.

Definitely one of the head-turning design elements on the Innovator is the fact that, by simply pushing a button, two sections of the dash raise to reveal spa-

acious accommodations below.

To deal with the relatively complex engineering issue of the hinged dash, Sunsation enlisted the expertise of Dave Moriarty. With a background in developing concept cars for the Big Three automakers, Moriarty was certainly up to the challenge.

As the project manager for the Innovator venture, his first hurdle was to develop a series of integral moving parts able to withstand the constant beating that a performance boat often faces. Not only did the dash have to hinge upward, adjustable footrests had to be lowered and two panels had to be designed to slide outboard for ease of access to below. Linear actuators, which move the four sections, were manufactured in-house and engineered to withstand harsh marine elements.

The components are constructed of stainless steel and billet aluminum, and the linear bearings are sealed and require no lubrication. Other hardware, such as hinges, are also stainless steel with a powdercoat finish. For added durability, nylon has been incorporated throughout to avoid any metal-to-metal contact on moving components.

The second challenge Moriarty faced was how to control the intricate workings. A state-of-the-art computer system was developed to handle the task. In fact, all of the switchable functions on board are fed through a multiplexing system from Carling Technologies, which are basically two onboard computers located under the rear bench seat. One computer is dedicated to controlling the dash, while the other handles the remaining 12-volt functions. (Footrests are mounted on linear bearings and 1" precision shafting).

Preprogrammed settings on the dash computer incorporate built-in safety features. For example, only the passenger side of the dash can be opened or closed with the engine ignition on; the driver's side remains locked in the closed position. Above 3,000 rpm, the entire dash is

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locked out. Should something obstruct any of the moving components, the computer will sense an amperage increase on the actuator motor and reverse its direction.

The remote keyless entry is a great option to have. We enjoyed just standing on the dock, opening and closing the dash, and watching the expressions on the faces of the people as they walked by!

Situated throughout the boat are nine backlit keypads that control the other 12-volt functions dedicated to the second onboard computer. Settings can be customized, too. For example, if you depress the blower button once, it stays on indefinitely. Pushing and holding the button for three seconds starts the countdown timer, which automatically turns off after 10 minutes. Cockpit courtesy lighting was also set up in a similar fashion. Interior lighting can be dimmed and set to desired lighting levels throughout. A non-volatile memory ensures that all of the settings remain stored, even if the computer's dedicated battery is disconnected.

Another advantage of this multiplexing system is that a single wire can handle several different functions, which means that less routing of wires is needed. In fact, the wires on the Innovator weigh less than half that of a conventionally rigged boat.

Whereas the 32 Dominator may have inspired the 32 Innovator, the latter's hull is newly designed by Michael Peters. It has a LOA of 31 feet, 7 inches, including an integrated swim platform, and features a beam of 97 inches. The true deep-V, meaning no pad, has 24 degrees of deadrise at the transom and a 14-degree transom angle.

Recently, at Lake X, the boat weighed in at 8350 pounds. This was with a 100-pound Coast Guard package, and 200 pounds of fuel on board. A more stripped-down version of the boat (i.e., no air conditioning, etc.) would weigh in at around 7500 pounds.

The hull design incorporates two steps placed six feet and eleven feet from the transom. The first step has a height of 3/4-inch, and the aft step is 1 inch high. A pair of lifting strakes run down either side of the hull with the inner strakes ending after the first step, while the outer strake continues all the way aft. For added strength and rigidity, these strakes are filled with a poly bond putty during the construction process.

Sunsation boats are manufactured under the direct supervision of Wayne Schaldenbrand. The lamination schedule

SUNSATION 32 INNOVATOR

is impressive and available in full detail from the company. Hull and deck are cored with an aircraft grade 3/4-inch Baltek AL 600 end grain balsa core and the hull sides are cored with a 1/2-inch of the same material.

To achieve the desired stringer length, some manufacturers butt pieces of wood together. It works, but flexing can occur. To reduce this risk, SunSation only uses a long single piece of 2" x 12" pine that runs from the transom all the way forward. To ensure a good bonding quality and to reduce the risk of warping, each piece is checked for moisture content. Any piece with a moisture reading over 13 percent is sent to a kiln for further drying.

Prior to installation of each stringer, the radius is put on, it's lightly ground to raise the fibers, and then pre-soaked with A.O.C premium resin. Next, a bead of adhesive putty is applied, and the stringer is placed in the hull where it is encapsulated with two layers of 1708 Knytex Owens Corning. After curing, the interior liner and its components are then put in place.

Once all internal workings have been assembled, the deck is then joined to the hull and it is securely bonded with a Plexus adhesive. Accessories and stainless steel hardware are applied and thru-bolted wherever possible. A range of high quality graphic and color packages are available, all of which are applied by Mitcher T. Custom Painting and Design.

Inside the cabin, you will find enough amenities to please even the most discriminating passenger. Accommodations include a seven-foot V-berth forward and a U-shaped lounge upholstered in white vinyl. Under the V-berth, a large hinged locker offers ample storage space. Additional storage can be found under a section of the lounge, and in overhead compartments to port and starboard.

The galley area to starboard features a sink, cupboard, molded beverage holders, AC and DC outlets, and a microwave. An optional air conditioning unit is housed below. Further aft, a sizable locker with a hinged door offers storage for large items, or it can be used to house the optional refrigerator. To port, an enclosed head features a chemical toilet, sink and cupboard.

A hand-held shower is a handy option, and the self draining liner will make cleanups a breeze.

Back aft, the engine hatch cover is uniquely designed. Utilizing "tell tales" on the hatch while performing high-speed runs, much testing was done to determine the location of any "hard air" over this area. As a direct result, the hatch cover has been sculpted to improve aerodynamics.

The forward corners of the hatch have also been molded to act as air intakes for the engine compartment. Air enters the hatch through a grille and is fed through an internal duct system that dumps the fresh air directly onto the flame arrestors. Should you decide to run with an engine package with, perhaps a blower, the inside of the hatch can be modified to accommodate the added height. For devoted sun worshippers, a more traditional hatch cover with a sun pad is also available. Whatever hatch design you choose, three quick-release pins allow for its easy removal when more access is needed – a concept inherited from the race team. For quick access, a single ram raises both the hatch and the rear bench seat, eliminating the need to climb over the upholstery!

Sunsation boats come factory rigged with Mercury power. Our test boat was equipped with with a pair of Mercury Racing HP500 EFI's hooked up to Bravo One XZ drives (1.5:1 gear ratio), running 30-inch standard Merc props. Space was at a bit of a premium inside the compartment, but SunSation did the best they could with what was available. To reduce clutter, and for practicality, they opted to use an external exhaust system by Gaffrig. Cable and wiring was neatly routed throughout. For peace of mind, an auto Halon system was mounted to the hull sides.

The Miami boat show is a great venue to check out some of the hottest new products, but it does have some limitations when it comes time for sea trials. With the Government Cut closed due to the presence of cruise ships loading and unloading passengers, traffic was forced to make its way further south through a "no wake" zone to Biscayne Bay. This obviously cut into our "fun" time a bit, but we did man-

age to get a few runs in.

With a burst of the throttles, we quickly shot up on plane in 4.5 seconds. Impressive, considering that there were five people on board and our fuel tanks were half full. Midrange acceleration was solid and we were soon running at a comfortable 50 mph and the engines weren't even breaking a sweat. The X dimension on the test boat was set at 17 1/2, which put the center of the prop shaft 5 inches below the bottom of the hull. This appeared to be an optimal setting to eliminate as much drag from the outdrives as possible, without sacrificing the ability to effectively adjust the running attitude of the hull.

Pushing the throttles all the way up, the GPS moved up steadily...79, 80, 81.... Just as things were looking good, a few jet skiers appeared ahead and we were forced to throttle back. We made a couple of more attempts for a top end run, but because of the high wave conditions offshore, and the traffic congestions in the ICW, we were soon forced to give up. On the way back, Wayne mentioned that he had been reaching numbers in the low 90's at Lake X, and they still haven't finished dialing in the boat completely.

There's no argument that the 32 Innovator is an impressive boat. Although I have outlined a few key players, it's quite obvious that the entire crew at SunSation takes pride in their work, which is reflected in the high quality workmanship throughout. The state-of-the-art cockpit design alone is a real attention grabber, so if you feel the need to "show off" this season, both underway and at the dock, this is one boat that will fulfill your goal. 🍷



VITAL STATS

LOA: 31'7"
Beam: 97"
Fuel Capacity: 100 gal
Dead Rise: 24 Degrees
Transom Angle: 14 degrees
Weight (approx): 7500 lb
Power as tested: ..Twin Mercury Racing
HP500 EFI's w/Bravo One XZ drives
Price as tested:\$199,900

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