

RIDING Technology

There is a boat category which stands beyond any criticism or comparison, a boat category that stands in an upper quarter of all other boats ever traveled on the seas and oceans of this world; a boat category that- quite curiously- feeds all other engine boats with riding technology and marine knowledge.

And if this is such a special category (which it is without doubt), what one can say about the numerous friends and fans, the owners of these boats, who have developed their relationship with the sea, to an experience. A unique experience for most, but a usual one for the few, not in the sense of the continuous contact with the sea, but with the scientific approach to the matter.

They follow the technological developments and they move with a speed that exceeds even the speed of their own boats, in order to gain the “know how” (as well as the equipment) which is going to give them even one more knot of top speed. For, that’s where the game is. The speed, the uniqueness of riding at 60, 70 or 80 knots over the waves, the “micrometric balancing”, the development of the sixth sense in controlling the boat completely and the obtaining of knowledge for the selection of the right boat, the right engine and the ideal propeller.

This category is the “mother of all powerboats”: the mono-hull deep V offshore performance boat, with the fixed and all time classic slim and long hull, having both the sharp V and the superb hydrodynamic qualities. It remains classic but continuously developing through the decades; it is the ultimate expression of sport, the ultimate status symbol as well as the ultimate dream of sea friends, a dream which can come true easier than anyone thinks.

The term “bullet shaped” may sound accurate but it is really not descriptive as it categorizes these boats only by their shape and not their technology. When other powerboats (eg ribs, e.t.c.) are fighting for keeping their stability over a 50 knot limit and consider a wind speed of 5 beaufort as “bad weather” obliging them to close the throttles, the Sunbation boats are travelling by 60 or 70 knots without any correction. This is an achievement, a peak, which the offshore deep V boats (meaning the monohulls) have attained, by endless hours, days and years of tests, through laborious proceedings which do not always give the glory of victory but the experience of the participation and evolution.

The victories and records are lost or achieved by some mile difference of top speed, or even by tenths of a mile. This means the overall standard is very high, hence the “first among equals wins”.

Due to the fact that all boats of all manufacturers of this category take part officially or unofficially in races, the experience of the open sea goes directly to their products. The same products that you can buy and depart for your (speedy) vacation, enjoying the 750 hp at 70 knots. Speed keeps up with stability, safety and low up to sensible fuel consumption. Power goes along both with reliability and inexpensive service costs. The impressive sport style and dynamic appearance are successfully combined with spacy cabins and satisfactory living areas. Finally, due to the high speed requirements, the manufacturing concept is based on extreme quality, making these boats always looking new, even after one or two decades.

Sunsation

A clever name which combines both “sun” and “sensation”, a word in the poor vocabulary (but rich in expressional ability) of the English language which means something that creates sensation ie strong feelings.

Sunsation:

Indeed creates sensation!

Visual, acoustic, fascinating!

Sunsation

American “fanatic” shipyard, having clients equally about speed and dedicated to the firm.

Having a small number of models (according to the American standards) but “religiously” dedicated to quality, finishing touch, engine choice and instruments, design, speed, personality, customization and continuous development.

There are seven models, starting by the 288, up to the forthcoming 409 (F4) which is awaited with great impatience by the “fast” community, keeping in mind that the above mentioned new model is expected to change the standards of its category.

Sunsation is a relatively new but very experienced firm which manufactures “family” high speed boats since 1982. Nevertheless, this recent date does not directly correspond to the quality of know-how and the dedication of the founders to the idea of high speed: As the same has happened in many other cases of “family ” companies, Sunsation, literally, was first established in the mind of young Wayne Schaldenbrand , who knew that he wanted to be occupied only by the sea and the powerboats, ever since he remembers himself (6 years old); and so he did:

He first constructed and experimental with Knee Boards, and later, together with his brother Joe, built by themselves (and for themselves) a powerboat of 5 meters (16 feet) they even sold 12 pieces of that. Later, Wayne was professionally involved in repair work, design and manufacturing of all boat types working for other shipyards but remaining dedicated to power boats during his space time. Finally, wanting to have his own big boat, he bought a powerboat which had sunk in a lake, having in mind to repair it. At the very beginning of the repairs he understood that it was much easier to build a brand new boat. That was the moment that Sunsation was born. Having the help of his two brothers, Joe and John, he established his own shipyard at Casco (Michigan). Their first model was the Rocket21, which had Excalibur hull and deck of their own design. Ten years later, in 1992, their new Aggressor 25 model was proclaimed as the top model of its category, compelling (or obliging) the Press, the rivals and, of course the customers, to learn more about the Schaldenbrants shipyard who have managed to reach the top so discreetly and quickly. Their next model, Dominator 32 (‘95), together with the Intimidator 288, entered the company to the terrain of ‘the big boys’.

Almost a decade later, in 2002, the equally top Innovator 32 was presented, having a two stepped hull. Later, at the Miami show of 2005 the Dominator 32SS was presented (having the hull of the Innovator and the deck of the Insignia Dominator) which encompassed all the naval construction as well as the practical experience of Sunsation. It combined extreme speed, space and style.

The range of Sunsations for 2006 includes two editions of 288 (offshore and mid Cabin Open Bow), three 32's (the Dominator SS, the Innovator and the 32 Mid Cabin open bow), and the new 409 which is the product of the cooperation of Wayne Schaldenbrandt, McLeod design group and Dave Moriarty. Before mentioning the experience and the conclusions of the test, just a few words for the way brothers Wayne and Joe are designing and manufacturing their boats: The Sunsation motive is "Beyond your expectations" and their target is to supply their boats with every kind of equipment, facility and detail the owners may ask or need.

The 288 and 32mid Cabin Open Bow, have a small cabin in the middle, with two doors, one from the cockpit and a second one which leads to the living room at the bow; at the edge of bow a big dromometer is placed in order for all passengers to have a view of the speed. Call this a Detail? Yes, but we like it. At the Innovator 32 the throttle & drive controls are on a stable base at the center between the two electric bolsters. There is a split dash cabin entrance system. Concerning the quality and the manufacturing perfection, any kind of criticism is unsuitable: the Instruments, the backwards mirror and the stairs, are all enhanced to the mould. The work of the polyesters is quite elaborated, the choice of graphics (15 designs) is really rich, the materials and instruments are of top quality. What can we say about the strict choice of the engines: all models have three alternatives: "ordinary in/outs (stern drives), high performance in/out, with single (288) or twin 32 placing.

The, namely, 'ordinary' engines are the Mercruisers 6.2-320 HP, the 496Mag-375HP and the 496Mag-Ho-425HP. The High Performance ones are the V10 Ilmors with 550 and 625HP carrying XR Bravo drives. The diesels are the Swedish Marine Diesel Hammerhead 320HP and Tigershark 415HP (having surface propulsion Imco). In our country, until now, the Sunsation boats, are unknown to the public, but we are quite sure that will very soon they be familiar to all.

The company Korakas Bross (Mytilene) are the main dealers for Europe and the Tassopoulos Gr.& Partners (Patras) are the sub-dealers for Greece. The first official presentation of these excellent American performance boats took place at the Marine Boat Show, where we had the opportunity to admire the Ilmor V10, 625HP engine. Right after the boat show, we went to the open sea on the Dominator SS. The impressions we gained were so enthusiastic, that we decided it was necessary to write the above mentioned introduction, in order for the readers to get acquainted with the history of the shipyard and not to consider as "exaggerations" all the writings.

The Dominator 32SS has a hull length of 9.63m, 2.46m beam and 0,9m draft. It weighs 3.200kg having a reservoir of 530lt of fuel and 50lt of water. It accepts engines ranging from 2x260 up to 2x625HP. It also has full extra standard equipment, a rich catalogue of extras and a great variety of graphics (15 standard patterns plus 3 signature).

The hull has two steps and specially designed the bow steps (we usually characterize them having 'ministeps') with really deep V of 25°deadrise (manufacturer quote is 24°) at the trasom and progressive entrance which starts at the 40° and it is increased to 45° higher before the chine. The transom angle is 14°. It also had two Mercruiser engines 496 Mag 375 hp with XR sportsmaster drives (gearing 1.50:1), propellers Bravo I of 30" pitch and fully hydraulic steering Imco.

The performance boat category is characterised by three elements. High performance (acceleration and top speed), capacity of high speed in extreme weather and standard space arrangement which is usually made up from a sundeck, a seat in front of the engines, two bolsters and seats on either side of the (low) cabin.

Sunsation combines the quick hull of Innovator with the deck on Dominator, giving greater height to the cabin, thus creating a boat which provides both performance and well made living area. Descending to the inner part through the sliding door, the corridor of the cabin is placed one stair lower, having the WC at the left and a sink, a glass drawer, a mirror and big drawers on the right .

Two U shaped bends are fixed at the sides of the cabin up to the V shaped bed where the Sony stereo CD speakers and the controlling lights are placed, dividing the V berth from the living room. The bed (V shaped) of 2,15 length has also storage space underneath, reading lights and a small hatch while the big hatch (which provides excellent natural light) is placed exactly next to the cabin door. The W.C. comprises of a chemical toilet, a sink with drawer and a mirror.

The cockpit is quite well planned as far as the practical and the aesthetic aspects. Starting from the enhanced swim platform where there is a shower as well as a waterproof stereo control. The sundeck -cover of the engine well- is decorated in black, orange and red colours having the deep bench placed at its base. The bolsters are McLeod II Special Edition providing electrically leaning seat for the upright position, as well as, special handles for the passengers at the back.

The Gauges panel is quite impressive due to the big white Livorsi instruments ('monster' series) and their arrangement: At the right side, an extra panel bears the Livorsi colored three blade steering racing wheel, as well as five instruments and a series of switches. Further up, covering all the width of the race faring, all instruments are placed in harmony.

In front of the captain lies the compass, two big round engine tachometers, the led indication of the trims and five smaller instruments. At the center, always enhanced in the mould is the big 100 mph dromometer-GPS and on its left lies a very useful mirror. Further on the left side, in front of the passenger, there are five more instruments a small drawer as well as a 'step' for transpassing to the bow. The controls are placed on the right on a special base together with the racing Kieckhafer flap switches and of the trim switches, while on the left passenger has side a handle and a holster. The total image is really attractive and quite impressive due to elaborated finishing touch.

All the above mentioned would be automatically cancelled if the Dominator 32 SS, as every other performance boat, could not reach the promised records - and strong feelings- to the pilot and buyer. Performance means EVERYTHING for those fast offshore boats; the special press in the U.S.A. (where their main market is) lays the emphasis, almost exclusively, on the acceleration and top speed. The US press looks for, makes comparisons and is expressed quite enthusiastic for the very fast boats, but with moderate satisfaction for the "simply fast" boats. According to the manufacturer, Dominator 32SS having two Mags 496, can reach the 70knots, carrying only the pilot and 100-150lt fuel. During our test, having propellers of 30", two passengers and 400lt of fuel, we achieved 67,2 knots of top speed. This means that the manufacturer is quite accurate in the specifications, as far as the top speed is concerned.

Consumption, according to the dealer, reaches the 3 lt/nm at the W.O.T. (always with Mag 496 of 375HP), whilst during the test it went up to 3.75lt/nm at 67.2 knots. But it was quite moderate –low we should say- during the cruise: At 3,000rpm the Dominator SS reaches 41 knots and needs only 1.95 lt/nm! At 3,500rpm and 50knots the consumption is 2.48lt/nm. Finally at 4,000rpm/57.3knots it reaches the 2.61lt/nm, going up to 3.75lt/nm from 4,500 (64knots) up to the trimmed 5,000rpm (67.2knots).

Acceleration is equally important aspect with top speed for the performance boats. At the very first test of Dominator 32SS, which was done by the specialized American performance magazine “Hot Boat” last June, there was an extensive report on the excellent acceleration of that boat which had the Mag 496HO of 425HP (comparison: we mention that the top speed of the whole package is 90mph according to Sunstation, while the HOT BOAT wrote down 83.7mph but with rough sea conditions.

According to the same magazine, the journalists were quite enthusiastic of the excellent acceleration times of Sunstation 32 Dominator SS. Comparing it with many other fast boats they came to the conclusion that it's a very fast boat which competes directly with high-specialized semi-racing constructions (Spectre Ocean Cat, with three outboards HTM 30” with superchargers, Magic Cat3A with 1600HP etc). Here are the HOT BOAT'S accelerations which we shall compare with ours; keeping in mind that the American test was held with the 496MAG HO 425HP, whilst our test was with the simple 496 of 375HP each, meaning that we have a difference of 100HP at the propellers.

We can see, though, that the acceleration times are quite close to each other, with the difference of the stronger engines being visible only at the high end (at 0-70mph). We should also mention that in the two cases of 30-60mph and 0-40mph, we wrote down better times although we had smaller engines. This is probably due to the different combinations and places of the trims and flaps that we used during our test in Greece. The common denominator of the two tests is the fact that the Sunstation 32 Dominator SS is a really fast boat. WOW, putting the throttle controls down does make the sea rough, while the boat remains indifferent. After the very first and momentary pushing the boat is obliged to wait for the Bravos to complete their slipping successfully. Up to 2.500rpm, we would not be able to write down the speed, while the boat is moving between 8 and 15 knots (that is why the consumption measurements are plasmatic in these quarters). But at 2.800 rpm the Sunstation literally “kicks off”, getting 41 knots at 3.000rpm! The feeling of the acceleration combined with the harmonic sound of the boat is really addictive and naturally makes us wonder what may happen with the 496HO of 425HP, or with Ilmor of 625HP. (We emphasize that there is possibility of placing superchargers to the 496 Mags which will boost the top speed up to 90knots).

Let's have a look at the radar's digital measurements. After the extreme cavitation which spares many seconds and the 20knots, Sunstation gains 5knots/1”, up to 50knots where the rhythm stops while it needs 2??-3??/5knots. The acceleration quarters from 20 to 50knots, makes the difference. This fact is also mentioned at the American test.

During our test the weather was very good. The wind was about 4 Beaufort and there was moderate waving at the open sea, as you can see from the photos.

The problem of Sunstation lies on the fact that you can not stop touring by 60-65knots before the fuel is finished: the feeling is quite unique with sweet and stable navigation, ideal pilot position (upright or leaned) due to the McLeod buckets (considered to be the

“tops” at this very moment) and the convenience of all the controlling. Trim is settled by the control but it is diminished only by the switches on the panel (there is the possibility of override).

The boat obeys to the orders of the pilot. In case of an inexperienced pilot there aren't any dramatic consequences because the “smooth ride” always remains ideal, whether the bow up or down. The two small “steps” on the bow are aimed to get the bow out of the waves easily.

The two main, fully aired steps, work perfectly at the high speeds and quick turns, while the hull design with the “clean” surfaces at the middle and at the back part gives unexpected stability, as the boat is traveling full trim at 65 + knots to all directions of waving, without needing any correction. Free exhaustions produce an amazing sound both at low speed and while maneuvering, disappearing though while the boats travels. The air on the face (and the backward drag of the cheeks due to high speed) is a part from living with a Sunsation, which does not have a windscreen, but can accept extra air deflector.

Basic equipment includes everything: Livorsi instruments, stereo CD, flaps, shower, reservoir, chemical toilet, carpets, two batteries, three bilge pumps, bucket seats, wash-stands, Mitcher-T graphics, free exhausts, cockpit covers etc. The catalogue of the extras is quite extended, as it has full bimini top, refrigerator, microwave oven, AC (dockside power), electric toilet, digital compass, TV, DVD etc. We were quite impressed by the fully detailed dealer's catalogue for the boats, engines and equipment.

The basic price of the boat (VAT not included) was \$141,000 in November 2005. The engines package started from \$23,500 for 375 HP having Bravo One, going to \$70,000 for Ilmor 625HP. For any further information you should contact the dealers.

Sunsation was a surprise for the Americans in 1992, it was also a surprise for us in 2005. It is a new entry in the category of deep V performance boats, but it has also elements that place it in an upper end of top quality: amazing appearance, top quality, unexpected performance and space/comfort which cover all the other needs on top of the performance. Of course, it is not supposed to be bought for its beds, but nobody did ever deny the “more - the better”. It's a boat for “experiences” having a price which in no way is characterized forbidding, consumption of only 1.95-2.48lt/nm at 40-50knots (it can not be approached by any other boat). They also have normal, quite respectable engines, making the speed enjoyment even more economic and safe. In other words we can not imagine that any buyer could not be absolutely satisfied from this boat. That's all we can write for this last model of Sunsation in this text, at the end of the test. A final reminder: Our measurements are beyond any doubt, but for any further information, contact the dealers to live the experience.