Owning the

When your personal boat wins the top award at the Boat of the Year trials, you can take extra pride in ownership. That's particularly so when you took significant risks in pioneering the installation of revolutionary power plants to help make it very special. *Power Boat* went aboard this champion Noosa Cat 4100 GT with owner John Williams and discovered why the success of the boat is a well deserved triumph for both him and boatbuilder Wayne Hennig. **By Graham Lloyd**

To come out on top of the 178 boats that were evaluated for this year's Boat of the Year Awards is immediate evidence that this Noosa Cat 4100 is a cut above the norm. Winning both the Non-Trailerable Cruiser category as well as the overall title, the Noosa Cat surprised many in the industry and the decision created controversy in some circles.

But even a short time onboard the champion boat leaves no doubt as to how good it is, and that makes even more sense when the owner and skipper tells how it all came about. John Williams is no stranger to boating having spent all his life with craft from a 15 foot aluminium runabout in which he fished offshore for 11 years through to a 32 foot Grand Banks. He enjoyed that for 12 years fishing with his mates and cruising with his wife Arom. There were other boats in between so John had plenty of experience to call on when he decided to upgrade in 2003.

Whilst fishing from the Grand Banks (which he referred to as "a beautiful boat"), John often admired the easy loping style of catamarans as they ran past offshore. John had also developed an appreciation of the rugged seaworthiness and bar-busting abilities of the original Shark Cats created by Bruce Harris during the 1970s. The reputation of the Shark Cats in rough conditions amongst abalone divers and rescue organisations, and its success in offshore racing, grew for a time to almost cult levels.

When Bruce Harris went on to other things in the 1980s, the Shark Cat presence faded in the market, but current owner and MD Wayne Hennig became involved in 1990 and has been growing the business, under the Noosa Cat banner, ever since. With a 40,000 square foot manufacturing facility in Noosaville, the company produces a range of power cats from 18 to 50 feet. These are used by recreational owners as well as in commercial, rescue, police, military and other government applications – in both Australia and increasingly around the world.

Time for a cat

When John decided it was time to get a cat, he researched the market and made the trip to Noosaville to check out the current derivation from the original Shark Cats. He had definite ideas on what he wanted and he told *Power Boat*: "As soon as I was on the 41, I just fell in love with it. I looked at other cats in magazines and so forth, but I was always keen on Shark Cats and then Noosa Cats. That was because of their design and their proven abilities after being chosen for use as navy, army, police and rescue boats. When I saw how much room was in the cockpit – I was sold – I wanted one! Most boats have got nowhere near the cockpit space that this boat's got.

Boat of the Year!

MAIN: John William's Noosa Cat is impressive on calm waters, and the design and fit-out are exemplary in offshore conditions.

INSET: The deep, narrow hulls knife through rough waters, and the cushioning effect of air flowing through the tunnel gives a soft ride to make possible high cruising speeds with remarkable comfort for the crew.

That was a big factor."

The 4100 Series is available in flybridge versions, but John decided on the Extended Cabin variant that packs vast areas of totally usable space on one level to provide easy-use accommodations for both cruising and fishing. The cat plan form carries a wide beam over the full length of the boat and gives an enormous space advantage over any similar length monohull.

This Noosa Cat is termed the 4100 'GT Series' and that's very appropriate as the 'Grand Touring' meaning of the now over-used GT designation is spot on for this boat. It's best explained by the delivery run made from Mooloolaba in Queensland to Swansea on the NSW central coast. John and his crew made the 550 nautical mile trip in a single run of 18 hours cruising at 32 knots through the day and 25 knots at night. Leaving at 5 pm on a Friday, they were waiting at 11 am the next morning for the noon opening of the Swansea Bridge.

John said: "Some of the game fisherman around here were shaking their heads and said it's never been heard of – you just don't come from Mooloolaba to Lake Macquarie in one go."

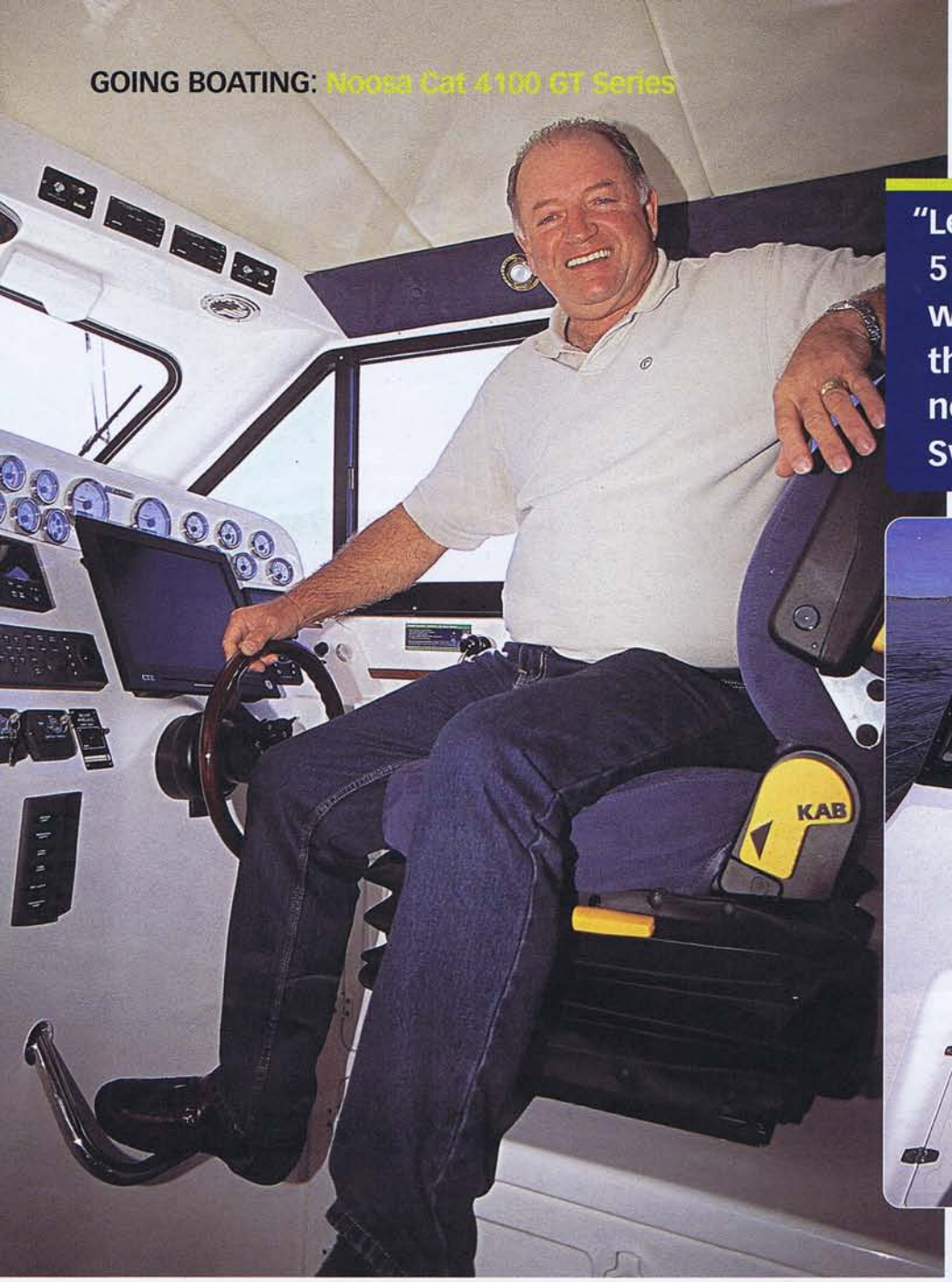
Accompanying John for the trip were three keen fishing friends – his brother-in-law Jim Archer, Ian Packman and Monty Hughes who is a veteran ship's captain and who has been a senior check pilot in Newcastle Harbour for the last 12 years. He has to get to ships outside the harbour through conditions few other boats or people would even contemplate challenging. So he knows how a good boat has to handle and perform.

Monty told *Power Boat*: "The delivery run was the first time I'd seen the boat. Having been a ship's captain and now a pilot, I said I'd take some charts and a compass with me. It's the old story, you have to play the game safely (in case of unexpected problems with electronic/satellite navigation). We headed out and I soon realised how fast the boat was travelling - I hadn't known how quick we'd be going, and I'd put some distances and times on the chart."

Hooting along at 32 knots

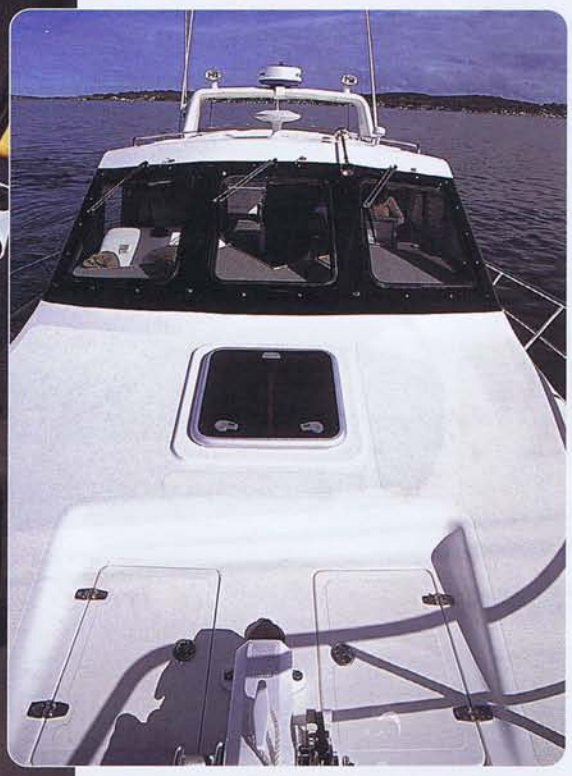
Monty said: "I'd originally thought we'd go to Southport and overnight there, then on to maybe Coffs Harbour the next day if the weather was okay before a final run to Swansea. But when we got out there, we started hooting along at 32 knots – I had to get my calculator out and re-work a few of the times!"

He continued: "When we were east of Fraser Island, I said to John it's going so good we might as well keep going. After a while we ran into a fair bit of a southerly set and found a few potholes, so we didn't think it such a



John at the helm of his award-winning catamaran. He has every right to look pleased with the boat which exceeded all his expectations.

"Leaving Mooloolaba at 5 pm on a Friday, they were waiting at 11 am the next morning for the noon opening of the Swansea Bridge."



The foredeck offers minimal wind resistance as it rises to meet triple windscreens with the helm to starboard offering superb visibility.

good idea to keep at 32 knots. We slowed to around 25 knots to better suit the conditions – by then it was getting dark anyway. We kept watch on watch, John first then Jim and Ian. I checked progress through the night and dozed on the lounge. When dawn broke, we were off Foster/Tuncurry and we took it back up to 32 knots. We mainly kept about six to nine miles off the coast and got some help from the southerly set – not that that makes much difference at 25 or 32 knots – and we were soon lining up for the noon opening of the Swansea Bridge."

Monty concluded: "It was a very impressive trip. I've been up and down the coast a lot at 18 knots, but never at 32 knots. That's warship stuff!"

A number of factors combined to enable coastal cruising performance at this level. Two of the key points are the inherent seaworthiness of cats and the remarkable combination of that with the unique qualities of Volvo Penta's revolutionary Inboard Performance System (IPS); this is the first cat in the world to be equipped with the IPS drives which is quite an achievement and honour for Noosa Cat.

It was only last year that Volvo Penta released its very different propulsion system that packages a diesel engine with a unique through-hull drive using counter-rotating props that pull rather than push the boat through the water. The drive leg is mounted down through the hull and provides steering by vectoring prop thrust as sterndrives do, but without adjustable trim angles. With the drive housing behind them, the forward-facing props operate in much cleaner water than shaft-drive or stern-drive props for dramatic improvements in efficiency, performance and economy.

IPS installations are giving improvements of around 20 per cent in top speed, 15 per cent in acceleration, 30 per cent in fuel economy and up to 50 per cent lower noise and vibration levels. Another advantage for owners is that the metals used in the drives do not need antifouling. As well, oil checks and changes for the drives can be done whilst the boat is in the water, and it's a two-year oil-change interval.

However, when John ordered his Noosa Cat in the middle of 2003, the plan was to install 370 hp Volvo Penta shaft-drive diesels. It was six months later, as the boat was taking shape, that Wayne Hennig called John and asked if he'd be prepared to try fitting IPS drives instead. John said he "loves technology" and so gave the go-ahead although there were two big implications.

Changes to fit Volvo Penta IPS

Firstly, the changes needed to install the IPS drives would add around 16 months to the delivery time for the boat (anyone who has ordered a new boat knows that's a long time to wait!), and the arrangement was that Volvo Penta had to be totally satisfied with the final performance of the installation – or the IPS engines and drives would have to be removed!

The saloon has hectares of space and generous headroom with windows all around for lots of light and widescreen scenic views. The skipper and navigator seats are pneumatic for extra comfort, and the control layouts are efficient as well as impressive to look at. John's wife Arom relaxes to port with John in the helm seat and his good fishing friend Monty Hughes in the centre. Monty is an experienced ship's captain and harbour pilot, and helped deliver the Noosa Cat to its home port of Lake Macquarie.

"This is the first cat in the world to be equipped with Volvo Penta IPS drives which is quite an achievement and honour for Noosa Cat."

The cat advantage of carrying its full beam right to the front of the boat gives plenty of room to handle anchoring and mooring tasks, and crew are protected by strong guard rails.

Even though this would be the first time that IPS had been installed in a cat, everyone, John included, was confident that it would work. The confidence was so high that nobody ever thought to agree in advance who would pay the costs if the IPS packages had to be removed and replaced with shaft drives.

John explained what happened: "The IPS drives needed some changes to the hulls. Volvo was involved with that and it was a long process getting everything approved by them. I was convinced that it would work – and so was Wayne. Each hull underneath for the last ten feet is flat before angling out in a diamond taper shape to a vee that runs forward to the stem. The props are about a metre forward of the stern. The props run parallel to the hull so we don't need trim tabs or anything like that. All the thrust is forward – there's no loss of efficiency as is caused by the down angle on a shaft drive installation – that's one of the big advantages of the IPS."

John continued the story: "Engineers came out from Volvo in Sweden and fitted the engines and drives, and did extensive testing off Noosa in late 2005 before the boat was fully fitted out. I was asked to go up after Volvo had successfully completed the initial testing. I was very nervous as I went up, wondering how it would go, and knowing I'd invested $800,000 in such a pioneering project. We went offshore – and I was blown away with how it performed. I'm more than happy with the installation and the performance, and the fuel economy – the Noosa Cat with IPS has exceeded all my expectations in every way."

John had the Noosa Cat for only a few months before Wayne called him and asked if he'd take the boat to Sydney so it could be in the Boat of the Year competition.

John agreed and told *Power Boat*: "Arom and I took the boat down the coast and we were in the Harbour within two hours of leaving Swansea Bridge. To show how good the ride of the cat is, Arom used to get sea sick and was always reluctant to make offshore trips with me. But this time she was so relaxed that she slept most of the way on the lounge in the saloon. I had to wake her up to see the beach at Manly as we got close to North Head. She was amazed."

Judges "blown away"

John continued: "Then we took about ten Boat of the Year judges offshore and one of them was so impressed that he told me that he wouldn't give it back. They were blown away as we came back through the Heads. We didn't go up to the Awards Dinner but Wayne called me the next morning. He was very excited – he said we'd won – he was very, very happy. The award is a manufacturing thing but I felt good that this is the only IPS-equipped cat in the world, and that was a factor that pushed the boat to win the award."

John added: "Wayne plans to build more boats with IPS. He already builds them with shaft drives, sterndrives, jet drives, surface drives – and now with the IPS packages which he says lift the hull up better than anything else. I think it's been a tremendous success

The very large cockpit gives the boat a gre deal of usable space on the one level. It was key factor in John's choice of the ca

and I think these IPS drives will be very successful for Volvo."

Wayne Hennig agrees with the level of success that John's boat has achieved, and he's already building a 5000 Series Flybridge which will be the first cat in the world to be fitted with the more powerful Volvo Penta IPS600s complete with joy stick controls for the ultimate in skipper-friendly berthing and manoeuverability.

This new boat will also have a full timber and leather interior with a 32 inch plasma TV/Navigation Systems display.

In our next issue, John will explain how and why he had his Noosa Cat fitted out to result in such a practical boat with high levels of comfort and performance. For more information call Noosa Cat on (07) 5449 8888 or visit www.noosacat.com.au.

"I've been up and down the coast a lot at 18 knots, but never at 32 knots. That's warship stuff!"

Super efficient Volvo Penta IPS Drives

With an installation approved by Volvo Penta, the IPS drives give higher performance and more economical operation. This is the first cat in the world to have IPS packages fitted.

Volvo Penta provides a total package of engine, drive and props with its revolutionary IPS. The forward-facing props are most efficient as they operate in waters undisturbed by any preceding gearcase housing or skeg. In this diagram, the drives are angled to suit a V-hull installation, but for the Noosa Cat the drives were installed vertically.

ABOVE: The installation below the cockpit sole of the Noosa Cat is neat with good engineering and excellent access for maintenance.

RIGHT: The twin IPS drives leave a distinctive wake flowing astern as the Noosa Cat streaks along.