

THE Shadow

JEREMY EVANS scans his beady eye over the latest joint venture by Yves Loday and Reg White, the Shadow. Is this new lightweight twin-hulled singlehander as fast as it looks?

Yves Loday and Reg White launched the two-man Spitfire in March 2001, with the singlehanded Shadow joining their Swell-Catamaran range exactly a year later. It's therefore surprising to find that the Shadow is a very different boat, created from a clean sheet of paper – there has been no attempt to just downsize the Spitfire and use the same major components. Instead, the Shadow has its own exclusive beams, trampoline and mast, with hulls that look slimmer, are quite a bit smaller and lack the characteristic Spitfire chines. No crew to leeward means that deflecting spray while doing wild things becomes irrelevant, but more importantly the Shadow hulls don't need chine reinforcement because they use different construction.

Design and construction

From the start, Yves and Reg decided that a singlehander has to be as light as possible. It's not only about sailing performance, but also about pulling the thing up a slipway and getting it upright after a capsize. So the Shadow hulls use sandwich construction with bi-axial glassfibre on the inside, foam in the middle and Kevlar with a white gelcoat on the outside. This is as light and stiff as White Formula – which builds the boats in Brightlingsea – can make a production cat, while preserving the durability required by most sailors. It doesn't extend to the Kevlar skin being bullet proof, but its use allows thicker and more rigid construction than fibreglass, at the cost of being ghastly for a boatbuilder to work with.

The Shadow we tested had the original prototype hulls which had shuttled between France and England for the best part of a year. Despite a lot of use and modifications – such as an extra



bulkhead under the forward beam – they looked in good shape with little wear and tear. Kevlar promises to be a tough solution to owning a lightweight cat.

In essence it's a minimalist cat with the absolute minimum of wires, ropes and things sticking out. The big omission is no spinnaker pole. Yves and Reg took

that decision from day one, opting for maximum simplicity and minimum clutter by flying the tack of the kite from the bridle. This is possible with the forestay bridle plates moved right forward, removing the need for an aluminium pole sticking out from the front. It means that the rigging is lighter, less expensive and



1, Moving the bridle plates right forward allows enough room to fly a 10sq m kite inside the forestay and makes the weight, windage and clutter of a spinnaker surplus to requirements. It also means you can drop the kite on either side. **2**, Getting the mast up and down on the Shadow is a simple solo operation. The mast is virtually as light as anything in carbon and suffers from no insurance loading.



more simple to put together than anything with a pole. It also has less windage on the water and allows drops from either side, plus it's safer in the dinghy park.

The rest of the boat is equally clutter-free, with the kite stowed in a chute that stretches diagonally under the tramp. Yves wanted to make the chute as tight as possible to ensure there was no chance of catching waves, but Reg argued that it must be wide enough for friction-free retrieval. Reg won, and looking under the tramp the chute appears to lie so flush that one can't imagine any problems. The mouth of the chute is moulded in aluminium and glass and fits just behind the main beam on the port side, but with the kite set behind the forestay is equally ready to accept leeward or windward drops.

Launching and rigging

Lifting the Shadow platform – hulls, beams, tramp and fittings – off its trailer gives some idea of what you're in for. It's so light that two adults could take it for a

walk! Lightness doesn't stop there. Reg says he splashed out '...a few thousand' on a brand-new dye for the Shadow's Sailspar mast – which is spectacularly light. Just 9.5kg without fittings means you can easily lift it one-handed, and Tim Swinburn demonstrated how easy it was to pop the mast up singlehanded, using the spinnaker halyard to hold it before attaching the forestay. The secret lies in the wall thickness of the French-made section which has been slimmed to around 1.7mm, with reinforcement in the sides to restrict lateral bend.

The rigging is also very simple. There are three settings for the aerodynamically shaped spreaders – light, medium and heavy – and the diamond adjuster needs to be wound up until pre-bend in the mast matches luff curve in the sail. If the bolt rope slides easily, pre-bend is about right with a neat and simple 'bent pin system' to prevent the adjuster unwinding. The head of the kite is flown from the hounds, so you don't need mainsheet tension to counteract the kite and the mast is not unduly loaded. This

light loading is reflected in a 'slim stick' boom with a normal dinghy gooseneck. With the mainsheet led direct to the clew, the boom is purely to regulate foot tension and unlike traditional cats there is minimal compression at the gooseneck.

Getting the Shadow into rolling mode on its trolley is a doddle and an average slope slipway should provide no problems for the singlehander. Just remember the Shadow is light. Be very careful about leaving it unattended with the main up, and be aware that it may not stick to the trolley so resolutely as a heavier cat – think before you shove when negotiating bumpy surfaces.

Sailing

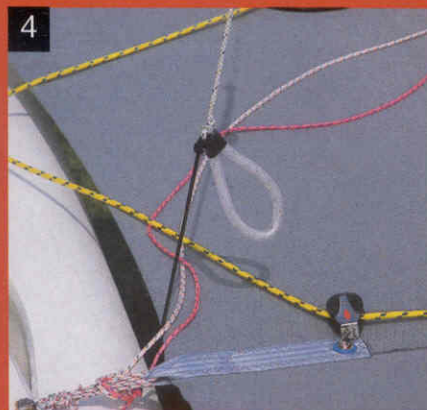
Sailing any singlehanded boat with a kite always sounds like a challenge, because there's the fear you might run out of hands! It's a true challenge – and a fair test of a fast boat – when you're out on a gusty day in the Solent off Calshot, with anything from 10-20 knots of breeze hitting the tide.

The Shadow has a stable platform, so I just hopped on and sailed away. The rudder locking mechanism is precise and easy to operate – you can get the blades down in a flash with a shockcord loop for security on each handle. Both daggers also slide down (and pull up) really easily and appear to lock fast in their chosen position. Time to sheet in and sail away.

There's loads of room on the tramp because it's virtually unobstructed by clobber. What's more the boat felt so friendly – even in a fresh wind – that there was no reason to delay going out on the wire. Once out and moving fast upwind, the Shadow was comfortable and well behaved. All the control lines come to hand, with a tweak on the downhaul or mast rotation if you want it as the Shadow drives forwards and over the waves. That's something you notice. The Shadow hulls may look quite small, but there was plenty of volume for my 70kg and because the boat is so light it wants to go over rather than through waves –



The Shadow has three calibrated positions for dagger depth. Position one is fully down which for most weights will be up to around 15 knots. If the wind gets stronger you lift the boards to position two and eventually three, while adjusting traveller position and mast rotation to suit.



3, The diamond adjuster needs to be wound up until pre-bend in the mast matches luff curve in the sail. 4, The plastic covered trapeze loops are easy to hook onto. 5, The mouth of the chute is moulded in aluminium and glass and it fits neatly behind the main beam.

which is of course the fastest passage.

Tacking is where some older cats – particularly singlehanders – can be slow and prone to stall. Just come in and drop to your knees on the tramp while pushing the tiller away. I used plastic covered trapeze loops which are brilliant. No steel to clank against and so easy to get the hook on or let it drop off. The Shadow tacked beautifully in a fair amount of wind and waves. Ease the boat round, change sides, which barely merits a duck under the high boom, and power away without drama. But it was also interesting to try tacking upwind in very light winds, with the boat in the lee of the land and set sideways by a swirling tide. In these difficult conditions it was easy to push the boat upwind and point high without stalling. Tacks were still no problem, with the Shadow turning easily around the dagger blades which are quite far back in the hulls.

So what about the kite? Could this be a white knuckle nightmare? Well, no doubt it could be challenging in some conditions, but most of the time – when it's less than 20 knots – it is going to be unexpectedly easy. Bear away deep, but not so deep that you risk gybing mid-hoist which is an excellent recipe for flipping. Kneel on the tramp with one foot resting on the tiller bar to keep sailing straight. Pull the halyard from behind the fairlead – which ensures the Spinlock stays active as the kite goes up. And it goes up in seconds. The kite may appear unfashionably small, but there's none of that 'Is it up yet' feeling and you can rest assured it goes up all the way.

Sailing on the kite, the mainsheet should be cranked in with traveller eased down the track. Then sheet in the kite and go. The most relaxed method is sitting on the back of the windward hull, with your feet tucked under the straps for security – a minor gripe was that with no 'lifter' the straps lie flat on the tramp, but Reg recommends pipe foam as an easy solution.

The boat takes off and is quick, but it

takes time to get used to handling the small kite which appears critical on over or under sheeting. Flying the windward hull is comfortable. When you fly too high, either bear away or sheet the kite which messes up the slot and depowers the boat – it all depends on where you are heading and means you don't need get too neurotic about obstructions to leeward. You can at least see them – a high boom, see-through main and small kite ensures excellent visibility.

The real fun will start when you get out on the wire. Footstraps come as standard behind the aft beams, but these were missing off the test boat which created an unnecessary challenge while bouncing over Solent chop at full bore. But once you're hooked on and foot in, there's no doubt that sailing with the kite off the wire will turn the Shadow's performance to full heat – and that's the way Yves Loday invariably races the boat downhill.

Gybes appeared simple because, unlike a dinghy, the Shadow does not roll around. The kite is small enough to remove most potential difficulties and is

prevented from blowing back round the mast by a shock-cord bridle at spreader height. At times it looked set for substantial wraps, but these came out every time. Dropping is a reversal of hoisting. Turn downwind, let the sheet go, grab the uphaul/downhaul line from in front of the fairlead so the Spinlock automatically trips and pull in from the back.

Hyde Sails supplies the natty one-design Mylar and Kevlar mainsail and kite. The kite is made from silicone coated Dynalite and disappears into its chute quickly and easily, with a reinforcement line between head and downhaul patch to relieve any strain on the top of the sail. There seemed to be absolutely no problems during half a dozen hoists and drops, so at the end of the day we were surprised to find a tear in the bottom of the sail. Best guess is this may have happened when I hesitated during a drop to change course, giving the kite enough time to kiss the dolphin striker. No 'mad pulling' was required to get the rest of the sail into the chute, so it may or may not have caused the tear.



Either way, it highlights the importance of setting things up so you can hoist and drop without stopping.

Capsize

Singlehanded cats can be a bit of a nightmare in this department, since the weight of a solo sailor may not be sufficient to lift the mast and get the top hull moving in an arc past vertical. It's one good reason why Reg has made the boat and its rig as light as possible and sealed the mast. He's also equipped the Shadow with a very neat 'right-up' righting line system that is ready-for-use under the trampoline and by Reg's reckoning fail-safe. Unfortunately it broke! The sharp edges of the turning block had eaten through their lashings, which is a simple problem for Reg to sort for future users but left me with a few immediate difficulties.

A swooshing tide made sure the Shadow kept its rig downwind. This is not at all good for righting a cat – tide pushing the bottom hull the wrong way, wind pushing the top hull the wrong way and a 70kg human trying to pull with spinnaker sheets that did not appear long enough. It wanted to come up, but with moored boats looming I hurriedly accepted a mast tip lift from a passing rescue boat. In most circumstances I would take Reg's word – seconded by Tim Swinburn – that the Shadow will come up easily, but it just goes to show that you can never take anything for granted when sailing.

Overall

This is light, quick, simple, easy to sail, though in certain conditions the Shadow could no doubt be a scarifying challenge – it is after all fast. The Shadow certainly provides the simplest solution to racing solo with a kite, and is already proving a very competitive boat. It has an SCHRS

(small cat handicap rating system) of 107 which is the same as the singlehanded Inter 17, three points slower than the Spitfire and six slower than Formula 18.

With SCHRS calculated by weight, measurement and materials, Reg explains that ensuring the handicap is competitive requires a delicate balance between going light or adding sail, both of which load the rating. Yves and Tim Swinburn were second and seventh in the fast handicap class at the ultra competitive Eurocat event in Carnac at the start of May. Yves sails at around 73kg while Tim is 75kg and both have been fully competitive with the Shadow. They've also been looking to depower on windy days when Tim says he's got 'More than enough sail...', which implies that Shadow sailors could stay competitive up to 85 or even 90kg – bulkheads inside the hulls will ensure plenty of support for what Reg quaintly calls 'any 200lb bums.' At the lighter end of the scale, 65kg-plus should be enough to blaze round the track in light to moderate winds.

But what about Shadows for dinghy sailors? Plenty have been accustomed to getting their thrills from asymmetric kites and sailing on a wire. Many have become disillusioned by the hassles of sailing with a regular crew. If they are very good, they might well fancy a Musto Skiff or RS700 type of challenge. But that takes a lot of commitment and skill. By comparison the Shadow is likely to be easier to sail, more forgiving and quicker round any track. It's also much the same price.

So that's the Shadow. What you see is what you get. Pure one-design with all boats the same. Speed relates to light weight and easy handling in a boat where simplicity creates performance. Loday and White produced an excellent boat with the Spitfire. Now they've done it again.

answerBack by Reg White

Our objective for the Shadow was simple: design and build a highperformance singlehanded cat, without the compromises inherent in modifying or producing a variant of an existing boat.



Shadow owners confirm Jeremy's opinion that our focus on usability and simplicity has been successful. Easy to rig, light and manoeuvrable onshore, effective rig controls with high quality fittings. This usability combines with light weight and a super efficient rig to deliver astonishing speeds compared to other high performance cats and dinghies – ensuring Shadow sailors have a huge beaming smile after every sail.

The unfortunate breakage Jeremy suffered with the righting system was traced to a sharp fitting cutting through a lashing. Stainless steel hasps on the front beam are now fitted on all production boats to prevent any recurrence.

Demo sails after Sailboat have resulted in good sales with Shadows on the water at Grafham, Stokes Bay and Circle Nautique, La Baule, France and boats being delivered to Bognor Regis and Marconi sailing clubs in coming weeks. The Shadow has already achieved excellent results at Carnac, Rutland, Stokes Bay and Round Texel, and will be competing at the East Coast Piers Race, Whitstable Forts Race and Grafham Cat Open.

Contact Swell Catamarans to arrange a demo sail soon...



The Shadow sailor is confronted with minimal controls.

Specifications

Loa:	4.80m
Beam:	2.40m
Mast:	8.0m
Sailing weight:	99kg
Mainsail:	13sq m
Spinnaker:	10sq m
Price inc VAT:	£6,950

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