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FORCE-FIELD

F18 — 150kmh on budget!

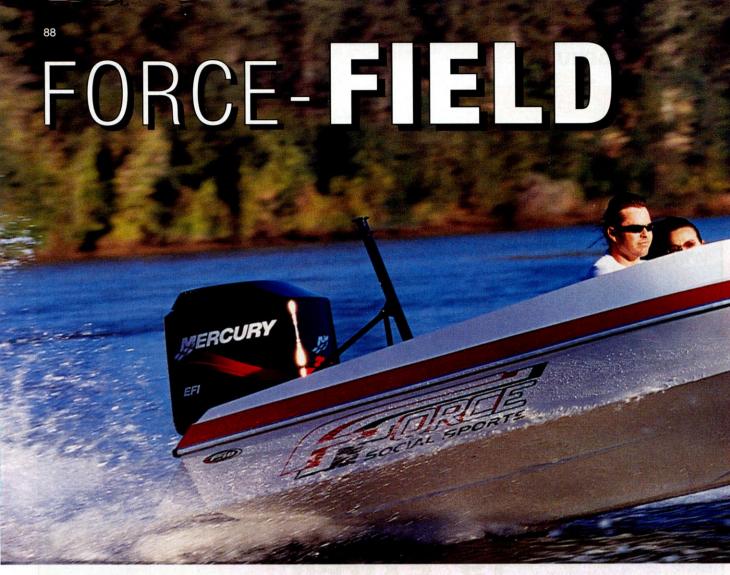


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The Force F18 is built on fastidious attention to detail, unbridled passion, and intelligence. David Lockwood reckons this high-performance social sportsboat is a force to be reckoned with.

ut for the old orchard dotted with citrus trees of all descriptions, the blue cattle dog with a fetching fetish, the chickens calling out from the coup, and the beautiful meandering river frontage, Rod Bickerton's waterfront property on the Hawkesbury River could be mistaken for

a boatvard.

Lying about the grassy fields between the mandarins, lemons, oranges and guavas are boats in various stages of suffering. There's a well-known brand of social skiboat on its way out the door with a new transom, another popular boat with cracks near its engine mountings, an insurance job with a split right down the keel.

Then there are the Force boats which, well, stand out from the motley crowd. Crafted from the latest composite materials, with perfect mouldings and slick sporty gelcoat jobs, the Force F18 is a stellar example of a hand-built, high-quality skiboat.

What you get you won't find on a mass production boat. A spray painter and panel beater by trade, Bickerton turned his hand to boatbuilding in the mid '90s after years of repairing the mistakes of other boatbuilders.

Transoms that are too thin, lay-ups that aren't strong enough, and exposed timber are just a few things he learnt not to do. And his trade meant he was already expert at making something fair and straight. But this is just part of the Force story...

THE QUICK & THE DEAD

Since he was 17 years old, Bickerton has been actively involved in waterski and powerboat racing. In case you didn't know, he has won every major title in NSW and Queensland. Take it from me, the bloke can drive a boat at speed in situations you'd never consider possible.

From the Grafton Bridge to Bridge to the Powerboat section of the Hawkesbury Bridge to Bridge (won for the last two years running), and most recently, the NSW State Titles, Bickerton is the Dick Johnson of the waterski world. His knowledge gained behind the wheel, along with that learnt through boat repairs and being exposed to a good spread of the mainstream marques, has put him in a unique position.

Unlike a lot of people who make boats purely

for bucks, Bickerton does it with passion and understanding. He knows (a) how a boat should perform, (b) how hull shapes influence performance, (c) how a boat should not be built, and (d) how to build a stiff boat.

Armed with this knowledge, he set about designing his first boat in the mid '90s. What Bickerton set out to build was a ski and raceboat with a deep cockpit for a feeling of security, a hull that crossed over from racing to social work, with a lot of cockpit space for its length.

TESTED TO THE LIMITS

Bickerton built a plug and could have gone ahead and made a production run. But instead, the enthusiast put in two years of R&D on the river, shifting strakes this way and that, changing the shape of the plank. Even 1mm changes made a profound difference to the way his boat ran. Then he tested for a year on the race circuit.

Eventually Bickerton found how to achieve speed, performance and handling. He created a boat that will get out of the water and go and which keeps its nose out of the trough in tight turns. After the kind of trial and error no



production boatbuilder could afford, the Force F18 was born.

To date, some 15 Force F18s have been built and, needless to say, none have even looked like coming apart. That is, despite being put through race circuits that can defy sensibility. Against such odds, his boats often feature in the winner's circle.

Back at his riverside home, with the sun beaming down, surrounded by trees loaded with fruit, and a barking dog, I would get my chance to drive the Force F18. This, I might add, was an enlightening if not humbling experience. But there's more to the story yet...

SOCIAL SKI WITH RACE PEDIGREE

The F18 comes in two versions: a performance raceboat and a social sportsboat that is still, let me tell you, a performance raceboat. The race model is some 100kg lighter, mainly through using a vacuum-bagged composite hull with Divinycell foam coring and carbon in the floor liner, transom and dash.

The F18 Social Sports has a more luxurious fitout, though both models share exactly the same hull. The hull has a sharp 21° of deadrise for chomping through rough water, a wide aft planing plank so you can ride on, err, nothing else but the plank, and a set-back transom for the hole shot of a jacking plate.

There is just one strake aside and sharp downturned chines which can be seen actively

turning the water away. But the big breakthrough came with the creation of small foils in the plank which provide extra surface area and sequential lift at two points of the hull. Unlike strakes, these foils are in the water at moderate speeds.

Hull testing has included running around the harbour where the boat remained soft and dry. But more impressive is the way the boat survived the one-metre swell and breaking waves in a Newcastle Harbour race, or the way it cut through the big blow on Jindabyne. And nothing has ever shifted.

The boat has knees from the well to transom for extra bracing and the hull and deck are fully glassed together to create one stiff assembly. On the water, the F18 Social Sports isn't at all like a production skiboat. It's more like a stiff race rig.

Needless to say, the Force F18 raceboat, which is capable of over 150kmh (94mph) top-end and 132kmh (82mph) with two skiers out the back, has been a big success on the circuit. Bickerton drives, Craig Stamford observes, and Shane Clarke and Adam Karl do the hard work out the back.

Unlike the social version it has water ballasting to help it stay on the water.

But the Social Sports version seen here isn't far behind. Its hull weighs just 450kg and, with a 225hp Mercury EFI outboard spinning a fourblade 25in Trophy prop, you will get 145kmhplus. As it was, a 23in Laser prop pushed the needle on the speedo past 130kmh (80mph) when the rev limiter kicked in at 6300rpm.

The hull shape contributes to the ease with which the F18 slides up onto the plane, but a terrific power-to-weight ratio is the reason for its top-end speed. And the construction method provides the reasons why you can maintain high speeds in tough conditions without damaging the boat.

STRONG, SOLID BUT LIGHTWEIGHT

Even the custom-made trailers which come with the F18 are veritable works of art, with attention to detail in areas others don't even dream about. There are matching glass guards, a two-pack paint job, concealed brake unit within the trailer neck, bowed axles to lower towing height for better road holding and easier launching, and flush-mounted submersible lights.

In many ways, the details are what set the Force F18 apart from the pack. Bickerton's fiancee, Kelly, is responsible for many of the finishing touches. She isn't afraid to get her hands dirty and the two of them work virtually seven days a week, rising at 6.00am when the rooster calls and toiling in the shed until 7.00pm.

Kelly says she's adept with a grinder and that she's worth seeing with a powerdrill. She has her own boat called *Pink Bits* and doesn't mind a beer or two. She's a good team player and inspired by Bickerton's enthusiasm for making boats he can be proud of.



A lot of work has gone into the hull, deck and seat moulds for the F18. There are no sharp edges and even the carbon fibre endcaps and nosecone aren't screwed. A tour of the factory alongside his home sheds light on how each boat is made.

The construction method for the F18 Social Sports doesn't involve vacuum-bagging like the raceboat, but there is Divinycell and hand-laid rovings with a totally-sealed transom and glassencapsulated maple stringers. Build time is around five weeks. The boats are well cured and the mouldings impeccable.

QUALITY INCLUSIONS

Under the floor hides a fully-baffled 120lt fueltank with water separating fuel filter. The deck filler, skipole, bilge outlet and engine cable grommet are all black anodised aluminium for extra style.

With a 225hp outboard, you will get a day's social skiing from the fueltank. But run the boat flat out and it's a different story. In the Powerboat section of the Sydney Bridge to Bridge, Bickerton used 115lt in 52 minutes on the F18 raceboat!

Steering is cable with steering bars. Most social boats go for hydraulic, but Bickerton tricks-up the steering on his social boats for better feel. Above 100kmh (60mph), the direct steering gives better feedback to the driver. There is a foot-throttle and foot, as well as hand trim, buttons.

A stylish Momo wheel, fully-lined and carpeted interior, and thick upholstery are all top grade. The marine vinyl is fixed to rot-free plastic seat and sidepocket bases. The seats are throughbolted to bases built into the hull.

There are the options of an aft-facing two person bench seat on the observer's side or swivelling pedestal seats on slides which are fully adjustable. Leg-room is excellent while facing fore or aft.

The aft lounge can take three people and, once again, you get a good deal of leg-room. Within reach are drinkholders. The skipper has a neat accessory unit which includes the CD player and switchpanel for the lights.

A ski locker is positioned ahead of the observer. Access is direct with the pedestal-seat version, while the aft-facing observer's seat lifts for access to the locker. Either way, the locker is big enough for skis, while the foam-cored foredeck is strong enough to stand on.

The F18 has plenty of storage in handy sidepockets, under the aft lounge, where there is an icebox with overboard drain, and under the aft deck. The lounge backrests lift out for quick access to the oil bottle (with deck filler) and battery or you can pop out the whole lounge if you want to replace the battery.

There's a neat anodised skipole and two boarding steps which, at rest, remain perfectly submerged for skiers to clamber aboard. To keep the hull nice and clean there are no grabrails or



silly ladders. The carbon fibre transom looks trick, as does the carbon dash insert with the Mercury gauges.

As seen here, the F18 Social Sports has fast and racy lines. The red, white and black colour combo and graphics are not unlike that seen on some touring cars. The charcoal carpet and black velvet lining inside, along with the white upholstery with piping, add some class. With a matching trailer, the F18 looks ready for the ski-race circuit.

DRIVER ERROR

Bickerton's display of boat driving will blow away the average self-appointee. He banks the boat off the wash, gets fully airborne without burying the bow, and runs at full noise on a few centimetres of plank. He knows every, and I do mean every, bend of the Hawkesbury River. During the Bridge to Bridge, the boats run past his front door.

Bickerton also has a way of teaching highspeed boat driving. New boat-owners will be allayed by his cool hand. Having said that, most of the F18s on the water are owned by sports ski aficionados who know how to handle a 130kmh (80mph) lightweight.

Running at 100kmh (60mph) or so is a breeze in the F18 and, as with most deep-vee hulls, it pretty much sits there. The Mercury gauges — RPM, MPH, PSI, engine temperature, trim and hours — are easily read and the wheel and foot throttle fall to limb. At 4000rpm the boat turns in a snappy cruise speed of well over 80kmh (50mph).

But from 0-100kmh (0-60mph) with Bickerton driving took all of five seconds. That's faster than a Porsche or Ferrari. Above 100kmh (60mph), the boat needs to be driven. That is, you add a subtle correction with the wheel to offset the hull motion.

I was too heavy-handed for the Hydrabar steering system. Coming from hydraulic steering, my corrections were too big. The steering is direct to the point that you need just a little tweak not a big flick. But with the F18 under control, you can revel in the handling, power through the turns, and have fun banking off washes and towing skiers as fast as they dare go.

Meanwhile, in between runs you can kick back and enjoy the comforts of deep seats, a fourspeaker sound system, and above all the fact you have a boat underfoot which isn't going to fall apart. Social skiers looking for a quality product should check out the Force F18.

Bickerton has been skiing all his life and is now living on the river he knows best. He has plans for a 21-footer with overnighting accommodation that can traverse big bays at high speed and run twin outboards. I'd like to see that!



Above from left: A bird's-eye view of the F18's stylish layout; Removable seating reveals rot-free seat bases; The sporty helm has a Momo wheel, foot throttle, foot and hand trim buttons.

FORCE F18

Price as tested:....\$39,500 (with Mercury 225hp EFI outboard and custom dual-axle brake trailer)

Options fitted: Momo steering wheel, carbon fibre transom, dash panel and end caps, swivel observer's seat, adjustable driver's seat, rear lounge with Esky, ski locker and skipole, CD player, flush-mounted nav lights and more.

Priced from:\$13,250 for bare hull and deck

GENERAL

 Material:
 Foam sandwich/GRP

 Length (overall):
 .5.35m

 Beam:
 1.80m

 Deadrise:
 .21°

 Rec/max hp:
 .175hp/225hp

 Weight:
 .450kg (hull only)

ENGINE (as tested)

Make/Model: Mercury 225hp outboard
Type: Fuel-injected V-six petrol two-stroke
Rated hp: 225hp @ 6300rpm on testboat
Displacement: 3032cc
Weight: 230kg
Drive (Make/ratio): Outboard/1.75:1
Props: 23in Laser

SUPPLIED BY Force High Performance Boats, Lower Portland (NSW), tel (02) 4575 4038.