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May the force be with you

It took five years and hundreds of alterations to perfect this awesome ski racer. **BY IAN MACRAE**

SOCIAL SPORTS

FORCE F18



In this job you get to meet a lot of varied and different people, some interesting and some not so interesting.

So, it was refreshing recently to meet a team of young boat builders who not only know what's required from a good ski boat, but also how to go about building it.

Rod Bickerton and his crew, made up of family and friends, at Force High Performance Boats, have spent the last five years perfecting a ski/racing hull that is going to surprise many, not only those in the industry, but competitors and social skiers alike.

Now Rod's no slouch when it comes to boats and skiing, having started driving ski race boats when he was 17 and not wishing to age



Main Pic: The F18 has clean, smooth lines and an uncluttered cockpit, but still with everything you need to enjoy a days skiing, including the stereo, 'Esky' and drink holders.

Right: The over-sized observer's seat gives good support and sits low in the cockpit so wind is easily deflected over your head when underway.

him too much, but that was 15 years ago.

As a driver he has won numerous major ski races including: Sydney's Bridge to Bridge; the Gold Coast Classic; the Grafton Bridge to Bridge; the Lion Island Classic, the NSW Series 175hp Class, and this year he took out the 175hp class of the Sydney Bridge to Bridge.

Perfecting the hull has literally taken years, with the original prototype being made from craft wood.

Rod toyed with more than 100 running planks, different shaped strakes, chines and V shapes, finally settling on a hull with a 21 degrees deadrise, small chamfered rear chines, two planing strakes, a delta flat that narrows towards the bow and a stepped transom.

The result is a custom-built boat that when fitted with 225hp outboard pulls 82mph with ease and never feels loose or flighty.

THE HULL

Although I have covered the hull fairly extensively in my introduction, there are still aspects of its design that need to be explained, so readers get a true picture of just how well this 18' ski/race boat performs.

Her overall length is 5.35m, with a beam of 1.8m, but Force Boats have crammed many clever features into this relatively small package.

Force built two boats, one a social ski boat and the other a 'full on' ski racing boat and apart from the race boat being a little Spartan, both have identical hulls and design features.

Talk to any ski-racing driver and they will tell you a good race boat must not dig its nose in during tight turns.

Then, on the other hand, the bow mustn't become flighty and rise out of the water in choppy or windy conditions and the Force F18 gets a tick on both those qualities.

Rod has designed the bow so that it basically droops. In other words while the underside is similar to other boats the foredeck slopes downwards.

This aerodynamic feature helps keep the bow down, but doesn't force it to dig in and delivers a stable, dry ride for those in the cockpit.

Plenty of thought has also gone into cockpit design. Even though this is a low profile boat when you're seated in the boat the gunwales are extremely high making passengers feel secure even during tight turns.

This is achieved by building the cockpit floor down as low as possible into the keel of the boat.

Not only does this help to protect the driver and passengers from the wind, but it lowers the centre of gravity of the hull and enhances its ability to turn.

The transom of the Force F18 also steps up to allow a greater flow of water over more of the outboard leg, which assist steerage, stability and overall handling.

LAYOUT

There is a surprising amount of room in this boat, which has seating for only five, but plenty of space to move around the open, uncluttered cockpit.

Even though there's no windscreen, but because of the low seating position the wind doesn't rip off your sunglasses even at high speed.

The top of the dash is also aerodynamically designed to deflect air up and over the top of the cockpit.

The boat comes with full instrumentation; a left foot throttle; sports steering wheel; a stereo console; drink holders; full carpets; hydraulic steering; bilge pump; drained Esky; deck oil and fuel fillers; ski pole and courtesy lights.

There are also swim platforms on either side of the outboard to aid access from the water.

All of the boat's metal parts are anodised and powder coated, so no unsightly rust will begin to appear after a few months on the water.

The rear lounge has storage underneath while the observer's seat back rest lifts to expose a huge ski locker.

A 120lt-fuel tank is positioned under the floor and it features a dip stick, for accurate fuel readings.

Another important feature of this boat is that Rod has gone to great lengths to ensure there are no sharp edges to catch on clothing or flesh, something that is sometimes over looked on some boats.

Clockwise from top right: There are two swim platforms, one on either side of the outboard leg to make boarding from the water easier.

This boat looks fast just sitting on the trailer, which just happens to be a custom-built, tandem with many innovative design features.

The observer's seat lifts to reveal a huge ski locker with more than enough room to store skis, wakeboards, ropes, wetsuits and the likes, all used during a day's skiing.



The Force F18 comes on an extremely well finished, dual-axle, custom-built trailer that supports the hull evenly, but the team at Force have also included clever design features into the trailer.

As we all know ski boats and trailers are getting bigger, but normally the shed or garage they live in aren't. So, with this in mind, Force designed a trailer coupling, which is set inside the trailer frame to increase the trailer ride height, effectively reducing the overall length of the trailer, so it will fit in smaller spaces - clever.

Another feature of the Force F18 is that no wood has been used to make seats and hatches. They're all upholstered plastic boards so they won't start to rot after a few years wear and tear.

The seats are also well made and are mounted and welded to a stainless steel plate so they can't pull out even under extreme force.

There is also a driver's footrest so there's something to brace against when you start hitting those 'white knuckle' speeds.



This delta flat runs three quarters of the way along the keel, narrowing near the bow and help rocket the Force F18 out of the hole.

PERFORMANCE & HANDLING

Probably the best way to describe the performance and handling of this boat is - awesome.

The 225hp EFI Mercury outboard on the test boat was overkill in

my opinion, but Rod assures me he was just running that motor in and soon it will be mounted on his race boat.

Running in or not, the 225 literally made this boat fly, but its handling showed no signs of deterioration even with all that weight on the back.

The boat turned extremely tightly with no tail slip and didn't dance on its chines in a straight line. Chop and other boat's wakes weren't a problem for the 21-degree deep-v hull and even at high speed the boat felt stable and safe.

Mile per hour to revolutions per minute figures were 25mph @ 2000rpm; 38mph @ 3000rpm; 60mph @ 4000rpm; 72mph @ 5000rpm, and 82mph @ 6300rpm.

The engine was running a stainless steel, 25" Mercury Trophy four-blade propeller and although hydraulic steering isn't allowed on a race boat, it certainly made everything smooth and tight on the social ski version.

OVERALL

Reading this you have probably realised I liked this boat, I liked it a lot and with good reason.

Its handling and performance were right up there with the best. The fibreglassing work was first class. The overall finish was extremely good and the 'young guns' at Force Boats could teach some of the big boys a thing or two about how to build a top trailer.

There was nothing really fancy about the boat in the way of fixtures and fittings, but that's the way it was designed, as a fully functional ski boat.

All the fittings were quality Rex Marine, so maintenance on the boat should be minimal.

The F18 has clean, smooth lines and an uncluttered cockpit, but still with everything you need to enjoy a day's skiing, including the stereo, 'Esky' and drink holders.

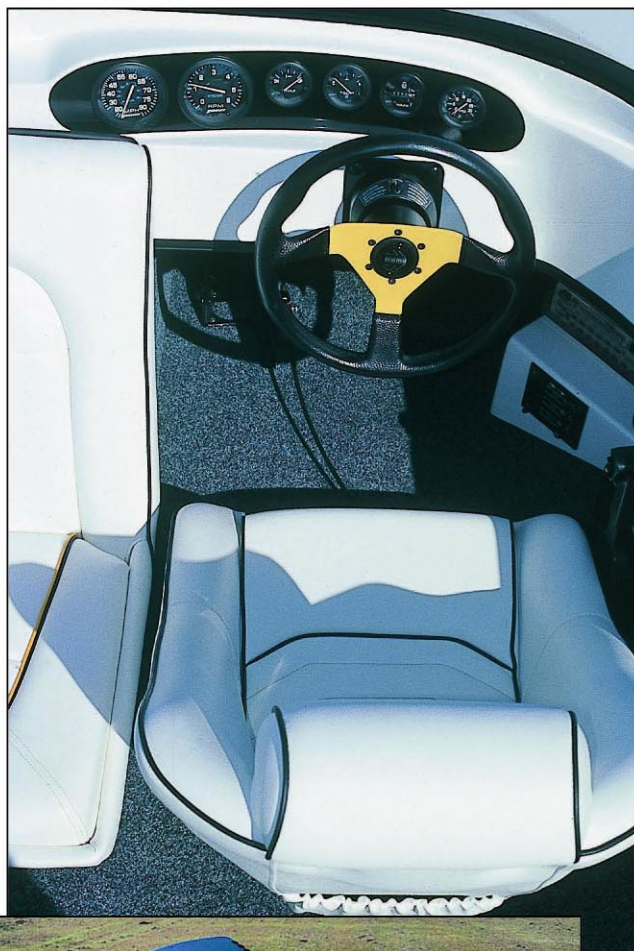
These boats are all custom handmade, so you can have any colour you desire for the hull, carpets and upholstery.

Also, watch this space as there's a 21 footer due out next year.

The Force F18 Social Sport's price starts at \$13,250 and the custom heavy-duty trailer costs \$3950. As tested with the 225hp EFI Mercury on the back, the boat's asking price was \$36,900.

Rod Bickerton and the team at Force High Performance Boat did





Top: For the driver, the helm station offers a sports steering wheel, a left-foot throttle pedal and a stereo console beside your right knee.

Above: Down at the blunt end there is storage under the transom and the anodised and powder-coated ski pole should give a lifetime of rust free service.

their homework well and used all the experience they have gained from ski racing to develop a top level ski boat.

I am sure we will be seeing plenty of F18 Social Sports ski boats on the water this season. Then, going by the amount of wins Force Racing is clocking up, I am equally as sure they will generate plenty of interest in ski racing circles.

FORCE F18

SOCIAL SPORTS

PERFORMANCE DATA

HULL INFORMATION

LENGTH	5.35m
BEAM	1.80m
DEADRISE	21 Degrees
WEIGHT	1250kg (with 225hp outboard)
PASSENGER CAPACITY	Six adults

STANDARD EQUIPMENT

Full instrumentation, AM/FM cassette stereo CD, hydraulic steering, bilge pump, Esky, drink holders, rear lounge, driver's bucket seat with footrest, driver's protection pad, fully carpeted interior, ski pole, swim platforms, custom-built trailer, anodised gunwale strips, courtesy lights and an oversized observer's seat.

ENGINE

Mercury EFI 225hp outboard (Recommended HP 175hp)

PROPELLER

Mercury Trophy 25" four-blade, stainless steel

FUEL CAPACITY

120lt

RPM VS MPH

2000rpm	25mph
3000rpm	38mph
4000rpm	60mph
5000rpm	72mph

WIDE OPEN THROTTLE SPEED

6300rpm 82mph

PRICING INFORMATION

\$36,900 (as tested)
Base price \$13,250

TEST CONDUCTED AT

Hawkesbury River, NSW

MANUFACTURER

Force High Performance Boats

BOAT SUPPLIED BY

Force Boats (02) 4575 4038 or 0409 678 544