

AeroMarine Research

TBPNews - Performance Report

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>>>> **Tunnel Boat Performance News** >>>>> (over 5000 members!)
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In this issue:

- 1) **Seebold Looking to Roar Back in 2010**
- 2) **Great Powerboat videos**
- 3) **F1 driver Craig Bailer blows over, spinal injuries**
- 4) **FEATURE: 'Winterizing Your Performance Outboard Engine' (Part 1)**
- 5) **Navy's newest warships top out at more than 50 mph**
- 6) **Formula Four Races Into Powerboat P1 Series**
- 7) **NEW Powerboat Design Software V7.10 Released!**
- 8) **Powerboat Racing on TV**
- 9) **Jimboat's NEW Feature Articles**

***** TBPNews *****

Check out [review of Jimboat's 13th Ed. "Secrets of Tunnel Boat Design" book in HotBoat magazine!](#)

1) Team Seebold Looking to Roar Back in F1 PROP 2010



Team Seebold is looking to move in one direction – back to the top of Formula One powerboat racing. The excitement and possibilities for a successful 2010 season in the new Formula One PROP Tour is refueling Tim and the rest of Team Seebold.

Team Seebold may have a few tricks up its sleeves for 2010. There may be a new Seebold hull in the works and possibly new sponsorship. Tim is finishing up the move of the Team Seebold race shop to quarters near his home at the Lake of the Ozarks so work can resume on boat preparations for the season-opener in Naples, Fla. The Seebold goal, as always, will be battling for the first spot under the checkered flag.

The Formula One PROP (Professional Racing Outboard Performance) Tour expects to conduct six to eight races next season for the Formula One, Formula Two (SST-120) and Formula Three (SST-45) classes of outboards. The races will be sanctioned through the American Power Boat Association (APBA), which has overseen boat racing in the United States for more than a century. The 2010 Formula One PROP Tour season will open in Naples, Florida, next March.

Check out more at: f1prop.com

***** TBPNews ***** [\[return to top\]](#)

2) Great Powerboat videos



Check out these great videos....

[Great rear-view of F1 tunnel race...2009 Bundy Thunder F1 Powerboat Race](#)

[Amphibious Car Vehicle at Lake Havasu](#)

[EVINRUDE V8 - 176.556mph - WORLDS FASTEST OUTBOARD-Part 1](#)

[EVINRUDE V8 - 176.556mph - WORLDS FASTEST OUTBOARD-Part 2](#)

***** TBPNews ***** [\[return to top\]](#)

3) F1 driver Craig Bailer blows over, spinal injuries



Seven times National F1 Powerboat Champion Craig Bailey has been taken to Bundaberg hospital with suspected spinal injuries after an accident in race 3 of the annual Bundy Thunder Powerboat Classic in Bundaberg, Australia.

The 47 yr old, just back from China competing for Team Qatar on the World F1 Circuit, was competing in the national F1 class when a gust of wind lifted the boat into the air, it then did a 360 degree flip coming down hard and severely damaging the boat. Bailey was able to free himself from the cockpit, he is held in by a 5 point harness similar to a racing car, and swim to the surface where rescue divers took him to an ambulance on shore. He was then transferred to Bundaberg hospital

accompanied by his wife Janelle. Initial tests show a fractured vertebrae and severe bruising around the shoulder. Bailey is the most successful Australian Powerboat racer, winning the French F1 Grand Prix in 1990 and having over 20 national titles.

Check out more at: f1h2o.com

***** TBPNews ***** [\[return to top\]](#)

4) FEATURE: 'Winterizing Your Performance Outboard Engine' (Part 1)

It's that time of the year again - If you live in a part of the world where winter is not the best time for power boating, then it is time to put your boat away for the winter. Although it is usually a sad time of year - remembering all the great times in the boat through the summer - taking a little time now can help to make sure that your boat will be ready (and happy) when you bring it out again next spring.



Getting your performance powerboat ready for winter storage is more than just pulling it out of the water. Proper winterization of your boat and motor can be the most important maintenance a boat owner can perform to help ensure it weathers the winter without damage, and to ensure safe boating next spring.

Make a list and check it twice - I am big on checklists. I don't like to forget any of the steps of the winterizing process, so I follow a list that I've built up over the years. If your owner's manual includes winterizing instructions, you should follow those recommended procedures. So, I recommend that you make up your own 'checklist' with all the winterizing steps that apply to your engine.

Tools of the Trade - The key items that you'll need are general maintenance tools (spark plug wrench, large slot screwdriver, manual ratchet set); your engine's normal lubricants (lower unit oil, triple-guard grease; lithium-based grease); aerosol can of fogging oil, a fuel stabilizer, and a grease gun.

It doesn't take a lot of time to get your outboard prepared for safe winter hibernation, and can save a lot of time and headaches in the spring. What needs to be done to get your outboard ready?

Prepare the Fuel System - Starting your engine in the spring with old gasoline is an invitation to problems. Removing all the possible moisture from the tank is the best approach. It is really best to leave your fuel tank(s) close to empty, draining the fuel that remains in the gasoline tanks and the fuel lines.

This is not always easy to do, and so as an alternative, a fuel stabilizer can be used in the tank(s) and lines.

If you are planning to drain the fuel tank, run the fuel tank fairly low, to minimize the amount of fuel that you have to drain. If you are not planning on draining the tank, fill it to a level that is almost (90%) full. Filling the tank will help reduce condensation in the tank as the temperature changes. Then, add a liquid fuel stabilizer to the fuel in the tank, using the instructions on the label of the fuel stabilizer.

Run the engine for a few minutes, either on the ramp or with a water hose attached for cooling, to move some of the stabilized fuel through the fuel pump and fuel system (never run your outboard without a water supply). The fuel stabilizer helps maintain the octane of the fuel, and reduces the gum and varnish buildup that can otherwise occur during storage.



Fog the carburetor/air breather intake(s) with an engine fogging oil. Fogging oil is an

anticorrosive mixture that protects the internal surfaces of the carburetor and the cylinders. Available in bulk or aerosol cans, fogging oil is formulated to stick to the cylinders and not slide down the walls. Follow the instructions that come with the product. Remove the cowls of your motor, and spray the fogging oil into the intake holes/vents.

Before the engine runs out of fuel, spray fogging oil into the carburetor or breather covers. Expect that the engine will run rough just before it runs out of fuel - that's ok. Get lots of fogging oil into the air intake system while the vacuum is operating.

Change the fuel filter inside the engine, using a fresh filter from your engine dealer. Remember to also change the fuel/water filter canister (usually mounted inside the boat and the aft, near the transom) if you have one. Leaving water in the fuel lines is dangerous during the winter

Inspect & Change Gearcase (Lower Unit) Oil - This operation is one of those things that you "can't do too often". When I was racing on the OPC circuit, we would change gearcase oil after every race - sometimes after every heat. It gives a chance to check condition of the transmission, seals, etc. - a chance to find a problem before it trashes your lower unit.



Even a small leak in your bearings or shaft seals will allow moisture to migrate into your gearcase. The carbon-steel parts, like gears and some shafts, will corrode, and ultimately cause more seal failures. But worse - if there is any water or moisture whatsoever inside your gearcase, the result can be a cracked housing! It is easy prevent such an event by checking for moisture now and replacing with fresh lube oil. (Note: if you do find water in the oil, you may have leaking seals that should be replaced before next season!)

Normal operation and wear will leave small metal filings mixed in your oil. Changing the oil now will prevent them from building up in the mixture and causing further wear next spring.

Don't leave your outboard without oil for the winter. This just allows moisture in the air to condense inside the gearcase and corrode during the winter. Fill it with fresh oil - ready for next season!

To drain the oil in the lower unit, have a container ready to catch the used oil. Remove the lower screw on the side of the lower unit (usually on the right side). Oil will begin slowly draining into your container. Remove the vent (upper) screw. The oil should come out faster now. Let the oil drain until you're satisfied that most of it is out.

To fill the lower unit, you will need either a squeeze bottle with a narrow tapered spout, or a pump. The oil is pumped into the lower unit through the bottom hole - not the top one! The top is a vent - and also prevents overfilling. With both holes open, place your squeeze bottle or hose against the lower hole, and begin pumping the oil in. Watch the upper hole. When you see oil starting to come out of the upper hole, the lower unit is full. Keeping the lower hole covered, install the upper screw and tighten snugly. When you remove the bottle/pump from the lower hole, immediately plug the hole with the proper screw. Tighten the screw, and clean up the mess with your rags.

Tip: Don't try to put the bottom plug in first and then fill from the top. This method can cause under filling or undesirable air pockets in the chamber.

That's all for this issue. Watch for the next issue of TBPNews, for the conclusion of Winterizing your Outboard. In Part 2, we will cover Preventing Rust & Corrosion, Engine Inspection & Preparation, and Freezing prevention.

See Jimboat's full colour article published in Family & Performance magazine at: aeromarineresearch.com

***** TBPNews ***** [\[return to top\]](#)

5) Navy's newest warships top out at more than 50 mph



The Navy's need for speed is being answered by a pair of warships that have reached freeway speeds during testing at sea.

Independence, a 418-foot warship built in Alabama, boasts a top speed in excess of 45 knots, or about 52 mph, and sustained 44 knots for four hours during builder trials that wrapped up this month off the Gulf Coast. The 378-foot Freedom, a ship built in Wisconsin

by a competing defense contractor, has put up similar numbers. Both versions of the Littoral Combat Ship use powerful diesel engines, as well as gas turbines for extra speed. They use steerable waterjets instead of propellers and rudders and have shallower drafts than conventional warships, letting them zoom close to shore.

Freedom is due to be deployed next year, two years ahead of schedule. Independence is an aluminum, tri-hulled warship built by Austal USA in Mobile, Ala. The lead contractor is Maine's Bath Iron Works, a subsidiary of General Dynamics. Lockheed Martin Corp. is leading the team that built Freedom in Marinette, Wis. It looks more like a conventional warship, with a single hull made of steel.

Early cost estimates for Littoral Combat Ships were about \$220 million apiece, but costs spiraled because of the Navy's requirements and its desire to expedite construction. The cost of the ships is capped at \$460 million apiece, starting in the new fiscal year. While they're fast, they aren't necessarily the fastest military ships afloat. The Navy used to have missile-equipped hydrofoils and the Marines' air-cushioned landing craft is capable of similar speeds - and smaller ships are capable of higher speeds. Nonetheless, the speed is impressive, especially considering that other large naval vessels have been cruising along at a relatively pokey 30 to 35 knots for decades.

Check out more at: news.yahoo.com

***** TBPNews ***** [\[return to top\]](#)

6) Formula Four Races Into Powerboat P1 Series



Powerboat P1 Management Limited, rights holders of the Powerboat P1 World Championship, has announced it has concluded discussions to take over the running of the British-based Formula Four Stroke Association (F4SA).

The move will offer competitors new technical regulations and the opportunity to compete across an enhanced calendar of races in Europe and in the UK. Over the past ten years, the F4SA, under the leadership of eight-time powerboat world champion, Steve Curtis MBE, has developed the offshore racing platform and nurtured pilots who have graduated to full international level. Its rapid development has seen it grow from just five teams competing in a single 130 hp class in 1999, to more than 25 teams competing in two classes in 2006, and 19 participating teams in 2009.

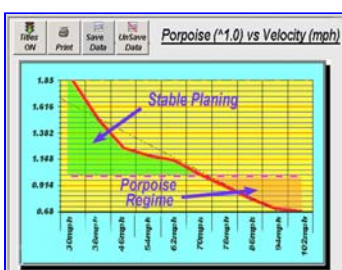
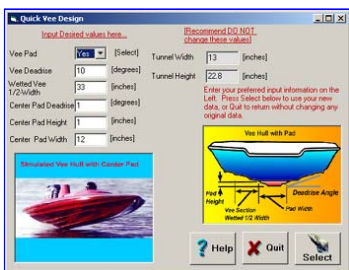
The series has enjoyed strong support from Honda who has backed the championship since 1999 in order to prove the performance of its then newly-launched BF130 hp four-stroke outboard engine. A new name and identity for the series is planned which will see the introduction of two-stroke 300 hp Mercury engines in the 27 ft class. Honda's 150 hp engines remain in place for competitors in the smaller 21 ft class.

The first event of the new series' European tour is intended for the opening round of the 2010 Powerboat P1 World Championship in Split, Croatia next April and Wicks believes the latest addition to Powerboat P1 will be well supported.

See more at: girlracer.co.uk.

***** TBPNews ***** [\[return to top\]](#)

7) NEW Powerboat Design Software V7.10 Released!



NEW Version 7.10 NOW RELEASED!
 BIG NEW FEATURE...YOU ASKED FOR IT...NOW TBP HAS IT!...
 *** full Vee Hull and Vee-Pad hull performance analysis - one-button click that changes inputs to simulate a vee bottom hull.
 *** Porpoise Analysis - We have developed a new analysis tool! XPorpoise is an engineering tool developed by AR that predicts your hull's inherent susceptibility to porpoising...and shows how to fix it!
 * New 2009 Motor database, with over 750 OEM engine

specs!

* Centerpod Wangle input - now you have the ability to represent a special angle of attack (trim angle) of the hull CenterPod that is different than the angle of the Sponsons.

*** Free Expert Analysis Reports (4) included shows how you can apply expertise to your design/setup.

- * Cuddy Cabin Cockpit option added to design considerations.
- * TBDP now calculates hydrodynamic drag of ANY lower unit design; includes standard design specs for 20+ OEM drives.
- * NEW enhanced HELP Manual with over 50 pages, over 17,000 words of tutorials, over 70 pictures & HELP illustrations.

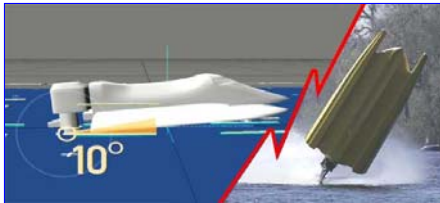
...AND Lots more new great Features in V7.10 TBDP software!

...check out the new TBDP software V7.10 at: aeromarineresearch.com

***** TBPNews ***** [\[return to top\]](#)

8) Powerboat Racing on TV

*** **"Thrill Zone: Extreme Powerboats"** - National Geographic powerboat show.



Author **Jim Russell** (Jimboat) is powerboat design technical consultant on a new National Geographic special for "Thrill Zone" series...

Details at: (channel.nationalgeographic.com)

check out next show date at AR's website! aeromarineresearch.com/NatGeo_thrill-zone.html

*** **"Streaming Motorsports"** on Speedbox.tv - Parker ENZED Jetsprinting Championship - - Check at: speedbox.tv

*** **"IHBA Lucas Oil Drag Boat Racing"** Series on SPEED TV - Check next show at speedtv.com

*** **"Champ Boat Grand Prix Series"** - on SPEED Channel - Check next show at: www.champboat.com or at: www.speedtv.com

*** **"F1 World Championship TV Show"** on The Water Channel - See: www.waterchannel.com; [see web site for other show times]

*** **"War On Water" TV Show** on The Water Channel - Check it out at: www.waterchannel.com; [see web site for other show times]

*** **"Powerboat Showcase"** on The Water Channel - Check it out at: www.waterchannel.com; [see web site for other show times]

*** **"Offshore Classics"** on The Water Channel - Check it out at: www.waterchannel.com; [see web site for other show times]

*** **"American Powerboat Television"** on The Water Channel - See: www.waterchannel.com or americanpowerboat.tv

*** **"Honda Formula 4-Stroke Powerboat Series"** - Check it out at: honda-racing.co.uk

[Ed. Note: The Water Channel is available on [The Dish Network](#)]

***** TBPNews ***** [\[return to top\]](#)

9) Jimboat's Feature Articles



NEW Jimboat Article Announcement! - Author Jim Russell explains '[How Do Tunnel Boats Fly?](#)'

Check out full article at: aeromarineresearch.com

Jimboat writes Feature articles in HotBoat, Family&Performance Boating, Performance Powerboat, World of Powerboats, Extreme Boats magazines.

- [Tunnel Vision - 'How Do Tunnel Boats Fly?' - HB Nov/Dec 2008](#)
- ['Why Do Boats Create Rooster Tails?' - HB-August 2008](#)
- ['What a Blow Out!' - 'Gearcase & Propeller Blowout- Why it Happens & How to Fix it' - HB-June 2008](#)
- ['Walk on the Wild Side' - 'Chine Walk - Why it happens & How to Fix it' - HB-Jan 2008](#)
- ['Hump Zone' - 'Why does your Boat Porpoise?' - HB-April 2007](#)
- ['The Bottom Line'-'Why does a Pad make a Vee Hull faster?' - F&PB-Sept 2005](#)
- ['10 Smokin' Speed Secrets Revealed...' - HB-Feb2005](#)
- ['Winterizing your Performance Outboard' - F&PB-Jan2005](#)
- ['What a Drag' - 'Trim Angle & Engine Height Can Reduce Drag and Increase Speed' - HB-Sept2004](#)
- ['10 Safety Tips' - 'Ten Safety Ideas for High Performance Go-Fast Boats' - HB-Aug2004](#)
- ['Flight Path' - 'Where does Lift Come From?' - HB-April2004](#)
- ['Rocket Science' - 'How To Increase Your Hull's Design Speed With Aerodynamics' - World of Powerboats-Winter2004](#)

