

# AeroMarine Research

## TBPNews - Performance Report

~~~~~  
 TBPNews #136 - December 1, 2010  
 ~~~~~

>>>> Tunnel Boat Performance News >>>>>> (over 5000 members!)  
 =====

### In this issue:

- 1) UAE pair retains the world Class 1 crown
- 2) Jay Price Wins For First Time In Doha F1!
- 3) Great Powerboat videos
- 4) Tech Report on Ethanol fuel in Winter
- 5) FEATURE: 'Winterizing Your Performance Outboard Engine' (Part 2)
- 6) NEW Software Release - get it before Christmas! (TBDP/VBDP V7.13)
- 7) Powerboat Racing on TV
- 8) Jimboat's NEW Feature Articles

\*\*\*\*\* TBPNews \*\*\*\*\*

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

### 1) UAE pair retains the world Class 1 crown



The UAE's Arif Al Zafeen and Nadir bin Hendi have recently bagged the UIM Class 1 World Powerboat Championship with two races remaining.

The duo reached at the pole position with yet another storming performance at race two of the Abu Dhabi Grand Prix. While bin Hendi led from start to finish to retain the title the pair won in such brilliant fashion in 2009, it may be noted here that the duo is now the best in terms of the race victories.

Moreover, the team is the most successful pairing in the history of the world's greatest powerboat racing team which it one of the best names that you will ever find in this business. Bin Hendi is of a view that the team

came to the venue looking for the championship and it has been able to do what it had planned.

Moreover, he also mentioned the fact that Arif is one of the best drivers that one will find and said that back-up crew has also done a very good job.

Check out more at: [topnews.ae](http://topnews.ae)

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

### 2) Jay Price Wins For First Time In Doha F1



Jay Price Completes Cycle And Wins For First Time In Doha!

DOHA, Qatar – Saturday, November 27, 2010 – Qatar Team driver Jay Price led from start to finish winning by 4.42 seconds at his home Grand Prix and has now moved into first place in the UIM F1 H2O World Championship for powerboating at the Eighth Grand Prix of Qatar in front of tens of thousands of fans along the corniche on the edge of the Arabian Gulf in Doha Bay.

"We had a perfect setup today and we got the start we were hoping for and

from there it was just a matter of holding off the competition,” said Jay. “I almost lost it at one point halfway through the event but was able to save it and continue on without losing much ground. Now we are feeling confident that if we just keep up the pressure we have a good shot at winning the title for the second time.”

While the American driver was pushing his way to his second win of the season and the ninth of his career, he was pushed to the limit by Finnish star Sami Selio as the 2007 World Champion got within a second and one-half with five laps to go in the 35 lap event only to lose ground thru traffic in the final moments of the race.

“We're happy with what we did today,” said Selio. “We now have gone from being down 15 points to nine and have gone from fourth to second in the championship with my teammate Alex Carella and fell strongly about the next two races that I have won before.”

Carella, a strong rookie-of-the-year candidate earning his third podium of the season, stayed in perfect formation with his veteran teammate finishing 6.79 seconds back at the end while holding off a determined Ahmad Al Hameli of Team Abu Dhabi who came charging up from his 16th starting position to take fourth 7.93 seconds back at the end of the drive of the day.

German driver Fabian Kalsow finished a great weekend of racing by qualifying his career best sixth and following it up with a fifth in the Grand Prix for the F1 Atlantic Team. Taking sixth charging up 12 places from the start was Team Abu Dhabi driver Thani Al Qamzi staying in within a shout of the championship as the series heads to his home country to the final two events.

Rookie driver Davide Padovan of the Rainbow Team had his fourth top 10 finish of the season taking seventh after starting in the 14th position at the start. Portugal veteran Duarte Benavente was eighth after charging up from the 15th position at the start of the grid in his Dragon boat.

French driver Philippe Chiappe started 17th and came home in ninth picking up a pair of points for the CTIC China Team, while rounding out the top 10 was Italian driver Fabio Comparato in the 800 Doctor sponsored boat coming out of a sick bed and starting 19th taking the final point of the day.

Francesco Cantando of the Singha F1 Racing Team who came in leading the drivers points championship lasted only a few seconds into the first lap crashing out by getting washed down by the spray of Sami Selio's BABA boat and blowing over in spectacular fashion and not injuring himself but damaging his BLAZE boat and dropping out of the lead in the title chase.

Jay Price now leads the championship with two races to go with 68 points. Three drivers Sami Selio, Alex Carella and Cantando all caught up with 59 points in second place and Thani Al Qamzi sitting with 49 marking the first time that three different drivers had been tied for second this late in the season.

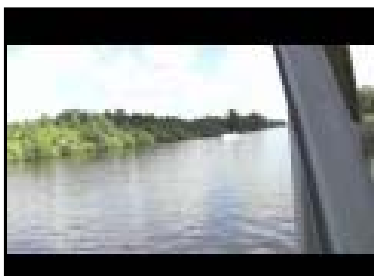
The UIM F1 H2O World Championship for powerboating heads off to the seventh race of the 2010 season next weekend for the 19th Grand Prix of Abu Dhabi in the United Arab Emirates on the 4th of December in a race that has a history to it going back to 1993. Jay Price now is back in the lead for the title and is his to lose with two events to be run. Anything can happen and the championship looks once again to be going down to the final few moments once again this season.

Be In The Know – With F1 H2O!

check out more at [F1H2O.com](http://F1H2O.com)

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

### **3) Great Powerboat Videos**



Check out these great videos....

[Rich Luhr's Switzer Wing Restoration](#)

[Rotary-engine Ski Race Testing](#)

[Mercury 1958 World Record Inline 6/Methane Run](#)

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

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

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

#### **4) Tech Report on Ethanol fuel in Winter**



Ethanol-extended gasoline is a fuel mixture that is much more susceptible to deterioration during storage. manufacturers seem to have different views on how best to "winterize" their engines that run on ethanol-extended fuels.

The Mercruiser manual suggests running the tank low for storage so that if the gas is contaminated by condensation, there is less fuel to dispose of. And moisture contamination is always a risk as long as fuel tanks are open to the atmosphere. Yamaha

recommends to use their Fuel Stabilizer & Conditioner to be run through the entire fuel system, and then store the tank seven-eighths full to leave room for expansion of fuel from ambient temperatures.

Star Brite and Sta-Bil (fuel stabilizer manufacturers) advise a full tank - apparently because sometimes the local fire marshal requires a full tank because it minimizes the formation of volatile fumes and lowers risk of fire. But some marinas don't like a full tank of fuel left in the boats stored on their lots.

So what to do? There's different views....Cold environments slow the deterioration process (that's a good thing). Warmer climates accelerate the deterioration of fuel (bad).

Well, for whoever's interested, I store whatever fuel is left in the tank - usually about a half tank. Then I stabilize the fuel in the tank and run through the motor. In the spring, I fill the tank before our first outing, so that i have as much fresh fuel as possible.

See more articles on Ethanol with performance powerboats at: [BoatUS.com](http://BoatUS.com).

See more on "[Winterizing your Performance Outboard Engine](#)" in this issue of TBPNews

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

#### **5) FEATURE: 'Winterizing Your Performance Outboard Engine' (Part 2)**

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. In the last issue of TBPNews, Part 1 discussed Tools required, Preparing the Fuel System, and Inspect & Change Gearcase (Lower Unit) Oil. Now, in Part 2, we will cover Preventing Rust & Corrosion, Engine Inspection & Preparation, and Freezing prevention.

##### Prevent Rust & Corrosion

Lubricate linkages - Clean all pivots and visible gears and protect them for the winter with oil or grease, as specified in your owner's manual. Grease all of the pivot points in the steering and trim/tilt mechanisms. Pumping some grease into these areas will displace any water that might be there.



Allowing corrosion to flourish during the off-season is less dramatic but equally destructive. Corrosion can establish a foothold on idle components, so liberal use of corrosion inhibitors--both internal and external--is a second guiding principle for winterizing.

Drain cooling passages - Use a flushing attachment (Flushing kits are available from boat dealers.), or run the outboard in a tank filled with clean fresh water. Disconnect the flush attachment or remove the motor from the flush tank. With the motor upright, let all water drain out of the pick-up. Open drain plugs (if any--see your owner's manual) to empty the powerhead and intermediate housing.

Crank the motor a couple of times by hand or "bump" it with the starter to empty the water pump. If the motor will be exposed to freezing conditions, it is essential that no water remain inside.

Fog the cylinders - Remove each spark plug and spray fogging oil into the holes to coat the interior surfaces of the cylinders. Rotate the flywheel (do this by hand, not by turning the starter motor with the ignition key) a few turns to spread the oil on the cylinder walls. While the plugs are out is the time to check them and re-gap or replace as required. Reinstall the spark plugs.

**CAUTION:** do not over tighten. Over tightening is the #1 mistake made when tuning up your outboard engine. Just turn the plugs until finger tight, and then use your socket wrench to tighten only 1/8th turn more. (Over tightening can strip the threads in the head, and really ruin your day!).

Fill oil tank - For (2-stroke) engines with automatic oil injection, fill the reservoir to the top fill line. This will prevent condensation from forming inside the tank. For 4-stroke engines drain the oil in the sump. When you're done filling the sump again with fresh oil, check the level using the dipstick (just like you would in your car!).



Touch up damaged paint (you can usually get a perfect color match paint from your dealer or from an automotive paint store. Mist-coat powerhead and any unpainted parts with an anticorrosion spray.

Spray a moisture displacing lubricant such as a silicone product onto electrical terminals and the fuse panel. Read the label to make sure the spray is safe for use on electrical components.

Clean and liberally lubricate propeller shaft - The off-season is the perfect time to have your prop(s) serviced. If the engine will be stored on the boat, take the prop(s) home to discourage theft.

Clean starter motor shaft and pinion gear - now is a good time to clean any buildup of grease and dirt from the starter. If there is too much buildup on the pinion gear, or the shaft or the return spring, then the starter may not function properly. Clean it all well, then put some white grease on the shaft and the pinion gear.

#### Inspect

Check the props for nicks or dings. Even very slight damage will hinder performance. Worse yet, blade damage can cause vibration, damaging other engine parts and the drive system. Get any damage repaired - some damaged props can be repaired by marine dealers for a fraction of the cost of a new one.



Inspect steering systems, including tiller steering friction fittings on outboards. Tighten them if they're loose. Grease the cylinders on mechanical steering connections to the motor.

Battery Prep - Remove the battery and store it inside. Do not store your battery directly on a concrete floor or on the bare ground as this can discharge your battery. Use an automatic shut-down (current limiting) battery charger to keep your battery charged up over the winter. If your battery has water fill caps, make sure they are filled to the "fill-line" with distilled water.

Mouse-proof your engine - This might sound crazy, but if you've ever had a bad marine experience with a rodent, you'll know what we mean! They can do all of damage mice to an outboard over the course of a long winter - and seem to really enjoy doing it in the most hard to reach corner of your engine. In addition to chewing up your wires and hoses, they really love that foam or plastic soundproofing material on the inside of the cowling. Use a fitted canvas engine cover, or something smelly that will discourage the mice from living inside your

engine during the winter.

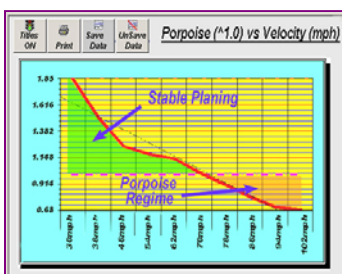
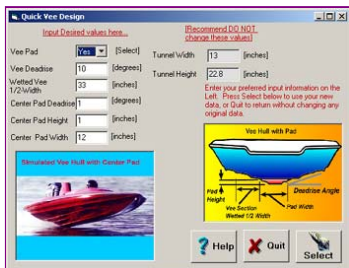
Watch out for freezing - It is sometimes a good idea to disconnect gages that use water pressure to operate - such as speedometer and water pressure gage. Trapped water in the line can make its way to the gage. The freezing process causes thermal expansion in the lines and inside the gage, ultimately damaging the gage if the water freezes.

None of these operations are very difficult, and can be done by the average handy boat owner. The 'checklist' makes it easy to go through the full process without missing any steps. For boaters who aren't comfortable doing their own maintenance, a qualified marine technician at your local boat dealer may perform the procedures. Taking a little time in the fall to get your boat and motor ready for winter means that you can be one of the first boaters out on the water next spring.

See Jimboat's full colour article published in Family & Performance magazine at: [aeromarineresearch.com](http://aeromarineresearch.com)

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

## 6) NEW Powerboat Design Software V7.13 Released!



### NEW Version 7.13 NOW RELEASED! (Dec 2010)

BIG NEW FEATURES...YOU ASKED FOR IT...NOW TBPDP© HAS IT!....

- \*\*\* Full Vee Hull and Vee-Pad hull performance analysis - one-button click that changes inputs to simulate a vee bottom hull.
- \*\*\* New aerodynamic algorithms.
- \*\*\* 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!

- \*\*\* User Picture import - right onto your TBPDP© data input screen!
- \*\*\* New 2010 Motor database, with over 960+ 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.
- \*\*\* NEW USER picture import feature.
- \*\*\* New CG import feature.
- \*\*\* Dozens of NEW features - including VEE HULL DESIGN software INCLUDED.
- \*\*\* NEW (June 2010) - Now can select Inside Spray Rails or Outer Spray Rails or BOTH. NOW input measured Static CG of boat hull if desired (otherwise TBPDP© will calculate for you).
- \*\*\* NEW (March 2010) - 'Rate-of-Change' performance analysis!
- \*\*\* Free Expert Analysis Reports (4) included shows how you can apply expertise to your design/setup.

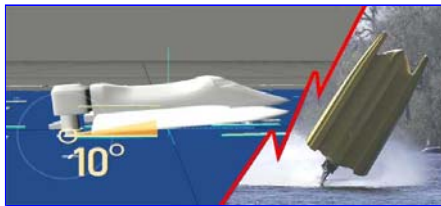
...AND Lots more new great Features in V7.13 TBPDP© software!

...check out the new TBPDP© software V7.13 at: [aeromarineresearch.com](http://aeromarineresearch.com)

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

## 7) 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](http://channel.nationalgeographic.com))

check out more at AR's website! [aeromarineresearch.com/NatGeo\\_thrill-zone.html](http://aeromarineresearch.com/NatGeo_thrill-zone.html)

- \*\*\* **"Powerboat SuperLeague"** Series - Check out show schedule at [AmericaOne.com](http://AmericaOne.com)
- \*\*\* **"IHBA Lucas Oil Drag Boat Racing"** Series on SPEED TV - Check next show at [speedtv.com](http://speedtv.com)
- \*\*\* **"War On Water"** TV Show" on The Water Channel - Check it out at: [www.waterchannel.com](http://www.waterchannel.com);
- \*\*\* **"Boats on TV"** - See at: [www.boatson.tv](http://www.boatson.tv)
- \*\*\* **"American Powerboat Television"** on The Water Channel - See: [americanpowerboat.tv](http://americanpowerboat.tv)
- \*\*\* **"Honda Formula 4-Stroke Powerboat Series"** - Check it out at: [www.f4sa.co.uk](http://www.f4sa.co.uk)

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

## 8) Jimboat's Feature Articles



**NEW Jimboat Article Announcement! - Author Jim Russell explains 'Chine Walking' in RIB magazine (Dec 2010 issue)**

**Watch for it!**

