

TBPNews #98 – March 31, 2006

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1) Why is it 'Starboard' and 'Port'?

In the primitive days of navigation, the helmsman stood at the stern of the ship, controlling the vessel's direction by hand with a rudder, which was on the right side and called a steer board - or as the Anglo-Saxons called it - a "starboard". The left side of the ship is called the "port" side because with the steering mechanism on the right, it was the only side that could be brought to rest against a harbour or port.

2) OMC Racing V-6 Returns to Competition

Kingfisher Inc. of Seattle, Wash., has acquired rights to the 3.0-liter, electronically-fuel-injected engine that was developed jointly by OMC and Cees Van der Velden and raced on the UIM Formula 1 circuit for three years.

Development of the engine ended with the bankruptcy of Outboard Marine Corporation in 2000. Kingfisher has acquired the entire inventory, assets, tooling and manufacturing rights for what was the OMC Johnson V-6 engine produced in Holland. OMC contracted with Cees to develop a racing engine. The motor was developed in 1998 and 1999 and ran on the European Formula 1 circuit for three years. When OMC went into bankruptcy, the racing program in Europe ended.

Kingfisher intends to go through everything, perform extensive dyno and race boat testing and decide how to continue developing the Johnson V-6 race engine, center section and gear case for racing and other high-performance applications - and to eventually sell complete race engines, gear cases and center sections. They also plan to field a race team with the Johnson engine in the Champ Boat Series in 2006.

For more information contact:

Greg Jacobsen, Kingfisher Inc; email swmjake@aol.com; Phone (206) 650-9627; Fax (425) 827-6285

3) Mercury's new Pro E.T. & Tunnel Race Propellers



Mercury Racing has invested in a state-of-the-art CNC machine and all-new propeller castings for the popular 5-blade cleaver propeller used with the legendary dry-sump Six drive and all-new dry-sump ACE drive. The CNC machining process enables Mercury Racing to produce propellers with exact tolerances, resulting in perfectly matched sets for optimum boat operating efficiency and propeller durability. Mercury Racing propeller technicians lab finish each propeller by hand.

The new CNC machining process and propeller castings enable Mercury Racing to produce the new propellers in 381 mm to 457.2 mm diameter and a pitch range of 660.4 mm to 1016 mm for virtually any application.

New Pro E.T.TM Outboard Propellers: The new 4-blade Pro E.T. outboard propeller is based off the popular three-blade Lightning E.T. propeller. There is an option of Pro Finish or Lab Finish. Finished models, featuring a high luster media finish, are designed for larger, heavier boats that need additional bow lift. Lab Finished versions are for lightweight hulls with natural bow lift. Lab Finished versions will whet the appetite of outboard quarter-mile drag racers, sport boaters and anglers who have that drive to be first to the hole and back.

Tunnel Race Propeller: Mercury Racing Propeller Specialists worked one-on-one with tunnel boat racers running Mercury Racing SST 120 and Champ outboards to develop the ultimate tunnel boat racing propeller. The new four-blade cleaver features a unique blade design for maximum acceleration while maintaining a competitive edge at the top-end as well. Models are available in 228.6 mm to 260.4 mm diameter and 381 mm to 533.4 mm pitch in left-hand rotation.

What is Lab Finishing? Mercury Racing has been producing custom high performance propellers since the early 1970s. Many of the first propellers were created and produced to support factory tunnel boat and offshore racing. In an effort to get more performance out of racing props, hydrodynamic experts spent years in engineering labs studying propellers traveling through water and the effects modifications made to the propeller had on boat performance. World-renowned powerboat racers coined the term "Lab Finished" when referencing the custom Team Mercury propellers tweaked and modified in the Oshkosh, Wis., engineering lab. Team Mercury racers helped make "Lab Finished" a term known for record-setting speed and performance around the world.

Today, Mercury Racing continues to offer race and consumer lab finished propellers, including the popular 4-blade Bravo I and 5-blade Maximus through-hub exhaust stern drive propellers and a full line of high performance outboard propellers.

4) Boat building experts to meet in Seattle

Representatives from the boat building industry are expected to be on hand at ProBoat Events 2006 in Seattle March 30-31, 2006.

Teams of expert boating building, design and repair professionals from around the world will present the most advanced methods, tools and materials during the two-day conference program. Seminars in five tracks: Closed-molding technology, network and system integration, composite structural repairs, designing high-speed marine vehicles and optimizing coatings.

5) Powerboat Racing on TV

*** "Thrill Zone: Extreme Powerboats" - National Geographic powerboat show Author Jim Russell (Jimboat) is the powerboat design technical consultant on a new National Geographic special for "Thrill Zone" series...Wednesday, March 29, 2006 at 11:00P - details at: http://channel.nationalgeographic.com/channel/ET/daily/20060329.html)



"Professional powerboat racing is one of the most death-defying sports in the world. Competing at speeds that often reach 200 mph, their boats are marvels of engineering but even the most technologically advanced can crash. From Formula One Racers to Offshore Powerboats to Unlimited Hydroplanes, Extreme Powerboats takes viewers up close with the world's fastest boats, the sport's best drivers, and the most advanced technologies".

Also airs: Saturday, April 1, 2006, at 10P; Sunday, April 2, 2006 at 1:00A; and Wednesday, April 5, 2006 at 1:00P, Saturday, April 8, 2006 at 10:00A

Check out details at: http://channel.nationalgeographic.com/channel/ET/daily/20060405.html

6) Anti-Rolling Gyro system

Norberto Ferretti first found fame in boat racing, where his desire to experiment with new designs and take risks won him success. His company, The Ferretti Group, is a major boat building conglomerate of custom and production lines, including Riva and Bertram.

Recently, Ferretti tackled the problem of transverse rolling, the motion that can aggravate the stomach of even the saltiest skipper. To steady the ride offshore, Ferretti adopted the Mitsubishi Anti-Rolling Gyro (ARG), first applied to satellites for altitude control and then to vessels in the Japanese market. It works on the same principle as a toy gyroscope—an electric motor spins the flywheel. A self-contained unit, an ARG is unlike a stabilizer fin because the hull doesn't have to be penetrated for installation. In fact, the only thing outside the box is the electrical power cable and the wiring that leads to the helm switch.

Check out at: <u>http://www.ferrettigroup.com</u>

7) U-6 Racing Buys Bud Boats

The owners of the U-6 formulaboats.com have purchased significant assets from the Miss Budweiser racing team, most importantly the famed T-5 and T-6 hulls that dominated the sport before Bernie Little passed away.

8) Jimboat writes NEW Feature article in F&PB magazine

*** NEW ***

Jimboat writes Feature article in Family & Performance Boating magazine. 'The Bottom Line'-"Why does a Pad make a vee Hull faster?" is the FEATURE in the F&PB September 2005 issue.

Get your copy of the full article at: <u>http://www.aeromarineresearch.com/adverts/Vee%20Pad%20Design.html</u>

and Recently published...

Jimboat writes Feature articles in HOTBOAT & F&PB magazine ...

"10 Smokin' Speed Secrets Revealed..." - Jimboat has new article in February 2005 HOT BOAT magazine. "If you don't want to make expensive modifications to your hull or engine setup, then here are some tips for getting the most performance from your current setup. By Jim Russell, author of "Secrets of



tunnel Boat Design" [editor-HB]. Check it out at: http://www.aeromarineresearch.com/adverts/HB_Feb2005.html

"Winterizing your Performance Outboard" - Jimboat has new article in Jan2005 issue of Family & Performance Boating. Check it out at: <u>http://www.aeromarineresearch.com/adverts/F&PB_Jan05.html</u>

"What a Drag" - Trim Angle & Engine Height Can Reduce Drag and Increase Speed", by Jim Russell, author of "Secrets of Tunnel Boat Design book [editor-HB]. See September 2004 issue of HOT BOAT Magazine. Or get your own copy of the feature article at: http://www.aeromarineresearch.com/adverts/HotBoat_Sept2004.html

See you next time!

/Jimboat



Note: Some of the articles presented in TBPNews are edited excerpts from the "Secrets of Tunnel Boat Design" book, "Secrets of Propeller Design" book, "History of Tunnel Boat Design" book, by Jim Russell, published by AeroMarine Research. The STBD book explains the theory in full, and outlines example design calculations, step-by-step. The "Tunnel Boat Design Program", software, does all the force calculations, dynamic force balances at all speeds, and reports the analysis automatically, including complete graphical performance results for any tunnel or modified vee-hull design.

>>>>> Tunnel Boat Performance News >>>>>>

Let us know any ideas you have, requests for articles, questions or comments on our TBPNews. Send your comments to <u>TBPNews@aeromarineresearch.com</u>

Get your full, illustrated, NEW 12th edition copy of the world known "Secrets of Tunnel Boat Design" book. GO TO: <u>http://www.aeromarineresearch.com/stbd.html</u>

Also, the publications "History of Tunnel Boat Design" book, "Secrets of Propeller Design" book, the "Tunnel Boat Design Program" software, and the "PropWorks2" software for speed prediction and propeller selection at the AeroMarine Research web site. GO TO: <u>http://www.aeromarineresearch.com</u>

<u>"Secrets of Tunnel Boat Design" book</u> <u>"History of Tunnel Boat Design" book</u> <u>"Secrets of Propeller Design" book</u> <u>"Tunnel Boat Design Program" software</u> for tunnel hull and vee-hull design <u>"PropWorks2" software</u> for propeller selection and powerboat speed prediction

>>>>> Tunnel Boat Performance News >>>>>

AEROMARINE RESEARCH - Tunnel and High Performance powerboat specialists

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