One- or Two-Person Sports Hydrofoils: Yamaha OU-32 Prototype, Tom Cat Wet Bike, Dynafoil, Others

Descriptions, Advice, Sources of Information, and Requests For Help

(Last Update: 9 Sep 03)

(For notice of hydrofoils "For Sale" and "Wanted to Buy," see the Announcements)

Go to Posted Messages Bulletin Board for more recent postings

Correspondence

Dynafoil Personal Watercraft For Sale SOLD!!

[27 Feb 02] I have two Dynafoil Personal Water Craft for sale. SOLD!!! Built 1978, one is in good running condition, and only needs a clean up. Has fresh Orange/Blue Denver Broncos paint, and new seat cover. The other is complete, but engine is not mounted in hull. Could be easily remounted and used, or kept for parts. These units have the high output 440cc engine, and come with original owners manual, parts and repair manual, documented service history, and spare parts. $500 for both, or $1000 for foils and a new dual Jetski trailer. I can deliver in the western USA -- Doc (mirror@interfold.com) phone: +1-303-885-2302
DYNAFOIL For Sale Sold

[27 Dec 01, updated 30 Apr 02] For Sale Sold: 1978 Dynafoil Personal Watercraft Manufactured in Newport Beach, CA. 2cyl. 2 Stroke watercooled engine Ran great before put into covered storage 4 years ago Comes with manual, trailer, and clean Missouri title. Very good condition $500.00 or best offer. Located in St. Louis Missouri USA. Call Chris at 618-345-6845 or email cheuer@cpicorp.com

Follow-up...

[30 Apr 02] Thank you so much for publishing the ad for the Dynafoil dated 12/07/01! I am happy to report it has sold and would like to ask that you would please remove the ad from your site at your earliest convenience. I greatly appreciate your service and thank you once again. Chris Heuer (cheuer@cpicorp.com)

Response...

[7 Jun 02] I just recently purchased the Dynafoils that were listed near yours. I hope I’m not bothering you but I would like to know if the person who bought your boat left any contact info. I am trying to find other dynafoil enthusiasts and owners. Also feel free to give out my address if anyone else contacts you looking for Dynafoil info. -- Scott Smith (ssmith@syntheon.com).

Junkyard Wars

[11 Oct 01, updated 25 Feb 02] On Feb.13, 2002 a show called Junkyard Wars was broadcast on The Learning Channel. Sunday the 17th at 10pm PST. It was repeated on Saturday the 23rd at 9 pm PST. If you missed the show, keep an eye out on the TV listing; it will surely be shown again. This is the USA version of Scrapheap Challenge, broadcast in Britain Nov 18, 2001 by Channel 4. See www.channel4.com/science/microsites/S/scrapheap. As a participant in this breathtaking, already-a-cult series, (I outlined, developed and calculated a weird "scrap-craft") I consulted to the British team "Catalysts" (3 Jaguar engineers) http://rotaryboy.screaming.net/ in their battle against time and to the mighty American team "The Mulewrights". -- Claus-C. Plaass, Pickert-10, 24143 Kiel, West Germany (plaass@foni.net), phone: +49-431-36 800; USA showtime provided by Matt Kirk (matric39@gte.net)

Personal Hydrofoil Watercraft Project

[11 Nov 01] I am a final year Industrial Product Design student at Coventry University, West Midlands, England. I have recently began my final year individual design project which is to design a new breed of water jet-powered Personal Watercraft (PWC). My intention is to design a sports-recreational product to be used by hobbyists and enthusiasts, with a view to possible competition use. Having looked at the existing PWC market which is largely dominated by stand-up and runabout Jet Skis, one of the ideas that I have come up with is to use hydrofoil technology incorporated with jet power to create a new high speed, highly manoeuvrable single (possibly two) seater watercraft. Currently in the early stages of research for the project, I have yet to determine whether such a proposal would be feasible - whether or not the two technologies
could be combined in a craft at all. I discovered an article on personal hydrofoils on the IHS website - and then found that I wasn't the first person to have the personal hydrofoil-jet drive idea! It seems that many people/companies have carried out some jet-drive hydrofoil PWC product design and development but haven't been able to, or haven't chosen to, put their crafts into production. I'm particularly interested in finding out something about the Yamaha OU-32 project that you mentioned - I'll be contacting Yamaha about it ASAP. I would be very grateful if you could send me, or point me in the direction of, any sources of information on hydrofoil PWC design. Comments and suggestions would also be very welcome. As an undergraduate Product Designer with little marine experience I would be very grateful for anything received. I can be contacted at the following E-mail addresses, or alternatively by post at: 44 Bedford Street; Earlsdon; Coventry; West Midlands CV1 3EW -- Richard Yates (ryates@coventry.ac.uk) or (richyates@breathe.com)

Response...

[21 Jul 02] I found the following Japanese page hosted by Yamaha. Besides having some good photos of the OU32, it also has a RealMedia movie! Hope you find this as much fun to view as I did. http://www.yamaha-motor.co.jp/cp/challenge/expansion/ou32/ou32.html. It's a shame they never mass produced it. Even 14 years later, it still looks pretty darned sexy and fun! -- Aaron Sakovich (aaron@alphant.com) [Unfortunately, Yamaha upgraded their site and in the process deleted the page on the OU32. - Webmaster, 8 Sep 03]

Personal Sport Hydrofoils, Power and Sail

[28 Apr 01] I have some of my hydrofoil work uploaded to the web for your interest. -- John Slattebo (raptor16@sbcglobal.net) website: http://hydrovisions.com/
Hot Personal Hydrofoil For Sale

[15 Apr 01, Updated 11 Nov 01] I thought you might be interested in my hydrofoil which I built some years ago. **Click Here** for a video clip of the Manta in action (file format: mpg; file size: 1.6 meg.) I would be happy to send you lots more photos as I am selling it. The hydrofoil which I call the 'Manta foil' (as in the Manta Ray) was developed with the idea of selling the product or concept to a larger manufacturing company and claiming a royalty. We got a long way down the road and were involved with some financial backers (some better than others), but as the partners involved dissolved their partnership (amicably) we all went our separate ways. Graeme Vanner was a partner as was Gavin Cawood and Myself. When the Partnership dissolved I took the debts and for that I took with me all the equity in the company - its products, prototypes, tooling, intellectual property and so on. I was intending to develop the Manta Foil to sell myself in small numbers but my wife and babies have got in the way. I am an industrial designer/ stylist and used to style cars but now design Motor Yachts from 50 - 200 feet (if you want one give me a call). At the moment I am selling the prototype because I haven't really got time to look for a manufacturer. Any potential buyer would receive the benefits of the knowledge gained in the work and testing to date. -- Steve Gresham ([Stevegresham@btinternet.com](mailto:Stevegresham@btinternet.com))
Top Photos (Left to Right)
- Manta with foils folded up, engine removed and ready to be lifted onto car roof by 2 people.
- Steve on the edge
- Nose view ready for action.
- The team from left to right: Graeme Vanner, Gavin Cawood on Manta, Steve Gresham standing

Bottom Photos (Left to Right)
- Sitting on land with foils folded down (usually one folds the foils down after the craft is in the water; this is just for show).
- Gavin running well
- Grabbing some air as they say

Dynafoil Personal Hydrofoil

[12 Jan 99] I'm trying to find info about a personal hydrofoil water craft known as the "Dynafoil". It was produced in the U.S. probably back in the 70's and/or 80's. It was ridden like a motorcycle, much like today's personal water craft. It was propeller driven and rode on two retractable foils, one fore and one aft. Have you heard of or have any info on? I remember seeing
James Bond Introduces the Wet Bike

[16 Jul 98] The WetBike was invented at the same time that the standup Jet Ski was introduced. It was unveiled in the James Bond movie "The Spy Who Loved Me" in 1978. It was a real popular water craft prior to the introduction of the WaveRunner and SeaDoo designs. Wet Bike was bought out by Ultranautics in 1988 and eventually went belly-up in 1992. The WetBike remained extremely popular, especially on the Racing Circuit until recently when SeaDoo and the others took over the market. Wet Bikes parts are continually available by a few water craft businesses. There still is no ride like a Wet Bike. It's nozzle is fixed (500 lbs. thrust) and its hydrofoils are steered by body weight and front ski handlebars, just like a motorcycle, not like the steering nozzle on today's jet craft. -- Steve Benn [BennS1B1@aol.com]

Responses...

[9 Sep 03] I am hoping you might know the name of a small jet boat that was made or marketed buy the same company in the early 1990s. It was small around 12 feet I think. It had a Suzuki inboard 2 stroke, and I'm pretty sure it only had 3 seats. -- Mad Mac [madmac@syd.eastlink.ca]

[23 Sep 00, updated 1 Jan 02)] According to the now defunctWetbike website at http://www.wetbike.net, "The original Suzuki powered, 50 horsepower version of the Wetbike was introduced in 1978 by Spirit Marine, a division of Arctic Enterprises. Early advertisements marketed the product as the “Wetbike Watercycle”: A motorcycle on water with a combination of all the thrills and fun of motorcycling, boating and waterskiing. Throughout its production run, which lasted from 1978 through 1992, the Wetbike received various changes, up-grades, technical advancements, and additional safety features, the most notable changes being the introduction in 1985 of a strong, exceptionally lightweight Metton body unit and in 1986, the introduction of a 60 horsepower, 800cc Suzuki motor, which brought the performance of the Wetbike to the pinnacle level of being the fastest personal watercraft available at that time." According to the Ian Fleming Foundation website, the Wetbike ridden by James Bond in the move The Spy Who Loved Me "is the actual engineering prototype of the first Wetbike ever built. This Wetbike was ridden by Roger Moore when Bond travels across the water from a nuclear submarine to Stomberg's oceanographic
Yamaha Personal Hydrofoil SINGLE LEGGER

[23 Feb 01] Mr. Kotaro Horiuchi has a long and amazing career of boat building, much of it with Horiuchi Labs of Yamaha Motor. He sent me his book called *A Locus of a Boat Designer*, [ISBN4-8072-4201-6], in which there is great detail on SINGLE LEGGER and many of his other projects. He tells me there's a new book coming out soon which will cover the HPB and engine-powered hydrofoils in detail. Unfortunately, the books haven't been translated from Japanese yet, but the pictures and charts are still quite useful. He built the boat in 1955, it has a 350cc 18hp outboard with a 16" extension, it's manually "flown" (no surface sensor), and as you saw, he reports 1.4G turns! There were several versions made including a tandem, and eventually Yamaha built the OR-S1 with a fully enclosed cockpit in one-, two-, and 12-seat configurations, but couldn't market them because of liability concerns. The design eventually found its way to production as the Yamaha Marine Jet with no foils. I'd already asked Mr. Horiuchi to contact you and peruse your site, and I believe he will do so soon. He's an amazing engineer and designer, and very well versed on all aspects of foil technology. He's still very busy building and writing, but I hope you get a chance to chat with him. -- Ron Drynan

(info@humanpoweredboats.com)

Yamaha Personal Watercraft on Discovery Channel

[24 Oct 97] Does anyone remember an experimental hydrofoil produced by Yamaha? It was featured on one of the "what's new" television shows a few years back. The hydrofoil had water jet drive, two in-line foils, and a single person bullet shaped hull. I'd like to find any info to build this one! -- Carl (cws@chem.ucsd.edu)

Responses...

[updated 23 Feb 01] You did not imagine the Yamaha hydrofoil "Personal Watercraft", nor are you the first to inquire about it. It appeared on the Discovery Channel TV Show "Beyond 2000" in 1990. It also appears on the Discovery Collector's Edition VHS videotape "Super Boats and
High Speed Hydroprototypes" distributed in 1992 by Discovery Program Enterprises, Inc. Bethesda MD 20814. I have seen several copies of this video go up for auction on Ebay over the last couple of years. The following was submitted a couple of years ago by Carl Allison (allison1@lnl.gov): "Yamaha demonstrated an OU-32, which was a fully enclosed two-man hydrofoil and it appeared on, I believe, "Beyond 2000" [Discovery Channel TV show]. That was the epitome of the personal hydrofoil, lacking only automated height control. This the market where hydrofoils might best be pushed for adoption. Price/performance in this area in more nearly comparable with other personal water craft vs. military vessels and large fast transports. I just wish that Yamaha had really released the OU-32. There were rumors out of Australia, then silence." To my knowledge this never went into production, at least not in the USA. If you wish to pursue this further, you might find someone in the Yamaha company that would steer you to the people who worked on the project. I have searched the web (though not recently) without finding anything on this. Other comments:

- There is a fellow Owen Morris (106027.3356@compuserve.com) in England who recently completed a marketing plan, design, and prototype mockup of a hydrofoil jet ski. He sent us quite a bit of material on his project when he was starting it up... maybe he would send you a copy of this stuff too... you can contact him by mail or email... OK to tell him I sent you.
- The only kits for motor-driven personal hydrofoils I know of are offered by Mike Stevenson's Back Yard Yacht Club, $15 for plans to build the SPORTFOIL. Go to www.stevproj.com/BYYCHome.html. You might also be interested to look at the info on this web site about BYYC's experimental [not yet available] "Hydroflier" accessible from the same site. [Editor's note: as of Feb 01, the SPORTFOIL plans were sold out with no intent to reprint them].

Personally I thought that hydrofoil Jet Skis were a marketable idea; however everybody told me that I was missing the point... Jet Ski owners don't want a smooth ride, they like to have their spines pounded into powder by bouncing from swell to swell. In recent years I seem to notice the emergence of the bigger family style craft that you can sit down on and ride with relative comfort, so maybe hydrofoils are an idea whose time has come for Jet Skis. -- Barney C. Black

[23 Aug 98, updated 11 Nov 01] I think you miss the point. Jet Ski (Kawasaki registered trademark) riders want to cut, jump and have a lot of control. I'd appreciate any suggestions... I am initially working on a towable hydrofoil with basically 3-axis aircraft-like control to allow the craft to jump without a wake to cross. (Jumping another boat's wake can be dangerous and illegal.) Additionally, long rides in choppy water will really beat you up. Especially if you are 40+ like me. An adjustable foil would allow you to use your energy when you really want to perform vs travel. I am working on a recumbent seating system with dual front foils having individual spoileron controls and a separate rear skeg (rudder). The spoileron controls should allow bank control, counteract tow forces and control the height. The rudder should control yaw. If this works out well enough, the next version will be powered. I'd appreciate any suggestions. Such as: The front foils need control, should I rotate the entire horizontal surface of the foil? Can I instead have trailing control surfaces like an airplane's flaps? I'm planning on building the foils in from flat aluminum. -- Barry Steele (barry_steele@yahoo.com)