

International Hydrofoil Society TEMP: PO Box 157, Hume, Va 22639 USA

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IHS OFFICERS 2016

Ray Vellinga.....President Mark Bebar....Vice President Roger Schaffer....Treasurer Joel Roberts.....Acting Secretary Bill White.....Technical Director Ray Vellinga.....Editor for a week

PRESIDENT'S COLUMN

Change in Presidency for the International Hydrofoil Society - 20 June 2016

FROM PAST PRESIDENT, MARK BEBAR:

Dear members of the International Hydrofoil Society,

After serving for 18 months as Acting President of IHS and for two years as President, I've determined that it would be in the best interests of the Society for me to turn over management to another member of the Board of Directors. In truth, since John Meyer passed away in 2014 after serving nobly for 21 years as President, I've been thinking that IHS leadership positions should be shorter in length. The idea of term limits makes sense in organizations such as ours.

I've spoken with Ray Vellinga and he is most willing and able to take over as President. Ray has been a stalwart member of the Board of Directors and has been instrumental in bringing forth new initiatives, including the Phanfare photo site on the IHS web page. Ray brings a wealth of experience to this job, and is well known in the world of recreational hydrofoils, having published the book "*Hydrofoils* – *Design, Build, Fly*".

My intent is to continue on the Board of Directors, Co-chair the Mandles Prize for Hydrofoil Excellence competition with Ray, coordinate future Board meetings, dinner meetings and continue presence of the IHS at future meetings of the American Society of Naval Engineers (ASNE). I will also continue to work on the permanent hydrofoil exhibit to be placed in the Washington Navy Yard museum. Third Quarter 2016 Editor: Ray Vellinga Contributors: Worldwide Hydrofoil Community

I want to thank the Board of Directors and others who have been steadfast in their support and involvement in the various initiatives underway within IHS and I look forward to working with Ray and the Board as we broaden our membership and explore new areas of interest to the hydrofoil community.

Mark Bebar, Past IHS President

FROM RAY VELLINGA PRESIDENT, INTERNATIONAL HYDROFOIL SOCIETY:



DUES ARE HISTORY!!! ALL UNPAID DUES ARE FORGIVEN, AND ALL PAST MEMBERS ARE REINSTATED -- FREE

As a key part of the incoming new administration, annual dues have been eliminated. The new program is to rely on Sustaining, Board, and regular members to make tax deductible donations. Advertising in the Newsletter, Web Page, Facebook and Phanfare will be made available for nominal contributions. Please inquire with President Ray to place and advertisement.

president@foils.org



CLICK ON VIDEO:

https://youtu.be/4r6voTHzaml

THE PRESIDENT'S MESSAGE:

Dear IHS members, As your new president, I propose significant changes to chart a new, modern course. The old model of recruiting members from Boeing, Lockheed, Navy, Coast Guard, Naval architects, Marine engineers and asking for \$30 of fees out of their significant professional salaries will no longer work. The problem is the Navy no longer has hydrofoils. The Navy leaves us with important history, great memories, and some valuable members, but this alone will not take us into the future.

Here is the new program and the reasoning behind it:

- 1. The internet is powerful. It will be the keystone of the new IHS. We are a virtual, international, Society.
- 2. We are non-profit, but examples of profitable enterprises are examples of success. Fortunes have been and are being made giving away internet services. For example: Google.

- 3. Google, is used by billions of people who value the service, not because it is free. Yet Google could make many billions of dollars very quickly by charging just one dollar to each user or only 10 cents for each use. Why don't they? The internet is built on a concept of free usage, even for extremely valuable services. Why would IHS be outside this rule? (Incidentally, one billion dollars income is worth over fifteen billion stock value at present price / earnings ratio).
- 4. More than anything, we need volunteers. It is more likely to find a productive volunteer out of one thousand free members than out of 10 paying members.
- 5. Today's hydrofoil excitement is in the America's Cup Foils, Moths, wind surfers, speed sailers, human powered, water skis, kite boards, passenger carrying vessels, etc.
- 6. IHS has good bones and is worth saving. Bill White maintains a great web site. Also of value are Phanfare, our Face book page, our bulletin board service, the Mandles Prize, Tacoma Maritime Fest (finished), the Navy Exhibit, our compact disks, and virtual library, etc. We have terrific members. We need to build on these successes.
- 7. The Navy hydrofoil tradition is dear to all of us, and will be respected and

maintained, but it is not the key to the future.

- 8. Bottom line is \$30 annual dues is a huge impediment to recruiting new members, especially young, energetic, sport-oriented types. Few members are actually paying, and they are not getting the promised Newsletter in return. So dues are in fact, a voluntary donation.
- 9. So why not change the name from "dues" to "donations"? Five other tax deductible donations equaling my recently committed \$100 would cover the essentials for a year. Likewise, fifty \$10 donations would be equivalent. This works for other projects, e.g., Google and "Crowd Sourcing".
- 10. There is another significant source of income that is being neglected. Presently, there are few hydrofoil manufactures, but there are many boat builders, material suppliers, lodging providers, sail makers, tourist agencies, restaurants, bars, etc. who create revenue off the America's Cup and other hydrofoil events. They need publicity and advertising. We can help, for an appropriate price.
- 11. To take pressure off our limited income sources, our expenses will be limited to actual costs of expenses benefitting all members such as the web site,

Phanfare, domain name, Navy permanent exhibit, etc.

- 12. Special projects, the joint ANCC -- SNAME/IHS dinner meetings will be accounted for separately and will not be a burden to the general membership. A committee will be established to plan and negotiate favorable agreements for the benefit of our Washington DC area members and these dinners will be paid for solely by those who chose to attend. A separate checking account will be established. The Mandles Prize will continue to be independently funded.
- 13. A pillar of this administration will be "transparency". That is why this policy letter is being sent to all members. Everyone should know what is going on in planning, administration, and finances.
- 14. I have personally pledged to sign up 700 new members this year (two a day, I hope). You all have friends and associates that would be served by being members. Please sign them up -- it costs nothing. To become a member, one needs to provide a name and email address. The addresses will be held in strict confidence.
- 15. The goal of this administration is to lead us into a bright future by building upon a proud past.
- 16. Encourage each board member to volunteer to

donate their talents to performing any one of these needy tasks.

To arrive at a consensus for the Board, I phone each individual Board member and asked the following 5 questions:

- 1. Do you support Ray as the new President?
- 2. Is he empowered to make day-to-day decisions for the IHS?
- 3. Is it agreed to drop the \$30 annual dues, now?
- 4. Assuming continued support by the IHS, do you agree all dinner meetings should be paid for entirely by the diners?
- 5. Do you agree that each board member should donate some labor to the cause, whatever their skill?

The general response was "yes" to each the questions.

Ray Vellinga

IHS NEW PROJECT DEPARTMENT



JOINT REQUEST FOR VOLUNTEERS FROM MARK AND RAY:

IHS has embarked on a wide range of initiatives aimed at increasing awareness of hydrofoil and hydrofoil related technology developments around the world. We are fortunate to have a Board of Directors that has devoted much time and effort over many years in moving these initiatives forward.

In any organization, it is vital that the leadership encourage existing and new members to become active in the work of the Society. It is also vital for the current Leadership to identify candidates for and foster development of the next generation of individuals to lead the International Hydrofoil Society into the future.

Ray Vellinga and I encourage you to consider working with one or more members of the Board of Directors with the objective of running for membership on the Board member and taking on the responsibility of leading one of our standing committees. The best way for you to support the Society and become a future Board member is to pitch in and become involved in one or more of these initiatives:

Newsletter:

Offer to become our new Editor, or assisting such an Editor with collecting material for future issues, preparing articles and editing.

Martinn Mandles Prize for Hydrofoil Excellence:

Work with Mandles Prize Co-Chairs:

Public relations/use of social media to promote the prize, establish/maintain college and university contacts, solicit entries for the Prize, judging team

Website Work with the Webmaster.

Explore potential website improvements and coordinate content updates, respond to posted messages.

Membership: Work with the Membership Chairman

New member outreach, update and maintain membership list, Coordinate and provide membership packets to new members.

Program:

Assist in identifying guest speakers for IHS/ SNAME Panel SD 5 Joint Dinner Meetings.

Permanent Hydrofoil Exhibit at Washington Navy Yard Museum:

Assist with collection of material for and development of the exhibit.

Phanfare Photo Site on IHS website:

Assistance in posting photos or editing/describing the content.

Collection/compilation/ indexing of hydrofoil (and other AMV) technical papers and data.

Many of these activities can be done at home over the internet or phone and can be at any level of engagement that you are willing and able to provide.

We urge all of you to consider where you might help in furthering these efforts.

Please contact Ray or Mark if you're interested. There is much to do and your active participation is critical to a successful future for the International Hydrofoil Society. Thanks.

Mark Bebar Outgoing President mark.bebar@csra.com

President Ray Vellinga president@foils.org

IHS MANDLES PRIZE FOR HYDROFOIL EXCELLENCE 2016



By Mark R. Bebar and Ray Vellinga 2016 Mandles Prize Entries:

1. Open Foil - Open Source Design Suite

Thiago Marinho

Faculty Advisor: Prof. Raju Datla

Stevens Institute of Technology

2. Stability and Maneuvering of Hybrid Hydrofoil/SWATH Vehicle

Sam Williams

Faculty Advisor: Stefano Brizzolara

Massachusetts Institute of Technology

3. Hullvane - Hydrofoil Assisted Drag Reduction Using CFD

Iruthayaraju Andrews Karthik Avala Faculty Advisor: Prasanta K. Sahoo

Florida Institute of Technology – Melbourne

IHS Newsletter 3rd Quarter 2016

4. A Framework for the Design by Optimization of Hydrofoils Under **Cavitating Conditions**

Paolo Olivucci

Faculty Advisor: Stefano Gaggero

University of Genoa, Italy

5. Fluid Structure Interaction Analysis of Sailing Hydrofoils

Casey Brown Cody Stansky

Faculty Advisor: Dr. Adrian Onas

Webb Institute

6. On the Design and Manufacturing Choices To **Obtain A Stable Canard** Hydrofoil System for a Low Speed Solar Boat

e

Elijah Thompson Caleb Tanner Caleb Jacobson Kevin Harmon John Hopkins Kyle Mary

Prof. Timothy Dewhurst

Cedarville University

7. Development of a Foil Bot Design Method

Erik Derecktor

Faculty Advisor: Prof. Michael Morabito

United States Naval Academy

8. Parametric Optimization of a Kiteboarding Hydrofoil in CFD

Zachary Backas

Dr. Adrian Onas

Webb Institute

WELCOME TO NEW **IHS MEMBERS**



We welcome on board our new members:

Alain Thebault Bix Bixby Buzz Curry Carl Domschke Charles deLartigue Chris Wenthur Dave Behrens Dave Hauge Dave Higgins Dave Neely Dick Bennison Dick Sapp Don Dombrow

L'hydroptere, Fr Telemetric expert Col Army (ret) Line Pilot (ret) Documentaries, Fr Lawyer, Amer. Cup Professor Yachtsman Computer expert Marine Col & yachter Tom Gayton Yachting Professor DDS. Cmdr USNR

Frank Van Geel George Babbitt Holland Smith. Jim Adams Jim Hubbar. Lt Cmdr Jim Lee Jim Mayer Adm. John Liljegren John Monk III John Mulligan Jon Freeman Jon Peterson Ken Malich Kevin Baerg Marc Jorgenson Mark Tronca Mike Elwell Pete Carr Richar Clos Ron Roark Shayne Waterby Steve Essig Steve Franklin Suzzette Wyers Terry James Tim Acker Tom Brosius Tom Michell Wayne Gilham Latest: Gary Altenbernd

Dwight Filley

Greg Altenbernd Jean Lois Farge Jean Prewo, Phd Morgan Miller Cliff Hartwell Ted Kenney Tim Sappala

Hydrofoil Inventor Publisher, NL Gen USAF (ret) Hydrofoil Test crew Line Pilot (Ret) Lt Cmdr (ret) USN **Bus Development** Adm. USN (ret) Yachter Engineer Physician (ret) Project mgr, Boeing Navy F-4 pilot (ret) Mech engineer (ret) Bus Manager Marina Cpa Yachting Exec (ret) Major Gen Army (ret) Oil Co exec Marina Owner Yachting Photographer FAA pilot Journalist, NL Yachting Lawyer Aerospace Yachter Marine Surveyor

> Exec (ret) Boater Water Business Boats & planes Consultant Ger. Cruising Boats Pilot (ret) Marina Op. Lawyer

IHS Newsletter 3rd Quarter 2016

SAILORS PAGE

SAILROCKET TEAM BACK FOR MORE...



http://ihs.phanfare.com/

Facebook:

https://www.facebook.com/Internat ional-Hydrofoil-Society-IHS-202091033164292/?fref=ts

LINKS TO IMPORTANT ASSOCIATE WEB SITES:

ttp://www.foilingweek.com/blog/

http://www.cupexperience.com/

VIDEO:

http://www.foilingweek.com/

INFORMATION REQUEST

Last issue we sought additional information about the Schlichting-Werft hydrofoil projects.

This issue we are seeking information on another image of a rare hydrofoil shown top of next column.

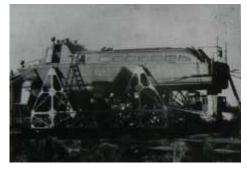


Image of what is believed to be an early Aquavion hydrofoil in article "Hydrofoil Craft" by Robert B. Harris, June 1958, within the AYRS booklet "Sailing Hydrofoils" of October 1970. The image is simply captioned: "Personal Ferry with Grunberg Hydrofoil system".

The Aquavion company produced craft of the type Waterman, Aquavit and Aquastroll, however this image does not match the arrangement of any of those smaller hydrofoils.

We would welcome information from our membership about the particulars of this craft – what it is, where and by who it was built and what became of it. Email: <u>editor@foils.org</u>.

Tribute to Barney Black

Award Citation

Barney C. Black

October 17, 1948 to July 29, 2015



The International Hydrofoil Society post humorously honors and recognizes Barney C. Black for his outstanding contributions to the Society's communications, specifically its Home Page, and Newsletter publications.

When the Board of Directors first discussed the idea of a Home Page for the Society, it was Barney who assembled and provided the necessary

Having achieved the outright speed sailing record at 65.45 knots, Paul Larsen and the Vestas SailRocket 2 team...Sailrocket 2, which smashed the world speed sailing record by the biggest margins in its history, will go on display at this years Advanced Engineering Show in Birmingham on the 4th and 5th of November. She will be accompanied by the team that sailed her at over 65 knots (75+ MPH) down the record course in Walvis Bay, Namibia.

SEE MORE AT THEIR WEB SITE: http://www.sailrocket.com/

CLICK HERE FOR OTHER IHS WEB ACTIVITY:

Main website:

http://foils.org/

8,000 photos in albums:

information. His knowledge of the structure and workings of the World Wide Web and his expertise in actually developing and operating a web page were crucial to the decision to undertake establishment of the IHS web site. His continuing dedication to the management of the Site has given the Society vastly increased international visibility.

Barney Black is also the designer and editor and a major contributor of articles for the Society Newsletter. This publication is considered excellent by many because Barney has devoted the time and made the effort to redesign it and manage it. For most IHS members, the Newsletter is the Society's primary product and the only one they regularly see. Many IHS members are not able to connect with the Internet. The Newsletter is for them the major source of current information on hydrofoils.

Barney Black has had an unusually varied and multi-disciplinary career in the marine industries. He earned the unusual degree of B. S. in Humanities and Engineering from the Massachusetts Institute of Technology in 1971. Barney has provided equipment, maintenance, and training to Navy, municipal, and civilian divers and fire fighters; worked in the SSN688 Class Advanced Design Project Office at the Newport News Shipbuilding and Dry Dock Company; served as a consulting engineer to the Navy in Arlington, VA, supporting various design and modernization projects in mine countermeasures;

provided logistic support to the PHM Class hydrofoils; and is currently a Senior Principal Engineer at TRW.*

Barney has great skill as a writer, especially as an interpreter of technical subjects for general audiences, and has been published in Skindiver, Fire Chief, Volunteer Fireman, InfoWorld, and Tidewater Virginian magazines, and others. He is a senior member of the Society For Technical Communication, a member of the Engineering Management and Technical Communication societies of the Institute for Electrical and Electronic Engineers (IEEE), and the International Hydrofoil Society.

Barney Black's many accomplishments and his devotion to the development of the IHS multimedia image are most deserving of special recognition by the International Hydrofoil Society. For his unstinting dedication to making the IHS a vital and useful organization for its members and for the marine community in general, we are pleased to present this award to Barney C. Black.

* Update: Barney Black was last working as Senior Logistics Management Specialist on the US Coast Guard's <u>Deepwater Project</u>.

Barney C. Black's Remarks Upon Accepting the IHS Award Citation

I am honored and grateful to receive this award and, I should also say, surprised. I hardly feel I deserve it when I consider the illustrious names of others who received the award before me and also the names of many who have not received it (yet) but are more deserving than I. As for service to the members, I also want to recognize that the contributions of Malin Dixon, our photo archivist, are invaluable, as are those of the experts who devote time to answering the many requests for technical and historical information that the Society receives.

The International Hydrofoil Society suffered a severe blow a few years ago when the US Navy decommissioned its entire fleet of hydrofoil patrol craft, the PHMs, at a single stroke. The future for hydrofoils appeared so uncertain and even bleak at that time that the Board of Directors seriously discussed proposals to merge IHS with other Advanced Marine Vehicle organizations or even to disband IHS altogether. However, any defeatist urge to "throw in the towel" and give up was short lived. A turnaround in IHS's prospects began with establishing a presence on the World Wide Web and dedicating the effort to respond promptly to all inquiries. The new IHS home page generated truly international interest and a surge in membership. The diverse backgrounds and interests of these new members expanded IHS's scope well beyond the US ferry market and the military hydrofoils that were the preoccupations of the recent past. The surge of new information arriving via the internet provided the material and impetus to upgrade and expand the newsletter, which has generated even further interest and membership. For now, then, IHS is in good shape, and the Society is

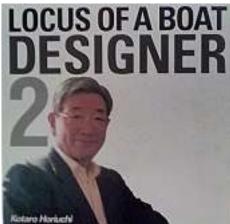
more fully living up to its mission to promote hydrofoils of all types, sizes, and applications.

Note from editor: Thank you,you very much. Father, as we knowBarney, for all your years of service.was very robust as of December ofYou are profoundly missed.2014But in his last year be

IN MEMORTY OF KOTARO HORIUCHI

Octorber 13, 1926 to January 18, 2016

Kotaro Horiuchi: A life spent in the uncharted waters of a boat designer



Editor's note: Here is a Bablefish.com translation of letter from Kotaro's daughter, Satoshi Horiuchi. I have edited it for clarity but in doing so, it may have lost some meaning:

Horiuchi Kotaro is my father. Today, everyone is busy with father's funeral. The family is all together and I received much love and support, thank you, thank you very much. Father, as we know was very robust as of December of 2014. But in his last year he suffered and lost weight. He was a tough person, but then he developed interstitial pneumonia, still his general health was good. He was recovering, and so he returned home, and continued to recover his energy.

Then the pneumonia temporarily took a dangerous turn and he was re-hospitalized. But by New Year's Day he was regaining strength; so he was again released home, provided there was 24 hour care. At home Kotaro resumed training on his ERGO (boat training machine). His condition was rapidly improving, but on January 18, after halving lunch and taking a rapid ride in his wheelchair, he suffered a cardiac arrest, and died quickly. His face was calm, and there was little suffering.

Father had a good life, I believe, but it was difficult when his wife, Atsuko , died 5 years ago at age 80. Atsuko was active to the end and had mastered rowing the skull, and won gold medals in the all Japan World Masters.

To fill the emptiness after losing her, my father for the first time had two lives. His early life was working as a boat Designer at Yokohama yacht, and Yamaha motor boat and yacht design. He designed hydrofoil power, sail, pleasure, and fishing boats Including is wide range of ocean going vessels. Also, he designed helicopters, and remote control helicopters are hung beside the front door. In addition, he created small cars and scooters, so he literally worked on vehicles for land, sea and air. Some of his creations were built in his workshop in shichirigahama, but occasionally he moved to Kamakura in cooperation with Yamaha. One of his last projects was finishing his father's 17-foot trimaran Cruiser.

The other life was as a racer of rowing boats. He rowed for high school, the University of Tokyo, and the Yokohama yacht Club. His specialty was rowing scull and kayak, and he had done so since childhood under the influence of his grandfather, Juro. The Japan Rowing Association selected him as crew. Then as the crew chief for Tohoku University he competed in the 1960 Summer Olympics and the 1964 Summer Olympics. After a gap of some 50 years he again coached at Tohoku University for the Intercollegiate National Championship. Then he coached the Japan national team in the World Championships.

I was anxious when father, at the age of 87 with health anxieties, flew to to Varese, Italy, There in the world masters tournament for rowers up to 90 years of age he earned 3 gold medals. I was very pleased.

By daughter, Satoshi Horiuchi

Also click on the link below for an excellent article in the Japan Times written by Edan Corkill:

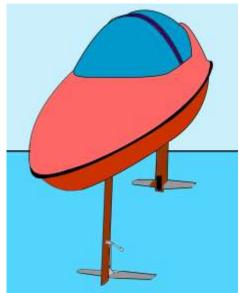
http://www.japantimes.co.jp/life/20 11/07/03/people/a-life-spent-inuncharted-waters-of-boatdesign/#.V27lgKKYJl1

The English translation of "Locus of a Boat Designer Vol. 2," the second of two books Kotaro Horiuchi has written about his design work, is currently available Amazon.com. Your editor gives it a thumbs up for hydrofoil design information.

Editor's Note: Kotaro was a friend of mine. We corresponded for years. He supplied me with video footage of his OU-32. I published it on Youtube and it went viral with nearly 3,000,000 views and climbing. Our latest video, Flying Samaria, came just months before his departure. I believe the Flying Samurai represents the state of the art for small, low-powered hydrofoils. Kotaro was an inspiration. As Satoshi mentions, he competed internationally as a rower into his late 80s, and he was intellectually sharp. Toward the end, he complained about a lingering pneumonia problem and our correspondence slowed to a trickle. Then came the bad news. We love you, Kotaro, and you cannot be replaced.

Ray Vellinga

VIDEO OF KOTARO'S OU-32:



https://www.youtube.com/watch?v =wObflyTPLvM

VIDEO OF KOTARO'S FLYING SAMARIA:



https://www.youtube.com/watch?v =Uz7SeyMB7zg

ON THE IHS WEBSITE

Check it out (click on link):

http://foils.org/

http://ihs.phanfare.com/

https://www.facebook.com/search/top/ ?q=international%20hydrofoil%20socie ty

THE NEXT ISSUE

Joel Billingsley and Roger Schaffer will be publishing a progress report on the permanent exhibit at the WNY Museum..

Remember, if you enjoyed reading articles in this issue of the Newsletter, they were provided with thanks to fellow IHS members. If you are able to share news on new projects or research work and, better still, prepare an article for the Newsletter, please email: <u>editor@foils.org</u>

BOARD OF DIRECTORS2012-20152013-2016

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2011-2014

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