

**JOINT DINNER MEETING
SNAME SD-5 PANEL AND
INTERNATIONAL HYDROFOIL SOCIETY**

**Tuesday, 26 April 2016
Army Navy Country Club, Arlington, VA**

5:30 to 6:30 Cash Bar - 6:30 to 7:30 Dinner - 7:30 to 8:30 Program

**Romaine salad
Grilled marinated chicken paillard with saffron cous cous and broccolini
Deep dish apple pie, Coffee & tea**

Price: \$35.00

To pay online, by 22 April, go to <http://foils.org/meetings.htm>

Make reservations by 4:00 Friday, 22 April

with Joel Billingsley at Joel.Billingsley@csra.com or Allen Ford at allenford@verizon.net

Please honor reservations. No-shows may be requested to cover costs incurred.

Hydrofoils: Design, Build, Fly
Ray Vellinga



Credit: Kotaro Horiuchi

While navies around the world no longer have operational hydrofoils, these craft are regularly employed commercially and recreationally, most dramatically in the latest America's Cup competitions. Interest is especially strong and growing in the "informal sector" of the maritime world, where individual researchers and builders are developing hydrofoils in a wide range of configurations, as an internet search will quickly reveal. The innovations are exciting, and performance records are often broken.

Ray Vellinga is a noted figure in that world. In the late 1960s, after receiving training in aerodynamics, he began trying to make things fly, first in aviation but then with hydrofoils. An early attempt to make a business of it convinced him that would be financially uncertain, and he pursued a successful career in industrial real estate development instead. But then he went back to hydrofoils with complete freedom to create and innovate. The result has been a series of small hydrofoil craft plus his well-received book, *Hydrofoils: Design, Build, Fly*, which shows that typical enthusiasts can actually be hydrofoil creators and flyers.

Ray will show videos and photos of many different small hydrofoil designs, including his own but also from other developers, and discuss their features and performance. He will also show some larger craft that originated in this informal sector, including the AC72 America's Cup racers.

After graduating from Bradley University in business Ray entered pilot training with the US Navy and was at the top of his class studying aerodynamics in preparation for a year of pilot training in T-28s and T-34s. He left the Navy as a Lieutenant and received his commercial and instrument rating as a civilian pilot. He has flown or created numerous human-powered, motor-driven, and wind-powered small hydrofoils. Ray is currently an owner of the Gig Harbor Marina in Washington (www.gigharbormarina.com) and a member of the Board of Directors of the International Hydrofoil Society.