

Catalyst

A Journal of the Amateur Yacht Research Society

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Weymouth Speedweek - '99

Observations from the Beach—by John Perry

Evening Seminar '99—by John Perry

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Newport Recollections—by Frank Bailey

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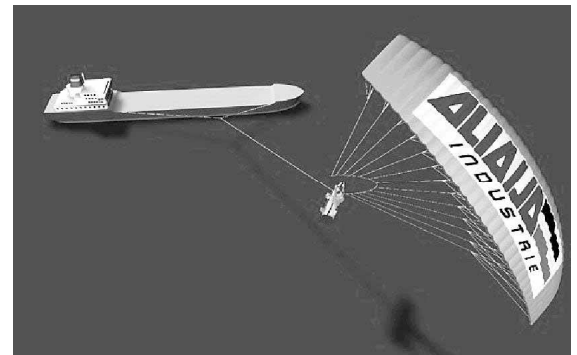
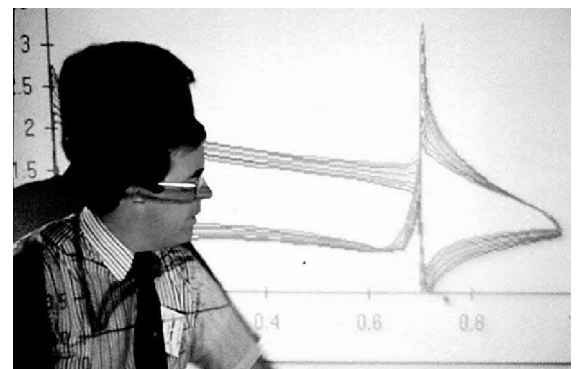
Guinness World Speed Record Award

Kite Sailing

Kites and Commercial Sail—by Dave Culp

Solar & Human Power

Solar and Hybrid Powered Boats—by Theo Schmidt



On the Cover—



Michael Ellison Photo

Orion at Speedweek '99

Harvey Bowden's highly tuned and stripped out Firebird catamaran making a run at Weymouth.

Orion, winner of the Round the Island Race and second this year to Paragon, a 60 foot trimaran, registered speeds of 20+ knots at Speedweek.



Speed and Performance

Flat-out, unbridled boatspeed captivates our imaginations. Record setting boatspeed was Harvey Bowden's goal on Orion this year at Weymouth and Bob Dill's intent with Iron Duck last March in Nevada. We marvel at the sailing speed of Yellow Pages Endeavor and the human-powered speed of Decavitator. Boat performance, however, includes boatspeed and much, much more.

Boat speeds are also a subject of measurement—course and instrumentation. Speed at Weymouth is timed on a straight, one-tack course in sheltered water. Bob Dill set his world landsailing speed record with a radar gun on a dry lake in Nevada. IMS and PHRF and such rating systems measure boat speeds in a manner that must have something to do with wind, water, and boats. And "The Race" is handicapped with gold, silver, and brass as well as sheer terror and brinksmanship.

Current technology developments offer new and challenging opportunities to measure boat speeds, but we must understand what they can and cannot do. We have GPS, Laser Tape, Radar, and a seemingly endless array of sensors we can connect to computers, but what do we do with all those "data points"? How do we interpret them? One thing this technology can do, as Alex Brincko remarked, is make his chimney swing in wide circles every time he attached his GPS antenna to it. Information is not knowledge and certainly not understanding. We have much to learn about understanding and interpreting the current information overload.

So, can we establish meaningful speed records? Yes, we can if the course and measurement system are understood. As Richard Boehmer notes, top speed for one second doesn't compare to average speed over 500 meters or 24 hours, and speed on a one, most-favorable tack does not compare to speed around 360°.

We begin the speed discussion in this first issue of Catalyst with news of Weymouth Speedweek and the Newport Symposium, Richard Boehmer's "Overall Performance Index", and Bob Dill's "Rules of the Speed Game", and expect to pursue the subject in coming issues.

Boat performance measurements are more encompassing and more useful in that the measurements may be weighted for personal preferences. Dick Newick, with his Claiming Race proposal at Newport, opted for a knot/cost measurement. Charles Houghton of Elco electric launches and David Stookey of "Open-Water Rowing" might advocate a pleasure/cost measurement, and Theo Schmidt might add an ecological factor to it. Dave Culp would certainly propose a cost/ton mile for his Kite Tugs and I would call for "The Forgotten Factor". We begin in this issue with Dave Culp's Kites and Theo Schmidt's Solar Power mindful of the many subjects yet to explore.

What an interesting prospect we have! And with each answer, we gain two new questions. Today we begin with speed, kites, and solar power. Tomorrow is rich with opportunities.

—Tom Blevins

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BCM AYRS, London WC1N 3XX, UK

Tom Blevins, Journal Editor

Dave Culp, Russ Munsell
and Ralph Pears
Assistant Editors

Sheila Fishwick, Production

Subject Coordinators

Aerodynamics—Tom Speer
Composites—Keith Burgess
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Human & Solar Power—Theo Schmidt
Hydrofoils—George Chapman
Iceboats—Bob Dill
Instrumentation—George Chapman
Kites, Wingsails Inclined Rigs—Dave Culp
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Speed Trials—Bob Downhill
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WSSRC—Michael Ellison

Simon Fishwick—AYRS Editor

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The Editors welcome submissions from both members of the Society and non-members. Electronic submissions to Fishwick@compuserve.com are preferred, but typed copy with illustrations may be sent to the Editors at the Society.

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