

ATHENA: A Classic Schooner for Modern Times recounts the design and construction of *Athena*, the 295' (90m) sailing yacht completed last year by Royal Huisman Shipyard (Vollenhove, The Netherlands). It is the ultimate coffee table book for maritime enthusiasts, weighing in at an impressive 8 lbs (3.8 kg) with its sturdy blue slipcase. The magnificent images by renowned photographer Louie Psihoyos take full advantage of an oversized format that measures 13" by 15" (34cm by 39cm).

The book's real and lasting value, though, particularly for readers of *Professional BoatBuilder*, lies in the detailed and compelling story presented by veteran marine writer Jack Somer. For designers, builders, and project managers of large yachts, and for those who aspire to such work, its 205 pages provide a rather magnificent textbook. It holds invaluable advice concerning the extremely complicated process of bringing such an ambitious project to a successful conclusion.

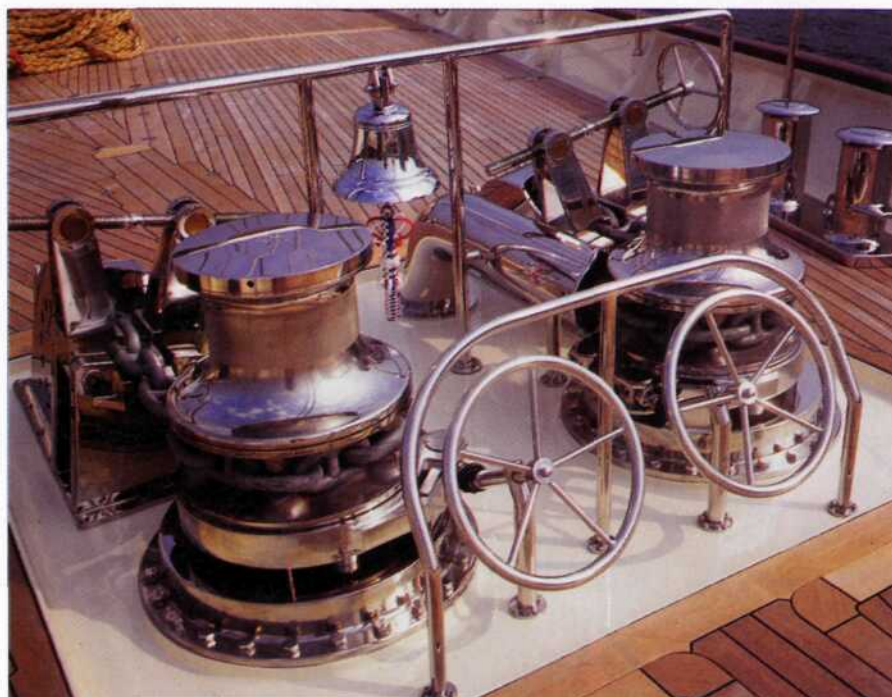
More importantly, the book reveals the many pitfalls awaiting those who might be tempted to undertake such a significant contract without ample resources and due preparation. Alice Huisman, currently managing director of the family-owned yard, which was founded in 1884, summed it up quite nicely with her understatement, "The future of our shipyard was dependent upon *Athena's* success."

Traditionally styled, *Athena* is nevertheless one of the world's most modern creations. Built entirely of Alustar aluminum, she is equipped with an incredible array of the latest electronics and software for navigation and ship management. One would expect nothing less once you learn that her owner is Jim Clark, an American who made his fortune with Netscape Navigator and Silicon Graphics. His previous Huisman yacht, *Hyperion*, at 154' (47m) was in many ways a test

Large-Project Management, Illustrated

An extraordinary limited-edition book documents the design and construction of one of the most complex sailing yachts ever built, and serves as a superb professional guide to managing projects of significant scope.

by Dudley Dawson



Top left—Athena's anchoring system utilizes vertical windlasses with integral capstans. The nearest handwheels control the windlass brakes, and the smaller wheels port and starboard operate the chain compressors, which relieve the strain on the brakes once the anchors are set or stowed.

Top and lower right—The engineroom is spacious and everything is readily accessible.

Above—With a need to serve dozens of meals three times a day, and hundreds during events aboard, a large commercial-grade galley is essential.

in their respective specialties, the pairing could have been a monumental clash of egos and agendas, but the two built a strong collaboration that benefited all. In Somer's words, they were "the double-helix of life-defining DNA, in which two vital streams of creative force were unalterably

entwined." There were many other players on the team, of course, but the head coach and chief cheerleader was the inimitable Wolter Huisman, who saw *Athena* to completion in spite of the cancer that finally took his life a few weeks after *Athena's* delivery.

There were frustrations along the way, to be sure. After erecting a massive new building shed specifically for the yacht that had an "absolute limit" of 216' (66m) on deck, Huisman watched as owner and designer stretched the dimension to 253' (77m). Following 14 preliminary designs that turned the design spiral into a virtual whirlpool, that additional length threatened to scuttle the entire project—and several longstanding friendships—before a resolution could be found.

The fascinating process of creating *Athena*, from initial concept sketches to world cruising, is detailed in the book with hundreds of charts, drawings, and photos, all captioned and explained in detail by Somer. Especially interesting are the many groupings that show Beeldsnijder's preliminary sketches, then photos of the work in progress, and finally the completed construction. Other illustrations include the final lines plan, rigging load diagrams, structural section drawings, propeller wake field



Above right—The sense of tradition that pervades Athena's design is perhaps best exemplified by her faceted binnacle and wooden ship's wheel. Located on the open bridge at the forward end of the upper deck, this sailing station is just steps away from an impressive array of modern navigation equipment inside the wheelhouse (**top**). **Above left**—Exterior railings, of polished stainless steel, have ball ferrules at intersections and beveled flanges at stanchion bases. This detail is repeated hundreds of times, and is typical of countless other costly and time-consuming details executed in metal and wood throughout the yacht.

bed for ideas that reached fruition with *Athena*.

Royal Huisman is experienced in dealing with the difficult, both technological and human. In response to the advertising slogan "If you can

dream it, we can build it," one potential client told the yard, "My dream is your nightmare!" Clark, fully involved in *Athena's* development and with definite ideas for her use, was not that client, but it could easily have turned

out that way if not for the complete professionalism of the team that Huisman and Clark assembled. Pieter Beeldsnijder was the designer, working in conjunction with Gerard Dijkstra as naval architect. Both giants



Top left—The master stateroom, with private library, and four double guest staterooms share the rich woodwork and detailing evident here.

Above—Master and guest staterooms are located below deck aft of the engine room and share a common passageway.

Left—The level of finish throughout Athena is apparent even in the crew mess. Crew are located forward in nine double cabins, while the captain has a cabin adjacent to the wheelhouse.



diagrams, flow membrane studies of sail efficiency, and FEA models for structure, rigging, and sails.

The chapter titles—among them “Why a Schooner?”, “Infinite Element Analysis,” “Scheduling the Schooner,” “A Tribute to Archimedes,” and “Outfitting the Beast”—give a clue that this is much more than your typical sailboat picture book. A lot of that credit goes to Clark and Huisman, who allowed full access during the entire process. But the central figure in the success of this remarkable book, which rivals *Athena* herself as a grand undertaking, is author Jack Somer.

Somer was not only the perfect choice as writer, he may have been the only one who could have written it. Trained as an engineer, he practiced that trade for years before landing in the music business. There, he

developed new technologies and gained patents along the way, until his love of boats and the sea won out. In sailing and writing, he found a new career where he could combine his true interests and his skills, not just to earn a living but to fully savor life and share it with others. His journey included a stint as senior editor of *Yachting* magazine before undertaking a freelance career in magazine and book publishing. Somer previously authored books on several other significant yachts, but with *ATHENA*, he brings forth a tale that is interesting on any number of levels. Glossy coffee table book at first glance, and textbook on large yacht construction on another level, *ATHENA* is also a most interesting study in business practices and human relationships.

ATHENA: A Classic Schooner for Modern Times is available for purchase from Bluewater Books (Fort Lauderdale, Florida), or the Armchair Sailor (Newport, Rhode Island), at about \$235 (www.bluewaterweb.com). It can also be ordered from Royal Huisman for roughly the same price (€190), but shipping costs make this option more attractive to European buyers (www.athenabook.com). **PBB**

The photos appearing in this article are courtesy of the Royal Huisman Shipyard.

About the Author: *Dudley Dawson, PE, is president of Dawson Marine Group Inc. (Roxboro, North Carolina), technical editor of Yachting magazine, and a contributing editor of Professional BoatBuilder.*