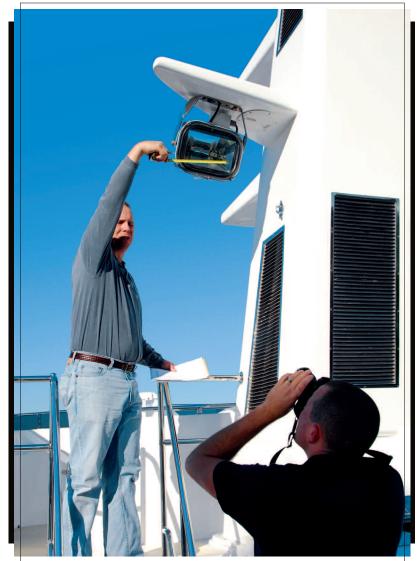
SEAKITS



MARINE MAINTENANCE
FOR THE 21ST CENTURY—AND SO MUCH MORE

STORY AND PHOTOGRAPHY BY STEVE D'ANTONIO

I'M A BELIEVER NOW.

A few years ago, SeaKits Inc. founder Barry Kallander approached me at Trawler Fest to poll me about an idea he had for a comprehensive vessel maintenance program. It was an all-encompassing package that aimed to provide boat owners with everything they would need to properly maintain the systems aboard today's increasingly complex yachts.

Back then, I confess, I didn't fully appreciate Barry's vision for what SeaKits could and would become. Thus, I guessed the business had an average chance of succeeding in what is traditionally an unforgiving industry, particularly where start-ups are concerned—especially new-concept ones. In my two decades in the marine industry, I had run into other folks with ideas for similar maintenance and parts-supply programs. Most had never made it past the drawing-board stage.

Three years after its launch, SeaKits Inc. is a thriving business, a well-known entity among discerning boat owners and operators who want to ensure the highest degree of reliable, trouble-free operation.

How much of a believer am I in the mission, services, and products of SeaKits Inc.? SeaKits is the only business I currently feature on my marine consulting home page.

WHAT IS SEAKITS?

SeaKits encompasses a series of programs and products designed for recreational and commercial vessels ranging from 40 to 100 feet that are operated by either owners or professional crews. Vessels in this size range possess between 150 and 250 pieces of equipment, along with 20 major systems and a variety of minor ones. Thus, it's no exaggeration to characterize these boats as being highly complex assemblies, much more complicated than even an opulent home. It's likely, in fact, that a cruising vessel—even one that's only 40 feet long—is the most intricate piece of equipment you'll ever own. It's no wonder that boat owners and

marine professionals invest so many hours in a boat's maintenance and upkeep (or should, anyway).

Spending time maintaining one's boat can be gratifying, to a point. If the time or effort becomes onerous or too costly, the sense of satisfaction quickly wanes. SeaKits offers what I like to call a "maintenance ethos" in both concept and practice that emphasizes preventive, rather than corrective, action for all maintainable onboard gear, from propulsion engines and generators to fuses and lightbulbs and everything in between. Importantly, it affords the user the greatest possible efficiency when carrying out maintenance chores or when tasking others with doing so (if you use SeaKits to generate a work list for your boatyard, for instance).

Think of it this way: In the absence of the documentation provided by SeaKits' Marine Maintenance System, it might take two hours of Internet research or phone calls, conducted by you or by the professional you're paying to carry out the service, to determine the assembly sequence and required replacement parts for rebuilding a fuel filter body. With that information in hand (e.g., a manufacturer's service document in electronic format), the research portion of the rebuild is eliminated and only the actual task remains.

The SeaKits maintenance protocols are detailed, indeed, and they include a wide variety of actions. In addition to typical items such as recommendations for fluid and impeller replacement, there's a detailed "test and inspection" directive to review. The directive for bilge pumps, for example, is not simply, "Lift the float switch and make sure it whirs." Instead, the boat owner is instructed to "...fill the bilge to activate the level switch and high bilgewater alarm in the pilothouse [and check that the bilge enunciator lights come on], make sure the pump is activated and removes water down to the level switch, inspect wire connection soundness, and inspect the hose for sharp bends, wear, or leaks."



SeaKits Spare Parts Kits are packaged in rugged, easy-tostore containers, and all components are clearly labeled for easy identification.

SeaKits' maintenance programs can be used by any vessel owner or operator. In my opinion, however, they have the greatest value for those who use their boats often, those who cruise long distances, those who travel to out-of-the-way places where parts and reliable service are in short supply, or those who simply want the greatest possible peace of mind when it comes to upkeep of their boat. SeaKits clients encompass the full spectrum of boaters: owners of factory-new and welltraveled vessels, folks who are new to the pursuit of cruising, as well as experienced, globe-girdling mariners. Again, in my experience, the people who use and appreciate SeaKits programs are those who invariably place a high value on reliability, performance, and safety. (Not surprisingly, many are aviators.) They are intent on providing the highest possible level of care for their vessel's systems with the greatest possible economy. SeaKits offers both.

As a former boatyard manager and as one who now assists boat buyers and owners in determining the maintenance needs of the vessels they own or are considering purchasing, I'm acutely aware of the value of establishing a maintenance protocol. Not only does it reduce long-term costs and improve reliability, safety, and economy, but it virtually ensures a higher price when it comes time to sell the boat. Simply put, well-maintained vessels show better and sell for more, and with good reason: they're more valuable.

SeaKits Inc.'s flagship product, the Marine Maintenance System, is now standard equipment on boats from a number of production and custom builders, including Fleming, Kadey-Krogen, Outer Reef, Real Ships, and Selene (East Coast only, at the moment). This industry acceptance of a newly implemented product and philosophy speaks volumes about its efficacy. For a variety of reasons, most production and custom boatbuilders provide little if anything in the way of overall preventive maintenance programs for the vessels they build and their associated systems. As an example of just how incongruous this is, have a look at the owner's manual for your car. It almost certainly includes a detailed service regimen for the entire vehicle, not just the drivetrain. Now consider that your boat weighs 30 or 40 tons and contains even more complex systems, and you'll see that the time was ripe for a company like SeaKits and its various offerings.

IN THE BEGINNING...

The genesis for SeaKits was Barry Kallander's experience with his own cruising vessels and their lack of a manufacturer-provided and -supported overall maintenance program. He had owned 36- and 42-foot sailing vessels, for which he had assembled technical documentation, spare parts inventories, and a maintenance program. Then, in 2005, he purchased a new 40-foot Nordhavn. For this vessel, Barry decided to take a more disciplined and reproducible approach to maintenance protocols and spares outfitting.

As a former high-technology and power industry executive, Barry had developed maintenance management systems for industrial complexes and large data centers. From this experience, he knew that the only way to do this effectively and efficiently was by using a software approach. His subsequent research revealed that no such software existed, and its creation became the seed that grew into SeaKits Inc. His plan was to create a company that would provide an integrated solution of turnkey maintenance software and parts outfitting, offering an alternative approach for boat owners who don't have the time, knowledge, experience, or discipline to assemble such a program themselves. From its inception, Barry was intent that SeaKits would be much more than a software program. Paying close personal attention to clients and the precise needs of their boats, providing documentation from equipment manufacturers and spare parts recommendations, and offering detailed information about maintenance requirements would form the core of SeaKits' business.

Until I was given access to it, I had no idea how large the trove of technical information amassed by the SeaKits staff is. More than 1,900 electronic documents from over a thousand manufacturers are included in SeaKits' "manufacturing repository." There are also more than 1,300 unique equipment templates, which are accessed by

SeaKits personnel and then imported for the customer to view (for instance, data about a specific model of engine or generator, washdown pump, or crane). Detailed specifications, repair procedures, and maintenance protocols from over a hundred manufacturers for a vast assortment of gear and equipment are included. As if that weren't enough, SeaKits also possesses more than 6,000 recorded maintenance history entries that detail a wide variety of repair and maintenance experiences gathered from clients. This data-entry component is equally impressive and emphasizes SeaKits' commitment to providing comprehensive information to its clients. The breadth and depth of SeaKits' data stores—the equivalent of a sizeable technical library that might be encountered at a large, well-established boatyard—are truly remarkable and must be seen to be fully appreciated.

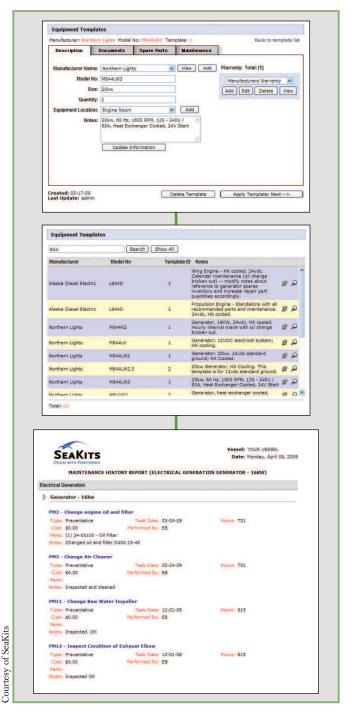
Barry is a former nuclear submarine officer. I've encountered many such folks in my work, both active duty and retired, and they universally share one personality trait: a nearly superhuman attention to detail. I can think of few individuals more qualified to create an exceedingly detailed maintenance program and electronic library.

When I was indoctrinated into the SeaKits program via an online demonstration, as prospective clients are, it was soon evident that the confluence of rich content and exceptional detail produces a simple, easy-to-follow, highly usable package that provides vessel owners and operators with a clear-cut direction for managing maintenance and spare parts.

SEAKITS PRODUCTS AND SERVICES

In the three years that SeaKits Inc. has been in business, its product line has expanded from its original offering of the Damage Control Kit to include the Marine Maintenance System (MMS), Spare Parts Outfitting, and a variety of other services and products.

Introduced in April 2007, MMS is now the backbone of SeaKits Inc. MMS is a fully integrated, web-based maintenance management program for cruising and commercial vessels. It's available as a turnkey solution for a specific vessel ("MMS/Complete") or for do-it-yourselfers who want to specify their own spare parts and maintenance requirements ("MMS/Lite"). Both versions of MMS function similarly. MMS/Complete is ideally suited for owners of new or refitted vessels who want a complete inventory of recommended spare parts and preventive maintenance tasks, as well as access to an electronic document library specifically tailored to their vessel. It includes preventive maintenance recommendations and information about general vessel maintenance, plus such functions as condition monitoring,



SeaKits' intuitive, user-friendly software provides detailed maintenance schedules for everything from propulsion engines to bilge pumps. It also offers the user an extensive library of manufacturer service and parts manuals in PDF format.

maintenance alerts, maintenance forecasting, spares parts inventories, maintenance history, and work-order creation. At the time of this writing, MMS had 125 registered users in the United States, Australia, New Zealand, the U.K., and Germany, of which 75 utilized the "Complete" package.

MMS/Complete and MMS/Lite include unlimited access to and data storage in your own vessel's page/profile, unlimited telephone support, and web/phone training for using the system. Additionally, an equipment baseline for all gear is part of the package; this includes make, model, serial number, warranty tracking, and manufacturer tracking for all major equipment on board. "Turnkey" is simply the best way to describe the MMS program.

If you purchase a boat from one of the aforementioned builders that equips its vessels with MMS, then you're in luck. But MMS also is available to buyers and owners of new and used vessels that do not come equipped with the program. The Marine Maintenance System also is popular with owners of used vessels that have recently



Above: SeaKits founder Barry Kallander inspects a vessel whose owner recently signed up for MMS. Above right: Craig Parkhurst, SeaKits' operations manager, examines a boat to determine its specific MMS needs.

undergone an extensive refit who want to get off on the right foot when it comes to taking care of the boat's new and existing systems.

It didn't take long for MMS clients to realize that, since SeaKits knows all the parts needed aboard their vessel, the company is in a unique position to supply those parts. (Another example of the best business ideas originating with customers.) A well-found cruising vessel often needs to source parts from dozens of suppliers, from engine manufacturers to sanitation system firms, and the list can be daunting. SeaKits accepted this challenge and now can provide parts for its clients at competitive pricing.

Spare Parts Outfitting, initiated in early 2007, provides the user with the spare parts needed for new or refitted vessels on a regular basis or when preparing for an



upcoming voyage. SeaKits will source the required parts and ship them to wherever the boat is docked, or to any location chosen by the customer—anywhere in the world. It's part of SeaKits' global logistics program, called "Follow Me." For those already using MMS, the spare parts include detailed labeling with the part name, number, manufacturer, and which piece of equipment the part is for. Additionally, parts supplied by Spare Parts Outfitting can be kitted specifically according to equipment, system, or any other logical grouping and are packed in water-resistant boxes for dry onboard storage.

The Spare Parts Kit, another SeaKits product, provides service and repair parts, as well as onboard storage for them. With this program, SeaKits will prepare an individual kit that is custom-designed for each vessel's and owner's needs. SeaKits determines the correct inventory for each piece of equipment; sources, bags, and tags the parts; and packs them into sturdy, water-resistant boxes. SeaKits' Spare Parts Kits can be designed for virtually any piece of shipboard equipment. Typical kits include those for generators, main engines, plumbing, hydraulics, and lighting, to name a few. As an example, if a SeaKits Spare Parts Kit user were to experience a leaking or failed main engine fuel-lift pump, he or she would simply grab the spare pump and gasket from the Main Engine Parts Kit (a standard component in an offshore parts kit). Then, by visiting the "Documents" tab on the SeaKits website, the boat owner would download the manufacturer's instructions for pump replacement. When finished, the boat owner would then enter the work that was completed into the "Maintenance History" section of MMS for the engine and select the "Corrective" (as opposed to "Preventive") maintenance button to log the event.

FOR MORE INFORMATION

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Prepackaged products offered by SeaKits include both the inaugural Damage Control Kit and fluid analysis kits. All are housed in waterproof ammo-type boxes made of orange plastic. I lecture regularly on the subject of damage control and fully appreciate its importance. Undoubtedly, one of the greatest obstacles to effecting damage-control repairs at sea is having the proper gear and tools aboard. Having a SeaKits Damage Control ("DC") Kit on hand is a bit like having MacGyver aboard as your personal DC officer. The kit includes an assortment of more than 35 plugs, patches, fasteners, and tools, plus a comprehensive guide to controlling flood damage. Unless you are prepared to assemble your own kit, being able to purchase an off-the-shelf package such as this is invaluable. All of the parts contained within the SeaKits DC Kit are individually available via the company's direct-order website.

Fluid analysis kits, introduced in January 2008, include those appropriate for testing crankcase oil, hydraulic fluid, fuel, and coolant. Several styles of kit are available, as are replacement sampling containers. Accessories include vacuum pumps and disposable tubing, both of which are essential for drawing contaminant-free samples.

Yet another product available from SeaKits is referred to as Deck Outfitting. The majority of SeaKits' customers own new boats. Barry recognized that these folks often require assistance with selecting and procuring deck and safety equipment. A three-page questionnaire supplied to clients details a wide variety of equipment—everything from fire extinguishers and anchors to PFDs and dive gear—and aids in the selection process.

Marine Maintenance Assist is a comprehensive onboard training program conducted by SeaKits personnel. It's designed to indoctrinate the owner into the "maintenance ethos," enabling him or her to perform, or at the very least oversee and inspect, any maintenance that might be needed aboard the vessel.

Recently, SeaKits began offering detailed boat owner's manuals for both individuals and boatbuilders. Because owner's manuals are not necessarily provided with every vessel, because those provided often fall short of what's necessary for safe and efficient operation, and because cruising boats are exceptionally complex, the manuals



created by SeaKits offer substantial value. SeaKits manuals are delivered both electronically and in hardcopy format. The hard copy contains foldout drawings for all major systems, and appendices that include select MMS reports for offline use. I've inspected these manuals and have found that they are professionally produced, packed with all the right information, well organized, and easy to use.

THE PEOPLE BEHIND THE BUSINESS

Because SeaKits relies so heavily on its unique software and an immense document library, a special approach has been taken to ensure full operability and security at all times. The MMS application and all customer data are hosted at Rackspace, a top-tier server facility that provides extremely high availability, security, and backup and recovery services. SeaKits' programs use what is referred to as "cloud computing," which is essentially an on-demand environment where the application is allocated the CPU and storage resources that it requires at any given moment. In short, this means all of the data and programming are remotely located, accessed via the Internet by SeaKits' staff and customers, and mega-redundantly backed up.

SeaKits operates out of a modest two-story building in Bolton, Massachusetts. The first floor serves as the stockroom, shipping and receiving, and parts kitting operation. The offices are located upstairs. Seven full-time employees—an operations manager, four engineers, a director of finance/purchasing, and a webmaster provide the necessary services offered by SeaKits. Company founder Barry Kallander concentrates on sales and new markets, as well as the design work for MMS and other products. While Barry clearly is a hands-on entrepreneur, the day-to-day operations of SeaKits are specifically designed to function smoothly in his absence.

If you knew nothing about Barry other than what I've already shared with you, you'd no doubt be impressed. After all, he has managed to succeed where many others have failed—as a small-business start-up in the marine industry—which is no small feat. Add to that the handson aspect of the SeaKits business, which requires even more mettle. As previously mentioned, the concept behind SeaKits was to avoid having it simply be a software program, and in that respect, it also has succeeded grandly.

Once you know more about Barry's background, it's easy to discern the source of his inspiration and his methodical approach to the SeaKits program. Barry is from Plymouth, Massachusetts, where, as a young man, he worked as a deckhand and mate on charter fishing vessels. He then went on to serve six years as a nuclear



The SeaKits staff at the company headquarters in Massachusetts.

reactor operator aboard submarines, where he learned the discipline and value of sound maintenance and operating practices. Following his naval service, he earned a BA in management and attended the Wharton School's executive program. From 1981 to 1999 Barry worked with a broad array of businesses, delivering maintenance (clearly, there's a maintenance gene in Barry's DNA), engineering, IT, and other services to the commercial nuclear industry.

Barry's interest in the sea runs deep. He has owned boats for 25 years, and during this time has developed a strong passion for cruising. He currently owns a 40-foot passagemaker and has owned sailboats as large as 42 feet. Barry holds a U.S. Coast Guard master's license with a near-coastal designation.

Maintenance is, and likely always will be, a hot topic among boat owners and operators. Practicing proper preventive maintenance is a philosophy I preach on a daily basis to my readers, lecture attendees, and consulting clients. The reasons are simple. When a boat is maintained well, it is nearly always more reliable and safer, and it presents the owner with a lower overall operating cost and higher maintained value.

I believe that many boat owners opt to properly maintain their vessels simply because they know it's the responsible thing to do. However, making sure a vessel is properly maintained is often easier said than done, even when the best of intentions are present. With SeaKits and its various products—the Marine Maintenance System chief among them—that process has become considerably easier.

Steve owns and operates Steve D'Antonio Marine Consulting (www.stevedmarineconsulting.com), providing consulting services to boat buyers, owners, and the marine industry.