New Leadership Team for Nautical Systems

ABS is committed to the long term success of Nautical Systems. A key factor to this success is strong leadership that will foster growth and continue to position Nautical Systems as a trusted and leading provider of integrated fleet management software to the marine and offshore industries.

Howard Fireman was appointed President of ABS Nautical Systems. Fireman joined ABS after a 35-year career with the US Navy where he was recognized as a distinguished leader in the areas of ship design, design integration, research and development and operational support.

He holds a Bachelor of Science and Master of Science (MS) in Naval Architecture and Marine Engineering from the University of Michigan, as well as an MS in Technical Management from John Hopkins University. Since February 2013, Fireman has been leading ABS' Operational and Environmental Performance team where he launched several first-of-a-kind services for ABS in energy efficiency for newbuilds and retrofits, vessel performance and environmental compliance.

In October 2013, Stephen Schwarz was named Vice President and Chief Operating Officer for Nautical Systems. Schwarz came to ABS from SunGard Energy Systems, a leading software and technology company, where he served as head of Product Management, Global Customer Service and IT Operations. He brings more than 20 years of experience in leading product development and systems support for commercial software organizations. Schwarz holds a Bachelor of Fine Arts from Southern Methodist University, as well as a Master of Business Administration from the University of Texas.

Schwarz is responsible for the day-to-day operations of ABS Nautical Systems, focusing on products and service delivery objectives. In addition, he is reviewing all procedures regarding operations, project planning, product development and consulting and will put in place policies that will measure performance across the organization.

These strategic moves allow ABS to reinforce and enhance the functional strengths of Nautical Systems, as well as deliver strong products to the market across both fleet management software and class clients.

Howard Fireman

Stephen Schwarz

NS5 ENTERPRISE
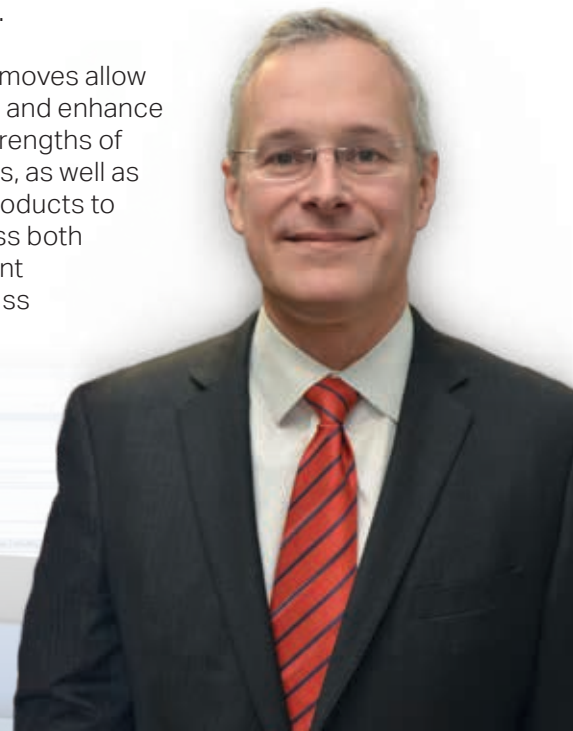
I would like to take this opportunity to officially welcome you to the first issue of our newsletter. *NS Insider* is one of the new ways that we intend to provide timely and effective communications to keep our clients informed about what we are doing in terms of future product development, service delivery and product quality, among other topics.

I have four priorities as the new President of ABS Nautical Systems. Number one is to assess and improve the quality of the NS5 Enterprise software platform. We are taking steps to identify improvements.

Service delivery is next. We are reviewing our procedures for account management, commercial and operational issue management and project planning. Having effective and proven procedures are fundamental to running any organization and this is a priority for Nautical Systems.

Number three is new products and enhancements. Based on client feedback, our plan is to develop the necessary products that support current issues in the market. We are reviewing our product roadmap and will provide information at each of our upcoming User Conferences this year, as well as in future issues of *NS Insider*.

Lastly is communication. It is my commitment to you that we communicate in a timely manner, what is going on within Nautical Systems. This newsletter is the first step in that direction.

I want to close by saying that I am committed, as is the entire ABS Nautical Systems team, to continue to invest in the delivery of quality software and improve the client experience.

I hope you find this newsletter informative. As partners in this process, we are always seeking suggestions for future issues. Please send your ideas and comments to Sue Powless at spowless@eagle.org.

Thank you

Howard Fireman

Nautical Systems Joins

ABS' vision for the 'future of class' is to build a competitive advantage for its marine and offshore clients by integrating both traditional class services and a unique enabling technology via its fleet management software product line. The offerings from Nautical Systems support this natural extension to the classification process and are an important part of this vision.

To put this vision in place, ABS created the Asset Performance Management (APM) group in October 2013. This new strategic initiative combines the knowledge base from the Operational and Environmental Performance (OEP) team that is responsible for overseeing ABS' efforts relating to environmental performance, energy efficiency and vessel performance; the Asset Integrity Management (AIM) team that is focusing on life cycle management programs to address asset reliability, technical integrity and safety; as well as the team from Nautical Systems.

For the OEP team, Dr. Jan de Kat, Director of Energy Efficiency, is a leader in the areas of hull form design and optimization, ship dynamics, energy efficiency, innovation and operational performance. He brings significant experience in numerical and experimental methods to predict ship performance. Tom Kirk, Director of Environmental Programs, continues to focus on ballast water management, biofouling and air emissions with a keen eye toward identifying cost-effective solutions.

Director of Asset Integrity Management, Chris

Jan de Kat
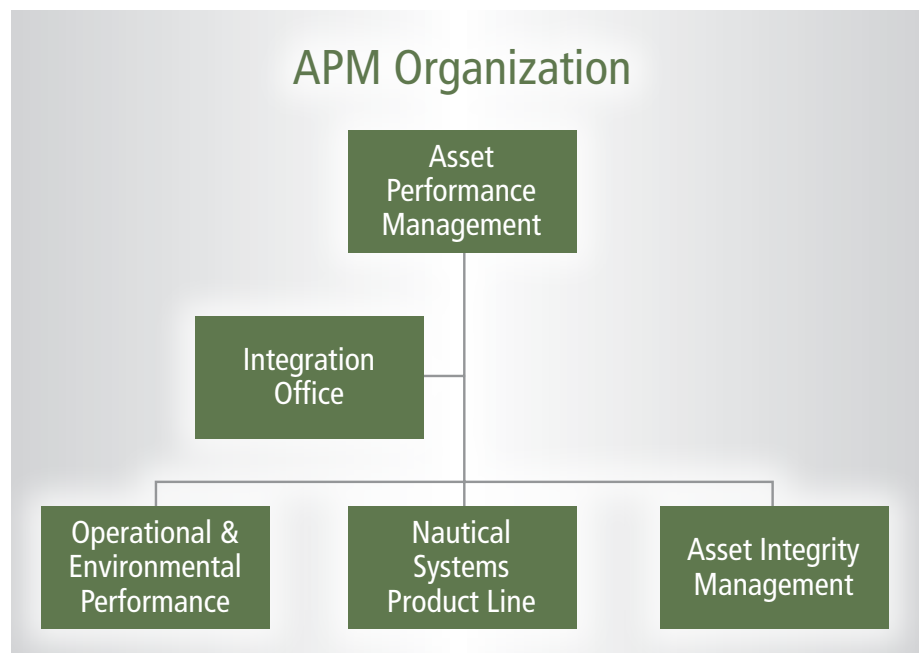
Tom Kirk

Chris Serratella

Lisa M. Smith

APM Group within ABS

Serratella previously led the Applied Innovations group within ABS Technology. In this previous role, his team worked closely with both OEP and Nautical Systems to develop tools to assist owners with energy and hull integrity management.

As Director of Product Development, Lisa M. Smith oversees the product development team located in both Houston, Texas and Pune, India is responsible for the delivery of the NS5 Enterprise products. Smith joined ABS in January 2012 with more than 15 years of commercial software experience. In her most recent position as Director at Triple Point Technology, she was responsible for the implementation of commodity trading systems.

The integration of Nautical Systems into APM changed its status as an operating division to a customer product line within ABS. This move strengthens and expands Nautical Systems into the mainstream offerings of ABS. Bringing together these three teams into a cohesive group will substantially increase the resources that can support Nautical Systems by providing an experienced team that can help to grow its product offerings.

As a group, APM will concentrate on developing innovative concepts, tools and practices needed by clients to improve their operational efficiencies and simplify regulatory compliance and at the same time improve data collection. For example, when Nautical Systems released the Energy & Environmental Manager module, it was linked to the vessel performance information captured by OEP. And later this year, Nautical Systems will be launching a new three-dimensional version of its Hull Inspection module in connection with the AIM team.

APM Organization

- Asset Performance Management
  - Integration Office
  - Operational & Environmental Performance
  - Nautical Systems Product Line
  - Asset Integrity Management

Russ Whitton Joins as New Chief Architect

Russ Whitton recently has been named Chief Architect for Nautical Systems. Whitton comes to Nautical Systems with over three decades of experience in information technology including software development, IT management and systems integration. In his most recent role as Chief Technologist at a major software product development company in Houston, Whitton guided the rollout of a service-oriented architecture strategy. He introduced workflow and data visualization tools, implemented a web interface, and updated the technology base of a major energy trading and risk management application, resulting in a modern and robust system widely adopted by existing and new clients.

Whitton's experience in applying new technologies to business problems should prove invaluable as Nautical Systems increases its pace of development and looks to solve new problems in innovative ways. His experience in guiding the evolution of commercial products should also boost the ability of Nautical Systems to smoothly evolve from today's technology to the tools of the future.

In his role as Chief Architect, Whitton will review and approve the technical and functional designs of the Nautical Systems' software offerings. Working closely with Vice President and COO Stephen Schwarz, he will look at existing and emerging technologies to determine which technologies to adopt to keep NS5 Enterprise the best in the industry.

Russ Whitton

2013 User Conference Recap

ABS Nautical Systems' 2013 User Conference, held in Houston, Texas, marked a record-setting year for both the number of attendees as well as companies represented from around the globe. More than 150 users of the NS5 Enterprise software suite, from more than 50 maritime companies, gathered for the three-day conference to exchange best practices and provide feedback on both the existing offerings and needed enhancements for the future of the software.

As in previous years, attendees participated in open-dialogue work groups on the features and functionalities of various modules within NS5 Enterprise, including energy management, purchasing, maintenance, crewing and health, safety, quality and environmental (HSQE) management. These smaller sessions allowed users to share experiences, gain user-to-user insight and provide detailed input on future development.

This year was especially important as day one opened with remarks from ABS Chairman, President and CEO Christopher J. Wiernicki. His focus was on the future of Nautical Systems and ABS' commitment to enhancing product quality, service delivery and support services. Additional sessions clarified Nautical Systems' role within the Asset Performance Management group, including the development of new products and services related to vessel performance and asset integrity. The first day concluded with a presentation on the methodology for successful software implementation.

Attendees offered feedback on the roadmap, quality, service delivery and past performance. Nautical Systems made a commitment to respond with structured plans to improve customer satisfaction. These plans include the formation of a replication task force that is currently in the process of a six-month plan to strengthen functionality and improve performance. A separate team was formed and has cleared the majority of level 1, 2 and 3 support tickets. In addition, a new release planning process has improved the ability of Nautical Systems to respond effectively to production and project issues. Support issues are now handled in both Houston and Pune, to improve client response time. A third party has been brought in to review and improve service delivery processes.

Based on numerous requests from clients, the Nautical Systems management team announced the move to regional conferences in 2014. Plans are in progress for conferences to be held in three locations – Athens, Greece in March, Singapore at a date to-be-determined and Houston in October. This move will allow engagement with more NS5 Enterprise users around the world and the global perspective that Nautical Systems will gain from successful conferences in each region.

2014 NS Regional User Conference 12-13 March 2014 Athens, Greece	2014 NS Regional User Conference Dates TBD Singapore	2014 NS Annual User Conference October 2014 Houston

Replication Manager Enhancements

Based on customer feedback from attendees at the 2013 User Conference, Nautical Systems assembled a dedicated replication team to perform a full review of the issues logged in Tech Excel. The team identified issues with a root cause related to replication. During the investigation, a backlog of defects was revealed including issues with version compatibility and problems connected to remote database creation. Each issue is being addressed in order based on impact to clients.

The leadership team at Nautical Systems sees this as an opportunity to improve the replication process overall. Currently the replication team is working to provide clients, and the Nautical Systems' support team, with tools and reports that will more rapidly identify

issues. In the second quarter of 2014, synchronization reports and log enhancements will be released to improve collaboration with clients and more quickly diagnose replication issues going forward.

An effort is also underway for major enhancements that include:
- Replication via a secured file transfer protocol (FTP) site
- Quicker processing of extremely large files
- Improvements in the process for logging issues

Enhancements to the replication tool will take place over the next six months to improve data quality and overall usability, as well as reduce the time it takes to diagnose future problems that might occur.

# Adopting a Project Delivery Approach

One area of focus for Nautical Systems is to improve its product delivery by utilizing an IT project delivery approach. Lisa M. Smith, Director of Product Development has been tasked to work on this and says that in order to be successful, we must "prepare the system for the business, and the business for the system."

So the question becomes, "How do we increase our chances of success?" Supporting the business processes of our clients, through quality applications and industry savvy consulting, are the goals of Nautical Systems. This is a partnership that begins with a realistic set of joint expectations and well-laid plans. The consultants and technical team at Nautical Systems work with each client to develop plans for successful outcomes.

So, how is Nautical Systems preparing the system for the business? A new team of developers has been hired that are full-time ABS employees located in both Houston and Pune, India. On the ground in Pune is Bibhas Sarkar, Technical Delivery Manager and long-time veteran of Nautical Systems. In addition, an independent team of testing professionals is bringing significant focus to software quality. These new teams report directly to Smith in Houston.

Nautical Systems continues to add proficiencies to meet client needs and implement development modifications. In addition, methodology testing is well underway. For example, in the second quarter of 2013, Nautical Systems shifted development to include Sprint Releases. This allowed the team to be more flexible and reactive to urgent issues and helped to reduce the need to always re-plan the plan. A patch is released every three to four weeks with organized development and testing. Improvements in code quality continue to take place, as well as full-cycle testing. Code stream management allows for easier troubleshooting, more efficient development and smoother upgrades. Other areas that are being addressed include reduction in issue resolution time, recurring issues, issue tracking and, prioritization and the efficient use of developers to resolve issues.

So then, how do businesses prepare for new systems? The implementation of any new IT system is complex; it requires adoption and encompasses more than just training. The process of adding a new IT system can also involve multiple geographies, multiple stakeholders and multiple
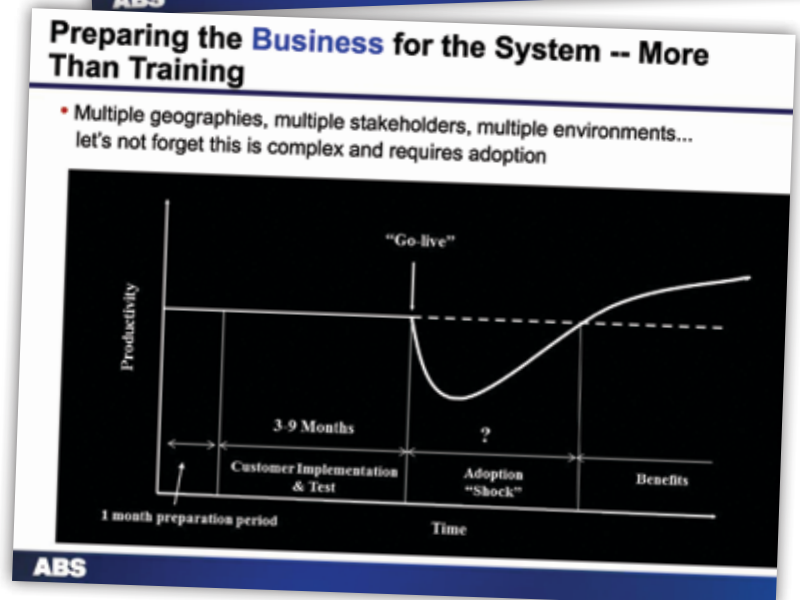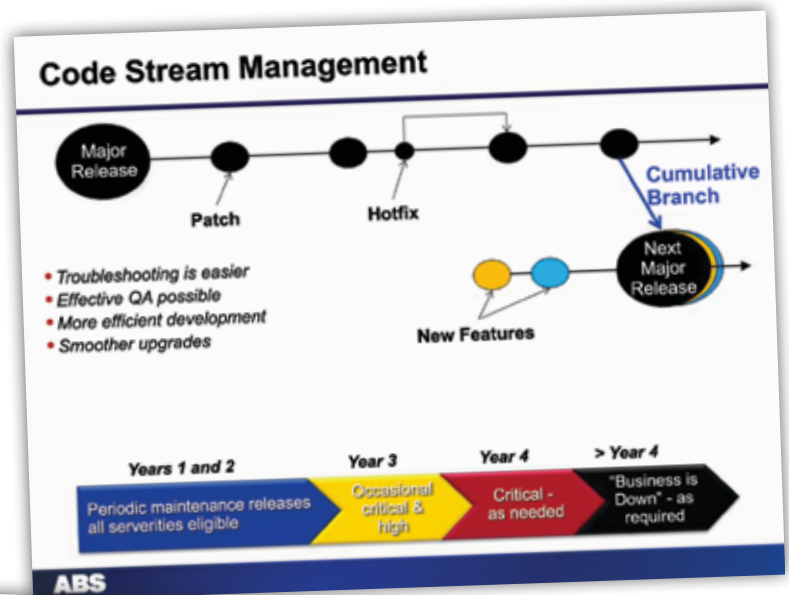
environments. So, it's important to build the plan. This is a business project and working together with Nautical Systems will increase the chances of success for all parties involved.

The first step for success is to map your organization's business process. By partnering with Nautical Systems, the Professional Services team will inventory your technology as well as identify super users and internal technical support personnel. Once that is understood, the software will be installed and configured, and then testing would begin. Testing could result in adjusting some of the business' processes to get the most out of the NS5 Enterprise system. Training and deployment of the software are the last steps.

While things can constantly change during this process, following the steps as outlined will result in a much better outcome.

NS5 Enterprise 6.3 Release

Nautical Systems is introducing major enhancements for three of the NS5 Enterprise modules in version 6.3, scheduled to release summer of 2014. Responding to client feedback as well as industry needs, new functionality will be added to the HSQE Manager, Crew Manager and Energy & Environmental Manager modules.

HSQE Manager – Quality Time Plan

The NS5 Enterprise HSQE Manager module provides features that address the requirements of international regulatory codes and related issues. The addition of the new Quality Time Plan functionality allows the user to create a job plan, produce quality documents, generate and maintain a schedule to complete and close a quality job and track and manage the work as it relates to quality standards whether the work is on or offshore. The user will be able to expedite workflow and easily track audits, inspections, drills and meetings which will help to minimize regulatory violations and reduce port delays.

Crew Manager – Crew Work/Rest Hours

In an effort to assist shipowners and operators comply with ILO Maritime Labour Convention, a new Work/Rest Hours functionality has been added to the NS5 Enterprise Crew Manager module. This feature auto-calculates time and will automatically notify the appropriate person within the organization if the required rest hours are not met. The addition of the Crew Work/Rest Hours functionality will help avoid regulatory incidents by reporting that the crew has had the required number of rest hours.

Energy & Environmental Manager

Increased global attention on conserving energy and protecting the environment has created a need for shipping companies to have a tool-set to help them manage the new environmental regulations that are in place. The NS5 Enterprise Energy & Environmental Manager module was released in 2012 to provide users the ability to collect, record, analyze and report the data necessary to meet basic regulatory requirements. Based on these regulations, additional functionality will be included in the release of 6.3.

– **Vessel Scheduler**

The vessel scheduler provides owners and operators with a ship or fleet-view of scheduled arrival and departure dates at a port of call. This new feature improves visibility by tracking the vessel's voyage and improving the management of crew and delivery of supplies, among other things.

– **Custom Required Fields**

System administrators will now have the ability to specify which form fields are optional versus required, based on operational processes. Not all users need the same information, therefore by having the ability to specify required fields the quality of the data collected by the ship's crew will improve.

– **Audit Logging**

Owners and operators are required to present specific reports based on regulatory requirements. The audit logging feature tracks data modifications made by crew members during voyage by capturing the data changed, when it was changed, who changed it and the reason for the change. This information supports compliance and onshore monitoring.
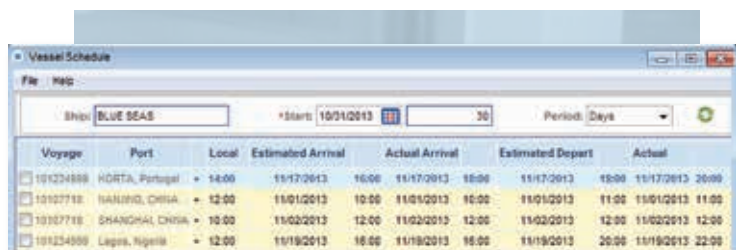
– **Additional Database Support**

Beginning in 6.3, the Energy & Environmental module will support clients using MS-SQL and Oracle as their back-end databases.

– **Cargo Form**

This form, which is currently found in the Energy & Environmental Manager, has been improved and new features include the ability to record cargo load information by specific vessel type. The cargo performance report has also been enhanced to provide users with cargo loading totals/variance by tank, including losses. All delays during the cargo operation can also be collected and reported. These improvements will allow for more accurate cargo/fuel analysis and EEOI calculations.
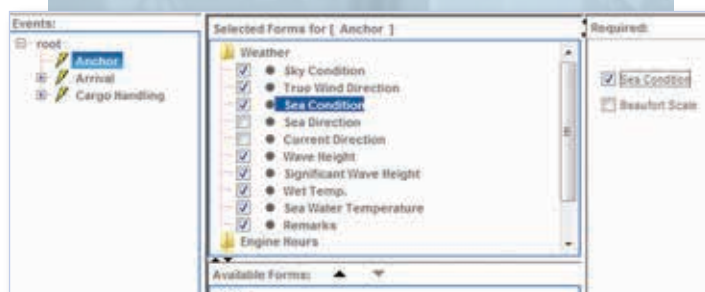
More enhancements to this module are currently in development and will be announced as they become available in future versions.

For more information on the release of and features included in NS5 Enterprise version 6.3, contact a member of the Nautical Systems' client account management team or send an email to: NS-Info@eagle.org

Support Continues for Older Versions of the NS5 Software

Currently there are several versions of the NS5 software in use by clients. While upgrading to the most current version of NS5 is highly recommended, the new leadership team at Nautical Systems understands the effort required for all of its clients to move to the newest releases. Therefore, Nautical Systems will continue to support 5.4 and 5.5. This revised policy was announced at the 2013 User Conference.

As versions become older, the level of activity on code streams declines and the possibility of issues with operating systems and database version compatibility increases. Nautical Systems will support running versions of choice, with the understanding that running older software presents certain risks and that enhancement activity will be primarily limited to the newest code stream.

For information on moving to the most current version of NS5 Enterprise, clients are encouraged to discuss this with a member of the Nautical Systems client account management team. To be successful with the upgrade process, it is essential that the Nautical Systems team understand the client's requirements so that the process is properly outlined and the necessary resources are made available to assist when the upgrade is scheduled. The ultimate goal is to ensure that moving to the most current version is a success for each client's organization.