



Maine State Ferry Service

Computerized preventive maintenance system delivers visible advantages.

“We knew the preventative maintenance was getting done on our vessels, but tracking maintenance hours, part requisitions and installations was always a study in patience. Now we have it all at the click of a button.”

James “Jim” Savoy
Assistant Ferry Port Engineer



Challenge: Legacy Whiteboards

As part of the Department of Transportation, the Maine State Ferry Service (MSFS) provides year-round, passenger and vehicle ferry service to islands in the mid-coast region of Maine. Specifically, six islands (Frenchboro, Islesboro, Matinicus, North Haven, Swan’s Island and Vinalhaven) are served from three mainland terminals in Rockland, Bass Harbor and Lincolnville.

MSFS regularly operates five vessels with two vessels that are used as fill-ins. A new ferry, the Capt. Richard G. Spear, is scheduled for launch in March 2021, and will replace the ferry that has served the island of Vinalhaven for 30 years.

When Mark Higgins was hired as the organization’s Ferry Services Manager in 2018, one of his first orders of business was to move maintenance methods from legacy whiteboards and handwritten checklists to a more automated systems.

Jim Savoy, Assistant Ferry Port Engineer for MSFS, noted: “We had no easy way to check our maintenance actions throughout the fleet. Due dates, schedules, lists and corrective actions were kept by the engineer and captain on a whiteboard as well as paper-based weekly checklists. Both Mark and I had used digital maintenance solutions for

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years in previous jobs and realized the value for everyone from captains and engineers to managers and our oversight organization.”

As part of the evaluation process, Savoy focused on finding a marine-based solution that was intuitive for captains and engineers with all the dashboard and summary data necessary for operational decision making.

Solution: On Board with SaaS

In November 2019, with a little help from a federal grant, MSFS selected Vessel Vanguard, a computerized maintenance management system operating in the cloud, from Baxter Marine Group.

A software as a service (SaaS) application with off-line syncing operation, Vessel Vanguard incorporates all the familiar features and functionality from maintenance tracking and a log man-

ager to work order management and reporting tools. It also incorporates off-line functionality to facilitate updated runtimes, view and complete maintenance tasks and access maintenance history without an internet connection.

When asked about implementation, Savoy commented, “That’s the easiest part. The [Vessel Vanguard] folks did all the research to populate to system with our vessel information including user manuals, drawings and documentation, along with maintenance schedules and spare parts recommendations.



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Over the course of three days, they gathered everything they needed from our entire fleet. Once in the system, we verified accuracy.”

After a short learning curve about the best way to use tablets versus laptops, MSFS was ready to go. While there were some delays due to the pandemic in 2020, all 12 engineers and 12 captains now have iPads equipped with the Vessel Vanguard maintenance solution, while Savoy, Higgins, Port Captain Dan McNichol, Port Engineer Pat Eutsler all have desktop/laptop solutions.

Results: Long-Term Advantages

When asked about benefits of the computerized preventive maintenance system, Savoy is quick to say visibility for everyone from captains and engineers to the MSFS Advisory Board.

For Savoy, he especially likes the ability to track maintenance hours with ease,

noting that he can pull up a maintenance report in a click of a button and see what’s been done, how many hours the work required and what tasks are left. “We knew the preventative maintenance was getting done on our vessels, but tracking maintenance hours, part requisitions and installations was always a study in patience. Now we have it all at the click of a button,” Savoy confirms.

The transition to electronic record-keeping for captains and engineers has also occurred with relative ease.

“Major transitions such as a shift from paper to electronic systems require patience as your team gets acclimated and familiar with a new process,” says Savoy. “That’s where customer service is essential. If I have a question, the [Vessel Vanguard] team responds very quickly. Just recently, I had a problem connecting my iPad with the vessel printers. The development team got right on it and it was fixed—they are on the spot.”

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The MSFS Advisory Board is particularly pleased with the system. Made up of representatives from each of the islands served by the ferry service, the Advisory Board is responsible for oversight of the ferry services. Savoy says, “They love that they can ask for and receive print-outs of operational expenses from crew hours to maintenance costs very quickly. In the past, getting this information together would have required hours of time to compile.”

Moving forward, Savoy plans to include third-party and shipyard data in the system as well as inventory management, which will help better track components taken off and on our vessels and automate much of the requisition process.

He is also looking ahead to improving inspection workflows as a result of the computerized maintenance system. MSFS’s first U.S. Coast Guard inspection is coming up beginning at the end of February, at which time, four vessels

will be inspected in a three-week time-frame. Savoy says, “I’m already planning a conversation with the inspectors about how we can help them streamline our maintenance inspections with our computerized records and reports.”



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He concluded, “We’re still learning all the ways that the computerized preventive maintenance system can help us, but I’m more than pleased with the system thus far. It’s exactly what we needed to streamline our maintenance tasks to drive our continued operational efficiency, services and safety.”

About Vessel Vanguard

Vessel Vanguard drives a proactive approach to marine maintenance management, minimizing unnecessary downtime and unplanned maintenance. Reduce maintenance costs by bundling work, staying current on warranty programs, scheduling preventative maintenance, and having parts ready to go. Vessel Vanguard protects you, your crew, your operation, and the value of your asset, and makes your vessel safer to operate.