

## Remote Monitoring of Yacht Operating Systems Improves Service Delivery and Reduces Costs

### Luxury Yacht Owners Benefit From Innovative Systems Monitoring Device

If the bilge pump fails on a boat and it's determined that it must be replaced, everyone understands why service technicians need to board the vessel on location and make the repairs. But, if the issue was an electronic system needing a reset or updated configuration, wouldn't it be nice if the machine could be accessed remotely by an encrypted session to put in the fix?

Well, today, there is no need to send a technician to the boat to make a diagnosis and electronic fix; the whole process can be handled remotely according to **Rick Hathaway**, marine specialist for The Hope Group. "One of our marine customers wanted to know if the kind of remote monitoring that allows boats to have an electronic security system could be used to control other features offered to their high-end luxury yacht customers," said Rick. Thinking creatively, the engineers at The Hope Group designed just such a system.

Rick pointed out that if a customer experienced an issue with control of the boat, a technician would typically be dispatched to do an on-board diagnosis. The technician would look to determine if there was an issue with a valve, or thruster, or the steering joystick, or whichever control component was malfunctioning. This approach involved delays in getting someone to the boat, perhaps only to discover that the issue could be solved with a software adjustment or other electronic fix. This approach can make for expensive service calls.

#### IoT (Internet of Things) Solution

The engineers and IT team at The Hope Group proposed to the customer that it consider installing an IoT (Internet of Things) remote monitoring system, custom designed and built, to address the service diagnosis challenge. "While there are a variety of commercially available remote solutions to consider, there are many

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#### IoT Remote Monitoring Prevents Unnecessary Service Calls

The remote monitoring system contained in the box above was installed for high-end luxury yacht builder that wanted to offer its customers an electronic security system that could also identify an issue or malfunction with one of the vessel's mechanical or electronic components. Customers benefit from the monitoring system, which allows for remote access, when a technician does not need to be dispatched to perform an on-board diagnosis, perhaps only to discover the issue could be solved with a software update.

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specific challenges for the marine application that were taken into consideration in the way the custom system was designed and built. Not the least of which is the exposure to extreme weather, moisture, vibration, and installation limitations,” said Rick.

**Pete Evans**, Senior Director of IT for The Hope Group, described the unique capability that the custom system brought to the solution. “We are not limited to any one platform or format for connectivity,” said Pete. He described that The Hope Group remote monitoring system can be used with any remote PLC/Electronic Control System/ Intelligent Hardware that connects via USB, Serial, or Ethernet devices.

Pete said, “It can be a good solution for customers that may have older equipment in the field, which has proprietary software, or hardware that is too expensive to replace.”

While The Hope Group focuses on manufacturers in the Northeast, the manufacturers often find that their ultimate customers spread worldwide, increasing the challenge to provide effective service and maintenance support. The ability for the boat-builder to monitor luxury yachts throughout the world gives their customers great peace of mind. Rick commented, “Our customer, in this case, specifically wanted to be able to connect remotely to continually offer support to its boat owners with routine software upgrades, trouble-

shooting and system fixes. With the implementation of this custom system, our customer benefits from the ability to replace what used to be a time-consuming manual process to a real-time, automated and interactive diagnosis and repair process.”

### Unlimited Applications

From an IT perspective, Pete commented that the applications are unlimited for remote monitoring. “One of our sales team members brought a challenge for us to consider, which was a customer that had multiple HVAC units, some on rooftops, scattered across a large industrial location. They needed a way to simplify their response time to outages and failures in the equipment,” said Pete. He described that, similar to the marine applications where each boat had systems to monitor, a fixed location with multiple systems to monitor can be equally challenging. Through the use of appropriate sensors, it was possible to keep watch on the equipment 24 hours a day and minimize the response time to any equipment malfunctions.

He also pointed out that depending on the needs of the client, they can assume the monitoring responsibilities directly, or they can subscribe through The Hope Group to have it provide the routine monitoring and response dispatch to meet any alarm or maintenance status alerts. “We can partner with the client to help them focus on their main business challenge and leave the maintenance and monitoring to us,” said Pete.



#### **Compatible With Electronic Hardware That Connects via USB, Serial, or Ethernet**

The remote monitoring system is not limited to a particular platform or connectivity format. It can be used with any PLC or intelligent hardware that connects via USB, Serial, or Ethernet devices. This makes it a good solution for customers who have equipment that is more than five years old and cannot afford to upgrade it.

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