

Enabling Real-Time Fleet Maintenance Across Global Waters

How one of the world's largest bulk carriers eliminated travel delays and reduced downtime across a 700-vessel fleet using Telepresenz® Smart Ops™



85%

faster issue resolution — from days to hours through live remote collaboration



90%

reduction in travel — experts support vessels without leaving shore



100%

digital maintenance traceability — automated documentation for every repair

Client: Oldendorff Carriers

Industry: Maritime / Shipping & Logistics

Scale: Global fleet of ~700 bulk carrier vessels operating worldwide

Worker Environment: Crew onboard long-haul vessels requiring real-time assistance from onshore experts

IT Environment: Secure satellite-based maritime internet enabling live video streaming and low-latency communication

Devices: RealWear HMT-1 head-mounted wearables for crew; laptops for onshore engineers and supervisors

Oldendorff Carriers, one of the world's largest bulk shipping companies, operates a fleet spanning international waters — where mechanical or operational faults can quickly escalate into costly disruptions. Historically, the process of diagnosing and resolving technical issues was slow and inefficient. Crew members documented issues through photos and emails, often resulting in incomplete communication and prolonged back-and-forth with onshore experts. In many cases, engineers had to physically travel to the vessel to assess or validate repairs — an expensive process that caused significant downtime. Given that some ships were thousands of kilometers offshore, even minor equipment issues could result in days of operational loss.

The challenge was clear: enable experts to “see what the crew sees” in real time — without relying on delayed, bandwidth-heavy, or travel-dependent methods.

“When a ship is thousands of kilometers from port, every hour of delay can translate to significant operational and financial losses.”

Solution: Telepresenz® Smart Ops™ for Digital Inventory Management and Remote Inspections

To modernize its fleet maintenance operations and eliminate communication bottlenecks, Oldendorff deployed Telepresenz® Smart Ops™ across its global fleet.

Using RealWear HMT-1 hands-free headsets, crew members can now stream live, high-definition video directly from the vessel's engine rooms, mechanical spaces, or cargo areas. Onshore experts join via laptops, providing real-time visual guidance, marking annotations on live feeds, and verifying repairs step-by-step.

The system leverages optimized satellite-based maritime connectivity to ensure stable, low-latency video streams even in open-sea conditions. Each session is automatically recorded and archived within Smart Ops™ for audit readiness, training, and compliance. Multi-party sessions allow several specialists from different locations to join the same call, accelerating resolution and decision-making.

"With Smart Ops, our experts can guide the crew in real time — without ever leaving the shore."

Within weeks of deployment, Oldendorff transformed its maintenance and troubleshooting workflow. Average issue resolution time dropped from two to three days to just a few hours. Travel for engineers was reduced by 90%, saving significant cost and allowing expert resources to focus on high-value analysis rather than logistics. Maintenance recordkeeping became fully digital, creating a transparent and searchable audit trail across all vessels. Real-time collaboration improved both crew confidence and the accuracy of repairs, while also enhancing safety during complex onboard operations.

Key Outcomes:

- 85% faster issue resolution across global fleet operations
- 90% reduction in expert travel and associated costs
- 100% digital traceability of all maintenance and inspections
- Enhanced safety through hands-free collaboration in high-risk areas
- Seamless communication between vessels and shore-based teams

"Smart Ops allows us to resolve most vessel issues remotely. We've saved time, costs, and improved our crew's confidence."

About Telepresenz®

Telepresenz® — AI-Powered. Frontline-Focused. Future-Ready. Telepresenz connects inspectors, engineers, and administrators through real-time collaboration and AI-powered operational workflows. With Smart Ops™, aerospace teams gain digital control over inspections, inventory, and compliance — turning complex maintenance programs into seamless, transparent, and efficient operations.