

Digital Inventory Checklist Management and Remote Inspections

How a global aerospace maintenance provider streamlined inspection workflows, improved visibility, and enabled real-time collaboration between inspectors and experts through Smart Ops™.



90%

Faster inspections through real-time collaboration with remote experts



95%

Lower travel costs by enabling SME oversight without site visits



100%

Digital traceability via centralized, auditable inspection records

Client: Confidential Global Aerospace Maintenance Provider

Industry: Aerospace / MRO / Engine Maintenance

Scale: Multi-site engine disassembly and inspection operations with distributed inspectors and administrators

Worker Environment: Field-based Lessee Inspectors executing complex inspection and disassembly tasks under stringent compliance requirements

IT Environment: Secure cloud deployment integrated with existing maintenance management systems (Cortex equivalent)

Devices: Mobile tablets for inspectors; desktop dashboards for administrators

The aerospace maintenance provider faced growing challenges managing complex inspection workflows across multiple facilities. Manual checklist tracking and photo documentation created delays, data inconsistencies, and a lack of real-time visibility for administrators and auditors. Inspectors relied on paper forms and standalone cameras to record work, with critical information stored in disparate systems. This fragmented process made it difficult to verify completed inspections, ensure traceability, or report accurately to customers and compliance teams.

The organization required a connected digital system that could unify inspection management, media capture, and remote collaboration while reducing manual data entry and improving transparency.

"The Smart Ops platform gave our teams a unified digital inspection experience — everything from task assignment to photo evidence capture to audit-ready completion happens within one environment."

MRO – Engine Maintenance

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

Using Telepresenz® Smart Ops™, the provider implemented a fully digital, collaborative inspection environment designed to streamline inventory management, inspection tracking, and remote oversight.

Administrators now assign and track digital checklists directly through Smart Ops™, receiving real-time visibility into progress and automated alerts for new or overdue jobs. Inspectors in the field access these guided workflows on their mobile devices, capturing all required data digitally — including scanned component IDs through integrated OCR technology.

During disassembly, inspectors record mandated photos and videos that are automatically linked to each inspection record, ensuring every asset and activity is documented and auditable. All captured media is stored securely within Smart Ops™, creating a comprehensive, searchable record for compliance and traceability.

Component scans are automatically logged into the digital checklist, reducing manual entry and eliminating errors while maintaining full traceability across all inventory items. Remote experts can join live video sessions to verify findings, validate additional items, or resolve discrepancies in real time, enabling true remote collaboration between field teams and off-site engineers. Finally, Smart Ops™ integrates seamlessly with the organization's maintenance management system, providing dashboards, digital signature support, and complete record storage to ensure both operational efficiency and compliance integrity.

"From checklist assignment to final approval, Smart Ops turned our inspection process into a fully digital, auditable workflow."

The deployment of Smart Ops™ has transformed how the provider manages inspection operations.

Real-time dashboards now provide complete oversight of inspection progress and asset status, giving leadership the visibility they need to make data-driven decisions. Digital workflows have cut documentation time by over 90%, freeing inspectors to focus on higher-value tasks and reducing downtime across the maintenance cycle.

Automatic data capture and OCR scanning have eliminated most manual entry errors, improving traceability and compliance reporting. Remote collaboration capabilities have reduced the need for on-site expert travel, saving costs and accelerating issue resolution.

The entire process — from inspection assignment to report submission — is now transparent, auditable, and accessible from any location.

Key Outcomes:

- Digital traceability for every component inspected
- Faster audit readiness through auto-generated inspection records
- Enhanced collaboration between inspectors and remote SMEs
- Improved compliance visibility via real-time dashboards and alerts

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.