

SOLUTION BRIEF

CareAR for the Oil & Gas Industry



Oil and Gas Industry Challenges

Complex equipment frequently located far from accessible technical expertise and parts defines the oil and gas industry. Risk of failures and challenges associated with following strict procedural guidelines can result in safety concerns. This can have far reaching implications along with significant cost considerations.

Rapid access to expertise challenges the energy sector when on-site technicians need assistance.

Complex large-scale systems present hazardous conditions for inspection and maintenance. Outages demand even more expert attention as off-line costs can quickly soar into millions of dollars.

Technologies offering virtual enhancement could reduce the cost of maintenance and operations by 10 to 15 percent.¹

The CareAR Solution

CareAR is an augmented reality (AR) visual support platform that allows oil and gas producers to optimize their equipment repair, maintenance, and inspection experience with live visual guidance tailored for each interaction. With CareAR, on-site technicians are guided by visual prompts while receiving remote, real-time guidance from off-site experts.

It's all about content with context. CareAR empowers on-site workers with remote expertise using mobile devices and drones. When safety is paramount, workers can go hands-free with smart glasses.

With visual AR assistance and support, technicians can survey maintenance, perform inspection, repair in real time, and capture critical details on live video. They can save these images or recordings into a pre-existing workflow or the CareAR secure cloud. This gives on-site teams more clarity, greater confidence and fewer delays for an enhanced service experience.

Use Cases

Remote Assessment and Guidance

Expert guidance for in-the-moment diagnosis and direction.

Hands-Free Glasses and Drone Augmented Reality

Quickly identify complex components not easily visible or accessible and remotely verify procedures.

Remote Training

Train on-site workers or upskill staff remotely to reduce human error and increase speed to resolution.

Benefits

Rapidly Resolve

Remote expert evaluation and guidance accelerates best action.

Prevent Failure

Frequent assisted remote compliance audits and expert analysis supports proactive resolutions.

Optimize Safety

Ensure rigorous oil and gas procedures are followed and verified to prevent hazardous behaviors.

Increase Efficiency

Reduce travel and downtime costs with augmented reality remote assistance and self-solve, self-learning guidance.

Oil & Gas Use Cases

Unplanned Outages

Immediate remote expert assistance without travel delay

Turnaround² Efficiency

Unexpected issues more quickly resolved with remote expert guidance

Safe Investigation

Video capture with AR guidance and via hands-free smart glasses or drone

Procedure Training

AR enhanced instruction enhances on-site learning

Pipeline Inspection

Drone AR review efficiently covers distance with remote expert verification

Gauge Analysis

Remote expert perspective confirms for confidence and audit

“Together with CareAR, ServiceNow is delivering digital experiences that empower service teams to better solve problems remotely so work can be completed efficiently and safely.”

Michael Ramsey,
VP of Product Management,
ServiceNow



SEE

View the service situation remotely from any location



SOLVE

Visually guide and collaborate for effective problem resolution



SAVE

Capture and share content in systems and with teams

Features

ServiceNow Integration

Integrate and extend AR for ServiceNow digital workflows with Field Service and Customer Service Management.

Create and Capture Content

Save images and video recording from live service sessions and store in the cloud for collaboration.

Enterprise Cloud Platform With Embeddable APIs

Built for scale on a global infrastructure for easy integration.

Smart Analytics & Dashboarding

Visualize time-to-resolution and organize service calls by tags and locations.

Technical Requirements

mobile	iOS 11 or later (requires ARKit) Android 10.0 or later (requires ARCore)
desktop	Windows and MacOS (intel)
smart glasses	Android 8 or later (includes Google Glass, Realware)
network	500 kbps and higher N/A for offline mode
data encryption	AES 256-bit

Start Visually Resolving Issues Remotely With Enterprise Augmented Reality

Get your free trial at [CareAR.com/free-trial](https://carear.com/free-trial)

Sources:

- <https://www.mckinsey.com/industries/oil-and-gas/our-insights/how-tapping-connectivity-in-oil-and-gas-can-fuel-higher-performance>
- <https://www.oilandgasiq.com/integrity-hse-maintenance/news/what-are-shutdowns-and-turnarounds>