

Google Distributed Cloud Tactical

Advancing National Security Infrastructure with Artificial Intelligence



As the first line of defence for national security, the Royal Navy, Maritime and Air Force collectively play a vital role in safeguarding national security and can respond to any potential threats at a moment's notice. However, the reliance on legacy systems and manual processes for maintenance and documentation is still prevalent and could expose vulnerabilities and increase the risk of human error and inefficiencies. To ensure operational readiness, these institutions require effective management of maintenance and administrative functions within their respective ecosystems.

Our Solution - GDC Tactical



Powered by Google Distributed Cloud with Artificial Intelligence (AI) capabilities, our portable, hardware and software solution can function as a sovereign mobile command centre, fully operational even without the need for connectivity.

- Secure data security and sovereignty to prevent data leaks and safeguard against external factors.
- Streamline relevant data and documentation management covering technical and training manuals, inspection reports, standard operating procedures, compliance records, certifications and many more) into a centralised, AI-powered ecosystem.
- Modernise frontline operations and maintenance of assets (Combat and Mission Systems Data, Alerts, Advisories and Change Notifications), allowing them to focus on higher-priority challenges, such as safeguarding national defence and security against both internal and external threat.

Faster Fault Resolution



Delivers instant troubleshooting steps based on ship-specific technical manuals —no more guesswork.

Secure Data Management



Enables low-latency data processing and secure document retrieval.

Security Standards Compliance



Ensures data residency and compliance with naval security protocols.

Adaptive System Updates



Seamless updates of configurations and applications to tailor to your needs.

Operational Advantages

Military-grade Disrupted, Degraded, Intermittent, and Low-Bandwidth (DDIL) standards, FEDRAMP High P-ATO and NIST SP 800-53 compliant.



Agentspace
A managed, unified multi-modal search experience with workspace integration for generative AI applications.



Kubernetes
Enables seamless application build, deployment and scaling.



DevOps
Drives a comprehensive and scalable approach, continuous integration and delivery (CI/CD).



Edge-enabled inferencing
Boosts efficiency through real-time insights.

Use Cases



Fleet Maintenance

Objective
Minimise downtime and streamline fault diagnosis for combat and support vessels.

Challenge
Repeated issues in cooling systems, radar electronics, and fuel systems with no centralised fault log.

AI Impact
Aggregates repair logs, OEM manuals, and E&R forms into a single AI-searchable interface.

- Outcome**
- 40% faster identification of root cause.
 - 35% reduction in vessel downtime.



Aircraft Maintenance Assistant (Air Force - RMAF)

Objective
Support aircraft technicians in handling technical bulletins and complex troubleshooting for diverse aircraft fleet (Sukhoi, Hawk, EC-725, A400M).

Challenge
Delay in execution due to multilingual bulletins and frequent personnel rotation.

AI Impact
Smart search with source-referenced guidance from EOM/AD/SB bulletins.

- Outcome**
- 30–50% reduction in manual referencing time.
 - Improved bulletin compliance rate from 60% to 90%.



Multilingual Smart Assistant for Technicians in East Malaysia

Objective
Support Navy and Army workshops in Sabah and Sarawak with localised support.

Challenge
Communication gaps in Bahasa Melayu, English, and native dialects.

AI Impact
Real-time translation and voice commands in multiple languages.

- Outcome**
- 3x increase in documentation comprehension.
 - Reduced repair errors from miscommunication.

