

## **WELCOME**

At Quartek, we provide process-driven and delivery-focused services, specialising in applied engineering and analysis, consulting and advisory, project management and integration, as well as software and automation.

#### **OUR VALUES**

At the heart of our organisation are four core principles by which we function: Trust, Quality, Integrity and Value. These are present in everything we do, but most importantly, they are central to the way we engage with our clients and our team.

#### **OUR FOCUS**

Quartek provides a range of engineering services to the aerospace, land vehicle, maritime, rail and energy sectors, with a strong emphasis on supporting defence and defence industry within Australia. From contracts to concepts, planning and analysis, through to in-service and manufacturing support, we can help you deliver.

#### **OUR MISSION**

To foster an inclusive and supportive company culture that provides the most rewarding and engaging environment for our team, which facilitates delivery of the highest quality service possible to our clients. ISO 9001:2015 Certified, FS631533

**DISP Accredited, ITAR Capable** 

ADF Clearances: Baseline and NV1

Member of the CASG
Defence Support Services (DSS) Panel

Wholly owned and operated Australian company

Fully insured – PI, PL and Work Place Insurance



## **SERVICES**



Quartek specialises in providing engineering and consulting services to the Australian defence industry as well as government and private sector entities. With an end-to-end capability across four major disciplines, partnering with us gives you the ability to deliver.

We offer a range of engagement models to suit your requirements. Whether you need complete work packages carried out independently, application development, temporary staff on-site, or an on-call help-desk arrangement, Quartek can adapt to your needs to ensure successful delivery.

At Quartek, we operate within our ISO 9001:2015 certified quality management system, ensuring high quality, robust and repeatable results with the capability to incorporate feedback and make changes as we continuously strive to improve.



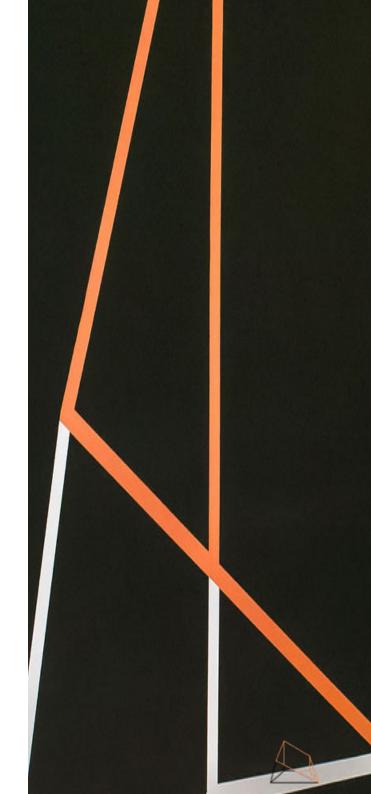
## **SERVICES**

#### **APPLIED ENGINEERING & ANALYSIS**

- STRUCTURAL ANALYSIS:
  - FEM, classical stress, frequency response, fatigue and damage tolerance.
- IN-SERVICE AND THROUGH-LIFE SUPPORT:
  - Airworthiness, structures & mech-systems, DASA/CASA compliant, regulatory framework.
- CAPABILITY ENHANCEMENT:
  - Design, analysis, integration, test program and certification support.
- MANUFACTURING SUPPORT:
  - Composite and metallic, concessions, MLB engineering
- ELECTRONICS & AVIONICS:
  - Circuit design and drafting

### **CONSULTING & ADVISORY**

- SYSTEMS ENGINEERING:
  - Systems safety, risk management, optimisation, engineering management.
- TEST & EVALUATION:
  - Test plan development, validation and verification activities, functional performance spec testing and assessment.
- DOCUMENTATION DEVELOPMENT:
  - ASDEFCON, certification planning, technical authoring, contract and bid writing.
  - **ENGINEERING POLICY:**
  - Strategic planning, Australian Industry Content analysis





## **SERVICES**

#### **SOFTWARE & AUTOMATION**

CUSTOM APPLICATIONS:

Application development, user experience design, on-call support.

SOFTWARE MODIFICATIONS & UPDATES:

Platform capability assessment, code optimisation and version control management.

SOFTWARE CERTIFICATION:

Regulatory compliance, software management planning, risk and safety analysis.

#### PROJECT MANAGEMENT & INTEGRATION

PLANNING:

Scheduling, work breakdown structures, risk analysis and planning.

• EXECUTION:

Stakeholder management, risk and budget tracking, critical path analysis, EVM.

ENGINEERING:

Supplier coordination, complex systems integration, multi-disciplinary engineering analysis.

DOCUMENTATION:

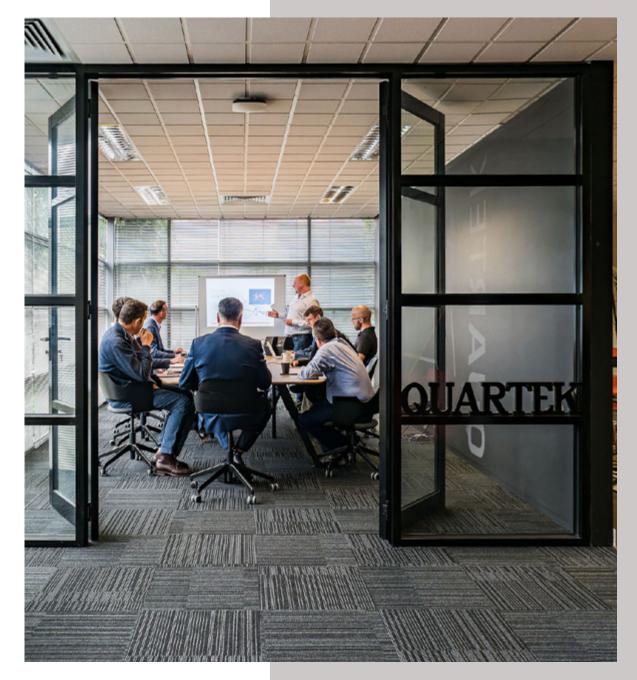
Systems engineering, regulatory environment analysis, configuration management.



### **GENERAL**

Quartek undertakes a wide range of projects for a diverse group of clients. Common to all we do is a dedication to delivery and a passion for engineering. With extensive experience gained on many defence and civilian projects of global significance, including F-35, A350, A400M, A380, Hawkei and GM's Zeta platform, our team have the skills, experience and knowledge to support you with whatever services you need to achieve delivery.

Our team of highly skilled professional engineers and consultants have been fortunate enough to work on some of the most technically engaging and challenging projects locally and abroad. This not only demonstrates the depth of our capability, but enables our team to remain engaged and enthusiastic whilst delivering exceptional results for our clients.







**PROJECTS** 

# F35 LIGHTING II COMPOSITE BELLMOUTH STRUCTURAL DESIGN AND ANALYSIS

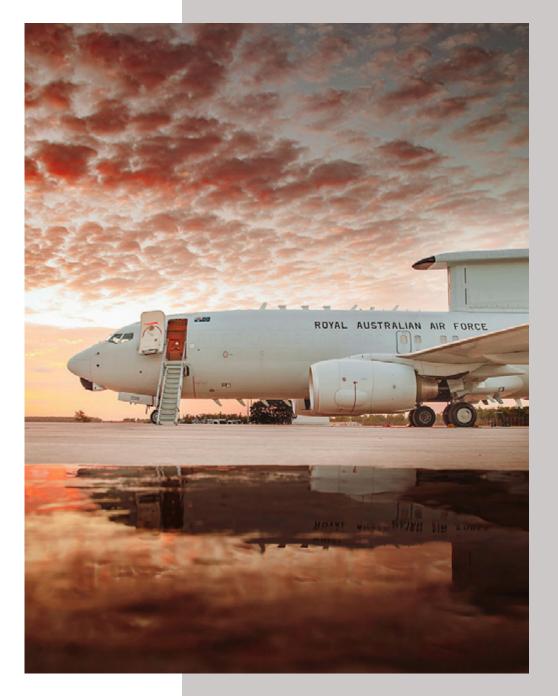
Leading and contributing to technical teams, we worked closely with Northrop Grumman in the US to first develop and then substantiate the design and analysis of one of the most complex pieces of composite aircraft primary structure ever built



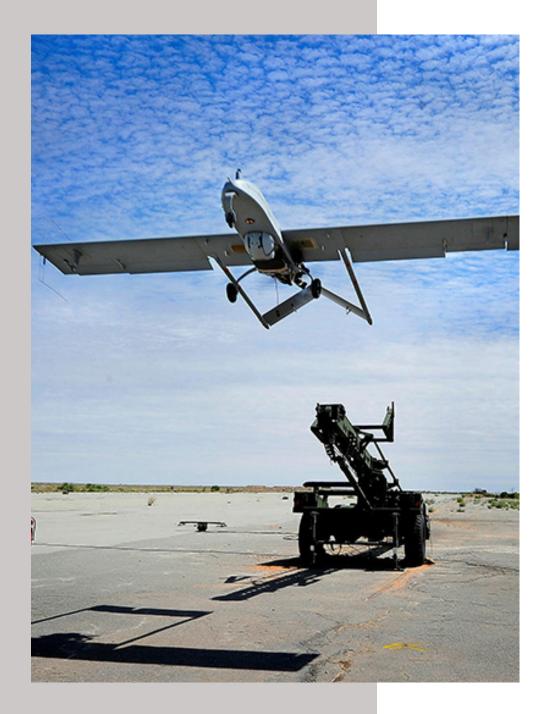
## **PROJECTS**

# RAAF E-7A WEDGETAIL IN-SERVICE SUPPORT

Working closely with Boeing Defence Australia in support of the RAAF, our team of highly experienced engineers, including CVEs and DEs, helps ensure this capability, critical to national security, stays safely in the air.







**PROJECTS** 

# SHADOW 200 TUAS VEHICLE INTEGRATION

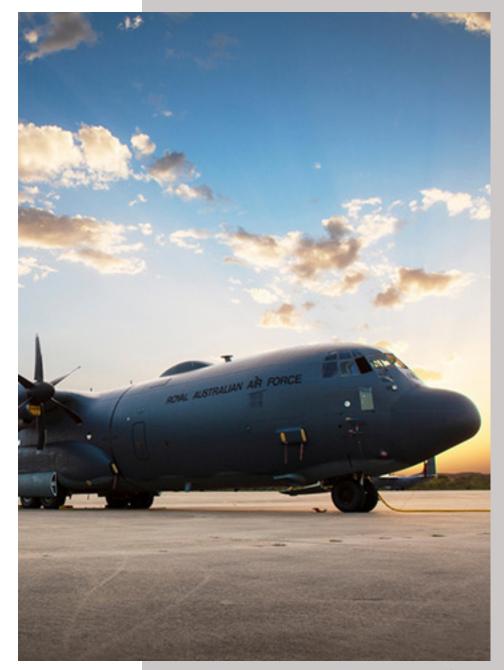
Our team of analysts and integration engineers helped Textron facilitate the transition of the Australian Army's Shadow 200 Tactical Unmanned Aerial System from the outgoing Unimog trucks to the recently acquired Rheinmetall Military Vehicles 40M transports.



**PROJECTS** 

## C130J KA-BAND COMPOSITE RADOME

Working with Airbus, our engineers conducted a detailed structural and frequency response analysis of a KA-Band radome for installation into the RAAF's fleet of C-130Js. This facilitated a successful and safe installation of the radome, which is now in service.







**PROJECTS** 

# ADEN 30MM CANNON CUSTOM TEST FIRING CAPABILITY

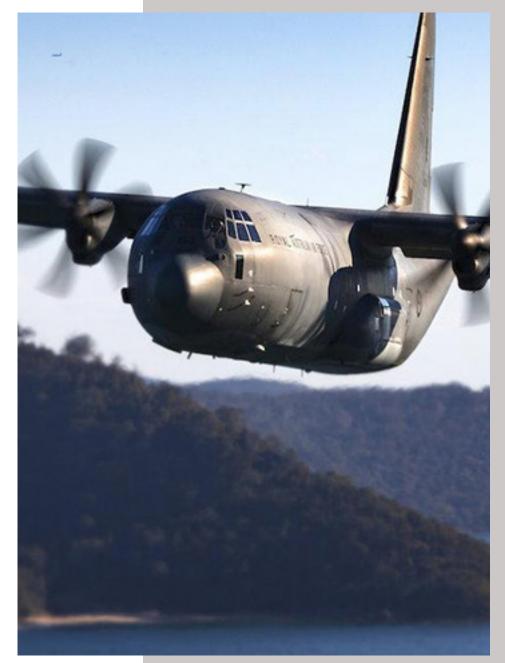
Working alongside QinetiQ, our team of engineers and project managers helped design, develop and deliver a unique capability that allows JPEU to safely test fire a range of aircraft-based weapons systems.



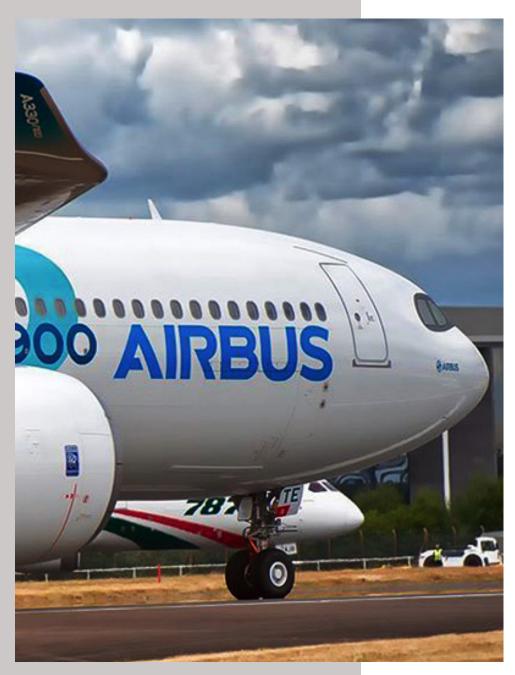
**PROJECTS** 

C130J LOAD MASTER FUSELAGE TRAINER

Our engineers designed, analysed and oversaw the construction of a series of Ground Support Equipment (GSE) items that enabled the joining of two C-130E fuselages to create a single C-130J. Quartek also designed and analysed the permanent trestling system on which it is supported. The combined fuselage now forms the basis of the Air Force's primary loadmaster training simulator, located at RAAF base Richmond.







**PROJECTS** 

A330 NEO WING LEADING EDGE FATIGUE AND DAMAGE TOLERANCE ANALYSIS

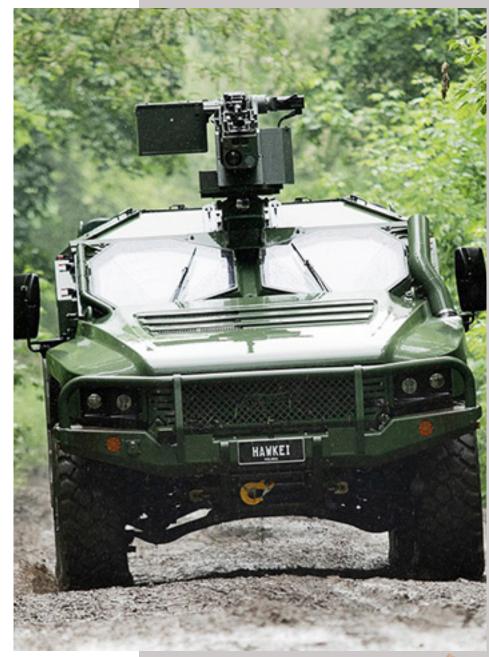
Leveraging our experience in Fatigue and Damage Tolerance analysis, we provided engineering oversight, guidance and L2 Airbus signatory to the QuEST Global team, enabling successful delivery of their work packages back to Airbus North America.



**PROJECTS** 

# THALES HAWKEI PMV BONNET WEIGHT OPTIMISATION

As part of a vehicle weight reduction program, Thales approached us to investigate options for optimising Hawkei's bonnet. Our team developed and analysed a new design that not only met operational requirements for strength and vibration but reduced weight by 25%.





#### **ITAR & DEFENCE**

The team at Quartek has extensive experience operating within ITAR environments, having worked with ITAR data at remote sites (Australia and Europe) and local sites within the US. Through this experience, the team has developed a deep understanding of the requirements of ITAR data management, including access vetting, monitoring, encryption, storage and transmission, as well as understanding the requirements at a corporate level.



#### ITAR CAPABLE

Quartek currently operates within the ITAR environment on several projects. To satisfy the requirements of this work, the company has:

- A Technical Control Plan
- · ISO9001:2015 certified QMS with procedures and work instructions tailored for ITAR data management
- Appropriate facilities and infrastructure both digital and physical

#### **CURRENT TECHNICAL ASSISTANCE AGREEMENTS:**

Quartek is a signatory to TAA's for the following organisations:

- CAE Inc, for data supplied from Lockheed Martin Aerospace
- Airbus Group Australia Pacific, for data supplied from Lockheed Martin Aerospace
- Boeing Defence Australia, for data supplied from Boeing USA

#### **AUSTRALIAN DEFENCE INDUSTRY:**

Quartek is an active participant within and champion of the Australian defence industry.

- · A wholly Australian owned and operated business
- · DSS Panel Member
- · AIDN Member
- Defence Security Cleared Staff
- DISP Member



## PARTNERS AND AFFILIATIONS







































## **CLIENTS**















Defence Science and Technology Group



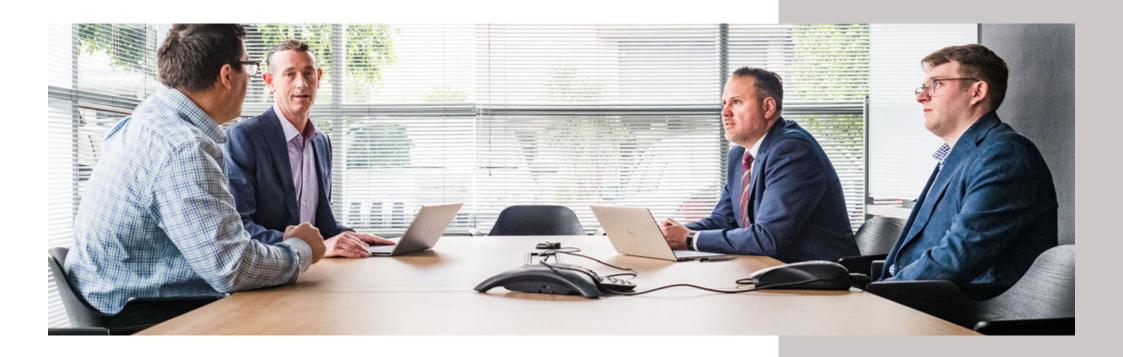












## **ENGAGEMENT**

**CLIENT-FOCUSED** 

The team at Quartek has experience in partnering with global industry leaders, manufacturers, suppliers, small businesses, R&D and defence, enabling us to tailor our support to your requirements through a range of different engagement models. We focus on remaining agile and dynamic, adapting to meet our client's needs.

# FOUNDED ON TRUST & INTEGRITY



# AWARDED BEST PRACTICE

By Airbus Group Australia Pacific

## **ADOPTION OF CLIENT METHODS & TOOLS**

- · We offer integration into clients' operations and way of working.
- We are experienced in learning and deploying client developed tools.

#### **EXPERTISE IN REMOTE WORKING**

- · We have experience in supporting customers globally.
- · We have an established remote working framework.
- · We offer a 24 Hour business cycle.

#### **TAILORED ENGAGEMENT MODES**

- · Work Packages carried out Independently
- Staff On-Site
- · Application Development
- · On-Call Help Desk
- Integrators
- · Research and Development
- Training



#### **Trust**

Meaning what we say, delivering what we say and being accountable.

## Quality

Having the best people available to deliver the highest quality service.

## **ENGAGEMENT**

#### **RELATIONSHIP**

Dedicated to developing long-term and strategic partnerships by supporting and enabling clients to focus on their core business.

We build client Relationships on Quartek's four core principles.

## Integrity

Open and honest communication, always keeping the client informed.

### Value

Combining Trust, Quality & Integrity to successfully deliver business outcomes.







## **CONTACT**

### Matthew Goldstraw

#### **Managing Director**

**M:** +61 449 264 289

E: matthew.goldstraw@quartek.com.au



## Paul Donald

#### **General Manager Consulting**

**M:** +61 499 229 551

E: paul.donald@quartek.com.au





