

**SHAPING THE  
AEROSPACE  
WORKFORCE  
OF THE FUTURE**



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# WELCOME

Thank you for your interest in the eQualified program, a special process personnel qualification program based on IAQG PCAP 001, created by and for the aerospace industry. Using the combined technical expertise of the participating organizations, eQualified:

- Develops free special process Bodies of Knowledge: documents which capture the knowledge and skills required by personnel operating in specific special process areas.
- Validates personnel competency through theoretical and practical assessments.
- Approves Training Providers to deliver technical courses aligned with the Bodies of Knowledge.

We look forward to welcoming you into the program.



## WHAT IS EQUALIFIED?

A global industry-managed program for special process personnel qualification in the aerospace industry, eQualified empowers all parties to influence, collaborate and be part of the change taking place in industry. eQualified leverages the combined knowledge of industry experts to develop Bodies of Knowledge (BoK) and assessments (online theory and practical). The program also approves Training Providers to deliver courses aligned with the Bodies of Knowledge which then support candidates in their preparation for assessment.

# THE INDUSTRY CHALLENGE

**THERE IS A CRITICAL SHORTFALL OF QUALIFIED SPECIAL PROCESS PERSONNEL IN THE AEROSPACE INDUSTRY, AS WELL AS A SKILLS GAP CREATED BY AN INCREASINGLY GLOBALIZED WORKFORCE. THIS HAS INCREASED PRESSURE ON ALL ORGANIZATIONS TO REDUCE THE TIME REQUIRED TO TRAIN NEW PERSONNEL AND ENSURE THEY ACHIEVE ADEQUATE STANDARDS OF COMPETENCY AT ALL LEVELS.**

## **eQualified is the solution**

**Aerospace Manufacturers and Airlines** benefit from utilizing an existing industry-managed program to support internal training and assessment or validate personnel capability within their supply chains, and support compliance to AS9100 (8.5.1.2).

**Training Providers** can have their training courses approved free of charge by industry technical experts to increase exposure within the aerospace industry and win new business.

**Industry Technical Experts** can help safeguard the future of aerospace manufacturing by contributing to the industry's efforts to increase personnel capability and capture the knowledge and skills associated with complex special process activities.

**Individuals** can take an eQualified assessment to evidence their competency at all levels within their chosen field and source superior Training Providers through the eQualified database.

# INDUSTRY RECOGNITION

FOR EQUALIFIED

MORE AND MORE COMPANIES ARE SEEING THE BENEFITS OF PARTICIPATING IN EQUALIFIED.



## MARK BINFIELD

NADCAP LEAD  
ACTUATION SYSTEMS  
UTC AEROSPACE (GOODRICH)

“For those not yet involved in this area, this is a great opportunity to network and learn about how the industry intends to utilize the framework of eQualified to address the difficulties we all face with the recruitment, training and qualification of aerospace special process personnel.”



## RICHARD BLYTH

ENGINEERING MANAGER  
EXTERNAL LABORATORIES  
ROLLS-ROYCE PLC

“eQualified represents a way to safeguard and improve our training and qualifications, which ultimately impact on the future success of our organisations as a whole. Everyone who participates will be contributing to a legacy of helping future generations with aerospace process quality.”



## CHARLES PARKER

SENIOR MANAGER OF MATERIALS  
ENGINEERING  
HONEYWELL AEROSPACE

“This is the first event I’m aware of to focus on the future of the aerospace special process workforce. I am looking forward to talking through the issues with others from the industry and from academia to see how we can go forward together.”

# INDUSTRY INVOLVEMENT

AN INCREASING NUMBER OF COMPANIES ARE ACTIVELY PARTICIPATING IN THE EQUALIFIED PROGRAM.

## **AIRLINES**

AIR NEW ZEALAND  
DELTA AIRLINES  
KLM ROYAL DUTCH AIRLINES  
LUFTHANSA TECHNIK

RAYTHEON COMPANY  
ROLLS-ROYCE PLC  
SOLAR ATMOSPHERES  
TRESICAL  
UTC AEROSPACE (GOODRICH)

## **AEROSPACE MANUFACTURERS**

BAE SYSTEMS  
BARNES AEROSPACE  
THE BOEING COMPANY  
CIRRUS AIRCRAFT  
DYNAMO COATINGS  
ELLISON SURFACE TECHNOLOGIES  
GE AVIATION  
HONDA AIRCRAFT COMPANY  
HONEYWELL  
LOCKHEED MARTIN  
MAGNETIC INSPECTION LABORATORY, INC.

## **MAINTENANCE, REPAIR AND OVERHAUL**

HONEYCOMB AIRCRAFT REPAIR CENTER  
HONG KONG AIRCRAFT ENGINEERING CO.

## **TRAINING PROVIDERS**

ABARIS TRAINING INC.  
ADVANCED COMPOSITES TRAINING  
EQUALEARN  
KVE COMPOSITES GROUP  
ROCV AMSTERDAM  
TARRANT COUNTY COLLEGE  
TWI

# BODIES OF KNOWLEDGE & ASSESSMENTS

## LEVELS

### PROCESS OPERATOR/ TECHNICIAN

Understand and perform the hands-on operations of the special process

### PROCESS PLANNER

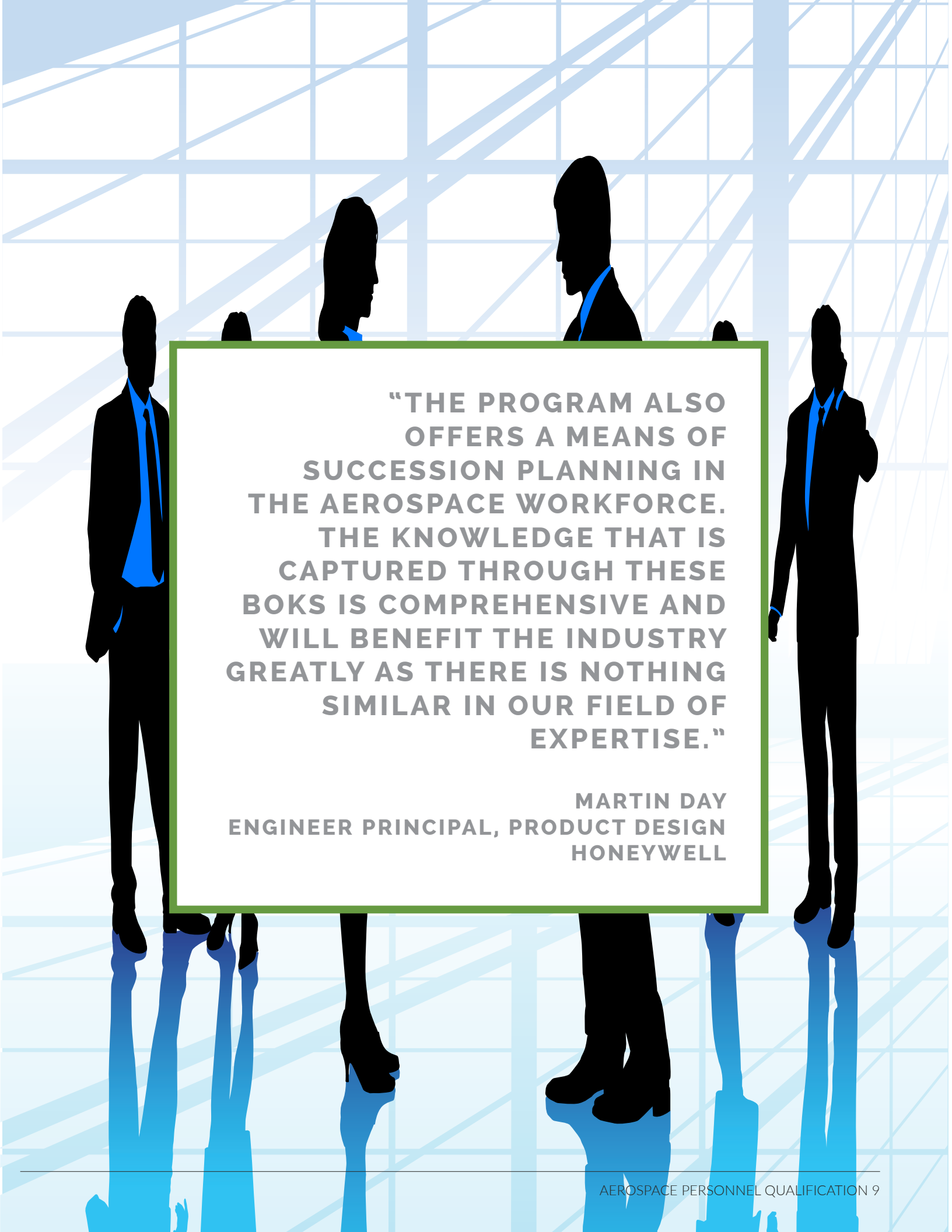
Capable of creating manufacturing processes and interpreting process procedures to conform to customer specification and requirements. Capable of problem solving and resolving day-to-day issues.

### PROCESS OWNER

Capable of writing, reviewing and approving processes, procedures and qualifications of Process Operators and Process Planners. Capable of designing new processes and resolving issues among other levels.

eQualified's goal is to fill gaps in the industry by creating new Bodies of Knowledge and assessments where they have not previously existed. As a result, eQualified has focussed its development efforts on **Planner Level** as this is where the eQualified Management Council has found the biggest opportunity to provide new special process personnel qualifications.





**“THE PROGRAM ALSO  
OFFERS A MEANS OF  
SUCCESSION PLANNING IN  
THE AEROSPACE WORKFORCE.  
THE KNOWLEDGE THAT IS  
CAPTURED THROUGH THESE  
BOKS IS COMPREHENSIVE AND  
WILL BENEFIT THE INDUSTRY  
GREATLY AS THERE IS NOTHING  
SIMILAR IN OUR FIELD OF  
EXPERTISE.”**

**MARTIN DAY  
ENGINEER PRINCIPAL, PRODUCT DESIGN  
HONEYWELL**

eQualified has developed Bodies of Knowledge and assessments in a number of special process areas and is actively developing more, according to industry need.

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## **Brazing**

Vacuum and Non-Vacuum Furnace Braze

## **Chemical Processing**

Anodizing

Cleaning

Etch and Etch Inspection

Painting

Plating

## **Coatings Applicator**

NEW IN 2018

## **Composite Repair**

Aerospace Composite Bonded Repair

General Composite Repair

## **Heat Treating**

Aluminum Alloys

Carbon and Alloy Steel

Heat Resisting Alloys

Pyrometry (Calibration and Test)

Pyrometry (Process)

Stainless and PH Steel

Titanium Alloys

## **Welding**

Fusion

Resistance Spot and Seam

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# FUTURE DEVELOPMENT

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Aerospace industry leaders have identified the following special process technologies for future development.

Additive Manufacturing

Coatings

Composites

- Manufacturing
- Metal Bond Repair
- Bolted Repair

Conventional Machining

Electronics

Materials Testing

Measurement & Inspection

Metallic Materials Manufacturing

Nonconventional Machining

Non Metallic Materials Manufacturing

Sealants / Elastomers

Surface Enhancement

- Shot Peening

Welding

- Electron Beam

- Laser

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# PARTICIPATION BENEFITS

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## Industry Collaboration

Through eQualified, industry representatives work together as equals, sharing best practices for the benefit of the industry as a whole. The opportunity to meet with other industry members and build advantageous working relationships cannot be underestimated.

## Knowledge Transfer

The eQualified Bodies of Knowledge are developed with extensive industry input and review.

They are designed to share the best practices and technical norms that any competent technician should know.

## Global Recognition

eQualified is an international qualification program, with companies actively participating from all around the world.

Being awarded an eQualified certificate of qualification signifies a universal acknowledgement of competency to industry standards.

# TRAINING PROVIDER CASE STUDY



MIKE HOKE  
PRESIDENT



"Our involvement with eQualified has given Abaris the opportunity to enhance the content of our aerospace training courses and build lasting relationships with aerospace industry stakeholders. Our membership is invaluable because it gives us the opportunity to work alongside our customers (and potential customers) and have a voice in shaping the training requirements for Composite Repair. By collaborating with other industry experts, we help develop the Composite Repair Bodies of Knowledge (BoKs) and then refine and improve our training courses to ensure they are fully aligned.

"Serving as the Vice Chair of the Composite Repair Review Board, I can apply what is discussed during our industry-wide meetings to our training courses. In 2016, one of our flagship courses, Composite and Bonded Structure Technician/Specialist was the first to receive approval from eQualified. This means anyone who wishes to achieve the eQualified General Repair Technician can be confident that by attending our training course they will be fully prepared to take the theory examination. We are currently in the process of achieving a second approval, this time for our Aerospace Composite Bonded Repair Technician training.

"I also participate on the eQualified Management Council which gives me influence over the strategy and development of the eQualified program itself. Abaris has been involved with eQualified for over 5 years now, in which time I believe that we have been able to enhance our relationships with the aerospace industry and improve our training programs. We look forward to our continuing collaboration with the program and seeing more Training Providers joining us."

# MEMBERSHIP BENEFITS

eQualified Membership is open to Aerospace Manufacturers, Airlines, Maintenance, Repair & Overhaul Organizations, and Training Providers.

eQualified Membership exists to safeguard the integrity of the assessments. Through a paid Membership system, eQualified is able to limit access to the assessments to only those companies who have signed agreements which commit them to keeping the assessment content secure.

Members have the right to:

- Influence and shape the content of eQualified assessments
  - Review and approve theory questions
  - Review and approve practical assessment checklists

For more information on participating in eQualified as a Member, please speak to the eQualified team.

# GET INVOLVED WITH EQUALIFIED

CONTACT US



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