AESQ Supplier Forum Host & Welcome Address

WELCOME FROM
PRATT & WHITNEY

JILL M. ALBERTELLI
VICE PRESIDENT, QUALITY
PRATT & WHITNEY
AESQ Supplier Forum Introduction

INTRODUCTION TO THE AESQ

MARTIN SCHAEFFNER, MTU AERO ENGINES AG

AESQ – Aerospace Engine Supplier Quality Strategy Group
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AESQ Supplier Forum Voice of Customer

VOICE OF THE CUSTOMER

RICHARD GALLAGHER
SUPPLIER QUALITY LEADER
BOEING

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AESQ Supplier Forum Human Factors

HUMAN FACTORS

LUDOVIC CHEVET
AIRBUS

<table>
<thead>
<tr>
<th>AESQ Principles</th>
<th>Expected Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>1. Common understanding and language of Human Factors across supply chain</td>
</tr>
<tr>
<td>Simplify</td>
<td>2. Align to AS81300 and other industry standards</td>
</tr>
<tr>
<td>Prescriptive, Available</td>
<td>4. Free issue guidance and training material that isn’t available otherwise</td>
</tr>
<tr>
<td>Common Language</td>
<td></td>
</tr>
<tr>
<td>Supported by 3P Party Training &amp; Consultancy</td>
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AESQ project is matching Airbus strategy
Airbus is taking active role in it

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AESQ Supplier Forum Standards Overview

AESQ Standards Overview

Olivier Castets
Safran

Helen Djäknegren
GKN

AESQ Website: aesq.sae-itec.com
AESQ Supplier Forum AS13004

AS13004 PFMEA & CONTROL PLANS

NICK STREPPA
GKN

DR IAN RIGGS
ROLLS-ROYCE
AS13003 MEASUREMENT SYSTEM ANALYSIS

CHRISTOPHER VEST
PARKER HANNIFIN

MARTIN SCHAEFFNER
MTU AERO ENGINES AG
# AS13006 PROCESS CONTROL METHODS

<table>
<thead>
<tr>
<th>AESQ Principles</th>
<th>Original State</th>
<th>Future State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardize</td>
<td>Varying standards &amp; approaches</td>
<td>Common standard &amp; approach</td>
</tr>
<tr>
<td>Simplicity</td>
<td></td>
<td>Aligned with AS10002, 13003, 13004, AS9103, AS9145 &amp; AMU &quot;Blue Books&quot;</td>
</tr>
<tr>
<td>Adopt existing industry standards</td>
<td></td>
<td>In scope: Process Control for all characteristics</td>
</tr>
<tr>
<td>Preventive, Auditable</td>
<td></td>
<td>Out of scope: Foundation requirements</td>
</tr>
<tr>
<td>Common language</td>
<td></td>
<td>Expected Benefits</td>
</tr>
<tr>
<td>Supported by 3rd Party Training &amp; Consultancy</td>
<td></td>
<td>- Improved variation control &amp; reduction techniques, broad-based belief in benefits</td>
</tr>
</tbody>
</table>

## Expected Benefits
- Improved variation control & reduction techniques, broad-based belief in benefits
- Common prescriptive standard fully aligned with AESQ AS9103 & AMU Blue Book Sides
- Focus on accurate data analysis and proactive problem resolution
- Improved Quality Performance, reduced risk
AS13002 INSPECTION FREQUENCY

AUSTIN SHEARS
PCC

LARRY BENNETT
GE
AESQ Supplier Forum AS13000

AS13000 PROBLEM SOLVING USING 8D

MATEUSZ ZYLA
COLLINS AEROSPACE

OLIVIER CASTETS
SAFRAN

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AESQ Supplier Forum Future Initiatives

FUTURE INITIATIVES

Lisa Claveloux Pratt & Whitney
Dr Ian Riggs Rolls-Royce
Helen Djäknegrén GKN
Barbara Negro GE Aviation
Catherine Catarina-Graca Safran

Product Life Cycle & Document Interaction

AS9145 (APQP/PPAP) & AESQ Standards

1. Planning
2. Product Design & Development
3. Process Design & Development
4. Supplier/Manufacturer Capability
5. Product/Process Validation
6. ADRG (Acceptance, Risk and Post Delivery Service)

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AESQ Supplier Forum
Hartford, Connecticut, USA – April 10, 2019
AESQ Thanks You!