



AESQ Supplier Forum

Hosted by

Rolls-Royce Civil Aerospace

Seletar Country Club, Singapore

April 6th 2017

AESQ – Aero Engine Supplier Quality Strategy Group

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Man on the far left wearing a blue and white striped shirt and dark trousers. He has a name tag on his chest.

Man in the second position from the left wearing a white long-sleeved shirt and dark trousers. He has a name tag on his chest.

Man in the middle wearing a yellow long-sleeved shirt and dark trousers. He is wearing glasses and has a name tag on his chest.

Man in the second position from the right wearing a light blue long-sleeved shirt and dark trousers. He is wearing a light-colored jacket over his shirt and has a name tag on his chest.

Man on the far right wearing a white and blue striped long-sleeved shirt and dark trousers. He is wearing glasses and has a name tag on his chest.

Documents and coffee cups on the table. One document prominently displays the logo for 'ASAP' (Association of Singapore Airlines Pilots) and the text 'ASAP' and 'ASAP'.













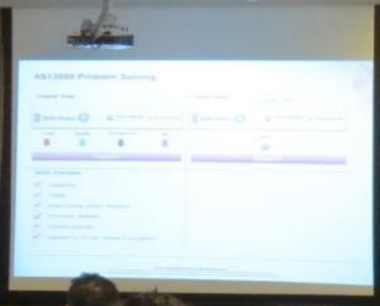


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AB 1200+ Supplier Self-Management Program

Supplier Self-Management Program

- Supplier Self-Management Program
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- Supplier Self-Management Program
- Supplier Self-Management Program





SUMMARIZING THE URGENCY

Partnership Component	Current Investment	Additional Investment
Regulation	100%	100%
Financial Partnership	100%	100%
Whole Body Approach Strategy	100%	100%

Partnership enables the Strategy to meet the Demand







Moving Forward

- 40% of firms with established and a growing relationship
 - Supplier flexibility is a competitive & price advantage & they will go to great lengths
 - Supplier engagement is being sought to create more resilience
 - Strategic relationships are being developed
 - Supplier engagement is essential for long-term success

Questions?

- Supplier engagement is a competitive advantage
 - Supplier engagement is a competitive advantage
 - Supplier engagement is a competitive advantage

AS13004 Process Risk Mitigation		AS13006 Process Control	
<p>Original Risk</p> <p>Risk Management</p> <p>Managing uncertainty and achieving the organization's purpose</p> <p>AS13004 Objectives:</p> <ul style="list-style-type: none"> Identify risks Assess risks Monitor and review risks Report risks Control risks Communicate risks Review and improve risk management 	<p>Feature Risk</p> <p>Essential Benefits:</p> <ul style="list-style-type: none"> Identification of risks Assessment of risks Control of risks Communication of risks Review and improvement of risk management 	<p>Original Risk</p> <p>Feature Risk</p> <p>Springing, identifying & determining</p> <p>Risk Rank</p> <p>Assessment of risk based on the likelihood of occurrence and the potential consequences of the risk</p> <p>Original Risk</p> <p>Identifying, assessing & determining</p> <p>Risk Rank</p> <p>Assessment of risk based on the likelihood of occurrence and the potential consequences of the risk</p>	<p>Original Risk</p> <p>Identifying, assessing & determining</p> <p>Risk Rank</p> <p>Assessment of risk based on the likelihood of occurrence and the potential consequences of the risk</p>

A man in a white shirt and glasses is speaking and gesturing towards the presentation board.

A man in a light blue shirt and dark tie is listening attentively with his hands clasped.

A man in a light blue shirt and glasses is looking at the presentation board.

A man in a white shirt and glasses is standing with his arms crossed, listening.

A man in a light blue shirt and glasses is looking towards the speaker.

A man in a light blue shirt is looking towards the speaker.

A man in a light blue shirt and glasses is looking towards the speaker.

A man in a light blue shirt and glasses is looking towards the speaker.

AS13004 Working...

AS13003 Measurement Systems Analysis

Original State



Future State

Practical Case Studies

Product	Process	Measurement
...
...
...
...
...
...
...
...
...
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AESQ Principles

- Standardise
- Simplify
- Adopts Existing Industry Standards
- Prescriptive, Auditable
- Common Language
- Supported by 3rd Party Training & Consultancy

Expected Benefits

- Improved knowledge of Measurement Capability
- Clarification of minimum acceptance standards
- Mandates replaces guidance
- Adopts Automotive Industry Action Group 'Blue Book' on MSA
- Improved Quality Performance

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AS13005 Internal Audits Requirements

Original State Internal audit requirements in many documents

Future State

Content

- Audit types & detection (sampling)
- System
- Production process
- Product
- Special process
- Auditor qualification
- Audit 4P's
- Audit criteria

In scope: Internal audits
Out of scope: 2nd/3rd party audits (e.g. Customer audits)

Expected Benefits

- Lean & effective internal audit process providing confidence in state of compliance throughout Aero-Engine supply chain
- Reduced and/or eliminated duplicate audits

AESQ Principles

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Take away "e-g-Customer audits"



AS13003 Measurement Systems Analysis

Original State

Future State

AESQ Principles

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AESQ Standards - Global Deployment

• Vision

- Deploy Internationally
- Challenge each other
- Common language
- Quality
- Easy adoption of standards
- Simplify requirements

AESQ Standards - Global Deployment

• Vision

- Deploy harmonically
- Challenge each other
- Common language for Quality
- Easy adoption of standards
- Simplify requirements

AESQ Standards - Global Deployment Status

	USA (ASQ)	UK (BSI)	EU (EN)	ASIA (JIS)	AUS (AS)
Quality Management	Approved	Approved	Approved	Approved	Approved
ISIRI					Approved
ISO 9001					Approved
ISO 14001					Approved
ISO 45001					Approved
ISO 27001					Approved
ISO 22301					Approved
ISO 26000					Approved
ISO 50001					Approved
ISO 20121					Approved
ISO 20126					Approved
ISO 20127					Approved
ISO 20128					Approved
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ISO 20198					Approved
ISO 20199					Approved
ISO 20200					Approved





AS13005 Internal Audit Requirements









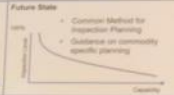




AESQ Vision

To establish and maintain a common set of Quality Requirements that enable the Global Aero Engine Supply Chain to be truly competitive through lean, capable processes and a culture of Continuous Improvement.

AS13002 Inspection Frequency

<p>Original State</p> <p style="text-align: center;">100% Inspection</p> <p style="text-align: center;">REDUCED Sample</p> <p style="text-align: center;">Error Proof AQL</p> <p>AESQ Principles</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Simplification <input checked="" type="checkbox"/> Severity <input checked="" type="checkbox"/> Adhere Existing Industry Standards <input checked="" type="checkbox"/> Prescriptive Authority <input checked="" type="checkbox"/> Common Language <input checked="" type="checkbox"/> Supported by 3rd Party Training & Consultants 	<p>Future State</p> <ul style="list-style-type: none"> • Common Method for Inspection Planning • Guidance on commonly specific planning  <p>Expected Benefits</p> <ul style="list-style-type: none"> • Standardized Process • Improved compliance • Improved Product Quality
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AS13003 Measurement Systems Analysis

	<p>Future State</p> 
<p>Expected Benefits</p> <ul style="list-style-type: none"> • Improved knowledge of Measurement Capability • Clarification of instrument acceptance standards • Reduced inspection variance • Assure Collaborative Industry Action Group Best Practice MSA 	<p>Expected Benefits</p> <ul style="list-style-type: none"> • Improved Quality Performance

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AS13005 Internal Audits Requirements

Original State Internal audit requirements in many disciplines

Future State

Content:

- Audit types & duration (simplified)
- System
- Production process
- Risked
- Special services
- Auditor qualification
- Audit 2P1
- Audit criteria

In scope: Internal audits
Out of scope: 2nd/3rd party audits (no customer audits)

Expected Benefits

- Lower & effective internal audit process providing confidence in state of compliance throughout Asia-Engine supply chain
- Reduced audit associated unnecessary audit duplicate audits

AS13008 Supplier Audit

Original State

Every Customer...

Future State

Customers use standard audit process to

Appropriate Suppliers

AESQ Principles

- Standardise
- Simplify
- Adopts Existing Industry Standards
- Prescriptive, Auditable
- Common Language
- Supported by 3rd Party Training & Consultancy

Expected Benefits

- Standard customer audit process aligned to AS13005
- Improved rigor of audit approach
- Suppliers chosen for audit based on risk (performance and risk)
- Reduced supplier audits for good performing suppliers (low risk) that demonstrate compliance to AS13005
- Recognises existing 3rd party certification
- Cost reduction / resources liberated by customer and supplier.









EXIT

AESO Market

- 20 minutes for
- For the 4-pub
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- For the 5 Work
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- 1300011300



standards
Oliver and Earl
Dave and Ian
In Progress standards
John and Peter
Helen and Jeremy
Mann-Bull...

EXIT

AS13021 Supplier Self Release Training

Solving

Future State:

Current State:

Expected Results:

AS13021 logo



AS13004 Process Risk Mitigation		AS13006 Process Control	
<p>Original State</p> <p>Future State</p>	<p>Original State</p>	<p>Future State</p>	
<p>AS13004 Principles</p> <ul style="list-style-type: none">• Identification• Analysis• Assessment• Control• Monitoring	<p>AS13004 Expected Benefits</p> <ul style="list-style-type: none">• Improved customer satisfaction• Improved compliance in a better understood market• Reduced quality costs• Increased customer loyalty & retention	<p>AS13006 Principles</p> <ul style="list-style-type: none">• Identification• Simplicity• Adopts Existing Industry Standards• Prescription, Auditable• Common Language• In-House Training & Consultancy	<p>AS13006 Expected Benefits</p> <ul style="list-style-type: none">• Improved variation control & reduction techniques. Small batch control in benefits• Common prescriptive standards fully aligned with AS9100 & ASAC Blue Book. Shop• Focus on accurate data analysis and proactive problem resolution• Improved Quality Performance, reduced risk





Whiteboard content includes:

- AS13007 Quality Management
- Original State
- Industry Standard for Quality Management
- AS13007 Principles
- Streams

AS13007 Quality Management

Original State

Industry Standard for Quality Management

AS13007 Principles

- Customer Specific Requirements
- Customer Specific Requirements

Streams









AS13001 Supplier Self Release Training

AS13000 Problem Solving

Original Book

Problem Book

Expected Benefits

Expected Benefits

BD

AS13001 - DPRV/DSQR

How is the Standard being used?

PCC

- Standardized training for self-release of product
- Cross-functional teams can benefit from this training

MTU

- Implemented within MTU with high sense of urgency
- Suppliers requested implementation

BD



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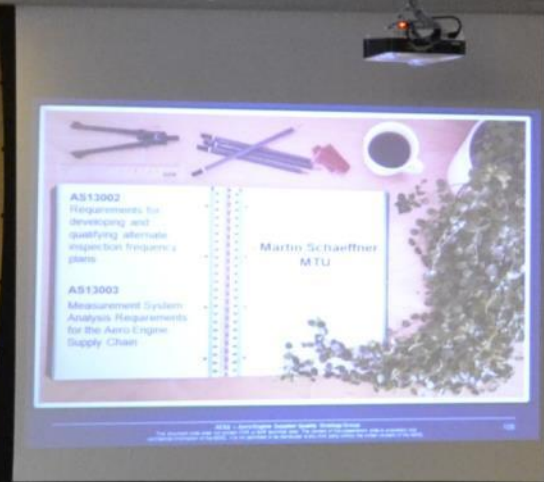
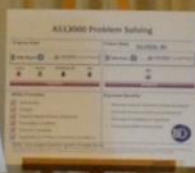
MTU	GKN
<ul style="list-style-type: none">• Implemented within MTU with high sense of urgency• Suppliers requested implementation	<ul style="list-style-type: none">• Implemented customer release agents at GKN sites• Implemented at suppliers for release agents

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108







How are the Standards being used?



PCC	MTU	GKN
<ul style="list-style-type: none">• For New Product Introduction• Limited implementation	<ul style="list-style-type: none">• IATF16949 has limited use due to existence of already approved quality plans• IATF16949 is implemented within MTU for IFAW parts	<ul style="list-style-type: none">• IATF16949 implementation depends on requirements however...• IATF16949 is going for re-introduction

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THANK YOU FOR YOUR PARTICIPATION



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