BAE Systems Military Air and Information Deployment of the Nadcap Program

September 2013 – Tony Maguire
Introduction

- BAE Systems has a global supply chain
  - Material supply, both metallic and non-metallic
  - Airframe supply, details, sub-assemblies and major units
  - Spec Equipment supply, HUD’s, Mission Computers, Engines, etc.

- 70% of all Airframe and Spec Equipment sits in the external supply chain and represents the biggest risk to the success of any program
- Careful monitoring of the special processes within the supply is fundamental to achieving product safety
- >75% of BAE Systems Product Producability issues emanate from within the supply chain, a high percentage from insufficient control of special processes.
- To remain competitive we must ensure that we achieve the required Quality levels, both internally and externally at minimum cost
BAE Systems and Nadcap

- 2004 BAE recognises the need to have greater controls of special processes, both internally and within the external Supply Chain.
- 2005/6 BAE engages the Nadcap organisation on embedding greater internal controls through Nucap certification to a number of special processes. BAE becomes a subscriber and “Prime” member of Nadcap.
- 2006 BAE issues initial mandate around Nadcap approvals to key suppliers.
- 2006 – 2008 BAE gains Nucap certification across a number of special processes.
Nadcap/NUCAP deployment within BAE MA&I

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Future considerations:
- Welding
- Measurement and Inspection
Products benefitting from Nadcap controlled processes
Nadcap Subscribers

- 309th Maintenance Wing-Hill AFB
- AgustaWestland
- Air Force
- Alenia Aeronautica SpA
- Avio SpA
- BAE Systems – Military Air and Information
- Ball Aerospace & Technology Corporation
- Beechcraft Corporation
- The Boeing Company
- Bombardier Inc.
- COMAC
- Defense Contract Management Agency (DCMA)
- EADS Corporation
  - Airbus
  - Airbus Military
  - Eurocopter
  - Astrium
  - Cassidian
  - Aerolia
  - Premium Aerotech
- Eaton Aerospace
- Embraer
- GE Aviation
- General Dynamics
- General Services Administration (GSA)
- GKN Aerospace
- GKN Aerospace Sweden AB
- Heroux Devtek Inc. (Landing Gear Division)

- Honeywell Aerospace
- Israel Aircraft Industries
- Latecoere
- Liebherr-Aerospace SAS
- Lockheed Martin Corporation
- M7 Aerospace LP
- MTU Aero Engines GmbH
- Northrop Grumman Corporation
- Parker Aerospace Group
- Raytheon Company
- Rockwell Collins, Inc.
- Rolls-Royce Corporation
- Rolls-Royce PLC
- SAFRAN Group
- Sonaca
- Spirit AeroSystems
- Textron Inc.
  - Bell Helicopter
  - Cessna Aircraft Company
  - Textron Systems
- Thales
- Triumph Group Inc.
- United Technologies Corporation
  - Goodrich (UTAS)
  - Hamilton Sundstrand (UTAS)
  - Pratt & Whitney
  - Pratt & Whitney Canada
  - Sikorsky Aircraft
Benefits

• The main benefits of Nadcap are that the majority of the aerospace industry has agreed that the Nadcap program has distinct advantages, such as improving product quality by focusing on overall supplier performance and reducing the number of audits required each year, which lessens the annual cost of auditing both to the supplier and to the prime but increases levels of confidence in the supply chain.

• Higher Quality in Quality Audits - With Nadcap, we have confidence that every auditor is a highly experienced specialist, selected and trained by other specialists. Every audit is conducted to the same standard procedures, every supplier is audited to the same rigorous criteria and every report is reviewed by a group of prime contractor and government experts.
Benefits

• **List of Qualified Suppliers** - The list of qualified suppliers is exclusively accessible to Nadcap participants 24 hours a day by the use of web based e-AuditNet. Under strict confidentiality agreements, Primes can use the database to find out about supplier current audit results, qualifications, product alerts, changes and improvements.

• **Risk reduction** - The Nadcap route is a Risk reduction & preventative detection scheme, which can reduce unnecessary non-conformances (concession applications etc.), and in turn could reduce alerts and recalls raised on aircraft & major assemblies.
Benefits

• **Internal resource** - After initial implementation the Nadcap process could potentially free up auditing resource to allow specialists to concentrate on higher risk product/process quality issues in-house, at new suppliers and in the supply chain.

• **Nadcap offers a significant step towards standardisation in the aerospace market.**
Supplier Benefits

- Improving quality levels and compliance to required process standards
- Audit standards agreed by SME’s from the worlds leading aerospace contractors, thus reducing the duplication of audits and associated costs
- Standard qualifications for auditors leading to standardised assessments
- Common standards, reducing duplication of similar requirements
- Evaluates a suppliers internal auditors and auditing processes against a recognised standard
- Accreditation by a globally recognised organisation, providing a chance to enter and compete in markets outside the UK
Thank you