The Future of DASA Oversight

LTCOL Aaron Rose – DD 145 (Maintenance), DAVCOMP-DASA
Scope of Presentation

- Background
  - DASA Role
  - Safety Assurance
  - Reasonably Practicable
- DASR Campaign and oversight
  - Reduced oversight
    - Transition to DASRs
  - Normal oversight
  - Enhanced oversight
Command must **ensure** that hazards/risk reduced

**DefenceAA assures** Defence aviation safety

**DefenceAA**

- **DASA**
  - DGTA
  - DDAAFS
  - DACPA

**DASP**

- Policy / regulation
- Promotion/education
- Initial Safety Case
- Ongoing Assurance

**DASR**

No WHS obligations: specialist amplification of WHS provisions for Defence Aviation hazards

**Defence Aviation Safety Program**
DASA Role - Why do we conduct ‘oversight’?

• To provide the DAA an **assurance** that ‘a **credible and defensible level of military aviation safety** performance’ has been established and maintained. (BR.10)
What is ‘credible’?

• Better practice – contemporary regulations
  • Outcome based regulations
• Trained and authorised personnel
• Approved procedures
• Approved organisations
• Managing risks
  • Capability built on managing risk
  • A strong QMS
• Generative safety culture - SMS
What is ‘defensible’?

- A known ‘safe’ system
  - ICAO based regulations
  - Adopted by 37 nations?
  - Internationally defensible
  - 10 Ways to Better Aviation Regulation
  - Strong ‘risk’ based decision making
    - DASM – Section 3 Chapter 7
- Recognised training
- Assessment and authorisation
- Enforcement policy

Backed by the principle of ‘reasonably practicable’?
What is ‘reasonably practicable’? DASM S3 Ch7 p13

- *Reasonably practicable* means that which is reasonably able to be done to ensure health and safety, taking into account:
  - the likelihood of occurrence
  - the consequence that might result from the risk
  - what the person concerned knows, or ought to know, about:
    - the risk
    - control/recovery measures
  - assessing the extent of the risk
    - the available control/recovery measures
    - the cost (time, money, effort, capability, reputation)
  - Have you taken all reasonable actions?
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DASA /DASR Campaign – Tranche 1, 2, 3

- MAOC
- CAM
- 21J – Defence
- 145 – Defence
- Occur Reporting
- Joint Directive
- Manual
- Delegate Structure
- CASA Agreement
- Conference
- DASA Phase 1

- MASP
- ATM/ANS
- 21J – Contractor
- 145 – Contractor
- Airworthiness Review
- 66 – Defence
- Flight Test
- UAS
- 21G - Production
- Certification reform
- Recognition
- ASDEFCON
- OTAs
- SMS
- Forms

- DASA Phase 2
- DASA Oversight
- Common Processes
- SIIS
- 66 – Contractors
- 147
- Flight Ops
- Mutual Recognition

Period of Reduced Oversight
Normal Oversight + AwBs
Enhanced Oversight

Defence Aviation Safety Program
Reduced Oversight

- Transition to DASRs
  - Develop MOE/CAME
  - Work on the shortfalls
- Mature the organisation
- Develop the understanding of outcome based regulation
Normal Oversight

- Questionnaires
- Assess ASORs
- AwB Reports
- Conduct Compliance Assessments (PS)
- Conduct Conformance Assessments (OE)
- Check: CAMM2, Defect Reports, SIIS
- Enforcement policy
- PSOE
Enhanced Oversight

- Information systems – SIIS
- Combined audits
  - DAVCOMP / ACPA?
  - CAM / 145
- Product audits
- Process audits
- Scaled audits
  - Scope vs time
So what does this mean to you?

- Very few audits until Sep 17
- Informal visits
  - Transition (contractors)
  - MOE development (contractors)
  - Shortfalls (transitioned orgs)
  - Guidance
- Planning an oversight program
  - Present ideas
  - Advisory Circular?
  - Engagement with you
Continuing Airworthiness Compliance Issues

Questions?

Defence Aviation Safety Authority
Command must *ensure* that hazards/risk reduced SFARP

DefenceAA *assures* Defence aviation safety

- CASG
  - HASD
    - DG
      - OC SPO
        - CO/CENGR
          - CO SQN
            - WHS Section 22-25
            - WHS Section 20/21
            - Section 16

- ACAUST
  - FEGCDR
    - OC Wing
      - WHS Section 20/21

- CAF

- DefenceAA
  - DASA
    - DASP
      - DASR

Risk decisions regarding capability / safety

Risk advice regarding defensible standards

No WHS obligations: specialist amplification of WHS provisions for Defence Aviation hazard

Defence Aviation Safety Program
How do we assure safety?

• Put regulations in place
  • Identified Hazards
  • Barriers / Mitigation
  • Prioritised based on risk
• Set standards
  • Form 4s
  • Org Approvals
• Oversight
  • Make sure that the mitigators and barriers have been put in place and are effective (PSOE)
How do we know that we’re doing the right thing?

• 10 Ways to Better Aviation Regulation
• Internationally recognised system
• Based on ICAO principles
• Internationally defensible
Examples

- Missed IMIs
- MTFs
- CFUs / Deferred Defects
Missed IMIs

• Scenario – 6 missed IMIs
• SENGO’s solution
  • SPO / Contractor’s fault
  • Publications not clear
  • Tradesmen are busy
  • Tradesmen are compliant
• Plans to brief his people and move on
RM’s responsibility

• is responsible for ensuring that all maintenance required ... is carried out to the design and quality standards specified in DASR 145.A.65 (b).

• is also responsible for any corrective action resulting from the quality compliance monitoring of DASR 145.A.65 (c).
Missed IMIs

- Further investigation – 50+ missed IMIs
- Root Causes
  - Publications
  - Individual Training
  - Collective Training
  - Assessment
  - Authorisation
  - Flying rate
  - Maintainer numbers
  - SCT
What’s changed?
  • No MTFs under DASR
Scenario – Pilots want to sign up MTF and continue sortie
SENGO’s POV
  • Good to go
  • We’ve always done it that way
Check Flights (MTFs) 059 S3C5 Para 21

5. **Risk**. Unit assesses that the extant practice described in References C and D does not increase the risk to flight safety over the Reference A compliant practice of landing, completing the CAMM2 certification and then re-launching for the following reasons:

a. The assessment of aircraft serviceability is performed by the appropriate, authorised personnel, namely the MTP and QFE, prior to any continuation of flight;

b. The aircraft serviceability state is radioed to ATC and Unit Tactical Support Centre; and

c. The situation is limited to single MTF serials.

- **Root Causes**
  - Is it really a check flight?
  - What is the residual risk?
Check Flights (MTFs) 059 S3C5

- Issues?
  - Serviceability of the Aircraft?
  - Justification of Risk?
  - Defensibility at BOI?
Deferred Defect

There are three methods used to defer a defect:

1. the Minimum Equipment List (MEL) or configuration deviation list (CDL) method, if available.

2. the deferred defect process where no MEL/CDL is available.

3. the DASR Basic Regulation provisions method for the Operating Organisation to proceed.
Continuing Airworthiness Conference - Oversight

**Immediate Action**
- Remedial Action
- Closure Plan

**Causal Analysis**
- Identify the underlying cause/s so the most effective solution/s can be implemented

**Corrective Action**
- Implement the most effective solution/s to eliminate the NC

**Validate/Verify Corrective Action**
- Send closure pack to DGTA (OQE IAW Plan)

**Assess Effectiveness**

**Issue Finding**
- Identify Threat to Aw

**What DGTA Controls**
- What the Org Controls
- Process Steps

**Process Steps**
Root Cause Analysis Basics

1. The Problem
2. 1st Cause
3. 2nd Cause
4. 3rd Cause
5. 4th Cause
6. 5th Cause

The word root, in root cause analysis, refers to the underlying causes, not the one cause.

Symptom of the problem. "The Weed" Above the surface (obvious)

The Underlying Causes "The Root" Below the surface (not obvious)
Product Assessment (Audit) on the ‘run’:

D – Documentation – \textit{U/S, rectification and certification},

D – Data – \textit{appropriate, authorised and up to date}

A – Authorisation – \textit{are the right people doing the job}

A – Aeronautical Product – \textit{approved and physical state, include consumables}

T – Tools - \textit{controlled, serviceable and includes S&TE})

E – Environment – \textit{suitable for the task}

\textit{“Always remember the DDAATE!”}
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How do RMs know where the limits are?

- MOE
- CAME
  - Deferred Defects
- Form 3
  - Approval Certificate
- Form 4
  - Personnel Acceptance
Continuing Airworthiness Conference - Oversight

Note: S 1000D Main System Breakdown – ‘Ratings and Limitations’
Continuing Airworthiness Conference - Oversight

- Available from the DASA web page, DASR link
- Ensure you complete document fully and include all attachments/evidence
- Acceptance will be via the return of the Form with the section below signed