



Australian Government

Department of Defence

Defence Aviation Safety Authority

# Engine Structural Integrity & DASR

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# Propulsion System Integrity Guide

## [DASA Intranet Page](http://intranet.defence.gov.au/dgta/WebPages/DAVREG/AMTR/DASA_Portal/DASAPortal.htm)

<[http://intranet.defence.gov.au/dgta/WebPages/DAVREG/AMTR/DASA\\_Portal/DASAPortal.htm](http://intranet.defence.gov.au/dgta/WebPages/DAVREG/AMTR/DASA_Portal/DASAPortal.htm)>

## [DASA Internet Page](http://www.defence.gov.au/dasp/)

<<http://www.defence.gov.au/dasp/>>



## Initial Airworthiness

### CRITICAL PART LIFING POLICY

- Classify and identify critical parts
- Establish critical part Life limits and critical inspections
- Establish usage monitoring algorithms, equations, requirements ect...
- Establish usage monitoring fill in factors, damage factors, accrual factors, conversion factors etc...

## Continuing Airworthiness

### USAGE MONITORING SYSTEM

- Tracking of critical part life consumptions
- Preventing life limit exceedances
- Verified and Validated for ADF specific use
- Routinely Checked accuracy and completeness

### USAGE ASSESSMENT (MISSION ANALYSIS)

- Assure applicability of critical part lives, inspections and UM requirements for ADF CRE
- Assessments performed routinely throughout the life of type

### OCCURRENCE REPORTING

- Accurate collection, investigation and analysis of data
- Timely notification and action
- Robust trend management

### CRITICAL PART OPERATIONS OUTSIDE THE TYPE DESIGN

- Ensure any excursions outside the type design are approved by the Authority
- Ensure the risk is understood and accepted by the operators

### CONDITION MONITORING

- Comply with OEM mandated CM requirements
- Ensure CM program supports requirements of DASR reliability programme

# Critical Part Lifting Policy

- Classify and identify critical parts
- Establish critical part Life limits and critical inspections
- Establish usage monitoring fill in factors, damage factors, accrual factors, conversion factors etc...
- Establish usage monitoring algorithms, equations, requirements etc....

# Usage Monitoring System

- Tracking of critical part life consumptions
- Preventing life limit exceedances
- Verified and Validated for ADF specific use
- Routinely Checked accuracy and completeness



# Mission Analysis

- Assure applicability of critical part lives, inspections and UM requirements for ADF CRE
- Assessments performed routinely throughout the life of type

# Occurrence Reporting

- Accurate collection, investigation and analysis of data
- Timely notification and action
- Robust trend management

# Critical Part Operations Outside the Type Design

- Ensure any excursions outside the type design are approved by the Authority
- Ensure the risk is understood and accepted by the operators



# Condition Monitoring

- Comply with OEM mandated CM requirements
- Ensure CM program supports requirements of DASR reliability programme



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# Questions?

