



Barry Sims General Manager Airworthiness

Civil Aircraft Sustainment

Aircraft Airworthiness & Sustainment Conference 2018

Practical impact for Sustainment

- □ Fatigue & Damage Tolerance Assessment
- □ Wiring repairs
- Engineer troubleshooting knowledge
- Parts availability
- □ Aircraft maintenance
- **D** Engine issues
- Cost pressures
- Avionics requirements



Fatigue & Damage Tolerance Assessment







Parts availability







Aircraft Maintenance





Engine







Cost Pressures





Avionics Requirements





Industry implications to assist sustainability

- Engineering Culture change
 - Sheet metal repairs <u>strictly</u> IAW approved data
 - Sheet metal repairs location accurately recorded
 - Awareness of long term impacts of defect rectification
- CAMO (Maintenance Control)
 - Scratch & Dent record keeping, including date
 - Fatigue & Damage Tolerance Assessment Record
 - Technical support to AMO
 - Reliability analysis
- Manufacturer/Type Certificate Holder
 - Design considerations for structural parts replacement
 - Clear communication of Fatigue & Damage Tolerance changes, particularly for previously approved repairs



Industry implications to assist sustainability (cont)

- Regulator
 - Consider how a regulation or constraint is to be practically monitored
 - Continuous review of process for 'Red Tape' reduction
 - Practical application (intent) of regulation
 - Foster/facilitate cross operator airworthiness knowledge sharing
- Industry
 - Better skin mapping techniques (i.e. laser mapping?)
 - Stronger Training of troubleshooting techniques
- International cooperation
 - Alignment of Avionics System requirement changes

