EASA
European Union Aviation Safety Agency

Summer Safety – Maintenance and CAMO Challenges

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Your safety is our mission.

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The Safety Map

Purpose

Safety as the ability to create and maintain the conditions for safe and effective operations - as organisations, leaders/ managers and individuals.

Be Ready

Defining and living by the values that creates the trust needed to support positive safety conversations.

Mindset

Having enough competent people who are operationally ready so they can perform to the best of their abilities

People

Ensuring safe aircraft products that are supported by the right tools, equipment and infrastructure

Resources

Stay Safe

Compliance

Encouraging people to do things right by following the relevant rules, procedures and practices.

Risks

Effectively identifying and mitigating risks effectively as part of a resilient management system.

Learning

Talk openly about safety and have a positive approach to learning and solving problems.

Risk - Overdue Inspection Not Timely Managed

An Example Situation

The organization failed to demonstrate compliance with M.A.902(b) regarding aircraft flight conditions

- An aircraft was **not grounded immediately** after a **non-airworthy condition** was identified

Key Timeline

- Aircraft physical inspection performed
- Overdue temporary repair identified → **MCC was notified in the evening**
  - **Aircraft operated four flight legs in a non-airworthy condition**
- Proper **inspection** was only performed at the **end of the following day**

Note: The overdue repetitive inspection had been pending **throughout the entire summer**

Analysis of Causal Factors

Problem Statement

The **aircraft** remained in **active** operation **despite** an **overdue inspection** being **identified**

MCC managers were **notified** but **did not take immediate action**

Direct Cause

The **email notification** about the overdue item was **not managed in a timely manner**

Inadequate response from MCC resulted in delayed corrective action

Causal Factors

Misinterpretation of Email Content: **MCC did not understand** the **urgency**

Limited Communication: Email **only sent to MCC managers** (excluding MCC Duty Engineers, who work 24/7)

CAMO Nominated Person (NP) was **excluded** from the information flow

Lack of escalation: Planning only requested an **overnight inspection**, failing to grasp the compliance risk

Weakly Worded Notification: Email from the **Airworthiness Engineer lacked urgency**

Root Cause Statement

Lack of understanding of an urgent maintenance notification led to a **non-airworthy aircraft operating flights**

Solutions and Actions

✅ **Corrective Action:** The overdue inspection was **rectified and completed** at the time of reporting

🚀 **Preventive Actions**

Training for MCC & Planning Engineers

Focus on **maintenance programs** and **practical maintenance planning**

Immediate Escalation Protocol

CAMO team must **inform CAMO NP** of any **suspected or detected overdue items**

Mandatory Training

Focus on **safety risk assessment, findings classification, and occurrence reporting**

Establishment of an Overdue Inspection Protocol

Standardized **reaction plan for overdue tasks**, ensuring **clearer communication** and **immediate grounding**

Culture Across Domains – Ops/ Maint/ CAMO

Safety Culture Concern

- Instead of **ensuring the aircraft was grounded**, the issue was **only reported via email** to MCC
- **Lack of urgency** and **poor communication flow** delayed corrective actions
- Highlights **weak decision-making** in handling safety-critical occurrences

Diversion due to Captain’s O2 bottle low pressure

Occurrence Summary

A **long-range flight** was planned

- upon aircraft inspection, the Captain noted **low oxygen bottle pressure (600 PSI)**

Previous flights also had decreasing **pressure trends** (**860 PSI → 700 PSI → 600 PSI**)

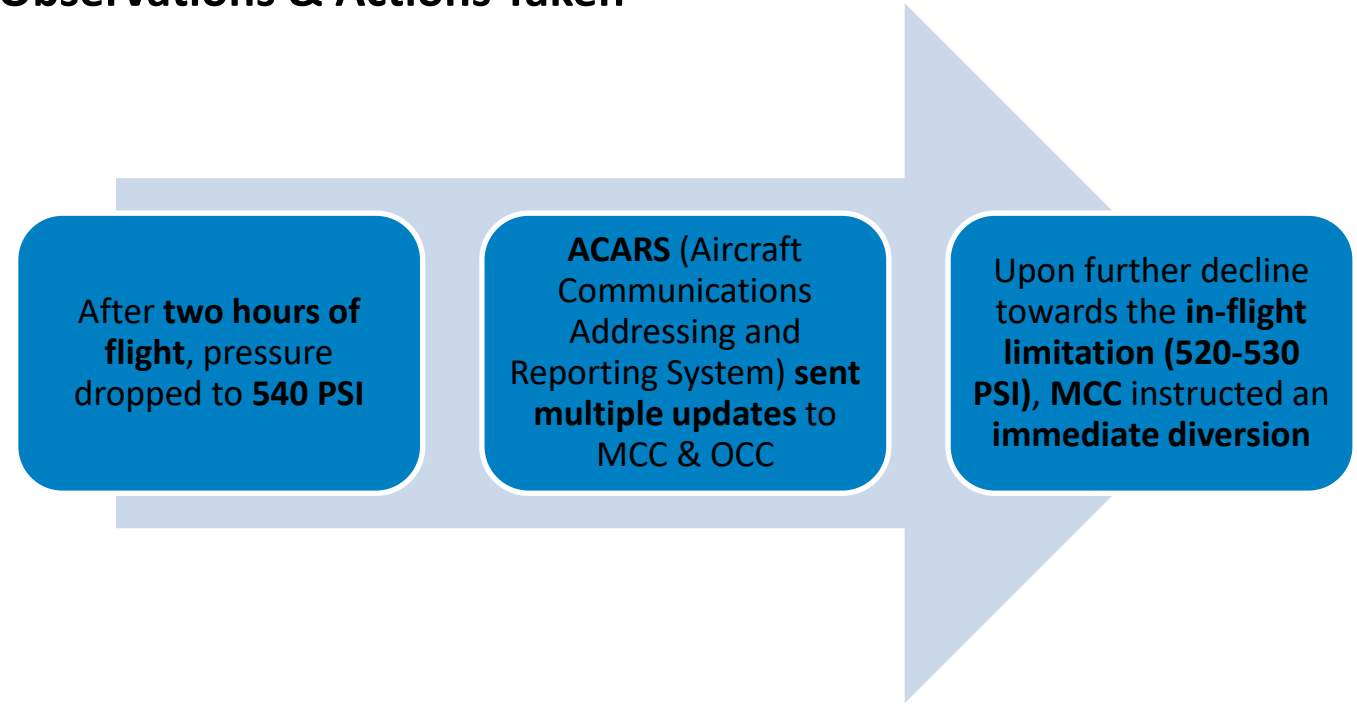
Captain's Actions

- Consulted **local maintenance** → received no clear resolution
- Contacted **MCC** (Maintenance Control Center) and suggested swapping aircraft

  → **MCC declined**, considering 600 PSI sufficient
- Contacted **OCC** (Operations Control Center) → eventually proposed a diversion option
- Expressed **continued concern** about a **potential leak** based on aircraft history

Diversion due to Captain's O2 bottle low pressure

In-Flight Observations & Actions Taken



Post-landing maintenance **confirmed the oxygen system leakage**

Diversion due to Captain's O2 bottle low pressure

Key Takeaways

- **Proactive reporting was crucial** in identifying and mitigating a safety risk
- Strengthen **decision-making protocols** for potential safety-related system degradations

Safety Culture Concern

- **Initial MCC/OCC risk assessment underestimated the issue**, delaying corrective action

Overall Safety Culture Observations

Recurring Themes Across Incidents

1. **Lack of Urgency in Handling Safety-Critical Issues**

   Both cases show **delayed reactions** to non-airworthy conditions

2. **Communication Gaps & Misinterpretation**

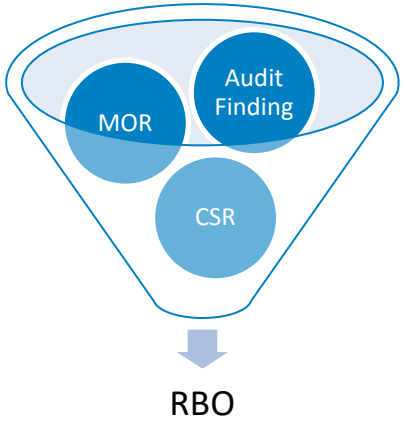
   Incomplete information flow led to **inadequate responses** (e.g., emails not reaching key personnel)

3. **Insufficient Oversight & Weak Decision-Making**

   MCC did not recognize **critical risks** in both scenarios

4. **Need for Stronger Reporting & Escalation Processes**

   Training and clearer protocols to **prevent recurrence**



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Thank you

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