A Practical Guide for Improving Flight Path Monitoring

What is Being Done to Improve Monitoring?

ICAO LOC I Symposium
May, 2014

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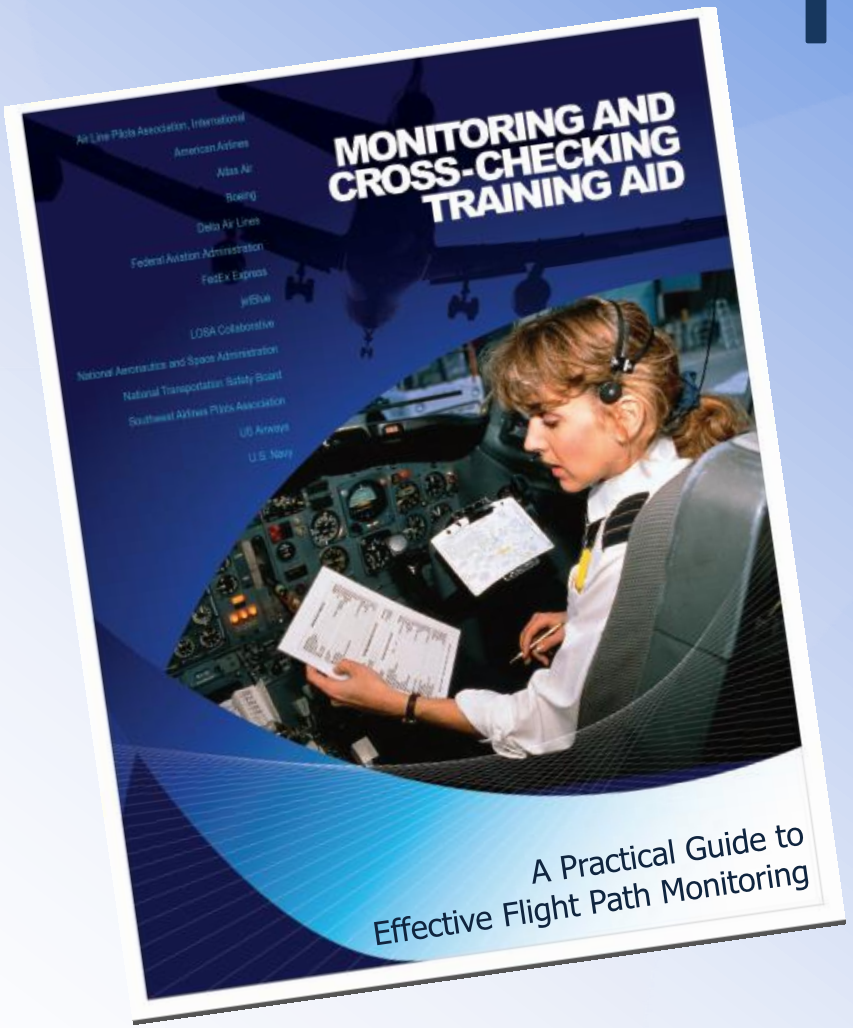
The goal of this document is to provide practical ways to improve flight path monitoring.

Participants



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Airbus
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Timeline and Progress

- Dec 2012, Planning of PM project after 1st HF Roundtable
- Feb 2013, First WG meeting at Delta in ATL
- May 2013, Second WG meeting at WSU in DAY
- Oct 2013, Third WG meeting at NBAA in DC
- Feb 2014, Steve, Robert and Helena met with FSF about publishing plans

Paradigm shift

It must become accepted that monitoring is a "core skill," just as it is currently accepted that a good pilot must posses good "stick and rudder" and effective communicational skills.

This will require addressing the 4 "P"s:

- Philosophy
- Policy
- Procedures
- Practices

A Practical Guide for Improving Flight Path Monitoring

- Section 1: Overview for Management
- Section 2: Data
- Section 3: Barriers to Effective Monitoring
- Section 4: Recommendations for Improved Monitoring

Section 1: Overview for Management

- The document is intended for those who develop SOPs and design and implement flight crew training programs.
- It is also intended for those who have responsibility for funding and endorsing training programs.

Section 2:
Monitoring Data and Research

Section 3:
Barriers to Effective Monitoring

Barriers to Effective Monitoring

- Boredom
- Complacency
- Fatigue
- Time Pressure
- Mental workload
- Lack of vigilance
- Looking without seeing
  - Inattention blindness
  - Change blindness
- Poor workload management/ task allocation

Bad News / Good News

Bad News

Humans are not naturally good at monitoring highly reliable / highly automated systems over periods of time.

Good News

Monitoring performance can be improved significantly by using the following procedures.

Section 4: Recommendations for Improved Monitoring

- 20 recommendations

  - SOPs Prototypical Training programs

Summary

- Inadequate flight crew monitoring has been cited by a number of sources as a problem for aviation safety.
- While it is true that humans are not naturally good monitors, crew monitoring performance can be significantly improved.

Thank You

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