Loss of Control Task Force…..
Work in Progress

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Loss of Control Task Force

1. Purpose
2. Scope
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5. LoCTF methodology
6. Some of our thoughts about possible output
7. Your questions, feedback and ideas!

Purpose

To work with aircraft operators, training organisations and other stakeholders to establish the key risks that lead to loss of control, and to recommend strategies for monitoring and reducing these risks.

Scope

Loss of control events:

- involving flight crew human factors.
- in public transport aircraft greater than 5,700 kg.
- excluding those occurring in landing flare or resulting in runway excursion.

Background

Safety Performance Indicator (SPI) 2

- **high-risk occurrences to Public Transport aircraft.**
- **increasing rate since Jan 2006 (especially to June 2008).**

Jan 2009: CAA Safety Conference

Apr 2009: SPI2 Working Group

July 2009: Loss of Control Task Force

Jan 2010: Report to SRG Exec Committee

Participants

CAA

AAIB

Airlines

Aviation Organisations

Military

Participants - CAA

Captain David McCorquodale **- Head of Flt Crew Stds (Chairman)**

Training Standards Inspectors **(6)**

Captain Steve Oddy **- Staff Flight Examiner**

Dr Robert Hunter **- Head of Aeromedical Certification**

David Wright **- FDM Specialist & Research Project Manager**

Rowan Christou **- Strategic Analyst**

Participants - non-CAA

Captain Margaret Dean **– Senior Inspector AAIB**

Air Cdre Richard Jones CBE **– Chief Executive UKFSC**

Captain Simon Wood **– FORCE**

Simon Grace **– Thomas Cook Airlines**

Phil Luxton **– Airbus Flt Safety Officer, Thomson Airways**

Captain Alex Fisher **– GAPAN**

Wg Cdr Rupert Clark RAF **– OC Examining Wing, HQ CFS**

Flt Lt Chris Eccles RAF **– CFS Multi Engine Examiner**

Lt Cdr Jim Reed RN **– MOD DARS**

LoCTF Methodology

Brainstorm

- Problems
- Solutions

Review of published work

Data analysis – Phase 1

- Worldwide Fatal Accidents 1998-2007
- >5700kg
- Excl. Technical, Icing, Flare and Runway Excursions

Data analysis – Phase 2

- High Severity Occurrences (MOR Database)
- Does Phase 1 analysis relate to Europe/UK?

All stages of the Task Force's work indicated that….

Loss of Control

is a Major Hazard

to all UK Operators

Brainstorming - Problems

Civil Aviation Authority

Stall training

Monitoring

Automation

Simulator limitations

Basic training

Recurrent training

Trainer skills

Type rating courses

Handling skills

Training manuals

Human Factors

Aeroplane characteristics

Practical aeroplane performance

Brainstorming - Solutions

- ATQP - ITQI
- Multi-Crew Pilots Licence syllabus
- Simulator performance
- Jet Orientation Course
- Pilot selection
- Monitoring skills training
- Handling skills training
- Type rating course content & structure
- Content of Licence Skill Test & Licence Proficiency Check
- ‘Gotchas’
- Open / non-jeopardy reporting system

Data Analysis – Phase 1

Indicated a need for these remedial actions (Top 5):

- **Manual Flying Skills Training**
- **Monitoring Skills**
- **Human Factors Training**
- **Upset Recovery Training**
- **Disregard of SOPs**

What can we do?

Operators

Encourage operators to acknowledge the risks and address them in their training programmes.

UK CAA

National changes to the way in which regulation is implemented.

EASA

Regulatory requirements (especially Licensing).

Recommendations being considered:

Alternative Training Qualification Programme

- Not a solution but effective vehicle
- Universal enthusiasm
- Increased opportunities for training
- Training driven by risk assessment

- **Promote uptake of ATQP** *(Operators and CAA)*
- **Assist 0perators with compliance** *(CAA)*
- **Support IATA Training Qualification Initiative – ITQI** *(CAA)*
- **Entry requirements are currently under review** *(EASA)*

Recommendations being considered:

Multi-Crew Pilots Licence (MPL)

- **Review content** *(EASA)*
- **Extreme manoeuvres module** *(EASA)*

Simulator Performance

- **Additional data from aircraft manufacturers to expand LoC training capability** *(EASA)*

Type Rating Course Content & Structure

- **One size fits all**
- **Review for highly-automated aeroplanes** *(EASA)*

Content of LST & LPC

- **Tailor to aircraft type** *(EASA)*
- **Demonstrate competence with automation** *(EASA)*

Recommendations being considered:

Manual Flying Skills *(operator)*

- **Stalling and Upset Recovery training**
- **If you HAVE to fly manually, something is probably wrong**

Monitoring Skills Training *(operator)*

- **Active monitoring**
- **Recognising when things are going wrong**
- **When to intervene**
- **Intervention strategies**
- **Human Factors skills**

Recommendations being considered:

Automation Training *(operator)*

- **'Holistic' approach to automation training**
- **Understanding functionality**
- **Managing energy and flightpath using automation**
- **Training Line Skills in the Simulator**
- **What are the 'Gotchas'?**

Company 'Open' Reporting System *(operator)*

- **CHIRP principle**
- **Maximise data awareness**

Other thoughts:

- Must not lose what we've got!
- Loss of control may be initiated by minor technical failure
- Are instructors always up to the job?
- Jet Orientation Course highly desirable
- Content of manuals – limited by concerns for liability
- Solutions lie more in automation training than manual flying skills
- Pilot selection

In summary:

- **Work in progress**
- **Loss of Control is a real risk to UK operators**
- **Timely opportunity for regulatory change**
- **Challenge for industry**
- **Re-focussed training, not necessarily more training**
- **ATQP provides opportunities**
- **No single ‘silver bullet’ solution**

The team believes that
a coordinated approach between
the regulators and industry
will be the most effective solution

Over to you!