

A Partnership in Safety UK Dimension

CAA Safety Plan & Safety Risk Management Process

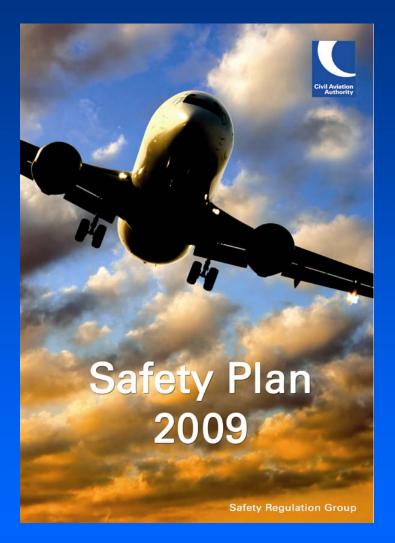
Graham ForbesHead of Licensing Division

29th January 2009 Gatwick Hilton



CAA Safety Plan

- Safety Objectives and Safety Management
- Safety Performance
- Safety Strategies





Safety Objectives



Safety Objective

To develop our UK world-class aviation safety environment, in partnership with industry, by driving continuous improvements in aviation safety in the UK, and in partnership with EASA, across Europe

CAA Corporate Plan



Meeting Safety Objectives

- Evidential:
 - Mandatory Occurrence Reporting Scheme
 - Continuous World and UK Event Analysis
- Risk Based:
 - Safety Oversight
 - Safety Management
 - Safety Improvement
 - Safety Promotion



Safety Management



Safety Management Process





Mandatory Occurrence Reports

- 14,000 MORs received per annum
- 200,000 on our Database
- UK's open reporting culture:
 - This data is invaluable
 - This is your current input into our safety management process
 - We really appreciate your willingness to report
 - Monthly distribution of data on CD-ROMs to Operators



Safety Performance



Safety Performance

- Worldwide Safety Analysis
 Global Fatal Accident Review (CAP 776) 1997 2006
 Published July 2008
- UK accidents, incidents, high-risk occurrences THREAT Analysis – annually since 2005
- UK Aviation Safety in detail
 Aviation Safety Review (CAP 780) 1998 2007
 Published November 2008
- UK safety performance indicators quarterly



Safety Analysis

Fatal Accidents Worldwide



UK Accidents, Incidents, High-Risk Occurrences



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Analysis → **Mitigations**

MORs → SPIs

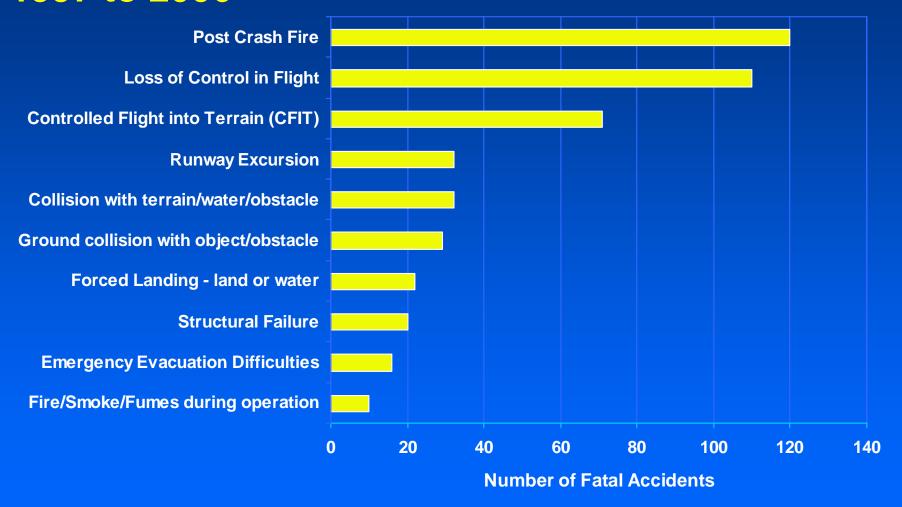




Prioritisation & Safety Plan



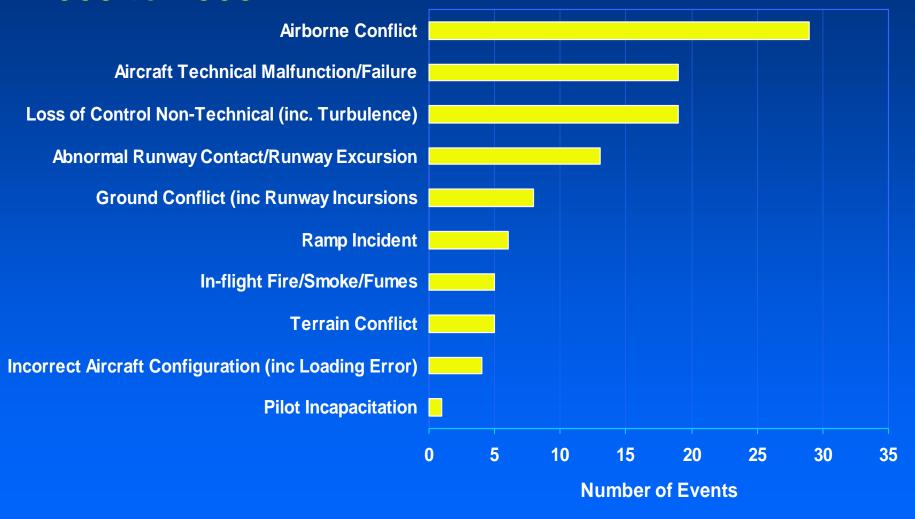
Global Fatal Accident Consequences* 1997 to 2006



*Consequence = an outcome of a fatal accident

Civil Aviation Authority

UK High-Risk Events 2005 to 2008





Our overall analysis of the priorities..... "The Significant Seven"



We welcome your thoughts....



Airborne Conflict

- 29 Occurrences 2005 2008
 - 25 = Airprox
 - 4 = Other, eg TCAS RA
- 20 out of 29 occurred abroad:
 - 10 = Eurocontrol Member States (4= Spain)
 - 6 = USA (4 = Miami)
 - 9 = conflict with GA
 - 6 = conflict with CAT
- 9 out of 29 occurred in UK:
 - 5 = outside controlled airspace
 - 4 = conflict with military fast jets



Pilot Performance The Main Causal Factor Globally

- 75% of all fatal accidents involved at least one flight crew related causal factor
- Most significant factors (CAP 776)
 - Pilot handling (especially with technical failure)
 - Flying below decision height without visual reference
 - Failure to fly a missed approach
 - Incorrect aircraft configuration for take-off
- Not necessarily pilot's fault......



Safety Performance Indicators

- SPI 1 High-Risk UK Total Occurrences
- SPI 2 High-Risk UK Public Transport Occurrences
- SPI 3 High-Risk UK Occurrences in Controlled Airspace
- SPI 4 High-Risk UK Non-Public Transport Occurrences
- SPI 5 High-Risk UK Runway Incursions
- SPI 6 High-Risk UK Level Busts
- SPI 7 High-Risk UK Airspace Infringements
- SPI 8 High-Risk UK Public Transport Airprox Occurrences
- Further SPIs to tackle high-risk events



The Safety Plan: Safety Strategies



Safety Plan: Safety Strategies

- Safety Oversight
- Safety Management
- Safety Improvement
- Safety Promotion



Safety Oversight

- Approval and oversight of the organisations and individuals involved in UK aviation
- Actions include.....
 - Working with EASA
 - Development of a risk-based approach to oversight
 - Air Transport Safety & Security SAFA Audits (Security is TRANSEC)
 - Single European Sky contribution to SESAR
 - UK State Safety Programme (CAP 784)



Safety Management

- Collaborative work with industry to continuously improve safety and address safety issues
- Actions include.....
 - Promotion of Safety Management Systems in all areas
 - Airspace & Safety Initiative
 - Increased Industry involvement in CAA Safety Risk Management Process



Safety Improvement

- Analysis of Worldwide and UK data to identify safety trends applicable to UK aviation
- Actions include.....
 - Research Based Projects
 - Development of additional Safety Performance Indicators (SPIs)
 - Safety Analysis improved data search
 - Flight Data Monitoring increased analysis
 - EU Occurrence Reporting & electronic submission of MORs
 - Improvement of Safety Risk Management Process
 - Task Forces for "Significant Seven"



Research Based Projects

- A range of projects to improve safety:
 - Automation & Loss of Manual Flying Skills
 - Post accident fire-fighting
 - Inspection of Composite Structures
 - Helideck Lighting
 - Helicopter Health & Usage Monitoring Systems
 - Aircrew Fatigue Model
 - Colour Vision Test



Safety Promotion

- Promotion through training, communications and dissemination of safety information
- Actions include.....
 - Production of Aviation Safety Review
 - Enhanced Working with Stakeholders
 - Participation in European Strategic Safety Initiative (ESSI)
 - Key participation in Airspace & Safety Initiative (ASI)



Europe

- European Aviation Safety Agency (EASA) has legal competence for
 - Airworthiness & Continuing Airworthiness
 - Operations & Flight Crew Licensing
 - Aerodromes & Air Traffic Management to follow
- Partnership with EASA is essential



Publications

- On your Conference CD-ROMS
 - Global Fatal Accident Review 1997 2006 (CAP 776)
 - Aviation Safety Review 1998 2007 (CAP 780)
 - State Safety Programme (CAP 784)
- In your Conference Packs:
 - Global Fatal Accident Consequences
 - UK High-Risk Events
 - "The Significant Seven"



Safety Plan 2009

 Next Safety Plan to be published April 2009 www.caa.co.uk/safetyplan





What we need from you....

- Airline views on high-risk concerns
- More airline & industry involvement in Safety Plan preparation
- More airline & industry involvement in Safety Risk Management Process
- Your views