MPL
Global Progress Report
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ITQI – Flight Operation Deliverables

- Review the applicability of existing regulations
- Develop global standards and best practices for:
  - Evidence-based Training
  - Instructor & Evaluator qualification
  - MPL implementation
  - Pre-selection criteria for pilots (Pilot Aptitude Testing)
  - FSTD
- Transition into Competency based training
MPL History

FCLTP, Industry View

Ab-initio-training

Operational competence in an airline cockpit (strategic skills)

Area of operational competence development

License requirements (tactical skills)

competence

time
MPL Implementation Status

- 22 States adopted:
  - regulations to embrace MPL concept
  - introduction of training courses
- 66 pilots (Europe 60 and Asia 6) successfully graduated from MPL courses and flying
- > 400 students have started MPL training and expect to be checked out over next 18 months
MPL Implementation Status

MPL Regulations in place:
- Armenia, Australia, Canada, Chile, China, Denmark, France, Germany, Ghana, Latvia, Maldives, Netherlands, Pakistan, Philippines, Singapore, Sweden, Switzerland, Syrian Arab Republic, Thailand, UAE, United Kingdom

Countries that have either completed, started, or will start MPL trial courses:
- Australia, Canada, China, Denmark, Germany, Philippines, Singapore, Sweden, Switzerland and United Kingdom

400 + students (see handout)
MPL World Map
Threats

- Misunderstanding about the rationale behind the concept
- Inaccurate statements in media reports
- Lack of comprehension
- Incompetence
- Ignorance
MPL Footprints

- Feet on the job task analysis of modern multi-crew transport category airplane operation (competency based)
- Emphasizes the overarching principle of Threat and Error Management (TEM)
- Shifts early from single pilot to multi-crew training, 20%/80%
- Develops pro-active handling strategies
- Considers the threats inherent to increased automation and reduced manual flying
- Through PANS TRG is the best ever documented training scheme in the history of ab-initio pilot training
Clarifications

- Reaction on pilot shortage in Asia !!! WRONG
- Cost and time saving!!! WRONG

but

- Contribution to enhance training quality = safety in view of further growth of global civil aviation
- We can not afford the accident rate to stay the same

MPL is Quality driven
Further Clarifications

- How many real airplane hours?
- Single or twin engine?
- Solo flying required?
- Upset recovery training?
- FSTD definition for phase 2 and phase 3?
- Course duration?
- Upgrade requirements?
- All questions answered in FAQ hardcopy handout
The Competency Assessment System

- Consists of 4 ingredients:
  - The training task (in the lesson description/grade sheet)
  - 9 KSA elements with performance criteria
  - Levels of performance (grades)
  - The norm-level of performance (on the grade sheet)

- Is the basis of the Student Monitoring System and the core of Competency Based Training
Principal KSA elements

- Communication
- Situational awareness
- Leadership and teamwork
- Workload management
- Problem solving and decision making
- Transfer of knowledge
- Application of procedures
- Flight management, guidance and automation
- Manual aircraft control
Threat and Error Management (TEM)

TEM is an overarching safety concept regarding aviation operations and human performance. It is a conceptual framework that assists in understanding, from an operational perspective, the interrelationship between safety and human performance in dynamic and challenging operational contexts.
The “complete“ Competency Model

- The 9 KSAs and their respective performance criteria constitute the complete set of observable behavior for a safe, efficient and effective multi-crew flight operation under all circumstances.

- To facilitate their application in the development of competencies and the continuous assessment of performance in MPL and EBT they are the 9 elements of Threat and Error Management
The Total System Approach

- These 9 terminal KSAs and their respective performance criteria are the cornerstones for:
  - the selection process of future airline pilots
  - the continuous assessment during MPL
  - the performance assessment in Evidence Based Training and Checking (EBT)
  - the definition of instructor and examiner qualification
EASA MPL Review Board, re-established

- To facilitate seamless communication and exchange of experience during the implementation phase of MPL in Europe
- Kick-off meeting was on 20 Nov ‘09 at EASA in CGN
- Next official board meeting on 16-17 Mar ‘10
- Results to be fed into the ICAO MPL “Proof of Concept” mechanism to facilitate a global exchange of experience
Outlook

In 2014 the majority of ab-initio airline pilots will be trained according to this new competency based training concept provided that the international airline training and regulating community is able to facilitate a globally harmonized and standardized implementation and avoid misuse.
Our Mission

- Ensure a globally standardized & harmonized implementation of the MPL
- Overcome the regional pilot license patchwork
The “competency based“ approach
(PANS TRG, Chapter 2)

- By means of a task analysis the duties of a multi-crew in modern jet transport operation where defined according to a flight profile and broken down to nine competency units
- Units were further broken down to competency elements
- The elements have been further split up into performance criteria (as observable behavior), each criteria provided with a condition statement, a standard statement and a action statement
The “competency based” approach
(PANS TRG, Chapter 2)

- This leads to the curriculum by defining terminal training objectives, mastery tests, training modules and devices
- Same aeronautical knowledge requirements as ATPL
- All of this is summarized in the MPL Training Matrix (PANS TRG, Chapter 3-Appendix A)
Flight Operations Deliverables

- FSTD – ICAO Doc 9625  Jul 2009
- FSTD – IATA Data Design  Aug 2009
- Selection Criteria – IATA Guidance Material  Q2 2010
- MPL – IATA Guidance Material  Q4 2010
- EBT – Manual & PANS TRG  Q3 2011
- IEQ – PANS TRG  Q3 2011
Thank you
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to represent, lead and serve the airline industry