MPL
Global Progress Report

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Working Group Leader – Selection Criteria
& MPL Implementation

ICAO NGAP Symposium 1-4 March 2010, Montreal
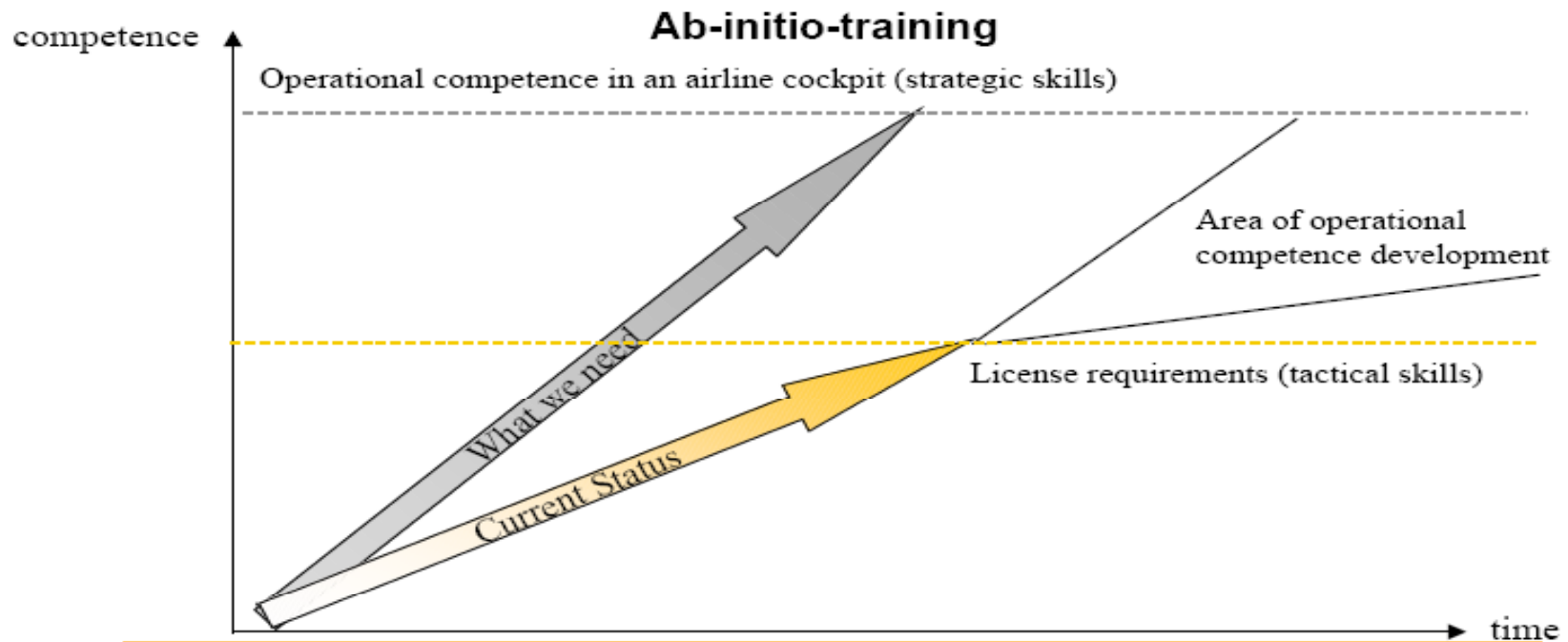
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ITQI – Flight Operation Deliverables

↗ 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

competence

Operational competence in an airline cockpit (strategic skills)

What we need

Current Status

Area of operational competence development

License requirements (tactical skills)

time

Working Group of the Whole, YUL, Oct. 21.- 25.

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*Captain Dieter Harms, Lufthansa Flight Training*

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
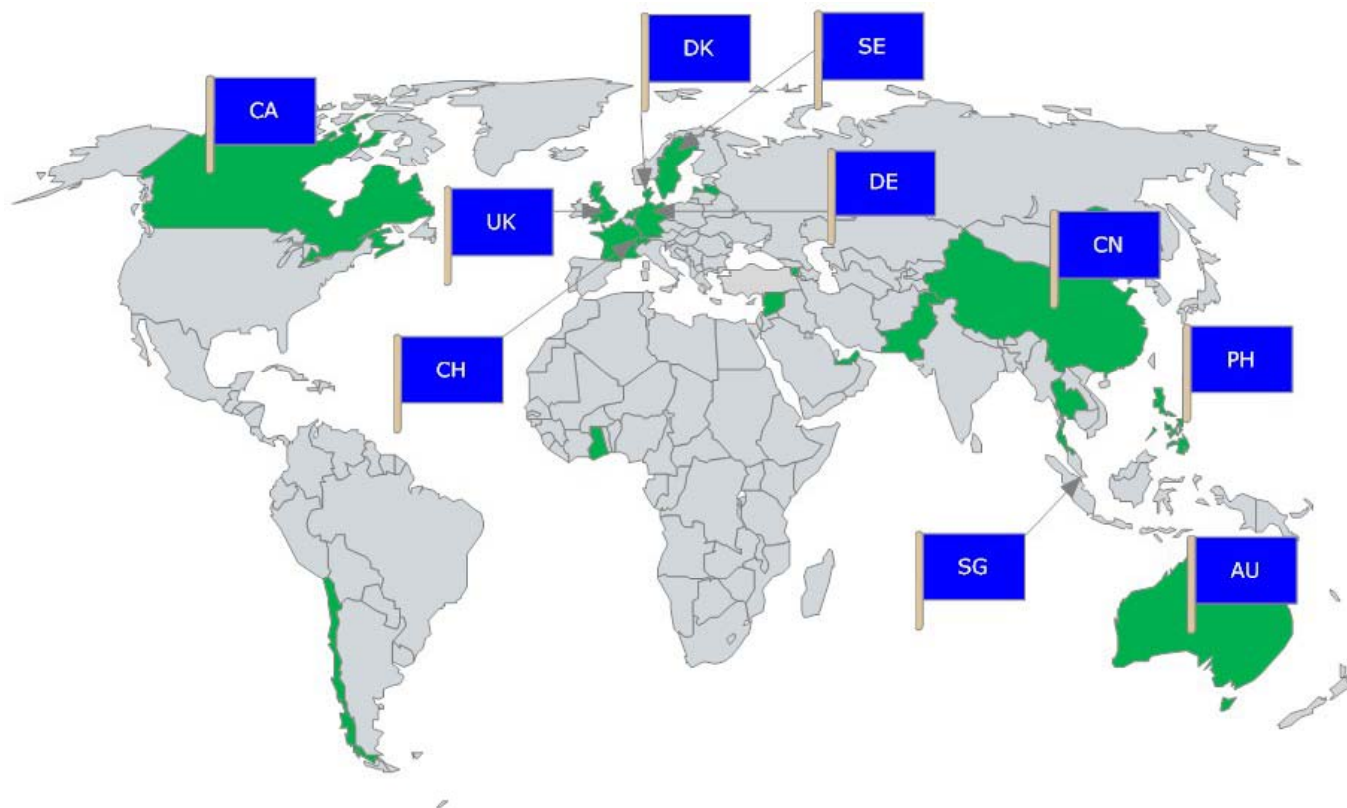
Threats

- ↗ 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 Managment (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