

FLY BETTER



CBTA and Evidence based Training at Emirates

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Our Path to CBTA and EBT

Competencies

EBT v Legacy

Our challenge

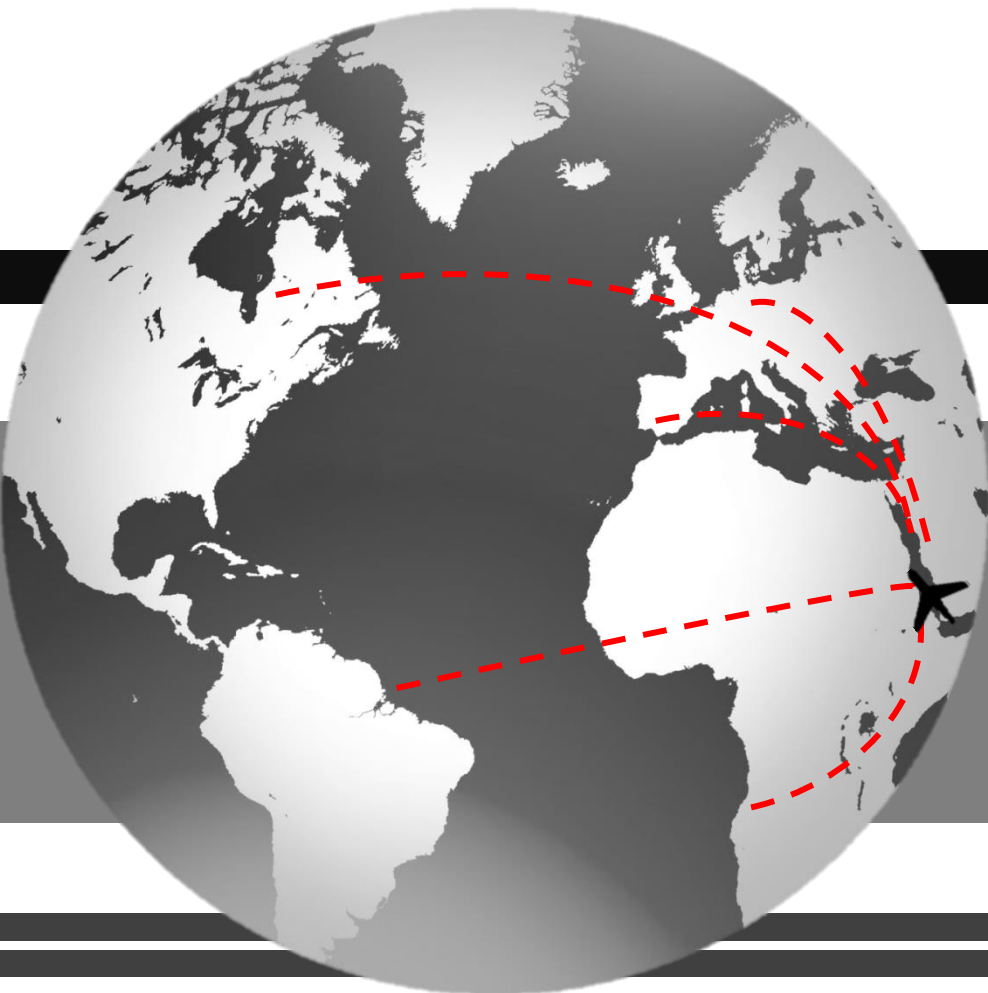


Questions

Considerations

Is it worth it?

CBTA in conversion and Recency.



- 157 routes / 84 countries
- Polar routes and ULRs
- Infrastructure in developing countries
- 102 nationalities / 75 languages

Our Challenge



Paradigm Shift Needed



versus





CBTA/EBT or
Legacy



EBT

Legacy



Competency development

Task Analysis (ISD)

Paradigm Shift


Established in regulations

Risk based using global evidence

Little Evidence

Emphasis on competency based assessment

Outcome of tasks

A close-up photograph of a wooden file folder tab with a white label that reads 'Regulations'. The background shows other folders with labels like 'Documents' and 'Safety'.

- CAR-AIR OPS
- Safety Decision



Data Report for Evidence-Based Training

July 2013

1st Edition



Evidence-Based Training Implementation Guide

July 2013



1st Edition



Doc 9895
AN/07

Manual of Evidence-based Training

Approved by the Secretary General
and published under his authority

First Edition — 2013

International Civil Aviation Organization



Competencies





Application of Procedures

Communication

Aircraft Flight Path Control – Manual

Aircraft Flight Path Control – Automation

Workload Management

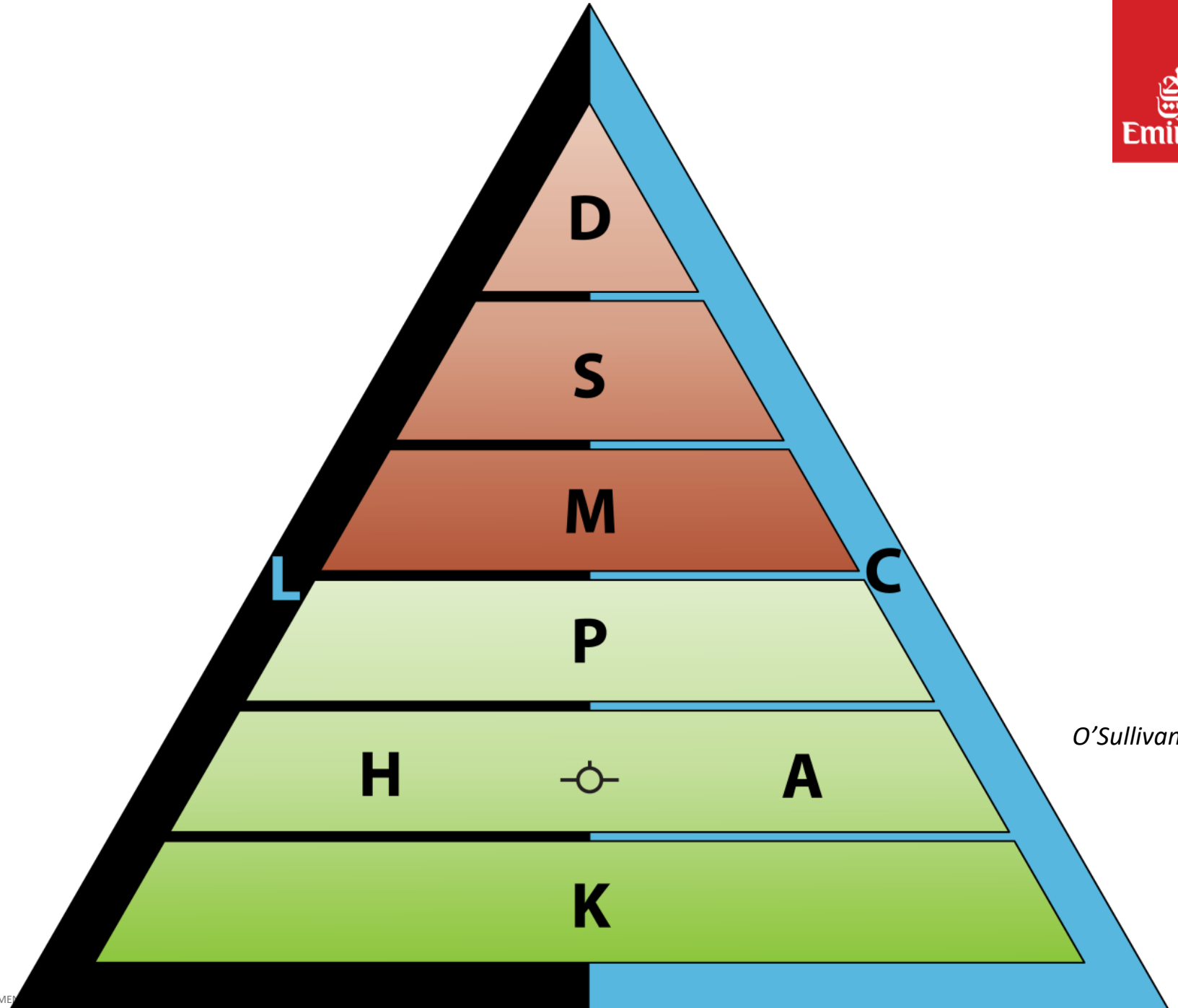
Problem Solving and Decision Making

Leadership and Teamwork

Situation Awareness and Management of Information

Knowledge

"A combination of knowledge, skills and attitudes (KSAs) required to perform a task to the required standard."



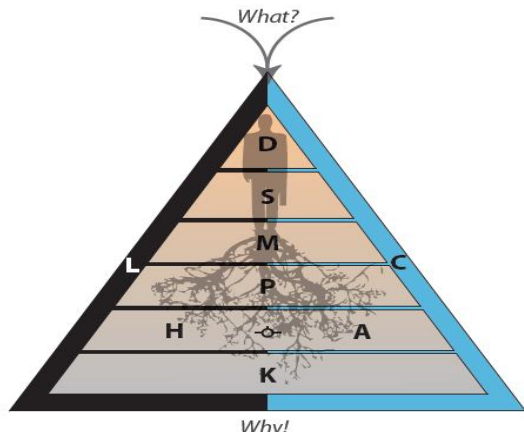
O'Sullivan 2015



What has been lacking?



Normal Performance





EK's path to EBT



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Step 1 - ATQP Task Based Programme – but allowed us to:

- i. Introduce nine-competency framework;
- ii. Introduce Grading System including measurement of training system performance;
- iii. Train instructors in adult learning and competency based training;
- iv. Allowed move away from legacy LPC/OPC and introduce Manoeuvre Validation and Line Orientated Evaluation.



A photograph of the cockpit of an aircraft. Two pilots in white uniforms are seated at the controls. The cockpit is filled with various instruments, including multiple digital displays showing flight data, and a complex array of physical buttons and switches on the overhead panel. The lighting is dim, typical of a cockpit during flight.

Manoeuvre Validation (Comply with LPC)

- Ensured the regulatory requirements met for the LPC;
- Allowed time for a realistic Evaluation (Competency Based) (LOE = OPC);
- Superseded by Manoeuvre Training post EBT introduction.

EK ATQP programme

DAY 1	DAY 2	DAY 3	DAY 4
Technical and CRM	Line Orientated Evaluation and MV	Training elements in Scenario Based Training Style	Manual Handling
Classroom Workshop	FFS 3 Hours	FFS 3 Hours	FFS 3 Hours

Every Six Months

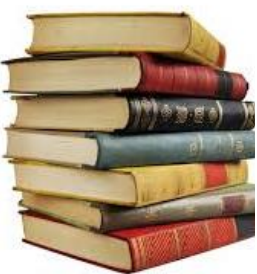
Training Day Philosophy

Study

2 hour
classroom

3 hour FSTD training

1 hour
reflection



6 Hour Training Event

ATQP

- i. Highly task based – not designed around competency;
- ii. Cover all aircraft systems over three year period – no resilience;
- iii. Check focused to meet regulatory requirements....

More needed to be done!



Step 2 - Mixed Implementation:

- i. Nine-competency framework and Grading System well established;
- ii. Instructors competent in adult learning and competency based training;
- iii. Allowed move away from legacy rule and introduce EBT methodology but still constrained for licencing purposes.



EK mixed implementation programme



DAY 1	DAY 2	DAY 3	DAY 4
Technical and CRM	Line Orientated Evaluation and MV	Scenario Based Training and In Seat Instruction (ISI)	Manual Handling
Classroom Workshop	FFS 3 Hours	FFS 3 Hours	FFS 3 Hours

Every Six Months

Mixed Implementation

- i. Move away from legacy practices e.g. aircraft systems over three years;
- ii. Introduce Approach and Malfunction Equivalence;
- iii. Recurrent programme amended to be in line with baseline EBT for generation 4 Jets.

More needed to be done!



Step 3 - Full EBT:

- i. Live 01st August 2020 on all fleets;
- ii. Full baseline EBT;
- iii. LOE replaced with Evaluation Phase;
- iv. Manoeuvre Validation replaced with Manoeuvre Training Phase;
- v. Introduced under two year implementation plan with GCAA.



EBT programme (3 years)



DAY 1	DAY 2 EBT Session 1	DAY 3 EBT Session 2	DAY 4
Technical and CRM	Evaluation Phase and Manoeuvre Training	Scenario Based Training	Manual Handling (Not part of EBT programme)
Classroom Workshop or Online	FFS 3 Hours	FFS 3 Hours	FFS 3 Hours

Every Six Months (Module 1 – 6)



CBTA in conversion courses and Recency



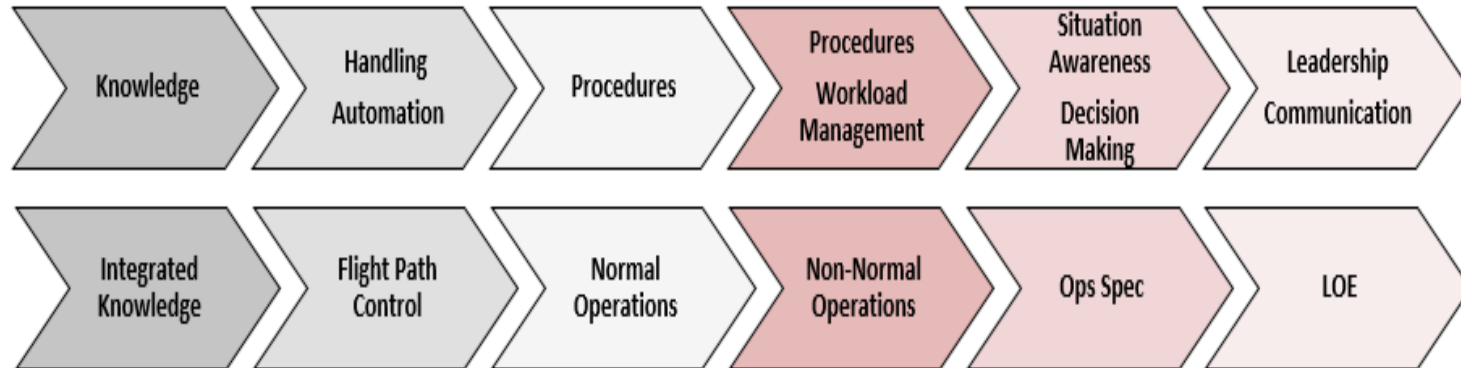
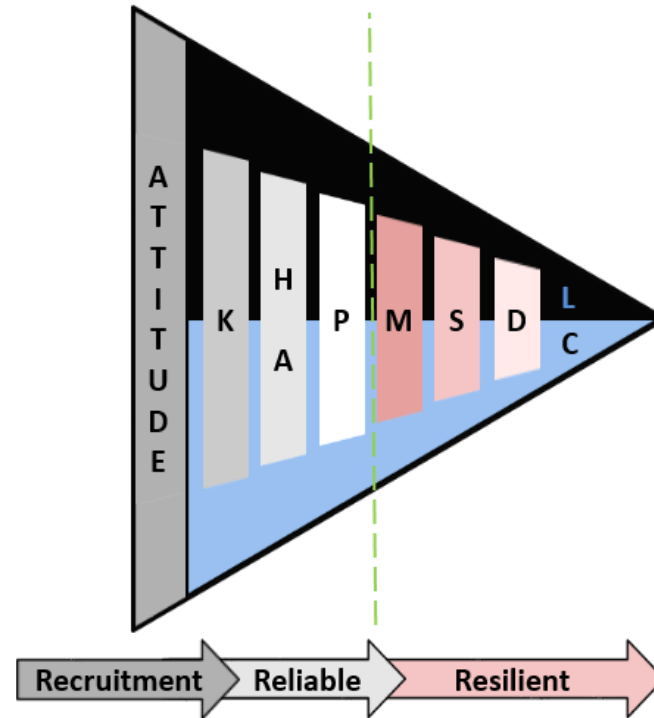
ICAO process

Workflow 1	Workflow 2	Workflow 3	Workflow 4	Workflow 5
ANALYSE Training need.	DESIGN Local Competency Based Training and Assessment.	DEVELOP The training and assessment materials.	IMPLEMENT Conduct the course in accordance with the training and assessment plans.	EVALUATE The course including the training and assessment plans.



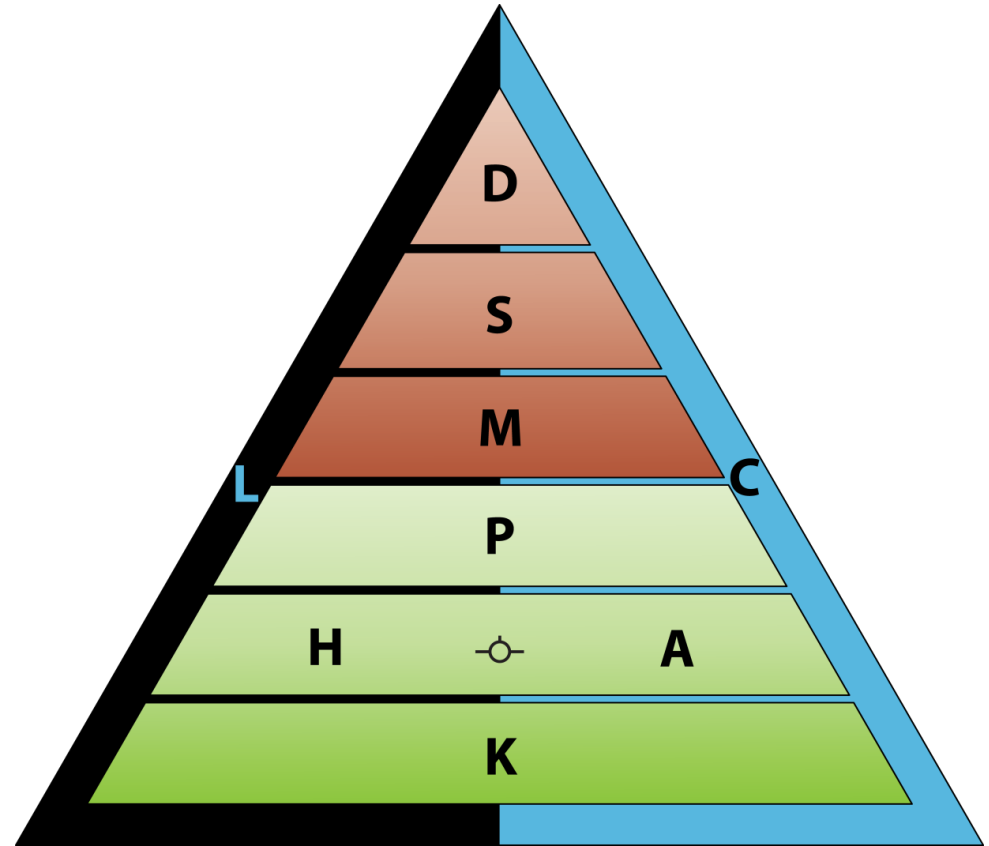
Conversion Course

Workflow 1	Workflow 2	Workflow 3	Workflow 4	Workflow 5
ANALYSE Training need.	DESIGN Local Competency Based Training and Assessment.	DEVELOP The training and assessment materials.	IMPLEMENT Conduct the course in accordance with the training and assessment plans.	EVALUATE The course including the training and assessment plans.



Recency Programme

Workflow 1	Workflow 2	Workflow 3	Workflow 4	Workflow 5
ANALYSE Training need.	DESIGN Local Competency Based Training and Assessment.	DEVELOP The training and assessment materials.	IMPLEMENT Conduct the course in accordance with the training and assessment plans.	EVALUATE The course including the training and assessment plans.



Target competencies on individual basis



Is it worth it?



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Considerations:


- i. The adaption to the pilot need;
- ii. the benefits in term of training effectiveness and efficiency.





Has **remained as safe**
as Legacy Programmes

Have seen a marked
improvement in FO
soft skills – especially
in WLM and DM.



Feedback shows **pilots**
far prefer EBT and
CBTA to Legacy as it
challenges, develops and
enhances individuals.

Considerations for EBT (and CBTA):

- i. An operator could implement EBT on the prescribed timescales if their aircraft types fulfil the generation criteria;
- ii. Standards/instructor training forms the **bulk of the work**;
- iii. EBT does not save money. The focus is on improved safety and operational efficiency;
- iv. EBT is an operators programme. Difficult to achieve where contracted training ATO is utilized;
- v. Operators may become distracted by the 'evidence'. Enhanced EBT has not been defined and removal of the baseline topics leaves operators exposed.
- vi. Essential for any operator to work very closely with the regulatory authority through the whole implementation process.





Questions?