



# Session 3

## Introduction to Competency-based Training & Assessment (CBTA)

# Overview

- Understanding CBTA
  - Traditional vs. competency-based approach
- Overview of CBTA
- Key Definitions
- Q&A

# Why move to competency-based training?



# The “traditional” way...

- Traditional aviation training programs
  - Meet qualifications of license, rating or privilege
  - National regulations
  - Quantitative terms
  - Prescribe “inputs”
  - Influenced by Authority’s testing criteria and methods



# So what's wrong with that?

## Inputs:

- Qualifications of license
- National regulations
- Programmed hours
- Authority's testing criteria and methods



## Training Programme:

- Objectives
- Course examinations and practical evaluations
- Modules
- Strategy
- Media
- Training & assessment materials



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## Training Programme:

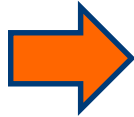
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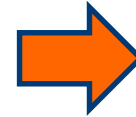
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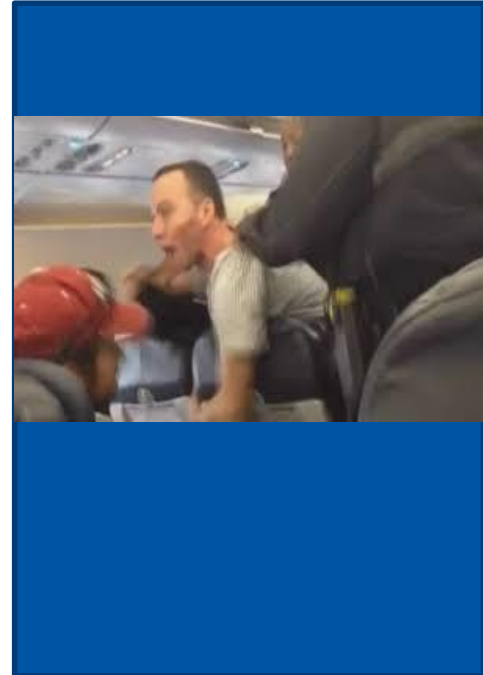
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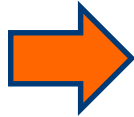




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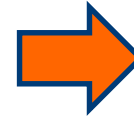
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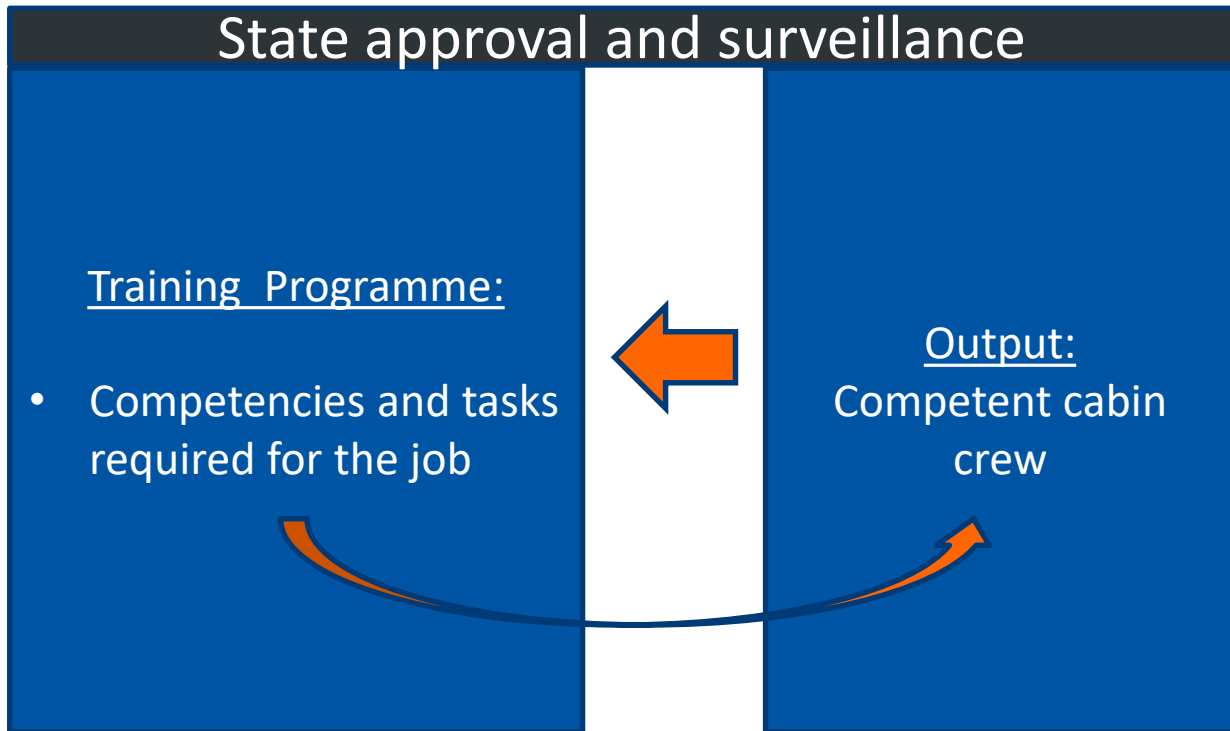
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# So what's wrong with that?



# The solution?



# What is CBTA?

- Training aimed at developing a set of competencies
  - for given function
  - in specific context
- Assessment through multiple observations
  - that competencies for given function are demonstrated
  - while performing tasks in context

# Principles of CBTA

- Relevant competencies clearly defined for particular role (e.g. cabin crew)
- Explicit link between
  - Competencies>>>training >>>required performance on the job>>>assessment
- Competencies are formulated in way that they can be
  - Trained>>>observed >>>assessed
  - consistently in wide variety of work contexts for given role
- Competency is manifested and observed through behaviours
  - that mobilize the relevant knowledge, skills and attitudes
  - to carry out activities or tasks under specified conditions

# Principles of CBTA (2)

- Trainees successfully demonstrate competence
  - by meeting associated competency standard
- Each stakeholder in process has common understanding of competency requirements
  - trainee
  - instructor
  - training organization
  - operator
  - State
- Clear performance criteria are established for assessing competence

# Principles of CBTA (3)

- Evidence of competent performance is valid and reliable
- Instructors' and evaluators' judgements are calibrated
  - to achieve a high degree of inter-rater reliability
- Assessment of competencies is based
  - on multiple observations
  - across multiple contexts
- To be considered competent
  - individual demonstrates integrated performance
  - of all required competencies
  - to a specified standard



# Benefits of CBTA

- Ensures that training is relevant to job of cabin crew
- Integrates KSA needed to perform effectively
- Enables crew to cope with predictable & unforeseen situations
- Is geared towards learning rather than passing test



# CBTA Best Practices

- Operator should encourage and support learning
  - in formal and informal settings
  - at different stages in cabin crew member's work life
- Cabin crew training programme should focus on quality of what cabin crew trainees do and achieve during training
  - rather than on prescribed amount of time they spend training
- Training should focus on accommodating individual trainee's needs
  - provide flexibility
- Highest quality and level of consistency of instruction should be provided
  - particular attention given to coaching, facilitation and mentoring cabin crew

# Key Definitions in CBTA

## Competency

- A dimension of human performance
  - used to reliably predict successful performance on the job
- A competency is manifested and observed through
  - behaviours
  - that mobilize relevant knowledge, skills and attitudes
  - to carry out activities or tasks
  - under specified conditions

# Key Definitions in CBTA (2)

## Competency-based training and assessment

- Training and assessment characterized by
  - performance orientation
  - emphasis on standards of performance and their measurement
  - development of training to specified performance standards

## Observable behaviour (OB)

- Single role-related behaviour
  - that can be observed
  - and may or may not be measurable

# Key Definitions in CBTA (3)

## Competency standard

- Level of performance defined as acceptable
  - when assessing whether or not competency has been achieved

## Conditions

- Anything that may qualify specific environment
  - in which performance will be demonstrated

# Key Definitions in CBTA (4)

## Performance criteria

- Statements used to assess whether
  - required levels of performance achieved for a competency
- Performance criterion consists of
  - observable behaviour

- condition(s)
- competency standard

Competency  
Assessment

# Points to Remember

- Differences between traditional and competency-based training approaches
- The two-step approach to develop competency-based
  - Define end-state first (competencies) to be achieved
  - Reverse-engineer training and assessment based on end-state
- Importance of job and task analysis

