Competency-based Approach to Cabin Crew Safety Training

Martin Maurino
Safety and Efficiency Support Officer
Air Navigation Bureau, ICAO

WATS 2012
17-19 April 2012
Overview of Presentation

- Existing ICAO material on cabin crew training
- Objectives of revision of guidance material
- Why move to competency-based approach?
- Approach taken by ICAO, with States & Industry
- Application of competency-based approach to cabin crew training
- Draft ICAO cabin crew competency framework
- Next steps
• ICAO (Annex 6 - Part 1) requires initial and recurrent cabin crew safety training
• ICAO developed guidance material on Cabin Crew Safety Training (Doc 7192 Part E-1)
• Documentation addresses training requirements in Annex 6
Cabin Crew Safety Training Manual

- Regulatory & training requirements
- General recommendations
  - Classroom-based training
- Aviation indoctrination
- Duties & responsibilities
- Emergency procedures
- Carriage of dangerous goods
- Human Factors, including CRM
- Hygiene, aviation medicine and first aid
- Recurrent training
Objectives of Revision

• Raise awareness of importance of cabin crew safety training
• Provide guidance material for initial & recurrent cabin crew safety training
• Develop cabin crew competency framework
  – Revise manual reflecting competency-based training
• Provide additional guidance on training aspects not addressed by ICAO standards
Objectives of Revision (Cont’d)

• Additional guidance for States and air operators:
  – Requalification training
  – Cabin crew In-charge training
  – Representative training devices
  – Safety Management Systems
  – Fatigue Risk Management
  – Threat and Error Management
  – Management aspects
  – etc.
Why Move to a Competency-based Approach?

- Focus on:
  - job performance
  - the adult learner
- Observable and measurable
- Flexible implementation
- Structures and reduces OJT
- Harmonises competencies globally
- Tool to improve quality in training
Competency-based Approach

1. Define the end-state first – *competencies to be achieved*

2. Reverse-engineer training and assessment based on the end-state
A Joint Effort on Cabin Crew Safety Training

Competency-based Approach to Cabin Crew Safety Training
Objectives of Revision (Cont’d)

• Develop guidance on hygiene, aviation medicine and first aid:
  – Communicable diseases
  – Defibrillator use
  – Death on board
  – Food safety
  – etc.

• In addition to updating existing guidance
A Joint Effort on Aviation Medicine and Cabin Health
Competency-based Approach to Cabin Crew Training

• ICAO is defining cabin crew competencies for:
  – Safety duties and responsibilities during normal operations
  – Abnormal and emergency situations
• Developing core competencies for soft skills
• Training guidance material will be re-written to align with this approach
Competency Framework 101

- **Competency**: combination of skills, knowledge and attitudes to perform task to prescribed standard

- **Competency-based training and assessment**:
  - performance orientation
  - emphasis on standards of performance & measurement
  - development of training to those standards
Competency Framework 101 (Cont’d)

- **Competency unit**: Function consisting of number of competency elements

- **Competency element**: Action that constitutes task
  - has triggering & terminating event that clearly defines its limits
  - observable outcome

- **Performance criteria**: Simple, evaluative statement on required outcome of competency element
  - Description of criteria used to judge whether required level of performance has been achieved
Components Competency Framework & Competency-based Training

1. Competency unit
2. Competency element
3. Performance criteria
4. Duty
   – Tasks specific to cabin crew in-charge, if applicable
5. Reference
   – E.g. Ops manual
6. Conditions (methods of instruction & training aids)
   – E.g. Classroom vs. simulator
7. Performance Standard
   – Standard of accomplishment
8. Knowledge and skills:
   – Applicable to competency element or performance criteria
Defining Cabin Crew Competencies

- Safety duties & responsibilities in normal operations
  - Competencies relating to everyday safety role of cabin crew
  - Competencies specific to cabin crew in-charge
  - Outlines main tasks and skills required to do job
Overview of Competency Units: Normal Operations

• Competency units group by duties by phase of flight:
  – Aircraft ground & pre-flight operations
  – Pushback/taxi
  – Take-off
  – Climb
  – Cruise
  – Descent/approach
  – Landing
  – After-landing & post-flight operations

• They encompass competencies needed for safe operation of routine flight
  – Possibility of abnormal/emergency situations
Overview of Competency Elements: Normal Operations

• Competency elements include:
  – Duties/procedures to be performed (specific to phase of flight)
    • E.g. securing cabin for take-off
  – Management of passengers and cabin environment
    • E.g. unruly passengers
  – Operation of systems/equipment
    • E.g. In-flight entertainment system
  – Communication
    • With flight crew, other cabin crew, and passengers
  – Management of any abnormal/emergency situation
    • Described separately
Example of Competencies:
Normal Operations - Pushback/Taxi

Competency unit: 2. Perform duties and responsibilities during to pushback and taxi

The competencies described below relate to the period which commences when the aircraft begins to move in the gate, ramp, or parking area, assisted by a tow vehicle, followed by the period when the aircraft moves on the aerodrome surface under its own power.

<table>
<thead>
<tr>
<th>Competency element</th>
<th>Performance criteria</th>
<th>Duty</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Arm door(s), if applicable</td>
<td></td>
<td>Ops Manual</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Verify door(s) status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3</td>
<td>Verify compliance with ordinance signs (seat belts, PEDs, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.4</td>
<td>Perform safety demonstration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.5</td>
<td>Check cabin and galley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.6</td>
<td>Check that lavatory is vacant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.7</td>
<td>Check that crew rest area is vacant, if applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.8</td>
<td>Confirm “cabin readiness” for take-off to the flight crew</td>
<td></td>
<td>IC</td>
</tr>
<tr>
<td>2.1.9</td>
<td>Take assigned seat for take-off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.10</td>
<td>Comply with pre-take-off signal (Receive and adhere to advisory to occupy assigned seat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.11</td>
<td>Perform silent review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.12</td>
<td>Take appropriate safety seating position for take-off (including brace, if appropriate)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Defining Cabin Crew Competencies

• Abnormal and emergency situations
  – Competencies relating to specific situations
    • Fire, decompression, evacuation, etc.
  – Competencies specific to cabin crew in-charge
  – Outlines main tasks and skills required during emergency situations
Overview of Competency Units: Abnormal and Emergency Situations

• Competency units:
  – Not specific to phase of flight
  – Embedded throughout framework

• Generic competency element under each unit:
  – “Manage abnormal and emergency situations”
Overview of Competency Elements: Abnormal and Emergency Situations

- Competency elements cover specific situations
- These include:
  - Fight fire
  - Apply smoke removal procedures
  - Apply decompression procedures
  - Prepare cabin for emergency landing/ditching
    - prepared or unprepared emergency
  - Evacuate aeroplane
  - Prevent/manage unlawful interference
  - Apply incapacitation procedures
    - Flight or cabin crewmember
Example of Competencies: Abnormal and Emergency Situations

## Competency unit 1. Perform duties and responsibilities during an abnormal or emergency situation

The competencies described below relate to duties and responsibilities that are assigned to the cabin crewmember in the event of an abnormal or emergency situation.

<table>
<thead>
<tr>
<th>Competency element</th>
<th>Performance criteria</th>
<th>Duty</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Fight fire</td>
<td>1.1.1 Detect and eliminate fire hazards</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.2 Locate source of fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.3 Identify the type of the fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.4 Apply communication procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.5 Use appropriate fire extinguisher, other firefighting equipment and protective equipment, as required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.6 Apply fire fighting procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.7 Apply post-fire fighting procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1.8 Complete the applicable documentation (e.g. incident report form, etc.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Defining Cabin Crew Competencies

• Integrate behaviours & skills into framework:
  – Communication
  – Stress management
  – Assertiveness
  – etc.

• Link them to specific duties
  – During normal operations
  – For specific situations

• Threat & Error Management
  – Recommended as part of Human Factors/CRM training
Next Steps

• Develop competency frameworks for:
  – Security-related duties & responsibilities
  – Cabin health
  – Dangerous goods
• Single cabin crew operations
• Human Factors, CRM and soft skills
• Review of work-in-progress
  – Meeting with regulatory group (April 2012)
  – Meeting with industry group (May 2012)
  – Joint meeting of Regulators/Industry (Sept 2012)
Conclusion

• Competency-based approach will enhance job performance
• Provide flexibility to air operators
• Guidance material will address wider range of issues
• Raise awareness of importance of cabin crew safety training
  – for normal, abnormal and emergency operations
ICAO
Uniting Aviation on
Safety | Security | Environment