Ab Initio Pilot Training today – and in the future

Capt Matthias Kippenberg, Airline Training Center Arizona, Inc.
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Agenda

> The Professional Airline Pilot

> Ab Initio Pilot Training today

> Ab Initio Pilot Training in the Future
  · Selection
  · MPL

> Conclusion
The Professional Airline Pilot

Airline Pilot with a well balanced Competency Structure

Technical Competence
- Manual Airplane Control
- Knowledge of Systems
- Use of Automation

Procedural Competence
- Knowledge of Procedures
- Adherence to Procedures

Interpersonal Competence
- Communication
- Leadership & Teamwork
- Workload Management
- Situation Awareness & Decision Making

Selection
 specific Aptitudes and Personality

Training
Ab Initio Training today

Airline Pilot
with a well balanced Competency Structure

Type Rating & Line Trng
Bridge Course
MCC
CPL/IR
Selection

Technical Competence
• Manual Airplane Control
• Knowledge of Systems
• Use of Automation

Procedural Competence

Interpersonal Competence

specific Aptitudes and Personality
Ab Initio Training in the Future

> mandatory and balanced Training of all competence areas

> at the earliest possible stage

> with an effective and economic use of training equipment

> based on a stringent selection
The Lufthansa Selection Process

<table>
<thead>
<tr>
<th>1. Basic Qualification (BU)*</th>
<th>2. Company Qualification (FQ)*</th>
<th>3. Pilot School</th>
<th>4. Type Rating and Line Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 30-35% successful</td>
<td>- 25-30% successful</td>
<td>- 95-98% successful</td>
<td>&gt; 99% successful</td>
</tr>
</tbody>
</table>

Two step pre-selection
- knowledge
- operational skills
- personality

7-10% successful

* In cooperation with German Aerospace Centre (DLR)
Evolutionary Step from traditional ATP to MPL

ATP
- Basic Flying Skills
- CPL & Basic IFR Skills
- Adv. IFR – Abn./LOFT

F33 A/C & FSTD
1 – 4a PHX
4b BRE
JO
5 + TR
Line Trng

MPL
- Core Flying
- Basic
- Int.
- Advanced
- IOE

F33 A/C & FSTD
CJ1+ A/C & FSTD
A320/B737 FFS

Basic Flying Skills
Basic IFR Skills
Adv. IFR – Abn./LOFT
## MPL Training Program

<table>
<thead>
<tr>
<th>1. Theoretical Training Bremen</th>
<th>2. Flight Training Phoenix (Core Phase 1-4)</th>
<th>3. Flight Training Bremen (Basic Phase 1-3)</th>
<th>4. Flight Training Frankfurt/München (Intermediate and Advanced Phase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 11.5 months</td>
<td>- 4 months</td>
<td>- 3.5 months</td>
<td>- 3 months B737 / A320 FSTD B737 / A320 Aircraft</td>
</tr>
<tr>
<td>- total 888 hrs</td>
<td>- F33 FSTD und F33 Aircraft</td>
<td>- CJ1+ FSTD und CJ1+ Aircraft</td>
<td>- total 88:00 hrs</td>
</tr>
<tr>
<td></td>
<td>- total 114:30 hrs incl 2:50 hrs Upset Trng</td>
<td>- total 135:00 hrs</td>
<td></td>
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</tbody>
</table>
Initial Operator Experience (IOE)

<table>
<thead>
<tr>
<th>Additional CM</th>
<th>Familiarization</th>
<th>CM 2</th>
<th>Proficiency</th>
<th>Final Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 sectors min ~ 15 hrs</td>
<td>15 sectors min ~ 23 hrs</td>
<td>25 sectors min ~ 38 hrs</td>
<td>30 sectors min ~ 45 hrs</td>
<td>10 sectors min ~ 15 hrs</td>
</tr>
</tbody>
</table>
Conclusion

The highest level of Safety Standards and Professionalism in Airline Pilot Training can be achieved by:

- A **stringent Selection** to retain students with defined **Aptitudes and Personality** as a solid basis for comprehensive and ambitious Ab Initio Pilot Training

- A **well balanced Training** of all **Competence Areas** (Technical, Procedural and Interpersonal) – which could be accomplished in the earliest stages of training and in the most effective way in an **MPL Training Scheme**
Thanks for your attention!