



**EAAP**  
EUROPEAN ASSOCIATION  
FOR AVIATION PSYCHOLOGY  
*Worldwide Support*



BRUSSELS | JUNE 7-8, 2023

**SAFETY FORUM**  
KNOWLEDGE, SKILLS AND EXPERIENCE  
FOR SAFE OPERATIONS

Powered by SKYbrary

## 10th ANNUAL SAFETY FORUM

# Pilot Support & Development: A Holistic Approach to Promoting (Psychological) Wellbeing and Resilience

**Gunnar Steinhardt**  
**EAAP President**

**Pascal Kremer**  
**Safety Manager, Luxair**



# Where we are coming from

The screenshot shows the SKYbrary logo on the left and the Flight Safety Foundation and EUROCONTROL logos on the right. A green banner across the middle contains the text 'Operator's Guide to Human Factors in Aviation'.

SKYbrary

Flight Safety Foundation

FLIGHT SAFETY FOUNDATION

EUROCONTROL

EUROCONTROL

Operator's Guide to Human Factors in Aviation

[...] Research indicates that 85% of all aviation accidents and serious incidents involve human error, and over 60% of these accidents have human factors as their primary cause.[...]



Stiftung Mayday

# Where we are coming from

## What happened 2022? (2021, 2020, 2019, 2018)

- **42% aviation related incidents** (40%, 58%, 82%, 78%)
  - 19% medical problems on board (21%, 14%, 21%, 18%)
  - 6% unruly pax (3%, 4%, 10%, 8%)
  - 5% Layover (7%, 7%, 9%, 8%)
  - 4% death on board (7%, 9%, 12%, 13%)
  - 4% total loss (8%, 8%, before < 3%)
  - 3% turbulence (<3%, 3%, 3%, 3%)
  - .....
- **58% private problems**, very often license-threatening and/or related to the death of a next-of-kin (60%, 42%, 18%, 22%)



# Mental Health Stigma

**Affected pilots are often hesitant to report psychological / emotional issues  
... and to seek corresponding support and guidance**





... if you want to get things right in bad times, you need to build up trust and promote in good times!



# How to Get There?



# Cornerstones of a Holistic Approach to Pilot Support and Development





# Initial Pilot Guidance & Support

- Initial guidance for pilots joining the operator
- **One-on-one with Aviation Psychologist/ Human Factors Manager & confidential**
- In-depth **reflection on selection results**
- Link pilot's experienced progress & actual performance with previously **identified strengths** as well as recognized **areas for further development**
- **Supporting growth** and enhance personal **resilience**
- Opportunity for additional **coaching** & support if required
- Establishing a **trustful relationship** to lower the barrier for future request(s) for support
- **promote Pilot Support Program**



# First Officer Development Program

- Implement a three-step program, given that First Officers develop specific needs and requirements which are likely to change throughout their career path, while following a **peer-centered approach**.

## 1. In the beginning of their career path:

- Initiating an open **exchange on beneficial as well as on critical experiences**;
- **Open dialogue with FLT OPS and Safety Management.**



# First Officer Development Program

- Implement a three-step program, given that First Officers develop specific needs and requirements which are likely to change throughout their career path, while following a **peer-centered approach**.
- 2. At the middle of their career path:**
- Open exchange with FLT OPS and Safety Management cont'd;
  - Providing **additional insights into other relevant departments**;
  - **Addressing issues on complacency** > ensuring **learning attitude** > **enhancing personal growth**.



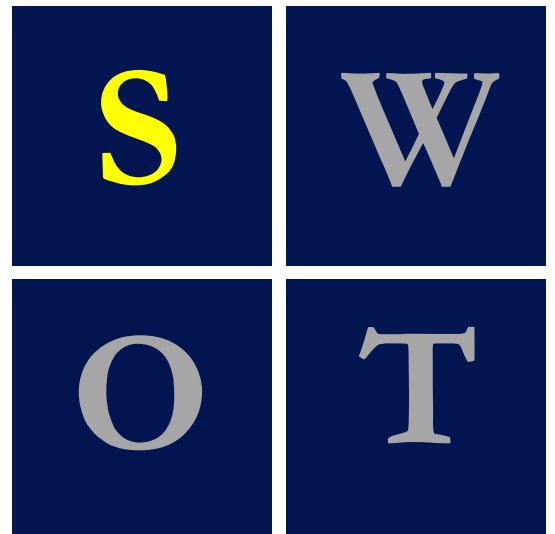
# First Officer Development Program

- Implement a three-step program, given that First Officers develop specific needs and requirements which are likely to change throughout their career path, while following a **peer-centered approach**.
  
- 3. **In the final phase of their career path:**
  - **Expanding on existing skills** for the future role of Captain;
  - Enabling direct exposure and a **closed feedback loop by fellow pilots and instructors**;
  - FLT OPS to address their **expectations; developing strategies to cope with upcoming demanding situations**.



# Holistic Approach: Summary of Strengths

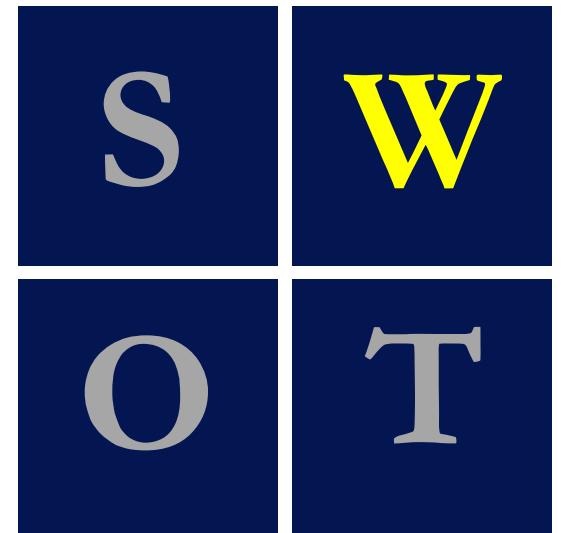
- Enhance pilot competencies through **individualized development programs**
- Enhance safety through **psycho-social support (peer-to-peer)**
- Identifying need for 'coaching' support
- Reduce crew **absenteeism / presentism**
- Encourage desirable pilot development as well as **identify 'critical' trends**
- **Bridge the gap** between **management** and **pilot community**
- **F/Os ready for captaincy** when required
- **CPTs ready for management tasks & crew guidance**





# Holistic Approach: Summary of Weaknesses

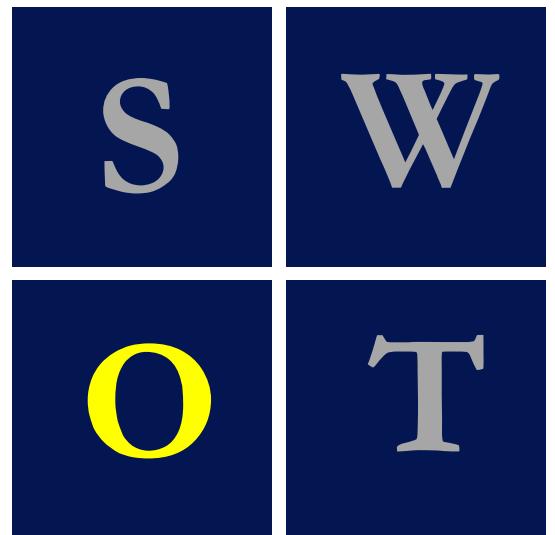
- **Investment** needed
- Implementation of **process** is **time consuming**
- **Difficult** to prove **effectiveness** of **development schemes/ peer support programmes**





# Holistic Approach: Summary of Opportunities

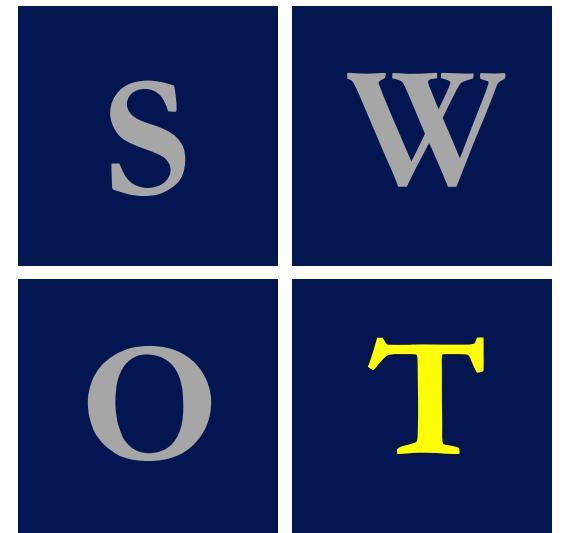
- **Anticipating EASA recommendations**
- **Positive influence on company (safety) culture and atmosphere**
- **Support trustful relationship between management & pilot community**
- **Integration into SMS without compromising confidentiality**
- **Integrating/benefit from aviation psychology/ human factors expertise into fight operations > hire an Accredited Aviation Psychologist!**





# Holistic Approach: Summary of Threats

- **Low acceptance** by crew community
- **Poor concepts/** weak realisation of programmes
- **No clear commitment** by management
- No clear or **weak guidance** by regulator
- Implementation of **concept** needs time





Trust takes weeks to build, but seconds to break, and it's all about Quality!

It's not about Quality, it's about Trust to  
Needs Broader Perspective!



# Components of a Holistic System





# Components of a Holistic System





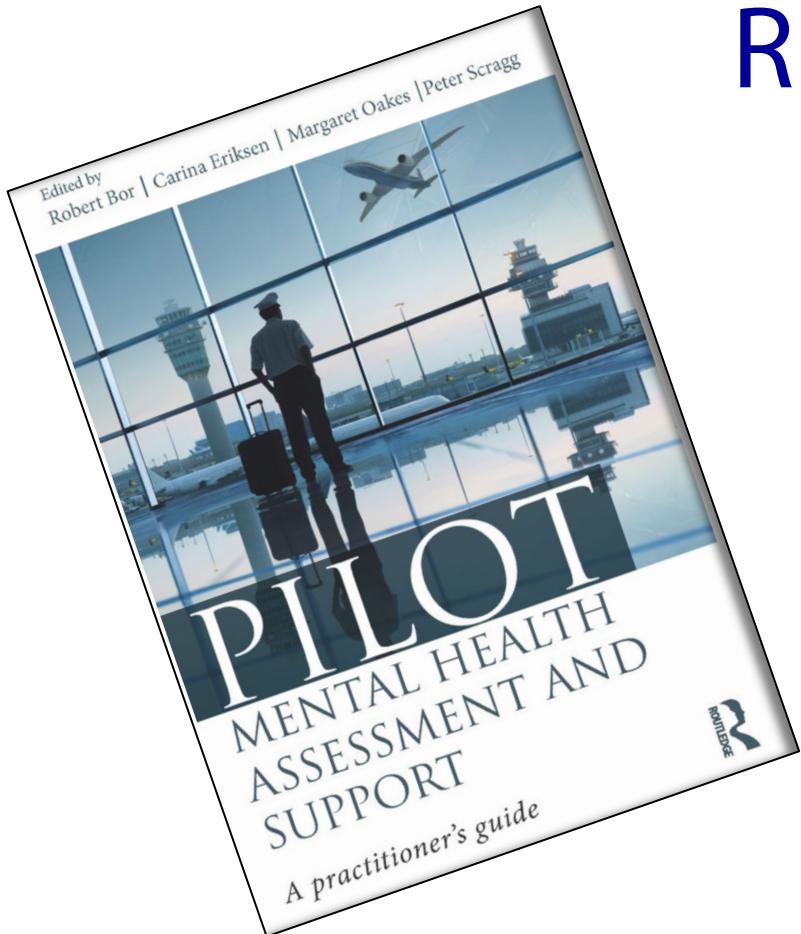
# Components of a Holistic System

## Company Culture: Quality TRUST...

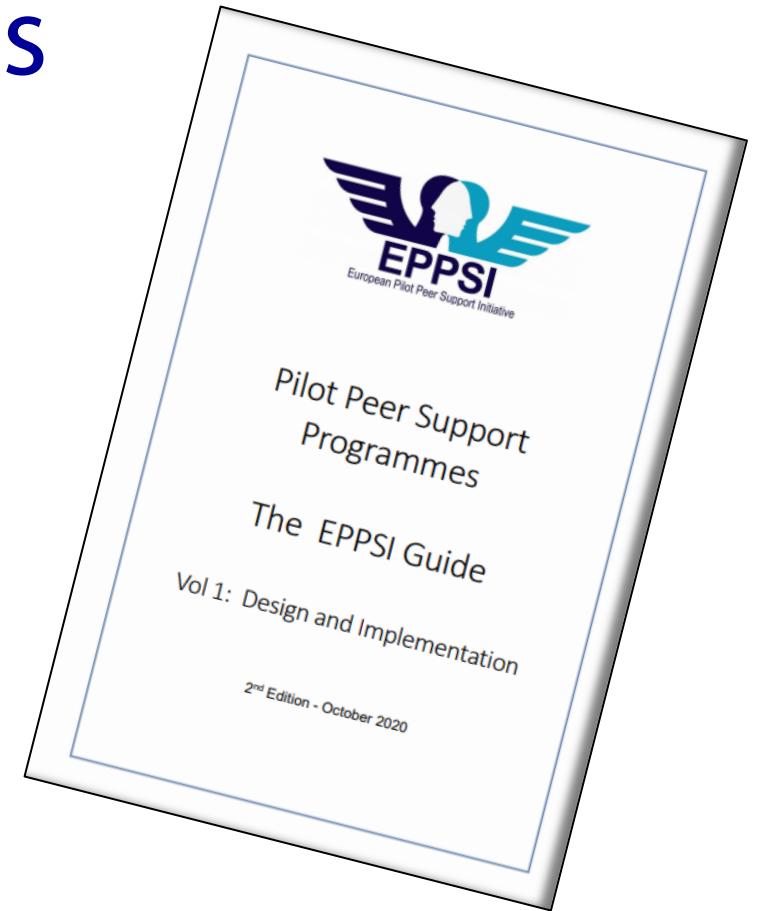




# References



Chapter 20, Peer-to-Peer support and development programmes for pilots: time for a holistic approach  
Gerhard Fahnenbruck and Gunnar Steinhardt



EPPSI Guide 2nd Edition  
[www.eppsi.eu](http://www.eppsi.eu)



# Coming Full Circle

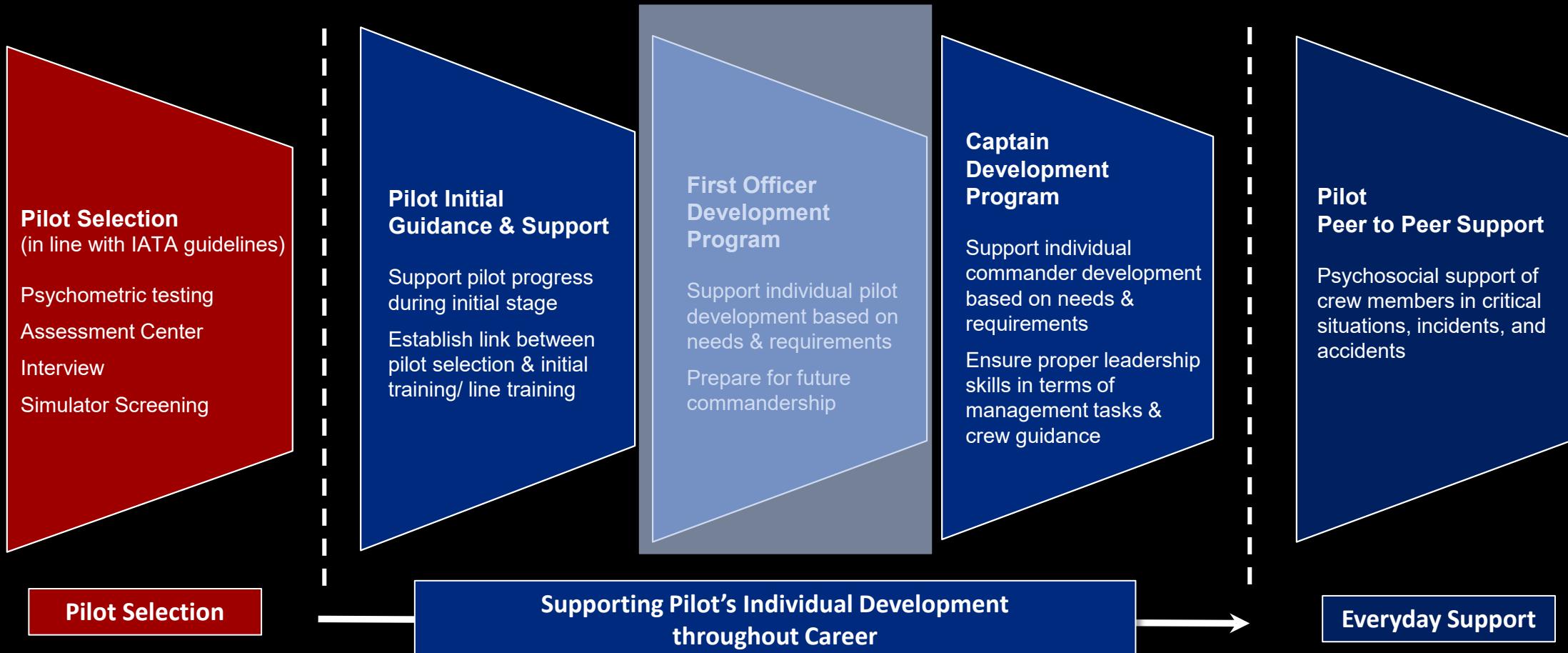
If you want to get things right in bad times,  
you need to build up *quality trust* and  
*promote* in good times!

# EAAP34 Conference Gibraltar September 2022



EAAP34 Members & Delegates, GIB RWY 27, 29.09.2022

# Cornerstones of a Holistic Approach to Pilot Support and Development



## Pilots' Competencies



**Luxair**



| [Inter]Personal Competencies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>Communication between Flight Crew Members may be either social or functional/operational. Both aspects serve a useful purpose, the former helping to built teamwork and the latter being essential to the task of flying an aircraft.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"><li>• Use the same channel of communication</li><li>• Share information actively</li><li>• Clearly state plans and intentions</li><li>• Assure that information given is received</li><li>• Assure understanding</li><li>• Actively ask for feedback</li><li>• Accept appropriate criticism</li><li>• Provide constructive feedback when appropriate</li><li>• Listen actively</li><li>• Express uncertainties and ambiguities</li><li>• Ask for proposals and openly listen to counter-proposals</li><li>• Show respect for other people's feelings and opinions</li></ul>                                                                                                                                                                                                                                      |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| [Inter]Personal Competencies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Leadership                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>A leader is a person who is able to motivate the crew to act towards achieving a common goal. To reach this common goal as a crew the leader acts through the use of example and persuasion. The leader understands the goals and desires of the crew as well as each involved individual. Leadership involves teamwork, and the quality of a leader depends on the success of the leader's relationship with the team.</p> <p>Leadership skills should also be developed by junior crew members. These skills are essential in aircraft operations where First Officers are sometimes called upon to adopt a leadership role throughout the normal performance of their duties.</p> | <ul style="list-style-type: none"><li>• Take the lead of the crew as commander</li><li>• Adopt a leadership role as a First Officer if required</li><li>• Advocate own position</li><li>• Encourage crew to be assertive</li><li>• Take views and opinions of others into account</li><li>• Establish and communicate tasks</li><li>• Achieve common understanding of tasks</li><li>• Take initiative to ensure involvement and task completion</li><li>• Control the outcome, if necessary, correct or adjust strategies</li><li>• Ensure SOP compliance</li><li>• Manage by objectives</li><li>• Delegate tasks</li><li>• Motivate crew through appreciation and, when necessary, offer support</li><li>• Give compliments when tasks are completed successfully</li><li>• Address and manage conflicts within the crew if appropriate</li></ul> |
| 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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## Operational Competencies 2

|                                           |   |
|-------------------------------------------|---|
| Aircraft Control                          | 4 |
| Knowledge / Use of Systems and Automation | 6 |
| Knowledge of / Adherence to Procedure     | 8 |

## [Inter]Personal Competencies 10

|                                         |    |
|-----------------------------------------|----|
| Communication                           | 12 |
| Teamwork                                | 14 |
| Leadership                              | 16 |
| Workload and Stress Management          | 18 |
| Situation Awareness and Decision Making | 20 |

## Case Studies 22

Dear colleagues,

Luxair Luxembourg Airlines prides itself with a strong company safety culture. We nurture it through our standards, our procedures, our trainings and, above all, through our philosophy on "how we do things".

In your hands you now hold our 'Philosophy on Operational & [Inter]Personal Competencies', in short 'Pilots' Competencies'. The philosophy regroups all important areas of expertise essential to a safe and successful flight operation. As a foundation of our company safety culture, it is published in our OM-A. This philosophy also sets the criteria of our CRM assessment program.

The aim of this booklet is to present these competencies and their related requirements in a clear, transparent and understandable way. All requirements are deliberately presented in positive terms to emphasize on "what to do" and not "what not to do". The philosophy was developed with the help of your valuable feedback, ideas and comments received in various trainings. Thank you very much for your effort!

We constantly need to adapt it to the fast changing environment we operate in. Therefore, we welcome any input you can provide to contribute to this challenging task. Let us live our philosophy, let us talk about it, let us exchange our opinions and feed it with our on-the-job experiences.

In good cooperation,



Daniel Colling  
Postholder  
Flight Operations



Georges Fleischhauer  
Postholder  
Crew Training



Gunnar Steinhardt  
Human Factors  
Manager



# Co-Pilot Development Scheme

## Goals

- **Provide detailed individual feedback** to all Luxair Co-Pilots concerning their performance according to our Operational and [Inter]Personal Competencies;
- Address Co-Pilots' **beneficial qualities** and identify areas of their competencies where **further development** is possible;
- **Provide feedback** to foster further development and improved performance in regard to future commandanship;
- Provide a **continuing, fair, and non-punitive Co-Pilot Development process.**



# Co-Pilot Development Scheme

Goals

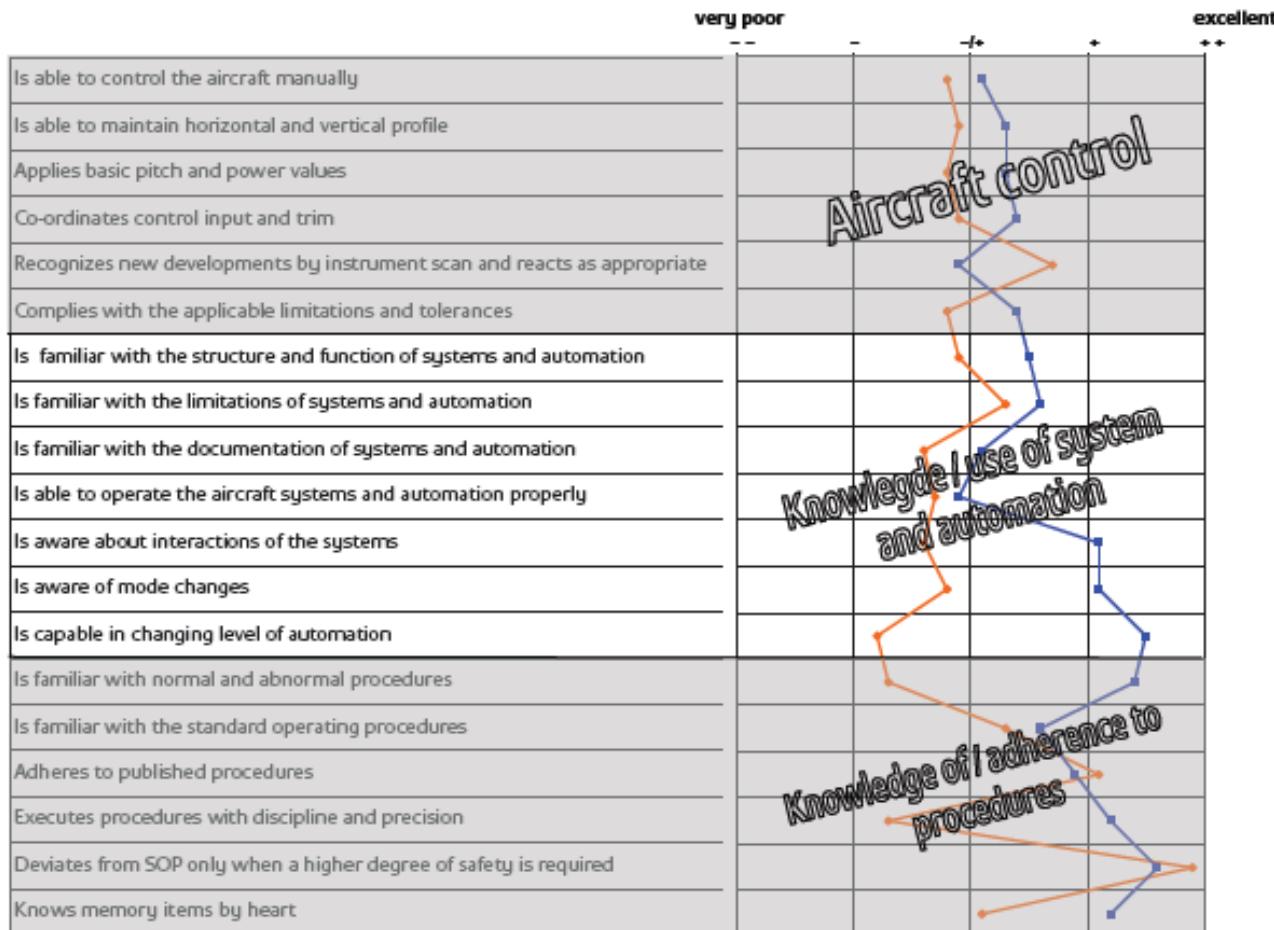
Setup

- TRIs/LTCs use the **Co-Pilot Development Form** to provide feedback;
- Data will be collected **ONLY during normal line operations**;
- Data will be collected and an individual **Co-Pilot Profile Sheet** will be created;
- All Co-Pilots **evaluate their own** performance by using the Co-Pilot Development Form.

## Operational Competencies - personal profile

Pilot (3-letter-code): \_\_\_\_\_

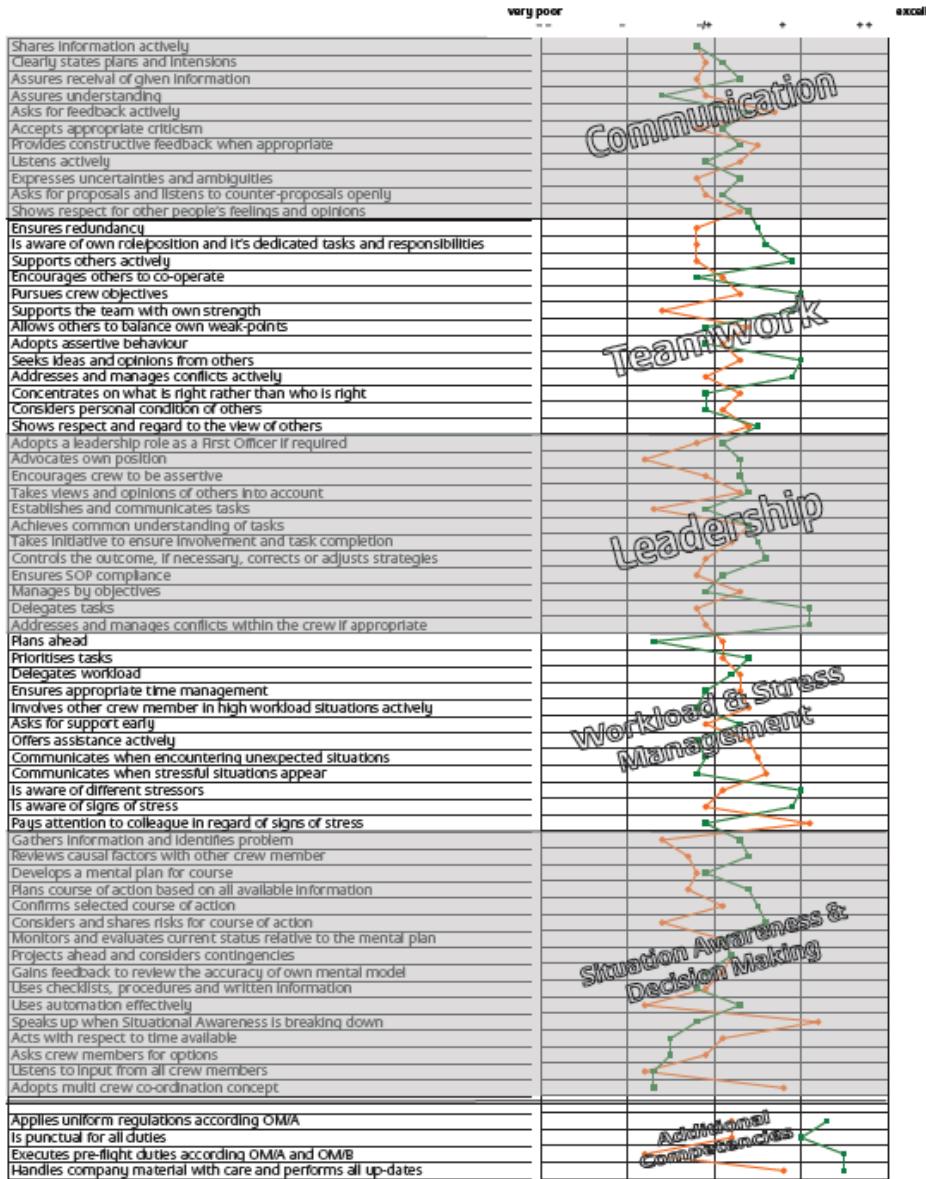
Date: \_\_\_\_\_



**[Inter]Personal Competencies - personal profile F/O**

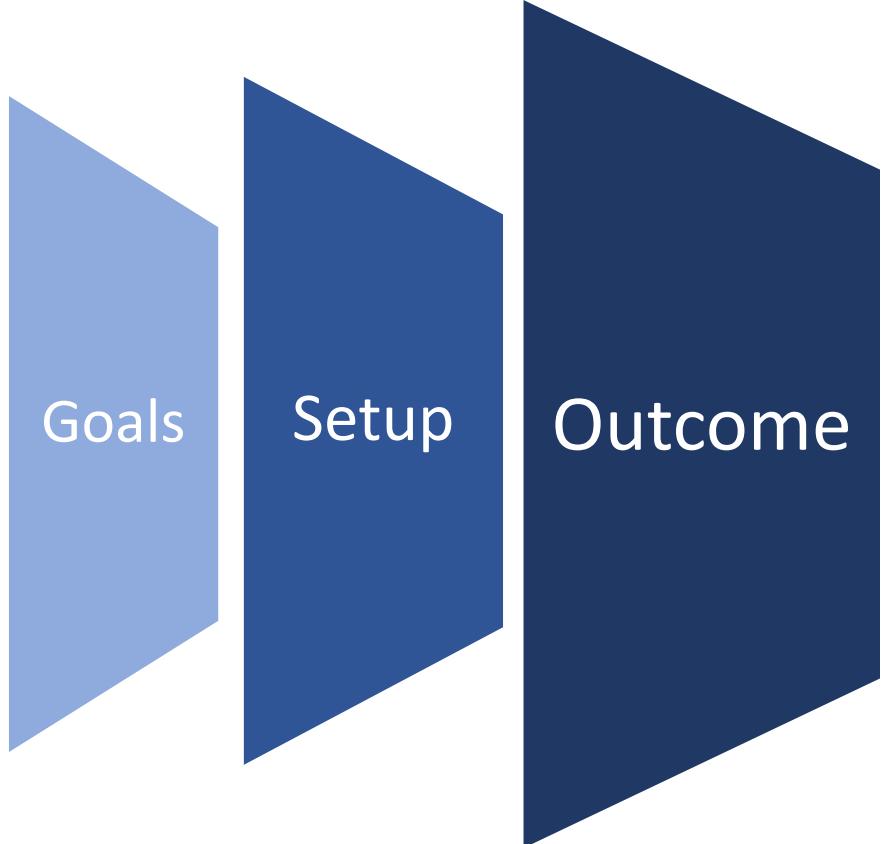
Pilot (3-letter-code): \_\_\_\_\_

Date: \_\_\_\_\_





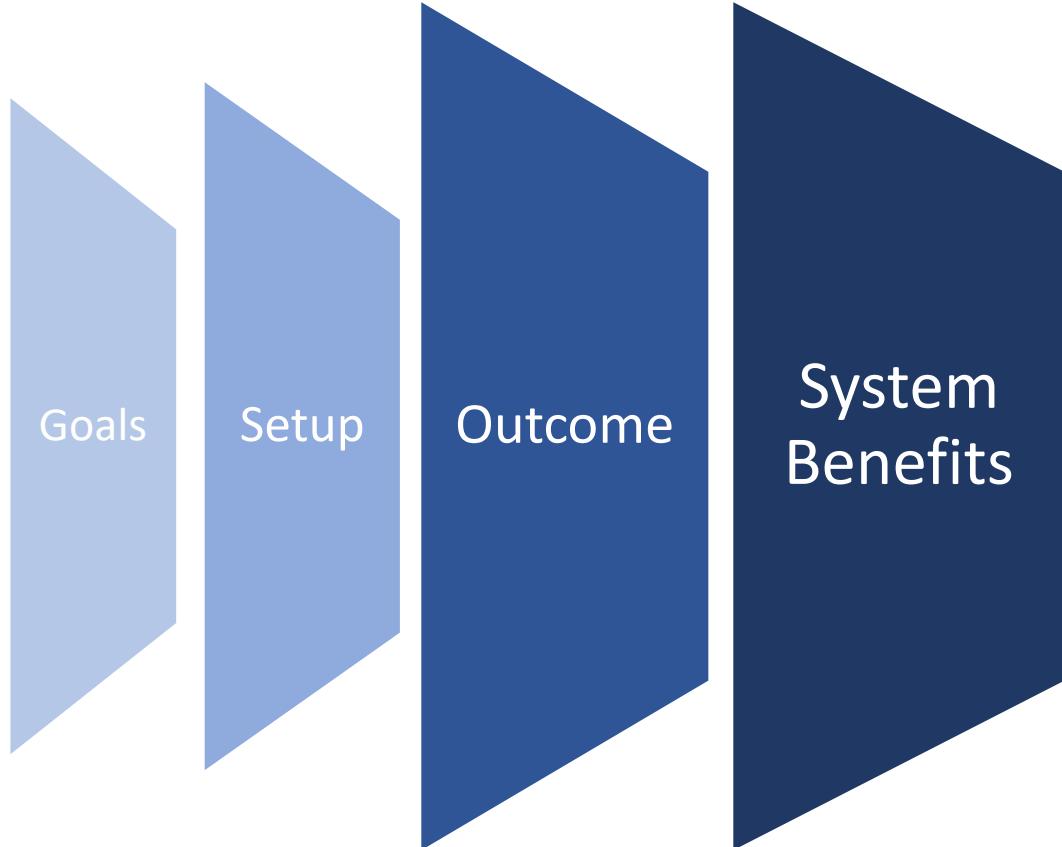

# Co-Pilot Development Scheme



- **Distribution** of Individual Pilot Profile Sheet to all **Co-Pilots and Fleet Chief & Deputy**;
- Fleet Chief meets with the individual Co-Pilot to **discuss the results** and
  - Addresses beneficial qualities;
  - Identifies areas of Co-Pilots' competencies where further development is possible;
  - Develops strategies together with the candidate to define how and where to improve performance;
  - Provides feedback on further development regarding future commandership.



# Co-Pilot Development Scheme



- Identification of **training benefits** and **needs** in general;
- **Instructor standardisation** by structured data;
- **Long term support** based on aggregated data;
- **Proactive approach** to support company **safety culture**.

**BUT THERE IS MORE ...**



# Post COVID World



**Holistic Approach: Summary of Threats**

- Low acceptance by crew community
- Poor concepts/ weak realisation of programmes
- No clear commitment by management
- No clear or weak guidance by regulator
- Implementation of concept needs time

|          |          |          |
|----------|----------|----------|
|          | <b>S</b> | <b>W</b> |
| <b>O</b> |          | <b>T</b> |

07-06-2023

Brussels Safety Forum (June 2023); Pilot Support & Development: A Holistic Approach to Promoting (Psychological) Wellbeing and Resilience



Now, even more than ever before a  
holistic system is needed.



# Thank you!

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