

LEARNING EFFECT?

COMPETENCE BASED
TRAINING?

TECHNICAL TRAINING

– *“Not just a Tick Mark”*

SIMULATIONS?

Scenario-Based Training into the
Maintenance Environment

BY

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AEROTEAM Training Solutions

ASSESSMENT OF SKILLS

Agenda: A Short Introduction

Active Learning

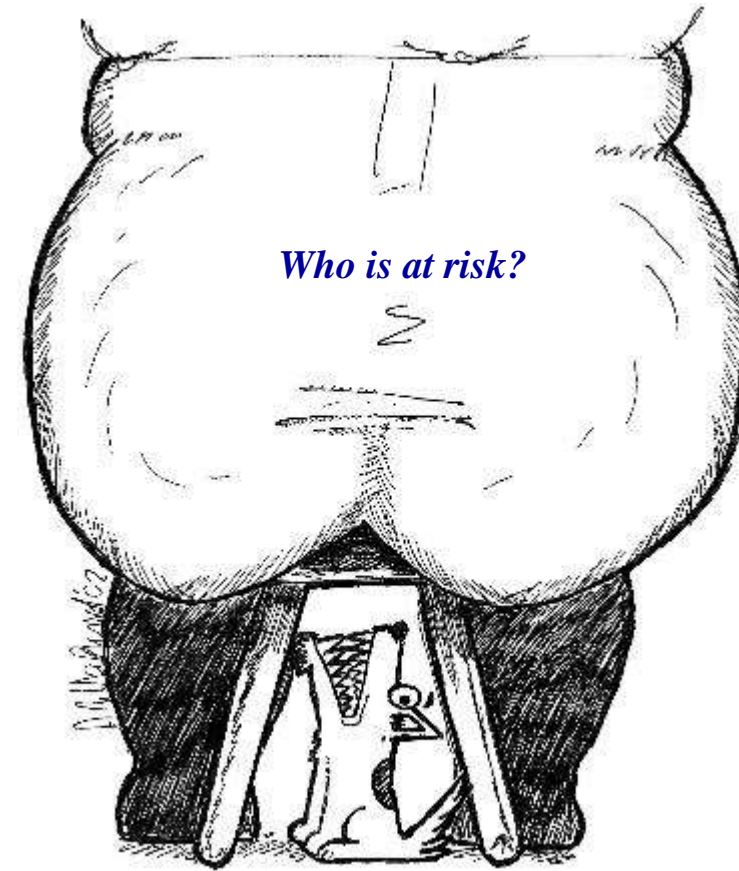
Scenario-Based Training

Assessments

Benefits

Human Error Management Strategies

- **Understanding the nature and extent of error or risk**
- **Changing the conditions that induce the error**
- **Determining the behaviours that prevent or mitigate error**



TRAINING



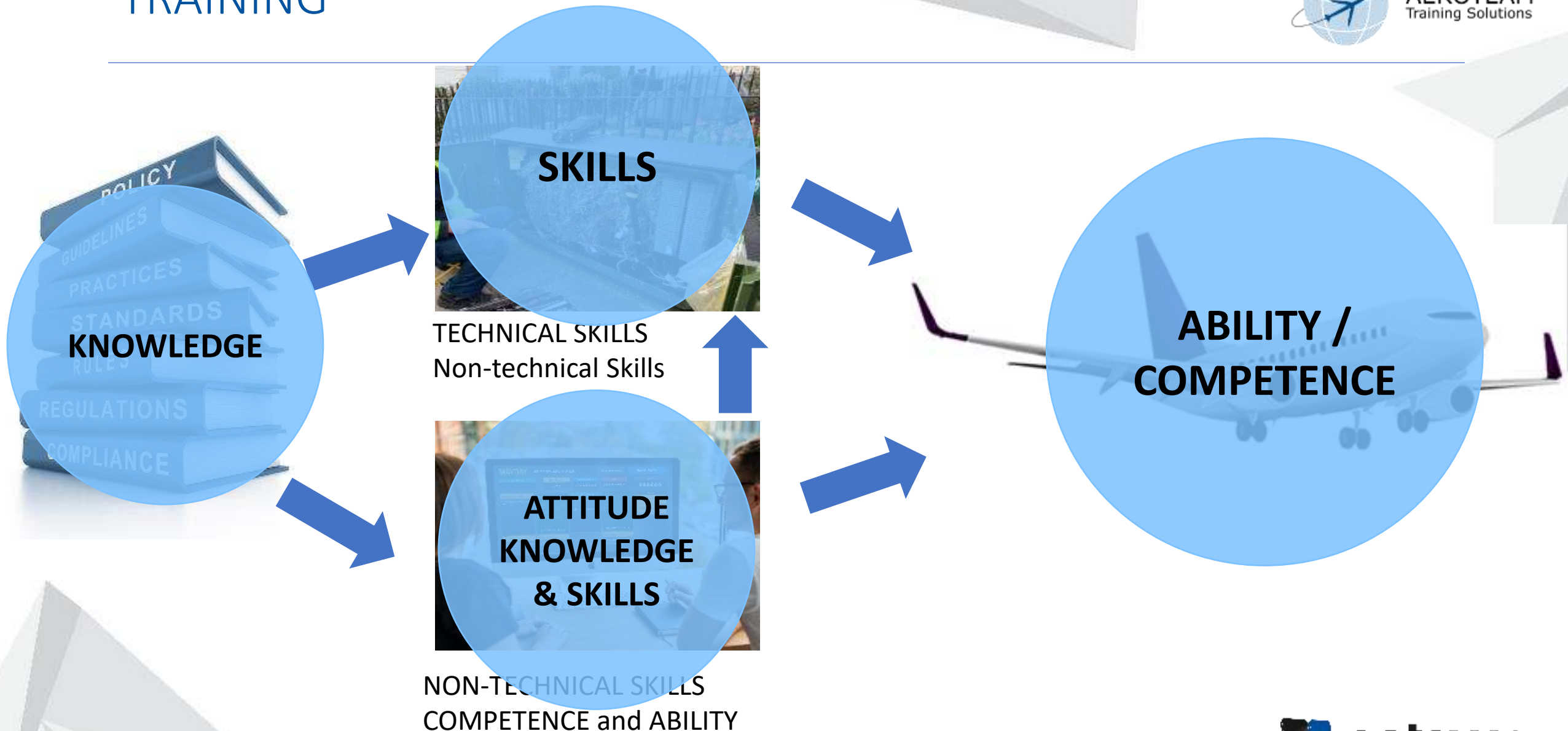
TECHNICAL SKILLS
Non-technical Skills



NON-TECHNICAL SKILLS
COMPETENCE and ABILITY



TRAINING





*“Tell me and I forget,
teach me and I may
remember,
involve me and I learn”*

- Benjamin Franklin

ACTIVE LEARNING

INTERACTIVE LEARNING of SKILLS

- ✈ Learning by Doing in a Simulated Reality
- ✈ It is **SAFE** and there is **No Inherent Risks**
- ✈ Individual learning of Skills
 - in a dynamic social environment
- ✈ Observation of Behaviours
- ✈ Easy Assessment of Non-Technical Skills



FACILITATION – HOW DOES IT WORK?



- Realistic Training Scenarios →
- Dilemmas to Create Discussions
- Give a few solutions – All plausible for discussions
- Highlight Possible Consequences
- Define Focus Areas

STAFF SELECTION



**CERTIFYING
STAFF**

BO, 47

Bo has spent many years working for different companies on line stations at airports abroad. His basic work philosophy is: "If it flew in, it can fly out". He is always the one handing over jobs to the new shift.



**CERTIFYING
STAFF**

CHARLOTTE, 38

Charlotte has been with the company since she was an apprentice. She is loyal and ambitious and rarely makes any mistakes. She recently divorced and is now a single mom.

DILEMMA

TASKS

5

THE PASSENGER SEAT

You are asked to contact a captain who has reported a problem with a cabin seat reclining mechanism. A repair normally takes 25 minutes. The aircraft has been boarded at full capacity. No spare aircraft are available.

This is only a job for certifying staff

Option A

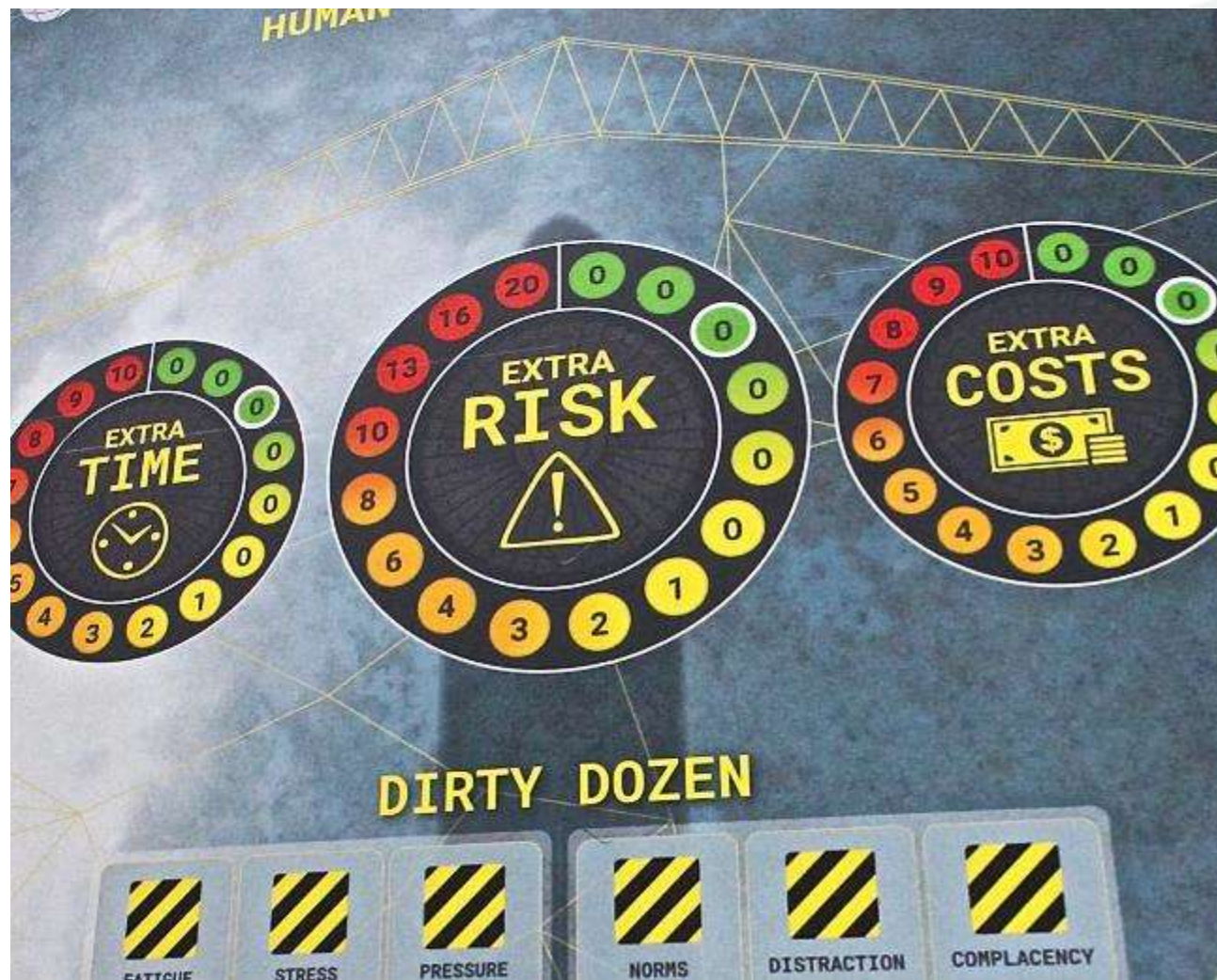
You replace the actuator straight away while the passengers wait in the aisle.

Option B

You ask the captain to send the passengers back to the terminal while you perform the repair job.


Option C

You inform the captain that you will defer the defect in accordance with the Minimum Equipment List.





CONSEQUENCES



THE PASSENGER SEAT

If the employee is Experienced: 



A
Passengers may distract you and create pressure, so you may feel compelled to select a "quick fix".

STRESS If the employee has LACK OF AWARENESS, DISTRACTION, COMPLACENCY, LACK OF TEAMWORK, LACK OF COMMUNICATION or LACK OF ASSERTIVENESS:  

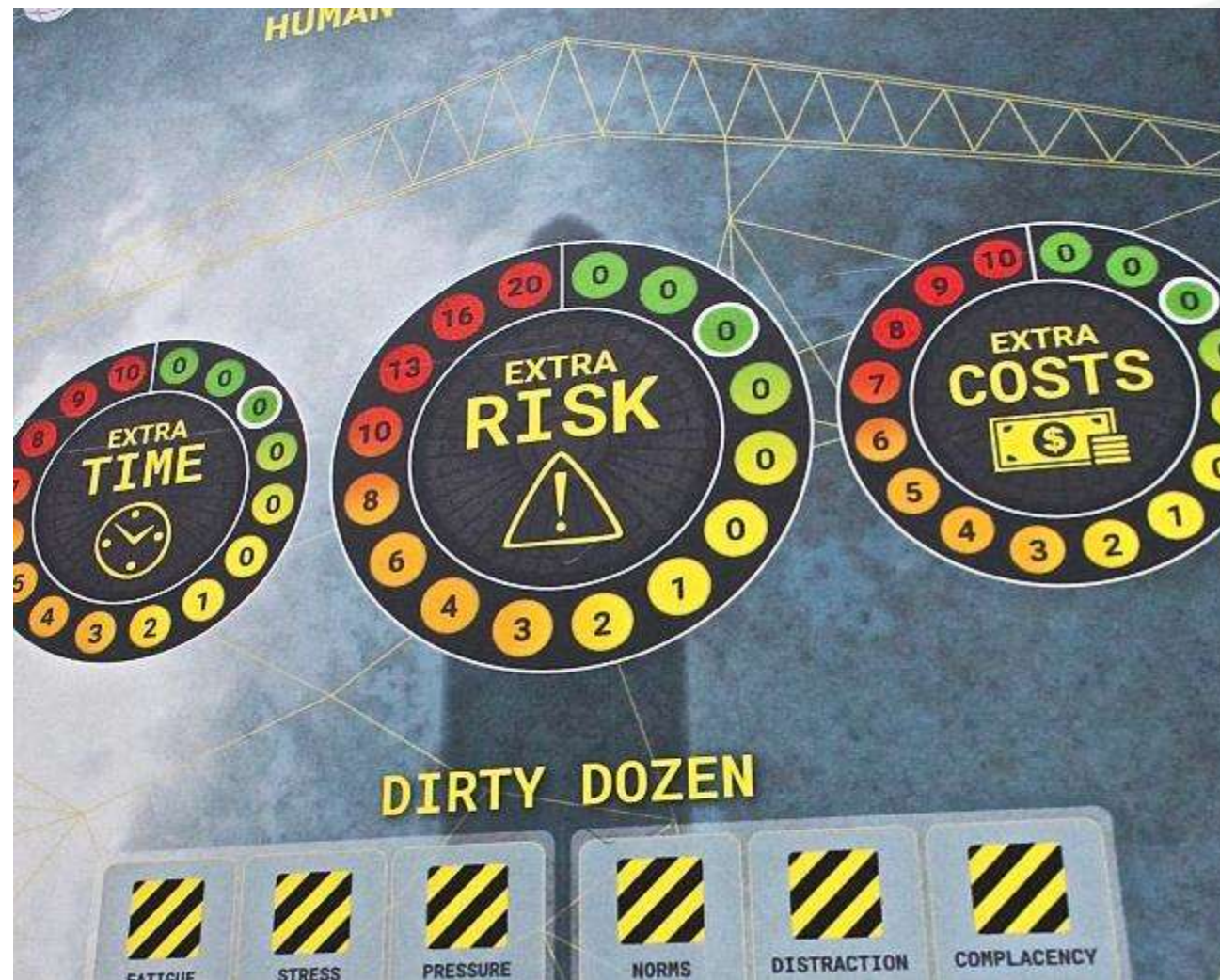
B
This puts a lot of operational pressure on both aircraft and ground crew.

PRESSURE If the employee has LACK OF TEAMWORK, LACK OF COMMUNICATION or LACK OF ASSERTIVENESS:  

C
Some passengers must be off-loaded.

PRESSURE If the employee has LACK OF TEAMWORK, LACK OF COMMUNICATION or LACK OF ASSERTIVENESS:  

5



BEST PRACTICES

Discuss which of these
Management tools that will help
create a more robust SAFETY
CULTURE.

Pick the 2 you think will help the
most in your organisation!

How could they be implemented
in your organisation?

☐ SAFETY SURVEY

☐ TOOLBOX MEETINGS

☐ TECHNICAL TRAINING

☐ MINIMUM STOCK LIST

ANALOQUE or DIGITAL?



BONUS: Assessment of Non-technical Skills

ASSESSMENTS



Non-Technical Skills Categories

TEAMWORK

LEADERSHIP & MANAGERIAL SKILLS

SOCIAL SKILLS



COMMUNICATION

WORKLOAD
MANAGEMENT

THREAT & ERROR
MANAGEMENT

SITUATIONAL AWARENESS

DECISION MAKING SKILLS

COGNITIVE SKILLS



ASSESSMENTS



FORMATIVE ASSESSMENT

- **Help students** identify their strengths and weaknesses and target areas that need work
- **Help faculty (Instructors)** recognize where students are struggling and address problems immediately and improve the training

SUMMATIVE ASSESSMENT

- **Evaluate student learning** at the end of an instructional unit by comparing against some standards or benchmark.



ASSESSMENTS in Practice

- It is behaviours that are observable and not the actual skills!
- Instructor knowledge of the NOTECHs Observable Behavioural markers is essential!
- Definition of effective Human factor behaviour is visible to the crew
 - Helps staff to compare own performance
- You ***MUST*** be ***OBJECTIVE*** in your assessment



OBJECTIVE versus SUBJECTIVE



OBJECTIVE	SUBJECTIVE
OBJECTIVE information is FACTUAL information based on OBSERVATIONS and MEASUREMENTS	SUBJECTIVE information is anything that is based on PERSONAL OPINIONS, JUDGMENT, FEELINGS, or POINTS of VIEW
VERIFIED with EVIDENCE	CANNOT be PROVED by EVIDENCE
UN-BIASED	BIASED
DOES NOT CHANGE	CHANGES depending on different PEOPLE

Benefits

- Engaging and motivating training
- Very high Learning Effect
- Assessment of non-technical skills in the classroom
- Value for money
 - High Return of Investment – also for the company



*"Education is NOT the learning of facts,
It is the training of the mind to THINK!"*

Albert Einstein

WHO WAS THIS GUY?

Søren Seindal Agner, CEO – AEROTEAM Training Solutions®

- ✈️ Tour Guide, Cabin Crew, Operations
- ✈️ Pilot
 - ✈️ Danish Air Transport (Short 7)
 - ✈️ Scandinavian Airlines (MD 80)
- ✈️ Ground Instructor – ATPL
- ✈️ CRM and Human Factors Trainer / Examiner
- ✈️ Multi Crew Course Instructor (MCCI)
- ✈️ Training Manager EASA Part 147
- ✈️ Member of The Danish Flight Safety Council since 2010
 - ✈️ Human Factors in Civil Aviation
- ✈️ INVENTOR of the MAYDAY Training Concept



PLEASE REMEMBER



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THANK YOU FOR YOUR ATTENTION