

LEARNING EFFECT?

TEAMWORK?

GAMIFICATION in
CLASSROOM TRAINING

ASSESSMENT?

NOTECHS?

**BENEFITS OF GAMIFICATION
IN THE CLASSROOM ENVIRONMENT
BY
SØREN SEINDAL AGNER
AEROTEAM TRAINING SOLUTIONS**

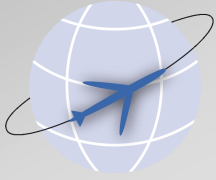


Tell me and I forget

Teach me and I remember

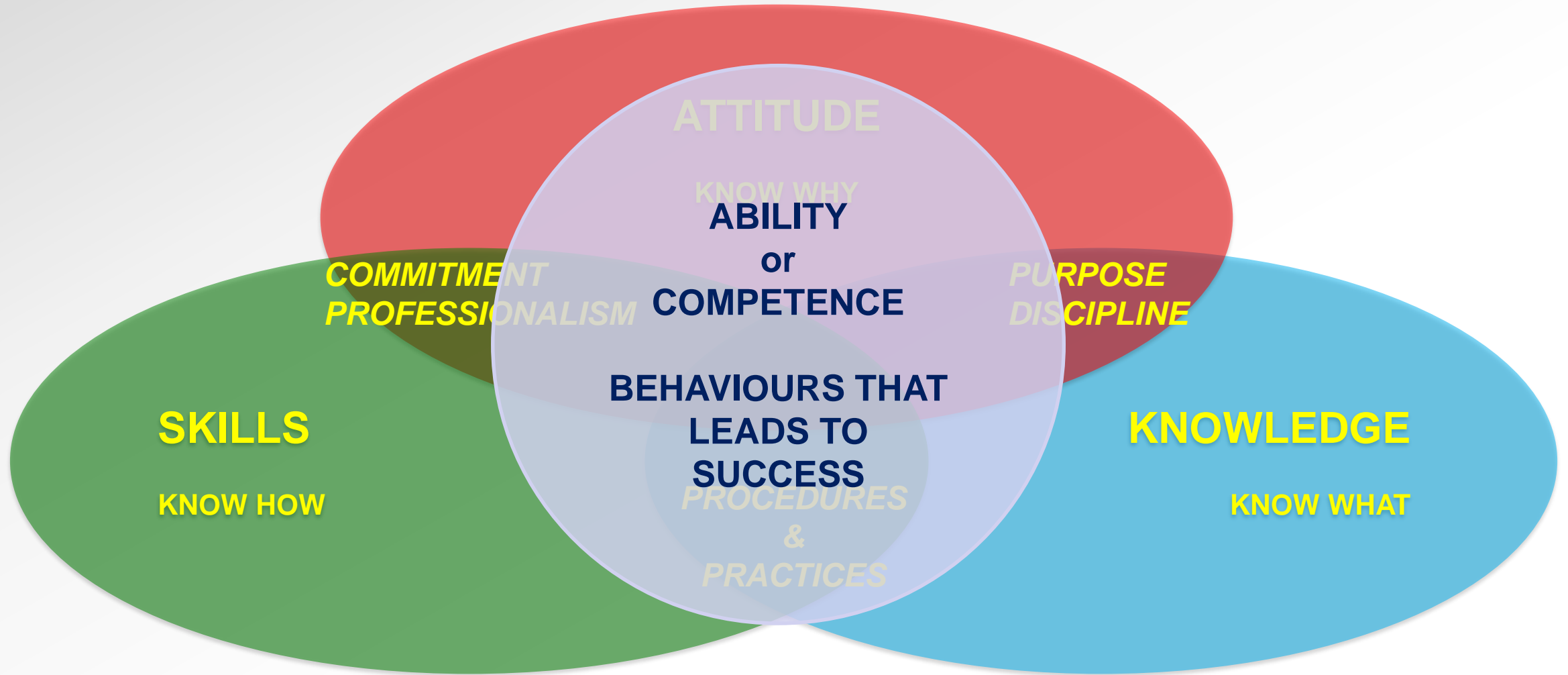
Involve me and I learn

Benjamin Franklin



ABILITY

SYNERGY OF YOUR ATTITUDE, KNOWLEDGE AND SKILLS



- ✈️ Learning games are Simulations
- ✈️ Learning by Doing or
 - ✈️ Learning by Simulation
- ✈️ Simulation creates a situation where ideas, decisions, or actions can be tried out safely
- ✈️ Consequences are visible
- ✈️ No actual risk



CREW TRAINING



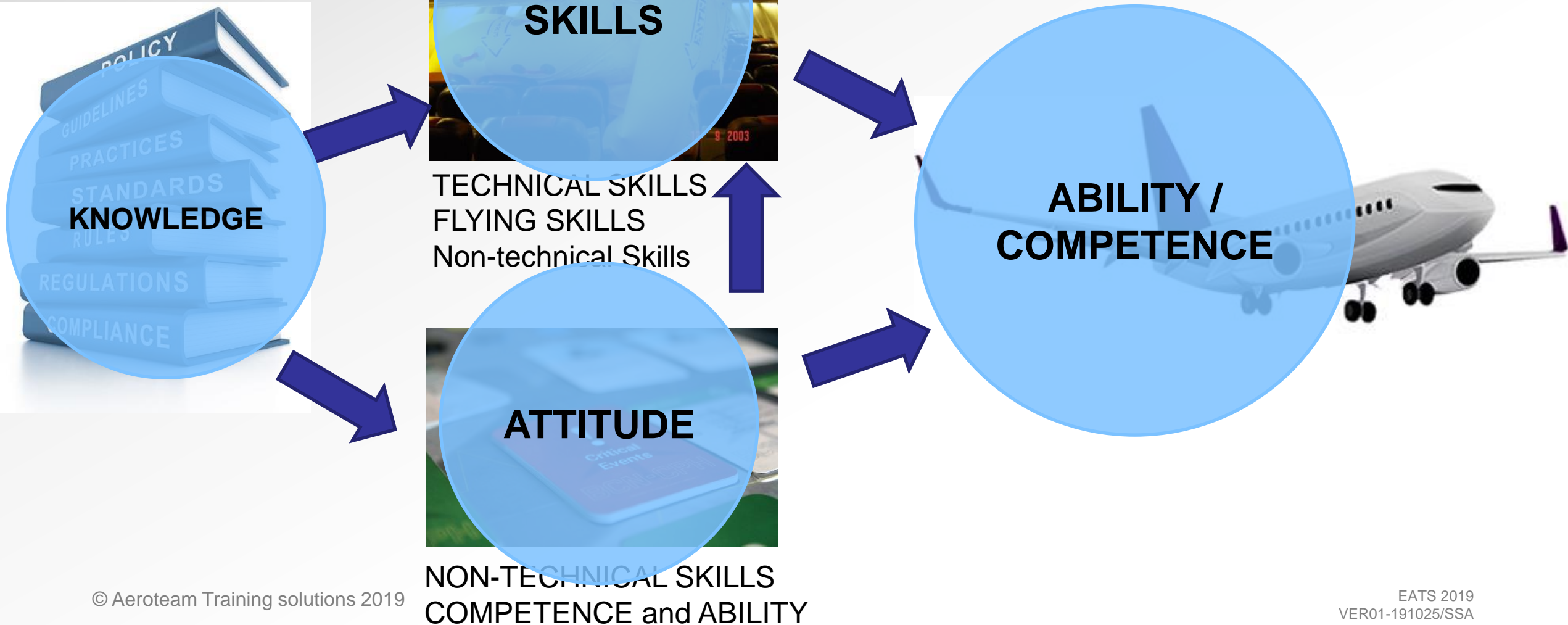
TECHNICAL SKILLS
Non-technical Skills

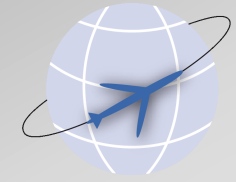


NON-TECHNICAL SKILLS
COMPETENCE and ABILITY



CREW TRAINING





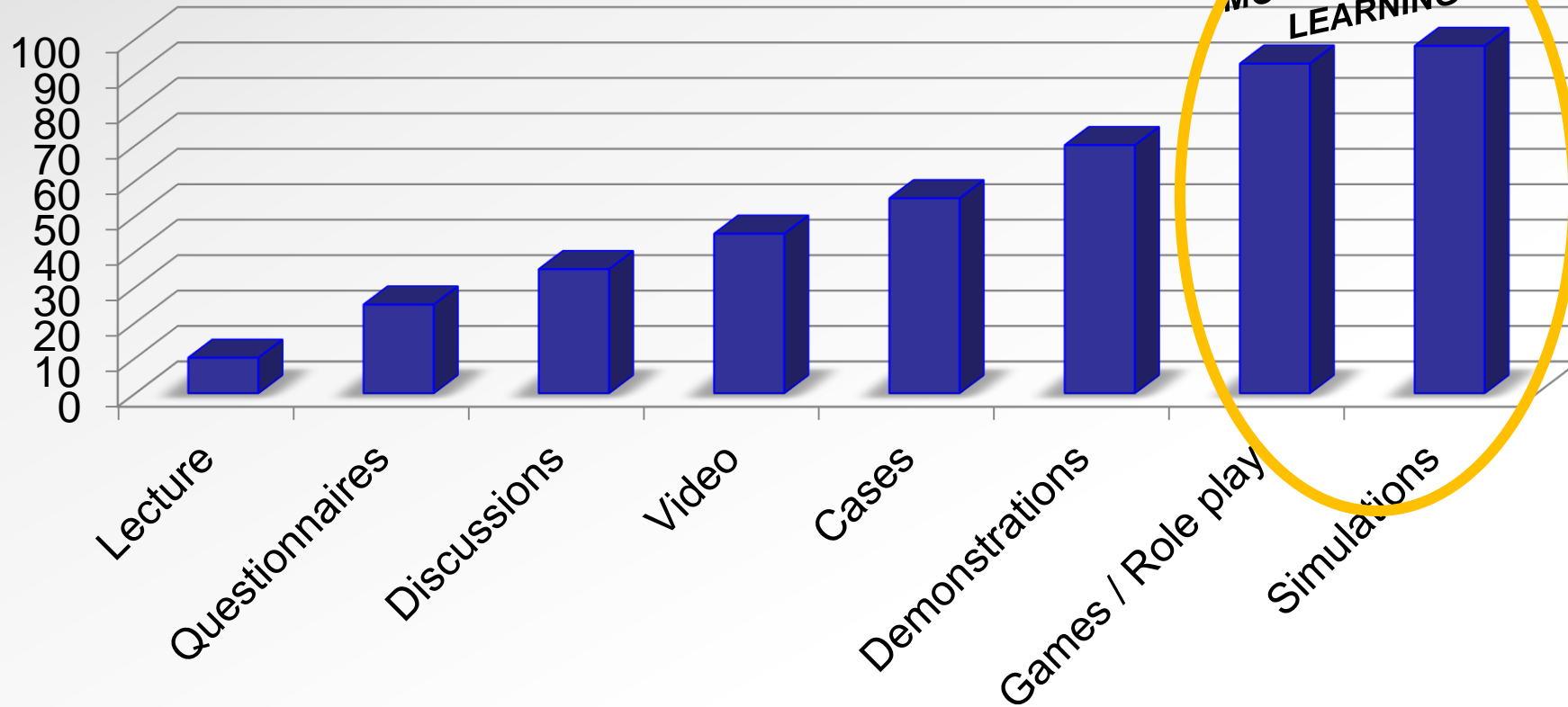
EFFECTIVE LEARNING METHODOLOGIES

LEARNING
EFFECT

LEARNING EFFECT

MOST EFFECTIVE
LEARNING

LEARNING EFFECT



LOW



STUDENT INVOLVEMENT

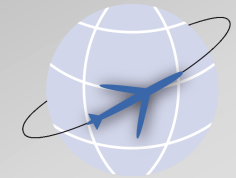
HIGH

LEARNING GAMES

ANALOGUE OR DIGITAL



FOCUSPOINT: Learning - Not entertainment



CREW SELECTION



Walther Harrison

Title: Pilot Age: 44

Walther is very experienced after 10 years as a fighter pilot in the Royal Airforce in the UK followed by seven years as commercial pilot. Never in doubt and calm as a rock. Rumor says that he once crashed a jet fighter during training in the US.

Mayday 1.0 crewmember 1



Joan Lindström

Title: CA1 / CA Age: 42

Joan is a very experienced stewardess and usually in the role as purser. She does not like too much small talk and apparently has no humor.

Mayday 1.0 crewmember 8

DILEMMA

Weather at destination 2

Check-in 1.3

Weather is deteriorating and snow clearing of runways is possible

A: Load extra fuel

Default: Stick to the original fuel calculation.

BCN-CPH

Mayday 1.0 event card no 4

Oven and coffee machine have no power. 2

Preflight 2.4

There is no power in two outlets out of six in forward galley.

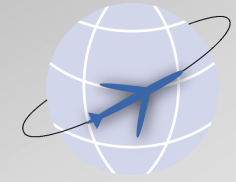
A: Call for a technician to fix the outlets.

B: Check C/B and call for a technician to disconnect the two outlet modules.

Default: Use other outlets

BCN-CPH

Mayday 1.0 event card no 10



DILEMMA

First Aid Kit 2

Preflight 2.1

The seal on a First Aid Kit is broken.

A: Wait for a new kit

B: Check contents is okay and write at note.

Default: Ignore

BCN-CPH

Mayday 1.3 event card no 7

Passenger Meals Missing 2

Preflight 2.3

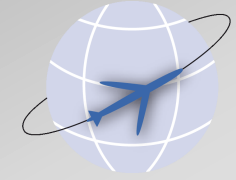
Two trolleys containing 50 passenger meals are missing.

A: Ask the catering for extra food. Expected delay: 20 - 25 minutes.

Default: Do nothing

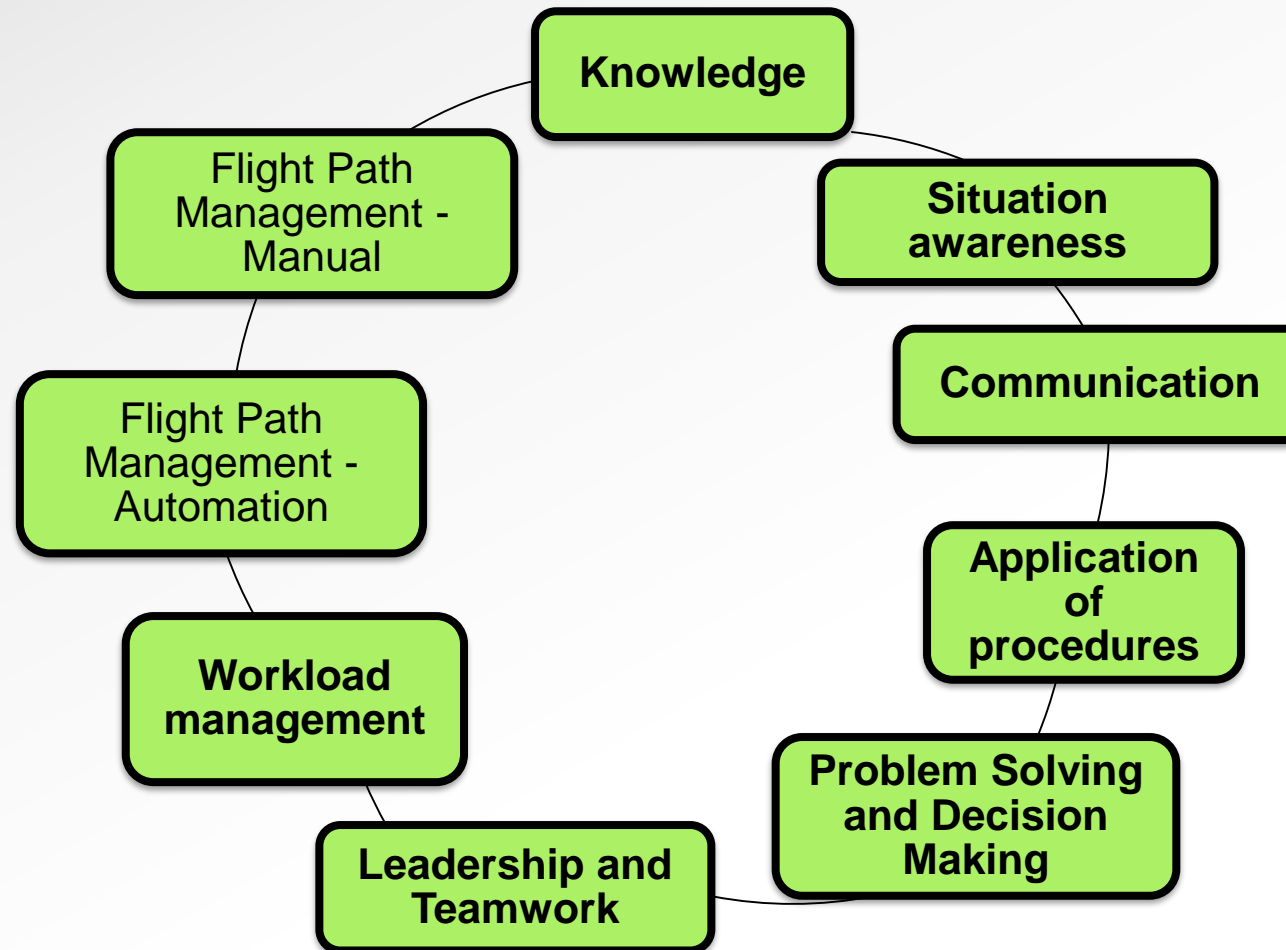
BCN-CPH

Mayday 1.3 event card no 9

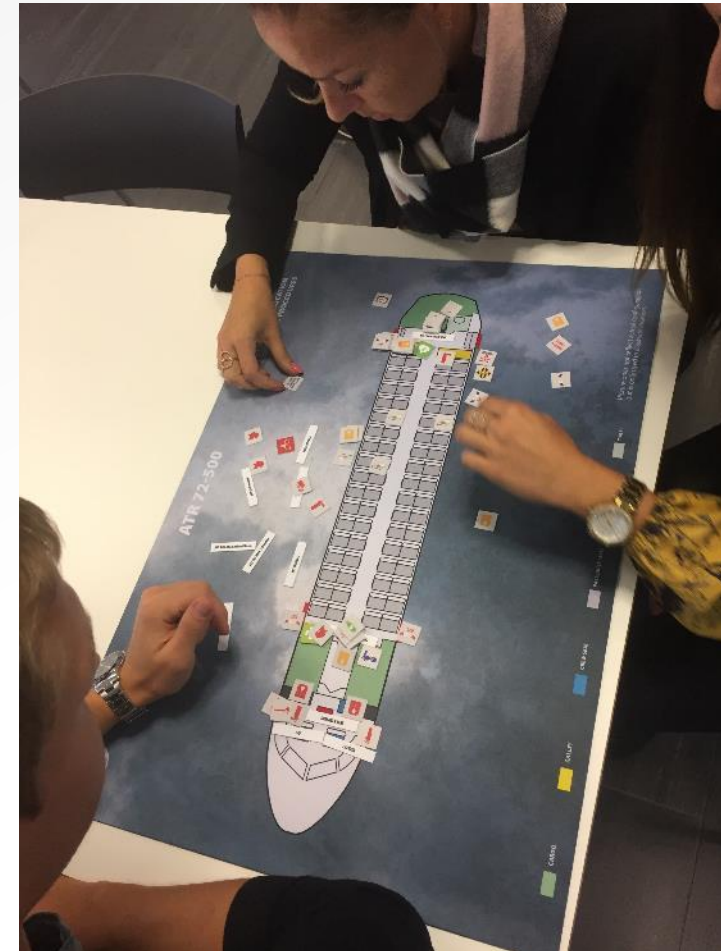


9 CORE Competencies

ICAO EBT Doc 9995



- ✈️ Safe to be challenged
- ✈️ It is OK (= SAFE) to make mistakes
- ✈️ Mistakes can be evaluated
- ✈️ Individual learning → in a dynamic social environment
- ✈️ Assessment of Non-Technical Skills (observable behaviours)



NOTECHS Categories

TEAMWORK

**LEADERSHIP &
MANAGEMENT
SKILLS**

SOCIAL SKILLS



**SITUATION
AWARENESS**

**DECISION MAKING
SKILLS**

COGNITIVE SKILLS



- Introduction of Learning Games into Crew Training will:
 - ✈ Enhance the Learning Effect by Active Participation
 - ✈ Enhance the Non-Technical Skills of the Crew
 - ✈ Connect Classroom Training to the Real World
 - ✈ Identify Problem Areas for Future Training (EBT)
 - ✈ Provide Possibility for Assessment of CRM Skills in the Classroom



- Introduction of Learning Games into Crew Training will:
 - ✈ Increase the Value of the Classroom Training
 - ✈ Provide Cost Effective, Efficient and Fun Training Sessions
 - ✈ Engage, Involve and Motivate the Participants
 - ✈ Enhance Instructor's Competence in CRM Assessment
 - ✈ Provide possibility to Measure the Learning Effect



 Learning games has to be:

Realistic – a Simulation of Reality

Simple – a Simple Presentation of Complex Problems

Precise – Clear and Precise Learning Objective

Well designed – Focussed on *Learning*, not Technology

Measureable for the Learning Effect.

"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, AEROTEAM

 Tour Guide, Cabin Crew, Operations

 Pilot

 Danish Air Transport (Short 7)

 Scandinavian Airlines (MD80)

 Ground Instructor – ATPL

 CRM Trainer / Examiner

 Multi Crew Course Instructor (MCCI)

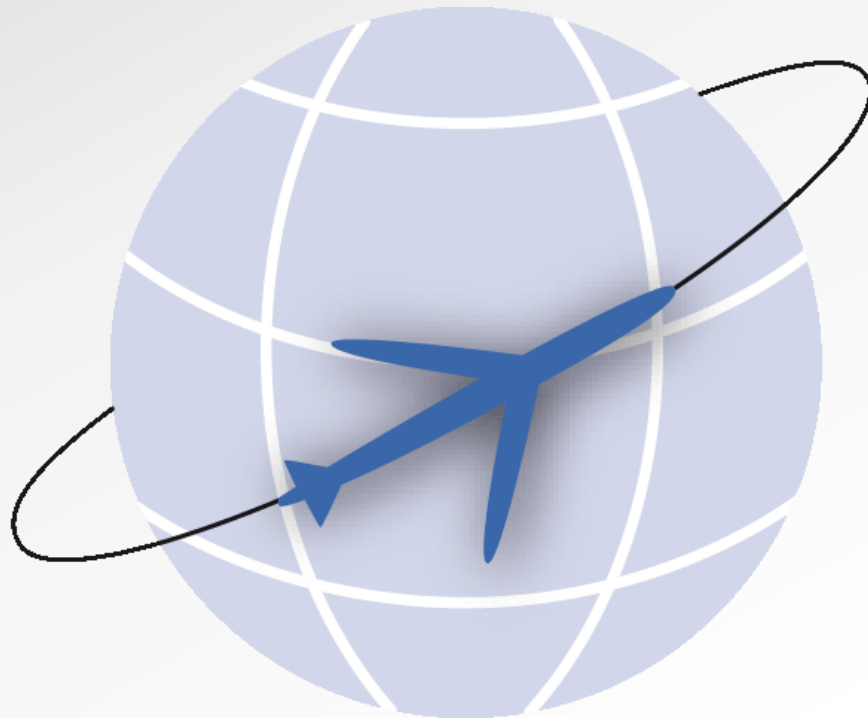
 Training Manager

 Member of The Danish Flight Safety Council since 2010

 Human Factors in Civil Aviation



THANK YOU FOR
YOUR ATTENTION!



AEROTEAM Training Solutions

Stratusvej 9,

7190 Billund, Denmark

+45 20 32 36 76

ssa@aeroteam.dk

www.aeroteam.dk

...if everything seems under control, you're not going fast enough...