

**AEROTEAM**

**MAYDAY**

CRM TRAINING CONCEPT

LEARNING EFFECT?

TRAINING TEAMWORK?

LEARNING GAMES

SIMULATIONS?

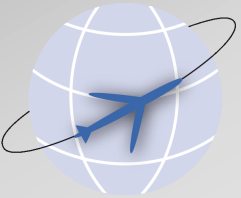
NOTECHS?

**BENEFITS OF LEARNING GAMES AND SIMULATIONS  
IN THE CLASSROOM ENVIRONMENT**

**BY**

**SØREN SEINDAL AGNER**

**AEROTEAM**

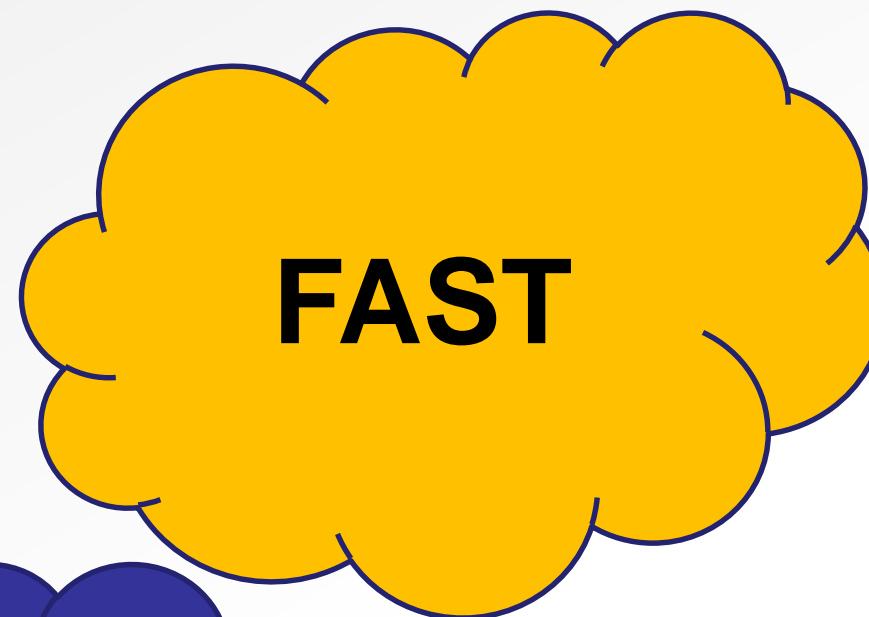


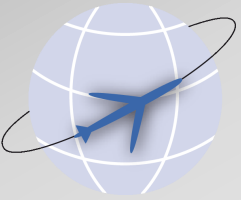
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# TRAINING

# MAYDAY

CRM TRAINING CONCEPT





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# EFFECTIVE LEARNING METHODOLOGIES

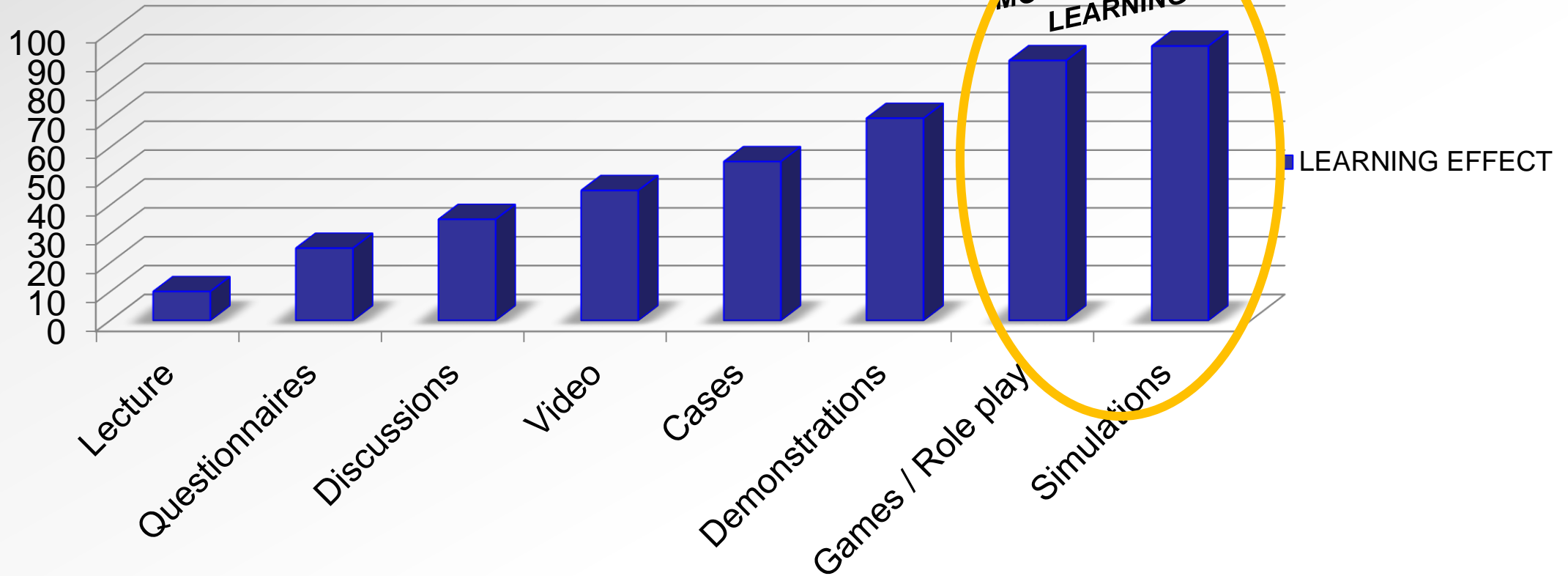
# MAYDAY

CRM TRAINING CONCEPT

LEARNING  
EFFECT

## LEARNING EFFECT

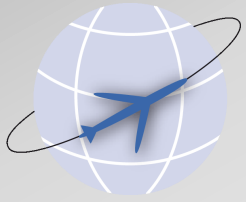
**MOST EFFECTIVE  
LEARNING**



PASSIVE ←

STUDENT INVOLVEMENT

→ ACTIVE



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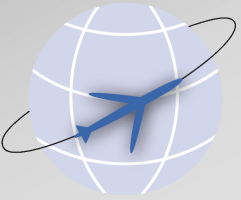
# SIMULATIONS

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CRM TRAINING CONCEPT

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





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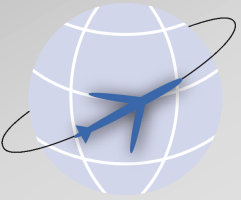
# Human Factors and Flight Safety

**MAYDAY**

CRM TRAINING CONCEPT

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





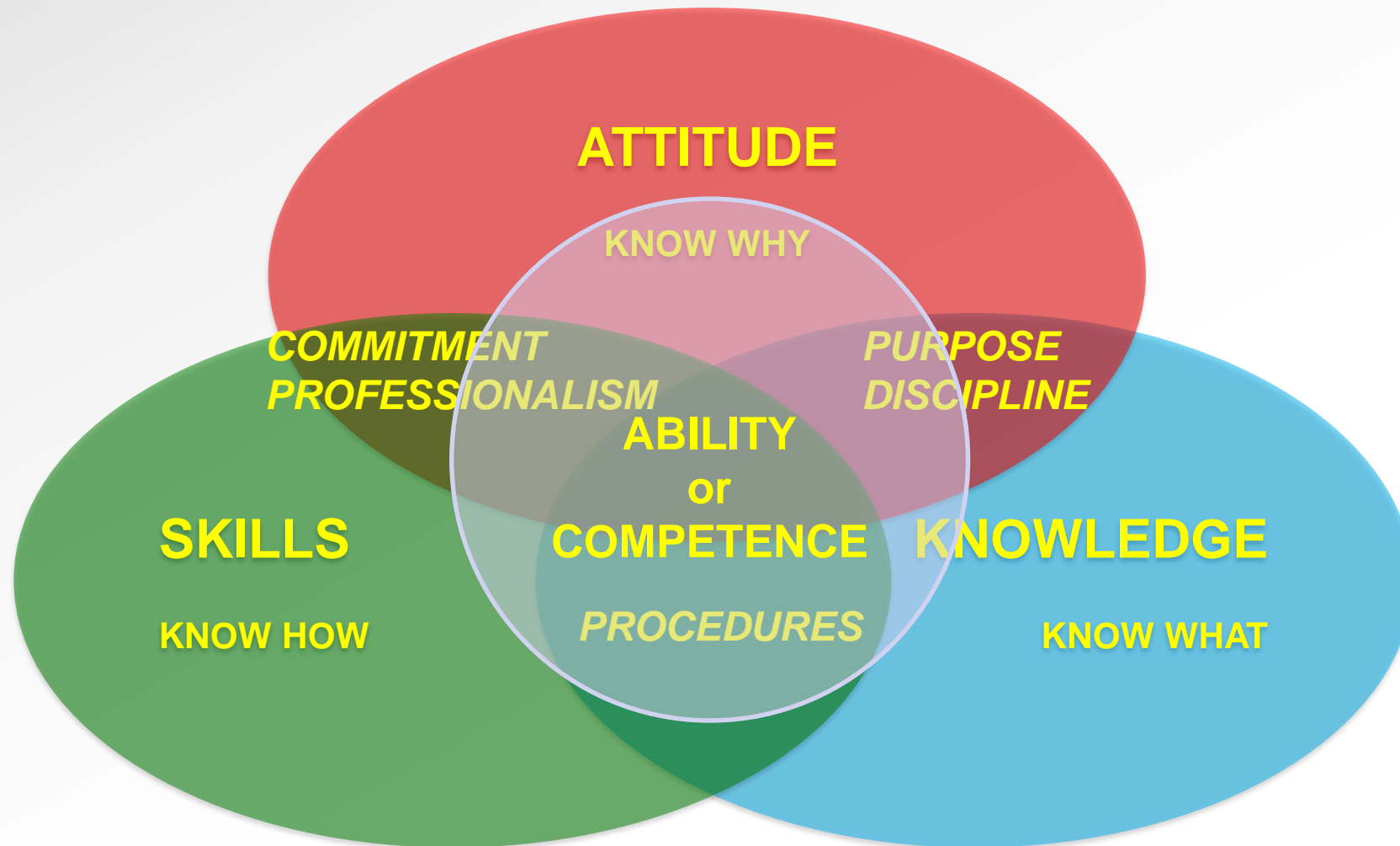
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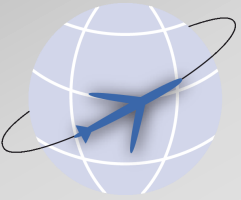
# ABILITY

SYNERGY OF YOUR ATTITUDE, KNOWLEDGE AND SKILLS

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CRM TRAINING CONCEPT





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# NOTECHS Categories

# MAYDAY

CRM TRAINING CONCEPT

**TEAMWORK**

**LEADERSHIP &  
MANAGEMENT  
SKILLS**

***SOCIAL SKILLS***

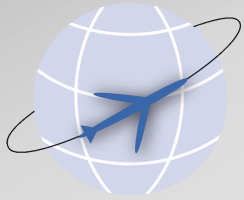


**SITUATION  
AWARENESS**

**DECISION MAKING  
SKILLS**

***COGNITIVE SKILLS***





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# INTRODUCTION

# MAYDAY

**CRM TRAINING CONCEPT**



**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



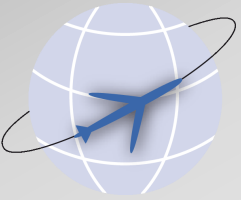
**Joan Lindström**

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





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# DILEMMA

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CRM TRAINING CONCEPT

**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.

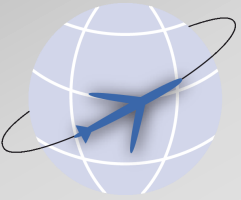
*A: Call for a technician to fix the outlets.*

*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



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## TRAINING

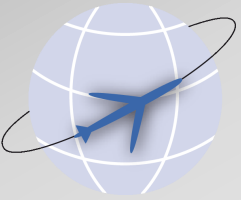


TECHNICAL SKILLS  
FLYING SKILLS  
Non-technical Skills



NON-TECHNICAL SKILLS  
COMPETENCE and ABILITY





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# TRAINING



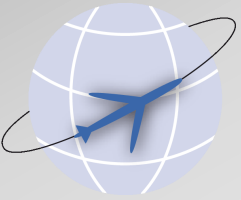
**SKILLS**

TECHNICAL SKILLS  
FLYING SKILLS  
Non-technical Skills

**ATTITUDE**

NON-TECHNICAL SKILLS  
COMPETENCE and ABILITY

**ABILITY /  
COMPETENCE**



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# LEARNING GAMES

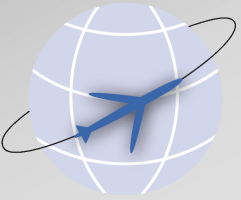
ANALOGUE OR DIGITAL

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CRM TRAINING CONCEPT



**FOCUSPOINT:**  
***It is Learning – Not entertainment***



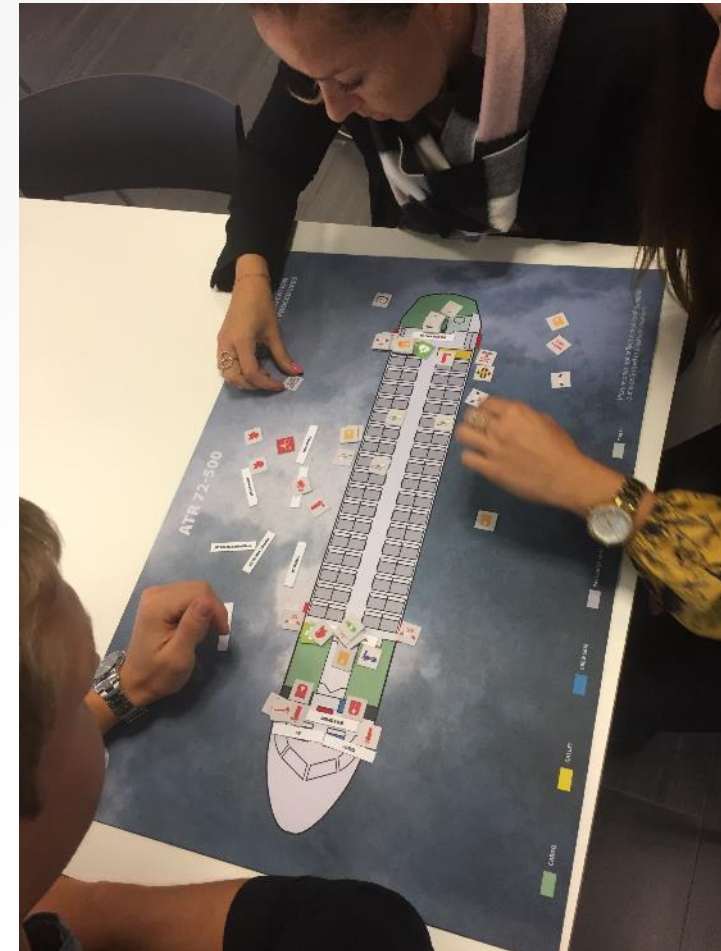
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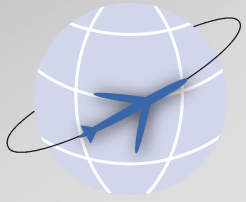
# INDIVIDUAL SOCIAL LEARNING

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CRM TRAINING CONCEPT

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





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# SUMMARY

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CRM TRAINING CONCEPT

 Learning games has to be:

**Realistic** – a simulation of reality

**Simple** – simple presentation of complex problems

**Precise** – clear and precise learning objective

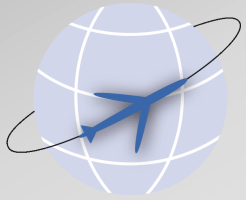
**Well designed** – focus on the *learning*, not technology

**Measureable** for the learning effect.



- Introduction of Learning Games into the training will:
  - ✈️ Connect classroom training to the *'Real World'*
  - ✈️ Enhance learning effect and motivation by active participation
  - ✈️ Define problem areas for future training (EBT)
  - ✈️ Enhance the Non-technical Skills
  - ✈️ Enhance Instructor Assessment Skills
  - ✈️ Cost-effective training






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# WHO WAS THIS GUY?

**MAYDAY**

CRM TRAINING CONCEPT

## **Søren Seindal Agner, AEROTEAM**

 Tour Guide, Cabin Crew, Operations

 Pilot

 Danish Air Transport (Short 7)

 Scandinavian Airlines (MD 80)

 Ground Instructor – ATPL

 CRM Trainer / Examiner

 Multi Crew Course Instructor (MCCI)

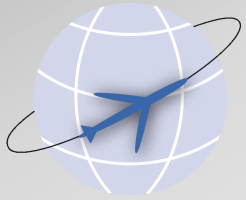
 Training Manager

 Member of The Danish Flight Safety Council since 2010

 Human Factors in Civil Aviation





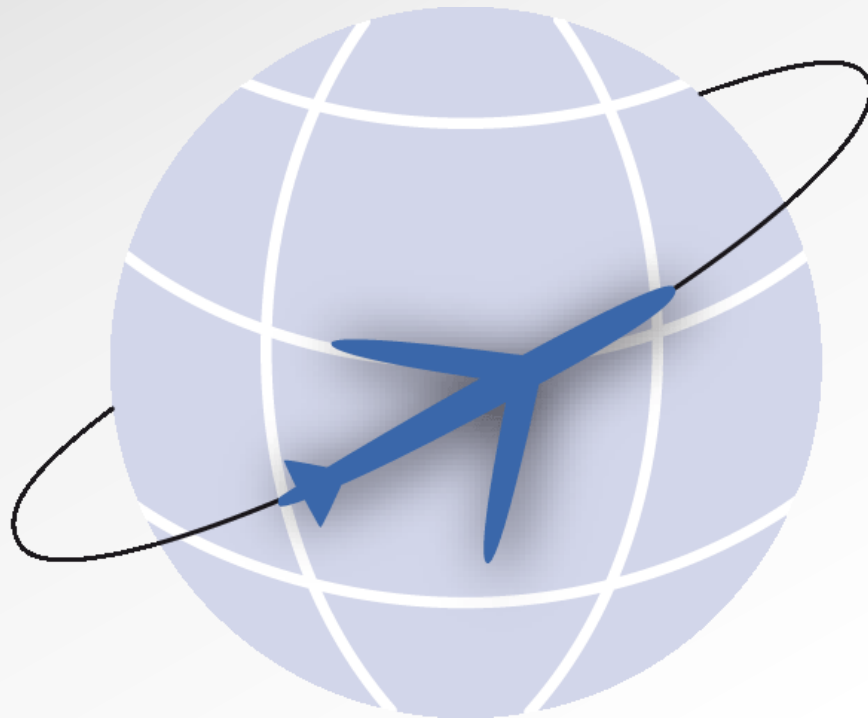


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THANK YOU FOR  
YOUR ATTENTION!

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CRM TRAINING CONCEPT



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