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# MPL as a Regulation Keeping the End Goal in Mind

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# MPL as a Regulation

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MPL symposium

## Elements:

- What is MPL?
  - ICAO Definitions
  - Competency Matrix
- MPL Course Structure
- Etihad Airways MPL Program

# What is MPL?



“

MPL is competency based which utilizes specific Knowledge, Skills and prescribed Attitudes (KSA's) established through task analysis and applied through instructional design.

”

“MPL training is dynamic rather than hours-prescriptive.

It is based on training to the final competencies required to operate modern jet transport aircraft

”

# MPL

## MPL SYMPOSIUM



MPL (Multi-crew Pilot License) was introduced by ICAO in 2006 as a **competency based training** program

- A modern approach to training which enhances safety and increase efficiency in Pilot Training
- Reverse-engineered, purpose built, custom training program for the airline operations
- ICAO Doc 9868 outlines the guidelines for implementing a MPL course, but each course is **unique** to the **airline training partner**
- The end result is a resilient, knowledgeable, professional type-rated Pilot who has been trained by not only FIs / TRIs, but also Instructors within the airline, from early on in the Cadet's training progress

“

Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

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ICAO

# ICAO Pilot Competencies

## MPL SYMPOSIUM

Competency based training is NOT training and checking

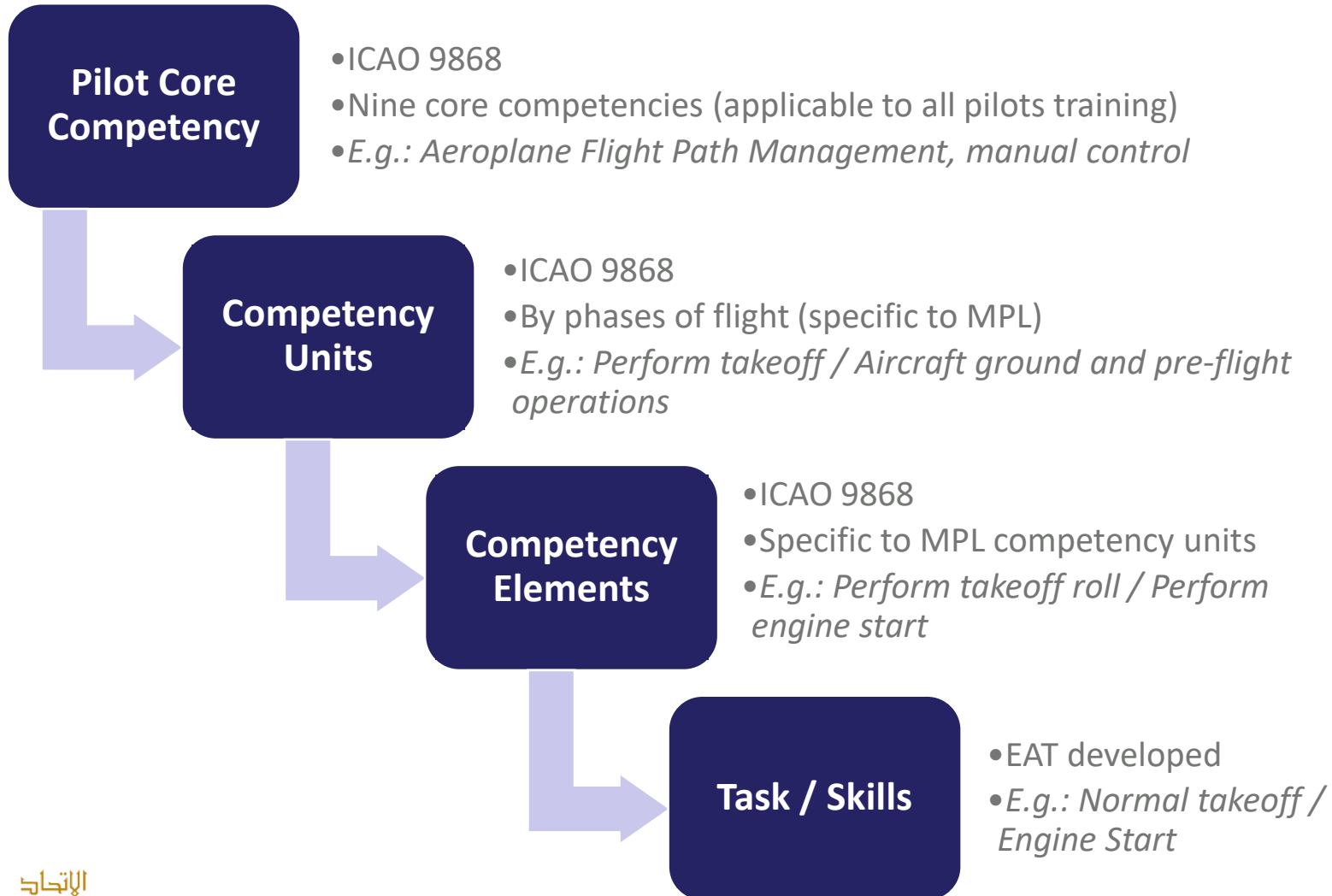
- Assessing whether the trainee is where they should be at that given time in the course
- Trainees do not need to be completely proficient until they reach the end
- The 9 ICAO pilot competencies (PC) are:
  - Application of Knowledge
  - Application of Procedures and Compliance with Regulations
  - Communication
  - Aeroplane Flight Path Management, automation
  - Aeroplane Flight Path Management, manual control
  - Leadership and Teamwork
  - Problem Solving and Decision Making
  - Situation Awareness and Management of Information
  - Workload Management





# MPL COURSE DESIGN

MPL SYMPOSIUM



	<b>MULTI-CREW PILOT LICENSE TRAINING MANUAL</b> Core Phase MEP (Lesson Plans)	Chapter: 5
		Page: 34
		Rev: 04
		Date: DD MMM 21

f. Lesson plan:

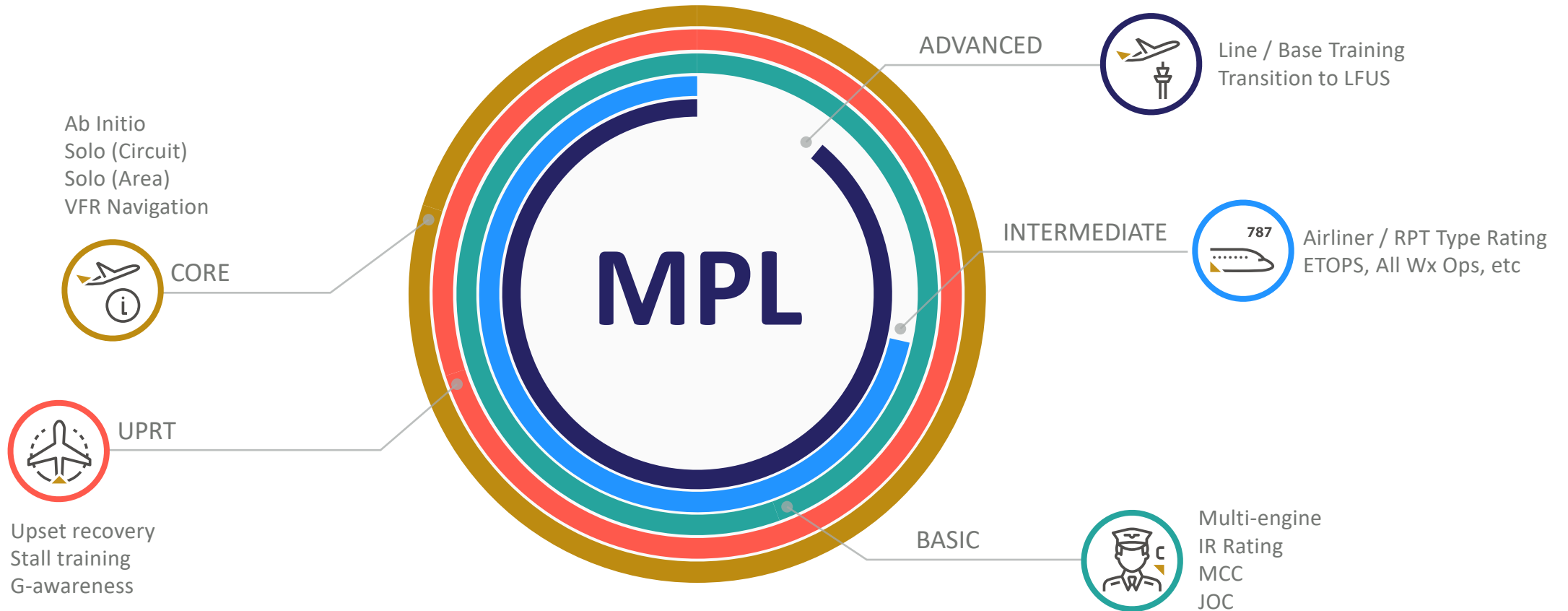
LESSON 7 (CS) – ADVANCED MANOEUVRES				
LONG BRIEFING	CREW	TIME	START	
BRIEFING TOPICS	#	TASKS/SKILLS	PER	
<ul style="list-style-type: none"> <li>• Starter Failure</li> <li>• Slow Flight</li> <li>• Steep turns</li> <li>• UPRT</li> </ul>	1	<b>PRE-FLIGHT PREPARATION &amp; PROC.</b>		
	1.3	Pre-flight briefing	HIGH	
	1.4	Mass & balance, performance calculation	HIGH	
	1.7	Engine starting & after start procedures	HIGH	
	1.8	Taxiing	HIGH	
	1.9	Aerodrome operations	MED	
	1.10	Before takeoff procedures	HIGH	
	1.11	Runway alignment procedure	HIGH	
	<b>COMPLETION STANDARDS</b>			
	<ul style="list-style-type: none"> <li>• Properly execute in-flight pre-maneuvres checks</li> <li>• Conduct flight at critically slow flight</li> <li>• Perform advanced turning manoeuvres to identify and recover from aircraft upset</li> </ul>	2	<b>TAKEOFF, LANDING &amp; GO-AROUND</b>	
		2.1	Normal takeoff & climb	MED
2.2		Normal approach & landing	LOW	
2.3		Stabilized approach criteria	LOW	
2.6		Climb	HIGH	
<b>TEM EMPHASIS ITEMS</b>				
<ul style="list-style-type: none"> <li>• Exceeding aircraft limitations</li> <li>• Aircraft Upset</li> <li>• Low speed aircraft handling</li> </ul>	3	<b>AIRWORK &amp; HANDLING</b>		
	3.0	General aircraft handling procedures	LOW	
	3.4	Climbing	HIGH	
	3.5	Climbing & descending turns	HIGH	
3.6	Descending	HIGH		
3.9	Steep turns	LOW		
3.11	Flight at critically low airspeed	LOW		
6	<b>ROUTE FLYING &amp; APPROACHES</b>			
6.3	Descent	MED		
6.4	Departure/arrival procedures VFR	MED		
7	<b>ABNORMAL &amp; EMERGENCY PROCEDURES</b>			
7.42	Abnormal engine start	LOW		
9	<b>TECHNICAL SKILLS</b>			
9.1	ATC liaison, compliance & R/T procedures	MED		
9.2	Corrective actions	LOW		
9.3	Handling skills	LOW		
10	<b>NON-TECHNICAL SKILLS</b>			
10.12	SOP compliance	MED		
10.16	TEM principles	LOW		
11	<b>POST-FLIGHT</b>			
11.1	After landing, parking & securing	HIGH		
11.3	Post-flight briefing	HIGH		
11.4	Self-assessment	MED		

# MPL versus ATPL

MPL-I Training

# MPL vs ATPL

## MPL symposium



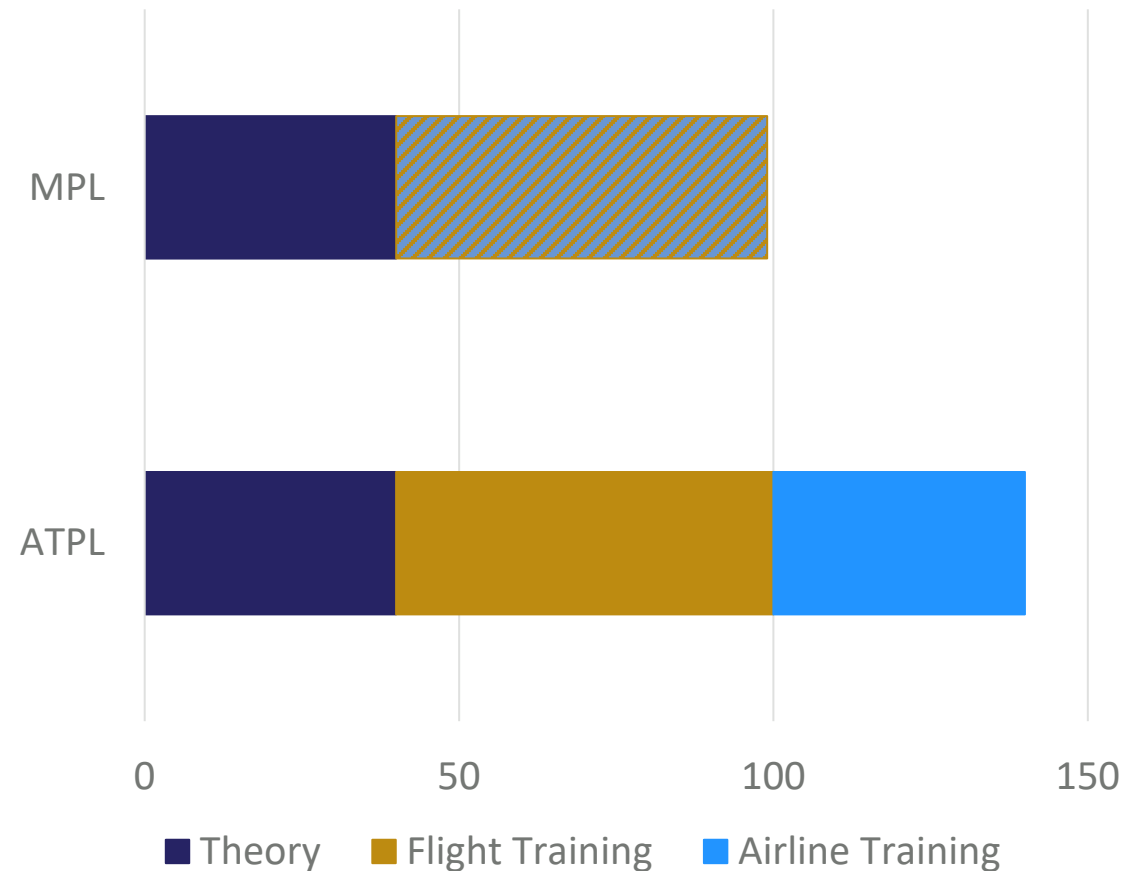
# MPL Today

MPL SYMPOSIUM

Developed 2002-2006

- ICAO FCL TP – ICAO Doc 9868
- More efficient than previous methods of Instruction
- Focused training program reverse-engineered from Airlines (A320 / B787)
- Non-prescriptive method of training, equipment varies from jets to piston aircraft

Course Comparison Table  
Weeks of Training



Etihad Airways

MPL Program

MPL-I Training

# ETIHAD AIRWAYS CADETS

Etihad Aviation Training provides in-house ground and flight instruction for the Etihad Airways Multi-Crew Pilot License (MPL).

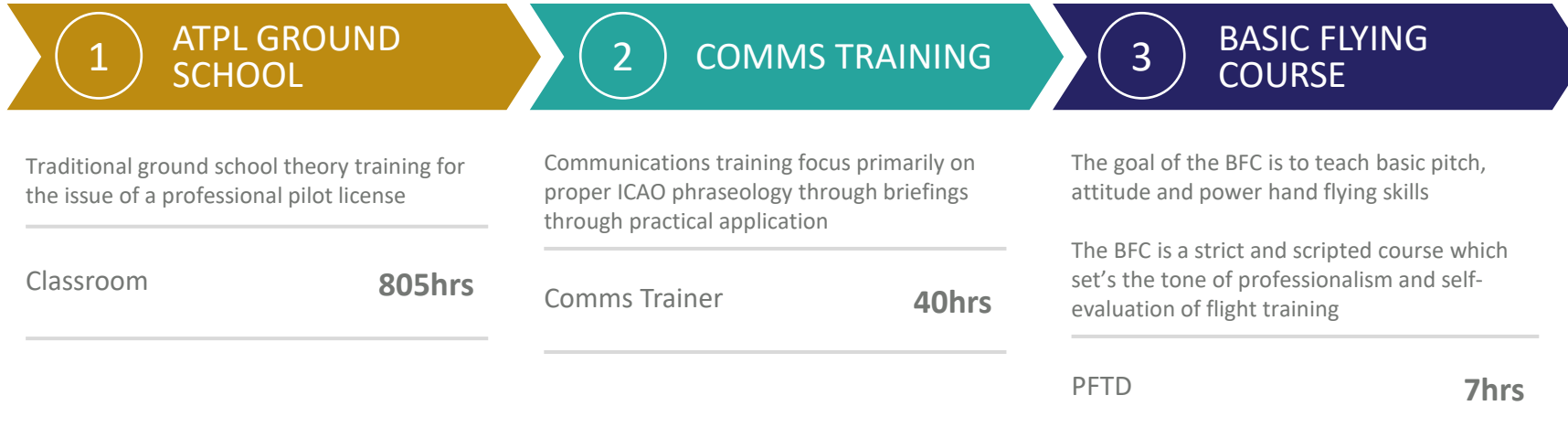
The first MPL training course was launched in 2014, further developed into a full Jet program in 2016 and at its latest revision in 2022.

Successful cadets will be selected to fly for Etihad Airways on either the Airbus A320 or Boeing 787 fleet of aircraft and connect Abu Dhabi to multiple destinations around the world



# Etihad Airways Multi-crew Pilot License

MPL symposium



# Etihad Airways Multi-crew Pilot License

MPL symposium

1 CORE PHASE	2 BASIC PHASE	3 INTERMEDIATE PHASE	4 ADVANCED PHASE
Multi-engine General Handling, SPIC, introduction Multi-crew & IFR and UPRT	Advanced Multi Crew Operations & IFR on Phenom 100E device	Introduction to advanced jet transport aircraft and airline specific procedures	LOFT, LFUS & Base Training preparation
Aircraft (53.5 MEP, 3 UPRT) <b>56.5hrs</b>	FNPT II <b>44hrs</b>	FTD <b>70hrs</b>	FTD <b>4hrs</b>
FNPT II <b>30.5hrs</b>		FFS <b>80hrs</b>	FFS <b>44hrs</b>



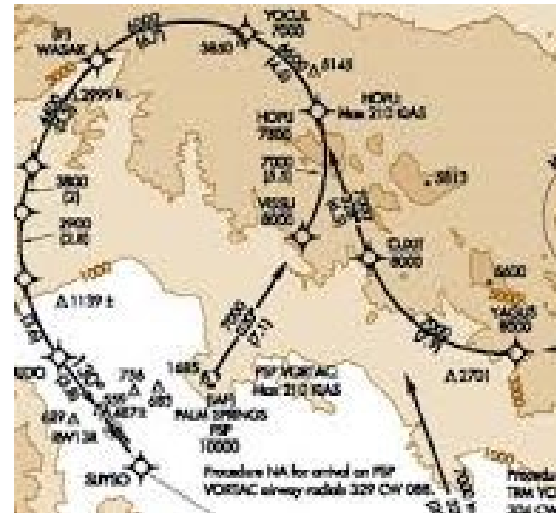


# Threat and Error Management

MPL SYMPOSIUM



- TEM is embedded within the MPL on each lesson and briefing
  - TEM Emphasis Items on the lesson plan
  - Departure and arrival briefings include TEM
- Develop cadet's problem identification and solving skills
- Continue to reinforce this philosophy which aids in decision making and leadership skills in time



# Regulation vs End Goal

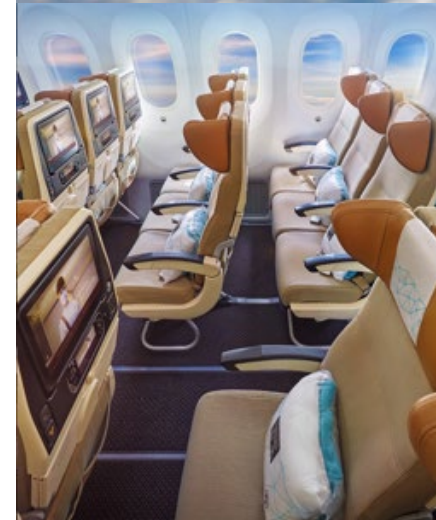
## MPL symposium

The current regulations from ICAO are not as descriptive as equivalent CPL or ATPL programs

The following needs to be considered when implementing MPL courses:

- To restrictive regulations will hinder the end goal
- No guidance will result in “shortcuts”
- Operators adapting existing programs to fit the MPL training

Ethihad Aviation Training has successfully trained over 450 MPL cadet both under GCAA and EASA regulations since 2014.



“Coming together is the beginning. Keeping  
together is progress.  
Working together is success.

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# Q&A



Thank  
*You*