

The Role of Training **Organisations in Al** & Cyber Security

Eric Schoonderwoerd & Jonathan G. Hoepel

PLATINUM EXCELLENCE





















Evolution of Aviation Technology

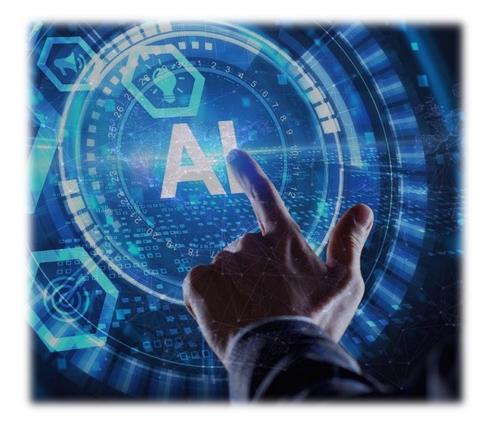
- **1903**: First powered flight.
- **1914-1918**: World War Laccelerates aircraft development.
- **1920s-1930s**: Commercial aviation emerges (airlines and passenger flights).
- **1933**: First modern airliner with all-metal construction and retractable landing gear.
- 1939-1945: World War II Aircraft technology advances rapidly for military purposes.
- **1960s**: Computerized flight control systems and autopilots.

- **1970s-1990s**: Digital avionics, fly-by-wire technology and GPS navigation systems.
- **1990s**: Glass cockpit displays, replacing traditional analog gauges with electronic displays.
 - **2000s**: Integration of carbon composites for lighter, more fuel-efficient aircraft.
- 2010s: Unmanned aerial vehicles (UAVs) and drones for surveillance, cargo delivery and aerial photography.
- **2020s**: Electric and hybrid-electric propulsion systems for greener aviation.



Artificial Intelligence in Aviation

- Artificial Intelligence (AI) offers transformative potential in revolutionizing traditional aviation training frameworks.
- AI can personalize learning experiences, simulate real-world scenarios and ensure the timely dissemination of up-to-date knowledge.
- By leveraging Al-driven training tools, aviation professionals can enhance their understanding and application of complex aviation regulations.





Cyber Security Threats

- Interconnected aviation systems are vulnerable to cyber threats, posing risks to safety & security.
- Cyber-attacks on aviation can have catastrophic consequences, highlighting the importance of robust Cyber Security measures.





The Role of Training Organisations

Building a Strong Foundation in AI & Cyber Security principles

· Understanding algorithms, machine learning and cybersecurity protocols.

Provide Personalized Learning Experiences & Practical Training

• Simulated cyber-attack scenarios and hands-on experience in AI development prepare professionals for real-world challenges.

Adapt to Technology Advancements

 Collaboration with industry partners and regulatory bodies ensures training reflects the latest innovations and best practices.



Welcome to Fundamentals of Instructional Competencies

Module 0 addresses:

Course navigation instructions





-Fundamentals of Instructional Competencies C Module 0 Attendance (()) recommendations Find a quiet place Volume check Full screen view Time management 3 months for course completion **Review content** Back Next

▶ 00:49,01 📢

 \sim

Fundamentals of Instructional Competencies



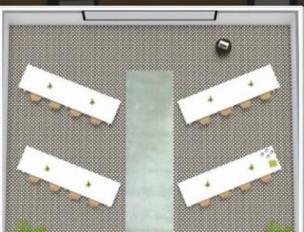
Section 5 Comfort and accessibility







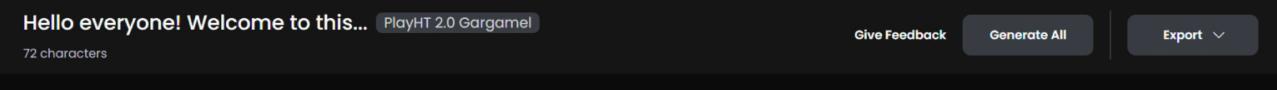






▶ 00:36,43 📢





		은 ⁾ William 1.0x					ģţţ	🚔 Advanced voice controls						
(0	Hello everyone! Welcome to this presentation on Artificial Intelligence.					SE	ETTINGS			nc	Regenerate		
							St	tability		(i) ∍t(1)		
		▶					Si	Similarity			ì			
						In	Intensity 👄		(ì				
	Press enter or click here to create a new paragraph						adjustments (Stability, Similarity, Intensity)							
-	00:00.00	00:00.00/00:04.69						M		than those curr			- €	
C	0:00	0	:11 1	0:22	0:33			0:44	0:55	1:06		1:17		
Audio	Hello ev	ve				(
											•	• 00:23,34	-	

The Role of Training Organisations

Foster a culture of Vigilance & Accountability

- Promoting awareness and responsibility among aviation professionals regarding AI and Cyber Security.
- Encouraging a culture of continuous learning and improvement to stay ahead of emerging threats.





Conclusion

- Training organisations are instrumental in shaping the future of AI and Cyber Security in civil aviation.
- By prioritizing education,

collaboration and vigilance; we can ensure the safety and security of our skies for generations to come.





EASA PART-IS & Cyber Security

- Part-IS introduces requirements for the identification and management of information security risks which could affect information and communication technology systems and data used for civil aviation purposes.
- EASA PART- Information Security (IS) training course for all that must comply to the new regulation regarding the management of information security risks with a potential impact on aviation safety:
 - <u>https://jaato.com/courses/1219/easa-part-is/</u>
- Aviation Cyber Security training course: covering the various elements of a cyber attack within the aviation industry, strengthening one's knowledge on cyber and bringing about increased awareness of such threat, creating a cyber-security culture.
 - https://jaato.com/courses/1012/aviation-cyber-security/



EATEO Seminar 24 June 2024



ORGANISERS: EUROPEAN ASSOCIATION OF AVIATION TRAINING ORGANISATIONS – EATEO JOINT AVIATION AUTHORITIES TRAINING ORGANISATION – JAA TO

PROGRAMME

"SAFEGUARDING AVIATION: RESPONDING EFFECTIVELY TO CONFLICT-RELATED DISRUPTIONS"

THANK YOU