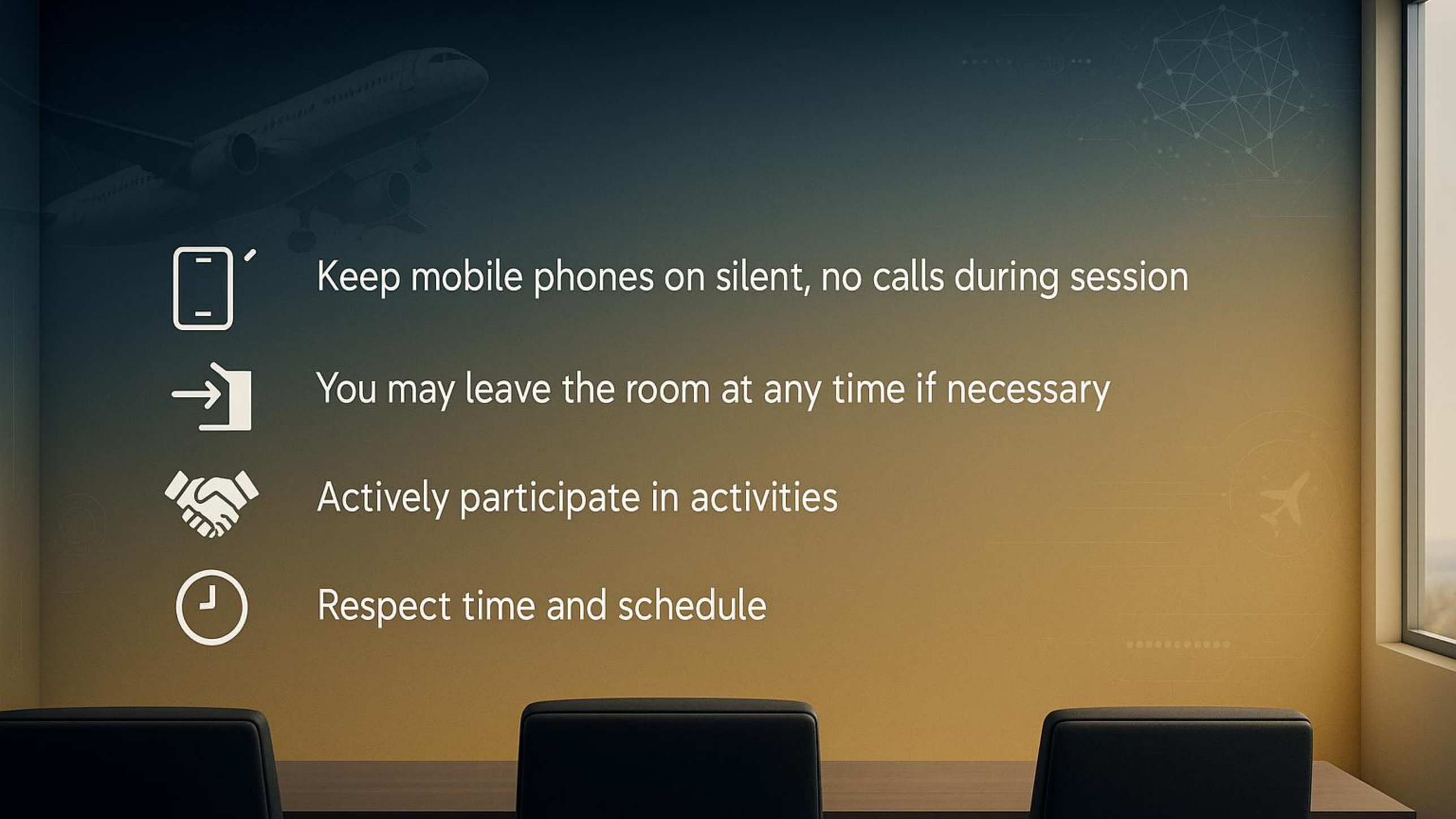
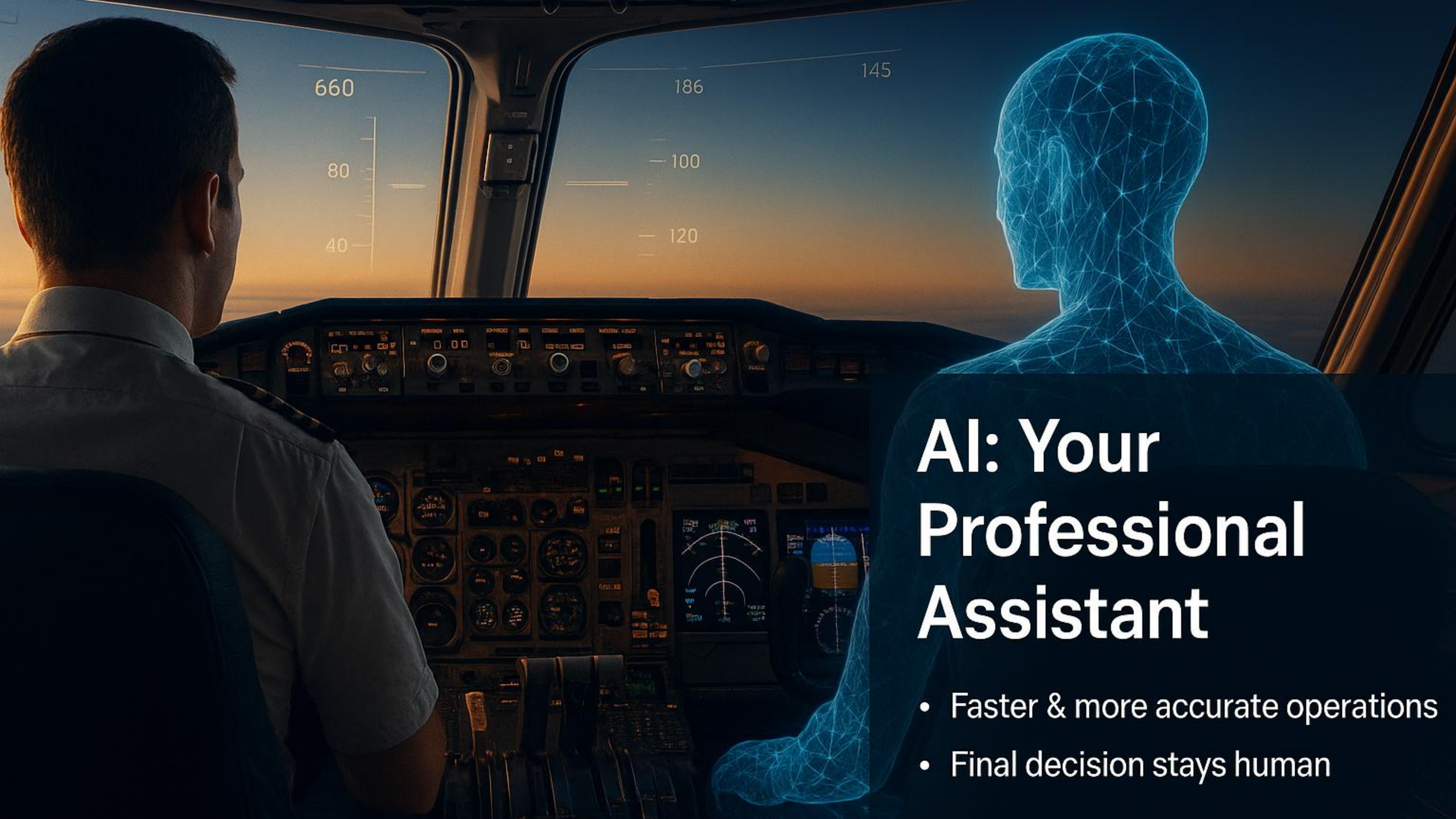
Application of Artificial Intelligence in Aviation

Final Project – TIC Course | Focus: Practical & Safe Applications

Scan this code to access the instructor’s full profile, course resources, and the presentation download link.


Keep mobile phones on silent, no calls during session
You may leave the room at any time if necessary
Actively participate in activities
Respect time and schedule


Understand AI’s role in aviation
Choose the right tools
Master effective prompt writing
Reduce human error
Produce a practical example



AI: Your Professional Assistant

- Faster & more accurate operations
- Final decision stays human

AI in Aviation Professions

Pilot: METAR & performance analysis

Dispatcher: Route & fuel optimization

Maintenance: Rapid data retrieval

Cabin Crew: VIP passenger handling

Case Study: MEL 77-1 & Appendix 3D

- EPR added to defect list
- AFM Appendix 3D reference
- AI: Instant weight limit calculation

VS

Manual calculation

AI – Assisted Calculation

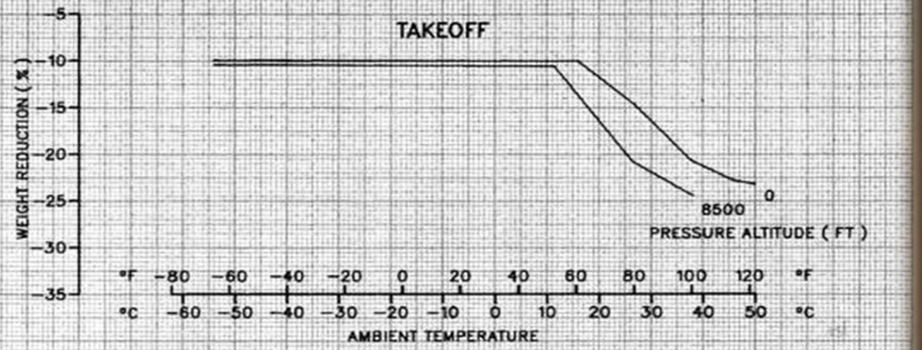
DC-9
MDC-J8480M
DATE: 4-1-98

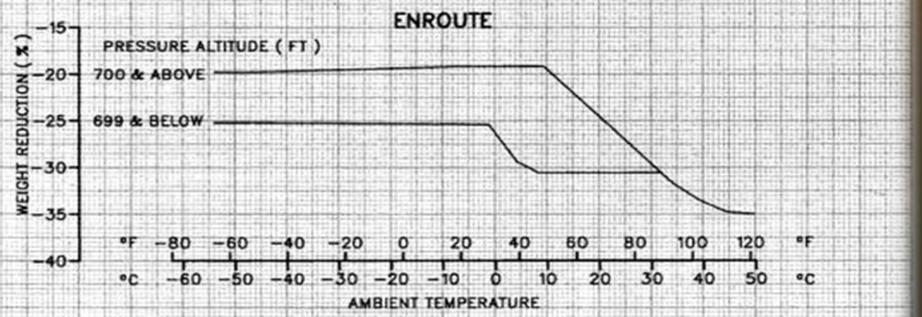
FAA APPROVED

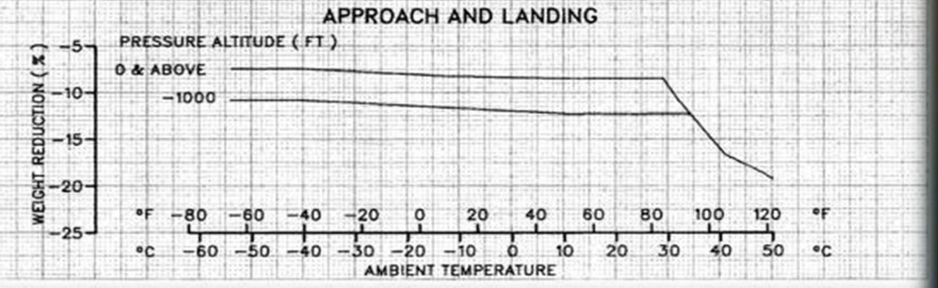
APPENDIX 3D
SECTION 4C PAGE 17A
PERFORMANCE

REPORT NO. C121-50.19.01 REVISED DATE: 9-8-97
PAGE NO.
MODEL
PREPARED BY: CP (Twd)
REFERENCE C121-50.19

MODEL DC-9
WEIGHT REDUCTION
ONE EPR SYSTEM INOPERATIVE
JT8D-217A/C ENGINES







AC 25-8P-4-1A
REV 6-71)

ChatGPT 4o >

Create a cartoon
illustration of my pet

Explain nostalgia
to a kindergartener

Help
a tec

Ask anything

Recommended AI Tools

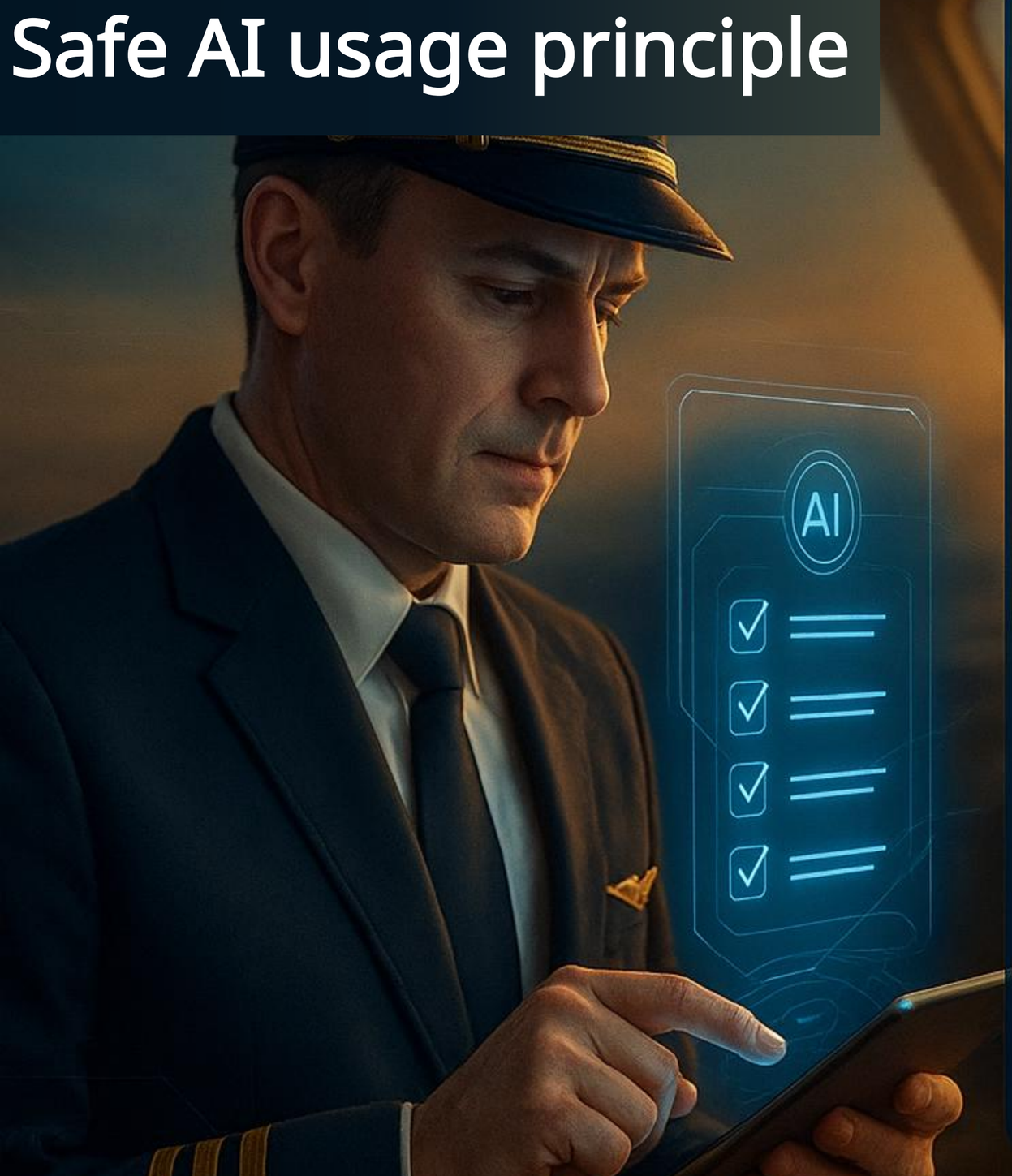
CHATGPT

GOOGLE GEMINI

CANVA

GROK

Safe AI usage principle



- Verify data accuracy before operational use
- Protect confidential & sensitive information
- Ensure human-in-the-loop decision making
- Follow company SOP & regulatory compliance
- Continuous monitoring & improvement


PAYAM
ZOMORODIAN
Veo