

Check D Team - Civil Aviation Exercise

Aircraft Flight Operations and Maintenance

Mark Ludwig Milano, Gabriele Cappelletti, Pasquale Scarano, Nicola
Biscione

1/03/2024 - rev.1



SAPIENZA
UNIVERSITÀ DI ROMA



Table of Contents

- ▶ Definition of Civil Aviation
- ▶ Civil Aviation Stakeholders



What is Civil Aviation?



- Civil Aviation encompasses a range of services, encompassing not only the aspects visible to passengers but also technical and economic activities, personnel, organizations, and regulatory bodies.
- These entities collectively facilitate the standardization and advancement of services in adherence to safety and security standards.



Civil Aviation Overview



- **Commercial Aviation:** Scheduled passenger and cargo flights.
- **General Aviation:** Private planes, corporate jets, air taxis, flight training, and special operations.
- **Airport Operations:** Airports, air traffic control, maintenance facilities, ground services.



Regulation, Impact, and Environment



- **Regulation:** Civil aviation is heavily regulated by national agencies (e.g., FAA, CAA) and the ICAO.
- **Economic Impact:** Vital to the global economy, creating millions of jobs in airlines, manufacturing, airports, and support services.
- **Environmental Considerations:** Ongoing research for more efficient aircraft, sustainable fuels, and operational changes.



Industry Participants

- **Operators:** Commercial airlines, cargo airlines, air taxis/charters, aircraft lessors.
- **Airports:** Operators of facilities for passenger and cargo handling, takeoff and landing.
- **Aerospace Manufacturers:** Companies designing and building aircraft, engines, and related equipment.
- **Air Traffic Management Providers:** Entities responsible for the safe and efficient flow of air traffic in a specific airspace.
- **Service Providers:** baggage handling, cargo loading/unloading, aircraft cleaning, etc.



Regulatory Bodies and Other Stakeholders

- **National Aviation Authorities:** Like the FAA (US), CAA (UK), ENAC (Italy), responsible for safety regulations, licensing, and oversight within their jurisdiction.
- **International Civil Aviation Organization (ICAO):** A UN agency setting global standards and coordinating international air travel.
- **Passengers:** Individuals using air travel for business, leisure, and other purposes.
- **Approved Maintenance Organizations:** Companies operating under part 145, dealing with aircraft maintenance.
- **Communities Surrounding Airports:** Residents and businesses potentially impacted by airport operations.
- **Financial Institutions:** Banks, investors, and insurers providing financial services to the industry.