Check D Team - Civil Aviation Exercise

Aircraft Flight Operations and Maintenance

Mark Ludwig Milano, Gabriele Cappelletti, Pasquale Scarano

29/02/2024





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

- Airlines: 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.
- Ground Handling Companies: Provide various services at airports, like 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.
- Cargo Shippers and Consignees: Businesses and individuals sending and receiving goods by air.
- Communities Surrounding Airports: Residents and businesses potentially impacted by airport operations (noise, air pollution, etc.).
- Financial Institutions: Banks, investors, and insurers providing financial services to the industry.