TECH FORUM

Navigation and Surveillance

ACJ Customer Forum 2024

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AIRBUS

Anemometric & Inertial System
Product Leader

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ATA 34 - NAVIGATION

Air Data & Inertial Reference Systems (ADIRS) systems

Air Data:
Provides main data sources (aerodynamics): speed, wind, temperature, etc.

Inertial Reference:
Provides primary data: precision attitude, heading, position, navigation data.
Displayed on the EFIS.

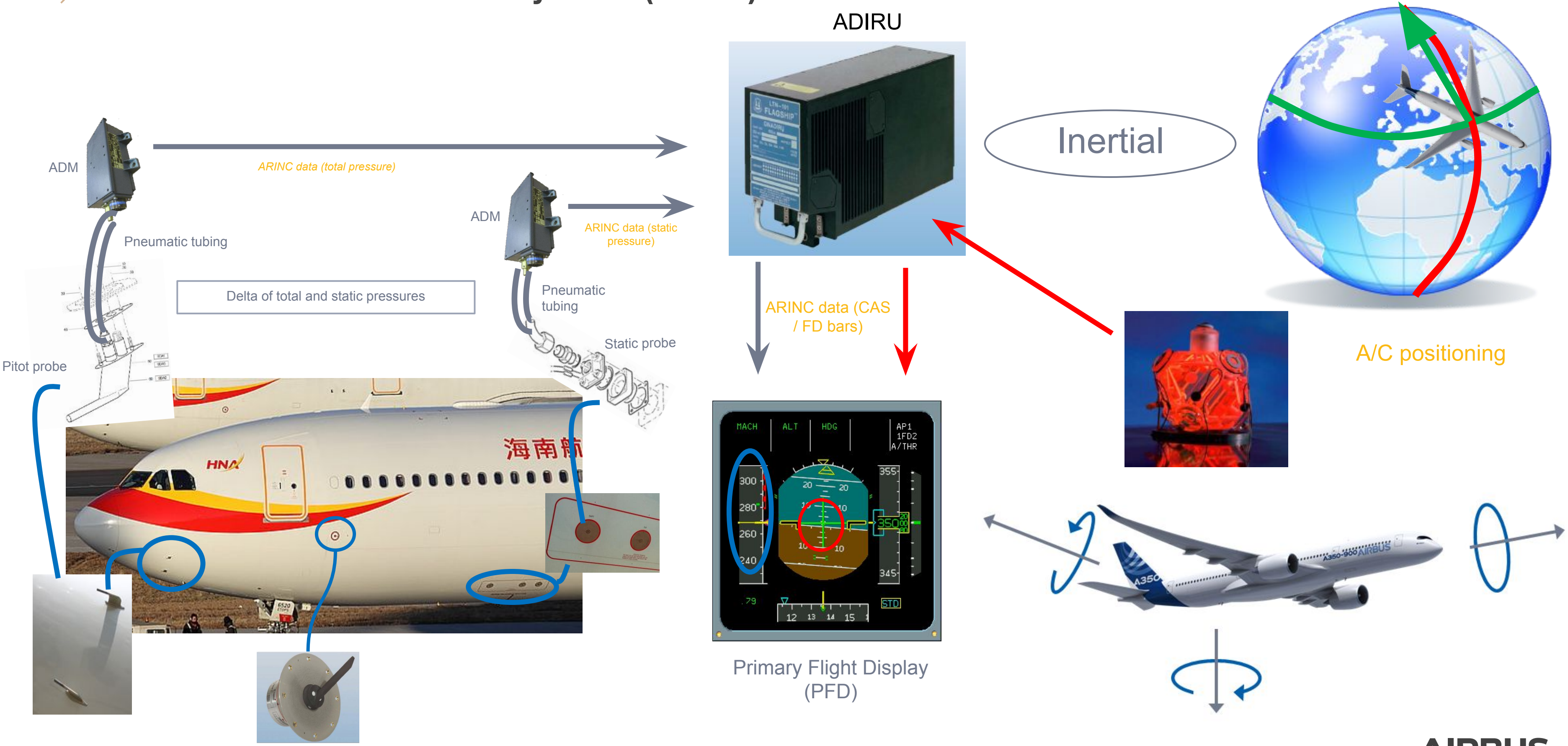
Radio Navigation systems

Determine the aircraft's position thanks to radio frequencies and navigation aids

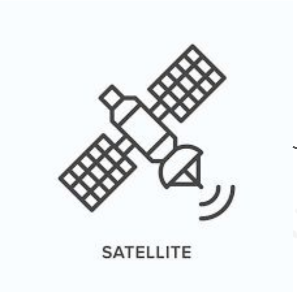
Surveillance systems

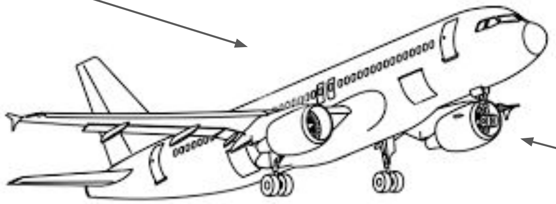
Warn the crew about the aircraft's environment and the potential threats (weather, terrain, other aircrafts)

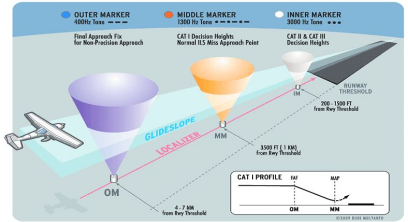
Air Data & Inertial Reference Systems (ADIRU)



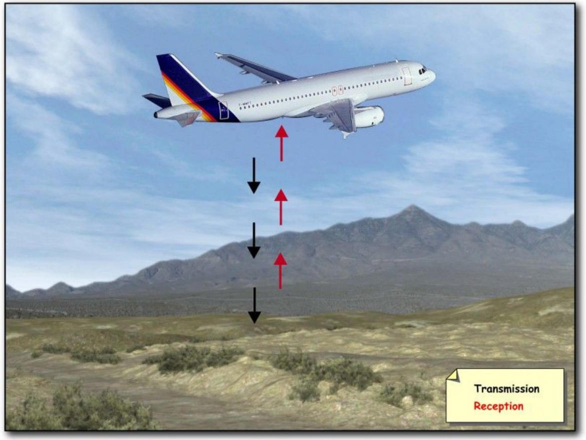
Radio Navigation Systems







Multi-Mode Receiver (MMR)



Radio Altimeter (linked to 5G)

Non Directional Beacon (NDB) system linked to Automatic Direction Finder (ADF) system

VHF Omnidirectional Range (VOR)

Distance Measuring Equipment (DME)

Instrument Landing System (ILS)

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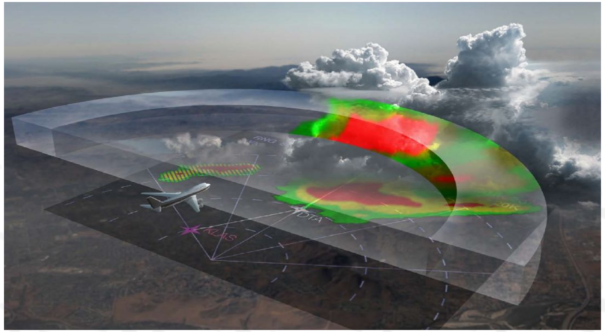
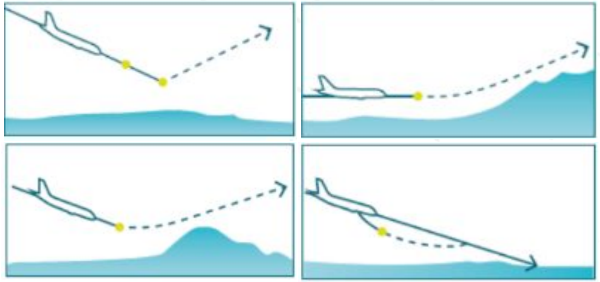
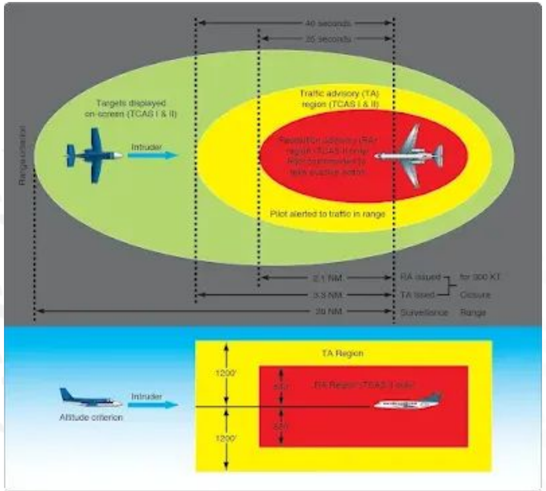
Surveillance Systems



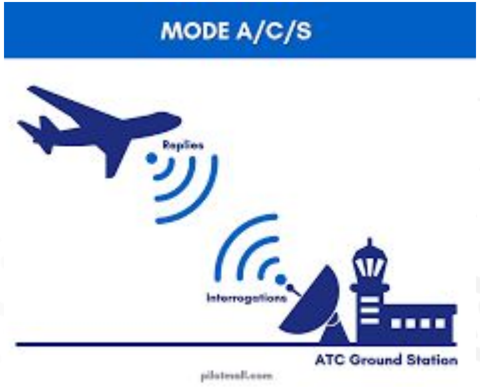
Weather Radar System



Terrain Awareness and Warning System (TAWS)



Traffic Collision Advoidance System (TCAS)



Transponder (ADS-B OUT)

AIRBUS

DEEP DIVE

ADIRU

Architecture

PITOT probe

AOA probe

TAT / SAT probes

Navigation & Surveillance

5G impacts on operations

ADS-B OUT

GNSS Interferences