

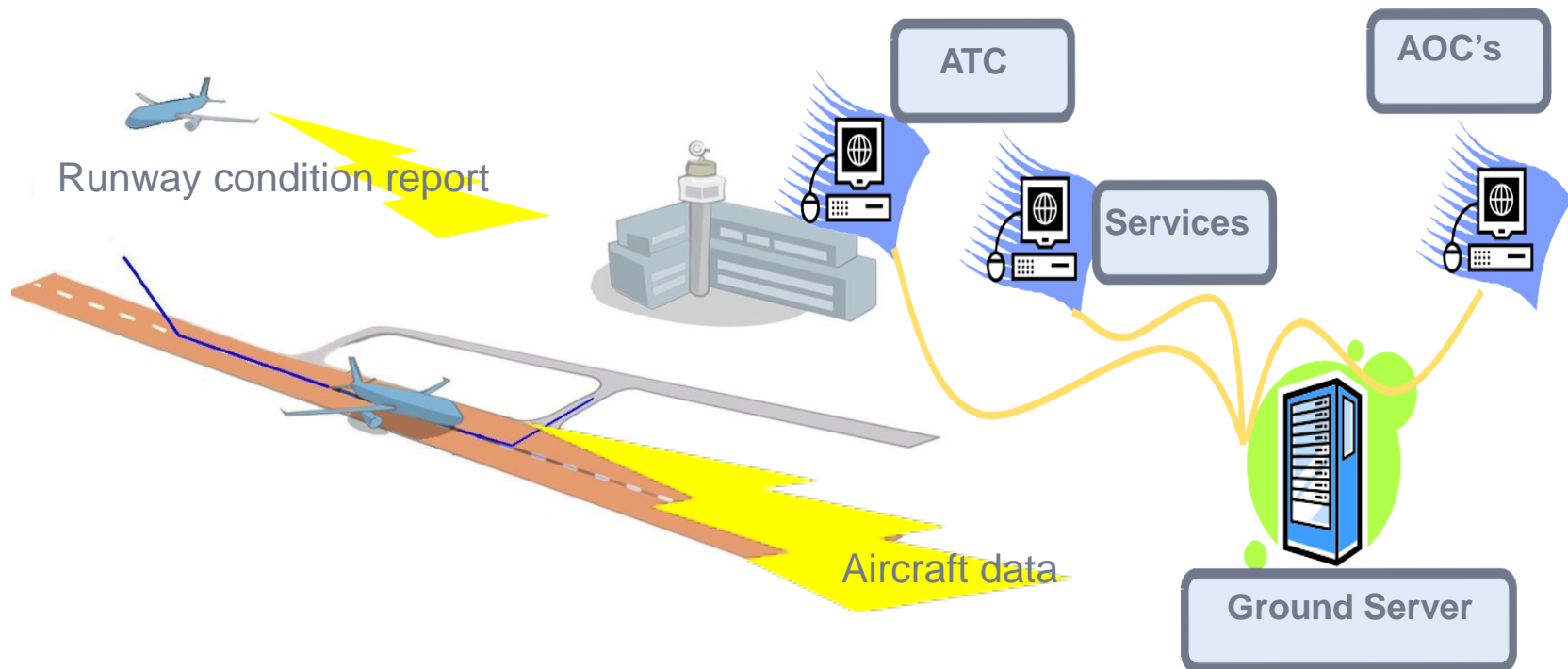


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## **CORSAIR Project Status Updates**

# CORSAIR Concept

- Airbus Concept : Use The Aircraft As a Sensor
- **C**ontaminated **R**unway **S**tate **A**utomatic **I**dentification and **R**eporting



# What does CORSAIR Actually Analyze ?

- CORSAIR analysis starts at brake-on set and ends at 30kt
- CORSAIR uses aircraft data (speed, deceleration, **models**) to estimate the braking forces experienced during the landing
- CORSAIR calculates the best corresponding TALPA runway state to determine the conditions experienced by the aircraft



CORSAIR  
ANALYSIS



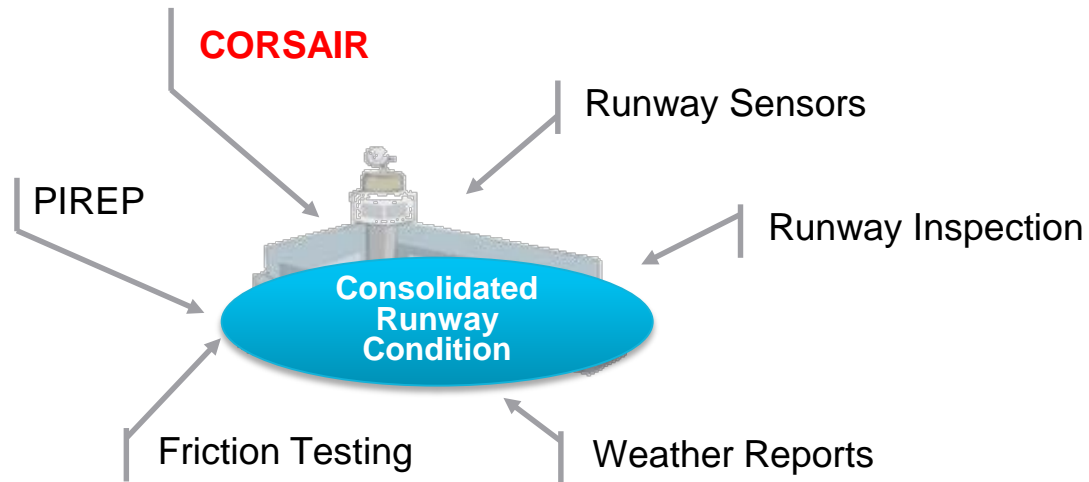
TALPA LEVEL



6-DRY  
5-GOOD  
4-GOOD TO MEDIUM  
3-MEDIUM  
2-MEDIUM TO POOR  
1-POOR

# CORSAIR Contribution to Runway Condition Reporting

CORSAIR technology is not designed as a **replacement** for existing measurement means, it is designed to **complement** them

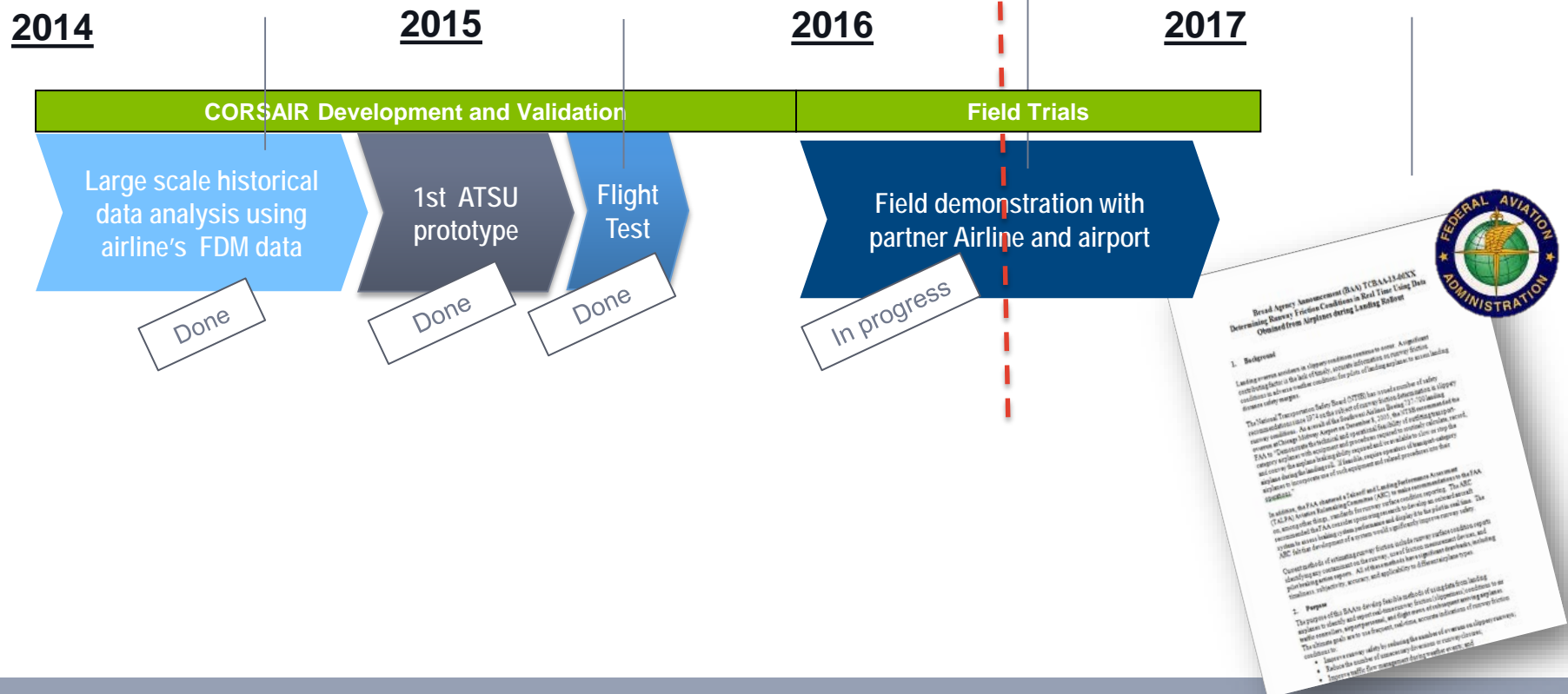


## CORSAIR Advantages

- Real-time assessment of runway condition
- Measurement of runway slipperiness as experienced by an airplane
- Reported using standardized terminology (ICAO)
- Ability to detect local areas of degradation

# FAA Project Status

- Completed validation and verification analyses using historical flight data obtained from participating airline partners
- Field Trial results and fully achieve project commitments
  - Share result with stakeholders. Collect their feed back and requirements for implementation
  - Confirm non-impact on flight crew workload and procedures for obtaining, reporting, receiving, or using CORSAIR outputs
  - Consolidate potential benefits for the FAA, airlines, and airports



# Summary and Next Steps

- Validation and verification analyses showed that
  - CORSAIR identification algorithms provide performance consistency and safe results for runway condition assessment
  - CORSAIR provides an added value of objective performance based measurement
  - Flight tests demonstrate feasibility of the CORSAIR approach
- Field trials will focus on
  - Evaluating feasibility of real time runway assessment function
  - Demonstrating end-to-end solution for braking action computation