

Air SHIELD: Aircraft Structural Health Intelligence for Evaluation and Lifecycle Detection

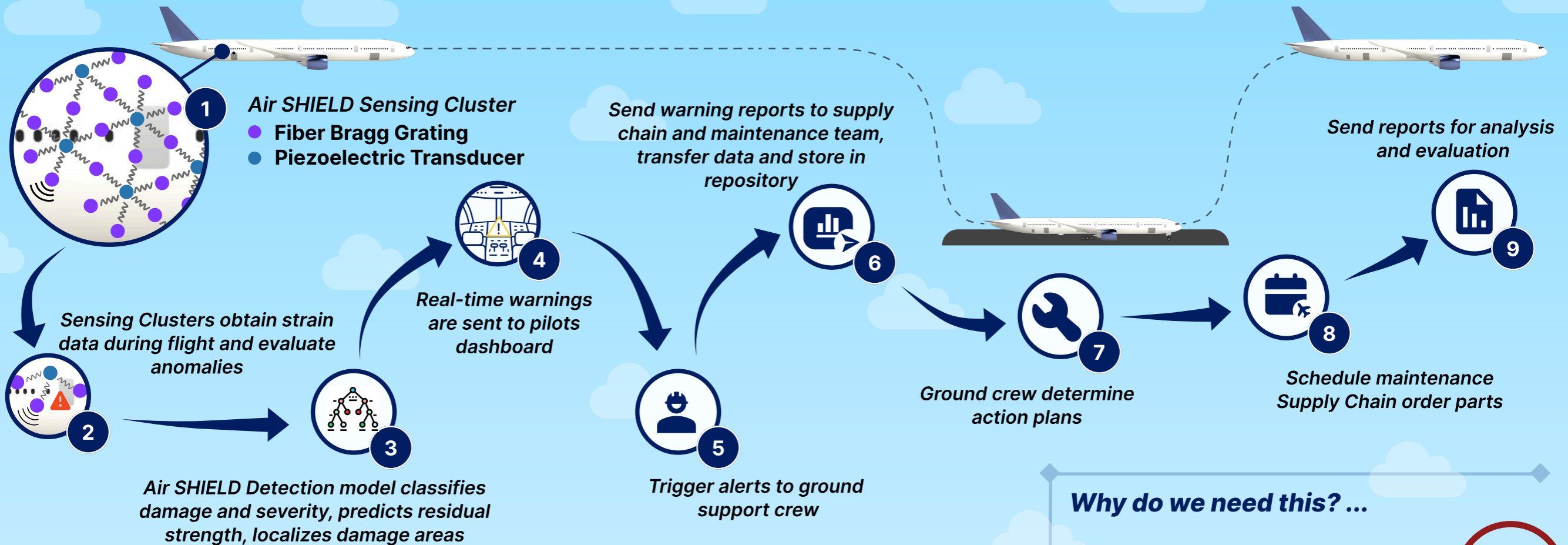
Continuous and autonomous in-flight structural health monitoring enabling safer operations, reduced downtime, and data-driven maintenance decisions



IN FLIGHT

ON GROUND

NEXT FLIGHT

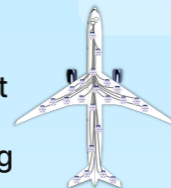


When will Air SHIELD be ready? ...

(PHASE 2) 2027 - 2031

Integration and Testing

- Sensor integration into aircraft network and frame
- Data collection through testing and cyclic loading



(PHASE 4) 2032 - 2035

OEM Integration and Training

- Integrate Air SHIELD into new and existing aircraft
- Implementation of trainings and procedures

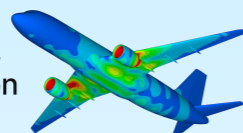


Now

(PHASE 1) NOW - 2028

Technology Development

- Development of Air SHIELD sensing hardware, optimization framework, and damage detection models to advance system maturity toward Technology Readiness Level 9



(PHASE 3) 2030 - 2033

FAA and Standards Compliance

- System compliance with FAA airworthiness and standards
- Development and approval of pilot maintenance training



2035

Why do we need this? ...

Traditional Inspection

Manual inspections ground aircraft for days



Air SHIELD Ecosystem

Reduce uncertainties, early damage detection

Increase Utilization



Overall Savings



FH Cost Reduction



*Based on maintenance man-hour savings