



ATA e-Business Forum 2025

Standards for IAHM – Integrated Aircraft Health Management

Christoph Heinen
Chief Engineer
Digital Tech Ops Engineering
Lufthansa Technik

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Standards for integrated AHM

08.10.2025, ATA e-Business Forum 2025

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Definitions/Regulatory Framework

OEMs and Industry

OEM & MRO Health Monitoring Solutions
Development of AHM tasks in MPD



International Standardization
Operational Data Integration

IAHM

A system combining
**sensor data,
transmission &
analysis** to monitor
aircraft health to
take action



**Federal Aviation
Administration**



EASA

European Union Aviation Safety Agency

AC 43-218

Data-based Condition Monitoring

MSG-3 2022.1

Decision logic to introduce AHM tasks

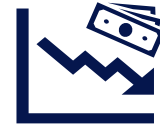
Benefits of IAHM

Integrated Aircraft Health Management

Real-time system monitoring

Fault prognosis & diagnosis

Condition based action



Lower operating cost



Increased reliability & availability

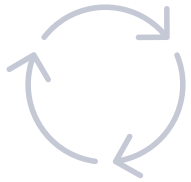


Fewer unplanned downtimes



Optimized maintenance intervals

IAHM Cases: 2 Examples



Recirculation Filter
ATA 21



2 alerts/AC/year
(every 3500 flight hours)



20 AC fleet



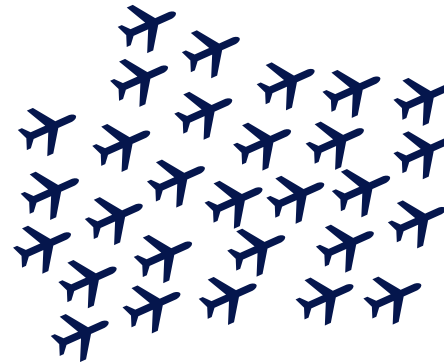
1 alert/week



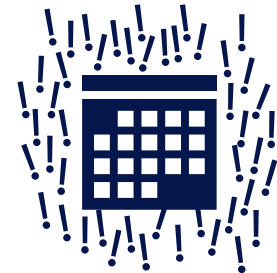
IDG oil level
ATA 24



7 alerts/AC/year
(every 600 flight hours)

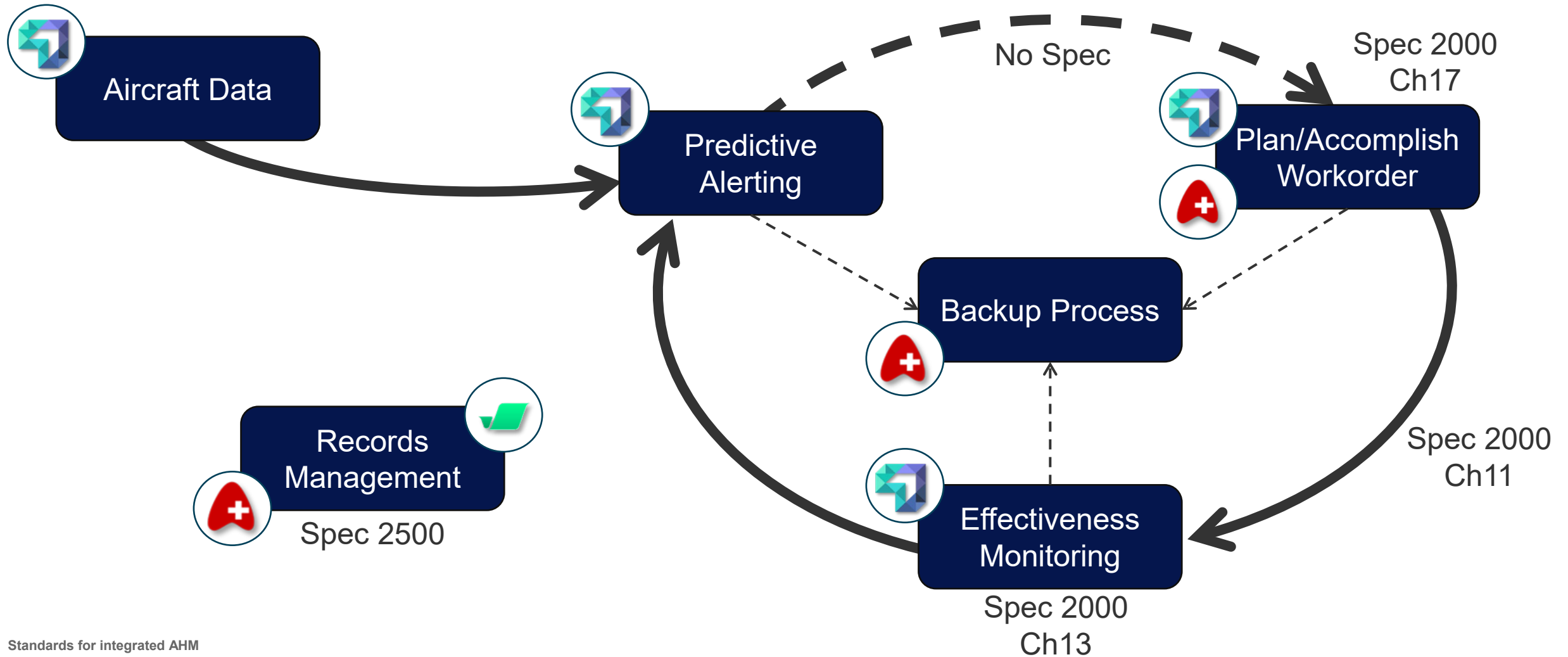


200 AC fleet

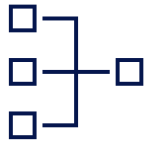


30 alerts/week

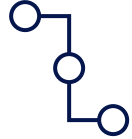
IAHM process based on standards



Predictive alerts clustered by ATA chapter for IAHM



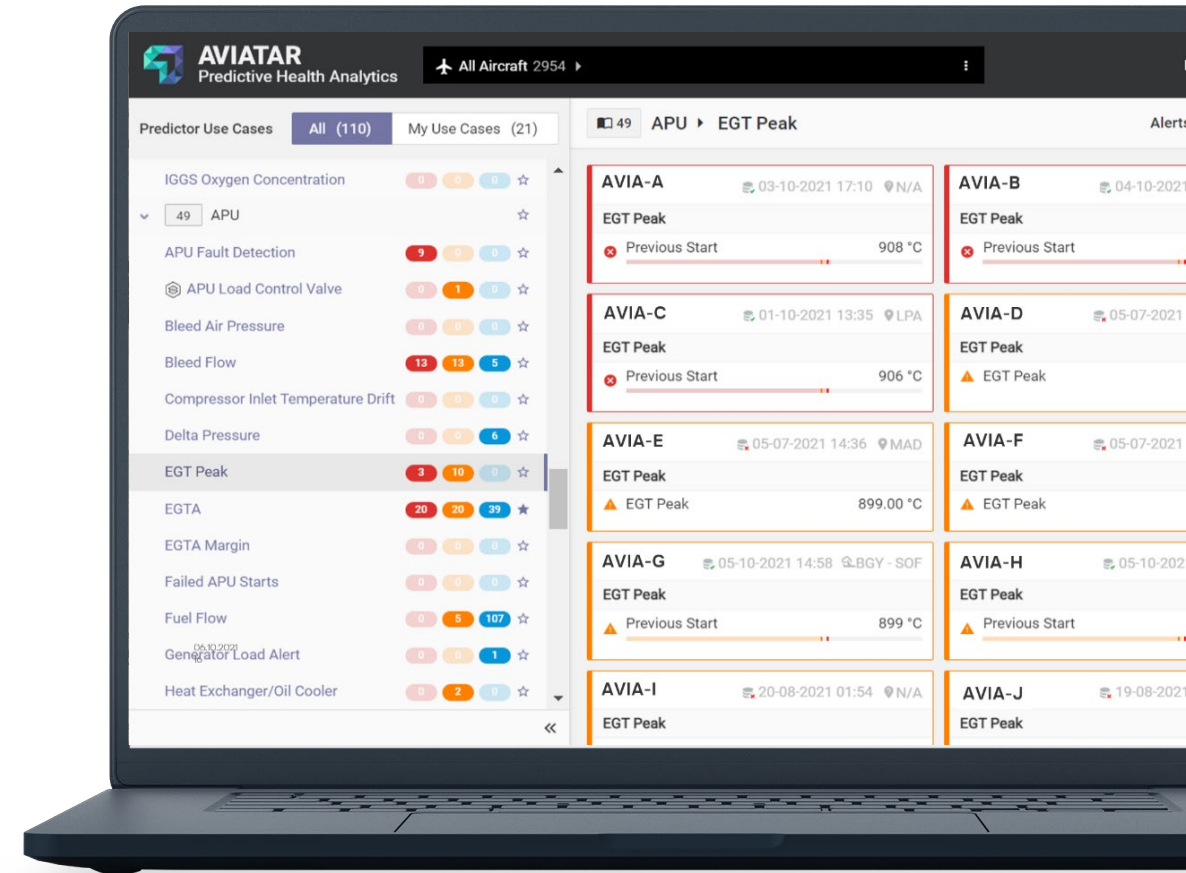
IAHM core functionality generally provided through independent systems



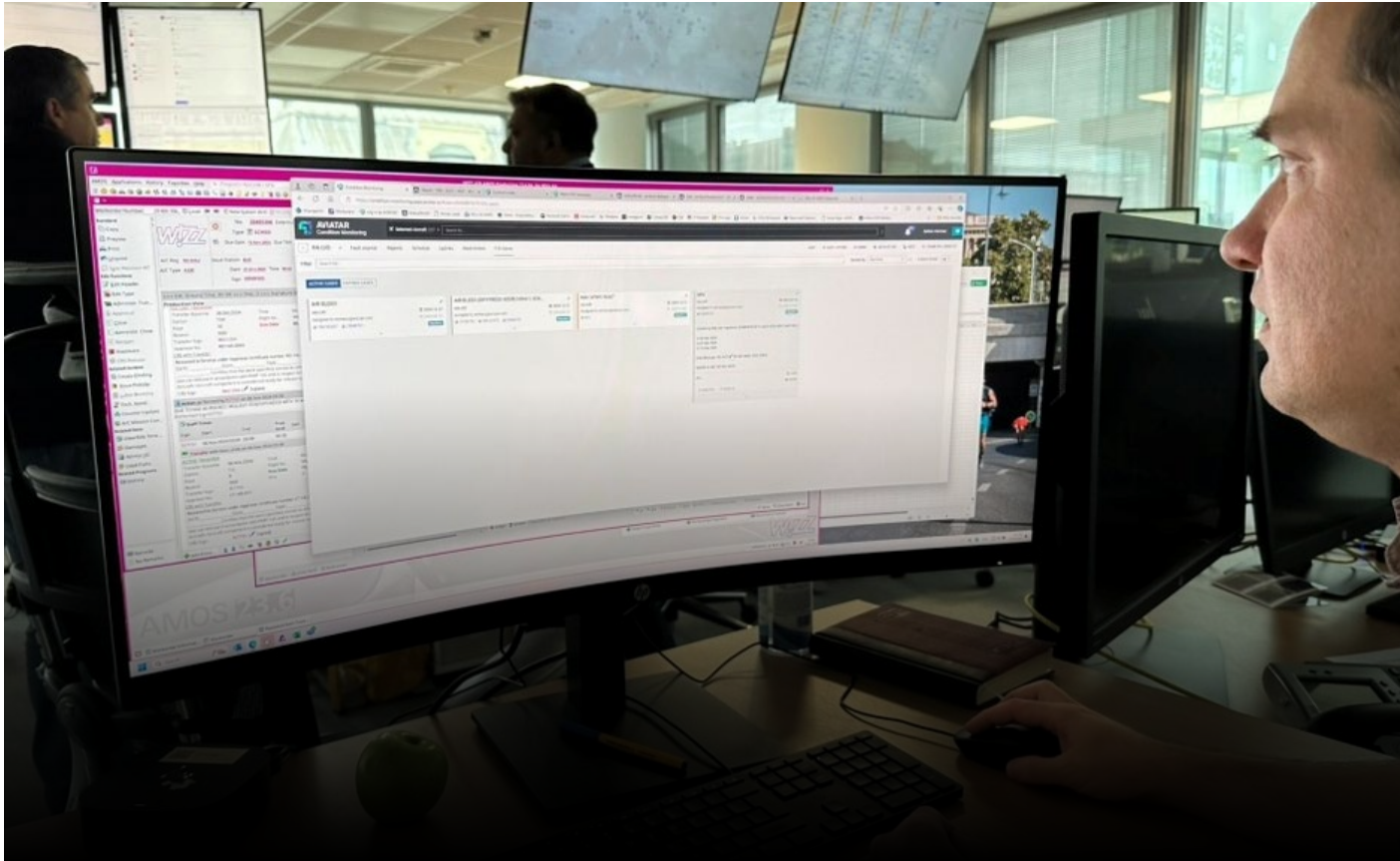
Establishing a standard for IAHM alerting to enable seamless integration across systems



Interface to be defined, for handover of triggers and availability data



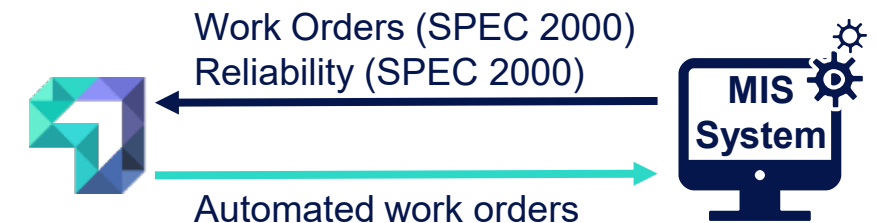
Workorders automatically triggered by your predictive alert



Automated and standardized creation of workorders

- ✓ Traceability
- ✓ Relevant alert data
- ✓ References

MIS remains central planning and compliance tool, with incorporated backup



Digital Technical Logbook for pilots & Tech Ops

Minimum Spec 2000 Ch 17
standard, but more is better



Clean Data Input



Statistical Evaluability



Accurate Interpretation



Monitor the effectiveness of IAHM in your fleet



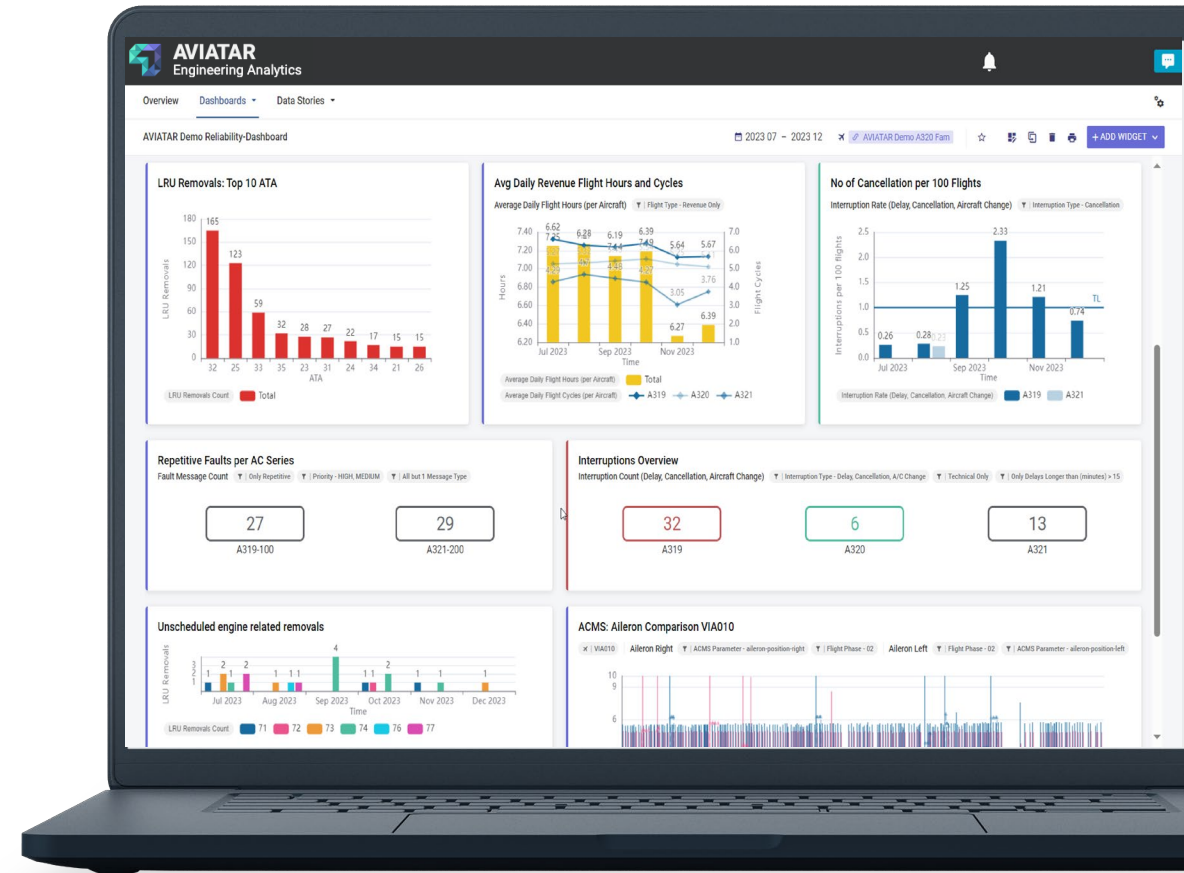
Reliability data interface Spec 2000 Ch 11



Upgrade to Spec 2000 Ch11 Rev 2021 enabling predictive workorder identification



Monitoring IAHM effectiveness in AVIATAR using Spec 2000 Ch 13 metrics



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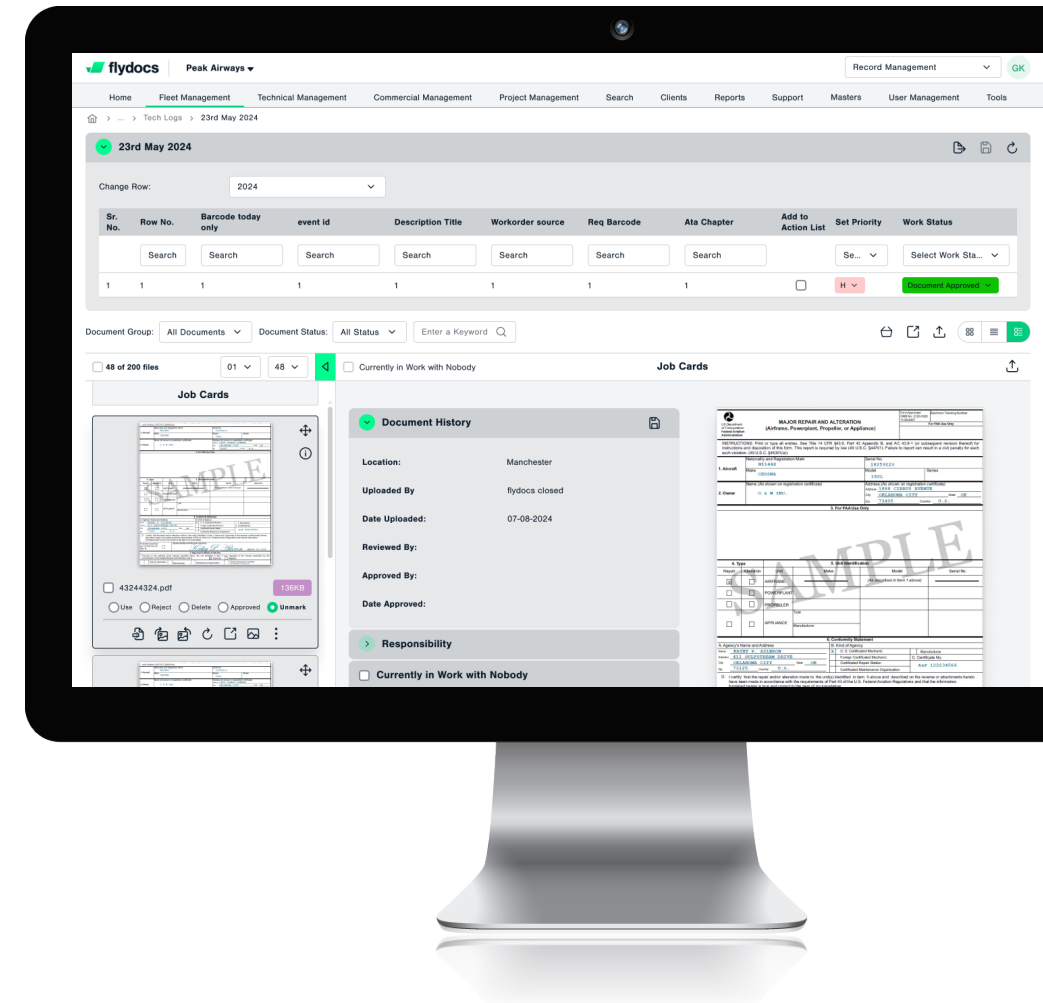
Easy access with Digital Records Management (DRM)



Ensure full back-to-birth traceability and audit-proof storage, Spec 2500 compliant



Enabling seamless, automated data transfer to support digital transformation in maintenance processes

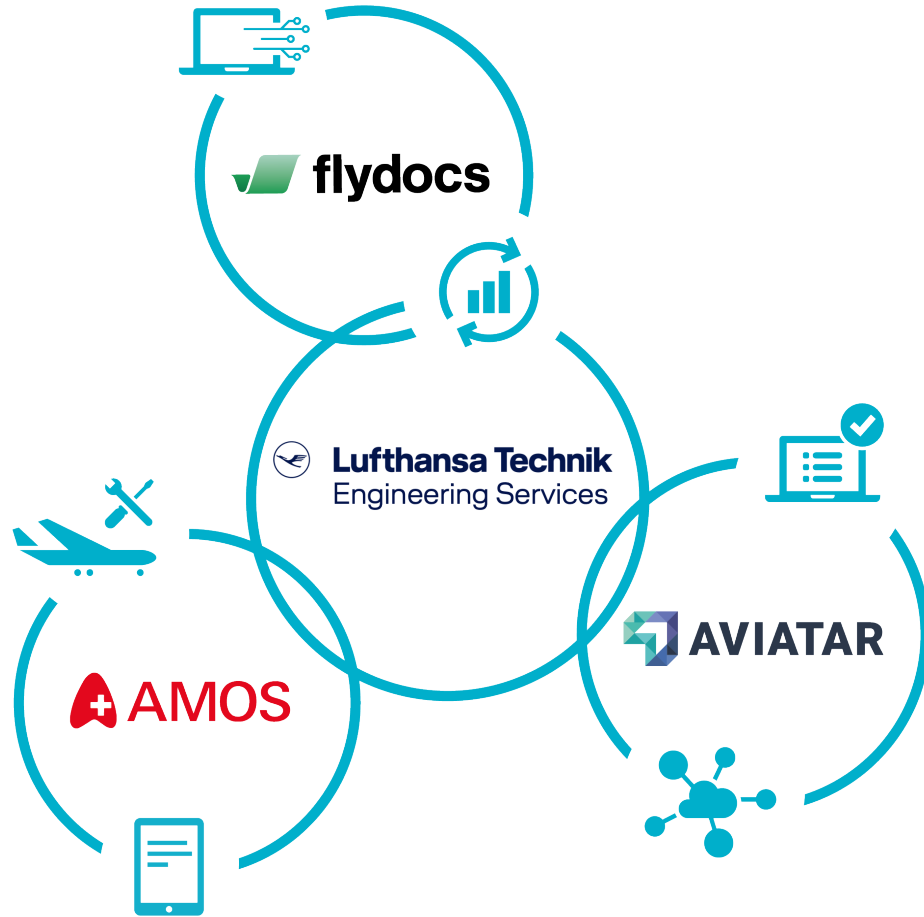


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Modular Digital Engineering with standardized interfaces



Our interpretation of IAHM: open, modular, neutral

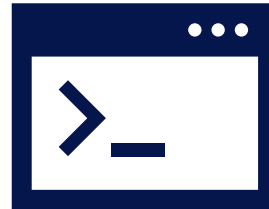
- ✓ Interconnections must use ATA Spec standards
- ✓ Continuously support evolvement of Specs
- ✓ Driving dynamic development of functionality to meet new industry requirements

Conclusion

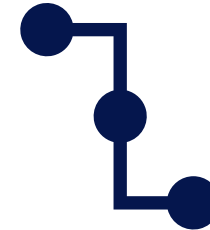
Integrated Aircraft Health Management



Enhanced A/C Availability
& Reliability



Automated Integrated
Processes



Use of standards is key
for full integration

Still Curious? Let's Connect:



Mr. Christoph Heinen

Chief Engineer Digital Tech Ops Engineering

✉ christoph.heinen@lht.dlh.de

☎ +49 151 589 03498

Mr. Thomas Gladyszewski

Product Sales Manager Digital Tech Ops Engineering

thomas.gladyszewski@lht.dlh.de ✉

+1 305 427 1766 ☎





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AVIATAR



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Seamlessly integrated Digital Tech Ops Ecosystem requires standardized interfaces



Maintenance &
Engineering Software

