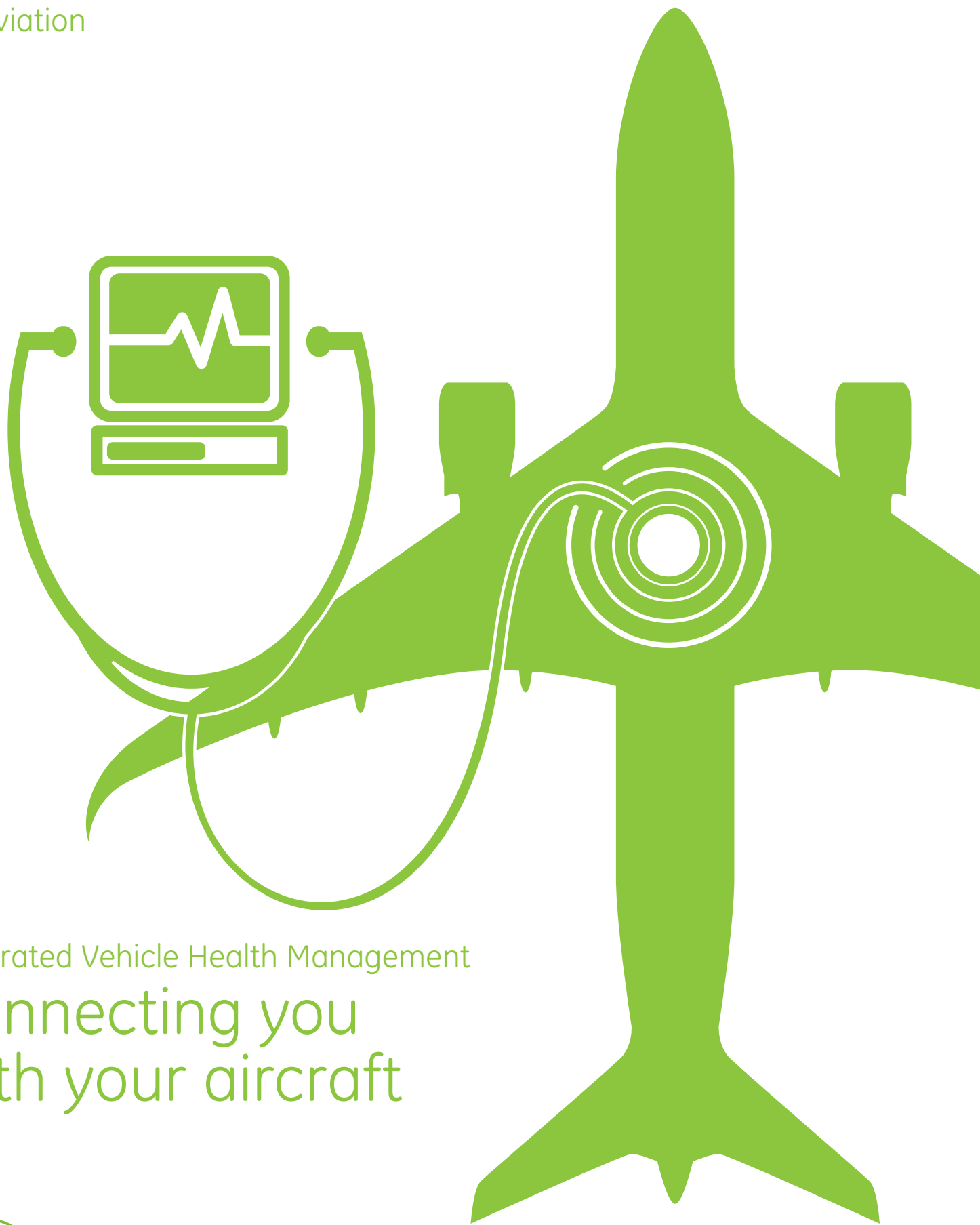


GE Aviation



Integrated Vehicle Health Management

Connecting you
with your aircraft



imagination at work

collect, connect,
detect, direct...

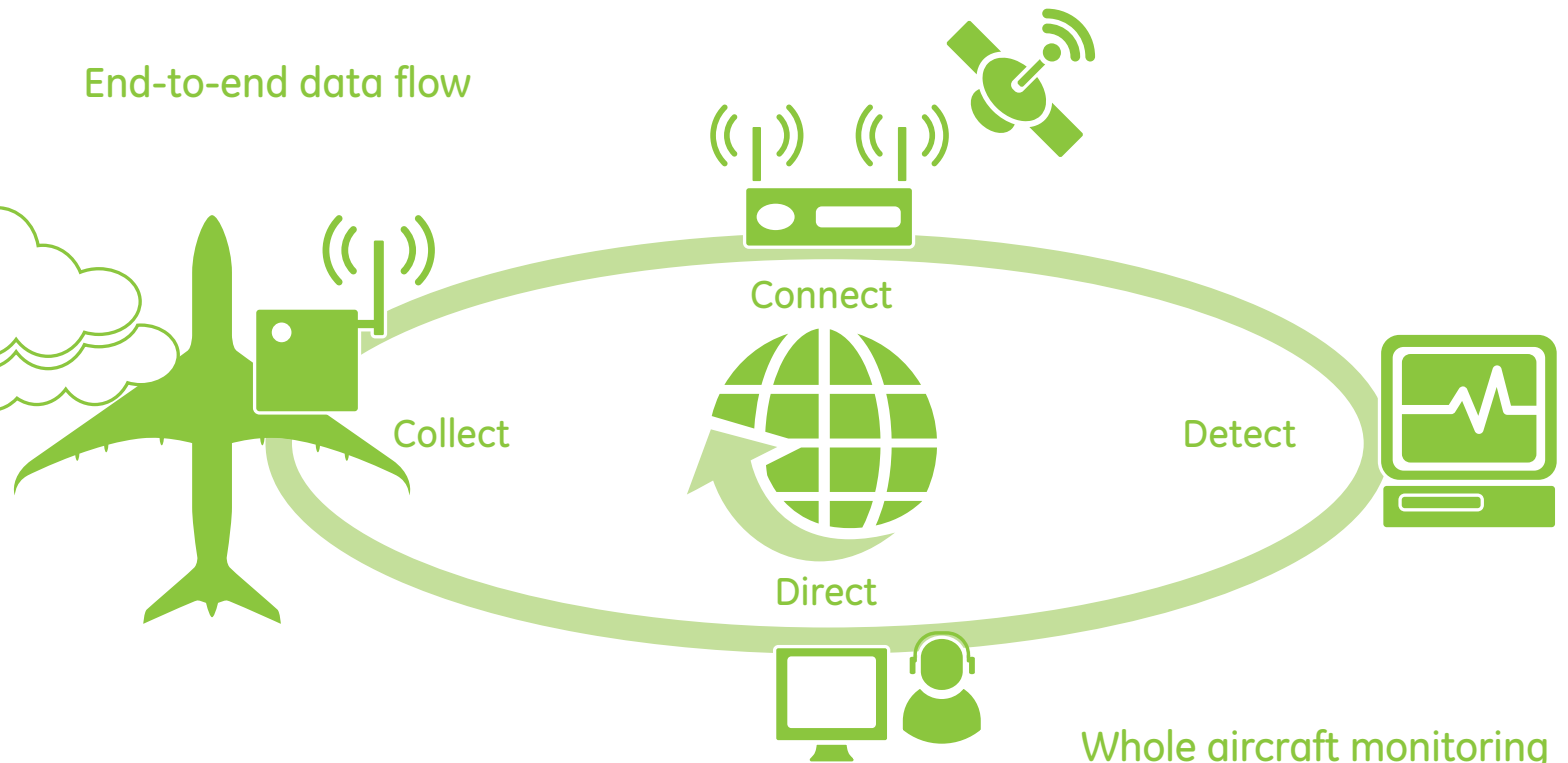
GE Aviation Systems' Integrated Vehicle Health Management (IVHM) solution acts as a virtual proactive maintenance team, determining the status of the aircraft and its subsystems to supply real time, actionable information to help aircraft operators predict failures before they occur and provide a quick and accurate "whole plane" view of health.



Worldwide
wireless
connection
24/7



End-to-end data flow



Optimization Solution

GE Aviation is a world leader in developing solutions that enable customers to connect aircraft condition to operational performance. Through IVHM, we provide a maintenance optimization solution that helps increase operational efficiency, asset utilization, and lower cost by reducing unscheduled maintenance, aircraft downtime and delays.



24/7 Web Access

GE's IVHM provides 24/7 world-wide wireless connection to the aircraft's health status – including prioritized alerts and analysis of engines, airframe and systems. By developing a comprehensive web-based aircraft health management service that provides high fidelity interpretation of all data, GE has made it possible for operators to monitor fleet trends and detect and predict anomalies earlier and with greater confidence. Advanced data transmission software enables a quick, smart and automatically updated 24/7 web connection between the customer base and the central data repository.

On-board Health Management Unit

GE's IVHM includes an on-board health management unit that communicates to a ground services network for storage, further analysis, and alert management by providing:

- Configurable acquisition
- Configurable algorithms
- Wireless communications manager
- Maintenance data server
- Embedded web-server
- Real time parameter display
- Databus interfaces
- Discrete I/O
- Wireless Communications links

Leader In Decision Science

From medical imaging, to aircraft engines, energy and rail monitoring, GE is a global leader and expert in decision science and prognostics with over 20 years of experience. GE and its affiliates currently monitor 200,000 different devices, including over 22,000 engines. GE's IVHM team continues to collaborate with the GE Global Research Center, which holds over 3,000 patents around prognostics, diagnostics, and decision sciences.

Increased Fault Detection

GE's IVHM uses an artificial intelligence based technology that can learn from the data, enabling increased fault detection and prognostics. The recent addition of artificial intelligence based detection technology to GE's Health & Usage Monitoring Systems (HUMS) through a secure web service has brought one of the most significant improvements in rotorcraft safety management – halving the number of undetected faults compared to existing systems.

Whole aircraft monitoring

End-To-End Solution

GE's IVHM is an end-to-end solution for collecting, analyzing, and producing actionable information. With IVHM, you can detect a problem and see exactly where it has occurred in an easily accessible, accurate, and concise manner. GE's advanced prognostics will help you anticipate problems before they occur, preventing delays and other unplanned events – which may lead to unscheduled maintenance.

Features

- Whole aircraft monitoring
- Worldwide wireless connection 24/7
- Remote interrogation in the air or on the ground
- Smart reporting
- Web-based data management
- Fleet-wide history and trending
- Open architecture for system compatibility

Benefits

- Reduced unscheduled and scheduled maintenance
- Reduced return to service time
- Reduced overall operations and maintenance costs
- Automatic data downloads for FOQA and health
- Quick identification of fleet-wide issues
- Increased aircraft availability
- Improved technical support
- New insights to aircraft operation and performance



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