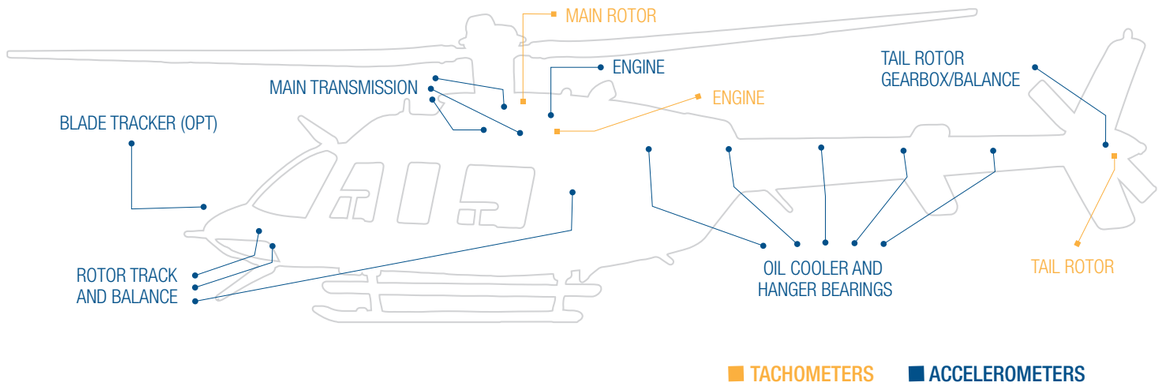

OFF-BOARD SYSTEM

The Foresight MX 407 HUMS off-board system features a GPMS-provided analysis server that is web-based and can be run on any internet browser accessible device. Bell MissionLink® allows viewing of Bell 407 HUMS data in the same system as Bell 429 and 412 HUMS/BHVM.

DATA MONITORING SUBSCRIPTION

The annual subscription for the 407 HUMS provides:

- 24/7 access to servers to monitor data (GPMS and Bell MissionLink®)
- Software updates & maintenance
- Award winning Bell product support with access to experts who can help analyze issues
- Contact your Aeronautical Accessories sales representative for information related to annual subscription.

For questions regarding 407 HUMS, please contact Aeronautical Accessories or visit www.aero-access.com.

800-251-7094
sales@aero-access.com
www.aero-access.com

RETURN ON INVESTMENT

Health and usage monitoring provides the benefit of advance detection of potential maintenance issues and reduces costs:

- Rotor track and balance (RTB)
  - Foresight MX reduces labor time and the number of maintenance test flights (MTF) from approximately 4 to an average of 1
    - The current balance condition is generally recorded on every flight
    - Improved logic and interface reduces errors
  - Also reduces labor time to install/remove RADS (or other carry-aboard RTB systems)
- Mechanical Diagnostics/Prognostics
  - Reduces the chance of chip detection or other issues that may require immediate grounding
  - Early detection reduces collateral damage to adjacent components
  - Foresight's diagnostics/prognostics may provide up to 200 hours of notice regarding upcoming maintenance

Aeronautical ACCESSORIES™
A Bell Brand

Bell 407 **Health and Usage Monitoring System** (HUMS)

Maintenance Predictability, Low Cost, Lightweight, Next Generation Technology

Aeronautical ACCESSORIES™
A Bell Brand

Maintenance predictability. Low cost. Lightweight. Next generation technology.

Aeronautical Accessories is the exclusive distributor for the GPMS Foresight MX Health and Usage Monitoring System (HUMS) for the Bell 407.

Monitors engine performance and vibration of critical components.
Get early warning of potential maintenance problems.

KEY FEATURES

The 407 HUMS provides numerous tracking and monitoring benefits including:

- Vibration monitoring of critical rotating components
- Rotor track and balance
- Flight data monitoring
- Regime recognition
- Engine performance monitoring

GPMS FORESIGHT MX SYSTEM

The new 407 HUMS is provided by GPMS. Based on the company founders' extensive knowledge gained in the wind turbine industry, the Foresight MX prognostic system has been developed, tested, and is now available for commercial aviation platforms. The GPMS team is dedicated to condition monitoring and prognostic design/development.

The GPMS Foresight MX system features next generation sensors on data bus to reduce wiring and weight, and offers easy wireless download. The total weight of the 407 HUMS is less than 10 pounds.

WHY HUMS?

Health and usage monitoring has already been proven in off-shore operations for medium/heavy aircraft. By incorporating the HUMS system, operators can increase maintenance predictability, get early warnings of potential maintenance problems and reduce overall costs by decreasing the number of maintenance test flights.
The Bell 407 HUMS meets FDM regulatory requirements (14 CFR 135).

LOW COST

INCREASED SAFETY

LIGHTWEIGHT

NEXT GENERATION TECHNOLOGY

407 HUMS (GPMS Foresight MX)

System Characteristics	
Weight (installed)	8.8 lb
Acquisition time	15 seconds
Sensors	
Accelerometers	13
Tachometers	3
Blade tracker*	Compatible with GE RADS system tracker (ETD, EUTD), RPX Dyna Track and FastTrac
Flight Parameter Data	
Data Source	• ARINC 429 Interface (407GX/GXP/GXI) • Analog Interface (407)
Parameters Recorded (4 samples/second)	32 (407GX/GXP/GXI) 31 (407)
Data Storage	8 GB
Download method	Cellular
User Interface	GPMS website accessible on any Internet browser capable device. Local ground station installation is optional.

* Not included with kit