Zing™ Ware offers three ground software tools for different user levels

Display Program – for maintenance personnel to perform aircraft maintenance & troubleshooting.

VibReview – for QA (Quality Assurance) personnel to review aircraft condition and health status, perform analysis, trending, and analysis to generate maintenance action (work order).

Odyssey Enterprise – for a HUMS manager to perform fleet data management & analysis, data collection & thresholds development, and configuration management. It is a web-enabled tool to centralize depository of fleet data and support monitoring, analysis, aircraft troubleshooting, and actionable maintenance report.

FAA Supplemental Type Certification (STC)

No other commercial product has such a broad number of FAA STCs on helicopter platforms as the VXP HUMS. The Honeywell VXP has been FAA certified on Sikorsky S61 & S76, Bell 206L, 212, 412, 407, 427 & 430, Eurocopter EC135 & AS365L, AgustaWestland AW139, A109 and soon on the A119 and AS350.

Zing™ – The System Solution Ready For Installation

The HUMS VXP / EVXP products are delivered ready for installation on the helicopter with a complete system design package, installation kit and documentation. Honeywell also offers installation service upon request by customers.

Zing: Total System Support

Honeywell offers the depth and breadth of one-stop shopping. We design, develop, manufacture, integrate and support all components used in our HUMS system, Ground Support Equipment, sensors and all related algorithms and software modules. In addition, Honeywell provides comprehensive data management and expert analysis services to support aircraft and fleet maintenance and operations. In the area of product support, we offer superior training services and source materials, depot repair to FAA and military standards and PMA capability for spares. We also offer our worldwide network of product support, sales and marketing functions, and manufacturing facilities. Through this combination of features, training and support, the Honeywell HUMS solution helps increase overall platform supportability.

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Honeywell

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Zing™ HUMS

VXP / EVXP

Honeywell

THE INTEGRATED MAINTENANCE SOLUTION

Enhances safety, reduces logistical footprint and increases dispatch availability

Zing™ HUMS VXP / EVXP

enhances safety, reduces logistics and increases availability

Intelligent aircraft health, performance and operation information in real-time.

The Zing™ HUMS VXP / EVXP systems integrate and automate aircraft maintenance functions such as rotor track and balance and specialized engine tests to eliminate dedicated maintenance flights and the need for ground support equipment. Operators are utilizing the information from the VXP/EVXP to enhance safety, reduce maintenance costs, and increase aircraft availability.

OEM-endorsed equipment

Sikorsky Aircraft Corporation has selected the Honeywell EVXP as standard option equipment on all new S76D helicopters. The Honeywell VXP and EVXP are offered as standard options for S76C+/C++ helicopters used in offshore missions. The Honeywell VXP has been installed and certified on multiple helicopter types such as S61, S76, B206L, B407, B212, B412, B427, B430, A109E, AW139, EC135, and AS365L helicopters. It has been accepted by the customers around the world due to its high level of integration & performance.

Modular design

Honeywell has applied its modular design concept, first proven with the Boeing 777 and Primus Epic, on Zing architecture. For instance, our vibration health monitoring & diagnostic card can be incorporated into an integrated avionics system or housed separately in a single LRU. Zing hardware and software architectures utilize partitions which provide customers with flexibility when they are integrated into a HUMS system. Similarly, diagnostics and prognostics software modules for rotor systems, drive train systems, gearboxes, bearings and propulsion systems developed by Honeywell, helicopter OEMs or Third Parties can be executed in microprocessors contained in either on-board or carry-on systems with minimal effort.

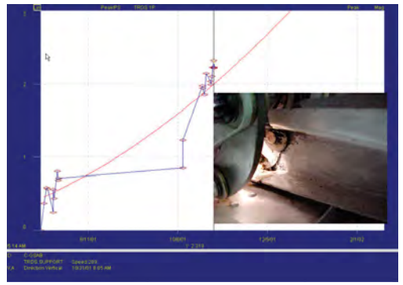
On-board system functionality

The on-board system automatically acquires and processes sensor data, continuously monitors real-time condition and health indices, records aircraft intelligent information and saves data for post-flight analysis in the ground station.

Functions include:

- Rotor track & balance solution
- Real time, continuous monitoring of engine and dynamic component health & usage without human intervention in compliance with CAP 753 and JAR OPS 3 requirements
- Operational usage accumulation and Helicopter Operational Monitoring Program (HOMP) parameters recording
- Advanced gearbox diagnostics
- Auto triggered acquisition using regime recognizer
- Integrated & automated aircraft maintenance functions to eliminate the need for ground support equipment

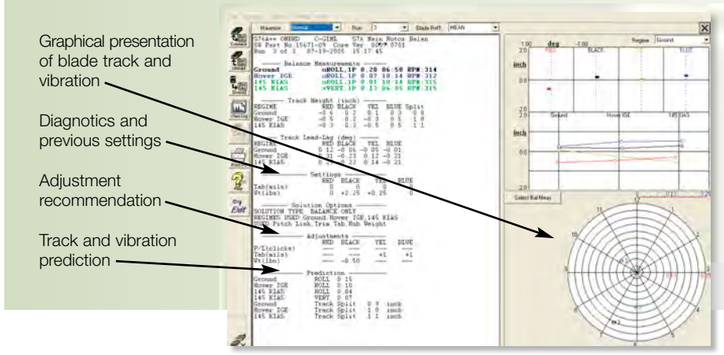
EVXP AU



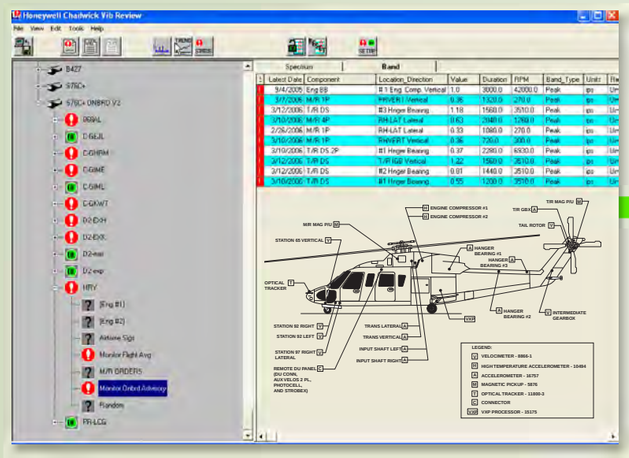
The Zing HUMS VXP / EVXP found a cracked support structure for the tail rotor drive shaft preventing a potential catastrophic failure.

Maintenance Tool

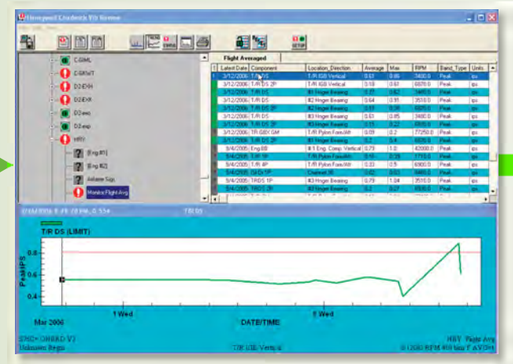
Rotor track & balance solution generated on-board and downloaded to the ground station for maintenance.



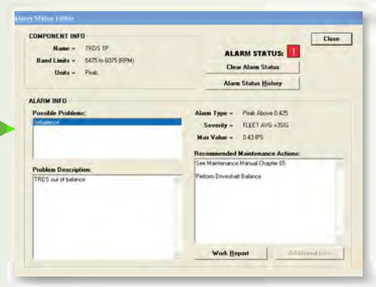
From fault detection to work order generation



Fault detection



Data analysis



Maintenance action