



## INSIGHTANALYSIS<sup>SM</sup>

### Web-Based “Maintenance-Centric” Solution Providing Optimized Scheduled Maintenance Programs

#### Transforming Scheduled Maintenance Programs

We are passionate about delivering high performance Scheduled Maintenance Programs (SMPs) for fixed and rotary wing aircraft. We believe data continuity, web-based availability, and data integrity are the foundational aspects of an effective Scheduled Maintenance Program.

SmartMaintenanceFast<sup>SM</sup>, consisting of FleetInsight<sup>SM</sup> technology products which directly complement FleetVector<sup>SM</sup> maintenance solutions, speeds the conversion of legacy sustainment processes into world-class SMPs. After implementation, FleetInsight products afford customers with authoritative, centralized data and provides fact-based decision making capabilities for any SMP.

#### What is InsightAnalysis?

InsightAnalysis is one part of the FleetInsight technology suite. It is the only web-based, multi-user, customizable software solution that has successfully converted a legacy scheduled maintenance program to a fully compliant Maintenance Steering Group-3 (MSG-3) based maintenance program. MSG-3 is the commercial aviation industry’s best practice for scheduled maintenance, and is approved and maintained by the Airlines for America (A4A, formerly the FAA). While other software solutions offer MSG-3 capability, InsightAnalysis incorporates specific logic for structures, systems, zonal, and Lightning-High Intensity Radiated Fields (L-HIRF). In addition, our software meet all DoD network security requirements and is fully transportable to other DoD agencies.

#### “Right Time to Find, Right Time to Fix”

MSG-3 is a system-driven, top-down, and task-oriented hierarchical maintenance program that incorporates repeatable, standardized inspections at all maintenance levels; and uses a highly structured decision logic that incorporates empirical and reliability data to determine the

precise timing of scheduled maintenance actions, a.k.a. “Right Time To Find, Right Time To Fix”. The InsightAnalysis design facilitates this very structured analysis logic capturing in the database each and every decision made during the development of the scheduled maintenance program. Once complete, a fully traceable scheduled maintenance program is available and documented with all relevant logic and decisions captured. The maintainer will always fully understand why and how maintenance actions are performed.

#### Systems/Structures/Zones

InsightAnalysis captures, documents and stores both Maintenance Significant Items (MSIs) and Non-MSIs. Analysts perform Failure, Mode, Effects and Criticality Analysis (FMECA), and create applicable and effective task(s) for each MSI. During each step of the analysis, each functional failure and how it affects the operation, safety and economic performance of the aircraft is captured. After systems analysis, each MSI is assigned a Hazard Risk Assessment and produces a Hazard Risk Index (HRI) to confirm task validity.

The specific structural analysis utilizes the Durability and Damage Tolerant Assessment (D&DTA) and Aircraft Structural Integrity Program (ASIP) data. This process aides in the identification and categorization of Significant Structural Items (SSIs) and Other Structural Items (OSIs). SSIs and OSIs are analyzed through accidental and environmental damage rating sheets to determine the susceptibility (likelihood of damage) and detectability (timely detection of damage). These ratings help determine the appropriate types of inspection task(s) and intervals.

InsightAnalysis provides a standard and enhanced (wiring and L/HIRF) zonal analysis. Zonal analysis allows for each zone to be analyzed and produce tasks that take into consideration the zone access, vantage point, environment, wiring and combustible material.

## Supply Chain Management

A key component of an optimized scheduled maintenance program is ensuring the right parts are available at the right time to support the maintenance effort. InsightAnalysis is a “maintenance-centric” solution; it incorporates each and every piece of information the mechanic needs to do their job. All relevant supply requirements, including expendable and recoverable assets, support equipment, and tools are integrated directly into each maintenance task. This fully comprehensive scheduled maintenance program not only provides the mechanic with all information needed to perform the maintenance tasks, but also ensures the supply chain is poised to support incoming and future workloads.

## Continuous Analysis and Sustainment

A significant advantage InsightAnalysis offers is a fully traceable scheduled maintenance program. Paired with continuous capture of failure data, analytical teams can quickly report and effectively identify negative trends before they become detrimental to a program’s reliability or availability. When integrated with Hexagon’s VectorSustain<sup>SM</sup> process, the scheduled maintenance program remains current and continuously fine-tuned for future optimization.

We empower you to make smarter and faster operational decisions. We enable you to organize vast amounts of complex data into understandable visual representations. We equip you with superior products and solutions to optimize and protect operations to make your organization safer and more productive.

## InsightAnalysis Standard Capabilities

- Offers a web-based, multi-user, customizable, and scalable software solution
- Meets all DoD network security requirements and is fully transportable to other DoD agencies
- Optimizes fleet maintenance program
- Captures and document MSI’s and Non-MSI’s
- Utilizes specific logic for performing structural, systems, zonal, and Lightning-High Intensity Radiated Fields (L-HIRF) analysis
- Incorporates empirical and reliability data to determine the precise timing of scheduled maintenance
- Identifies and categorizes Significant Structural Items (SSIs) and Other Structural Items (OSIs) for inspection task(s) and intervals
- Incorporates all relevant supply requirements, including related assets, support equipment, and tools directly into each maintenance task.
- Provides tools for ad-hoc and predictive analysis
- Provides Supply Chain organization with forecasting and trending

## Minimum System Requirements

Microsoft Windows 2008 Server including IIS 7.0, Microsoft SQL Server 2008 Standard, 8 GB RAM, storage requirements dependent on amount of data processed.

## Contact Us

Email: [info@hexagonusfederal.com](mailto:info@hexagonusfederal.com)

Tel: +1 800 747 2232

[hexagonusfederal.com](http://hexagonusfederal.com)

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