



Computerized Records

Top Five Reasons for Automated Maintenance, Inventory and Compliance Management

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OVERVIEW

Maintenance records are the lifeblood of an aircraft, proof that it has been maintained in accordance with the manufacturer's documentation as well as FAA or local regulatory guidelines.

While maintenance tracking is required, enrolling your aircraft in a computerized maintenance tracking program is not. For years, aircraft maintenance teams have relied on traditional paper-based methods of records management.

Today's technology, from the cloud and mobile devices to robust applications, is uniquely equipped to facilitate the accurate and efficient recording of maintenance, inventory and compliance activities across a fleet. Even the FAA has adopted and promoted maintenance tracking programs and paperless compliance (AC 120-78), a clear indicator of the industry shift into a more functional and streamlined approach to maintenance and compliance.

Here are five reasons why you might consider updating your records management and workflow to a fully serviced, automated maintenance tracking system.

1. REDUCED DATA RE-ENTRY & IMPROVED ACCESSIBILITY

Many aircraft owners and operators still rely on a combination of handwritten logs, spreadsheets and some digital documentation to support maintenance activities and inventory tasks.

Maintenance directors, technicians and quality control spend hours each week manually entering and often re-entering data into various forms to meet operational and regulatory requirements. A major service or inspection can take days of data entry and one inspection work order can total 100 to 200 pages.

Need to budget for scheduled maintenance tasks across an entire fleet? Few paper-driven systems are equipped to efficiently and accurately provide instant information about when items are coming due to support continued airworthiness, safety and operations.

Operational inefficiencies create a silent drag on an organization, costing time and money. A well-developed automated maintenance, inventory and compliance system provides instant accessibility to safety records and reports, regulatory requirements with regard to components, inspections per manufacturer and operational costs.

When asked about efficiencies gained from automated record keeping, Kari Van Winkle, Director of Maintenance at Wing Aviation, a large charter and private jet service management company, confirms, *"The technicians complete a task, type in the description on their tablets, e-sign and they're done. We used to have to print every task card, get signatures and then store them. It used to be that a 15-minute task required 30 minutes of paperwork. Now, a 15-minute task requires three minutes of electronic paperwork."*

2. INCREASED OPERATIONAL VISIBILITY

Do you know in an instant the state of your fleet? Can you spot and then track recurring part issues? Are your maintenance expenses on the rise and do you know why?

These are all questions that are difficult to answer with disparate, disconnected systems. Automated record-keeping provides a central-ized resource for maintenance directors to gain real time insight into the state of their fleet. Knowledge about work orders, labor hours and part costs in one system facilitates decision making and drives efficiency.

With electronic record-keeping and operational dashboards, a maintenance director has a highly accurate record of daily activities like labor hours and cost-per-flight-hour, and cost of scheduled and unscheduled maintenance per aircraft. A director can assign multiple tasks to mechanics, flag items for review, monitor progress and alert key personnel to complete tasks and inspections.

One director of maintenance noted that he saw an 8% increase in maintenance expenses over a period of time. With automated maintenance, he was able to identify several components across the fleet that were failing three times faster than usual. With that information, the director estimates the organization will save \$30,000 this year.

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For Nick King, Director of Maintenance at Hospital Wing, a non-profit air ambulance company, the home page dashboard is where he gets the most value. He adds, *"Right from the home page, I'm able to see the MELs, NEFs and any discrepancies that we have and quickly track the history of every aircraft. No paper logbooks or flight logs or aircraft maintenance logs. No more paper. Now I can step away and still have that live interaction with our aircraft fleet."*

3. BETTER MAINTENANCE & INVENTORY CONNECTIVITY

"Our goal is to have a just-in-time inventory. Technology, specifically powerful tracking software, can help us understand our usage data so we have the right stock levels," says Paul Coursey, Director of Maintenance at REVA.

Imagine an automated inventory system that streamlines inventory management and populates the maintenance tracking dashboard for true integration.

Connecting maintenance and inventory tracking to create seamless transactions, eliminate duplicate entry, and build history across components and maintenance items is one of the most effective applications of today's technology applications. An inventory control dashboard manages the movement of parts throughout an operation while the maintenance tracking systems manages fleet status and maintenance schedules.

Josh Wexler, Aircraft Maintenance Lead at Hospital Wing, uses the connected inventory and maintenance capabilities to build a reusable parts list for maintenance items and allocate those items directly from the real time inventory database to a work order and then transfer data directly from the work order to an eLogbook.

Well-developed solutions can even tie in external programs, like scheduling, through APIs to consolidate data entry.

4. IMPROVED FINANCIAL REPORTING & ANALYSIS

One of the biggest challenges in any organization is effective communication between operations and maintenance, and stakeholders and finance departments. This includes detailed audit trails and component expense reports.

With legacy systems, it's almost impossible to pull actionable financial data. The technology is outdated and the data isn't easily accessible. Legacy systems incorporate inflexible processes that confine operators to predetermined workflows, which can hamstring an organization by creating tedious workarounds that waste critical labor hours.

By leveraging the data within a cloud-based records management and inventory system, operators are running detailed reports across their fleet, identifying excess costs and delivering critical data to key stakeholders in the organization.

Patricia McPhee, Maintenance Administrator / Coordinator with REVA, is responsible for checking daily reports, verifying flight log times, entering maintenance and pilot discrepancies, and entering and closing out mechanic times. She adds, *"Through Flightdocs, we've established a highly accurate record of our daily activities like labor hours and cost-per-flight-hour, cost of scheduled and unscheduled maintenance per aircraft, etc. It's digital organization that helps us understand what we do on a daily, monthly and annual basis."*

5. ON-DEMAND AUDITING & COMPLIANCE DOCUMENTATION

Automated record keeping is also ideal for supporting audits and other compliance-related activities. Top systems have built-in electronic compliance workflows that simplify compliance processes and record keeping. As the auditor steps through checks, the maintenance director is pulling up certifications — easily and instantly, with no searching through paper certifications.

Wyatt Robertson, Chief Inspector for Wing Aviation and responsible for aircraft regulatory compliance, explains, *"Preparing for an audit used to take several hours a day for a few days prior to the event. I do the same thing [with Flightdocs] in just a few hours on one day — that's all it took for me for verification and confidence in the documentation."*

Paul Coursey, Director of Maintenance at REVA, says, *"Flightdocs helps me assure that we're compliant with federal aviation regulations, develop work orders, purchase orders, etc."*

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6. BONUS REASON: SMOOTHER AIRCRAFT RESALE

The value of any aircraft is dependent on maintenance tracking data. Len Beauchemin, Managing Director / Senior Advisor for AeroTechna Solutions, LLC., states, *"Regulations are clear about what is required within a logbook or work order – but there is no template for how it is presented, preserved and managed."*

It's important when establishing best practices for aircraft records that a company evaluates the process from an asset management perspective. How will your records translate to maximizing the value of your aircraft when it's time to sell? Records is one of the top depreciators of an aircraft.

The value of any aircraft is determined by:

- Accuracy and integrity of your data and records
- Continuity of information and inspection
- Accessibility of data/records
- Presentation of information

An automated maintenance, inventory and compliance management solution maintains all of that information, making it accessible at the touch of a button. Maintaining the value of your asset, the aircraft, is just one more benefit of streamlined and automated record keeping.



ABOUT ATP Flightdocs

Flightdocs Enterprise was built with the technology and capability to fit almost any flight department. Whether you want to go paperless, stay old-school, or find a happy medium, Flightdocs streamlines recordkeeping and automates processes that used to take technicians hours or days. With our management tools, managers can stay on top of their fleet by assigning tasks, communicating with team members, and monitoring progress as tasks are completed. These are invaluable tools that make management easier and more effective than ever before.