

THE MOST COMPREHENSIVE HELICOPTER M&E MRO SOLUTION ON CLOUD OFFERING COMPLETE MOBILITY ANYWHERE, ANYTIME





## SIGNIFICANT GAINS BY RAMCO CUSTOMERS

Reliability Management

100%

Rouge parts identification

**Engineering Management** 

80%

Automation of Non-critical activity

Resource Management

**15%** 

Productivity improvement

Contract Management

10%

Reduction in revenue leakages

Warranty Management

\$6M

Savings on warranty

Data Availability & Reporting

40%

Reduction in data corruption

Inventory Management

6%

Reduction on Carrying cost

5<sup>th</sup> Gen Aircraft Management

300

Software upgrades at click of button



### **ANYWHERE APPS**

# Did you know maintenance delays cost airlines \$3-3.5 billion\*

each year during turnaround operations?

Some of the key roles in the aviation maintenance ecosystem add waiting time in small and medium time packets.

A supervisor waiting to receive in-cockpit discrepencies from the pilot.

A mechanic waiting for the storekeeper to respond to a part request.

The storekeeper tries to find which zone of the warehouse the part is situated. The entire aircraft waiting for management to approve paperwork.

Reactionary delays prevail in full opacity and contribute to a large delay percentage when added together.

Ramco "Anywhere Apps", offer "smart" context-aware functions such as real-time monitoring of stock position, tracking the movement of parts and task card, documentation rendering in a responsive form with in-place sign-offs enabled, and cloud-based data retrieval. Critical functions, like those which are stock-related, are secured through Geo-fencing, which prevents unauthorized access beyond the defined perimeter of the warehouse location and as determined by the current GPS co-ordinates of the transacting device. Integrated bar code scanner, smart search and voice input features, offer a near hands-free experience to the line maintenance personnel at the Warehouse and Hangar.

## Here's a small introduction to each of the anywhere apps

Fly Anywhere is an Electronic Flight Bag solution that brings cutting edge technology to the flight deck. It manages pre-flight, in-flight and post-flight functions wherein end-to-end Aircraft pilot & crew activities are captured in real-time, leading to a paperless cockpit.

Along with user friendly UI and easy navigation, this app features many operational and business functionalities such as aircraft

data, weather data, weight and balance calculation, journey details, document reference, performance calculations, flight sheet and more.

It enables the pilot to manage parameters recording, log delay and discrepancy and access crew and duty information for every flight. For contracted or point to point charter operations, Fly Anywhere app seamlessly integrates with the M & E application to generate contract—based customer invoicing from journey log details at the click of a button.

#### **Key highlights on Fly Anywhere App**

- O A stand-alone app which can be used in-flight without network connectivity
- O Updates the corresponding flight details and maintenance schedules without human intervention



- O Improves gate-turn performance while efficiently delivering the right information to the crew
- O Communicates mechanical issues clearly to determine the course of action
- O Secures the information by enabling data backup at any point of time

Mechanic Anywhere helps mechanics to streamline daily operations through electronic routine task cards, request and tracks parts and resources, as well as log discrepancies and view resolution histories.

Warehouse Anywhere provides store managers and clerks with a comprehensive platform for stock management; supports key warehousing functions such as stock inquiries, stock issues, returns and transfers.

Route Anywhere helps the logistics in-charge / routing personnel to service requests for picking parts and moving across Warehouses or Work Centers in real time

Customer Anywhere provides the right information at the right time to MRO customers through a simple intuitive portal. The app allows the customers of MRO organizations to record various operational & commercial approvals like Quote approvals, PMA parts usage, etc.

Approve Anywhere permits senior management to approve transactions on-the-go. It covers documents having financial impact, such as stock corrections, purchase orders, repair orders and invoices.

## How can the anywhere apps eco-system be used in the helicopter maintenance?

You are a leading transportation services provider who operates helicopters for offshore oil & gas industry.

The Commercial Department will then prepare and send the customer invoice for approval which the customer receives and approves on his Customer Anywhere App

The shift mechanic at the work center, while logging in to the app on his iPad, gets the task on priority along with the regular daily check in his to-do list

NT | NST-000071-2015 | Task to be Executed | Evidence of Oil Leakage near main rotor shaft found. Inspect & Repair as necessary

The store clerk, who is having lunch outside, will get a notification on his iPhone (Warehouse Anywhere App) regarding the MR.

#### GI-010226-2015 | Part# 09-013 | Qty: 1

The store clerk realizes that he is outside the geo-fencing parameter applicable to his warehouse and cannot issue the part. He then quickly walks to the warehouse, searches for the zone and bin of the part. He realizes that the part requested is not available in the warehouse he is based at and searches for the part in the warehouses nearby

The Water Spider who is supposed to deliver the part to the work center gets a notification on his "Route Anywhere" App regarding the stock transfer

He mobilizes the part and delivers it to the shift mechanic in the work center.

Pilot A, who is currently flying one of the regular sea routes, reports an oil leakage on his helicopter in the Fly Anywhere App as he flies it down to your base for maintenance after his day's flight.

Once the helicopter lands back at the base, the pilot marks the flight as completed in his "Fly Anywhere" app and the Commercial Department gets the heads up to prepare the customer invoice.

Once the helicopter arrives at the base, the lead mechanic at your base receives the request on his "Mechanic Anywhere" app and quickly adds this discrepancy to the work package for daily maintenance

The shift mechanic can then select and open the task card to find the task details, task instructions and the sub-tasks

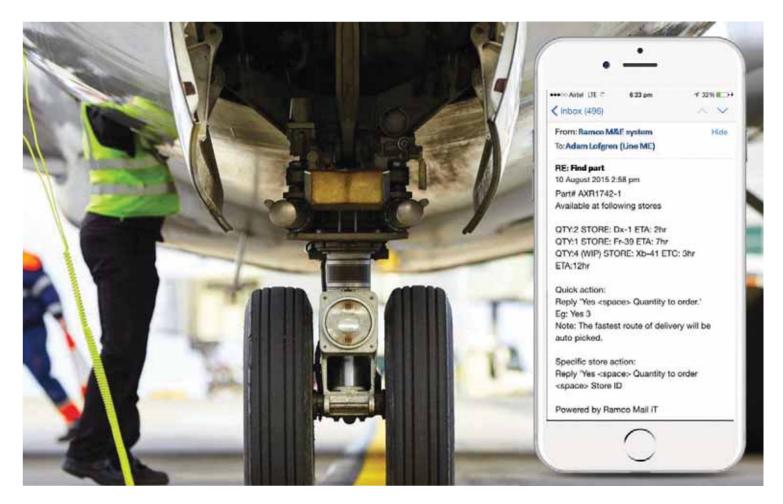
The mechanic then evaluates the tasks and understands that

O He can perform the task by replacing the oil seal with a serviceable one from the warehouse and creates a Material Request (MR)

After finding the part requested in the nearby location, the store clerk issues a stock transfer

The shift mechanic finishes the job and e-signs off the task as completed; a notification goes to his supervisor in real time.





From an accessory to the 'necessary', email communication has firmly crept into the day to day activities of the Helicopter personnel. Employees are not just exchanging instant information, or bartering for basic work ingredients without logging on to the system but are also rampantly performing transactions through email. This is becoming another channel to communicate and transact with your business applications – from personal office productivity tools to enterprise wide applications suites.

Let's take a typical line maintenance scenario where the mechanic needs to find a part to fix a problem occurred. The mechanic will walk back to the work station, log in and find the job information. He will then assess if there is any material needed to finish this job and raise the request to the store manager who in turn will check manually through his desktop and the stores nearby to find the part required. The time taken to finish this job could take several minutes to hours. This is simply not acceptable when the severity increases or in an AOG situation.

To ease the life of various maintenance personnel and the operators, Ramco introduces the zero UI concept, the Ramco Mail

IT. Imagine a situation where the aviation maintenance personnel doesn't have to login to the system or traverse through multiple screens to find the information they need.Ramco Mail IT has been designed for the light or Line Maintenance user, this solution leaps over traditional user interfaces to focus on end user experience by using the ubiquitous email from a smart phone or tablet to interact directly with your M&E system.

The zero UI concept of Ramco Mail IT leaps over traditional user interfaces to focus on end user experience. In the Helicopter industry, time is money and the mechanic or the warehouse manager would not have the luxury to go through the tiring process of walking back to the hangar for each and every transaction. In this case, an actual anywhere, anytime access that makes the system most inclusive and quite simple to use and work happening smoothly is just what every heli-operator or MRO needs! So just Mail IT and embrace Zero UI!

Section: 2
SIMPLIFYING OPERATIONS

Innovative solutions that weed out complexities from the maintenance ecosystem

Flight Contract & Invoicing

Offline FIELD Maintenance System

Barcoding

Straight Through Processing

Time & Attendance

e-Pubs

Hub IT



## FLIGHT CONTRACTING AND INVOICING

With ever rising fuel rates, how can heli-operators maintain their competitive streak through effective pricing?

With information on aircraft coverage, billing arrangement for operations & other chartering costs, flight contracts have become more complicated over the last couple of years forcing helicopter operators to read between the lines before officially invoicing the end customer.

Flight Contract & Invoicing | OFMS | Barcoding | STP | T & A | e-Pubs | Hub IT

Additionally, unstable and ever-rising fuel rates make it all the more difficult for operators to bill the appropriate amount to the customer.

If a solution integrates the data points captured on the Electronic Flight Bag (aircraft usage, number of flight hours, activity information, crew charges etc.) with the do's and don'ts of a customer's contracts, a flight invoice can be released to the customer based on the rate definitions made in the contract.

Ramco's EFB and intuitive Flight contract-based invoicing does just that. The new feature weeds out all the manual work from the process by automating the process of going from journey logs to contract-based invoicing, all in 1 step.

#### **PROBLEMS**

With multiple customers and contracts, the standing charges are not billed on time every month. Added to this variety are complex rules that govern customer contracts - resulting in delayed billing that reflect on revenue.

Moreover, back charging of expenses relating to customer flights become difficult due to lack of effective linkage between vendor invoicing & customer invoicing systems.

#### SOLUTION

O The application's 'Manage Flight Contract screen' captures all aspects of customer flight contracts. Thus enabling the user to keep a record of essential flight contract information for the charter flights and facilitates him to capture entire customer and aircraft details for the given effectivity. The versatility of the application helps the user to define the way in which each "Billing Head" can be billed.

## **OFFLINE FIELD MAINTENANCE** SYSTEM (OFMS)

To support oil & gas industry, petroleum exploration, mining industry, medical evacuation, firefighting, construction, etc. Heli operators venture into remote locations around the world. Down in the Bermuda Triangle or up on the Alps, stay connected with Ramco OFMS- Offline Field Maintenance System.

Ramco's Offline Field Maintenance System (OFMS) comes as a blessing to Heli-operators to overcome the operational problems in remote operations, by enabling seamless operation even with limited or no-data connectivity.

- O With easy tab-based navigation, the user would be able to record all key information relating to a flight contract like customer information, aircraft details and crew details.
- O The user has the flexibility to make a contract with general terms and conditions, or to record a contract which is customer specific.
- O As fuel costs contribute to a major se operational expenses for a heli-operator, Ramco's invoicing solution offers users by providing various means to effectively bill customers, namely.
- O Entire/Partial charging of expenses back to the end-customer with/without mark up
- O Through the entry made in the uplift log in the application, the customer is charged on the basis of rate specified on the contract prior to the journey
- O Standard burn rate based on the aircraft specific burn rate set, the customer is charged based on the number of hours flown

#### BENEFITS

- O Prevents revenue leakage as the system facilitates an effective queue on pending billable elements
- O Invoice generation & verification becomes easy with the rule-based automation of billing heads
- O Accuracy in billing of all contracted billing elements as the source data for billing is drawn from the system based on contractual terms
- O Effective analysis of profitability as all the cost and revenue tied to the contract & customer
- Efficient Management of revenue from business operations

SIMPLIFYING OPERATIONS

OFMS provides the flexibility to update data from locations which have limited or no connectivity and ensures global visibility of the required data through a synchronous data update cycle while maintaining data integrity.

Operational activities at remote locations like recording flight journey logs, discrepancies component replacements, routine checks, part usage from warehouse etc. are recorded in the field base devices and transmitted to main base in the form of data packets.

This enables the helicopter operators to synchronize maintenance planning activities throughout their operational locations irrespective of connectivity issues. For instance, the flying hours recorded as a part of flights carried out in remote locations are passed on to the headquarters where the helicopter and its attached component's life are tracked closely for effective on-condition maintenance. Moreover, through the synchronized data process, the part usages in the warehouse of the remote locations are monitored and stock replenishment is carried out in advance to avoid any AOG situation.

#### BENEFITS

- O It is a lightweight solution having only the functions required for remote operations and can be installed in a laptop making it act as a local server for the aircraft crew to record their maintenance operations and track inventory, while they are in remote location
- O It provides utility to extract the data in packets which can be shipped via an external media to the main location where the main server is located
- The data packet can also be moved through automated emails or auto FTP to the main server when connectivity is established
- O It provides utility to read the data packet at the other end (main server) and import the data from the field
- O Master data and other system parameters are transferred from main server to field base through the same utility
- O Data packet extraction and load can be a batch process and on demand as well
- O It provides the required reports like maintenance due report, tag report etc. for the field user mechanics

### BARCODING

Never has the term "read between the lines" ever made more sense than in the case of barcodes. Over the years, the usability of barcodes has grown leaps and bounds to such an extent, that now, several processes cannot be thought of being performed without it.

That is why Ramco Aviation Suite has been embedded with features to leverage this technology – to ensure greater employee productivity and improved decision-making through increased data accuracy.

#### **PROBLEMS**

- O The execution of aircraft maintenance work or maintenance services demands that documents such as engineering orders, work orders, work packages, non-routine jobs etc. be created at a planning level and then issued to execution level.
- O The execution level supervisors then receive, read, and assign these documents to a mechanic or engineer, and record the assignment details.
- O Shift-In-Charges/Supervisors mostly record this information offline at the end of the shift or at the end of each maintenance or service work, since their main goal is to complete the aircraft maintenance task at hand, and adhere to OTP requirements.
- O Therefore, captured data on the time spent completing certain maintenance tasks are mostly only estimations rounded up based on each person's experience, and may not exactly be the actual time taken by the mechanic who performed it, thereby making the data unreliable.
- O When there is no access to reliable data, the man-hours and cost used in the maintenance process estimations become unrealistic variables and in the long run will likely contribute to erroneous estimates, budgeting and cost.

#### SOLUTION

O The application is embedded with a new business process 'Smart Operations' to manage bar-code based operations

Flight Contract & Invoicing | OFMS | Barcoding | STP | T & A | e-Pubs | Hub IT

- O For select actions by the mechanic, bar codes are provided on the 'Task card' print in the cover page
- O Actions such as clock-in, clock-out, material request etc. can be completed by scanning the barcode alongside the appropriate action
- O Additionally, application screens can also be launched using the bar code interface

#### **OPERATIONAL ROBUSTNESS**

O Improved decision-making due to the availability of accurate data on time consumed on any particular activity

#### PRODUCTIVITY IMPROVEMENT

O Increased employee productivity as a result of automation of activities that are relatively less business-critical



## STRAIGHT THROUGH **PROCESSING**

#### THE 'STATUS QUO'

Helicopters are used for a wide variety of activities ranging from transporting people, emergency evacuation, heavy lifting, construction, aerial survey and lots more. From a business perspective, one of the key factors that contribute to the success of an operator in such scenarios is the availability of operation-ready helicopters. With multiple stages in the part repair/return process, how do heli-operators ensure quicker turnaround, fleet availability, lower costs and revenue increase – all at the same time?

With increasing costs and reducing margins in the rotor wing industry, it only makes sense for organizations to adopt practices that keep both time and cost in check. Ramco's Helicopter suite is built on this foundation; enabling resources and personnel to focus on business and mission critical activities, while letting the software or the system to work on the rest.

#### **EXPERIENCING 'SEAMLESSNESS'**

Unleashing (STP) Straight Through Processing in Aviation, an in-built process optimization engine that intelligently automates the non-critical processes and steps that earlier consumed several man hours, adding more spanner time to the end user (mechanic/maintenance engineer).

Below are some of the steps that in today's scenario are executed manually in a typical 'part repair and replacement process'

- O Having the stores in-charge confirm the return request raised by the mechanic
- O Routing of the part for external repair by the production/ material control in-charge
- O Processing the repair order through the buyer/repair admin
- O Having the buyer/repair admin release the part for shipping
- O Having the store-in charge confirming the issue
- O On board STP, such manual interventions related to documentation and non-critical approvals can be seamlessly automated and successfully eradicated.

#### **BUSINESS IMPACT**

O Faster processes = Shorter TAT = More turnarounds each day

When STP is incorporated to some of the other critical processes, imagine incremental 'time and cost gains' an operator or an MRO would usher into every single transaction, alongside accuracy and dependability.



## FAST TRACK YOUR MAINTENANCE OPERATIONS WITH TECHNOLOGY

Aircraft Induction in **UNDER 5 DAYS** 

Parts Repair Processing down to 2 STEPS FROM 7

Fast track your throughput time to



## KIOSK-BASED TIME AND ATTENDANCE

Over the years, organizations across the world have tried to come up with a solution to maximize employee productivity and ensure that an employee's work hours are recorded and allocated to various assignments.

On similar grounds, tracking human resource utilization across activities has been a problem that has haunted several Heli-operators globally, especially with new bases springing into action in remote locations. Ramco's latest Heli-operator suite v5.7 provides the perfect solution to ensure that all Heli-operators have clear knowledge on the projects/activities that their employees are spending time on.

The software intuitively uses a single interface enabling employees to book time against different entities. Provisioning to allow backdated entries helps employees to make entries for work that has already been performed.

Employees can now book time against any other job, besides Shop Work Orders or Aircraft Maintenance Execution Orders, thereby helping track employee productivity, besides increasing accuracy by eliminating the possibility of human errors, and saving time and effort.

#### SOLUTION

- O Kiosk-based attendance & timesheet entry facilitates multiple employees to record time by individual authentication
- O Employee logins are based on smart cards and bar codes including manual logins. Time reporting is also made easy with simple screens and smart & intuitive filters
- O The ability to bar code read the Work Order / Execution document, and task information from the task card, helps avoid manual recording of those details during time booking
- O Default intelligent screens help initiate or end the time clocks
- O The solution also provides comprehensive information with visibility on the employee's timesheet summary for the day
- O It also helps with easy reporting of time against multiple projects and activities
- O The inbuilt system logic helps to divide the time amongst various tasks running in parallel, while facilitating good visibility on the timesheet reported against previous activities
- O Besides providing for exception-based review and correction of time entries, it also offers auto-stoppage of running-time entries on attendance swipe-outs

- O Saves time by facilitating exception-based review and bulk approval of time entries of employees. It automatically identifies the alternate approver as required
- Consolidated processing of timesheet entries integrated with accounting, with in-built restrictions preventing timesheet reporting for the periods for which time accounting is processed
- O Users can also create and manage multiple time-booking entities
- O The user can review his/her work summary for the day and book for exceptions

#### **BUSINESS IMPACT**

O Cost-effective, as the kiosk-based time entries facilitates sharing of resources by multiple employees

#### PRODUCTIVITY IMPROVEMENT

O Increases overall employee productivity as the data entry is made easy

#### **OPERATIONAL ROBUSTNESS**

- O Accurate employee timesheets and expense tracking / job costing
- O Effective tracking of indirect time entries



## **EPUBLICATIONS**



Technical documents, provided by the aircraft Original Equipment Manufacturers (OEMs) are constantly changing. They are the primary source of aircraft, engine and component reference information. Constant revisions and updates by manufacturers, vendors and airline personnel add more

complexity in controlling these documents. Not following the maintenance repair and overhaul procedures approved by manufacturers, vendors and regulatory agencies can result in poor quality or worse, non-compliance fines. Technical documents are usually stored in multiple places and version control is extremely difficult in this case. Typically, different automated tools are used to create and maintain records, leading to a process that is extremely time consuming and in some cases inaccurate. An integrated approach is needed to Technical Documentation Management to ensure the above-mentioned confusion and loss is eliminated.

#### Presenting Ramco's ePublications Solution!

This is a web-based interactive technical documentation management system for the Maintenance & Engineering (M&E) and Maintenance Repair and Overhaul (MRO) segments of the aviation industry. The solution has the built-in capability to process OEM's digital documents, manage content and author task cards, Work Instructions and Engineering orders. The ePublications Solution interfaces with Ramco's M&E MRO Solution and provides direct links to the maintenance programme tasks and modifications. It has three modules to manage these document publications needs – Task Card publisher, Work Package Publisher & Document Publisher.

#### **DOCUMENT PUBLISHER**

- O Processes OEM maintenance documents (AMM, IPC) in digital formats (SGML) for interactive document viewing
- O Hierarchical presentation of Table of Content for AMM & IPC documents to facilitate easy navigation between the nodes
- O Ability to highlight the revisions in AMM/IPC (SGML) since last release
- Three-panes view to facilitate the side-by-side presentation of Parts and related graphics from the Illustrated Parts Catalog (IPC)

- O Capability to extract the part list from SGML IPC document
- O Extensive search capabilities in form of search by Part#, Figure#, ATA# & Task# along with option to perform wildcard search
- O Ability to bookmark the Tasks and Figures for later reference

#### **RK PACKAGE PUBLISHER**

- O Generates work packages in PDF format for saving and printing
- O Initiates the Work Package printing from the work execution screens due to the built-in integration with Ramco M&E MRO Solution
- O Facility to select and include Tally sheet, Planning details, Sign-off blocks, Work Instructions and attachments as per requirement in the task card package
- O Ability to include and print non-routine task cards as part of a work package

#### TASK CARD PUBLISHER

- O Ability to author task cards by referring to procedures & graphics from AMM (SGML)
- O Adds custom instructions and graphics at Task/subtask level with sign-off blocks for mechanic/inspector
- O Controls the process for review, release and revision of task cards
- O Capability to trigger emails on completion of different events throughout the life cycle of Task Card publishing
- O Facility to publish Task cards in a standard PDF template

#### BENEFITS

- O Web application allows access to maintenance information from anywhere
- O Enhances productivity of maintenance staff by providing a simple, user friendly interface to quickly find the required maintenance information
- O Improves fleet uptime and regulatory compliance
- O Fully integrated solution starting from OEM manuals to task cards to M&E application allows faster communication of changes and revisions

## **HUB IT WITH RAMCO**

The rotor wing industry is comprised of heli-operators of various sizes, most of which are small. Moreover, most operators strategically position their fleet across field bases at various locations to cater to end-customers in the respective region. Besides the critical maintenance activities of the aircraft that occurs at the main base, the field base is responsible for day-to-day maintenance of aircraft to ensure its air-worthiness.

Both cases share the mutual problem of insufficient staff, which in many cases involves having a single field base mechanic juggling multiple responsibilities at the base besides just maintaining an aircraft.

A field base mechanic's responsibility extends to managing the warehouse too - including Requesting, Issuing, Receiving, Shipping parts and lots more.

#### **PROBLEMS**

Although physical activities may be performed on a day-to-day basis, it becomes a mandate for the mechanic to have them recorded in the organization's ERP system, which in most cases is considered cumbersome and time consuming. It involves visiting different processes, activities and dashboards to enter the data. The application's complex navigational system and lack of clarity increases the chance of inaccuracy and decreases the productivity of the mechanic.

Adding to the difficulty, several transactions need to be monitored and displayed to the specific user to reduce processing time. It becomes extremely difficult for the mechanic to search and determine pending action items and therefore, there is a need to have them notified about the same.

Therefore, it becomes vital to provide them a simpler solution to monitor and complete transactions. Ramco addresses just that.

#### SOLUTION

- O Ramco's intuitive HUB IT acts as a "to do" list
- O It traverses through many functions to help users effectively monitor and perform transactions
- O The application's Inventory HUB IT can be used to monitor and process issues, returns, receipts etc. The issues can be also confirmed using the HUB IT
- O Action items due are dynamically retrieved based on the actions performed by the mechanic

#### **OPERATIONAL ROBUSTNESS**

- O The feature enables users to monitor and process data without having to traverse complex screen navigations
- O The availability of all pertinent information improves user-experience and usability as relevant activities can be performed on the same screen
- O Increased visibility of pending action items on a single dashboard
- O The system auto-alerts the mechanic about part expiry
- O Mechanic Transaction cycle time for any process is cut down a lot as all operations can now be performed on one screen.

With several such activities to be performed by the mechanic, how can the heli-operator facilitate faster and accurate data entry by the mechanic?



Customer Testimonials and Case Studies

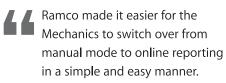
**Customer Testimonials** 

**Customer List** 

**Case Studies** 

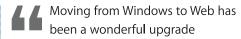






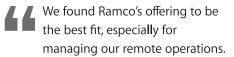
- Rob Zwanenburg, Ornge





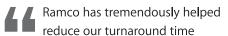
- Stan Wilson, President Columbia Helicopter Inc.





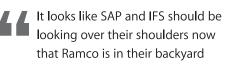
- John Boyd, President & CEO, **Mission Aviation Fellowship** 





- Raylund Romero, Purchase Manager, PHI





- Predrag Jakovijevic, **TEC Analyst** 





## **8 OUT OF TOP 10 HEMS PROVIDERS TRUST RAMCO BECAUSE IT'S A MATTER OF SAVING LIVES!**

## **CUSTOMER LIST**

































- World's Largest independent provider of air medical services
- Group includes: Air Evac Lifeteam & Med Trans Corporation, and Eagle Med
- Air Evac Lifeteam 95 bases, 100 Bell 206 Long Ranger Helicopters
- MedTrans 36 Bases, 40 Aircraft, 15 States

#### **Key Business needs**

- Move from "Records Only" solution to integrated maintenance / materials solution on single platform
- Accurate Maintenance Forecasting

#### Solution offered

- Ramco Maintenance & Engineering rolled out at Air Evac, followed by Med-Trans, and being planned for Eagle Med
- Mobile-first Strategy carry your business in your pocket location & context aware solutions with geo-enabled mobile applications

#### **Business benefits**

- Single point of data-capture
- Accurate real-time maintenance forecasting
- Inventory Control
- Multiple Business units and consolidation from single installation





## ERA HELICOPTERS, ONE OF THE LONGEST-SERVING OPERATORS IN US, SAYS GOODBYE TO DISPARATE SYSTEMS

- One of the longest-serving operators
- Fleet: 170
- Oil & Gas, Air Medical Services, Search & Rescue, Firefighting, Flightseeing & Disaster Relief Efforts

#### **Key Business needs**

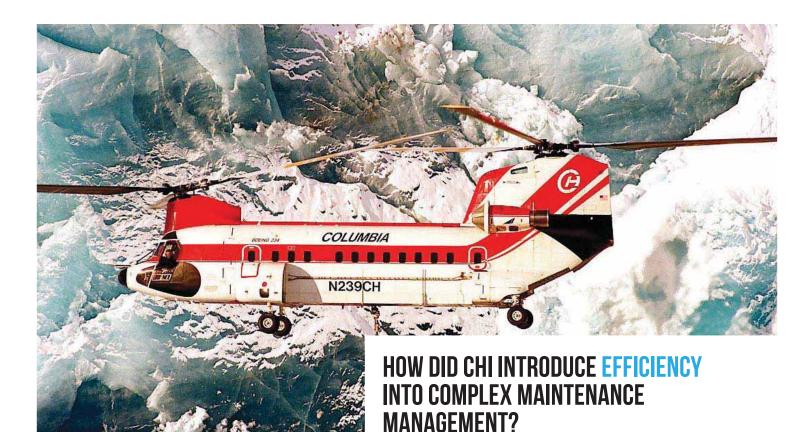
- Technology leadership to be more competitive in the marke place
- One common integrated system to replace multiple disparate systems

#### Solution offered

- Ramco Maintenance & Engineering
- Interface to Corporate Financials (Oracle)

#### **Business benefits**

- Consolidated and optimized inventory across locations
- Control over Power By Hour (PBH) Contracts
- Warranty Tracking
- Centralized visibility & control of fleet



#### **PROBLEM**

Columbia Helicopters is the largest civil operator of the Boeing Vertols and Chinooks. These aircraft have a very complex maintenance management and supply chain. With remote operations and increasing stringency of FAA, they wanted to modernize their infrastructure, bring about efficiencies and position the organization for the propelled growth.

#### **FEATURED SOLUTIONS**

- Ramco Maintenance & Engineering
- Ramco Aviation Financials
- Offline Field Maintenance Solutions (OFMS)
- Time & Attendance Solution

#### **ENGAGEMENT MODEL**

On Premise | On Cloud

Domain Change Management experts experts

Out-of-thebox Large scale implementation

#### **KEY CLIENT CHALLENGES**

- Need for a fully integrated system across their shops, hangars, remote bases and all related functions
  - To cover the life-cycle of aircraft and components,
  - Efficient supply chain management
  - Accurate and effective finance & accounting functions
  - A robust system to support their growing MRO line of business
  - Optimization of mechanics, parts and work load between the maintenance of their own fleet and customer assemblies and parts
  - Maintenance of the Ground Support Equipment functions to have proper accounting of labor and materials
- Managing Maintenance and Inventory data of the remote bases that have limited or no network connectivity
- Managing Time and Attendance of the employees for job costing and payroll purposes

#### RAMCO'S SOLUTION

- Ramco's Aviation Solution is a completely web-centric, state-of-the-art, fully integrated solution including finance and accounting functions
- Utilizing the powerful features of the application, the Columbia Helicopters' team
  has configured the application to take care of the challenges and provide solutions
  to the complex challenges

- End-to-end integration from maintenance to supply chain to finance to operations
- The Offline Field Maintenance Solution enables remote location crew to update records in field bases and auto-sync all data from and to the head office
- The Time & Attendance functions enable the easy & accurate tracking of labor hours and attendance records
- The powerful formula builders within the application enables the team to manage complex maintenance due calculations for component usage
- The comprehensive Contracts functions, that are fully integrated to all areas of the application enables the MRO division to accurately track performance, customer inventory and billing o the work done

#### **KEY BENEFITS**

- Has brought about the technological readiness of Columbia Helicopters to current requirements and set the stage for all future advances with relative ease and agility
- Tracking of the maintenance, parts and utilization from nose to tail
- Visibility of aircraft, components, personnel, parts and equipment across locations
- Consolidated time-tracking for the personnel
- Better visibility & control of costs, revenue and hence predictable profitability
- Optimized inventory across locations
- Increased efficiencies of mechanics more wrench time, less data search and locate time
- Better tracking of the MRO business. Entire Order to Cash cycle in one application
- Centralized IT management



#### **PROBLEM**

PHI predicted rapid growth of their business in the immediate future and wanted a system that seamlessly integrated across maintenance, materials and finance & accounting. The growing number of bases also called for a system that will be web centric for use by the personnel in the field bases. This will provide for real-time data for better analysis and decision-making.

#### FEATURED SOLUTIONS

- Ramco Maintenance & Engineering
- Aviation Analytics
- Electronic Flight Bag

#### **ENGAGEMENT MODEL**

On Premise | On Cloud

Domain | Change Management experts

Out-of-the-box | Large scale implementation

#### **BUSINESS NEEDS**

- Disparate systems over 1000 individual data silos needed to be replaced with 1 source of data
- An IT system that is aligned with PHI's expansion of global operations with excellent scalability
- Ability to plan heavy maintenance of their aircraft to reduce downtime of aircraft
- Ability to have near-zero usage of paper (paperless Shops & Hangars)
- Streamline supply chain across their growing number of bases
- Optimize inventory across all field bases
- Ability to track warranty efficiently
- Replace the home-grown EFB with a robust product that will be state-of-the-art in technology and features
- Reduce the time to bill after the flight had taken place

#### **RAMCO'S SOLUTION**

- Ramco's web-centric application with rich functions in maintenance, engineering and supply chain provided seamless flow and visibility of data across these functions
- Integration with their accounting system with minimal to no human intervention
- Centrally-controlled resource requirements (Man power, materials & equipment)
- Streamlined forecasting & planning of personnel and materials reducing their heavy maintenance turn-around time by almost half
- Real-time tracking of aircraft usage and analysis resulting in PHI's ability to engage in new/competitive pricing models
- Comprehensive Materials Request Matrix, integrating all locations for automated flow of supply chain of parts
- Automated warranty claim generation based on set rules enabling PHI to track warranty even on small items
- Seamlessly integrated EFB providing the following:
  - Paperless cockpit
  - Offline system with ability to communicate through serial port
  - Simple & easy to use flight planning, fuel burn calculations and weight & balance
  - Near real-time billing (Pilot pushes a button upon agreement by the customer in order to to update data into the billing system)

#### **KFY BFNFFITS**

- Single source of data that is real-time, enabling better decision-making
- Achieved paperless shops, hangars and cockpit
- Streamlined aircraft visit planning resulting in increased aircraft availability yielding incremental revenue of \$1.5 million per year per aircraft
- Enhanced warranty tracking enabling savings of around \$6 million per year
- 99.9% Inventory accuracy at all stocking locations
- On-time billing and financial closure
- Complete visibility over parts (internal, external and under repair) across locations
- Automated flow of parts removing any manual intervention using min-max that automatically orders parts for optimal stocking
- Real-time Warranty tracking discovered new savings



#### **PROBLEM**

Hevilift, a leading aviation charter service company in the Asia-Pacific region with a fleet size of 48, required a robust system to integrate their maintenance operations in three main bases across 15+ countries.

#### **FEATURED SOLUTIONS**

- Ramco Maintenance & Engineering with Integrated HR and Finance Modules
- E-publications

#### **ENGAGEMENT MODEL**

On Premise	On Cloud
Domain experts	Change Management experts
Out-of-the- box	Large scale implementation

#### **BUSINESS NEEDS**

- Operator needed financial consolidation & reporting across the group
- Needed to maximize resource utilization aircraft, manpower, material
- Existing system lacked systemized Warranty Tracking abilities
- Engineering Change Management process required automation

#### RAMCO'S SOLUTION

 Ramco to roll out aviation-specific Finance and Accounting solutions, consolidate country-wise financials and report books of accounts at group level (adding visibility)

**SOLUTION FOR ALL ITS NEEDS** 

- Maximize utilization of available resources and increase visibility by integrating Maintenance
   & Engineering, Supply Chain Management, MRO, Finance and Work Force Administration
- Real-time Warranty Management solution to ensure on-time claims recovery by tracking and sending alerts of critical parts
- Deploy complete set of Engineering Change management modules by ensuring automation of aircraft and component modifications

#### **KEY BUSINESS BENEFITS**

- Single harmonized platform for multi company operations
- Improved efficiencies and productivity across the company by restructuring the enterprise setup
- Improved visibility of maintenance dues, parts availability and tracking with M& E solution
- Better management of skilled work force and project allocation with improved end-to-end integration
- Ease of financial consolidations, on-time billing and financial closure
- Profitability analysis at aircraft and customer level

PAYLOAD: 22,000 POUNDS = SPEED: 222 KM/HR = FUEL CONSUMPTION:170 GALLONS/HR **FUEL CAPACITY: 350 GALLONS** COLUMBIA HELICOPTERS' VERTOL (CH46)
FIREFIGHTING IN ALASKA, MAINTAINED ON RAMCO

