



The role of modern MRO in performance excellence at China Airlines



With a proven implementation plan, and supported by a committed vendor in IFS and an internal team of champions, China Airlines is on the right path to making its business performance objectives a reality, helping it remain agile and top of mind in today's highly-competitive market.

Safety first—always

For China Airlines, the promise of safety is the fundamental factor in its goal to deliver the best possible customer service. As Taiwan's largest air carrier and operating in the highly dynamic and competitive Asia Pacific market, being able to strengthen its reputation as an industry leader in this area is a business imperative. Mr. Houng Wang, Senior Vice President, Engineering & Maintenance Organization, China Airlines, says, "We have integrated safety awareness into our operations, system, design, and organization to ensure that all our employees are committed to it. We continuously evaluate and monitor the training and certification of our maintenance personnel to ensure ongoing compliance with regulations."

About China Airlines

Founded in 1959, China Airlines is the largest airline in Taiwan and a SkyTeam airline alliance member since September 2011. As of 2017, the airline operates a fleet of 84 aircraft with an average age of just 8.1 years, including A350-900, A330-300, 777-300ER 737-800, 747-400, 747-400F (cargo). With its hub in Taipei, it serves 151 destinations in 29 countries. China Airlines has 12,562 employees worldwide. Subsidiaries include Mandarin Airlines and Tigerair Taiwan. Revenue in 2016 amounted to TWD 141,047,739 million.

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Needed to integrate maintenance software

The airline had a network of legacy mainframe systems that often failed to deliver the critical data insights required to evolve the business and introduce new efficiencies. The systems were mostly siloed from one another and operated with various sets of processes. This made it difficult to access and share timely maintenance information across the organization. “In our highly competitive marketplace, we knew that success would hinge solely on factors that could be controlled, i.e. driving greater operational efficiencies,” says Mr. Wang, adding that aggressive growth plans and an expanding fleet meant that retaining the status quo was no longer viable. So the search began for a modern IT solution that would do more than merely store transactional data or execute existing processes. The company wanted to integrate the entire Engineering & Maintenance Organization (EMO), strengthen configuration control and record keeping, and minimize in-house customizations.

Mr. Wang continues, “In addition to generating substantial cost savings, we wanted to drive stronger visibility into our operations, both ‘day of’ and historical. This would not only simplify compliance with regulatory standards, but would also help us better understand why things happen and how we could best minimize the risk of it happening again in the future through preventive maintenance.”

IFS Maintenix™—a full end-to-end maintenance suite

China Airlines engaged in a thorough market search to assess the solutions on offer, eventually opting for IFS Maintenix™. Mr. Wang says, “We chose IFS Maintenix as our system of record for maintaining and engineering our fleet of Boeing and Airbus airplanes, as well aircraft from our growing third-party maintenance services.” IFS Maintenix is a full end-to-end suite, including functionality for maintenance program management; configuration management; engineering; planning; materials management; and line, heavy, and shop maintenance.

To ensure the least amount of risk, IFS Maintenix was implemented in two key phases. Mr. Wang explains, “A phased approach offered us the ability to gradually wean off legacy systems and build in the necessary integrations to others, most notably to our SAP ERP system. It also gave us the time to effectively handle change management among staff who would need time to acclimate to a new system. Most importantly, we were able to evaluate progress and measure results at key intervals, assessing fit to the overall business plan, and implementing necessary modifications before moving on.”

The first implementation phase focused on core competencies in engineering, planning and technical records management. The second phase supported the move to real-time management of line and heavy maintenance events, as data is captured at the point of maintenance execution.



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Mr. Houg Wang, Senior Vice President, Engineering & Maintenance Organization, China Airlines

“This is of significant benefit to the growth areas of our business,” says Mr. Wang, “namely our expanding third-party MRO services for global customers like Continental Airlines, FedEx, Korean Air and Japan Airlines.”

IFS Maintenix also extends into such specialty areas as materials management. For instance, China Airlines currently uses a warehousing system called ASAR, or Automatic Storage Automatic Retrieval. ASAR is quite robust, capable of retrieving information on more than 120,000 parts and materials within just 50 seconds of inquiry. “To capitalize on this power, we integrated the system with IFS Maintenix,” Mr. Wang explains. “This enables a completely seamless ‘Just in Time’ supply model, helping us cost-effectively execute timely parts requests and fulfillment in line with increasingly competitive serviceability targets.

Optimization and efficiency key gains

Optimizing the way line and A checks are performed, coupled with the significant reduction in layover times, mean that aircraft are spending more time in revenue-generation mode, and less time in the hangar. “Collectively, the positive results we have experienced to date cannot be undersold,” says Mr. Wang, “Factoring in the cost reductions achieved to date, we are setting ourselves up well for stronger financial performance.” In 2013 alone, China Airlines saw its EMO operating costs go down by U.S. \$3.5 million—a significant achievement considering how the market’s increasingly competitive nature is forcing operators to deliver greater services with fewer resources.

Moment of Service

Moving forward, the real-time logistical support and complete cost analysis afforded by IFS Maintenix will help China Airlines to further increase its maintenance cost control and drive continuing improvements in repair quality and efficiency.

The airline firmly believes that optimizing its EMO will go a long way to maintaining a positive customer experience and driving greater brand loyalty. Most importantly, according to Mr. Wang, “it supports our unending commitment to delivering the safest and most reliable passenger and cargo service in the industry.”

Benefits

- 10 percent increase in line management process efficiencies
- 3 percent increase in A Checks delivery efficiencies
- Average reduction of 30 days layover in scheduled aircraft maintenance
- Average reduction of 25 days layover in unscheduled aircraft maintenance

Find out more

Further information, e-mail info@ifs.com, contact your local IFS office or visit our web site, ifs.com

