

World's first full-fleet deployment of an EFB tech log solution contributes to improved operational efficiency



Thomas Cook Airlines chose an electronic flight bag (EFB) solution from Optimized Systems and Solutions (OSyS) to provide operational-efficiency benefits. The system contributed to the airline's significant on-time performance improvement: they advanced to have the best record among U.K. charter airlines in just one year.

*"Thomas Cook is an industry leader in streamlining aircraft operations through the use of information technology, and we are excited that the OSyS EFB solution with the electronic technical log helps us improve our operational efficiency and supports our goal of a totally paperless environment. Having the EFB information in real time means we are able to improve our customers' experience with even better on-time performance."*

Steve Solomon  
Director, Flight Operations  
Thomas Cook Airlines

## Thomas Cook Airlines

Thomas Cook Airlines is owned by Thomas Cook Group plc, a leading international leisure travel group created by the merger of MyTravel Group plc and Thomas Cook AG in June 2007. The U.K.-based airline operates a fleet of 42 Boeing 757 and 767 and Airbus A320, A321 and A330 aircraft in providing travel services to more than 19 million people annually.

## The drive to continually improve

OSyS' association with MyTravel Airways, now Thomas Cook Airlines Ltd, began in 2004 as the airline was focused on three goals: delivering better performance, maintaining customer satisfaction and remaining a leading force in the industry. They recognized that achieving these goals meant eagerly embracing new technologies and ideas. The search led them to OSyS' EFB solution.

## The OSyS solution

An easy-to-deploy and cost-effective EFB framework, OSyS' solution provided a comprehensive, connected and robust environment for applications. The airline selected the electronic technical log (ETL) as the first application because it delivered the highest tangible return on investment. The ETL manages aircraft technical logs and voyage reports, capturing information including flight-sector data, maintenance monitoring and parts tracking. The data is transmitted wirelessly to a data center for real-time analysis and distribution to the airline's global operational staff who are then able to take action, such as performing recurring maintenance tasks at the aircraft.

The OSyS-developed Class 1 EFB system had successfully completed preliminary trials with various U.K. operators. The airline recognized the benefits that could be derived and partnered with OSyS to perform in-depth proof-of-concept trials on the system. Encouraging trial results led to deployment of the system on the airline fleet.

Working closely with the customer, OSyS implemented the EFB framework and ETL application software to satisfy the airline's needs. During trials on the aircraft, the U.K.'s

## Benefits realized

- *Extended V2500 engine life*
- *Faster capture of high-integrity data*
- *First-time transmission success rate – average 93%*
- *More than 50,000 sectors without a single sector lost*
- *Easily meets 20-minute turnaround standard*
- *Data mining for improved fuel uplifts and burns, targeting 1% reduction in fuel costs*
- *Increased awareness through effective data exchange with ground*
- *Reduced need for manual transcription of technical data and printing / distributing documents*
- *Wireless upload to remote aircraft improves control of maintenance items*
- *Web portal gives global overview of fleet and aircraft status*
- *Transformation of line-maintenance and maintenance-control processes to deliver higher aircraft availability into service*

Civil Aviation Authority (CAA) closely observed the system operation to ensure it met their stringent requirements. The initial tests completed thousands of successful data transmissions without any loss of data, and revealed the benefits that more robust hardware and software could provide. The modifications also needed to allow future developments and capability to produce a framework and application suite that were equally at home on Class 1 and Class 2 platforms.\*

An early test involved parallel running with the customer's legacy paper system. Comparison of the two outputs highlighted data anomalies, effectively demonstrating how the EFB data-entry standardization improves accuracy.

## A successful outcome

The revised system gained CAA approval in early 2006. It was developed to be fully compatible with any airline's existing systems. The approved system was enhanced with Panasonic Toughbook hardware and more resilient, more open software. It was the first system of its type to go through the approval process. The successful submission developed by MyTravel and OSyS formed the benchmark against which the CAA evaluates subsequent requests for EFB system approval.

Full deployment to the airline's fleet began in May 2006. Using GPRS and GSM as the low-cost, widely-available communications channel, OSyS delivered a system capable of meeting rapid turnaround requirements while maintaining highly affordable transmission costs.

MyTravel Airways was recognized by Flightontime.info\*\* as the U.K. charter airline with the best on-time record for the summer 2006, summer 2007 and winter 2007-2008 seasons. It also achieved the most improved on-time performance in 2006 for cutting late flights from 13.9% in winter 2004-2005 to 6.9% in winter 2005-2006.

## The story continues

Growing on the success of the initial deployment, Thomas Cook Airlines (U.K.) has pushed ahead to extend the system capabilities into the following:

- Flight library with a complete ship-set of manuals distributed electronically
- Crew notices and flight briefing onboard
- Take-off and landing calculation/performance tools

OSyS continues to work with the Airline to realize the EFB solution's full potential, with delivery of an extended set of applications into trial and plans to deploy across the merged fleet. Long term, the solution supports migration to a Class 2 platform.

\* Class 1 platforms are portable, not attached to the aircraft or aircraft systems. Class 2 platforms are portable, but attach to the aircraft and have limited connectivity to aircraft systems.

\*\* Flightontime.info is a web-based information service that analyzes data derived from the statistics published monthly by the U.K. CAA and then posts the results for the "Big 8" U.K. charter carriers.

## Contact Information

Optimized Systems and Solutions  
civilaviation@o-sys.com  
+44 (0) 1332 777 504

www.o-sys.com

