

CASE STUDY

ATSG CONVERGES ON NEXT GEN MRO

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As a leading provider of aircraft leasing and air cargo transportation services, comprised of transport and maintenance subsidiaries, Air Transport Services Group (ATSG) made the decision to migrate all of its operations to a single, new MRO IT system. After an extensive and rigorous selection process, ATSG chose IFS as its MRO partner, and IFS Maintenix as its new IT platform.

The Search for MRO Convergence

ATSG provides maintenance and airport ground services, as well as aircraft dry and wet leasing, air cargo lift, passenger aircraft, crew, maintenance and insurance (ACMI), and charter services. Operating a combined fleet of more than 90 aircraft across its eight business units requires 3,800 employees worldwide, supporting more than 45 domestic and international stations. With 40 years of operating experience, and the world's largest fleet of converted Boeing 767 freighter aircraft, ATSG had a solid handle on its fleet maintenance requirements, which were the focus of its MRO platform selection process.

Three requirements for its MRO partner were paramount: a track record of successful implementations, strong multi-entity functionality, and the ability to perform a "hot cut" migration to minimize downtime and avoid costly parallel operation. ATSG needed to consolidate two airlines and one leasing company into a streamlined MRO process with advanced technology growth paths. ATSG ultimately selected IFS as its enterprise MRO standard. Not only did the software meet all technical requirements, ATSG was also impressed by IFS' partnership qualities and the positive feedback from current IFS Maintenix customers.

The Hot Cut

A key decision with any major system installation is whether to use a phased approach or a hot-cut. ATSG's Director of IT Paul Harding explains their reasons for the latter: "We decided even before we kicked off the project that we needed to do it that way. The old system was integrated with several different things, plus we had two airlines to migrate to new software. We feared that without a hot cut, the shared data between systems would get out of sync, and it would be too hard to catch them up."

Although the entire migration project spanned 22 months beginning in January 2018, much of that time was spent in detailed design, infrastructure build-out, staff training, and data migration. The actual cutover occurred on a single day in November 2019. "One of our subsidiaries is an MRO operation, and to date our MRO model didn't need to change." The cutover was successful and the existing maintenance organization is now able to bring new dry-lease MRO activities onboard. "We are now expanding our operations quite a bit. We have an initiative called Project Harmony," says Harding, to centralize purchasing across all business units. "And we're looking to take advantage of forecasting, as a lot of our dry lease customers use us for maintenance on their planes."



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Data Migration

ATSG's single largest migration task was data conversion, which required both IFS' technical skills and extensive in-house IT involvement. Harding notes "We had to integrate with Sabre, our flight system," which required custom programming for real-time data exchange. The data conversion process also cleaned up databases quite a bit. "IFS Maintenix helped us find our inventory better, and track where it is." As a result, the new system is running with more accurate data, and is collecting more accurate data going forward. "The way that we existed before IFS Maintenix wasn't getting us there. They were the building block of getting us to a spot where we can really grow and leverage the greater good of ATSG."

Staff Education and Dress Rehersals

As part of its hot-cut preparation, ATSG developed in-house Computer Based Training (CBT), as well as materials from IFS. A third-party training organization provided additional educational manpower, since all ATSG staffers still had to perform their regular jobs. "We did a couple of things," says Harding. "We had CBT introductions, and we had a war room with nine PCs for each airline set up." To isolate training from day-to-day distractions, small groups of staff came into an offsite "war room" for most training activities.

Key Benefits



With the hot-cut completed, ATSG began to realize some immediate payback on the IFS Maintenix investment. "We have two airlines using the same software platform," Harding points out – a remarkable accomplishment in its own right. "We also created a centralized purchasing model. Long term it will help us in staffing. Because we're adding a lot of planes, we want to minimize staff-up and forecast blackout times." For example, a recent aft-pressure bulkhead replacement program can now be scheduled to minimize revenue impact while optimizing maintenance shop efficiency.



ATSG implemented a private cloud, self-hosted IFS Maintenix implementation, with support for remote operations. "That was a key piece too. We had some operations with a hard time getting to our network from outside the firewall. This enabled the team to get directly into Maintenix to get their updates and get the different things that they needed. This was a big help to us."

IFS Maintenix also has many advanced technology options, such as mobile point-of-maintenance signature collection and pilot e-logbook to capture maintenance squawks and remediation. "We do want to get things like e-signature and e-logbook to help make these activities more timely and better."

The primary function of any Maintenance Operation Center (MOC) is supply-chain verification and return-to-service control. IFS Maintenix provides tight audit trails of parts history as well as fleet maintenance sign-offs. Harding appreciates these capabilities for its own MOC: "The requirements are the same [as before], but this gives us tighter security in enacting those limitations, as it's just more obvious if you're not in a position to do what you're supposed to be doing."

A key feature of IFS Maintenix is comprehensive data analytics, to identify trends and support fact-based decision that drives continuous maintenance program improvement. An ongoing ATSG analytics project is engine data collection and predictive analysis. "One of the things we're doing now is putting Teledyne boxes on the planes to analyze data. We just hired a director of operational analytics to get a better handle on predictive analytics."

Future Directions

With IFS Maintenix cutover complete and fully operational, ATSG has a clear roadmap for the future. "We've only been live for five or six months so far," notes Harding. "Our goal was to buy off-the-shelf and put that into place, and we pretty much did that. There's always the process of ironing out infrastructure details, and we're still finishing those processes." ATSG is now well poised to exploit IFS Maintenix' predictive analytics, APIs, mobile e-Signature and e-Logbook, and other mobile operations.

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