

The German ADAC Luftfahrt Technik GmbH (ALT) stumbled upon their new corporate software in a rather unconventional manner: as current systems mapped out helicopter maintenance processes in an inadequate or complicated way, project managers simply made enquiries to similar companies. At Petroleum Helicopters (PHI) in the USA, they came across the integrated ERP system from the internationally established software company Ramco Systems and were impressed by its helicopter specialised functions and global references. Ramco Systems web solution has now greatly optimised ALT's work and approval processes.

ermany's oldest airfield, Bonn-Hangelar in St. Augustin, is home to the ADAC Luftfahrt Technik GmbH (ALT), which is mainly responsible for repairing the ADAC's 50 rescue helicopters. Keeping pace with ADAC Eurocopter fleet, ALT has also grown over the past ten years, so that the company now has approximately 100 employees, with another two German sites in Oppin and Landshut and also trains aircraft mechanics. Aside from "one-stop shop conversion jobs" in ten modern docks, ALT offers bodywork painting and component maintenance. It also has permission from EA-SA, the European aviation authority, to conduct airworthiness tests (CAMO+) and make certain aircraft modifications

Although helicopter centres primarily earn their money from the type of

models they can and are permitted to service, which is governed by the German Federal Aviation Office, customers also expect a fast turnaround, after all, it costs approximately 1,000 euro a day when a helicopter is grounded. Modern helicopters are highly sophisticated and call for special system know-how. Older models are being used for longer and longer and as such, require more maintenance. Repairs are complicated as a result and there is a growing demand for new additions and retrofitting of, for instance, navigation and communication systems, measuring and data capture equipment. This increases the pressure on using all available docks to optimum effect. The mechanics must document every replaced or newly installed part in detail. This and other information, e.g. the installation position or an error description should then be passed onto the responsible departments for monitoring and testing.

Up until autumn 2007 these processes were mapped at ALT by self-developed software based on D-Base and MS Works and several linked systems. Although the service periods of built-in parts could be monitored and order processing performed automatically in some cases, many component attributes could not be traced and the stock management department was unable to identify individual withdrawals from a batch. This however was urgently required in accordance with EASA quality standards in order to immediately identify the aircraft concerned in the event of potential material defects.

In practice, however much of the work was still performed manually. Preparing orders for large-scale hangar checks was too time-consuming and

involved too much paperwork: "With 100 entries for each of the 50 helicopters, the lists in the old system had simply become too complicated. Given the absence of interfaces, preparation and supervision took too long," explains project manager Torsten Balwinski from ALT. Another aspect regarded as a disadvantage was the lack of incorporation of the new sites into the old system and the dependency on the know-how of a single programmer. The introduction of modern integrated corporate software was aimed at fundamentally improving this state of affairs and restructuring procedures and processes.

The quest for software proved to be difficult. "Most ERP systems fell far short of our requirements. Even big-name providers were unfamiliar with our business and did not adequately cover the processes we needed.

We hadn't known of it until then

We were simply not prepared to start a project like this with workarounds", explains Torsten Balwinski. Without further ado, the ALT project managers called up companies abroad in the same industry to gather their experience with other systems.

At the large US company PHI (formerly known as Petroleum Helicopters) they came across the integrated ERP system from Ramco Systems: "We hadn't known of it until then. However, the familiarity with the industry, functions in our core areas of maintenance, repair and overhaul plus good global references impressed us". The ALT project managers had the system presented to them by web session, "A Ramco employee responsible for Indian and Swiss operations explained the functions and a colleague in the USA answered the questions. We then realised that selecting this option would involve an unaccustomed degree of global communication and cooperation", comments Torsten Balwinski. A subsequent visit and exchange



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Today, the ALT centre is much better equipped to deal with the growing number of orders and increasingly complex maintenance tasks. The mechanics now receive their orders directly from the system.

of information at PHI in Lafayette (Louisiana). USA, confirmed that the application satisfied the requirements of aviation regulations and employee handling.

In the end, the company made a decision in favour of the English language turnkey solution. "Initially, the language was of secondary importance because our employees constantly work with English terms and manuals anyway". A positive side effect was that the Ramco ERP consists of web services. As Balwinski comments, "This meant that we had practically worldwide access per browser and were not bound to locations or operating systems. It also saved us considerable installation and hardware costs".

Once Ramco had installed a server for training courses and test runs, and adaptation needs were satisfied, ALT prepared the data transfer. Over 15,000 parts had already been split up into around 40 individual parameters. After just three months, the software went online - too early as it transpired, "We should have been more cautious, taken off more key users and conducted more in-depth testing", remarked Torsten Balwinski with hindsight.

Minor decisions at the peak of high season thus resulted in major repercussions in daily business. In the ordering sector, information on alternative parts was lacking. "At zero stock, the system

was unable to output any alternatives and, correctly as far as the system was concerned, new stock was procured from the supplier" explains Torsten Balwinski. "The only thing was, it was often unnecessary because substitutes were in stock".

A few months later the Ramco system was running smoothly. Ramco's support is provided from two strategically located centres in the USA and India and as part of the agreement there are dedicated personnel responsible for ALT. A telephone conference is held every two weeks, and a user conference once a year.

Dealing with complex MRO tasks

ALT is now a member of the worldwide Ramco Aviation ERP user community. Any errors arising are entered into a defect tracking system (DTS) set up by Ramco and eliminated in one of the following updates. The status can be viewed at any time. Another Ramco team in Chennai is in the process of harmonising the accounting module with German legislation. "The Ramco Team is great and when required, on call until late in the evening six days a week", notes Torsten Balwinski.

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German Summary

Auf eher untypische Weise kam die rheinländische ADAC Luftfahrt Technik GmbH (ALT) zu ihrer neuen Unternehmenssoftware: Da hiesige Systeme die Abläufe rund um die Hubschrauber-Wartung kaum oder umständlich abbildeten, fragten die Projektverantwortlichen einfach bei vergleichbaren Unternehmen u.a. in den USA nach. Bei Petroleum Helicopters (PHI) fanden sie das integrierte Aviation-ERP-System des international tätigen Softwarehauses RAMCO Systems, dessen breite helicopterspezifische Branchenfunktionalität und globale Referenzen sie überzeugten. Die RAMCO-Systems-Weblösung hat die Arbeits- und Freigabeprozesse bei ALT inzwischen spürbar optimiert. Die transkontinentale Abstimmung und Systembetreuung funktioniert reibungslos. Projektleiter Torsten Balwinski sagt: "Es war die richtige Entscheidung."

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rectly from the system whereby ten task packages for small routine maintenance jobs can be put together in approximately 15 minutes, thus saving a huge amount of working hours alone during preparation. Even follow-up steps like ordering standard material, are already included. If inspections come up at short notice due to an airworthiness order from the Federal Aviation Office, the system demonstrates its key benefit: from the order to the assignment and proof of performance, everything is fully prepared for an entire fleet within the shortest space of time. Test documents are also created and forwarded with approx. 80% system support.

The latest 5.4 release of the Ramco Aviation ERP solution is now available and will possibly be implemented by ALT within the next few years. The Ramco Series 5 solution will enhance all organisations as it is not limited by company size. It is based on the latest server requirements and software standards and features additional, and in some cases specially adapted maintenance functions. Integration is to be extended, users trained even more intensively. "Although the current system is pretty powerful for our small company" concludes Torsten Balwinski "the future belongs to those equipped for it. Ramco is closely linked to our business which is why our decision was the right one". ←