

STREAM FOR SUCCESS

Waviatech, a British company, has developed a system to quickly produce aircraft technical records with a full search capability, helping leasing companies and MROs to keep track of valuable assets



Technical records can be held in several different ways. This is not so unusual a sight for Waviatech personnel in the field. Their experience enables them to quickly categorise documents into relevant categories for scanning (photo: Waviatech)

Accurate technical records can not only help to sell an aircraft quickly, they can also protect its value. But with a typical narrowbody aircraft generating 5,000 documents every year, the effort involved in sorting paper records into an easily readable form can sometimes be too much of a task for a busy organisation.

Waviatech, a London Gatwick-based company, has developed a product called Secure Technical Records for Electronic Asset Management (STREAM). The company was formed in 2002 by Karl Scanlon, aircraft engineer and now Director of Products and Services, and Rhett Williams, a business systems analyst with 20 years' IT experience in the financial industry. They had identified that traditional scanning lacked the intelligence to manage the volume and diverse nature of aviation documentation. Although it provided a backup of hard copies, it did not provide an effective,

user-friendly means to access and share information or search for a particular document.

There are four main categories of user for STREAM, according to the company. It provides aircraft and engine owners/leasing companies with asset protection and easier access to records, leading to faster lease returns, re-marketing and re-delivery. For airlines, there is increased access to aircraft records throughout the organisation, and a faster return of aircraft to owners at end of lease. MRO facilities are required to hand over all the job cards to a customer when the work is complete and, under JAR 145, keep their own records for two years. By using STREAM, their data storage is simplified while the end product can be made more attractive through customisation. Finally, aviation consultants can use STREAM and Waviatech bureau services to increase the scope and lev-

els of services offered.

Godfrey Ryan, Sales and Marketing Manager, says Waviatech's expertise is not just based on technology, but the skill and experience of its people, all of whom have a technical records background. Whether the records to be processed are paper, as PDF files on CD/DVD or on microfilm, the team sort the documentation into logical bundles according to category. They are then scanned and turned into TIF files at a minimum of 300dpi, which provides a good balance between speed and quality. The next step does use technology, an Optical Character Recognition (OCR) program to enable text searchability. It can also read barcodes. Some data, such as hours and cycles, is entered manually, but this only a small percentage of the total work package. The documents within each package are chronologically ordered, with searchable text and separate indexes for ADs,

SBs, repairs or component certificates.

STREAM is also available under licence says Ryan, aimed primarily at MROs. An MRO, using its own scanning equipment and using a Stream license can scan work cards onto a Stream CD/DVD for its own backup purposes and to present their clients with a more user friendly means to answer queries relating to the work package.

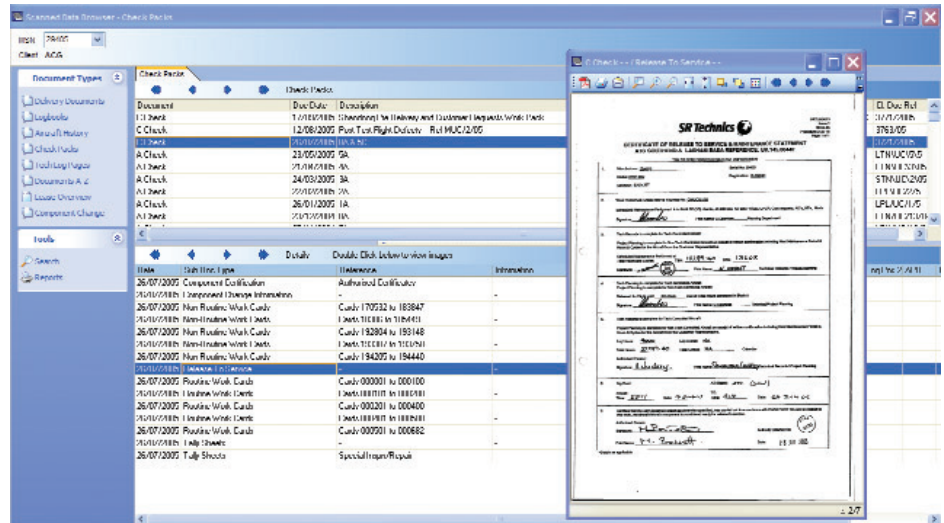
The final step is to output the records to CD/DVD or put them online. For the end user, there is no software to run, as the package is self contained, even including a short introductory video that explains how STREAM works. There are easy options such as thumbnail, print, save as PDF and attach to email that can be accessed when browsing the records.

Putting STREAM into a financial context, Ryan says missing documents at the end of a lease can cause delays of 16 to 20 days, which could run up penalties of between \$75,000 and \$200,000. For a recent customer, all the documentation for an end-of-lease C check was processed by STREAM in 1.5 days. As the aircraft was transferring from the German to the Spanish register, the records could be sent directly to a Spanish CAA inspector ahead of the delivery flight. This should significantly reduce the usual 10 to 12 days required for inspections after arrival.

A casebook example of STREAM is a recent contract to scan the entire historical records for 10 ex-Northwest Airlines Airbus A319s in storage at the Evergreen Air Center in Marana, AZ. The contract was awarded by Simat, Helliesen and Eichner (SH&E), acting on behalf of the owner.

“The fact that each aircraft was imminently being sold at auction meant that we had to facilitate the inspection of the records for interested parties from around the world. Waviatech offered a solution whereby they could provide simple, secure and fast online access to the records the day after the aircraft was scanned,” says Gary Weissel, Vice President, SH&E.

Scanlon says: “The project got the go ahead on a Wednesday night, with one of our project managers arriving on site on the following Friday morn-



A sample screen shot from STREAM. It shows a Certificate of Release to Service for a C check on a Boeing 737. The list of categories can be seen on the left hand side (graphic: Waviatech)

ing. Over the next 10 days, staff from Waviatech and SH&E worked to get the records prepared, scanned and uploaded online for access by potential clients for the aircraft. After scanning, the entire set of indexes and scanned images for one aircraft were sent overnight via a high-speed internet connection to Waviatech’s head office. The final step was to put the records online.

Ryan adds: “From the first day we had aircraft number one online, we could track activity from all over world, there was huge demand to see these records and those people who were given access could easily browse the records using the STREAM Online functionality.” In the end, the aircraft were sold before the auction took place.

For very large packages, Waviatech will use local scanning companies to provide the equipment, making logistics simpler. It also has an agreement with a Los Angeles-based company to process microfilm records because these are more difficult to read, and it is easier to subcontract to someone with the necessary (and expensive) specialist equipment. The company was contacted last year following an enquiry to Waviatech from a customer with the service history of 10 ex-United Airlines aircraft on dozens of microfilm cartridges. It can also be used to integrate CDs containing previously converted microfilm in PDF format along with various scanned images. Over the

past 18 months, the number of aircraft coming out of the major US carriers has meant more and more microfilm that needs to be analysed and processed as part of the due diligence process.

The advantage of STREAM is that all the records can be made accessible online, with access tailored to particular clients. It also means that the clients can answer the majority of their own questions without having to travel, saving costs and increasing productivity over the marketing and lease transition stage. Ryan says one airline had a team of people who spent three weeks online, studying records.

Another benefit from STREAM is that maintaining scanned images or copies can protect the owner/operator in times of crisis and will allow them to return the aircraft to service in less time and with less cost. Fire, flooding, improper storage conditions, theft and complacency can mean significant loss of earnings to an aircraft owner in relation to their historical records. He cites the example of a hangar fire in Ireland, which damaged several aircraft. Perhaps more seriously, the loss of technical records grounded a number of helicopters for some months.

Customers currently protected by STREAM are mainly leasing companies and airlines, with around 85 aircraft with a value of approximately \$3.3 billion. ■