

BY PAUL DEGROOT

PHOTOGRAPHS BY FRANCOIS LECLAIR

Airlines Flying High

WITH ADVANCED CARGO CONTAINER TRACKING



Do airlines ever lose their own suitcases? The answer is yes. And at up to \$30,000 each, these “suitcases” aren’t assets airlines can afford to lose.

The “suitcases” are the slope-shouldered containers that most airport visitors can see being loaded into cargo holds. Among cargo experts, these containers go by the unglamorous name of unit load device, or ULD. But they’re a big part of an airline’s business – some airlines have \$100

million tied up in these cargo containers – and they’re a headache to keep track of when they leave an airline’s control.

That’s why the airlines jumped when they were told that a Web-based tracking system could be built in a few months using WebFOCUS from Information Builders, and would deliver better data – and thousands of dollars in savings – almost immediately.

“At any time, about five percent of the containers that an airline owns are being used by another airline,” explains Ted McEvoy, manager of Cargo Business Planning for the International Air Transport Association (IATA), based in Montreal, Canada. A customer in Dallas who needs to move cargo to Moscow, for example, may call American Airlines. American will fly the cargo container to Europe, but since American doesn’t fly to Moscow, it will transfer the container to

SNAPSHOT

Organization: The International Airline Transport Association (IATA) operates a wide number of joint programs for nearly 270 airlines around the world

The Challenge: Airlines needed an efficient way to track the movement of cargo containers among themselves, but data input was unreliable and the system only delivered paper reports. Identifying lost containers was difficult, finding them was harder, and using the data for strategic planning was impossible

The Strategy: IATA used WebFOCUS from Information Builders to put the database on the Web, making it possible to deliver timely reports electronically, and to validate data as it was entered, improving the quality of the data

The Results: The system has dramatically reduced the cost of tracking cargo containers, while just as dramatically improving reporting speed and the quality of strategic information. Many more airlines can now participate in the system, and it has created a base for the first effective intermodal (air, truck, rail and ship) tracking of cargo

Information Builders Solution: WebFOCUS



It's in the Bag

Funding the cargo application was relatively easy, IATA's Ted McEvoy reflects – a small price to pay for a big business intelligence solution.

another airline that does. By the time American sees its container again, it may have gone around the world and passed through the hands of several other airlines on its way.

Until recently, the system that tracked the movement of cargo containers between airlines was based on software first developed in 1972. Running on a shared mainframe, whose other tasks sometimes delayed production of reports, it pumped out reams of paper that airline staff would pore over, looking for signs of missing cargo containers, and clues to where they might be found.

Today, the days of searching through paper reports are gone. With help from Information Builders, the Interline ULD Control system is moving to the Internet, and IATA has replaced paper reports with digital files that can be accessed and downloaded from the Web.

Better, Faster, Cheaper

Airlines can now enter data about cargo containers that they transfer between each other by filling in a form at a Web site maintained by IATA. That data is stored in an Oracle database running on a Windows server. When they need to get reports on where their cargo containers are, airlines can download the data from the Web site.

The new system offers substantial advantages over the old, including:

Better and faster data. With the old system, airlines sent records of ULD transfers to IATA over a special network that the airlines use for travel reservations. An improperly formatted record could be stuck for an entire weekend (because of time zone differences, the system is in continuous use) before being kicked out of the system for manual follow-up. The new Web-based system verifies data as it is entered, and users are prompted to fill out accurate and complete records before they ever reach IATA's database. Reports are downloaded from the Web site instead of mailed, saving additional days. This makes it much easier for an airline to track a missing container before the "trail grows cold."

Custom reports. WebFOCUS's powerful reporting features let airlines slice and dice the data to deliver summaries and analytical reports that were previously available only with painstaking manual input. Airlines will be able to immediately identify missing containers, and where they were last transferred.

A Foundation for New Transportation Efficiencies

Information Builders was asked to help develop the system because of its early work with IATA in converting the mainframe-based system to a PC network. Information Builders' attractive prices and excellent customer references won it that contract, says McEvoy, and Information Builders was called back for Year 2000 conversion work, and again for the Interline ULD Control System.

Information Builders is likely to see more of IATA, because McEvoy says the new system offers intriguing possibilities

for additional efficiencies and capabilities. They include:

Near real-time reports. The new system gives airlines faster access to their data (they can download new reports each week instead of waiting for mail each month), but IATA wants to speed it up even further. WebFOCUS will allow IATA to update each airline's data daily, and to deliver reports as Excel spreadsheets or preformatted Portable Document Format (PDF) files.

Important intelligence about container movement. The system will allow airlines to view the history of any con-

"About 60 participating airlines pitched in \$3,000 each to develop the system, and some of them will save more than \$100,000 annually as a result, just in managing their cargo containers ... an ROI any manager can understand"

- Ted McEvoy,
Manager of Cargo Business Planning,
International Air Transport Association

tainer for the previous six months. They will be able to sort missing containers by airport or airline, helping them identify trouble spots. Airlines will also be able to spot particularly promising flows or exchanges – regular, substantial container exchanges at particular airports or with particular airlines – that could lead to more efficient routes or relationships with other partners.

Wider participation by airlines. Many smaller airlines in less-developed countries don't have reliable electrical power, and do not participate in the airlines' internal electronic network. The new Web-based system will be accessible to any airline capable of bringing up an Internet con-

nection, if only for a short time each day.

Integrating air cargo with other transportation systems. Even at this early stage in its development, McEvoy believes IATA's system could easily be adapted to tracking many types of asset that pass from one company to another. Trucking companies that work extensively with airlines, for example, could be brought into the system to improve the level of detail in reports and make it easier to track down a missing container. In the past, such cooperation was prevented because trucking companies do not have

Getting to Go

While the value and volume of assets involved is considerable – 200,000 transactions each year, tracking about 1.6 million ULDs that are worth several billion dollars – McEvoy says approval for the new system was relatively painless.

IATA's technical team was confident that the software involved, an Oracle database and WebFOCUS, could deliver an inexpensive solution. Funding was approved at IATA's annual meeting in September, and only three



access to the airlines' electronic network. By using WebFOCUS, the airlines open the system to any company with an Internet connection.

Real-time reports on container movement. Advances in communications and tracking, such as use of barcodes or radio frequency transmitters embedded in containers, could allow containers to "track themselves." As containers pass through shipping points or warehouses, the data could be sent over the Internet to IATA's database, giving airlines information about not only which company is currently responsible for their container, but where the container is and how much it is moving.

months later two dozen airlines were getting their cargo container reports off the Web.

About 60 participating airlines pitched in \$3,000 each to develop the system, and some of them will save more than \$100,000 annually as a result, just in managing their cargo containers, McEvoy estimates. That's a return on investment that any manager can understand.

"This was not a hard sell. Getting this kind of business intelligence at this price made it easy for them to buy in." 🌐

Paul DeGroot is a freelance writer based in Medina, WA.