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Flyht Set To Roll Out Real-Time Data Decision Tools

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Credit: Swoop

After more than a year of product development and collaboration with operators, Flyht Aerospace Solutions is poised to move its revamped suite of real-time data analysis tools into line operations with launch customers China Express, LIAT, and Swoop, CEO Bill Tempany said.

"Our focus is to look at the data airlines have and drive value out of it," Tempany told Aviation Week. "What they are really interested in is actionable intelligence. They get reports constantly, but nothing is ever done to correct the problem."

By early in the second quarter—within a few weeks—Flyht expects to begin changing that for its three launch customers. The new product line, Actionable Intelligence (AI), builds on Flyht's long-time expertise as a real-time data and satellite communications provider by adding logic and an interface between an airline's data—much of it collected on by the company's Automated Flight Information Reporting System (AFIRS) unit onboard each aircraft—and its myriad systems. AI's interface, which the company calls JetBridge, takes data from customer-defined sources and delivers it practically any way the customer wants. In-flight fault codes may get routed to an aircraft's next station via maintenance software so a ground crew can properly prepare to turn the aircraft with minimal delay. A billing system will get information from the field, such as the amount of fuel taken on, that it can match to a pending invoice.

"We're building a layer over top of all the airline systems," Tempany said. "Our system will go and get the data it needs, whether it be from the aircraft, scheduling system, maintenance software or the payment system, and distribute it as requested."

As part of AI's development, each customer supplied lists of 10-20 "pain points" that it knew was costing its operation money. Flyht set out to create a link from the data source to an existing system that gives the airline an option to take action or, in some cases, triggers an automated, money-saving process.

An example of the latter is work being done for Swoop. The airline wanted visibility on aircraft cleaning for several reasons, including the coronavirus pandemic. By installing a card reader onboard each aircraft and linking it to AFIRS, Swoop can have contractors badge in and out and get instant visibility on what work has been done and how many person-hours it took. The data is also fed into the billing system so the

carrier can ensure invoices match the work performed.

Another initiative involves integrating ground handling equipment and personnel at one customer's stations. Messages about inbound flights are sent via SMS to ground handling personnel to mobilize the correct staff and equipment.

"If someone comes along and says ramp teams are never there on time, we can give them visibility and they can take action," Tempany said.

Flyht has AFIRS on more than 3,000 aircraft in the global fleet, and supplemental type certificates for installing it on most models in service. The hardware is line-fit on Airbus narrowbodies and A330s.

The three announced customers give Flyht a broad set of systems to help tailor AI. Each operator uses a different flight planning, maintenance, and enterprise resource planning system, Tempany said. That has helped push Flyht to ensure AI has maximum flexibility. Also in the works: a CORSIA reporting function for operators monitoring per-flight emissions.

Confirmed customers combine to offer a diverse fleet, including A320s, Bombardier CRJs, ATRs, and even COMAC ARJ21s. The initial contracts call for AI to be used on about 80 total aircraft, but this will likely grow as the initial customers expand their commitments—Swoop is a subsidiary of WestJet, and both operate Boeing 737s—and new ones join. Two operators have tentative agreements, while half a dozen more are close, Tempany said.

"The idea is to find the nuggets of gold in all the data that operators can act on," Tempany said. "Dashboards are a historic look at what happened, and live looks already exist. This is about giving them not just real-time visibility, but real-time choices."