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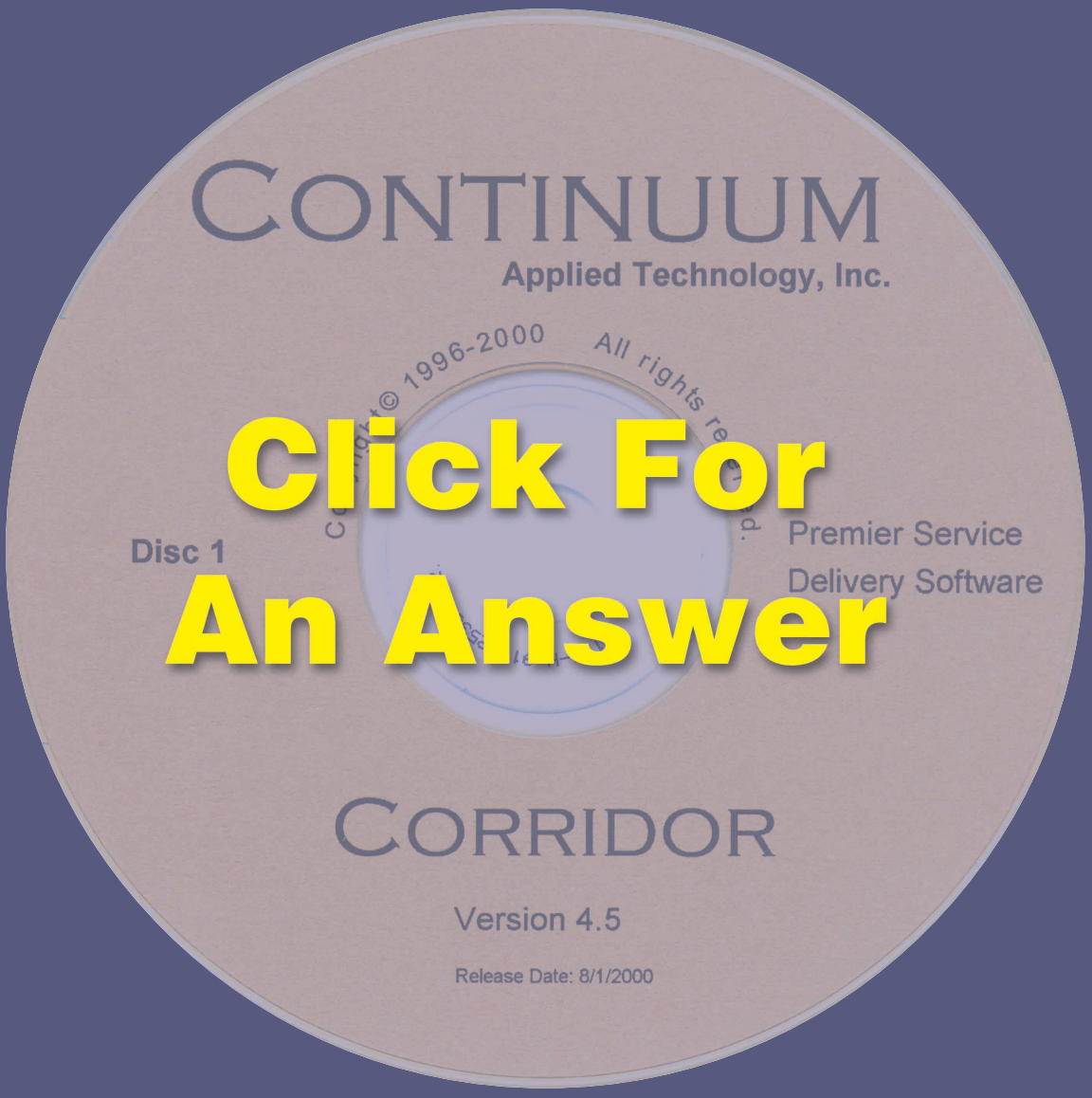

A look at how one maintenance company is boosting performance with Continuum's CORRIDOR Software.

Click For An Answer

By Heather Baldwin
Contributing Editor

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A&P mechanic Daniel Lambert uses Corridor software at Atlantic Aero.

It is two o'clock in the afternoon and an Atlantic Aero customer who brought his Learjet in for repairs that week is on the phone checking to see how things are going. From his office overlooking the hangar floor, it takes Daniel Derby, senior vice president of marketing and operations, about five seconds to give him an answer. Not only that, Derby knows who did the work, what time that technician began the work and what, if any, new parts were required, all in the time it takes to draw a breath. No, this Greensboro, North Carolina-based company is not employing psychics to improve its maintenance operation. Rather, Atlantic Aero has embraced Continuum Applied Technology's Corridor software, an increasingly popular maintenance shop management tool that is enabling companies to improve efficiency, productivity, customer service, and inventory control.

The software has become so popular that word of mouth alone has brought Continuum 24 customers across the United States—mostly FBOs and repair stations—and strong expressions of interest from several non-U.S. companies. (Continuum's orders surged late last year as Y2K approached, and they have not slowed down). While those numbers may not seem formidable, they do give a hint of what is yet to come considering that Continuum is just now starting to build its sales and implementation teams to prepare for its first real marketing effort.

What makes this software such a hot commodity is that it is optimized for the gotta-have-it-now world of business. Corridor operates in real time to provide any transaction information in any level of detail, whether for customers, vendors, work orders, purchasing, shipping, receiving, or inventory management. It ties together all the functions of the maintenance business so that a technician can order a part he needs and check on its status without leaving his work area; a purchasing agent could reroute an existing purchase order to fill the request; the receiving department knows where that part needs to be delivered once it arrives; and a manager can check on the progress of an open work order, including real time profitability, with a few key strokes. Just imagine the possibilities of having access to the information you want whenever you want it.

Atlantic Aero officials imagined it, then liked so much what they envisioned the product could do for their business that they bought it in early 1998. After a test-run in June 1998 dur-

ing which their previous system, Miller, remained in operation, they then pulled the plug on Miller and shifted entirely to Corridor in early July.

At your service

Derby explained why Atlantic Aero chose Corridor over other software products on the market and, more significantly, versus staying with the Miller system that already was in place. "We perceived the Corridor system to be the future, and we wanted to make sure we were part of it," he said.

Prodded for details, Derby zeroed in on the improvements Corridor has made in Atlantic Aero's customer service. "If a customer has a question about a repair," he said, "I can immediately pull up his record and see the whole history of the work we've done on his aircraft." ("See?" he asked, typing in a tail number. Instantly, the screen presented a list of repair work done on that airplane. A mouse click on any repair item showed the status of that work, which technician did the work, the date and exact time he signed in and off the job, parts used, costs, and more). "So while the customer is talking to me, I can answer his questions right there on the phone." No more taking down a name and number, then figuring out which technician is working on that aircraft, then hunting down that technician for answers, then calling the customer back later. The software is real time, which allows customer inquiries to be addressed in real time.

There are other customer service-related benefits as well. For example, a crew chief can use Corridor to prepare an estimate and when the work is finally completed and the invoice printed off, each numbered item on the estimate will correlate with the same numbered item on the invoice. For customers, this is manna from heaven. "Usually customers get their invoice and nothing matches and so they don't understand where the numbers came from," said Derby. Corridor makes it easy for a customer to lay the estimate and invoice side by side, see clearly how the two compare and quickly identify areas where they have questions. The result? "They're happy, we're happy," he said. "It's quick and easy" to go over a bill.

"This system doesn't seem to be dated," he observed. "It's the only system that really struck us as a futuristic look at where maintenance systems need to be going. And since it's Windows-based, we don't foresee a huge leap in technology" that would render Corridor obsolete.

Parts are parts

Downstairs, parts manager Carter Shepherd finished up one of his ongoing bin inventories and smiled. There are no discrepancies. Everything tallies up with 100-percent accuracy, but Shepherd isn't surprised. "Today our inventories average about 90 to 95 percent accurate," he said. "It used to be 60 to 65 percent accurate under the old system."

Corridor has made the lives of everyone in the parts department a whole lot easier by automating processes that previously used up pens, paper, and patience at an alarming rate. For starters, it has been a parts-tracking panacea. All parts in inventory have on-line status information that includes quantity in stock and available, quantity in stock and reserved, quantity on order, quantity out for service, and quantity awaiting receiving inspection. Each specific part also displays its condition (i.e. new, serviceable, overhauled, etc.).

Rotable records go one step further, including information such as approved or preferred overhaul facilities, exchange price, list price, and selling price. Every part is tracked by a unique lot number, which is assigned when the part is first received so that part's history can be tracked from cradle to grave.

Here's how things work: when a technician requests a part from his work station on the hangar floor, a bar-coded ticket prints in the parts department. Someone pulls the part, swipes its bar code with a bar code reader, then swipes the bar code on the ticket. If the codes don't match, Corridor alerts the user and will not allow the part to be confirmed for delivery to the work order. If the part a technician needs is not in inventory, he can generate a purchase request from his workstation. Gone are the human error problems of pulling the wrong lot number, which Shepherd says were largely responsible for previous inventory discrepancies.

Sure, it took a lot of work to get here. "We had to go through and reassign lot numbers to everything," said Vikki Hatfield, director of materiel. She estimated that it took

Growing the System

Atlantic Aero and other early Corridor customers have gone through a series of system upgrades that later users will not have to endure. Jack Demeis, president of Continuum Applied Technology, explained that his goal in developing the Corridor system was to get as much customer feedback incorporated into the system as possible. "Instead of us spending two or three years developing it in a vacuum, having us determine if customers needed something and then developing it how we thought it should be, we took directions from them," he said. "Ninety percent of software today is designed from the computer out, i.e., for the convenience of the developers. Ours is designed from the mechanic to the computer."

Corridor's first installation was in January 1997. From June 1998 through March 1999, the company added features as it received feedback from its early users. For instance, customers requested and received a way to see real-time status of work in progress; a way to allow more than one aircraft or component on a single work order while keeping cost and pricing associated with the proper element; and a feature that allows a final invoice to be printed and handed to the customer at the end of a job. All upgrades were done remotely, from Continuum's Austin, Texas, base, either during the night shift or over a weekend. "The feature set is very rich right now, so [upgrades] have slowed way down," said Demeis.

But that doesn't mean further improvements are not forthcoming. Demeis said his company is currently working on a tool crib and calibration module that would indicate which tools were used for each job. He's also developing a troubleshooting module to monitor how many times a certain discrepancy shows up on a specific aircraft type, and what will fix it.

Down the road, Demeis has an even broader vision for this type of information. "We have our hearts set on sharing that information industry-wide," he said. "If someone spends 10 hours figuring out how to fix a problem, someone else shouldn't have to spend 10 hours trying to figure out the same problem." Although he has yet to pin down the details, Demeis envisions his company buying the experience, compiling it in a centralized knowledge base, then charging users as they tap into it.

How Much?

Okay, you're sold. But now you've got to convince the accounting department. What can your company expect to spend on Corridor? First, it depends on which version you purchase. There are three to choose from:

- Corridor PV (Personal Version) - custom-assembled for smaller, more specialized organizations such as those with a single user.
- Corridor WV & WV+ (Workgroup Version and Workgroup Version Plus) - WV is designed for two to 10 users and WV+ for 10 to 30 users.
- Corridor EV (Enterprise Version) - the most advanced version, EV is designed for 30 to an unlimited number of users whose organizations are highly departmentalized and offer a full array of services.

Price also depends on the number of workstations and the number of modules purchased. For instance, if you purchase Corridor PV, WV or WV+, you'll pay initial licensing and implementation (includes training and installation) fees ranging from $12,000 (licensing) and $5,000 (implementation) on the low end to $39,500 (licensing) and $16,500 (implementation) on the high end. Annual support fees, which include unlimited business-day phone support, free upgrades, and a discount on any new Continuum products, range from $4,800 to $11,500. Corridor EV will top those prices but it has too many variables to offer here a meaningful price range.

her crew about a week, working nights and weekends, to print the bar codes and place them on each of the parts. "But it's definitely been worth it." And not just for inventory. "I can get any type of report I need at any time. Min/max reports, receiving reports, inventory reports, work order reports, cycle count reports. Corridor will do all of them," she said. "Our jobs would be a lot harder without this system."

On the floor

In an office just off the hangar floor, service manager Steve Hippert mulls over a question about how implementation of the Corridor system went with the people who count the most—the mechanics. Technicians have access to four computer workstations on the main hangar floor—two in the center and one on each of the far ends—and they must use them at every step of the maintenance process. Finally, Hippert echoes what other managers and technicians have said: there were definitely some growing pains, but they've been worth it.

According to Derby, initial system training lasted anywhere from about two hours to between 16 and 24 hours, depending on a person's position. Corridor's training team conducted the classes, then stuck around to help out with the on-the-job training that was needed during the early days of operation. "It probably took about a month or two before a lot of the same questions weren't being asked," said Hippert. "But compared to how things used to be, the mechanics like it. The only grumbling was from those who didn't have computer experience."

Indeed, talk to the technicians on the floor and most will acknowledge that they are still a whole lot more confident with nuts and bolts than they are with bits and bytes, but they'll nonetheless rave about how much easier and more productive it has made their jobs. "I like that I can look at any work order, no matter how long ago it was," said crew chief Todd Rogers. "Requesting parts is so much easier. And I think this is 200 percent better in terms of what we give the customer." As proof, he cites Corridor's "maintenance release" function, whereby an aircraft can be released back to a customer with a list of all the work performed, even though the invoice won't be sent until later. "Before," he said, "customers wouldn't get the work order until they got the invoice."

Hippert is equally enamored. "I know at a glance if parts are on order, who's on a job, how long it's taking them, who did a certain job in case you had a question. Previously it was up to the crew leader to know all that."

It's about customers

Back upstairs, Derby paused for a moment when asked to define how much, in dollars, this software has saved Atlantic Aero since its implementation. "I don't think it's a cost-saver yet," he finally conceded. So where's the financial benefit? He promises it's coming, and it will come mostly through increased efficiency. "From a management perspective, Corridor will give us an idea of AMT proficiency much better than the mechanical time clock. And it will be a time-saver as far as managing each job since crew leaders can see quickly what needs to be done" and thus more rapidly dole out the work.

The company is also working on automating logbook entries so an inspector can print off, sign, and stick the entry in the logbook in a matter of minutes. Today, in a process that can sometimes take a couple hours, the admin section must type up the entry from an inspector's often hurried handwriting, then hunt down the inspector for his signature.

It is all these little gains added together that are transforming Atlantic Aero into a model of efficiency and customer service prowess, and Derby is happy with the progress. "If you can make a customer feel number one," he said, "this system does it."

He summed up the bottom line: "Customer perception is key, and Corridor is a strong customer tool. Business is all about how a customer perceives you. If they come in and see this level of detail and accuracy and feel our people respected their aircraft, they'll be back." In the end, that's what Corridor is all about. **AM**

Contact

Continuum Applied Technology, Inc.
9801 Anderson Mill Road, #206, Austin, TX
Tel: 512-918-8900, Fax: 512-918-9115
Visit us on the web: www.continuumapptech.com