

**INSIDE THIS ISSUE:**

BAUER ANSWERS TO MILITARY WITH ITS AFTERBURNER SPRAY RING TEST STAND 2

PEOPLE & PLACES: BAUER AT ASIAN AEROSPACE 2006 EXPO 3

PRODUCT SPOTLIGHT: THE MTS2000 4

ROB MICHELL RETURNS TO THE BAUER TEAM 5

BAUER INC.

World-Class
Supplier of
Aircraft
Maintenance
Support
Equipment
and Test
Systems

175 Century Drive
Bristol, CT 06010-7482
USA

Phone: 1-860-583-9100
Email: aerovision@bauerct.com
Web: www.bauerct.com

**MESSAGE FROM THE PRESIDENT**

Today, Bauer is on track to achieve performance goals for orders and shipments that represent a 20 percent improvement over a very successful 2005 fiscal year. The company's foundation for continued success is in place with a backlog at its highest point in history, thanks in part to you, our loyal customers.

Although these past 12 months have not been without growing pains, I can say with confidence that our experience during this period—combined with several key accomplishments—have placed Bauer in a better overall condition than ever before. Some noteworthy achievements that are positively impacting the service and products we offer our customers include:

- Bauer's business process is significantly improved with the completion of a new, fully-integrated VISUAL business system implementation. Project management controls are much tighter, the flow of product is continuously tracked and management information is keeping us focused on key metrics, such as on-time completion.
- Bauer was awarded a large, multi-year contract to design and manufacture the most state-of-the-art test systems for a brand new OEM component repair operation in Europe specializing in P&W F100, CFMI CFM56 and V2500 engine accessories. Every accessory on all of the engine models in these families is included on the capability list.
- Bauer's involvement in aircraft pneumatic component test systems has significantly expanded with several new projects across the globe covering high flow/high pressure/high temperature valve test systems, air cycle machine test systems and engine air starter test systems. This combination of projects and related experience solidifies Bauer's position at the head of those select few companies who supply aircraft pneumatic component test systems.



Bauer President, Lou Auletta

Continued next page...

MESSAGE FROM THE PRESIDENT CONTINUED FROM PAGE 1...

- Bauer has successfully completed the development and release of our “next generation” ADA2000 Advanced Data Acquisition and Control System and MTS2000 Universal Electronic Test System. Bauer’s ADA2000 system is being used every day in hundreds of applications by aircraft accessory and component shops worldwide. Bauer’s MTS2000 Universal Electronic Test System (see product spotlight in this issue of AeroVision) provides the electrical test interface as required by the component manufacturers and it is now the only electrical test system being used by every one of the fuel control OEMs.



- Bauer has expanded its Customer Service and Support capabilities to offer additional services and customer service staff, including field service technicians based in Europe and Asia. Our commitment to providing exceptional customer service is a key strength in our organization and, we now have more resources than ever before to ensure that this commitment is fully supported.

We believe our customers are seeing the positive effects of these recent achievements, however, there is always more hard work to be done. We will remain focused on building upon what we have accomplished while identifying new opportunities for further improvement in order to serve you better.

Lou Auletta, President

BAUER ANSWERS TO MILITARY WITH ITS AFTERBURNER SPRAY RING TEST STAND

When military customers were experiencing a high rate of F100 engine test failures due to augmentor spray ring performance, Bauer participated as part of the Constant Improvement Program (CIP 315) to not only tackle the issue but find an answer that would generate significant cost savings for its customers. The F100 Augmentor Spray Ring Test Stand—developed out of the CIP 315 program—is proof of Bauer’s ability to address a problem and find the right solution for military clients.

Here’s how the issue arose: The F100 engine overhaul requires the line unit to disassemble the engine into its major modules and to send those modules to their respective depots for overhaul. The spray rings are kept at the line unit and pyrolytically cleaned before they are reassembled into the engine when the overhauled modules are returned from the depots. Without test equipment to confirm the performance of the spray ring, the units stand a high chance of having augmentor performance issues in the test cell and failure of the engine test.



As of April 2006, Bauer’s Afterburner Spray Ring Test Stand has saved the Luke Air Force Base nearly \$900,000 in addition to having an increased state of readiness.

Continued next page...

BAUER ANSWERS TO MILITARY WITH ITS AFTERBURNER SPRAY RING TEST STAND CONTINUED FROM PAGE 2...

The Test Stand consists of a single section combining both the spray chamber and Test Stand monocoque on a common base frame. A removable counter top is mounted on the front of the Test Stand monocoque below the operator's panel. An electrical enclosure is integrated within the monocoque at the right hand side of the operator's panel. The spray chamber is of a basin design with a horizontal hinged cover.

The F100 Augmentor Spray Ring Test Stand performs an abbreviated version of the spray ring tests called out in T.O. 6J28-2-8-1 and 6J28-2-3. These tests can identify spray ring flow problems resulting from coking and stretching. When used with a pyrolytic cleaning process, coked-up spray rings can be cleaned and confirmed ready for service. Checking the performance of the spray rings prior to their incorporation into the engine assembly prevents the time and material lost by discovering the spray ring performance issues in the test cell.

The Bauer F100 Augmentor Spray Ring Test Stand was developed in conjunction with the Air Force, Pratt & Whitney and Woodward FST. Since its installation in February of 2004 at the Luke Air Force Base, they have not had a single engine fail test in their test cell due to Spray Ring performance issues. As of April 6th 2006, Luke Air Force Base has saved \$861,000 in addition to having an increased state of readiness. Of the 1105 rings tested, they have found 287 rings with performance issues thanks to Bauer's F100 Augmentor Spray Ring Test Stand.

Since its installation in February of 2004 at the Luke Air Force Base, they have not had a single engine fail test in their test cell due to Spray Ring performance issues.

Note: For questions or to request a product sheet on the F100 Augmentor Spray Ring Test Stand contact Rob English at 860-583-9100 or Robert.english@bauerct.com.

People & Places:

Bauer at the Asian Aerospace 2006 Expo



[From left to right] Tom Gilchrist of Bauer, Christine Lu Ping of DASS Aero Engine Services, China and S.K. Sengupta of DASS Aero Engine Services, India participated at the Asian Aerospace 2006 show this year. Also present but not shown, Lou Auletta of Bauer.

© MARK ANDERSON, WWW.ANDERSTOONS.COM



"Have you been flying a lot? Your contents seem to have shifted."

PRODUCT SPOTLIGHT: THE MTS2000

From the Editor: Electronics Engineer, Toan Nguyen, specializes in Bauer's Electronic Test Cart and answers questions regarding the MTS2000 in this issue of AeroVision.

AeroVision: Does the MTS2000 provide value added services?

Toan Nguyen: Yes. It's cost effective and can be utilized for many components across many engine types. As with any Bauer product, we are committed to customer service and providing technical support via phone, fax or e-mail for the lifetime of the product. A one year warranty is standard and customers also have the option for up to a three year warranty on all Bauer products.

AeroVision: How is it cost effective for a company?

Nguyen: Airlines and third party overhaulers that test electronic controls can either purchase a specific OEM electronic tester for each component or the Bauer MTS2000, which performs the function of several test boxes resulting in significant cost savings. The multi-function MTS2000 is generally in the same price range as a single purpose OEM test box. Additionally, the MTS2000 is field configurable to handle new components as customers' fleets change.

AeroVision: How has Bauer's experience with developing the MTS2000 progressed over the years?

Nguyen: In 1993, the MTS was introduced as the MTS9300. Since then we have made major changes in software, design and hardware (components) while maintaining compatibility with the MTS9300. We have also achieved significant improvements in the component interface and have added features to the software by listening to and working closely with our customers to incorporate their suggestions and test experience.

AeroVision: What do you test with the MTS2000?

Nguyen: The MTS2000 is primarily used to test Main Engine Control (MEC), Hydromechanical Unit (HMU), Fuel Metering Unit (FMU) and Fuel Control Unit (FCU). However, it can test almost any aircraft component that has electronic inputs and feedback, such as a Variable Stator Vane (VSV) Actuator, Variable Bleed Valve (VBV) Actuator or fuel flow transmitters.

AeroVision: Is the MTS2000 versatile?

Nguyen: Yes. The MTS2000 is easily upgradeable, easily configurable and universal. It has the flexibility to be adapted to test virtually all of the aircraft engine controls on the market today. Universal features include: programmable excitation voltage for LVDT, RVDT or Resolvers. The MTS2000 has torque motor control cards, solenoid DC power supply, digital input/output, analog input/output as required by the application. The software provides easy and user friendly configuration panels, calibration panels and uses a Windows XP industrial computer. The Graphical User Interface (GUI) can also be arranged and configured based on customer preference.



The Bauer MTS2000 —A versatile, cost effective testing product that adds value to your business.



ROB MICHELL RETURNS TO THE BAUER TEAM

From the Editor: This is the first in a series on Bauer's individual staff members.

Anyone who commits to the same company three times must be both adventurous and knowledgeable. So when Rob Michell returned for the second time to Bauer (three stints in all) to accept the challenge of heading up our large, multi-piece test equipment for 1-Source Aeroservice S.A., we felt it would be worthwhile to interview him to establish his motives.

Now no individual or organization is perfect. Every company has its faults and its quirks. Familiarization, as the saying goes, either builds contempt or respect. Rob's story begins in 1985 when he first came to Bauer as a technical writer. From the beginning, Rob had a penchant for making improvements. His supervisors, recognizing this, sent him to outside training and he returned with the responsibility of replacing Bauer's existing manual systems with a computer-based approach. He now had a role within the organization that he could, in his words, "sink his teeth into." The position also touched many areas of the company's activities including project management.

In 1987, Rob felt the need to experience the ambience of a bigger company and he accepted a position with Hamilton Standard (now Hamilton Sundstrand) as a technical writer. Soon he experienced a slower work pace, greater formality and a comparative lack of challenge. When Bauer approached him to return to the company, this time as project manager, Rob enthusiastically accepted the position. "When Rob sees an opportunity for improvement, whether it's something in the organization or in himself, he is motivated to act on it," said Bauer President, Lou Auletta. "In a business the size of Bauer, this attitude really makes a difference," he said, "and the benefits are mutual."

He enjoyed the organized role of a project manager, the challenge of leading a team and he liked the opportunity Bauer offers its employees to assume broad responsibilities. Bauer is not large enough to have a formal career planning discipline but it is small enough to afford many different roles to those who seek opportunities for diverse experiences. Rob's eventual positions included contract administration, IT coordinator, product pricing, production manager and then, operations manager.

In 1998, Rob was off adventuring again, this time accepting a key role to grow a small system integration business. As exciting and successful as this was, after a period of time, Rob felt he had accomplished all he could there and contacted Bauer for assistance in locating a position that would utilize his project-management skills. The timing was perfect as Bauer had the ideal position open.

We recently asked Rob, why, after all the adventures, is Bauer the "one." His answer is manifold. "I've learned many lessons along the way. Bauer's professional management team accepts me as a collaborator, one whom they know and respect," he said. "The company is committed to and does move in a process of continuous improvement and it promises room for continuing contribution." Rob also likes the culture and size of Bauer because it promotes flexibility and if there is a *better* way, Bauer is ready. "At Bauer, there is a high level of talent, hands-on engineering, craftsmanship in the factory and above all," said Rob, "there is, throughout the organization, a strong pride in workmanship, quality and customer satisfaction."

Welcome back Rob! We are proud to have you return to the Bauer team.

"When Rob sees an opportunity for improvement, whether it's something in the organization or in himself, he is motivated to act on it," said Bauer President, Lou Auletta.