

**MESSAGE FROM THE PRESIDENT**

We are pleased to introduce Bauer's first quarterly newsletter, *AeroVision*. Our intent in launching this newsletter is to expand our channels of communication with our customers, who participate in the aircraft maintenance industry. *AeroVision* will include current information on activities and projects, technical solutions and product briefings, as well as other global interests that we feel will benefit our customers.

We think a lead article on productivity improvement is an appropriate starting point for this first issue given all the economic and competitive pressures our customers face today. Increasingly, our customers are demanding integrated solutions. They expect us to know, and learn, enough about their businesses and them to be able to deliver a total solution package. In many cases, a significant component of this package encompasses *Semi-Automation*, which means it must include an optimal utilization of hardware devices, software controls and the technician's know-how to design a test system for maximum productivity. At Bauer, our decades of experience and in-depth understanding of test processes allow us to recommend and deliver exactly the right solution for every situation. We hope you enjoy reading more about *Semi-Automation* solutions as well as our other industry and Bauer related news stories.

We would greatly appreciate receiving your feedback and ideas for future topics at [aerovision@bauerct.com](mailto:aerovision@bauerct.com) or by returning the fax form on the last page. Thank you for taking the time to provide us with your comments.

*Lou Auletta, President*



Bauer President, Lou Auletta

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**Customer Reflections**

"The most impressive part of our experience in working with Bauer is their excellent communications and support during the course of a project."

(KLM Royal Dutch Airlines)

**SEMI-AUTOMATION FOR TODAY'S COMPONENT SHOPS**

*Semi-Automation* of test equipment seems to have as many definitions as the number of component overhaul shops considering it. For some, a basic data acquisition system can provide all the capability they are seeking. For others, a computer-controlled test process requiring minimal test stand operator intervention is the expectation. The right approach depends on each application. It is always determined by having an intimate knowledge of the components being tested and by possessing a clear understanding of the customer's objectives.

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## SEMI-AUTOMATION FOR TODAY'S COMPONENT SHOPS, CONTINUED...

Component knowledge comes with experience and, while customer objectives vary, there are several common goals, such as maximizing productivity and ensuring the accuracy and integrity of test results.

After a clear understanding of the applications is determined, the hardware and software solutions can be applied. At the core of every semi-automated solution is Bauer's ADA2000 Advanced Data Acquisition and Control System—a robust, flexible and easily expandable system—specifically designed for aircraft component testing applications.

For example, in a semi-automated fuel pump test stand application, a significant opportunity exists for productivity improvement by automating the fuel pump break-in process. Fuel pump break-in tests are tedious, time consuming and do not

require judgments by the test stand operator.

These break-in tests are ideally conducted with the system assuming full control by automatically stepping through the entire test sequence. The program adjusts pump drive speed, as well as pump discharge backpressure settings at each step in the process. This frees the operator to perform other tasks.

In a semi-automated lube and scavenge pump test stand application, Bauer's ADA2000 System provides even greater productivity gains in the testing process. This type of testing requires precise control of several input parameters simultaneously due to the multiple pump elements and control of pump outlet parameters. In a typical procedure, the system will automatically preset inlet conditions to the pump's scavenge elements, set the specified discharge pressures, and then adjust the inlet pressure conditions for each element. Flow and pressure data are recorded as all elements are tested. The system, with PID closed-loop control functions, is able to manage this challenging task very efficiently. It re-

duces the overall time required to test a lube and scavenge pump by as much as

50% compared to a strictly manual process.

Bauer's ADA2000 System is currently being used in fuel, oil, pneumatic, hydraulic and mechanical component test stands in more than 150 installations worldwide. It is also available as an upgrade to replace existing analog instrumentation, outdated digital display systems or for use with an existing Daytronic System 10 as the signal conditioning module. *For further information on Bauer's ADA2000 Advanced Data Acquisition and Control System, contact Bill Kovall, V.P., at [bill.kovall@bauerct.com](mailto:bill.kovall@bauerct.com)*



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In a lube and scavenge pump test stand application,

Bauer's ADA2000 System provides even greater productivity gains in the testing process.

## NEW PROJECTS: AIR CYCLE MACHINE TEST FACILITIES

Bauer continues to expand its experience with pneumatic component test facilities with recent projects for Air India, Saudi Arabian Airlines and a premier Chinese maintenance company. The Saudia and China projects are for complete Air Cycle Machine (ACM) Test Systems, including capabilities ranging from the A320 ACM (Liebherr) to the B777 ACM (Hamilton Sundstrand). Bauer's ADA2000 Advanced Data Acquisition and Control System is the ideal system for the critical process control required for ACM testing. It also provides management of the test process, data acquisition and data analysis. *For further information on Bauer's Pneumatic Component Test Systems contact Tom Gilchrist, Vice President, at [tom.gilchrist@bauerct.com](mailto:tom.gilchrist@bauerct.com).*

## CUSTOMER FOCUS: ENHANCED SUPPORT SERVICES PROGRAM

Andrew Parfitt, recently appointed as Director of Customer Support Services, is leading Bauer's enhanced customer service program. This includes an expanded array of services to build on the company's excellent customer service reputation. The impetus for this program is Bauer's recognition that many customers have greater needs for specialized assistance than in the past. They require a range of services:

- Technical consultation
- Establishment of test capabilities to improve processes
- Equipment and software upgrades, retrofits or modifications
- Test equipment and component test training
- Preventive maintenance programs and service contracts administered locally by Bauer's technical service partners

Bauer's Customer Support Services Group has the motivation and the capabilities required to provide our customers with a single source for all technical support service in the test equipment business.

For further information or to discuss your specific needs, contact Andrew Parfitt at [andrew.parfitt@bauerct.com](mailto:andrew.parfitt@bauerct.com) or call 1-860-583-9100 extension 183.



Recently appointed, Andrew Parfitt, Director of Customer Support Services, is focused on providing the highest level of service and technical support to our customers.

## BAUER PARTICIPATES IN KLM'S NEW ENGINE SHOP OPENING



The KLM grand opening ceremony this past December launched the company's new Engine Shop.

*Photo by Joop Gijsbers*

On December 9, 2004, Bauer had the distinct honor of participating as a sponsor in KLM's new Engine Shop grand opening ceremony at Amsterdam's Schiphol Airport. KLM's 38,250 square meter, state-of-the-art engine shop covers all aspects of engine maintenance and is one of the most impressive engine shops in the world. The Accessories Unit in KLM's new Engine Shop features new test stands manufactured specifically for KLM by Bauer. The equipment includes a semi-automated Main Fuel Pump Test Stand, providing capability for CFM56-7 and CF6-50/80 engine fuel pumps; and a semi-automated Engine Oil Components Test Stand, providing capability for CFM56-7 and CF6-50/80 engine lube and scavenge pumps, as well as many other engine oil accessories.



## INDUSTRY PERSPECTIVE: THE COMPONENT OVERHAUL BUSINESS

Many companies in the component overhaul and repair business continue to predict a return to the growth in revenues that has been so difficult to achieve these past few years. Since early 2004, investment in new capabilities has increased significantly as component repair companies develop strategies and forecasts for growth. Some companies have taken the approach of upgrading existing test equipment when possible to add new capabilities and to improve turn times. Others are investing in new test equipment and facilities, especially those highly focused on new generation and higher technology capabilities, such as those related to CFM56-7 HMUs and B777 ACMs. Overall indicators suggest that the component overhaul business has turned the corner and is headed in a positive direction. To discuss how Bauer can assist you in establishing new capabilities and improving productivity, contact Bill Kovall, at [bill.kovall@bauerct.com](mailto:bill.kovall@bauerct.com).

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Bauer, Inc. is the world's industry leader in the design and manufacture of Aircraft Maintenance Support Equipment and Test Systems. With over 60 years in the business, Bauer maintains an outstanding reputation for providing high quality products and exceptional service to the Aircraft Maintenance Industry. For further information on Bauer, Inc. contact Lou Auletta, President, at [lou.auletta@bauerct.com](mailto:lou.auletta@bauerct.com).

**BAUER TO EXHIBIT AT MRO 2005 CONFERENCE**

This year, Bauer continues its tradition of demonstrating the latest technology and services available in aviation maintenance at the MRO 2005 Conference. Celebrating its tenth anniversary, Aviation Week's premier MRO Conference & Exhibit is being held April 20th-21st at the Gaylord Convention Center in Gaylord, Texas. At the 2005 MRO Conference, Bauer will highlight its ADA2000 Advanced Data Acquisition and Control System, which will include a hands on demonstration of specific component test applications. Come meet Bauer President, Lou Auletta, Vice President, Tom Gilchrist and Andrew Parfitt, Director of Customer Support Services, who will be in attendance at Booth 1816. For more information on the MRO 2005 Conference:

[www.aviationnow.com/conferences/mromain.htm](http://www.aviationnow.com/conferences/mromain.htm)

To receive additional information or send comments please email [inforequest@bauerct.com](mailto:inforequest@bauerct.com) or fax this form to: 1-860-583-9111

Name: \_\_\_\_\_ Company: \_\_\_\_\_

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Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

Country: \_\_\_\_\_ Zip: \_\_\_\_\_

**I would like information on (please check):**

- Aircraft Component Test Equipment
- Test Equipment Modifications/Upgrades
- ADA2000 Data Acquisition and Control System
- Aircraft Wheel and Brake Shop Equipment
- Technical Services (Spares, Maintenance, Repairs, Calibration)
- Other: \_\_\_\_\_
- Please have someone contact me.
- Please add me to AeroVision's mailing list.
- Please remove me from AeroVision's mailing list.

**For Sale**  
**Refurbished Main Engine Fuel**  
**Accessories Test Stand**

Main Engine Fuel Accessories Test Stand in excellent condition. Provides fuel flow up to 25,000 pound per hour and includes a 75 HP drive system. Digital data display (expandable to data acquisition) system. Less than one year of actual usage. Test stand can be configured for applications such as CF34, CFM56, JT8D, V2500 fuel controls, fuel pumps and other high flow accessories. For further information, photo and to discuss your specific application, contact Bill Kovall, V.P. at [bill.kovall@bauerct.com](mailto:bill.kovall@bauerct.com) or call 1-860-583-9100 x126.