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Neil Book, JSSI



Todd Duncan, Duncan



Stan Deal, Boeing



Gavin Gillogly, Mitchell



Rich Hopf, BAE Systems



Russell Ford, StandardAero



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April / May 2018

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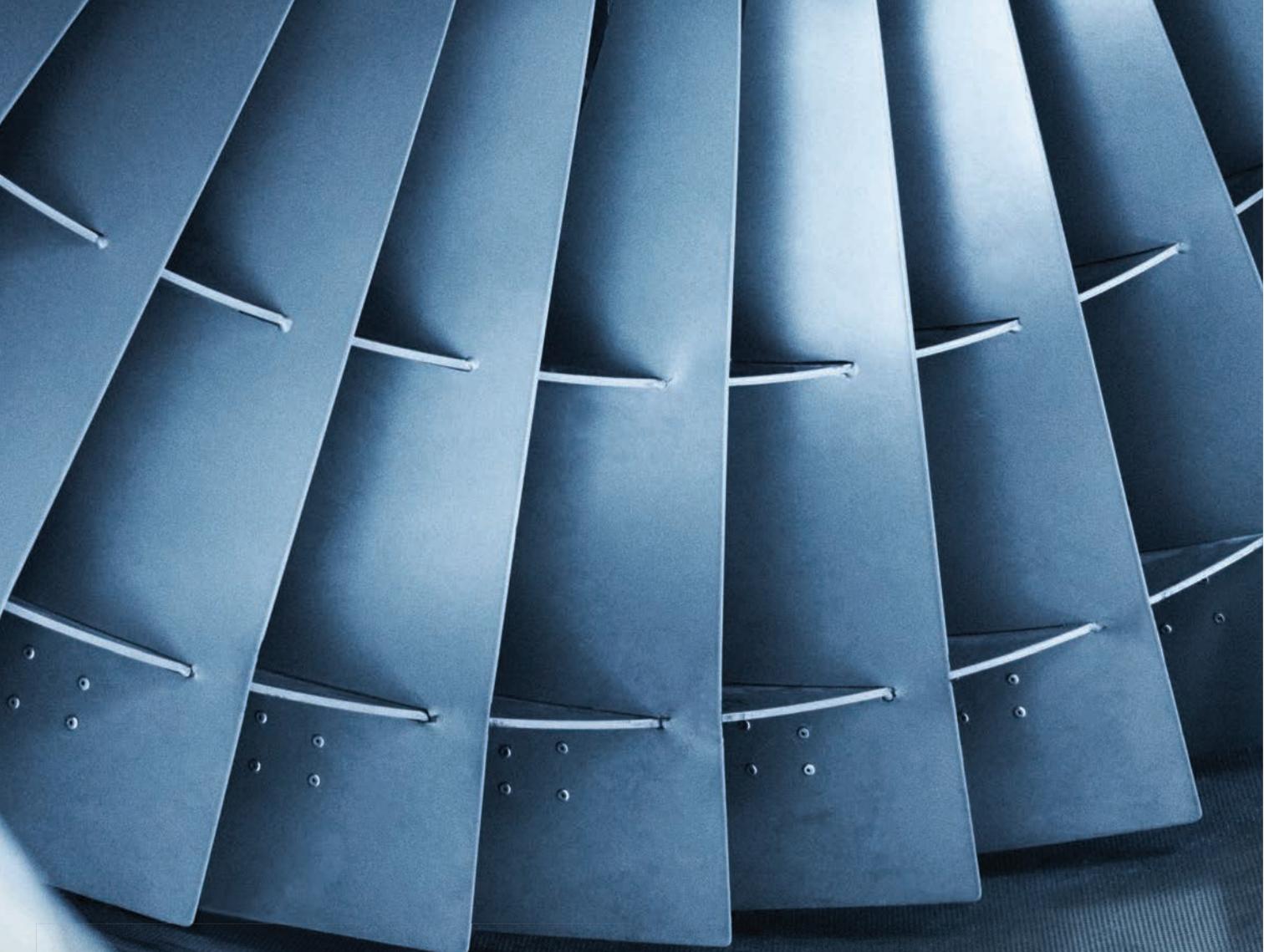
WHAT IS NEW IN THE AIRCRAFT CONVERSIONS WORLD? WE TAKE A LOOK TO FIND OUT



### CHINA TRADE?

JASON DICKSTEIN HAS RECENTLY RETURNED FROM CHINA AND HAS SAGE ADVICE





# STATE OF THE INDUSTRY

by Joy Finnegan

## Industry Leaders Discuss Key Issues Facing Aviation MRO



The annual *Aviation Maintenance magazine* State of the Industry Leadership Insights has always attracted great interest from the MRO industry. We contacted a wide range of industry leaders, from airline MROs to independents, industry associations, airplane manufacturers and engine OEMs.

We received replies from chairmen and chief executives, vice presidents and directors. All have been candid with their answers.

Many of the responders answered all of the questions, while some answered those that they felt were most relevant to their own business.

We hope that you find this survey enlightening and useful to your own business activities. Huge thanks to all of these busy executives who took the time to answer our questions. We greatly appreciate your participation and sharing your insights with our readers.

app" on both iOS and Android platforms. This application allows our Project Managers to access real-time information using their mobile devices. In addition to this, our mechanics and inspectors can view their training records, authorizations with just a few clicks. They can also register for upcoming training classes. We are very excited about the next level of integration with our customer portals, to enhance the customer experience.

### **3. NAME AND EXPLAIN THE HARDEST CHALLENGES YOU WILL FACE THIS YEAR AS A LEADER.**

The shortage of qualified aviation mechanics is the biggest challenge I will face this year as we expect the shortage to intensify as demand for services increase and the work force ages. Major employment actions by airlines have already had a significant impact on our workforce and the supply of contractors is limited. AAR is developing an even more robust approach to address the situation in addition to what we have done already - listed below.

### **4. THERE IS A SAYING, "THE ONLY CONSTANT IS CHANGE." HOW DOES YOUR COMPANY ADDRESS CHANGE IN OUR INDUSTRY?**

By staying on top of industry trends, staying close to our customers and developing strategies that take advantage of opportunities as they present themselves. Anticipating and reacting to industry trends is how AAR has stayed in business for more than 60 years and remains financially stable. For example, we built our state-of-the-art Rockford MRO to accommodate wide-body and new-generation aircraft like the 787, A350 and A380 in anticipation of future demand, but are currently utilizing that space for current generation aircraft.

### **5. WHAT ARE THE BIGGEST BARRIERS YOUR COMPANY FACES IN YOUR QUEST FOR SUCCESS (GOVERNMENT, REGULATIONS, OEMS, PERSONNEL)?**

For us, addressing the personnel shortage is key. Since government education policy and funding moved away from technical schools/training and to four-year colleges, we've seen a shortfall of high-quality technical training for jobs like AMTs. The current FAA requirements for AMT certification makes it challenging to attract new candidates to the occupation.

Global expansion of MRO facilities into emerging markets is also a challenge. While independent MROs like AAR can bring and share our expertise, we need to find local partners with strong workforce and cultural knowledge of the region to be successful. Luckily, AAR has found that partner in our JV with Indamer to develop a new MRO facility in central India that will be operational by early next year.

### **6. IS THE SHORTAGE OF MAINTENANCE PERSONNEL TRULY HERE? IF SO, HOW IS IT IMPACTING YOUR COMPANY AND HOW ARE YOU ADDRESSING THE PROBLEM?**

Aerospace has dealt with a shortage of experienced aircraft maintenance workers for over a decade. Data from ARSA suggests that the impact is already being felt: More than 80 percent of respondents to ARSA's 2018 member survey report difficulty finding qualified technicians and more than two thirds of responding companies have unfilled positions.

AAR has also done our best to partner with technical schools and community colleges near our MROs, advise on their training curriculum, and provide apprenticeships to their students and graduates.

In fact, one of the reasons we chose to build a new MRO facility in Rockford was the local promise to establish an enhanced AMT training program at nearby Rock Valley Community College, which is now underway and producing graduates. In this way, everyone wins as jobs are created and AAR can hire locally but we also need more experienced workers.

AAR also is bringing the labor issue to the attention of elected officials, and we're supporting any legislation such as the recent bill introduced by Senator Inhofe and others called the Aviation Workforce Development Pilot Program Bill as well as supporting efforts of ATEC (Aviation Technician Education Council) in the areas of modernizing AMT curriculums.

The Aviation Workforce Development Pilot Program Bill would establish a pilot program to train maintenance professionals, help veterans transition to civilian careers and recruit new technicians. Grants of up to \$500,000 per year would be available to business or unions, schools and governmental entities that partner to pursue creative solutions to one of the aviation community's most pressing strategic challenges. ARSA is now working with its members and allied organizations to build support for the legislation and get it enacted this year, likely as part of the Federal Aviation Administration reauthorization.

### **7. WHAT SHOULD WE BE WARY ABOUT IN OUR INDUSTRY DURING THE NEXT FIVE YEARS?**

Again, the shortage of qualified aviation maintenance technicians should be on MROs' radar. Oliver Wyman's CAVOK Division projects that demand for technicians will outstrip supply beginning in 2022. In addition, the industry needs to be careful not to add too much capacity given the cyclical nature of our demand cycle and the lengthening of check periods on newer aircraft.

## **Rich Hopf, BAE Systems**



### **1. WHAT TECHNOLOGY ADVANCEMENTS ARE NEEDED IN THE AVIATION MAINTENANCE INDUSTRY?**

The use of digitized data (Big Data) is offering great promise to the aerospace industry. This data will be very useful for those components that wear out or deteriorate during use (like APUs, landing

gear, etc.). There are still some fundamental issues to resolve (such as who actually owns the data) that need to be worked out before the information can be fully utilized. For electronic components like ours, we need to understand how we can utilize this information to better support our customers. There is information that could be useful to us such as improved systems diagnostics that would help us (and the operators) reduce no fault found removals. Advance notification of failures with greater detail would also allow us to better position assets and people to improve our turnaround times.

### **2. WHAT INNOVATION THAT YOUR COMPANY HAS MADE IN THE LAST YEAR ARE YOU MOST PROUD OF?**

We continue to expand our value-added services offerings to our customers. By utilizing our knowledge of field performance, customer needs, part interchangeability, and obsolescence, we have identified multiple solutions to improve the operational performance of our more mature product lines. By taking a proactive approach to both our engine control and avionics products, we can allow our customers to choose several

different methods to improve the field performance of our equipment.

### 3. NAME AND EXPLAIN THE HARDEST CHALLENGES YOU WILL FACE THIS YEAR AS A LEADER.

We will continue to focus on the 737 MAX and LEAP service entries this year. The ramp up to the new aircraft and engines is the fastest that has ever been seen in industry and we want to see it go well.

### 4. THERE IS A SAYING, "THE ONLY CONSTANT IS CHANGE." HOW DOES YOUR COMPANY ADDRESS CHANGE IN OUR INDUSTRY?

Our company is focused on continually enhancing the support and services we provide. In addition, we are flexing with the changes in the industry. One area that is rapidly evolving is our path moving to holistic asset management plans that include pooling, leasing and exchanges.

### 5. WHAT ARE THE BIGGEST BARRIERS YOUR COMPANY FACES IN YOUR QUEST FOR SUCCESS (GOVERNMENT, REGULATIONS, OEMS, PERSONNEL)?

We don't see any major headwinds out there beyond our continuing need for great people to join our organization.

### 6. IS THE SHORTAGE OF MAINTENANCE PERSONNEL TRULY HERE? IF SO, HOW IS IT IMPACTING YOUR COMPANY AND HOW ARE YOU ADDRESSING THE PROBLEM?

Our customer support and services area has specialized personnel requirements compared to the rest of our business. Finding the right mix of technical and business knowledge with a high degree of customer affinity makes hiring challenging in some cases. We are working on improving collaboration with technical schools and colleges to recruit the best talent for our hiring needs.

### 7. WHAT SHOULD WE BE WARY ABOUT IN OUR INDUSTRY DURING THE NEXT FIVE YEARS?

Like our peers, we keep a close eye on the evolving dynamics in our industry. Clearly the aircraft OEMs are evolving their approach to the aftermarket, and we are watching closely to see what this means. The growth of fleets in China also is high on our list given the complexities of that market. Finally, I think we will see more on how better protect the integrity of our products from future cyber threats.

## Sarah MacLeod, Aeronautical Repair Station Association



### 1. WHAT TECHNOLOGY ADVANCEMENTS ARE NEEDED IN THE AVIATION MAINTENANCE INDUSTRY?

Aviation businesses have always developed new technology and associated tools to improve productivity and minimize human factor errors. We, unfortunately, too  
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