

March 8, 2017

The Honorable Frank LoBiondo  
Chairman  
Aviation Subcommittee  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Rick Larsen  
Ranking Member  
Aviation Subcommittee  
U.S. House of Representatives  
Washington, D.C. 20515

### **ARSA Statement on the Aviation Maintenance Industry's Role Supporting Air Transportation in the United States in the 21st Century**

Dear Chairman LoBiondo and Ranking Member Larsen:

This statement is submitted by the Aeronautical Repair Station Association (ARSA) in conjunction with today's subcommittee hearing on air transportation in the United States in the 21<sup>st</sup> Century. ARSA is the trade association representing the global aviation maintenance industry. Our primary members are companies certificated by the Federal Aviation Administration (FAA) and other civil aviation authorities (CAA) to perform maintenance, preventive maintenance and alterations on civil aviation aircraft, airframes, aircraft engines, propellers, appliances and components.

We are pleased to report that the health of the aviation maintenance industry is good and the sector is growing. However, our members are concerned that certain risks – political and economic – could undermine future growth.



*To learn more about the aviation maintenance industry, go to <http://avmro.arsa.org/about/> and watch our seven-minute public television documentary.*

#### **Aviation Maintenance Industry Economic Profile**

The aviation maintenance industry has a massive economic footprint in the United States. According to [a report prepared by Oliver Wyman for ARSA](#), the sector employs more than 277,000 people and generates \$44 billion in annual economic activity.

Maintenance, repair, and overhaul (MRO) activity accounts for 75 percent of all employment (more than 210,000 workers) and generates \$21 billion in annual economic activity. Repair stations are the largest employers with more than 186,000 workers. The remaining 23,000 workers are employed by air carriers and other firms. The fact that there are eight times more people working for FAA-certificated repair stations in the United States than there are mechanics working for airlines underscores the dominant and critical role that contract maintenance plays in the aviation industry.

<b>Aviation Maintenance Industry Employment</b>			
Maintenance, Repair & Overhaul			
Repair Stations	Air Carriers	Parts Manufacturing and Distribution	Total Employment
186,410	23,783	67,199	277,392
<b>Aviation Maintenance Industry Economic Impact</b>			
Maintenance, Repair & Overhaul		Parts Manufacturing and Distribution	Total Economic Impact
\$21.290 Billion		\$22.852 billion	\$44.142 billion
<small>Source: CAVOK, a division of Oliver Wyman, 2017 industry economic analysis. More information is at <a href="http://arsa.org/news-media/economic-data/">http://arsa.org/news-media/economic-data/</a></small>			

Aircraft parts manufacturing and distribution is also an important part of the maintenance sector, employing more than 67,000 and accounting for \$23 billion in annual economic activity.

Additionally, because aviation maintenance work is so highly specialized and so much of it is done off the aircraft, the

industry is dominated by small companies. According to Oliver Wyman's industry analysis, 85 percent of US. repair stations are small and medium-size businesses.

### ***A Positive Outlook for the Industry***

ARSA members are generally optimistic about the health of their industry and prospects for 2017. Fifty-eight percent of the respondents to ARSA's 2017 member survey said they expect their revenues and markets to grow in the coming year; fewer than seven percent expected contraction. Fifty percent said their margins and/or profits had increased in the past two years; fewer than 20 percent said profitability had decreased. That strong economic performance is translating into new jobs: 56 percent of the respondents said they plan to add to their workforces in the coming year; no survey respondent planned to lay off workers. However, as discussed elsewhere in this statement, expanding the maintenance industry workforce will be contingent on finding scarce technical talent to fill the new positions.

### ***Regulatory Burden Risks Undermining Industry Growth***

A major threat to the aviation maintenance sector is government intrusion through overregulation. The aviation industry is among the most – if not *the* most – regulated in the entire global economy. To obtain a certificate from any CAA, maintenance providers must meet strict requirements defined in national aviation regulations. In order to keep that certificate, they are subject to periodic inspections and audits by regulators, customers and external quality organizations not to mention their own quality assurance departments.

For a company to be successful in the aviation industry, safety and security must be paramount concerns. Operators and airlines will not do business with companies that put passengers and valuable business assets (i.e., aircraft) at risk. Put simply: good safety is good business. Congress and the FAA must understand that government and the industry share the same safety goals and should refrain from micromanaging through unnecessary agency action. When considering imposing new mandates on repair stations and requiring new regulations, lawmakers should consider whether the

proposal truly improves safety and the additional regulatory burden it creates considering the totality of existing regulatory requirements. ARSA stands ready to work with the committee to assess proposals and help improve understanding about the impact of new potential requirements in light of current regulatory requirements and business realities.

**U.S. Repair Stations, Economy Benefiting from International Aviation Maintenance Trade**

The positive impact of international trade on U.S. companies in the aviation maintenance industry cannot be overstated. The average ARSA member responding to

EASA-Approved Repair Stations – By State (Top 25)			
Rank	State	EASA-Approved Repair Stations (#)	Total Repair Station Employment in State (2016)
1	Florida	291	15,671
2	California	202	26,659
3	Texas	141	16,404
4	Arizona	68	6,270
5 (tie)	Connecticut	53	4,522
5 (tie)	Kansas	53	5,382
7	New York	50	5,121
8	Washington	48	9,055
9	Georgia	46	16,083
10	Oklahoma	41	11,469
11	Ohio	39	6,174
12	Illinois	38	3,935
13	Michigan	32	4,653
14	North Carolina	26	3,711
15	Alabama	24	5,314
16	New Jersey	22	3,948
17	Colorado	21	1,308
18 (tie)	Massachusetts	20	2,160
18 (tie)	Tennessee	20	2,165
18 (tie)	Missouri	19	1,531
18 (tie)	Pennsylvania	19	3,341
18 (tie)	Wisconsin	19	2,188
18 (tie)	Indiana	16	2,650
18 (tie)	Kentucky	16	608
25	Nevada	12	1,546

the 2017 member survey indicated that a quarter of their company revenues are derived from work done under a bilateral aviation safety agreement (BASA) (i.e., for customers outside the United States).

Workers and companies in almost every state benefit from international trade in aviation maintenance services, according to a [recently-released ARSA analysis](#). The findings underscore the broad economic impact of the aviation maintenance industry in communities throughout the United States, as well as the benefits of BASAs, which make government oversight more efficient.

A long-standing BASA between the United States and European Union (EU), allows U.S. repair stations certificated by the FAA to more

easily receive and maintain approval to work on European-registered aircraft and related components. The BASA also makes oversight more efficient for government and industry by allowing the FAA and European regulators to share responsibilities. In addition to the EU, the United States has BASAs with several other countries (including Canada) covering maintenance, flight operations and aircraft and environmental certification.

The ARSA analysis of the European Aviation Safety Agency's (EASA) [list of U.S. EASA approval holders](#) found there are 1,460 repair stations spread across 47 of the 50 states authorized to work on European aircraft and components. ARSA correlated the EASA data with [industry employment figures](#) and found that, collectively, there are more than 161,000 Americans employed by repair stations in the 25 states with the most EASA approvals.

BASA's do not just make it easier for U.S. companies to serve international customers, they also minimize cross-border compliance costs. A 2011 ARSA study found U.S. repair stations pay a 300 percent mark-up when applying for certification by a foreign CAA when the country does not have a BASA with the United States. That study also found that BASA's disproportionately benefit small companies, which have less economic activity over which to amortize the costs of regulatory compliance.

ARSA believes the positive impact of international trade on small businesses and workers in the aviation maintenance sector is one of the U.S. economy's best kept secrets. As Congress begins considering FAA reauthorization legislation, ARSA urges that lawmakers keep the benefits of BASAs and international trade in this area in mind. Anything that undermines our current bilateral relationships or that limits the ability to conclude new agreements, will have negative repercussions for repair stations operating in communities throughout the economy.

Similarly, Congress should reject proposals to impose new mandates or restrictions on foreign FAA-certificated repair stations, many of which are owned by U.S. companies and are essential to American air carriers operating internationally. By taking action against repair stations outside the United States, Congress would make it harder for U.S. companies to expand overseas and potentially subject U.S. repair stations to retaliatory action that could limit their ability to serve foreign customers.

### ***Skilled Technical Worker Shortage is Major Strategic Risk to U.S. Aviation Maintenance Industry***

ARSA members consider the technical talent shortage to be the biggest challenge confronting the industry. Asked to identify the most pressing risks to company profitability, revenue or workforce forecast over the next five years, 56 percent of respondents to ARSA's 2017 member survey selected "difficulty finding/retaining technical talent", more than any other strategic challenge to the industry (including, "regulatory costs and burdens," which was selected by 50 percent of respondents).

Despite the fact that jobs in aviation maintenance are well-paying – according to the Bureau of Labor Statistics, aircraft and avionics equipment mechanics and technicians earned average annual salaries of more than \$58,000 in 2015 – repair stations are having trouble filling open positions. Thirty-one percent of survey respondents reported having "a lot of difficulty" finding qualified workers to fill technical positions over the past

two years; half of respondents reported having some difficulty. Fewer than one-fifth of respondents said they had no difficulty. Half of ARSA survey respondents reported having open, unfilled technical positions. The number of vacancies at responding companies ranged from one to 190 with an average of 19.

As the FAA reauthorization process proceeds, we urge the committee to draw attention to the aviation industry worker shortage and to look for opportunities to improve career technical education (CTE) in our sector. We also urge the committee and its members to support efforts to reauthorize the Perkins Act, which provides a framework for federal investment and involvement in CTE.

***Expanding Airport Infrastructure***

The American Society of Civil Engineers has given the nation's airport infrastructure a grade of "D." The Airports Council International has estimated that airports will require almost \$100 billion in capital improvements over the next half decade. ARSA believes Congress must look for fiscally-responsible ways to expand America's airport capacity to improve passenger mobility, enhance system efficiency and ensure the continued growth and health of the aviation industry.

Thank you for your consideration of our comments. We look forward to working with you and your colleagues on both sides of the aisle and in both chambers of Congress to enact and FAA bill that improves regulatory oversight, enhances safety, expands our industry workforce, and improves our airport infrastructure.

Sincerely,



Christian A. Klein  
Executive Vice President

c.c. All members of the House Transportation & Infrastructure Committee