

Pandemic Impacts the World Over

Regional Aviation of Russia and the CIS – 2020

October 20, 2020

Christian A. Klein, Executive Vice President

About the Aeronautical Repair Station Association

[ARSA](#) is devoted to the worldwide civil aviation maintenance industry—from its global corporations to the small, independent businesses. [ARSA](#) members are located on five continents and in nearly 20 countries.

The association's experts create tools for members to navigate the maze of government mandates while enhancing safety, efficiency and productivity.

[ARSA](#) is managed by the law firm of [Obadal, Filler, MacLeod & Klein, P.L.C.](#), which provides management, government affairs, and legal services to trade associations and transportation-centric companies.

About Obadal, Filler, MacLeod & Klein, P.L.C.

[OFM&K](#) is a boutique law firm based in Alexandria, Virginia (across the river from Washington, D.C.).

It provides management, government affairs and legal services to trade associations and transportation-centric companies with particular emphasis on international aviation safety regulations.

It helps clients navigate the maze of government mandates while enhancing safety, efficiency and productivity.

About the Presenter – Christian A. Klein

[Christian A. Klein](#) is the managing member of [OFM&K](#) overseeing the firm's policy advocacy practice. He represents trade associations as a registered federal lobbyist and provides strategic communications and legal counsel services to clients. He is Executive Vice President of the [Aeronautical Repair Station Association](#). Mr. Klein is a member of the University of Virginia's adjunct faculty.

Mr. Klein obtained a bachelor's degree with honors in international relations from the College of William and Mary, a law degree and a master's in congressional politics from the Catholic University of America; and a post-graduate certificate in public relations from University of Virginia.

Legal Disclaimer

This material is provided for educational and informational purposes only. It does not constitute any type of professional advice. Law, regulations, guidance and government policies change frequently. While this material is updated, its accuracy cannot be guaranteed.

In addition, the application of this material is always dependent on the particular facts and circumstances involved. The use of this material is therefore at your own risk.

Description

What is the impact of the COVID crisis on the global aviation maintenance industry? How could political developments in the United States affect air carriers, manufacturers and maintainers the world over?

This session will consider these questions based on data gathered and analysis performed by ARSA, its industry allies and partners at aviation consulting firm Oliver Wyman.

Overview

- Background on the global aviation maintenance industry
- Where we were: ARSA/Oliver Wyman forecast
- Where are we now: OW updates and ARSA survey
- Where we're headed: Factors affecting the future
- U.S. elections and anti-repair station legislation

Background on Civil Aviation Maintenance Industry

- Key terms:
 - Civil aviation authority (CAA): The authority within in a “country” that controls civil aviation safety (e.g., US FAA, EU’s EASA, Russia’s Rosaviatsia)
 - Aviation maintenance: maintenance, preventive maintenance, rebuilding, and alteration of airframe, aircraft engines, propellers, appliances, and component parts of such aircraft.
 - Repair station or approved maintenance organization: Facility approved by aviation authority to perform civil aviation maintenance for air carriers, general/business aviation
 - Contract maintenance: Maintenance performed for an airline by someone other than the airline
 - MRO: Maintenance, repair and overhaul (non-technical way of referring to the aviation maintenance)
 - Maintenance industry: Repair stations, airline mechanics, parts manufacturers and distributors

Background on Civil Aviation Maintenance Industry

- Under Chicago Convention (treaty that created UN's International Civil Aviation Organization) state of registry of aircraft controls maintenance, so U.S. aircraft must be maintained by FAA approved "persons" (mechanic, air carrier, repair station) anywhere in the world
- Each aircraft has more than one million serviceable parts, so maintenance has become more complex as aircraft have become more sophisticated
- Repair stations are highly specialized so get better return on investment in facilities, training, tools, etc. (i.e., they can do the work more cheaply without impacting safety)
- As airlines have embraced contract maintenance model, work has migrated from airlines to repair stations (approximately 2/3 of maintenance is performed by repair stations)
- Contract maintenance has made airlines more efficient and contributed to the safest period in the history of U.S. civil aviation
- As of March 9, U.S. repair stations employed six times more workers (193,857) than U.S. airlines employed mechanics (31,855)
- Parts manufacturing and distribution employed 22 percent of U.S. aviation maintenance workforce but generated almost half of economic activity

Background on Civil Aviation Maintenance Industry

2019 Aircraft Maintenance Balance of Trade

<u>Type of Maintenance</u>	<u>North America</u>	<u>Western Europe</u>	<u>Eastern Europe</u>	<u>Latin America</u>	<u>Asia Pacific</u>	<u>China</u>	<u>India</u>	<u>Middle East</u>	<u>Africa</u>
Heavy airframe	Importer	Importer	Exporter	Exporter	Exporter	Exporter	Importer	Exporter	Importer
Component	Exporter	Exporter	Importer	Importer	Importer	Importer	Importer	Importer	Importer
Engine	Exporter	Exporter	Importer	Importer	Exporter	Importer	Importer	Importer	Importer

Exporter: More work in category comes into region than leaves it

Importer: More work in category leaves region than comes in

Source: Oliver Wyman/ARSA Global Fleet & MRO Market Economic Assessment 2020-2030

Where We Were: 2020 ARSA/Oliver Wyman MRO Market Report

- [Released March 9, 2020](#)
- MRO demand expected to grow 3.7 percent annually from \$90 billion in 2020 to \$130 billion in 2030
- Factors:
 - 21,000 new aircraft (2,100 annually) representing 30 percent production increase over 2010-2020
 - Aging fleet (almost nine percent of fleet over 25 years of age)
 - Slowing growth in revenue passenger miles (3.6 percent 2020-2030 vs. 6.8 percent 2010-2020)
 - Decline in freight tonne kilometers
- Significant workforce shortages cost U.S. repair stations >\$1 billion per year in lost economic activity

Where We Are: Oliver Wyman Insights

- [Update OW forecast](#): Global MRO spend expected to be \$50.3 billion in 2020 (versus anticipated \$91.2 billion)

Region	Pre-COVID fleet size	Aircraft sent to storage	Aircraft put back into service
Africa	1,137	700	262
Asia Pacific	8,689	5,334	3,618
Europe	6,821	5,414	2,871
Latin America & Caribbean	1,746	1,319	469
Middle East	1,404	1,059	504
North America	8,087	4,588	2,092
Total	27,884	18,414	9,816

Source: Oliver Wyman Global Fleet and MRO Market Forecast, 2020-2030, Revised

Where We Are: Insights from 2020 ARSA Mid-Year Survey

- Methodology and respondent profile
 - Conducted online in July 2020, [results released](#) July 28
 - Data based on 99 U.S. headquartered MX companies representing 266 certificates in the United States and 23 foreign facilities
 - Some participation from non-U.S. companies, but not enough to be statistically valid
 - Strong alignment between results and Oliver Wyman (OW) and government reports

Where We Are: Insights from 2020 ARSA Mid-Year Survey

- Repair station revenues
 - 88.8 percent report declines
 - Average decline is 45.9 percent
 - MX industry effectively lost half its business activity in first half of 2020

Where We Are: Insights from 2020 ARSA Mid-Year Survey

- Jobs impact:
 - U.S. aggregate employment fell 26.9 percent from Jan. 1 to June 1
 - Projected across entire workforce (193,000 workers pre-COVID), repair stations laid off an estimated 50,000+ workers since Jan. 1
 - Reductions spread unevenly:
 - 47.5 percent reported declines in employment
 - 42.5 percent reported no change
 - 10 percent added employees
 - Companies receiving government relief had far fewer layoffs

Where We Are: Insights from 2020 ARSA Mid-Year Survey

- What's ahead?
 - More job losses:
 - 31.7 percent plan temporary reductions through end of the year
 - 9.8 percent plan permanent reductions
 - Company outlook for 2020 vs. 2019
 - Pre-COVID: 69.57 percent expect growth and 5.8 percent expected contraction
 - Post-COVID: 70 percent expect contraction and 12 percent expect growth
 - When will business return to normal?
 - More than half say not before next summer (almost a quarter say no until 2022)
 - One-third of respondents (31.8 percent) concerned about company survival

Where We're Headed: Factors Affecting the Future

- Implications of layoffs for industry efficiency
- Currency value implications
- Markets, customers, geography
- Government support
- Reopening/infection spikes
- Vaccine distribution: Impact on public confidence, direct impact on transportation (8,000 aircraft)
- Health of global economy
- U.S. elections

U.S. Elections

- What's at stake?
 - President
 - One-third of Senate (currently controlled by Republicans)
 - 435 House of Representatives seats (currently controlled by Democrats)
- Joe Biden (Democrat) leads Donald Trump (Republican) by average of 9 points in national polls and 4.5 points in key battleground states
- Democrats expected to hold House and make Senate gains (of 16 competitive races, 12 currently held by Republicans)
- Biden has made “Buy American” a central campaign theme

Anti-Repair Station Legislation

- [Safe Aircraft Maintenance Standards Act \(H.R. 5119\)](#) is new front in long-standing union battle against contract maintenance (MRO)
- As airlines have embraced contract maintenance, technical work has migrated from airlines to repair stations
- As of March 9, there were six times more repair station employees than airline mechanics
- Unions raising false safety and security arguments to promote legislation that raises costs, undermines MRO competitive advantage, makes it more difficult for air carriers to use repair stations
- Goal of contract maintenance opponents is to bring more maintenance work back “in house” (in United States) and increase union membership ranks

Anti-Repair Station Legislation

- H.R. 5119:
 - Surprise inspections all foreign FAA repair stations
 - Extensive MX data gathering unrelated to safety
 - Permanent ban on U.S. aircraft maintenance in CAT 2 countries (currently Bangladesh, Costa Rica, Curacao, Ghana, OECS, Pakistan, Panama, Thailand, Venezuela)
 - Direct FAA certification of foreign repair station employees
 - Ban on new foreign repair station certificates if FAA doesn't complete all tasks in bill, issue drug & alcohol testing rule, etc.

Anti-Repair Station Legislation

- Bill is pending in House of Representatives, no Senate companion
- ARSA [managing coalition](#) to oppose enactment
- Democratic election gains could add impetus
- Could lead to collapse of U.S.-E.U. BASA and disrupt global maintenance services trade
- [Join ARSA](#) and ask your government to express concerns via diplomatic and regulatory channels

Following up

- [Join ARSA](#) to access regulatory compliance, legal, networking and advocacy resources
- Ask your government to express concerns about [H.R. 5119](#) via diplomatic and regulatory channels
- If you need legal services related to regulatory compliance and enforcement, consider [OFM&K](#)

Questions?





Christian A. Klein

Executive Vice President

T: 703.739.9543 Ext. 106

M: 703.599.0164

christian.klein@arsa.org

www.arsa.org

Contact ARSA

121 North Henry Street
Alexandria, VA 22314-2903

703.739.9543

www.arsa.org

arsa@arsa.org