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Submitted via:

<http://www.ftc.gov/nixingthefix>

Office of the Secretary
Federal Trade Commission
Suite CC-5610 (Annex B)
600 Pennsylvania Ave., N.W.
Washington, D.C. 20024

RE: Nixing the Fix: Response to Request for Empirical Research/Data Regarding Repair Restrictions

Dear Madam or Sir:

This is a response to the Federal Trade Commission's (FTC) request for empirical research and data regarding repair restrictions; it details the widespread restrictive practices employed in the aviation sector by design approval holders (DAH) (i.e., manufacturers) and the resulting impact on repair stations, their customers and the general public.

(I) Summary

The Aeronautical Repair Station Association (ARSA) represents the global aviation design, production and maintenance sector. ARSA's primary members are companies certificated by the Federal Aviation Administration (FAA) and other authorities to perform maintenance, preventive maintenance or alteration of aircraft, other aviation products, appliances and components. Although our membership also includes leading manufacturers, airlines and other entities and individuals with an interest in aviation policy, the bulk of our members – and most repair stations – are small businesses.

The repair restriction challenges faced by aviation repair stations are related to the FAA's inconsistent enforcement of rules that require manufacturers to develop maintenance information and make it available. Specifically, the FAA fails to enforce the regulation requiring Design Approval Holders (DAHs) to develop basic maintenance information and thereafter make it available to maintenance providers ([14 C.F.R. § 21.50\(b\)](#)), while aggressively enforcing the rule requiring repair stations to possess that same maintenance data ([14 C.F.R. § 145.109\(d\)](#)).

Due to this inequity, many small businesses face unnecessary administrative and financial burdens and significant loss of business opportunities. While, for antitrust reasons, ARSA does not survey members about maintenance rates charged to customers, it is highly likely that the associated costs are passed along to commercial

and general aviation customers, many of the latter of whom are individual owner-pilots. The inequity also creates a government-induced monopoly and barrier to entry for small business, preventing competition and innovation in the civil aviation maintenance market.

(II) FAA Regulations Require Design Approval Holders to Produce and Make Maintenance Manuals Available

The FAA controls design, production, operation and maintenance of civil aviation aircraft in the United States. In order to design and produce a civil aviation product or article, an entity must comply with [14 C.F.R. part 21](#). Among other things, DAHs are required¹ to create and furnish Instructions for Continued Airworthiness (ICA) (i.e., maintenance manuals) to the owner of each aviation product and to any other person required by FAA regulations to comply with those instructions.

Since 1941, aviation safety regulations have required engine manufacturers to create and make maintenance instructions available; manufacturers of rotorcraft and propellers have been subject to comparable requirements since 1950 and 1952, respectively.² In 1981, the FAA promulgated [14 C.F.R. § 21.50\(b\)](#) to standardize the requirements for creating and making ICA's available and added requirements for fixed-wing aircraft.

Despite the clear requirement in the aviation safety regulations that DAHs create and make vital maintenance information available, the agency has consistently failed to enforce these rules.

(III) The FAA Strictly Enforces the Requirement that Repair Stations Possess Maintenance Manuals but Does Not Enforce Rules Requiring Design Approval Holders to Make Manuals Available

In order to perform maintenance, preventive maintenance or alteration as a repair station, the entity must be certificated by the FAA under [14 C.F.R. part 145](#). Title [14 C.F.R. § 145.109\(d\)](#) requires the repair station to have specified manufacturer maintenance information "current and accessible."³

In order to comply, repair stations must first obtain the manuals. This is a problem in and of itself since the agency's refusal to enforce [14 C.F.R. § 21.50\(b\)](#) allows manufacturers to avoid creating the documents. If the required documents are created, manufacturers frequently make them available only to their own repair stations, which is also contrary to the plain language of the regulation. Additionally, the agency will not involve itself in the

¹ See [14 C.F.R. § 21.50\(b\)](#) and predecessor regulations outlined in the [Memorandum](#) on the historical regulations governing the creation and availability of maintenance information.

² *Id.*

³ See legal interpretations issued to [Andrew V. Cebula](#) (2006), [Christopher Witkowski](#) (2008), [David M. Schultz](#) (2009), [Manager, Sacramento FSDO](#) (2010), [Paul N. Sissons](#) (2010), [Albert T. MacMillan](#) (2011), [Steven Tomer](#) (2012), [Charles Willette](#) (2013), [Carcano-Swift Avionics Services, Inc.](#) (2017), [W. Harvey Cash](#) (2017), and [Daniel Murphy](#) (2017).

pricing of the required documents, which allows manufacturers to make manuals constructively unavailable by charging any amount with no fear of retribution.⁴

Second, even when the manuals are available, if the owner/operator or repair station determines that earlier versions of the documents are to be used, the part [145](#) certificate holder is still required to maintain the most current versions. Third, when the DAH no longer supports the product or article, the repair station must still constantly ensure “currency” of manuals and data required by [14](#) C.F.R. § [145.109\(d\)](#), creating an unnecessary administrative burden.

The FAA’s strict enforcement of the requirement that repair stations obtain and maintain these documents, while failing to enforce [14](#) C.F.R. § [21.50\(b\)](#) and its predecessor requirements, traps businesses in a regulatory Catch-22 and has a number of negative and anticompetitive impacts as described below.

(IV) Response to FTC Questions

(A) The Prevalence of Certain Types of Repair Restrictions

The DAH practice of denying access to maintenance data is widespread in the industry. Indeed, one of the reasons our association was founded more than three decades ago was to address this issue. The association and its members have endeavored for decades to push and prod the FAA to more equitably enforce its rules,⁵ unfortunately, with little result.

In September 2018, ARSA filed a comment with the Small Business Administration’s (SBA) Small Business Ombudsman’s office⁶ urging it to review FAA’s practices and the disparate impact on small companies in the aviation sector. Several ARSA members filed individual comments shedding further light on DAH practices. We are still awaiting an official response from SBA.

The prevalence of DAH restrictions is reflected by ARSA survey data. Each year, the association surveys its members about business activities, strategic challenges facing the industry and other issues. As part of the survey, members are asked to choose from a list of nine perceived threats to profitability, revenue or workforce over the next five years. In 2018, the availability of maintenance data was the top perceived threat to the industry. In other years, the issue has been a close second or third perceived threat along with the skilled labor shortage and regulatory complexity.

⁴ See [Memorandum](#) on how other agencies have addressed the issue of costs for required documents.

⁵ See 20-year chronology of ARSA activity on maintenance manual issue at <http://arsa.org/regulatory/faa/design/ica-efforts/>.

⁶ Aeronautical Repair Station Association, “ARSA Urges SBA Review of Maintenance Manual Availability” (Aug. 29, 2018) <http://arsa.org/sbaicacomment/>.

As noted above, when DAHs make maintenance data available, it is often at high and escalating prices that may render it constructively unavailable. Member comments from recent ARSA surveys and SBA comments are telling⁷:

- “The OEM's [REDACTED] overhaul manuals have risen from \$5,000.00 to \$51,000.00 in less than 10 years with annual appearing to be automatic increases to the point of affordability. We are approved for 13 different models of [REDACTED] and could only afford to stay current with 3 models due to price gouging. We simply cannot service our customers (sic.) needs due to this arrangement.”
- “All DAH’s give us some level of push-back. For example, one DAH requires we obtain a letter from our Aircraft Operator/Customers that states they have chosen [REDACTED] to be the Repair Station for a particular item/component. IF they accept that letter of designation, then we are allowed to purchase the Maintenance Manual. There have been times when we have had to submit multiple letters only to be ignored and never receive a Maintenance Manual. Another DAH requires we pay an annual service fee PLUS the cost of any Maintenance Manuals [REDACTED] requires. Both these practices violate the clear language of 14 C.F.R. § 21.50(b) and are a burden to [REDACTED] – but it is a burden we have to live with because the FAA will not enforce 14 C.F.R. § 21.50(b). There is, however, one particular DAH that has recently decided to refuse to make Maintenance Manuals available to anyone outside their network under all conditions. [REDACTED] continually requests of this particular Design Approval Holder (DAH) for Maintenance Manuals. This noteworthy DAH is one of the largest aircraft component manufacturers, and therefore, holds a significant amount of economic power in the market. On this DAH’s website, they specifically require the person asking for the manual to be a DAH-associated repair station.”
- “Manufacturers such as [REDACTED] will not sell [component maintenance manuals (CMM)] to third Party Shops. Further, they have gone as far as releasing a new revision of the CMM with no changes in context, thereby blocking the Third Party Repair Station from Returning to Service the component to which the CMM applies. This is done specifically to eliminate competition from the Third Party Repair Stations.”
- “We have attempted to procure manuals from a number of OEMs (Design Approval Holders) including [REDACTED] and others. In every case these OEM refuse to provide or sell [REDACTED] CMMs since we are not an airline or owner of an airplane with their parts on it. Our only recourse is to get an airline to agree to enter into a three-way agreement with the OEM designating us as their repair shop for specific parts. This is a very long and tedious process specifically designed to dissuade the airlines from participating. Plus it must be renewed annually. In addition, we have one full time employee whose job is to maintain all of our manuals in current condition.

⁷ Comments have not been edited but have been redacted to remove identifying information and company names. The comments are a sample of those received by ARSA from companies across the United States and reflect concerns about, and practices of, multiple manufacturers.

Manuals are checked daily for revision changes as many are changed more than once a year with no notification. In addition, we are responsible to our customers for current, correct, incorporation of any engineering changes they have to the CMMs. The FAA checks our manual records at every visit.”

- “Prior to [REDACTED] merger with [REDACTED] [REDACTED] annual cost was around \$8,000 for ICA data from [REDACTED], we now pay more than ten times that. Imagine wanting to repair a part for an airline that cost new \$10,000 and the cost of the repair is \$950.00 but you must first purchase the data for more than a new part costs. Some like [REDACTED] try to make it even more difficult by requiring you acquire the data from your airline customer. Imagine how difficult that is when your customer is not the airline but is the owner of the part.”
- “The cost of the manuals has increased by 38% each of the last 2 years. Cost of the manuals is becoming prohibitive. Also it is necessary to purchase manuals every year. In prior years it was normally necessary to purchase manuals every 2 years.”
- “Our biggest issue is the continuously increasing cost of manual subscriptions from [REDACTED]. We believe that they are trying to purposefully drive up the prices on independent MROs. Costs on each [REDACTED] overhaul manual collection increased on an average 10% to 15 % every year; or roughly \$4000 - \$7000 every year, over the last 6 years. Costs are 16x higher now, using CDs (very few CD services left), website access, and digital downloads, than when all manual (sic) were paper product hard copies that had to be shipped through the mail.”
- “[REDACTED] has inflated their maintenance manuals (\$6000.00) to make it cost prohibitive to acquire the current manuals in support of customer equipment. Along with that unreasonable price tag comes strings attached requiring an agreement to share (somewhere around 20%) profits of customer repairs. [REDACTED] refuses to release the [REDACTED] manual to us. We have made several requests and have received a flat out denial. ...[REDACTED] also has come out with a short list of authorized repair centers that had to sign an extremely unreasonable agreement which includes % of profits on all repairs going to them. As well as total access to all company records including agreeing to allow a [REDACTED] representative be in house at all times. Those of us who found this agreement unreasonable, not beneficial to our business growth, against good trade practices, or just plain disagree with on principle alone and refused to sign the agreement, are now being blackballed from getting access to manuals and repair parts. This is definitely not good for our industry. It hurts the small businesses and ultimately hurts the aircraft owners because they no longer have a free trade market for repairs. They are stuck going through [REDACTED] who can ultimately control the market since all "authorized" repair centers are under their thumb. These are just few examples of unfair practices I'm aware of going on that seem to be designed to cut out the small businesses (Privately owned Repair Stations).”

- “The issue of overhaul, maintenance [REDACTED] manual revision compliance as required for (current) revisions being made available as they occur from [REDACTED] has become unobtainable due to exuberant price increases to \$27,863.00 for manual revisions for our existing manual library for the small [REDACTED] engines we own and operate repair and maintain. We do not solicit nor compete with anyone nor advertise for outside work. The increase was over \$7000.00 since last year....”

(B) The Effect of Repair Restrictions on the Maintenance Market in the United States, and the Impact that Manufacturers’ Repair Restrictions Have on Small and Local Businesses

By refusing to create and then limiting access to maintenance data, DAH’s are able to maintain and enhance a government-induced monopoly. Aviation safety rules are very specific; Title [14](#) C.F.R. § [145.109\(d\)](#) requires a repair station to maintain:

[T]he documents and data required for the performance of maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications in accordance with part 43. The following documents and data must be current and accessible when the relevant work is being done:

- (1) Airworthiness directives,
- (2) Instructions for continued airworthiness,
- (3) Maintenance manuals,
- (4) Overhaul manuals,
- (5) Standard practice manuals,
- (6) Service bulletins, and
- (7) Other applicable data acceptable to or approved by the FAA.

Furthermore, Title [14](#) C.F.R. § [43.13\(a\)](#) requires:

Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in § 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator. (emphasis added)

Similarly, Title [14](#) C.F.R. § [43.16](#) provides that:

Each person performing an inspection or other maintenance specified in an Airworthiness Limitations section of a manufacturer's maintenance manual or

Instructions for Continued Airworthiness shall perform the inspection or other maintenance in accordance with that section, or in accordance with operations specifications approved by the Administrator under part 121 or 135, or an inspection program approved under § 91.409(e). (Emphasis added.)

Noncompliance with the foregoing rules requiring the use of DAH maintenance data is not an option for a certificated entity; records falsification (i.e., certifying that specific maintenance data was used when it was not) is a serious violation that could subject a company or individual to the loss of their certificate and other penalties.⁸

DAHs' failure to make maintenance manuals available has significant consequences for FAA-certificate companies – whether large or small – seeking to compete, including:

- Paying exorbitant prices to DAHs to obtain manuals (when they are willing to provide them);
- Spending time and money searching for and obtaining manuals from third-party sources;
- Turning away customers because manuals are not available;
- Being forced into licensing agreements with DAHs to obtain data that should be made available under current regulations and paying a percentage of the repair stations revenues to the DAH;
- Diverting personnel and other resources to develop and obtain approval of non-DAH repairs under FAA's regulatory system.

(C) The Effect Repair Restrictions Have on Prices for Repairing Goods, Accessibility and Timeliness of Repairs, and the Quality of Repairs

The association does not survey its members about prices charged for maintenance services. For reasons described in section (G), below, because of FAA's regulatory framework, quality of repairs is not an issue because all maintenance must return the article to at least its original condition. Furthermore, if the appropriate data cannot be obtained from the manufacturer, the repair station cannot perform the work without obtaining approval or acceptance of alternative methods, techniques and practices from the FAA.

As described in Section (J), below, airlines have become sufficiently concerned about some manufacturer practices and related impacts on accessibility and timeliness of repairs that they have filed complaints with regulators and forced at least one engine manufacturer to adopt a conduct policy to temper its anticompetitive aftermarket practices.

⁸ See, e.g., [14 C.F.R. § 145.12](#) ("Repair station records: Falsification, reproduction, alteration, or omission").

(D) The effect of repair restrictions on consumers' ability to repair warranted products or to have the products repaired by independent repair shops

Please see Section (J), below.

(E) The Relationship Between Repair Restrictions and the Sale of Extended Warranties by Manufacturers

The association has no relevant expertise related to extended warranty sales by manufacturers.

(F) Manufacturers' Justifications for Repair Restrictions and the Factual Basis for Such Justifications

Manufacturers use two "reasons" to justify the restrictions. First, is the claim that the information is proprietary and contains "trade secrets". This reasoning has been challenged by the agency itself in several policy documents and legal interpretations. Basically, the FAA has stated that if the information is required to ensure safety, it cannot be withheld. The agency has noted that assurances that the information will only be used to perform work on the manufacturer's articles can be obtained.

Second, manufacturers will raise a "safety" argument, alleging that only it can perform the work. That restriction makes little sense since no person may perform maintenance, preventive maintenance or alteration on an aircraft or article with a U.S. certificate of airworthiness without a certificate from the FAA.⁹ In other words, manufacturers have no authority to allow another person to perform maintenance; that authority resides with the aviation safety agency (i.e., the FAA).

(G) The Risks Posed by Repairs Made by Consumers or Independent Repair Shops

The aviation maintenance industry is unique in the high-level of government oversight required on any person performing maintenance, preventive maintenance or alteration on aircraft and components with U.S. certificates of airworthiness. This intense oversight combined with the industry's outstanding safety record should leave no question about the quality and lack of risk associated with the use of independent repair shops.

FAA's rules specifically require all certificated repair stations to have "housing, facilities, equipment, materials, and data that meet the applicable requirements for the issuance of the certificate and ratings the repair station holds."¹⁰ Repair stations must also demonstrate to the FAA's satisfaction that the organizational framework and procedures will ensure consistent outcomes. Pursuant to [14 C.F.R. § 145.51](#), to receive a certificate, a repair station must create:

- A repair station manual acceptable to the FAA;

⁹ [14 C.F.R. § 43.3](#) ("Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations").

¹⁰ [14 C.F.R. § 145.101](#) ("General").

- A quality control manual acceptable to the FAA;
- A list by type, make, or model, as appropriate, of each article for which the application is made;
- An organizational chart of the repair station and the names and titles of managing and supervisory personnel;
- A description of the housing and facilities, including the physical address;
- A list of the maintenance functions, for approval by the FAA, to be performed for the repair station under contract by another person; and
- A training program.

The FAA also restricts repair stations to certain types of work based on ratings issue by the agency pursuant to [14 C.F.R. § 145.59](#).

Put simply, the FAA will not approve any repair station that cannot demonstrated its ability to perform work consistently and safely.

(H) The Liability Faced by Manufacturers when Consumers or Independent Repair Workers are Injured While Repairing a Product.

Our association is not familiar with any instance in which a DAH has been subject to liability to for an injury incurred by a repair station employee while repairing a product. Presumably, these would be issues of state tort and workman's compensation law.

In the case of maintenance of aircraft and articles subject to the jurisdiction of the FAA, it is frankly, irrelevant. The agency has the power and authority to determine the ability of a repair station to perform work in accordance with the aviation safety regulations. As in the case of all instances of interstate commerce, federal law preempts state requirements.

(I) The Liability Faced by Manufacturers when Consumers are Injured After Using or Coming into Contact with a Product that has been Repaired Improperly by a Consumer or Independent Repair Shop

Our association has no knowledge of how courts have apportioned liability in tort cases related to consumer injuries sustained as a result of work improperly performed by a repair station. Again, it would be irrelevant to the even enforcement of regulations by the agency charged with ensuring compliance aviation safety requirements.

(J) Whether Consumers Understand the Existence and the Effects of Repair Restrictions

Whether consumers understand the existence and effects of repair restrictions depends on the definition of consumer. If the consumer is a member of the traveling public, it is unlikely that an individual airline passenger would have that knowledge; however, because costs of doing business are passed along down the supply chain, it is possible that airline ticket prices have increased because of the increased costs incurred by aviation maintenance providers being passed on to the air carrier or owner/operator.

Aircraft purchasers – whether professional operators or individuals – likely become aware of the restrictions as they seek to have maintenance performed. In fact, the International Air Transport Association (IATA), the trade association for the global airline industry, filed a formal complaint against engine manufacturer CFM International (CFM) in the European Union related to that manufacturer's restrictions on aftermarket services. The complaint was withdrawn after CFM agreed to a set of conduct policies that, among others, require CFM to make its engine shop manual available to repair stations.¹¹ However, IATA filed a similar complaint against another manufacturer, which has not been withdrawn.

Many ARSA members report having to obtain maintenance data from their airline or private owner/operator customers because the DAH will not provide the information. In some cases, ARSA members themselves own or operate aircraft and encounter restrictions. For example, one ARSA survey respondent said that, "It appears [REDACTED] does not want us to maintain or repair our own engines we make a living with. We are considering our action to inform the DOT/FAA, ICC as well as the US State Department of these financial burden atrocities and illegal processes by the Canadian OEM."

(V) Conclusion

DAH practices of restricting maintenance data – and the FAA's unwillingness to equitably enforce its regulations – are a perennial challenge for repair stations and result in increased costs and inconvenience for maintenance providers and their customers.

ARSA's longstanding position is that if maintenance manuals are sufficiently important to safety that DAH's must create them and maintenance providers must have them to do the work, then regulators should be just as concerned about ensuring that DAH's make them available on a reasonable basis.

We look forward to the prospect of working with the FTC to address these anticompetitive practices in the aviation aftermarket.

Sincerely,



Christian A. Klein
Executive Vice President

¹¹ International Air Transport Association, "IATA, CFM International Sign Pro-Competitive Agreement on Engine Maintenance" (July 31, 2018) <https://www.iata.org/pressroom/pr/Pages/2018-07-31-01.aspx>.