No. _____

In the Supreme Court of the United States

AVIDAIR HELICOPTER SUPPLY, INC.,
Petitioner,

v.

ROLLS-ROYCE CORPORATION,
Respondent.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Eighth Circuit

PETITION FOR WRIT OF CERTIORARI

EDWARD A. MCCONWELL
Counsel of Record
LAURA L. MCCONWELL
McConwell Law Offices
5925 Beverly Street
Mission, KS 66202
(913) 262-0605
ed@mcconwell.com

Counsel for Petitioners

April 17, 2012

Becker Gallagher · Cincinnati, OH · Washington, D.C. · 800.890.5001

QUESTIONS PRESENTED

In 1958 the United States Congress enacted the Federal Aviation Act (the Act) (49 U.S.C. § 44701), creating the Federal Aviation Administration (FAA) for the purpose of designating one federal agency to be responsible for issuing aviation safety regulations. The Act specifically directed the FAA Administrator to establish regulations for the "safe flight of civil aircraft in commerce." 49 U.S.C. § 44701(a). The FAA Administrator was directed to promulgate regulations known as Federal Aviation Regulations (F.A.R.s) that encompass substantially all areas of air safety, which include aviation manufacturing (14 C.F.R. § 21), aviation maintenance (14 C.F.R. Part 43) and FAA certified aviation maintenance repair stations (14 C.F.R. Part 145).

The questions presented are (1) whether maintenance related F.A.R.s and/or orders promulgated by the FAA, including 14 C.F.R. § 21.50, 14 C.F.R. § 33.4 and FAA Order 8110.54 must be considered and enforced in a Federal District Court and/or a United States Circuit Court of Appeals in providing the appropriate standard of care for state law remedies involving claims of misappropriation of aviation overhaul/repair and maintenance information alleged to be trade secrets?; (2) Can an FAA authorized aviation maintenance provider be, in effect, required to violate the law (F.A.R.s) through not being allowed to possess current manufacturer maintenance instructions?; (3) Can a United States Circuit Court of Appeals, selectively enforce only certain F.A.R.s on its own volition and ignore other relevant F.A.R.s? (4) Can a United States Circuit Court of Appeals create a definition of "value" of an alleged aviation related

trade secret that is contrary to a controlling decision of the United States Supreme Court?; and (5) Can a United States Circuit Court of Appeals ignore summary judgment evidence and decisions of its Circuit and of the United States Supreme Court, which deal directly with loss of trade secret protection?

PARTIES TO THE PROCEEDINGS

Petitioner, AvidAir Helicopter Supply, Inc. was the Appellant in the U.S. Circuit Court of Appeals for the Eighth Circuit. Respondent, Rolls-Royce Corporation, was the Appellee in the Eighth Circuit. Avid Air is a closely held Missouri corporation. No public corporations hold any of its stock.

TABLE OF CONTENTS

APPENDIX

TABLE OF AUTHORITIES

Cases

Constitutional Provisions

Statutes

Regulations

Other Authorities

PETITION FOR A WRIT OF CERTIORARI

Petitioner, AvidAir Helicopter Supply, Inc, respectfully petitions this Court for a writ of certiorari to review the judgment of the United States Court of Appeals for the Eighth Circuit in this case.

OPINIONS BELOW

The opinion of the Eighth Circuit is reported at 2011 U.S. App. LEXIS 24620 and reproduced in the appendix hereto at App. 1a. Denial of Petitioner's Motion for panel rehearing and/or hearing en banc is reproduced hereto at App. 63a. The Opinions of the District Court for the Western District of Missouri are reproduced at App. 23a, 30a, 45a, and 49a.

JURISDICTION

The Opinion of the Eighth Circuit was entered on December 13, 2011. The final judgment of the Eighth Circuit was entered on January 18, 2012 by denial of Petitioner's Motion for rehearing. The jurisdiction of this Court is invoked pursuant to 28 U.S.C. § 1254(1).

CONSTITUTIONAL, STATUTORY AND REGULATORY PROVISIONS INVOLVED

Article VI, Clause 2 of the Constitution, the *Supremacy Clause*, provides that the laws of the United States "shall be the supreme Law of the Land;.... any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." Accordingly, Congress can enact laws that preempt the laws of the states as reflected by express Congressional intent.

Federal Aviation Act of 1958 (49 U.S.C. § 44701, *et seq*.) consolidates the field of aviation safety in a single federal agency, the Federal Aviation Administration, (hereinafter called "FAA") and grants the agency the power to promulgate regulations Federal Aviation Regulations (hereinafter called "F.A.R.s") which encompass the entire field of aviation.[1] (App. 65a)

14 C.F.R. § 43.13(a) (a/k/a F.A.R. § 43.13(a)) which requires aircraft maintenance providers to "use the methods, techniques, and practices prescribed in the current manufacturers maintenance manual, Instructions for Continued Airworthiness, or other methods, techniques or practices acceptable to the Administrator." (App. 100a)

14 C.F.R. § 145 (a/k/a F.A.R. § 145) provides that "a certified repair station may not approve for return to service any article unless the maintenance, preventative maintenance, or alteration was performed in accordance with applicable approved technical data or data acceptable to the Administrator."

14 C.F.R. § 21.50 (a/k/a F.A.R. § 21.50) which requires aircraft and aircraft engine manufacturers, who hold Type Certificates and/or Production

---

[1] House Report No. 85-2360 at pages 1 and 20, reprinted in 1958 U.S.C.C.A.N. §§ 3741 and 3761 (1958) describing the importance of making one federal agency responsible for issuance of all regulations relating to "safe flight of civil aircraft in commerce." See 49 U.S.C. § 44701(a) which directs the FAA Administrator to promulgate regulations concerning "other practices, methods, and procedure the Administrator finds necessary for safety in air commerce and national security."

Certificates, to provide Instructions for Continued Airworthiness (hereinafter called "ICAs") to aircraft owners and to persons responsible for performing maintenance/repairs to aircraft, aircraft engines, aircraft accessories and aircraft components.[2] (App. 21a)

14 C.F.R. § 33.4, Appendix A which establishes the requirement that cleaning methods, inspection methods and fits and clearances be provided as ICA. (App. 94a)

Indiana Uniform Trade Secret Act (hereinafter "U.T.S.A.")(IC 24-2-3, *et seq*.) which provides an Indiana state law remedy for misappropriation of trade secrets, identical in all respects to the Missouri Uniform Trade Secret Act (Mo. Rev. Stat. § 417.453, et seq.) concerning issues relevant to this Petition.[3] (App. 69a)

Pertinent sections of information in the F.A.R.s , required to be provided to maintenance providers; and the Indiana Uniform Trade Secret Act are reproduced in the Appendix.[4]

---

[2] F.A.R. § 21.50 was promulgated by the FAA in 1981. Also promulgated concerning the ICAs are 14 C.F.R. § 33.4 (App. 94a), FAA ORDER 8110.54 (App. 130a), FAA Advisory Circular 33.4-1 (App. 102a) and FAA Policy Statement, PS-AIR-21.50-01. (App. 124a)

[3] The New Hampshire Uniform Trade Secret Act (NHRSA 350-B:1(IV)(a)) also contains the identical definition for "trade secret" that is contained in Indiana's and Missouri's U.T.S.A.

[4] As of February, 2012, framework of the U.T.S.A. was enacted by 46 states, the District of Columbia and the U.S. Virgin Islands.

INTRODUCTION

This case impacts how maintenance/repairs are performed on hundreds of thousands of aircraft and/or engines registered in United States. All United States manufactured aircraft, aircraft parts and aircraft engines are required to be manufactured by the holder of a U.S. Type Certificate (14 C.F.R. § 21.6) pursuant to a U.S. issued Production Certificate (14 C.F.R. § 21.267)[5] Each Type Certificate Holder is required to provide and update ICAs, including overhaul, repair and maintenance manuals for the products they manufacture. (14 C.F.R. § 21.50) Information required by regulation to be provided and the FAA National Policy concerning information to be provided will be discussed in detail later in this petition. Aircraft maintenance/repairs and overhauls must be performed in accordance with F.A.R. Part 43 by persons authorized by the F.A.R. Part 65. Likewise, records of maintenance are required to be made pursuant to F.A.R. Part 43.

AvidAir is an FAA Certified Repair Station, authorized pursuant to 14 C.F.R. Part 145, to perform maintenance, repairs and overhauls on Allison (Rolls-Royce) Model 250 aircraft engines. Since its inception in 1994, AvidAir's business has primarily been the overhaul/repair of Model 250-C20 engine compressor case assembly. It is one of the few companies in the world that performs overhauls/repairs to compressor case assembly for Model 250-C20 engines. Rolls-Royce,

---

[5] The FAA also issues Parts Manufacturing Approval (14 C.F.R. § 21.303) (PMA) allowing for the manufacture of aviation parts but PMAs are not at issue in this litigation.

plc of the United Kingdom acquired the stock of the Allison Engine Company, holder of the Model 250 Type and Production Certificates in March 1995. Later the Allison corporate name was changed to Rolls-Royce Corporation.

This case involves two consolidated cases brought by AvidAir and by Rolls-Royce that involve Model 250 repair and overhaul information (ICAs) commonly identified as Distributor Overhaul Information Letters, (hereinafter "DOILs")[6] (42 in total) some of which were claimed by Rolls-Royce to be its trade secrets. In addition to a declaratory judgment seeking an order that DOILs at issue and replacement information identified as PRPLs[7] be declared public documents, AvidAir sought damages for anti-trust violations and tortious interference.[8] (JA-0035-0051)

This Petition focuses on four issues: (1) failure of the Magistrate, the District Court and the Eighth Circuit to consider and enforce the "standard of care" concerning the requirement that ICAs contained in the F.A.R.s be included in the trade secret analysis; (2) The dilemma AvidAir faced by Rolls-Royce's

---

[6] Subsequent to Rolls-Royce's acquisition of Allison Engine Company, DOILS were named AMC-OILs. For consistency they will all be referred to as "DOILS".

[7] On December 31, 2003, Rolls-Royce cancelled all DOILS and re-issued the information as Parts Repair Procedure Letters, "PRPLs", available only to Rolls-Royce Authorized Maintenance Centers and others approved by Rolls-Royce.

[8] References to "JA" reference the Joint Appendix pages filed in the Eighth Circuit Appeals Court.

withholding ICA repair/overhaul information from the engine overhaul manual; (3) the Eighth Circuit, in its *de novo* review erroneously determining that "value" under the Uniform Trade Secret Acts means value to AvidAir because it was required to use the information on DOIL 24, Revision 13 in order to return compressor case assembly to service; and (4) The Eighth Circuit, in its *de novo* review failed to consider the record evidence relating to disclosure by Rolls-Royce of alleged new information contained in DOIL 24, Rev. 13 to third parties who were under no obligation to maintain the information in confidence.

STATEMENT OF THE CASE

This Petition arises primarily from the partial summary judgment concerning DOIL 24, Revision 13, entered by the District Court, on the basis of the Magistrate's Report. (App. 170a) There was no evidentiary hearing or trial on the issue of the Federal Aviation Regulations' requirement that the information in DOIL 24, Revision 13 was required by law to be provided or whether the disclosure of the alleged new information in DOIL 24, Revision 13 in fact had any value to Rolls-Royce; or whether Rolls-Royce's disclosure of the information to the Japanese Defense Agency (hereinafter "JDA") (JA-0070-0724, 2835-2837) without restriction and distribution of the information to unknown recipients (JA-4339) destroyed any trade secret protection that might have existed.

A. Federal Aviation Administration/Federal Aviation Regulations

Overhauls, repairs and maintenance performed of aircraft, aircraft engine and related parts and modules overhauls are at the heart of aviation safety. It cannot be disputed that the FAA has completely preempted aviation manufacturing and maintenance. The F.A.R.s determine who can manufacture aircraft, engines and parts; and maintenance/overhaul/repair information that must be made available (14 C.F.R. Part 21); how aviation maintenance is performed and recorded (14 C.F.R. Part 43; and who is authorized to perform maintenance (14 C.F.R. Part 65 and 14 C.F.R. Part 145). (App. 72a)

The particular language from the F.A.R.s and FAA Order applicable to this case contains the requirement that the Model 250-C20 Overhaul Manual (10W3) include the following language:

> (b) Engine Overhaul Manual or Section.
>
> (1) Disassembly information including the order and method of disassembly for overhaul.
>
> (2) Cleaning and inspection instructions that cover the materials and apparatus to be used and methods and precautions to be taken during overhaul. Methods of overhual inspection must also be included.
>
> (3) Details of all fits and clearances relevant to overhaul. (App. 94a)

FAA Order 8110.54 required that information like DOIL 24, Revision 13 be made available to Aviation Maintenance Providers.

If the aircraft, engine or propeller maintenance information references the use of a component maintenance manual as the appropriate location for the ICA, those applicable instructions are incorporated by reference and become part of the complete set of ICA. As part of the ICA, they must be made available to the owner and any other person required to comply with those instructions per 14 C.F.R. § 21.50. (App.91a)

The three items of alleged new information claimed to be in DOIL 24, Revision 13, describe (1) a method of cleaning; (2) a method of inspection with magnification; and (3) a fit and clearance dimension concerning two components of the compressor case assembly. (App.78a-80a)

On March 23, 2012 the FAA issued National *Policy Statement PS-AIR-21.50-01: Type Design Approval Holder Inappropriate Restrictions on the Use and Availability of Instructions for Continued Airworthiness*. (App. 124a) The FAA Policy was issued to further clarify 14 C.F.R. § 21.50 and FAA Order 8110.54A and to address whether Type Certificate Holders can place inappropriate restrictions on use and availability of Instructions for Continued Airworthiness. (e.g., Rolls-Royce withholding the alleged cleaning, inspection and fits and clearance information from AvidAir).

An example of Rolls-Royce's violation of F.A.R. § 21.50 is its May 13, 2004 public announcement of the cancellation of all AMC-OILs (DOILs), including DOIL 24, Revision 13. The notice acknowledges that 14 C.F.R. §§ 145.109(d) and 145.211(c)(1)(v) require the use of current data for performing maintenance and

Rolls-Royce's obligations under 14 C.F.R. §§ 21.50 and 33.4. (JA-0845)

There is no effective or efficient administrative remedy that allows maintenance providers to compel a Type Design Approval holder to provide withheld Instructions for Continued Airworthiness or removal of Type Design Holder mandates that only its approved maintenance providers may overhaul, repair or maintain particular aircraft, engines, parts and/or components.[9]

An aggrieved person may bring a Part 13 complaint pursuant to 14 C.F.R. § 13.5. Part 13, however, is an ineffective procedure in that it contains no enforcement capability and its processing is discretionary with the Agency.[10]

---

[9] Rolls-Royce restricts information contained in the PRPLs which was formerly contained in DOILs to its Authorized Maintenance Centers and other persons with whom it has an agreement. Further, it requires that certain maintenance, repairs and/or overhauls be performed only by its designated maintenance providers.

[10] On November 23, 2005, the Aeronautical Repair Station Association, Inc. (ARSA) brought a Part 13 Complaint in the Department of Transportation (Enforcement Docket (AGC-10, docket No. 13-05-02) on behalf of HEROS, Inc., a party in *Rolls-Royce v. HEROS, Inc., et al.,* 3:07-cv-0079, (N.D. Tex.). The Part 13 Complaint involved may issues, including Rolls-Royce DOILs. Rolls-Royce answered the Part 13 Complaint on February 28, 2006. After more that 5 years without action by the FAA, it was dismissed by ARSA on April 5, 2011.

B. AvidAir Helicopter Supply, Inc.

It cannot be disputed that AvidAir is a "maintenance provider" within the meaning of 14 C.F.R. 21.50. As an FAA Certified Part 145 Repair Station, AvidAir is required by the FAA to have an approved repair station manual, and additionally to comply with all of the applicable F.A.R.s. The summary judgment record contains evidence that AvidAir's FAA Approved Repair Station Manual requires AvidAir to maintain the following:

> All equipment, materials, and technical data needed for the work this repair station performs will be available where the work is accomplished and under the repair stations's control when the work is being performed.....This repair station will maintain current and accessible at least the following materials and technical data pertaining to the performance of any work under the Repair Station Certificate:
>
> - Airworthiness Directives,
> - Instructions for Continued Airworthiness,
> - Maintenance manuals,
> - Overhaul Manuals,
> - Standard practice manuals and Service bulletins.
>
> Whenever a manufacturer updates its manual, the corresponding acknowledgment form will be placed in the manual to verify its currency. The technical data will be updated in accordance with the manufacturer's instructions. (JA-5886)

Among the documents maintained by AvidAir in its technical library concerning Model 250-C20 compressor case assembly repairs/overhauls were the 10W3 overhaul manual and revisions published by Rolls-Royce which AvidAir purchased from Rolls-Royce or its authorized supplier. Until Rolls-Royce in 2006 made demand that AvidAir cease using DOIL 24 in its overhaul/repair of Model 250- C20 compressor case assembly, the 10W3 overhaul manual directed overhaul/repair facilities to utilize DOIL 24 and DOIL 3. (JA-0666-06669) Subsequent to suit being filed, the 10W3 Overhaul Manual dropped the reference to DOIL 3 and DOIL 24 and inserted PRPL. Later reference to PRPL was deleted. (JA-0666-0669)

C. The Summary Judgment Record contains evidence that the three items of alleged new information were disclosed without restriction.

At the summary judgment stage, evidence was provided that information at issue was provided to the JDA without restriction. ((JA-0700-0724, 0780-0784, 2213-2216, 2835-2837, 2842-2843, 6574-6575)) Summary judgment evidence indicates that the details of dimensional change to the 5^{th} and 6^{th} stage vanes was distributed by Rolls-Royce to unknown recipients by means of a BookFax that bore no confidentiality legend. (JA-4339) It further includes evidence that overhaul procedure 72-30-21 for compressor case assembly overhauls/repairs was intended by Rolls-Royce's Chief Engineer to be included in Overhaul Manual 10W3. (JA-0712)

D. Material Proceedings in the Courts below relevant to this Petition.

1. United States District Court

The District Court assigned a United States Magistrate to consider the parties' cross-motions for summary judgment on the issue of whether or not the DOILs at issue were trade secrets. The Magistrate chose to consider DOIL 24 and requested that Rolls-Royce identify items of new information contained in the 13th revision of DOIL 24. The alleged new items were identified, the parties submitted briefs and a hearing was held by the Magistrate. On April 7, 2009, the Magistrate issued his Report (App. 170a) finding that DOIL 24, Revisions 1-10 were not trade secrets and DOIL 24, Revision 13 (issued October 31, 1997) was a trade secret because of three items of new information that were not in prior revisions. (App. 183a-185a) AvidAir filed exceptions to the Magistrate's Report concerning DOIL 24, Revision 13 and again raised the applicability of F.A.R.s §§ 21.50 and 33.4; and brought FAA ORDER 8110.54 to the Court's attention. (JA-2688-2700)

On June 23, 2009, the District Court adopted the Magistrate's Report and entered partial summary judgment in favor of AvidAir concerning DOIL 24, Revisions 1-10 and in favor of Rolls-Royce on DOIL 24, Revision 13, finding that AvidAir had misappropriated Revision 13, contrary to both the Indiana and Missouri Uniform Trade Secrets Acts. (Ind. Code §§ 24-2-3-2,

24-2-3-4 and Mo. Rev. Stat. §§ 417.453, 417.457)[11] The District Court, specifically denied AvidAir's contention that the F.A.R.s, including F.A.R. §§ 21.50 and 33.4; and FAA Order 8110.54 precluded DOIL 24, Revision 13 from being a trade secret (App. 50a-57a) and held that:

> any complaints about Rolls-Royce's compliance with the FAA regulations [*emphasis F.A.R.s*] must be made to the FAA. (App. 57a)

The District Court proceeded without a detailed analysis of the summary judgment record, to enter summary judgment against AvidAir on DOIL 3, Revision 16; DOIL 8, Revision 6; DOIL 24, Revision 12;BookFax 97-AMC-0059 and on its Anti-Trust and Tortious Interference claims. (App. 30a-43a).[12] A jury

---

[11] At trial AvidAir offered deposition testimony of Rolls-Royce engineers involved in the development of the alleged new information contained in DOIL 24, Revision 13. (JA-0700-0724, 0780-0784, 2213-2216, 2835-2837, 2842-2843, 6574-6575) The Court reviewed the testimony which it described as "the basic thrust would be to show that the revisions and Revision 13 were minor revisions, that they didn't take long to create, that the problem was open and obvious, that the solution was more form than substance", but continued to exclude the evidence. (W.D. MO., Trial Transcript, September 8, 2010; 325:22-325:6)

[12] It should be noted that a companion case was pending in the United States District Court for the Northern District of Texas in which the trade secret status of DOIL 3, Revision 16, DOIL 8, Revision 6 and other DOILs was also being considered. On July 29, 2010, the Texas Court granted summary judgment which included a determination that the DOILs were not Rolls-Royce trade secrets. See *Rolls-Royce v. Heros, Inc., et al.*, 2010 U.S. Dist. Lexis 119381 and reaffirmed on November 8, 2010, see *Rolls-Royce v. Heros, Inc., et al.*, 2010 U.S. Dist. Lexis 118790. While the

trial commenced on September 7, 2010 on the amount of damages for misappropriation of DOIL 24, Revision 13, whether AvidAir misappropriated information contained in DOIL 24, Revision 13 in its creation of a Designated Engineering Representative (hereinafter "DER") Repair for the overhaul/repair of compressor case assembly and whether AvidAir acted willfully or maliciously. The jury awarded damages for misappropriation of Revision 13, but found that AvidAir did not misappropriate information in Revision 13 in creation of its DER Repair and had not acted willfully or maliciously. Following trial, the District Court entered an injunction concerning DOIL 24, Revision 13, DOIL 3, Revision 16, DOIL 8, Revision 6 and BookFax 97-AMC-059. (App. 23a-29a)

2. Eighth Circuit

The Eighth Circuit determined that the principal issue before it was whether the District Court had erred in granting Summary Judgment on Rolls-Royce's trade secret claims, which it reviewed *de novo*. (App. 7a) Early in its Opinion, the Eighth Circuit determined that

> Federal regulations [FARs] require that an overhauled engine be certified for return to service.....an overhaul shop must follow a procedure that has been approved by the ...FAA...the approved overhaul procedure for the Model 250-C20 requires...details about

---

initial order was withdrawn when the case was dismissed with prejudice, the District Court's analysis is instructive.

> processes, procedures, techniques and material specifications contained in ....DOILs.(App. 3a) (*emphasis supplied*)
>
> In the present case we need not examine whether the documents introduce significant engineering differences so long as it is established that the documents have a value independent of older publicly available versions. (App.10a)
>
> existence of a trade secret is determined by the value of a secret, not the merit of its technical improvements. (App. 9a)
>
> AvidAir instead contends that changes were too trivial to create as value. We disagree. The value of Rolls-Royce's documents is apparent when a shop is required to certify the return to service of an overhauled engine. To certify to the FAA that the overhaul was completed in accordance with an FAA-approved procedure, the shop must have updated, [current] technical information for the engine.(App.11a) (emphasis supplied)

The Eighth Circuit effectively found that "value" means "value" to Avidair and determined that the District Court's summary Judgment concerning DOIL 24, Revision 13 should be affirmed. The Eighth Circuit then summarily affirmed the remaining findings of the District Court. (App. 15a-18a)

REASONS FOR GRANTING THE PETITION

A. Courts should be required to enforce federal aviation regulations that require manufacturers of aviation products to provide information to aviation maintenance providers required by the F.A.R.s to be provided as Instructions for Continued Airworthiness.

It cannot be disputed that Congress intended that the Federal Aviation Act of 1958, (49 U.S.C. § 44701) would result in one federal agency, the FAA, being responsible for regulating and monitoring aviation safety. While there is a disagreement among Federal District Courts and Circuit Courts of Appeal concerning the extent of preemption in the aviation field, it is generally agreed that the FAA, through F.A.R.s and FAA Orders, has preempted the field of matters related to in flight aviation safety. See *U.S. Airways, Inc. v. O'Donnell*, 627 F.3d 1318, 1327 (10th Cir. 2010) citing *Fidelity Federal Savings and Loan Assn. v. de la Cuesta*, 458 U.S. 141, 153-154, 102 S.Ct 3014, 73 L. Ed. 2d 664 (1982). Through the F.A.R.s, the FAA has established a minimum "standard of care" for state law tort actions with determination of state law remedies remaining with the states. See *Green v. Goodrich Avionics Systems, Inc.*, 409 F 3d 784, 795 (6th Cir. 2005) where the Sixth Circuit said "We agree...that federal law establishes the standards of care in the field of aviation safety and thus preempts the field from state regulations." In *Abdullah v. American Airlines, Inc.* 181 F.3d 363, 367 (3d Cir. 1999) the Third Circuit received the following certified question from a district court:

> Does federal law preempt the standards for air safety, but preserve State and Territorial damage remedies?

The Third Circuit responded "Yes" to both parts. It further responded:

> As to the first part of the question, contrary to courts that have found that federal law does not preempt state and territorial air safety standards, or that federal law only preempts discrete aspects thereof, we find implied federal preemption of the entire field of aviation safety. As to the second part, we conclude that, despite federal preemption of the standards of care, state and territorial damage remedies still exist for violation of those standards." *Id.* at 365.

The Act specifically provides that its remedies are in addition to other remedies, consequently while "standard of care is preempted", state law remedies remain unaffected. (49 U.S.C. § 40120(c) It should be noted that while some courts have narrowed the scope of the preemption,[13] no case has been found involving aircraft manufacturing, operation, overhaul, repairs or maintenance which would limit the scope of the federal preemption concerning tort actions. Finally, it has been uniformly held that the criteria for maintaining a private cause of action established in *Cort v. Ash* 422 U.S. 66, 95 S.Ct. 2080, 45 L. Ed. 2d 26, 1975 U.S. LEXIS 143 (1975) have not been established for the

---

[13] E.g., *Elassaad v. Independence Air, Inc.* 613 F.3d 119, 121 (3d Cir. 2010) which narrowed the preemption to matters affecting "in-flight" safety.

Federal Aviation Act and that there is no private cause of action under the Act. See *Rauch v. United Instruments, Inc.,* 548 F.2d. 452, 457 (3d Cir. 1976). No cases have been found to the contrary.

This case was brought by AvidAir seeking Missouri common law tort remedies, a declaratory judgment and remedies under the federal antitrust laws. Rolls-Royce brought its claims under the Indiana Uniform Trade Secrets Act (Ind. Code §§ 24-2-3-2, 24-2-3-4) and various Indiana common law claims. AvidAir contended that the Missouri Uniform Trade Secret Act applied. (Mo. Rev. Stat. §§ 417.453, 417.457**)** Ultimately, the parties agreed that Uniform Acts were identical except for the provisions in the Indiana Act that allowed for punitive damages and attorney fees in the event of a finding of willful or malicious misappropriation.[14] The District Court elected to try the case under Indiana Uniform Trade Secret Act which is considered to be an intentional tort. See *Infinity Products, Inc. v. Quandt*, 775 N.E.2d 1144, 1153 (Ind. Ct. App., Second District 2002) reversed on other grounds in *Infinity Products, Inc. v. Quandt, et al.*, 810 N.E.2d 1028 (Ind. 2004). The Seventh Circuit also agrees that claims under the Indiana Uniform Trade Secrets Act are intentional torts. See *Micro Data Base Systems, Inc. v. Dharma Systems, Inc.*, 148 F.3d 649, 654 (7th Cir. 1998) and the Fifth Circuit is in accordance with *Miller v. Abrams Incorporated*, 156 F.3d 598, 603 (5th Cir.1998).

---

[14] By not awarding punitive damages, the jury found that AvidAir did not willfully or maliciously misappropriate DOIL 24, Revision 13.

Generally where a federal statute does not create a private right of action for damages, a party may still make defensive use of the statute. See *Townsel v. Dish Network*, 668 F.3d 967, 969 (7th Cir. 2012). Under the above cases, Rolls-Royce's Unfair Trade Secret Act case is a tort case whose "standard of care" must be measured under the duties imposed on both the parties by the F.A.R.s, particularly, F.A.R. § 21.50, F.A.R. § 33.4 and FAA Order 8110.54; and damage remedies imposed by the Indiana Uniform Trade Secret Act Ind. Code § 24-2-3. Here the Eighth Circuit held that federal regulations (presumably F.A.R. § 43.13(a)) required AvidAir to have current maintenance information and that DOIL 24, Revision 13 constituted Instructions for Continued Airworthiness but refused to enforce 14 F.A.R. § 21.50 and FAA Order 8100.54 (App. 11a) which required Rolls-Royce to provide the information in DOIL 24, Revision 13 to AvidAir.

B. The panel's conclusion that DOIL 24, Revision 13 was a trade secret solely on the basis of value to AvidAir is contrary to precedent from the Seventh Circuit and the United States Supreme Court.

The Indiana Uniform Trade Secrets Act defines a "Trade Secret" as meaning

> information, including but not limited to a formula, pattern, compilation, program, device, method, technique, or process that:
>
> (a) Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper

> means by, other persons who can obtain economic value from its disclosure or use... (App. 69a)

This Court in *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1012, 104 S.Ct. 2862, 81 L.Ed.2d 815 (1984) defined value in the trade secret context as follows:

> The economic value of that property right lies in the competitive advantage over others that Monsanto enjoys by virtue of its exclusive access to the data, and disclosure or use by others of the data would destroy that competitive edge.
>
> We emphasize that the value of a trade secret lies in the competitive advantage it gives its owner over competitors. Thus, it is the fact that operation of the data-consideration or data-disclosure provisions will allow a competitor to register more easily its product or to use the disclosed data to improve its own technology that may constitute a taking. If, however, a public disclosure of data reveals, for example, the harmful side effects of the submitter's product and causes the submitter to suffer a decline in the potential profits from sales of the product, that decline in profits stems from a decrease in the value of the pesticide to consumers, rather than from the destruction of an edge the submitter had over its competitors, and cannot constitute the taking of a trade secret. [L.Ed. HR18B]

The Seventh Circuit in *Micro Data, supra* at page 657 citing language in the New Hampshire Uniform Trade Secret Act (NH RSA 350-B:1(VI)(a)) that is

identical to the Indiana Trade Secret definition quoted above and to the Missouri Uniform Trade Secret Act stated:

> A trade secret is simply a piece of information the value of which to the creator of the information depends on its not being generally known.

A reading of the language in the Act's definition of Trade Secret unambiguously reflects a meaning that two values are included: the first to the owner of the information (in this instance Rolls-Royce) and the second to the possessor of the information against whom damages are sought. In addition, the provision is conjunctive and the summary judgment record contains no evidence or argument that there is any actual "value" to Rolls-Royce from the three alleged items of new information. Since the jury found that AvidAir had not misappropriated two of the three items of alleged new information in DOIL 24, Revision 13 in creating its DER repair, Rolls-Royce should be foreclosed, as a matter of law, from claiming "value" in this information.

The finding by the Eighth Circuit that "value" needed to meet the definition of a trade secret under the Indiana Uniform Trade Secret Act is value to only AvidAir from using the information it was entitled to receive from Rolls-Royce as a matter of law pursuant to F.A.R. § 21.50, is contrary to precedent of the United States Supreme Court and in conflict with the interpretation of the Seventh Circuit and the clear and unambiguous meaning of the Indiana Uniform Trade Secret Act.

C. The summary judgment record contains evidence that the DOIL 24, Revision 13 and/or the three items of alleged new information were revealed by Rolls-Royce to third parties without restriction; and is contrary to holdings of the Supreme Court, Eighth Circuit precedent and precedent from other Circuits.

"If an individual discloses his trade secret to others who are under no obligation to protect the confidentiality of the information or otherwise publicly discloses the secret, his property right is extinguished." *Ruckelshaus v. Monsanto*, 467 U.S. 986, 1002 (1984) citing R. Milgram, Trade Secrets 1.01[2] (1983). Each of the three items of alleged new information (cleaning, inspection and fits and clearance method) contained in DOIL 24, Revision 13 were specifically disclosed to the JDA without restriction during the period of August 1997 through October 1997. (JA-0700-0724, 0780-0784, 2213-2216, 2835-2837, 2842-2843, 6574-6575, McKain, Randall, Griggs and Loney deposition excerpts) Additionally, the dimension change to the fifth and sixth stage vanes was disclosed without restriction by Rolls-Royce through BookFax 97AMC059, which contained no proprietary legend and was sent to unknown persons throughout the world. (JA-4339)

Under the law of the Eighth Circuit, citing *Ruckelshaus*, trade secret protection is extinguished by unrestricted disclosure. (See *In re Remington Arms Co., Inc.,* 952 F.2d 1029, 1032 (8th Cir. 1991) A Circuit Court of Appeals should be required to abide by law as determined by the U.S. Supreme Court and the law of its own Circuit, unless distinguished or reversed. Here

the Eighth Circuit simply ignored the clear evidence of the disclosures by Rolls-Royce without restriction of the items of information to the JDA.

IMPORTANCE OF THE ISSUES TO PUBLIC AVIATION SAFETY

Nothing can be more important to public safety in aviation contemplated by the Federal Aviation Act than assurance that aviation maintenance is performed in compliance with regulations promulgated by the FAA. The F.A.R.s encompass the entire field of aviation maintenance. (App 72a). Maintenance Providers authorized by the FAA to perform aviation maintenance include 339,204 FAA Authorized Mechanics, 21,964 Inspection Authorized Airframe and Powerplant Mechanics, and 4061 Domestic FAA Certified Repair Stations who must have access to all current ICAs needed to perform overhaul/maintenance and repairs on approximately 222,520 general aviation aircraft, their engines and component parts.[15] Additionally, aircraft owners and the U.S. Government should be provided all current ICAs and be free to select the FAA approved maintenance provider of choice without manufacturer interference or pressure.

There are approximately 14,000 aircraft, mostly civilian and military helicopters, that are powered by Allison Rolls-Royce Model 250 engines. The Model 250 engine is over 40 years old with thousands of separate parts in each engine. The engine is a modular engine with three modules: a compressor module, an

---

[15] The statistics can be found at www.FAA.gov for United States registered aircraft, their engines and associated component parts.

accessory gear box and a turbine section. While this case involves only overhaul, repair and/or maintenance of the compressor case assemblies in the compressor module, the principles established by the Courts in this case, will impact the safety of the entire aviation maintenance community and the safety of aviation in the United States. The FAA has determined that all aviation maintenance providers it has approved, not only those approved by the various aviation manufacturers, are competent to provide aviation maintenance.

In addition to safety, competition for the providing of aviation maintenance is beneficial to aviation product owners who are currently subject to restraints which are believed to be in violation of the anti-trust laws of the United States. (15 U.S.C. §§ 1 and 2). In addition, the U.S. Military regularly solicits contracts for the overhaul/ repair of Model 250 engines. The Government is harmed if maintenance providers are excluded because of a lack of ability to utilize and possess all ICAs needed to perform the work. The Competition in Contracting Act (CICA), 41 U.S.C. § 3301, requires free and open competition which is currently impaired by perceived and actual withholding of ICAs.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

EDWARD A. MCCONWELL
Counsel of Record
LAURA L. MCCONWELL
McConwell Law Offices
5925 Beverly Street
Mission, KS 66202
(913) 262-0605
ed@mcconwell.com

Counsel for Petitioners

April 17, 2012

APPENDIX

APPENDIX

TABLE OF CONTENTS

APPENDIX A

United States Court of Appeals
FOR THE EIGHTH CIRCUIT

No. 10-3444

[Filed December 13, 2011]

AvidAir Helicopter Supply, Inc.,	)
	)
Plaintiff - Appellant,	)
	)
v.	)
	)
Rolls-Royce Corporation,	)
	)
Defendant - Appellee.	)
	)

Appeal from the United States
District Court for the
Western District of Missouri.

Submitted: September 20, 2011
Filed: December 13, 2011

Before MELLOY, SMITH, and BENTON, Circuit Judges.

MELLOY, Circuit Judge.

This appeal comes to us from two consolidated suits brought under the Uniform Trade Secrets Acts of Indiana and Missouri. Both suits involve information about the repair and overhaul of helicopter engines published by Appellee Rolls-Royce Corp. Rolls-Royce sought damages and injunctive relief for alleged trade secret violations. Appellant AvidAir Helicopter Supply Inc. sought a declaration that the information in question was not protected by trade secret law. AvidAir also alleged that Rolls-Royce had violated antitrust laws and tortiously interfered with its business interest. In multiple summary judgment rulings below, the district court[1] held in favor of Rolls-Royce by finding that some, though not all, of the information in question was a protected trade secret. The court ruled against AvidAir on its antitrust and tortious interference claims. A jury later awarded Rolls-Royce $350,000 in actual damages, and the court issued a permanent injunction requiring AvidAir to return the protected documents to Rolls-Royce. AvidAir appeals the rulings. For the reasons stated below, we affirm.

I.

Rolls-Royce Corp. develops and produces the Model 250 engine used in civilian and military helicopters. Before 1994, Rolls-Royce's predecessor, Allison Engine Co., did not exert tight control over access to the technical information required in the repair and

[1] The Honorable Ortrie D. Smith, United States District Judge for the Western District of Missouri.

overhaul market for these engines. This led to the development of third-party overhaul shops. AvidAir is a Missouri company that entered the repair and overhaul market in 1994. AvidAir's business focuses on the overhaul of compressor cases, one of three modules in the Model 250 engine.

Federal regulations require that an overhauled engine be certified for return to service. In order to certify the return to service for a Model 250 engine, an overhaul shop must follow a procedure that has been approved by the Federal Aviation Administration (FAA). The approved overhaul procedure for the Model 250 requires, *inter alia*, details about processes, procedures, techniques and material specifications contained in Distributor Overhaul Information Letters (DOILs) issued first by Allison, and later by Rolls-Royce.[2] DOIL 24 related specifically to the compressor case, and like the other DOILs, it was periodically updated through numbered revisions. Because Allison had not restricted the redistribution of earlier revisions, AvidAir was able to acquire DOIL 24, Revisions 1 through 7 from various sources sometime in the 1990s.

In 1994, Allison began to restructure its approach to the overhaul of Model 250 engines. Allison appointed twenty-five Authorized Maintenance Centers (AMCs) to whom it would exclusively issue technical information (such as DOILs and other overhaul manuals). Allison executed agreements with

---

[2] The parties occasionally refer to the letters as OILs, or AMC-OILs. Following the district court, we will refer to the documents as DOILs for the sake of clarity.

each AMC that specified the proprietary nature of this technical information, prohibited the AMCs from disseminating this information, and required the AMCs to return all proprietary documents at the end of their relationship. Allison also began including a proprietary rights legend on the front page of its DOILs. All of the documents at issue on appeal contain this rights legend.

Rolls-Royce, plc. acquired Allison in 1995 and eventually changed its name in 2002 to Rolls-Royce Corp. Rolls-Royce issued a cease and desist letter to AvidAir in 2002, demanding it stop using DOIL 24 in its overhaul of Model 250 engines. In 2003, the FAA responded to a Rolls-Royce complaint by inspecting AvidAir's overhaul process. The FAA found that AvidAir was not following the latest approved overhaul instructions contained in DOIL 24, Revision 13. Because AvidAir was not an AMC, it had never been authorized to receive a copy of the latest DOIL. After the FAA inspection, AvidAir eventually obtained a copy of DOIL 24, Revision 13 without Rolls-Royce's permission. Though there is a dispute about the extent to which AvidAir changed its overhaul procedure after obtaining Revision 13, AvidAir admits that it made adjustments for new measurements contained within Revision 13, and it certified to the FAA that it was in compliance with the document. AvidAir also obtained copies of other DOILs, though not all are at issue in this appeal.[3]

---

[3] The district court's misappropriation orders involved DOIL 24, Revisions 12 and 13; DOIL 3, Revision 16, and DOIL 8; Revision 6. The court's injunction order applied to these four DOILs, as well as BookFax 97-AMC-059, which was a notice of a change to

On September 29, 2006, AvidAir filed suit in the Western District of Missouri seeking a declaration that Rolls-Royce's DOILs were not trade secrets and alleging that Rolls-Royce violated antitrust laws and tortiously interfered with its business. According to AvidAir, DOIL 24 Revision 13 was substantially the same as earlier, publicly available revisions. On October 2, 2006, Rolls-Royce filed its own suit against AvidAir in the Southern District of Indiana for trade-secret violations under the Lanham Act. In 2007, both cases were consolidated and eventually transferred to the Western District of Missouri. The issues were bifurcated, and both parties filed for partial summary judgment as to the trade-secret status of DOIL 24. This issue was submitted to a magistrate judge[4] for determination. On April 7, 2009, the magistrate judge issued a report and recommendation that the district court grant summary judgment in favor of Rolls-Royce as to DOIL 24, Revision 13 (finding it was a protected trade secret) but grant AvidAir summary judgment on Revisions 1–10 (finding they were not trade secrets). On June 23, 2009, the district court adopted the report in full.[5]

DOIL 24, Revision 12 that became part of DOIL 24, Revision 13. Rolls-Royce withdrew its claims on all other DOILs.

[4] The Honorable William A. Knox, United States Magistrate Judge for the Western District of Missouri.

[5] The district court also adopted the report's finding that it should deny AvidAir's motion for summary judgment with respect to Revisions 11 and 12. Though the record supported a finding that Revision 12 was a trade secret, Rolls-Royce had not yet asked for summary judgment on that issue. On September 28, 2009, the court granted summary judgment in favor of Rolls-Royce as to Revision 12.

On June 20, 2009, AvidAir acquired a full technical library from Precision Air Power, which was a branch of a Rolls-Royce AMC. Relying on this acquisition, AvidAir filed a motion to reconsider the district court's Order of June 23, 2009 and a motion for leave to amend the complaint. AvidAir argued that its purchase of Precision's library demonstrated AMCs were not restricted from distributing information pertaining to the Model 250 engine and that the information was therefore in the public domain. The court found that the proprietary-rights legends on the documents, as well as Rolls-Royce's AMC Agreement (under which Precision was prohibited from disclosing confidential materials) contradicted this argument. The district court concluded that the time for amending the pleadings was long passed, and on September 23, 2009, it denied AvidAir's motion in full.

Both parties again filed motions for summary judgment, and the district court granted motions in favor of Rolls-Royce on AvidAir's antitrust claim, AvidAir's tortious interference claim, and Rolls-Royce's trade secret claims involving DOIL 3 and DOIL 8. The issue of damages was submitted to a jury, which awarded Rolls-Royce $350,000 in actual damages. After the jury award, the district court granted in part Rolls-Royce's Motion for Permanent Injunction. Pursuant to the injunction, AvidAir is required to return all of Rolls-Royce's trade secrets, but AvidAir is not prevented from continuing to operate in the Model 250 overhaul market according to procedures developed from publicly available knowledge.

AvidAir appeals the court's rulings.

II.

AvidAir presents many issues on appeal, though the principal issue before us is whether the district court erred in granting Rolls-Royce summary judgment on its trade secret claims. We review grants of summary judgment de novo, applying the same standard as the district court. Strategic Directions Grp., Inc. v. Bristol-Myers Squibb Co., 293 F.3d 1062, 1064 (8th Cir. 2002). Summary judgment is appropriate when there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Id.

Though the existence of a trade secret is a fact-intensive inquiry, it is ultimately a question of law determined by the court. Steve Silveus Ins., Inc. v. Goshert, 873 N.E.2d 165, 179 (Ind. Ct. App. 2007); Lyn-Flex West, Inc. v. Dieckhaus, 24 S.W.3d 693, 698 (Mo. Ct. App. 1999). Under the Uniform Trade Secrets Act (UTSA), which has been adopted by both Indiana and Missouri,[6] a trade secret is:

> information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (1) derives independent economic value, actual or potential,

---

[6] The present appeal is a consolidation of two cases filed in Indiana and Missouri. The district court determined that because both states had adopted the UTSA, and because both states approved of reliance on decisions from other UTSA jurisdictions, it was unnecessary to determine which state's law governed the existence of a trade secret and looked to case law from both states. The parties do not contest this conclusion, and we will follow the same approach.

> from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Ind. Code § 24-2-3-2; see also Mo. Rev. Stat. § 417.453(4).

The district court found the DOILs[7] were compilations of publicly available information and new proprietary information. Compilations are specifically contemplated in the UTSA definition of a trade secret, and the fact that some or even most of the information was publicly available is not dispositive of the first factor in the UTSA definition. Compilations of non-secret and secret information can be valuable so long as the combination affords a competitive advantage and is not readily ascertainable. See Amoco Prod. Co. v. Laird, 622 N.E.2d 912, 919–20 (Ind. 1993). Compilations are valuable, not because of the quantum

---

[7] The Report and Recommendation of April 7, 2009 and the district court Order of June 23, 2009, both focus exclusively on DOIL 24. The district court later used the DOIL 24 analysis as a "framework" for resolving the trade secret status of DOIL 3, Revision 16; DOIL 8, Revision 6; and the BookFax. See Order of September 9, 2009 at *4. Though the record is more developed for DOIL 24 than the other documents, AvidAir did not challenge the district court's use of this framework for analysis. Instead, AvidAir maintains the same argument for all of the documents—that the changes were too small to be valuable, and that the documents were not protected by confidentiality agreements. We will therefore consider the analysis as it applies to all of the documents, even though much of the record specifically refers to DOIL 24.

of secret information, but because the expenditure of time, effort, and expense involved in its compilation gives a business a competitive advantage. Id.; N. Elec. Co. v. Torma, 819 N.E.2d 417, 426 (Ind. Ct. App. 2004); Lyn-Flex West, 24 S.W.3d at 699. This value is not dependent on how much of the information is otherwise unavailable because "the effort of compiling useful information is, of itself, entitled to protection even if the information is otherwise generally known." Torma, 819 N.E.2d at 426; see also Penalty Kick Mgmt. Ltd. v. Coca Cola Co., 318 F.3d 1284, 1291 (11th Cir. 2003) ("[E]ven if all of the information is publicly available, a unique combination of that information, which adds value to the information, also may qualify as a trade secret."). But see Nationwide Mut. Ins. Co. v. Mortensen, 606 F.3d 22, 29 (2d Cir. 2010) (denying trade secret protection for information that had merely changed in form but not substance).

AvidAir argues that the DOILs cannot provide independent economic value because there is only a trivial amount of information that was not readily ascertainable from prior revisions. Such a trivial amount of information, AvidAir contends, offers no engineering advances from previous revisions. As the above-cited cases demonstrate, though, existence of a trade secret is determined by the value of a secret, not the merit of its technical improvements. Unlike patent law, which predicates protection on novelty and nonobviousness, trade secret laws are meant to govern commercial ethics. See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 489–90 (1974) (noting this as the reason why trade secret protection is weaker than patent protection); Water Servs., Inc. v. Tesco Chems., Inc., 410 F.2d 163, 172 (5th Cir. 1969) ("'[Trade Secret] protection is not based on a policy of rewarding or

otherwise encouraging the development of secret processes or devices. The protection is merely against breach of faith and reprehensible means of learning another's secret. For this limited protection it is not appropriate to require also the kind of novelty and invention which is a requisite of patentability.'" (quoting Restatement of Torts § 757 cmt. b (1939))); 1-1 Roger M. Milgrim & Eric E. Bensen, Milgrim on Trade Secrets § 1.08 (2011). But see Kewanee Oil, 416 U.S. at 481–82 (acknowledging that maintaining standards of commercial ethics and encouraging invention "are the broadly stated policies behind trade secret law"). Trade secret protection does not shield an idea from "infringing" other uses of the idea; instead it protects valuable information from being misappropriated despite reasonable efforts to keep it secret. In the present case, we need not examine whether the documents introduce significant engineering differences so long as it is established that the documents have a value independent of older publicly available versions.

The UTSA states that a trade secret derives its value from not being readily ascertainable. Ind. Code § 24-2-3-2; Mo. Rev. Stat. § 417.453(4). The fact that information can be ultimately discerned by others—whether through independent investigation, accidental discovery, or reverse engineering—does not make it unprotectable. See Laird, 622 N.E.2d at 918 ("Even if information potentially could have been duplicated by other proper means, it is no defense to claim that one's product could have been developed independently of plaintiff's, if in fact it was developed by using plaintiff's proprietary designs.") (internal quotation marks omitted). Instead, the court must look at whether the duplication of the information would

require a substantial investment of time, effort, and energy. Id. at 919–20. AvidAir does not dispute that the revised DOILs were updated as a result of Rolls-Royce's own research and testing, or that AvidAir avoided the burdensome expense of reverse engineering the updated specifications contained in the DOILs by simply acquiring the documents that Rolls-Royce claimed were protected. AvidAir instead contends that the changes were too trivial to create any value.

We disagree. The value of Rolls-Royce's documents is apparent when a shop is required to certify the return to service for an overhauled engine. To certify to the FAA that the overhaul was completed in accordance with an FAA-approved procedure, that shop must have updated technical information for the engine. AvidAir claims that it can obtain FAA approval for a procedure that is based on only publicly available information, and if this is true, AvidAir may be free to do so. This is, however, not what AvidAir did. Instead of obtaining FAA approval based on an independent investigation of changes to the approved procedure, AvidAir simply appropriated the documents it knew were claimed to be trade secrets and then certified that its procedure was in compliance with the updated documents. Indeed, even after the district court adjudicated the trade secret status of DOIL 24, Revision 13, AvidAir again misappropriated it and other documents from Precision, claiming it did so lawfully in order to benefit from Rolls-Royce's efforts to update proprietary information. AvidAir's repeated attempts to secure the revised DOILs without Rolls-Royce's approval belies its claim that the information in the documents was readily ascertainable or not independently valuable.

The second factor we must consider is whether Rolls-Royce established reasonable efforts to maintain the secrecy of its DOILs. Reasonable efforts to maintain secrecy need not be overly extravagant, and absolute secrecy is not required. Torma, 819 N.E.2d at 428; Zemco Mfg., Inc. v. Navistar Int'l Transp. Corp., 759 N.E.2d 239, 246 (Ind. Ct. App. 2001). The use of proprietary legends on documents or the existence of confidentiality agreements are frequently-considered factors in establishing or denying a trade secret claim. See, e.g., Wyeth v. Natural Biologics, Inc., 395 F.3d 897, 899–900 & n.4 (8th Cir. 2005) (applying Minnesota UTSA); Diamond Power Int'l, Inc. v. Davidson, 540 F. Supp. 2d 1322, 1334–35 (N.D. Ga. 2007) (applying Georgia UTSA); Nilssen v. Motorola, Inc., 963 F. Supp. 664, 679–80 (N.D. Ill. 1997) (applying Illinois UTSA). Misplaced trust in a third party who breaches a duty of confidentiality does not necessarily negate efforts to maintain secrecy. Torma, 819 N.E.2d at 428; see also Kewanee Oil, 416 U.S. at 475 ("This necessary element of secrecy is not lost, however, if the holder of the trade secret reveals the trade secret to another in confidence, and under an implied obligation not to use or disclose it." (internal quotation marks omitted)).

It is undisputed that all of the documents in question were labeled with proprietary-rights legends. Though AvidAir claims the documents were "freely available" in the industry, it failed to present any evidence that Rolls-Royce actually distributed them to a party not bound by confidentiality agreements. We agree with the district court that these were reasonable efforts to maintain secrecy. AvidAir maintains that the DOILs were possessed "without restriction" by others, but this argument is

unsupported by the record. All the record reflects is that AvidAir either acquired the documents from others who were not authorized to provide AvidAir with the documents, or acquired the documents from others who had themselves misappropriated the documents. The fact that a trade secret was successfully misappropriated does not defeat the fact that there were reasonable efforts to maintain its secrecy. See Wyeth, 395 F.3d at 900 ("'The existence of a trade secret is not negated merely because an employee or other person has acquired the trade secret without express or specific notice that it is a trade secret if, under all the circumstances, the employee or other person knows or has reason to know that the owner intends or expects the secrecy of the type of information comprising the trade secret to be maintained.'" (quoting Minn. Stat. § 325C.01, subd. 5)).

AvidAir devotes a great deal of attention to its acquisition of Precision's technical library, and it argues that Precision was not bound by the AMC Agreement originally entered into by Allison. The AMC Agreement noted in ¶ 6.2 that Allison would provide "general technical data and other Manuals (as referenced in the Manual List)," and that "[s]uch material may be Allison proprietary and may bear appropriate copyright and Marks restrictions. No distribution of this material is to be made outside Authorized Maintenance Center Business Operation(s) except as provided in each document, the Policy Manual or as specifically Authorized by Allison." AvidAir contends that, because the "Manual List" appended to the agreement does not list the DOILs, this restriction does not apply to them. Rolls-Royce argues that the "Manual List" is exemplary and not exhaustive. Viewing the Agreement in the light most

favorable to AvidAir, we conclude that the absence of DOILs on the "Manual List" does not support AvidAir's contention. The Agreement unambiguously applies to "general technical data," which covers the DOILs regardless of whether they were or were not defined as "Manuals." The AMC Agreement does not excuse AvidAir from misappropriating trade secrets.[8]

AvidAir argues that Rolls-Royce is attempting to reclaim and remove information that was previously available in public. All of the information in earlier revisions that was already available to the public, however, is still available to the public. The district court ruled that DOIL 24, Revisions 1 through 10 were not trade secrets. Giving protection for Revision 13 does not make it a misappropriation to acquire Revision 1, which contains some of the same information. But the fact that some of the information is available in Revision 1 does not give AvidAir the right to misappropriate the entirety of Revision 13, which has a separate value to competitors because of

---

[8] AvidAir's Motion for Leave to Amend was part and parcel of its argument that Rolls-Royce did not exert reasonable efforts to maintain the secrecy of its proprietary information. AvidAir attempted to demonstrate that it lawfully obtained the documents in question from Precision's technical library after proceedings had already been underway, and it sought to expand its claims under this argument. The court reviews a denial of a motion for leave to amend under an abuse of discretion standard. Marmo v. Tyson Fresh Meats, Inc., 457 F.3d 748, 755 (8th Cir. 2006). The district court concluded that "there is no just reason to continuously amend the pleadings to encompass events and transactions that occurred after the case was filed." Order of September 23, 2009. Because AvidAir was merely trying to reassert arguments that had already been considered and dismissed by the court, this was not an abuse of discretion.

FAA regulations. AvidAir is not entitled to the value of the proprietary revised documents, even if the new technical specifications are relatively minor in the context of the overhaul process as a whole.

III.

Having concluded that the documents in question were protected trade secrets, the district court did not err in granting an injunction in favor of Rolls-Royce. We review a grant of permanent injunction for abuse of discretion. Kennedy Bldg. Assocs. v. CBS Corp., 476 F.3d 530, 533 (8th Cir. 2007). We will affirm a grant of injunctive relief unless the district court "'clearly erred in its characterization of the facts, made a mistake of law, or abused its discretion in considering the equities.'" South Dakota v. Ubbelohde, 330 F.3d 1014, 1026 (8th Cir. 2003) (quoting Bhd. of Maint. of Way Emp., Lodge 16 v. Burlington N. R.R. Co., 802 F.2d 1016, 1020 (8th Cir. 1986)). Under the UTSA, "[a]ctual or threatened misappropriation may be enjoined." Ind. Code § 24-2-3-3(a); Mo. Rev. Stat. § 417.455.1.

AvidAir offers no argument as to how the district court abused its discretion, other than reiterating that the trade secrets were obtained lawfully, and thus not misappropriated. The district court found, and we agree, this argument was not supported by the record. Furthermore, the injunction granted by the court was narrow and minimized the hardship imposed on AvidAir. The injunction requires AvidAir to return all proprietary information, but did not enjoin AvidAir from using a separate overhaul process developed from publicly available information. If, as AvidAir argues, it can obtain FAA approval for a process that uses only publicly available information, it may be free to do so.

This injunction merely prevents AvidAir from enjoying the unfettered benefits of Rolls-Royce's efforts to update the process.

IV.

AvidAir also challenges the district court's grant of summary judgment for Rolls-Royce on AvidAir's antitrust and tortious interference claims. The standard of review for summary judgment determinations is de novo. Strategic Directions Grp., Inc., 293 F.3d at 1064. We conclude that AvidAir's claims were both resolved by the district court's determination that the documents were trade secrets.

AvidAir's antitrust claim was based on its theory that Rolls-Royce's trade secret suit was a sham litigation in violation of Sherman Act §§ 1 and 2. The Supreme Court has held that those who petition the courts for redress are generally immune from antitrust liability, unless the lawsuit "is a mere sham to cover . . . an attempt to interfere directly with the business relationships of a competitor." E. R.R. Presidents Conference v. Noerr Motor Freight, Inc., 365 U.S. 127, 144 (1961). In order to determine whether a lawsuit is a sham, the Court established a two-part test. "First, the lawsuit must be objectively baseless in the sense that no reasonable litigant could realistically expect success on the merits." Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49, 60 (1993). Only if the lawsuit is baseless does the court look to the second, subjective factor of whether the baseless lawsuit was "'an attempt to interfere *directly* with the business relationships of a competitor.'" Id. at 60–61 (quoting Noerr, 365 U.S. at 144).

AvidAir's argument that Rolls-Royce attempted to interfere with its business by improperly seeking trade secret protection does not pass the first prong of the sham litigation test. A lawsuit that leads to a jury award of $350,000 is not objectively baseless, even if it did not succeed on each claim of the complaint. See id. at 60 n.5 ("A winning lawsuit is by definition a reasonable effort at petitioning for redress and therefore not a sham."). Indeed, AvidAir essentially concedes that this argument must fail if we do not reverse the district court's trade secret ruling. Because we affirm the district court's rulings on Rolls-Royce's trade secrets, we also affirm the dismissal of AvidAir's antitrust claim.

Rolls-Royce's success in establishing its trade secrets likewise defeats AvidAir's tortious interference claim. For AvidAir to succeed under a theory of tortious interference, it must prove, "(1) a contract or valid business expectancy; (2) defendant's knowledge of the contract or relationship; (3) a breach induced or caused by defendant's intentional interference; (4) absence of justification; and (5) damages." Rice v. Hodapp, 919 S.W.2d 240, 245 (Mo. 1996) (en banc). To satisfy the justification element of an interference claim, AvidAir must demonstrate that Rolls-Royce "lacked a legal right to justify [its] actions." Horizon Mem'l Grp., L.L.C. v. Bailey, 280 S.W.3d 657, 662 (Mo. Ct. App. 2009). However, not only does ownership of a valid trade secret justify an attempt to protect a trade secret, good faith efforts to enforce legal rights are even justified when a court later decides the claimed rights don't actually exist. See, e.g., Healthcare Servs. of the Ozarks, Inc. v. Copeland, 198 S.W.3d 604, 614 (Mo. 2006) (en banc). Rolls-Royce had a legal right to protect its trade secrets and did not lack justification

for its actions. Even though Rolls-Royce abandoned its claims about other DOILs, its success on the claims now on appeal is enough to establish its good faith in bringing suit. The district court did not err in concluding that AvidAir had failed to establish tortious interference.

V.

For the foregoing reasons, we affirm the judgment of the district court.

UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

No: 10-3444

[Filed December 13, 2011]

AvidAir Helicopter Supply, Inc.	)
	)
Plaintiff - Appellant	)
	)
v.	)
	)
Rolls-Royce Corporation	)
	)
Defendant - Appellee	)
	)

Appeal from U.S. District Court for the Western District of Missouri - Kansas City
(4:06-cv-00816-ODS)

JUDGMENT

This appeal from the United States District Court was submitted on the record of the district court, briefs of the parties and was argued by counsel.

After consideration, it is hereby ordered and adjudged that the judgment of the district court in this cause is affirmed in accordance with the opinion of this Court.

December 13, 2011

Order Entered in Accordance with Opinion:
Clerk, U.S. Court of Appeals, Eighth Circuit.

/s/ Michael E. Gans

APPENDIX B

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

Case No. 06-0816-CV-W-ODS

[Filed September 30, 2010]

AVIDAIR HELICOPTER SUPPLY, INC., Plaintiff,	)
vs.	)
ROLLS-ROYCE CORPORATION,	)
Defendant.	)

JUDGMENT IN A CIVIL CASE

_____ **Jury Verdict.** This action came before the Court for a trial by jury. The issues have been tried and the jury has rendered its verdict.

__X___ **Decision by Court.** The issues have been considered and a decision has been rendered by the Court.

IT IS ORDERED AND ADJUDGED 1) Overruling the Parties' Objections, Adopting the Magistrate Judge's Report and Recommen-

dation, granting Roll-Royce Corporation's Motion for Partial Summary Judgment, and granting in part and denying in part AvidAir Helicopter Supply, Inc.'s Motion for Summary Judgment pursuant to Order issued on June 23, 2009; 2) granting Rolls-Royce's Motion for Summary Judgment with Respect to Count II of AvidAir's Complaint pursuant to Order issued on September 22, 2009; 3) granting in part and denying in part the Parties' Cross-Motions for Summary Judgment issued on September 28, 2009; 4) granting judgment on Jury Verdict Form A in favor of Rolls-Royce on its claim for misappropriation of trade secrets and awarding Rolls-Royce $350,000.00; and 5) granting in part and denying in part Rolls-Royce's Motion for Injunctive Relief pursuant to Order issued on 09/30/2010.

DATE: 09/30/2010

ANN THOMPSON,
Clerk of Court

/s/ Eva Will-Fees
Eva Will-Fees, Courtroom Deputy

APPENDIX C

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

Case No. 06-0816-CV-W-ODS

[Filed September 30, 2010]

AVIDAIR HELICOPTER SUPPLY, INC.,)
)
Plaintiff,)
)
vs.)
)
ROLLS-ROYCE CORPORATION,)
)
Defendant.)

ORDER AND OPINION GRANTING IN PART AND DENYING IN PART ROLLS-ROYCE CORPORATION'S REQUEST FOR INJUNCTIVE RELIEF

In orders leading to the trial, the Court held:

1. AvidAir misappropriated DOIL 3, revision 16, DOIL 8, revision 6, and DOIL 24, revisions 12 and 13.

2. BookFax 97-AMC-059 is a trade secret, but there are material factual disputes as to whether AvidAir misappropriated the document.

3. DOIL 6, revision 2, DOIL 7, revision 5, and DOIL 24, revisions 1-10 are not trade secrets.

4. There are disputed issues of material fact as to whether DOIL 4, revision 6, and DOIL 24, revision 11, are trade secrets and, if they were, whether they were misappropriated.

5. Rolls-Royce is entitled to summary judgment on Counts I and II of AvidAir's Complaint.

Sometime thereafter, Rolls-Royce abandoned its claims regarding the documents in number 4, above, leaving for trial the issue of damages for the misappropriations identified in number 1 and liability and damages with respect to the document described in number 2. Rolls-Royce abandoned its claim with respect to number 2 during the trial.

Rolls-Royce claimed damages only for the misappropriation of DOIL 24, Revision 13. The jury awarded $350,000 in actual damages and did not award punitive damages. In response to a special interrogatory designed to advise the Court, the jury found AvidAir did not use DOIL 24, Revision 13, in formulating its own repair process. The only remaining issue to be decided before entering judgment is the issue of equitable relief.

Under the Uniform Trade Secret Act (as adopted in both Missouri and Indiana), "[a]ctual or threatened

misappropriation may be enjoined." Ind. Code § 24-2-3-3(a); Mo. Rev. Stat. § 417.455.1. Rolls-Royce has also asserted a claim for replevin, which seeks the return of property wrongfully withheld. E.g., Coleman v. Vukovich, 825 N.E.2d 397, 407 (Ind. Ct. App. 2005). Four factors must be considered to determine if equitable relief should be issued: (1) the adequacy of legal remedies, (2) the claims upon which the plaintiff prevailed, (3) whether the threatened injury outweighs the harm equitable relief would visit upon the defendant, and (4) the public interest.
Ferrell v. Dunescape Beach Club Condomiiums Phase I, Inc., 751 N.E.2d 702, 712-13 (Ind. Ct. App. 2001).

I.

The Court's prior determination that certain documents are Rolls-Royce's trade secrets establishes that those documents are Rolls-Royce's property, that AvidAir had no right to possess them, and that AvidAir obtained them from third-parties that had no right to transfer them to AvidAir. Equity dictates that AvidAir be ordered to return all such documents to Rolls-Royce because they belong to Rolls-Royce and not AvidAir.

AvidAir invites the Court to revisit its prior rulings, contending (1) evidence introduced at trial and (2) the jury's findings demonstrate these documents were not trade secrets. The Court disagrees. While AvidAir repeatedly claims certain entities (such as Precision Air Power) possessed documents "without restriction,"

the Record belies this claim.[1] No amount of repetition will alter this fact, and there has been no evidence presented – either before or during the trial – substantiating AvidAir's characterization. Similarly, there has been no evidence contradicting the Court's conclusion that the undisputed facts demonstrate the documents are trade secrets. The jury's verdict does not bear on the issue because the jury was not asked to decide whether the documents were trade secrets – in fact, it was precluded from deciding that issue and instead was told that the Court had already decided it. Nothing relevant to this issue can be gleaned from the jury's verdict.

II.

Rolls-Royce also asks for an injunction prohibiting AvidAir from using its DER Repair process. Rolls-Royce would be entitled to such relief if AvidAir used Rolls-Royce's trade secrets to develop and obtain approval for its repair process. This is a determination for the Court to make: while the jury rendered its opinion, that opinion was advisory and is not binding. Tamko Roofing Products, Inc. v. Smith Eng'g Co., 450

[1] For instance, section 6.2 of the Additional Provisions to Allison's agreements with Authorized Maintenance Centers declares that "Manuals . . . may be Allison proprietary and may bear appropriate copyright and Marks restrictions. No distribution of this material is to be made . . . ." Section 13.8 requires the Authorized Maintenance Center to return Manuals to Allison. AvidAir insists the term "Manuals" is vague and does not identify what is included, but AvidAir ignores section 1.49 which defines the term broadly to inlcude "[t]echnical documents prepared and distributed by Allison."

F.3d 822, 828 (8th Cir. 2006).[2] Nonetheless, the jury's verdict confirms the Court's view of the facts. The universe of publicly available information is quite vast, and a compilation of those materials, coupled with Craig Rookstool's experience, suggests Rookstool was fully capable of developing an acceptable process for overhauling compressors. Rookstool testified that it was frequently necessary to deviate from the written procedure in order to achieve the result that was necessary; for instance, while a procedure might call for blasting with grit to clean a part once, it might be necessary to repeat the blasting at another step of the process. The Court thus finds it logical to believe that AvidAir developed its own procedures (or variations from others' procedures) for overhauling compressors that were formalized in its DER Repair Process. Rolls-Royce compares portions of AvidAir's process that appear in its trade secrets to corresponding provisions of AvidAir's process, and they certainly suggest a reason to believe that Rolls-Royce's documents were the origin for those provisions – but the undersigned is not convinced that it is more likely true than not true.

The Court is not finding that AvidAir did not rely on Rolls-Royce's trade secrets. Rolls-Royce bears the burden of proof on this issue, and – like the jury – the Court simply is not convinced. Because the Court cannot find AvidAir used DOIL 24, Revision 13, to develop its DER Repair Process, it cannot enjoin AvidAir from using its DER Repair Process.

---

[2] Rolls-Royce intimates the advisory verdict is contrary to the Court's prior orders. The Court disagrees. While the Court previously determined Revision 13 had been misappropriated, it never found that AvidAir misappropriated it by using it to develop its own DER Repair Process.

III.

In a related request, Rolls-Royce seeks an order preventing AvidAir from overhauling compressor cases for five years. Rolls-Royce contends AvidAir will inevitably rely on its knowledge of the trade secrets, and a five year moratorium is necessary to deprive AvidAir of its wrongfully-gained advantage. The Court disagrees.

First, such an Order contradicts the Court's conclusion that AvidAir should not be barred from using its DER Repair Process. Second, the need for such an injunction has not been established. The so-called "'head start' rule . . . provides that by misappropriating the trade secrets, a defendant is able to 'cut short' the time it would normally take to produce and market a competitive product. A defendant should be enjoined only for the time it would take to produce and market the competitive product, absent the misappropriation." Synergetics, Inc. v. Hurst, 477 F.3d 949, 961 (8th Cir. 2007). Here, the Court has effectively held that the time it would take for AvidAir to independently develop a process acceptable to the FAA has already passed. Ultimately, not only is there no evidence supporting a five-year ban, there is no evidence supporting any ban on AvidAir's ability to overhaul compressors.

IV.

In light of the foregoing discussion, AvidAir is ordered to deliver all copies of DOIL 3, revision 16, DOIL 8, revision 6, and DOIL 24, revisions 12 and 13 that are in its possession or control to Roll-Royce. This applies to all such copies, regardless of their source or

how they were acquired or created. In addition, AvidAir shall provide Rolls-Royce with a statement identifying any such copies that were at one time but are no longer in AvidAir's possession or control. This identification will include an explanation as to the fate or location of any such copies. AvidAir shall comply with this paragraph within thirty days.

IT IS SO ORDERED.

DATE: September 30, 2010

/s/ Ortrie D. Smith
ORTRIE D. SMITH, JUDGE
UNITED STATES DISTRICT COURT

APPENDIX D

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

Case No. 06-0816-CV-W-ODS

[Filed September 28, 2009]

AVIDAIR HELICOPTER SUPPLY, INC.,)
)
Plaintiff,)
)
vs.)
)
ROLLS-ROYCE CORPORATION,)
)
Defendant.)

ORDER AND OPINION GRANTING IN PART AND DENYING PART THE PARTIES' CROSS-MOTIONS FOR SUMMARY JUDGMENT AND SETTING DATES FOR TRIAL

Pending are cross motions for summary judgment that address the remaining claims in the case. For the following reasons, both motions are granted in part and denied in part.

I. BACKGROUND

A. Procedural History

The heart of this case involves determining whether certain documents are trade secrets. Until now, the case has focused on DOIL[1] 24. With respect to DOIL 24, the Court has ruled

- Revisions 1-10 were not trade secrets,
- Revision 13 was a trade secret,
- The Record demonstrated Revision 12 was a trade secret, but Rolls-Royce had not requested summary judgment, and
- Disputed issues of material fact precluded a determination as to whether Revision 11 was a trade secret.

The Court's focus on DOIL 24 was understandable: it was identified by the parties as the most important aspect of the case and has consistently received the majority of the parties' attention. The parties have mentioned other documents, but they devoted little attention to them. Nonetheless, the parties have believed and understood that additional documents are it issue. These documents are addressed in several filings, including Count III of Rolls-Royce's Amended Complaint, AvidAir's October 29, 2008, Motion for Partial Summary Judgment, and the cross-motions the parties filed on July 24, 2009.

---

[1] The Court understands the documents at issue may be referenced with different designations. For the sake of consistency and clarity, the Court will (as it has in its other orders) use the DOIL designation.

In addition to addressing these documents' status as trade secrets, there are several claims that remain at issue. AvidAir asserted the following claims:

Count I	Tortious Interference with Business Relations, Contracts, and Prospective Economic Advantage
Count II	Violation of the Sherman Antitrust Act (or the Clayton Act) through the abuse of monopoly power
Count III	A claim seeking a judicial declaration that DOIL 24 (and other unspecified documents) is not a protectable trade secret

Rolls-Royce's claims are:

Count I	Violations of the Lanham Act
Count II	Replevin
Count III	Misappropriation of Trade Secrets
Count IV	Conversion/Theft
Count V	Quantum Meruit/Unjust Enrichment

The Court has previously granted Rolls-Royce Summary Judgment on AvidAir's Count II, and has partially ruled on each parties' Count III (at least insofar as DOIL 24 is concerned).

B. The Record

The efforts of Rolls-Royce (and its predecessors) to maintain the secrecy of documents has been discussed in prior Orders. In summary, the Record reveals that versions or revisions of DOILs distributed prior to late 1994 or early 1995 were not the subject of reasonable measures to preserve their secrecy and thus do not constitute trade secrets. In 1994 or 1995, Rolls-Royce began entering agreements with Authorized Maintenance Centers ("AMCs") that (1) required the return of any proprietary documents at the end of the parties' relationship, (2) acknowledged that technical data and other materials (including DOILs) where proprietary property, and (3) prohibited the AMC from disseminating such information to other parties. Rolls-Royce also began placing a proprietary rights legend on its documents.

The parties do not seem to agree as to which documents are at issue, but the matter is readily resolved. The Court agrees with Rolls-Royce that the only documents at issue are those that AvidAir possessed at the time of this lawsuit.[2] While AvidAir's Complaint could be read more broadly, there can be no case or controversy between the parties about documents AvidAir did not possess when the case was filed. Thus, at most the documents at issue (other than DOIL 24, which has already been addressed) are:

---

[2] The Court recently rejected AvidAir's to inject claims and arguments about documents it acquired after the lawsuit was commenced.

- DOIL 3 Revision 16 promulgated October 15, 1997
- DOIL 4 Revision 6 promulgated August 31, 1995
- DOIL 6 Revision 2 promulgated March 10, 1985
- DOIL 7 Revision 5 promulgated October 10, 1985
- DOIL 8 Revision 6 promulgated October 31, 1997
- BookFax 97-AMC-059 promulgated October 6, 1997

AvidAir's motion seeks a ruling with respect to DOILs 3, 4, and 8 and BookFax 97 AMC 059. It does not specify any particular versions or revisions of those documents, but as noted the Court lacks jurisdiction over documents that are not in controversy. AvidAir has also failed to discuss the particular revisions in any detail, preferring instead to describe each DOIL collectively without regard to when a particular revision was issued. Rolls-Royce has narrowed its request and seeks a favorable ruling with respect to DOIL 3, revision 16, DOIL 8, revision 6, DOIL 24, revision 12, and BookFax 97-AMC-059.[3] Rolls-Royce contends the Court's prior decisions present a "framework" for resolving the trade secret issues, and the Court presumes Rolls-Royce no longer pursues a

[3] Compare Doc. # 170, p. 7, with Doc. # 229, p. 3.

favorable ruling for the other documents because it recognizes that under the Court's framework DOIL 4, revision 6, DOIL 6, revision 2, and DOIL 7, revision 5, would not clearly qualify as trade secrets.

II. DISCUSSION

A moving party is entitled to summary judgment on a claim only if there is a showing that "there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." See generally Williams v. City of St. Louis, 783 F.2d 114, 115 (8th Cir. 1986). "[W]hile the materiality determination rests on the substantive law, it is the substantive law's identification of which facts are critical and which facts are irrelevant that governs." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986); see also Get Away Club, Inc. v. Coleman, 969 F.2d 664 (8th Cir. 1992). In applying this standard, the Court must view the evidence in the light most favorable to the non-moving party, giving that party the benefit of all inferences that may be reasonably drawn from the evidence. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 588-89 (1986); Tyler v. Harper, 744 F.2d 653, 655 (8th Cir. 1984), cert. denied, 470 U.S. 1057 (1985). However, a party opposing a motion for summary judgment "may not rest upon the mere allegations or denials of the . . . pleadings, but . . . by affidavits or as otherwise provided in [Rule 56], must set forth specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e).

A. Trade Secrets

The first issue to be decided is whether the Record permits a ruling with respect to the documents at issue. As noted earlier, the Court has determined the Record conclusively establishes Rolls-Royce took appropriate steps to protect DOILs before some of the DOILs at issue were promulgated. The Court has also confirmed that the DOILs at issue contained the proprietary rights legend identifying them as Rolls-Royce's property.

The Record also establishes the BookFax was protected as a trade secret. The BookFax was a preliminary notice of a forthcoming change to DOIL 24 that eventually became part of Revision 13. The BookFax was issued on October 24, 1997, which was after Rolls-Royce's agreements with AMCs clearly designated DOILs and their revisions and amendments to be Rolls-Royce's proprietary information.

AvidAir contends summary judgment is inappropriate because "Rolls-Royce has failed to provide admissible evidence providing the detail of any new information that is included in [these documents or] the cost of development or the actual new value that is purportedly contained in the documents." Doc. # 239 at 40-41. This endeavor is unnecessary. As held previously, a trade secret is

> information, including but not limited to, technical or nontechnical data, a formula, pattern, compilation, program, device, method, technique, or process, that:

- derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and

- is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Ind. Code § 24-2-3-2; Mo. Rev. Stat. § 417.453(4). There is no question that these documents qualify as information or that they derive independent economic value from not being generally known. The type of information is also not readily ascertainable; it is ascertainable, but it requires a combination of effort, resources, expertise and experience to formulate methods for repairing and overhauling the engine. The legal analysis does not call for a certain quantum of effort or resources, so Rolls-Royce is not required to establish the amount of effort and resources it expended.

AvidAir also attaches significance to Rolls-Royce's changed policies towards the DOILs. At one time Rolls-Royce (or, more precisely, its predecessors) did not expend much effort to maintain the DOILs' secrecy. Over time, efforts were initiated, and (as held previously) eventually became sufficient to be deemed reasonable as a matter of law. AvidAir finds this evolution to be sinister, but the Court does not. Rolls-Royce is not asserting – and, more importantly, is not being permitted to assert – that documents previously released into the public domain are now trade secrets. Rolls-Royce has taken documents that were in the

public domain, added information to those documents, then protected the revised documents' secrecy. As discussed in prior orders, this is permissible under the law and the revised document – now a combination of public and secret information – may be regarded as a trade secret.

AvidAir's final arguments are similar. It contends the documents in question have been disseminated to others and that it has not misappropriated the documents. However, the fact that some AMCs violated their agreements with Rolls-Royce and provided documents to others (such as AvidAir) does not obviate the trade secret.[4] Rolls-Royce's efforts were reasonable as a matter of law. The misappropriation issue is separate from the trade secret issue. In other words, misappropriation is not required for these documents to be trade secrets. Whether the Record supports a conclusion that AvidAir misappropriated

---

[4] In this regard, the Court notes AvidAir's tendency to assert, in conclusory fashion, that it obtained documents "lawfully" or that documents were provided to an AMC "without restriction." The labels are not supported by the Record; the Record demonstrates, for instance, that AvidAir obtained the DOILs, and that AMCs received them – but the citations relied upon by AvidAir do not establish that the AMC's possession was unrestricted or that the subsequent transfer to AvidAir was lawful. To the contrary, and as discussed in the Court's prior orders, the Record conclusively establishes the contractual relationship between Rolls-Royce and the AMCs that restricted the AMCs' ability to transfer the DOILs.

The Court also takes this opportunity to note AvidAir has asserted a great many facts that are not addressed in this Order. This failure should not be construed as the Court's acceptance of the truth of those facts: the failure means either the matter has been addressed in prior orders or (more commonly) the fact in question is irrelevant to the legal issues involved in this case.

the trade secrets will be addressed later in this Order. For now, it is sufficient to say that the undisputed facts demonstrate DOIL 3, revision 16, DOIL 8, revision 6, DOIL 24, revision 12, and BookFax 97-AMC-059 are trade secrets.

The Court's prior holdings establish Rolls-Royce's practices were not reasonable efforts to preserve the DOILs' secrecy when DOIL 6, revision 2, and DOIL 7, revision 5, were promulgated. Accordingly, the Court holds these documents were not trade secrets. The Record is not clear with respect to Rolls-Royce's practices when DOIL 4, revision 6, was promulgated, so neither party is entitled to summary judgment with respect to that document.

B. Rolls-Royce's Claims

AvidAir contends it is entitled to summary judgment on Rolls-Royce's claims because they all depend on a finding that some or all of the DOILs are trade secrets. The Court's conclusion that some of the DOILs are trade secrets defeats AvidAir's argument. The prior conclusion that AvidAir misappropriated DOIL 24, revision 13, also defeats AvidAir's contention that it is entitled to summary judgment on Count III.

AvidAir points out that Rolls-Royce is entitled to a single recovery and it cannot obtain relief under all five counts. Rolls-Royce concedes the point, and the Court agrees – but this is not a reason to grant summary judgment. Moreover, an election of remedies is premature at this juncture because there is no way to determine which theory or combination of theories will provide the Rolls-Royce with the fullest relief. To illustrate the point, consider BookFax 97-AMC-059.

The Court has concluded it was a trade secret, but there is (as discussed in footnote 4, *infra*) a question of fact as to whether it was misappropriated. This does not mean Rolls-Royce is without recourse: the BookFax is still Rolls-Royce's property, and other theories (such as replevin) may entitle Rolls-Royce to an order directing the BookFax be returned. The facts may also support a monetary award for unjust enrichment. At the present, there is no basis for concluding Rolls-Royce cannot prevail on Counts I, II, IV or V.

For its part, Rolls-Royce seeks summary judgment on Count III with respect to DOIL 3, revision 16, DOIL 8, revision 6, and DOIL 24, revision 12. The Court has already held these documents are trade secrets, and the undisputed facts in the Record also demonstrate AvidAir knew or had reason to know these documents were obtained from or through a party who owed Rolls-Royce a duty to maintain their secrecy. Mo. Rev. Stat. § 417.453(2)(b).c.iii. Therefore, AvidAir misappropriated these documents.[5]

C. Count I of AvidAir's Complaint

In Count I, AvidAir contends "Rolls-Royce knowingly and/or intentionally, and by using unlawful means, interfered with AvidAir Business Relationships

[5] Rolls-Royce does not seek a ruling that AvidAir misappropriated BookFax 97-AMC-059, which is just as well. Even though the BookFax is a trade secret, it does not have the proprietary rights legend that appears on the DOILs. Therefore, the Record does not conclusively establish AvidAir had reason to know that the BookFax was provided by someone who owed a duty of secrecy to Rolls-Royce. A jury will have to decide whether the BookFax was misappropriated.

by refusing to permit AvidAir overhauled/repaired Series II compressor cases to be embodied or purchased by Rolls-Royce AMC's and other Rolls-Royce authorized facilities." AvidAir Complaint, ¶ 40. AvidAir describes this conduct as interference with its business relationships.

The tort of interference with contract or business expectancy has five elements: "(1) a contract or valid business expectancy; (2) defendant's knowledge of the contract or relationship; (3) a breach induced or caused by defendant's intentional interference; (4) absence of justification; and (5) damages." Rice v. Hodapp, 919 S.W.2d 240, 245 (Mo. 1996) (en banc). Rolls-Royce presents several arguments but the Court believes it necessary to address just one: the Court concludes Rolls-Royce is entitled to summary judgment because the uncontroverted facts demonstrate its actions were legally justified.

"To establish the absence of justification element, the plaintiff must establish that the defendant lacked a legal right to justify his actions." Horizon Memorial Group, L.L.C. v. Bailey, 280 S.W.3d 657, 662 (Mo. Ct. App. 2009). AvidAir bears the burden of demonstrating a lack of justification. Stehno v. Sprint Spectrum, L.P., 186 S.W.3d 247, 253 (Mo. 2006) (en banc). However, Rolls-Royce's failure or refusal to enter an agreement allowing AvidAir to use its trade secrets cannot support the claim. BMK Corp. v. Clayton Corp., 226 S.W.3d 179, 191 (Mo. Ct. App. 2007). A business also cannot commit this tort if the action complained of involves a good-faith effort to enforce its rights, so long as improper means are not employed. E.g., Healthcare Services of the Ozarks, Inc. v. Copeland, 198 S.W.3d

604, 614 (Mo. 2006) (en banc); Stehno, 186 S.W.3d at 252-53.

Rolls-Royce had a legal right to protect its trade secrets. The fact that Rolls-Royce will prevail on several of its claims demonstrates it had a good-faith basis for acting. Other claims will require resolution by a jury, further demonstrating the reasonableness of Rolls-Royce's actions. The Court's rulings against Rolls-Royce do not substantiate a lack of good faith on its part.

AvidAir insists some of Rolls-Royce's actions constitute improper means, but the definition of wrongful means is narrower than AvidAir admits. Improper means "are those that are independently wrongful, such as threats, violence, trespass, defamation, misrepresentation of fact, restraint of trade, or any other wrongful act recognized by statute or common law." Stehno, 186 S.W.3d at 252; see also Nazeri v. Missouri Valley Coll., 860 S.W.2d 303, 317 (Mo. 1993) (en banc). AvidAir has described numerous acts it believes were wrongful because they constituted restraints of trade, but this is insufficient. Any action a business takes to protect its trade secrets will restrain trade to a certain extent, but this does not transform legitimate business activity into improper conduct. AvidAir's emphasis on the Court's conclusion that some documents were not trade secrets does not save the claim because Rolls-Royce had a good faith basis for its beliefs and do not transform the entire litigation effort into a bad faith effort. Accepting AvidAir's position would ignore the significant validity already found in Rolls- Royce's claims.

III. CONCLUSION & EPILOGUE

The combination of prior rulings and this ruling results in the following holdings:

1. AvidAir misappropriated DOIL 3, revision 16, DOIL 8, revision 6, and DOIL 24, revisions 12 and 13.

2. BookFax 97-AMC-059 is a trade secret, but there are material factual disputes as to whether AvidAir misappropriated the document.

3. OIL 6, revision 2, DOIL 7, revision 5, and DOIL 24, revisions 1-10 are not trade secrets.

4. There are disputed issues of material fact as to whether DOIL 4, revision 6, and DOIL 24, revision 11, are trade secrets and, if they were, whether they were misappropriated.

5. Rolls-Royce is entitled to summary judgment on Counts I and II of AvidAir's Complaint.

The issues remaining for trial consist of (1) resolving the factual disputes described in numbers 2 and 4, above, and (2) assessing damages. To that end, the Court sets the jury trial for March 1, 2010. A pretrial conference will be held at 10:30 a.m. on January 8, 2010. The deadlines in paragraphs 14 and 15 of the Court's December 19, 2007, Scheduling and Trial Order are changed accordingly.

IT IS SO ORDERED.

DATE: September 28, 2009

/s/ Ortrie D. Smith
ORTRIE D. SMITH, JUDGE
UNITED STATES DISTRICT COURT

APPENDIX E

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

Case No. 06-0816-CV-W-ODS

[Filed September 22, 2009]

AVIDAIR HELICOPTER SUPPLY, INC.,)
)
Plaintiff,)
)
vs.)
)
ROLLS-ROYCE CORPORATION,)
)
Defendant.)

ORDER AND OPINION (1) GRANTING ROLLS-ROYCE'S MOTION FOR SUMMARY JUDGMENT WITH RESPECT TO COUNT II OF AVIDAIR'S COMPLAINT AND (2) FINDING ROLLS-ROYCE'S MOTIONS TO STRIKE EXPERT WITNESSES TO BE MOOT

Count II of AvidAir's Complaint asserts violations of the Sherman Act, 15 U.S.C. §§ 1, 2. The heart of

AvidAir's claim[1] rests on allegations that Rolls-Royce has improperly claimed or designated certain materials to be trade secrets and engaged in sham litigation to protect invalid or non-existent interests. Consistent with the Court's prior determination that at least some of the materials in question are trade secrets and that Rolls-Royce is entitled to protect its interests, Rolls-Royce's motion for summary judgment (Doc. # 105) is granted.

Rolls-Royce's efforts to control its trade secrets cannot violate the antitrust laws. Such efforts are the very essence of a trade secret because a trade secret constitutes property the owner/developer is entitled to control. The secret can be assigned with or without limitation. Therefore, Rolls-Royce's changed or improved efforts to protect its secrets do not constitute anti-competitive behavior. Even if Rolls-Royce published a document that could have been a trade secret in a manner that vitiated its secret status, Rolls-Royce could thereafter take steps to protect later, different versions of the document without running afoul of the antitrust laws.

The Supreme Court has held that in certain circumstances litigation can violate the Sherman Act. So-called "sham litigation" is a lawsuit that is "objectively baseless in the sense that no reasonable

---

[1] The allegations in Count II could theoretically be construed as extending beyond these issues, although the Court believes the entirety of Count II reduces to the issues described. Regardless, neither AvidAir's experts nor AvidAir's Suggestions in Opposition discuss or identify any other theories supporting AvidAir's antitrust claim, so the Court holds no other antitrust theories are advanced.

litigant could realistically expect success on the merits. If an objective litigant could conclude that the suit is reasonably calculated to elicit a favorable outcome, the suit is immunized . . . and an antitrust claim premised on the sham exception must fail." Professional Real Estate Investors, Inc. v. Columbia Pictures Indus., 508 U.S. 49, 60 (1993).

The Court has little difficulty concluding that a reasonable litigant could realistically expect success on the merits of Rolls-Royce's claims. The primary support for this conclusion is found in the Court's prior holdings. The Court has ruled Revision 13 is a trade secret and that it has been misappropriated. The Court has ruled Rolls-Royce is entitled to a ruling that Revision 12 is a trade secret – the only reason such an order was not entered is that Rolls-Royce had not requested. "A winning lawsuit is by definition a reasonable effort at petitioning for redress and therefore not a sham." Id. at 61 n.5. The Court has ruled disputed issues of material fact preclude entry of judgement with respect to Revision 11. A claim that survives summary judgment and requires resolution of disputed facts is objectively reasonable. While Rolls-Royce did not prevail with respect to Revisions 1-10, the effort was not a sham because there was a reasonable chance that it could have been valid. Id. at 62-63.[2] Rolls-Royce subjective motivations are irrelevant because AvidAir cannot satisfy the objective component of the test. Id. at 57, 65-66.

---

[2] "Where, as here, there is no dispute over the predicate facts of the underlying proceeding, a court may decide probable cause as a matter of law." Id. at 63.

In light of the Court's holding, there is no need to address Rolls-Royce's other arguments in favor of summary judgment. The motion (Doc. # 105) is granted and Rolls-Royce is granted summary judgment on Count II of AvidAir's Complaint. The Court also finds the motions to strike experts AvidAir designated to support its antitrust claims (Doc. # 100 and Doc. # 103) are moot.

IT IS SO ORDERED.

DATE: September 22, 2009

/s/ Ortrie D. Smith
ORTRIE D. SMITH, JUDGE
UNITED STATES DISTRICT COURT

APPENDIX F

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

Case No. 06-0816-CV-W-ODS

[Filed June 23, 2009]

AVIDAIR HELICOPTER SUPPLY, INC.,)
)
Plaintiff,)
)
vs.)
)
ROLLS-ROYCE CORPORATION,)
)
Defendant.)

ORDER AND OPINION OVERRULING THE PARTIES OBJECTIONS, ADOPTING THE MAGISTRATE JUDGE'S REPORT AND RECOMMENDATION, GRANTING ROLLS-ROYCE CORPORATION'S MOTION FOR PARTIAL SUMMARY JUDGMENT, AND GRANTING IN PART AND DENYING IN PART AVIDAIR HELICOPTER SUPPLY, INC.'S MOTION FOR PARTIAL SUMMARY JUDGMENT

On December 8, 2008, the Court designated the Honorable William A. Knox to conduct proceedings

regarding, and prepare a Report recommending a ruling, with respect to the parties' various motions for summary judgment on trade secret issues. Judge Knox issued his Report on April 7, 2009. The parties have filed objections and other responses to the Report.

The Court has conducted a *de novo* review of the Record. This consists of many briefs, exhibits, and transcripts of hearings. After considering the parties' arguments, the Court overrules all of the objections. The Court adopts the entirety of Judge Knox's Report as the Order of the Court, including the recommendations for disposition of the parties' motions for partial summary judgment. This Order should be regarded merely as a supplement designed to address the parties' objections.

I. BACKGROUND

The Report succinctly summarizes the events leading to this litigation, including the lawsuits that were filed, consolidated, and ultimately transferred to this district. There is no need to summarize these matters again; the Court will only add a description of the claims that have been asserted.

AvidAir's operative pleading remains the three-count Complaint filed on September 29, 2006. The three counts are:

Count I	Tortious Interference with Business Relations, Contracts, and Prospective Economic Advantage

Count II	Violation of the Sherman Antitrust Act (or the Clayton Act) through the abuse of monopoly power
Count III	A claim seeking a judicial declaration that DOIL 24 is not a protectable trade secret

Rolls-Royce's operative pleading is the Amended Complaint filed on July 3, 2007, in the Southern District of Indiana. The Amended Complaint asserts the following claims:

Count I	Violations of the Lanham Act
Count II	Replevin
Count III	Misappropriation of Trade Secrets
Count IV	Conversion/Theft
Count V	Quantum Meruit/Unjust Enrichment

The key to this case – and to all the claims asserted – is the extent to which DOIL 24 is a trade secret. To that end, the parties and the Court have focused on the parties' respective "Count III's" because the status of those counts will likely dictate the outcomes on the other counts. There have been thirteen revisions to DOIL 24, and to varying degrees each of them has been addressed. AvidAir sought summary judgment on the parties' third counts, arguing that all of the revisions were in the public domain or were not protectable for other reasons. Rolls-Royce sought partial summary judgment only with respect to the thirteenth revision. The Report recommends

1. granting AvidAir summary judgment with respect to Revisions 1-10,

2. granting Rolls-Royce summary judgment with respect to Revision 13, and

3. denying AvidAir's request for summary judgment with respect to Revisions 11-13.[1]

II. DISCUSSION

The Court will limit its discussion to the portions of the Report relevant to the parties' arguments. This limitation should not obscure the Court's decision to adopt the Report in its entirety, including those portions that are not specifically discussed herein.

As a preliminary matter, the Court hereby denies *all* pending motions to strike related to the issues in the Report and this Order. These motions (Doc. Nos. 168, 177, 182, and 184) challenge various materials relied on by the opposing party, arguing they should not be considered because they are not valid items of evidence or they do not support the propositions for which they are offered. The Court views these arguments as a component of the larger issue regarding the propriety of summary judgment and not as separate matters. The Court will address the

---

[1] The Report recommends denying summary judgment with respect to Revision 11 because the Record does not conclusively establish whether Rolls-Royce utilized measure to protect its secrecy. It recommends denying summary judgment with respect to Revision 12 because the Record establishes it was a trade secret so AvidAir cannot obtain summary judgment – but Rolls-Royce did not ask for summary judgment with respect to Revision 12.

arguments to the extent necessary to resolve the issues involved in the parties' respective Count III's, but there is no justification for removing documents from the Record.[2]

A. Rolls-Royce's Exceptions

Rolls-Royce contends the Record establishes Revisions 5 through 11 were (and are) trade secrets because they were subject to reasonable measures to restrict their publication and dissemination – measures Rolls-Royce contends are comparable to those used with respect to Revisions 12 and 13. The Court disagrees.

Rolls-Royce relies almost exclusively on William Fesler's affidavit to support its contention. The Court has reviewed Fesler's affidavit and has determined it is not as helpful as Rolls-Royce posits.

Revision 8 was distributed in March 1994. According to Fesler, prior to 1994 a Product Support Policy Manual guided Rolls-Royce's[3] conduct. Article VII of the Manual contains provisions regarding the provision of DILs and DOILs to distributors and declares that Allison (Rolls-Royce's predecessor) "controls the publication and distribution of these manuals by reserving the rights to exclusive

---

[2] Some of these motions may not be fully briefed. However, in light of the Court's view that they are properly regarded as part of the briefing on the summary judgment motions and not independent matters, there is no need to wait.

[3] References to Rolls-Royce also refer to Rolls-Royce's predecessors.

publication and printing." Section 7.2.3 is specific to DILs and says they "are for the exclusive use of the Distributor." Section 7.2.4 is specific to DOILs and says they "are issued exclusively to Distributors approved by Allison for overhaul." However, there was no contractual agreement between Allison and the distributors obligating the distributors to do anything or refrain from doing anything. There is also nothing obligating the distributors to return DILs and DOILs at any time (including in the event of the relationship's termination) or otherwise establishing the DILs and DOILs remained Allison's property.[4] The Record also establishes the DILs and DOILs did not have a proprietary rights legend. While Rolls-Royce and its predecessors were only required to take "reasonable" steps to protect the information, a few sentences buried in a manual carrying no contractual weight is insufficient as a matter of law.

In 1994, a network of Authorized Maintenace Centers ("AMCs") replaced the distributor network. The AMCs entered into an AMC Agreement, page six of which includes a clause declaring "[t]he provisions set forth in the following 'Additional Provisions Applicable to Authorized Maintenance Center Agreement' are hereby incorporated as part of this Agreement." Article 1.49 of the Additional Provisions addresses "Manuals" and declares "Select Manuals may be owned by Allison and provided to the [AMC] per the terms and conditions of this Agreement or a separate bailment agreement." Article 6.2 lists a series

---

[4] This conclusion is supported by both the Policy Manual's contents and Fesler's deposition testimony. Fesler Depo. at 144-47, 149.

of publications and materials that may be provided to the AMC and indicates the "material may be Allison proprietary and may bear appropriate copyright and Marks restrictions. No distribution of this material is to be made outside Authorized Maintenance Center Business Operation(s) . . . ." Article 13.8 requires AMCs to return "all originals and copies of Manuals, drawings, processes and all other proprietary information furnished by Allison" within fifteen days of the termination of the AMC agreement.

Rolls-Royce contends the term "Manual" includes anything containing technical information, but the term's definition is not so clear. Moreover, this interpretation does not comport with the definition's statement that "*select*" manuals "*may* belong to Allison." There is nothing in the agreements between the AMCs and Rolls-Royce clearly identifying the DILs and DOILs as proprietary information. Compounding the lack of clarity is the absence of a proprietary rights legend on the DILs and DOILs themselves. Rolls-Royce cannot cobble together disparate clauses from a multitude of documents in order to demonstrate it took reasonable steps to protect the documents' secrecy.

Other evidence in the Record confirms the absence of any dispute. A memo written in July 1992 noted that "Ryder Aviall has reprinted our CSLs, CEBs, DILs, DOILs and IBs. Allison has no objection to Ryder Aviall doing this since these documents are not copyrighted material." This view was in contrast to the copying of "technical data such as IPCs, O & Ms, and Overhaul Manuals," which the memo indicated could not be copied. In actual practice, terminated AMCs were not required to return DILs and DOILs. Fesler Depo. at 137, 264-65, 286-87. Indeed, the tenor of

Fesler's deposition reveals that concern over the secrecy of the DILs and DOILs did not arise until after Rolls-Royce acquired Allison. It was only after Rolls-Royce acquired Allison that a proprietary rights legend began to appear on the DILs and DOILs. It also was not until after the acquisition that contracts between Rolls-Royce and those who were provided the DILs and DOILs clearly identified those documents as Rolls-Royce's property and obligated their return to Rolls-Royce. Prior to that time, the Record leaves no factual dispute that Allison did not take reasonable steps to preserve any proprietary rights in the DILs and DOILs, and summary judgment is properly granted to AvidAir with respect to Revisions 1-10.

The Record is not clear as to the timing of changes in Rolls-Royce's procedures, or when the various steps to preserve proprietary rights were taken. The Court agrees there are factual disputes with respect to Revision 11 that preclude entry of summary judgment for either side.

B. AvidAir's Exceptions

1. FAA Regulations

AvidAir first argues Revision 13 cannot be a trade secret because FAA regulations require it be made available to the public. It points to 14 C.F.R. § 21.50(b), which states that a "holder of a design approval . . . shall furnish at least one set of complete Instructions for Continued Airworthiness, to the owner of each type aircraft, aircraft engine or propeller upon its delivery . . . ." AvidAir also relies on Appendix A to Part 33 for the proposition that overhaul instructions

must be included in the Instructions for Continued Airworthiness.

There are several reasons for rejecting AvidAir's argument. First, AvidAir's Complaint does not seek declaratory judgment with respect to Rolls-Royce's obligations under FAA regualtions. Second, AvidAir has not demonstrated Revision 13 must be included in the Instructions for Continued Airworthiness. To credit AvidAir's implication would effectively hold that aircraft manufacturers lose all proprietary rights. Related to these two points are the provisions of 14 C.F.R. § 33.4, which requires applicants to "prepare Instructions for Continued Airworthiness in accordance with appendix A to this part that are acceptable to the Administrator." AvidAir has not established (or even suggested) the FAA has determined Rolls-Royce's submission is unacceptable or otherwise violates the regulation. Ultimately, the Court believes any complaints about Rolls-Royce's compliance with the FAA's regulations must be made to the FAA.[5]

Even if Rolls-Royce is legally obligated to provide Revision 13 to owners of its helicopters, this does not mean Revision 13 is publicly available. The regulation does not appear to require such disclosure, nor does it forbid Rolls-Royce from imposing restrictions on those who acquire Revision 13. Thus, even if AvidAir's

---

[5] Regardless of the content of, or Rolls-Royce's obligations under, FAA regulations, the Court must deal with Revision 13 as it is – not as AvidAir contends it should be. The question is whether Revision 13 is a trade secret – not whether it should or should not be a trade secret.

interpretation of the regulations proves correct, this does not mean Revision 13 cannot be a trade secret.

2. Previous Disclosures / Reasonable Efforts

AvidAir next argues Revision 13 has been disclosed without restriction and Rolls-Royce's efforts to maintain its secrecy have not been reasonable. However, the records does not support this contention.

For instance, AvidAir contends the Australian Air Force "possessed unrestricted DILs and DOILs since at least 1994," but the portions of the record relied upon do not support this contention. The Blackie Affidavit is not specific to Revision 13 and does not establish the Australian military was free to disseminate documents to the public at large. Chris Anrkom's deposition establishes the Australian Air Force had DILs and DOILs generally but is not specific to Revision 13. Ankrom also does not establish the Australian Air Force had anything, much less Revision 13, without restrictions on transfer or use. As noted in the Report, the record establishes Revision 13 was provided to the Australian military with restrictions. The record provides no basis for believing the Australian military was somehow excepted from the nondisclosure requirements Rolls-Royce imposed on other recipients of Revision 13.

AvidAir argues there are other entities who possess or possessed Revision 13 "without restriction." Again, the portions of the record AvidAir relies upon do not establish this fact. The references cited often are not specific to Revision 13 and, in light of the time frame being discussed, cannot possibly refer to Revision 13. The references also fail to establish that Rolls-Royce

had excused or exempted the possessor from the obligation to maintain Revision 13's secrecy. Finally, in some instances it appears the party purportedly possessing "without restriction" received the documents in question from someone other than Rolls-Royce – in other words, if they received Revision 13, they received it from someone who was not supposed to provide it to them. The Court reiterates the Report's discussion of this subject:

> AvidAir contends that DILs and DOILs are freely available within the industry, but this general statement does not establish *Revision 13* is freely available. The Record demonstrates that it is not, but the point is irrelevant. The fact that many people and companies have improperly obtained Revision 13 in contravention of the proprietary rights legend and the agreement with AMCs does not determine the issue. Rolls-Royce's efforts have not been perfectly effective, but perfection is not required. Reasonable steps are required, and reasonable steps were taken. Avidair has suggested nothing else which Rolls-Royce should or could have done to protect the information in Revision 13, and no reasonable jury, from the information provided this court, could conclude the steps taken were not reasonable.

The Court's review of the record and the parties' arguments confirms the absence of disputed facts in this matter. The Court also concurs with the Report's summary of the law (on page 10) to the effect that it is generally sufficient to protect a secret by (1) entering a contractual agreement restricting distribution and

(2) placing a legend on the document announcing its proprietary status. Accordingly, the Court concludes, as a matter of law, that Revision 13 was the subject of reasonable efforts to maintain its secrecy.

3. Economic Value from Secrecy

The Report carefully analyzes three changes between Revision 13 and prior revisions as part of the process of determining whether there is economic value in Revision 13's secrecy. AvidAir faults the Report's failure to discuss the time, money and other resources necessary to formulate Revision 13's new content, but there is no requirement that this be done. The significant point is: time and money were expended, and AvidAir is not entitled to the unfettered use of the benefits of those expenditures.

Revision 13's greatest value, however, arises when an overhauler is required to certify to the FAA that an engine or part was overhauled in accordance with procedures approved by the FAA. Thus, one in legal possession of Revision 13 can certify that they followed Revision 13. AvidAir insists it can develop its own procedures and seek the FAA's approval to use them. This is true, but beside the point. AvidAir can expend its own resources to develop acceptable procedures – but, as stated above, AvidAir is not entitled to the benefits of Rolls-Royce's efforts.

4. AvidAir's Acquisition and Use of Revision 13

AvidAir describes the reasons it began using Revision 13 and the manner in which it uses that procedure in a confusing attempt to demonstrate that it did not misappropriate Revision 13. AvidAir's

argument starts from the premise that it used Revision 13, which is fatal to its effort because unauthorized use and possession of a trade secret constitutes misappropriation. AvidAir also contends it did not acquire Revision 13 through improper means. The Court has not intimated that AvidAir stole Revision 13 – but such a finding is unnecessary. Misappropriation does not require acquisition through independently wrongful conduct. It is enough that AvidAir possesses and uses Revision 13 without Rolls-Royce's permission. Ind. Code §§ 24-2-3-2, 24-2-3-4; Mo. Rev. Stat. §§ 417.453, 417.457.

AvidAir also argues that it does not always strictly follow Revision 13. Even if AvidAir deviates from the instructions, it still uses the document by certifying to the FAA that it complied with its contents. In any event, the record establishes that Revision 13's procedures are used at least some of the time.

III. CONCLUSION

The parties' objections and exceptions are overruled. With the additional discussion in this Order, the Magistrate Judge's Report and Recommendation is adopted in its entirety as the Order of the Court. AvidAir is granted partial summary judgment on its Count III; specifically, summary judgment is granted with respect to Revisions 1-10 and denied with respect to Revisions 11-13. Rolls-Royce is granted summary judgment on its Count III, which relates to Revision 13.

IT IS SO ORDERED.

DATE: June 23, 2009

/s/ Ortrie D. Smith
ORTRIE D. SMITH, JUDGE
UNITED STATES DISTRICT COURT

APPENDIX G

UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

No: 10-3444

[Filed January 18, 2012]

AvidAir Helicopter Supply, Inc.	)
	)
Appellant	)
	)
v.	)
	)
Rolls-Royce Corporation	)
	)
Appellee	)
	)

Appeal from U.S. District Court for the
Western District of Missouri - Kansas City
(4:06-cv-00816-ODS)

ORDER

The petition for rehearing en banc is denied. The petition for rehearing by the panel is also denied.

January 18, 2012

Order Entered at the Direction of the Court:
Clerk, U.S. Court of Appeals, Eighth Circuit.

/s/ Michael E. Gans

APPENDIX H

UNITED STATES CODE SERVICE
TITLE 49. TRANSPORTATION
SUBTITLE VII. AVIATION PROGRAMS
PART A. AIR COMMERCE AND SAFETY
SUBPART III. SAFETY
CHAPTER 447. SAFETY REGULATION

49 U.S.C. § 44701

§ 44701. General requirements

(a) Promoting safety. The Administrator of the Federal Aviation Administration shall promote safe flight of civil air-craft in air commerce by prescribing–

(1) minimum standards required in the interest of safety for appliances and for the design, material, construction, quality of work, and performance of aircraft, aircraft engines, and propellers;

(2) regulations and minimum standards in the interest of safety for–

(A) inspecting, servicing, and overhauling aircraft, aircraft engines, propellers, and appliances;

(B) equipment and facilities for, and the timing and manner of, the inspecting, servicing, and overhauling; and

(C) a qualified private person, instead of an officer or employee of the Administration, to examine and report on the inspecting, servicing, and overhauling;

(3) regulations required in the interest of safety for the reserve supply of aircraft, aircraft engines,

propellers, appliances, and aircraft fuel and oil, including the reserve supply of fuel and oil carried in flight;

(4) regulations in the interest of safety for the maximum hours or periods of service of airmen and other employees of air carriers; and

(5) regulations and minimum standards for other practices, methods, and procedure the Administrator finds necessary for safety in air commerce and national security.

(b) Prescribing minimum safety standards. The Administrator may prescribe minimum safety standards for–

(1) an air carrier to whom a certificate is issued under section 44705 of this title [49 USCS § 44705]; and

(2) operating an airport serving any passenger operation of air carrier aircraft designed for at least 31 passenger seats.

(c) Reducing and eliminating accidents. The Administrator shall carry out this chapter [49 USCS §§ 44701 et seq.] in a way that best tends to reduce or eliminate the possibility or recurrence of accidents in air transportation. However, the Administrator is not required to give preference either to air transportation or to other air commerce in carrying out this chapter [49 USCS §§ 44701 et seq.].

(d) Considerations and classification of regulations and standards. When prescribing a regulation or standard under subsection (a) or (b) of this section or any of sections 44702-44716 of this title [49 USCS §§ 44702-44716], the Administrator shall–

(1) consider–

(A) the duty of an air carrier to provide service with the highest possible degree of safety in the public interest; and

(B) differences between air transportation and other air commerce; and

(2) classify a regulation or standard appropriate to the differences between air transportation and other air commerce.

(e) Bilateral exchanges of safety oversight responsibilities.

(1) In general. Notwithstanding the provisions of this chapter [49 USCS §§ 44701 et seq.], the Administrator, pursuant to Article 83 bis of the Convention on International Civil Aviation and by a bilateral agreement with the aeronautical authorities of another country, may exchange with that country all or part of their respective functions and duties with respect to registered aircraft under the following articles of the Convention: Article 12 (Rules of the Air); Article 31 (Certificates of Airworthiness); or Article 32a (Licenses of Personnel).

(2) Relinquishment and acceptance of responsibility. The Administrator relinquishes responsibility with respect to the functions and duties transferred by the Administrator as specified in the bilateral agreement, under the Articles listed in paragraph (1) for United States-registered aircraft described in paragraph (4)(A) transferred abroad and accepts responsibility with respect to the functions and duties under those Articles for aircraft registered abroad and described in paragraph (4)(B) that are transferred to the United States.

(3) Conditions. The Administrator may predicate, in the agreement, the transfer of functions and duties under this subsection on any conditions the

Administrator deems necessary and prudent, except that the Administrator may not transfer responsibilities for United States registered aircraft described in paragraph (4)(A) to a country that the Administrator determines is not in compliance with its obligations under international law for the safety oversight of civil aviation.

(4) Registered aircraft defined. In this subsection, the term "registered aircraft" means–

(A) aircraft registered in the United States and operated pursuant to an agreement for the lease, charter, or inter-change of the aircraft or any similar arrangement by an operator that has its principal place of business or, if it has no such place of business, its permanent residence in another country; and

(B) aircraft registered in a foreign country and operated under an agreement for the lease, charter, or interchange of the aircraft or any similar arrangement by an operator that has its principal place of business or, if it has no such place of business, its permanent residence in the United States.

(f) Exemptions. The Administrator may grant an exemption from a requirement of a regulation prescribed under sub-section (a) or (b) of this section or any of sections 44702-44716 of this title [49 USCS §§ 44702-44716] if the Administrator finds the exemption is in the public interest.

HISTORY:

(July 5, 1994, P.L. 103-272, § 1(e), 108 Stat. 1185; Oct. 31, 1994, P.L. 103-429, § 6(55), 108 Stat. 4385; April 5, 2000, P.L. 106-181, Title VII, § 714, 114 Stat. 161.)

Indiana Code 24-2-3

Information Maintained by the Office of Code Revision Indiana Legislative Services Agency

IC 24-2-3
Chapter 3. Trade Secrets

IC 24-2-3-1
Short title; construction; purpose

Sec. 1. (a) This chapter may be cited as the Uniform Trade Secrets Act.

(b) This chapter shall be applied and construed to effectuate its general purpose to make uniform the law with respect to the subject matter of this chapter among states enacting the provisions of this chapter.

(c) The chapter displaces all conflicting law of this state pertaining to the misappropriation of trade secrets, except contract law and criminal law.

As added by Acts 1982, P.L.148, SEC.1.

IC 24-2-3-2
Definitions

Sec. 2. As used in this chapter, unless the context requires otherwise:

"Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means.

"Misappropriation" means:

(1) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or

(2) disclosure or use of a trade secret of another without express or implied consent by a person who:

(A) used improper means to acquire knowledge of the trade secret;

(B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was:

(i) derived from or through a person who had utilized improper means to acquire it;

(ii) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or

(iii) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or

(C) before a material change of his position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

"Person" means a natural person, limited liability company, corporation, business trust, estate, trust, partnership, association, joint venture, government, governmental subdivision or agency, or any other legal or commercial entity.

"Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(1) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and

(2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

As added by Acts 1982, P.L.148, SEC.1. Amended by P.L.8-1993, SEC.343.

* * *

FAR|AMT

FEDERAL AVIATION REGULATIONS FOR AVIATION MAINTENANCE TECHNICIANS

Rules for maintenance and repairmen

Includes Parts 1, 3, 13, 21, 23, 27, 33, 34, 35, 39, 43, 45, 47, 65, 91, 119, 121 J&L, 125, 135, 145, 147,and 183, Advisory Circulars 20-62D, 20-109A, 21-12B, 39-7C, 43-9C, 43.9-1F, 65-30A, and FAA-G-8082-11A

Updated and Published by

Aviation Supplies & Academics, Inc.
7005 132nd Place SE
Newcastle, WA 98059-3153

ASA-08-FAR-AMT

U.S. Department of Transportation:
From Title 14 of the Code of Federal Regulations

* * *

SUBCHAPTER C
AIRCRAFT

PART 21
CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS

SPECIAL FEDERAL AVIATION REGULATION

SFAR No. 88

Subpart A — General

Subpart B — Type Certificates

Subpart C — Provisional Type Certificates

Subpart D — Changes to Type Certificates

Subpart E — Supplemental Type Certificates

Subpart F — Production Under Type Certificate Only

Subpart G — Production Certificates

Subpart H — Airworthiness Certificates

Subpart I —
Provisional Airworthiness Certificates

Subpart J —
Delegation Option Authorization Procedures

Subpart K —
Approval of Materials,
Parts, Processes, and Appliances

Subpart L — Export Airworthiness Approvals

Subpart M — Designated Alteration Station Authorization Procedures

Subpart N —
Approval of Engines, Propellers,
Materials, Parts, and Appliances: Import

Subpart O —
Technical Standard
Order Authorizations

* * *

PART 43
MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

* * *

PART 65

CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS

SPECIAL FEDERAL AVIATION REGULATIONS

SFAR No. 100-1
SFAR No. 103

Subpart A — General

Sec.

Subpart B — Air Traffic Control Tower Operators

Subpart C — Aircraft Dispatchers

Subpart D — Mechanics

Subpart E — Repairmen

Subpart F — Parachute Riggers

* * *

PART 145
REPAIR STATIONS

SPECIAL FEDERAL AVIATION REGULATION

***SFAR No. 36 [Note]**

Subpart A — General

Subpart B — Certification

Subpart C — Housing, Facilities, Equipment, Materials, and Data

Subpart D — Personnel

Subpart E — Operating Rules

* * *

CODE OF FEDERAL REGULATIONS
TITLE 14: AERONAUTICS AND SPACE
CHAPTER I – FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION
SUBCHAPTER C – AIRCRAFT
PART 21 – CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS
Subpart B – Type Certificates
SPECIAL FEDERAL AVIATION REGULATIONS

14 CFR 21.50

§ 21.50 Instructions for continued airworthiness and manufacturer's maintenance manuals having airworthiness limitations sections.

(a) The holder of a type certificate for a rotorcraft for which a Rotorcraft Maintenance Manual containing an "Airworthiness Limitations" section has been issued under § 27.1529 (a)(2) or § 29.1529 (a)(2) of this chapter, and who obtains approval of changes to any replacement time, inspection interval, or related procedure in that section of the manual, shall make those changes available upon request to any operator of the same type of rotorcraft.

(b) The holder of a design approval, including either the type certificate or supplemental type certificate for an aircraft, aircraft engine, or propeller for which application was made after January 28, 1981, shall furnish at least one set of complete Instructions for Continued Airworthiness, to the owner of each type aircraft, aircraft engine, or propeller upon its delivery, or upon issuance of the first standard

airworthiness certificate for the affected aircraft, whichever occurs later. The Instructions must be prepared in accordance with §§ 23.1529, 25.1529, 25.1729, 27.1529, 29.1529, 31.82, 33.4, 35.4, or part 26 of this subchapter, or as specified in the applicable airworthiness criteria for special classes of aircraft defined in § 21.17(b), as applicable. Thereafter, the holder of a design approval must make those instructions available to any other person required by this chapter to comply with any of the terms of those instructions. In addition, changes to the Instructions for Continued Airworthiness shall be made available to any person required by this chapter to comply with any of those instructions.

HISTORY: [Amdt. No. 21-23, *33 FR 14105*, Sept. 18, 1968, as amended by Amdt. No 21-51, *45 FR 60170*, Sept. 11, 1980; Amdt. 21-60, *52 FR 8042*, Mar. 13, 1987; Amdt. 21-90, *72 FR 63364, 63404*, Nov. 8, 2007]

AUTHORITY: AUTHORITY NOTE APPLICABLE TO ENTIRE PART: *42 U.S.C. 7572; 49 U.S.C. 106(g)*, 40105, 40113, 44701-44702, 44704, 44707, 44709, 44711, 44713, 44715, 45303

NOTES: [EFFECTIVE DATE NOTE: *72 FR 63364, 63404*, Nov. 8, 2007, revised paragraph (b), effective Dec. 10, 2007.]

NOTES APPLICABLE TO ENTIRE TITLE:
CROSS REFERENCES: Department of the Air Force; Use of Air Force installations by other than U.S. Department of Defense aircraft: See National Defense, 32 CFR Part 855.
Federal Communications Commission, aviation services: See Telecommunication, 47 CFR Part 87.

NOTES APPLICABLE TO ENTIRE CHAPTER:
[PUBLISHER'S NOTE: For Federal Register citations concerning Chapter I Disposition of comments, see: *72 FR 34999*, June 26, 2007.]
[PUBLISHER'S NOTE: For Federal Register citations concerning Chapter I Regulatory guidance, see: *73 FR 10986*, Feb. 29, 2008.]

NOTES APPLICABLE TO ENTIRE PART:
[PUBLISHER'S NOTE: For Federal Register citations concerning Part 21 Policy Statements, see *60 FR 10480*, Feb. 27, 1995; *64 FR 65655*, Nov. 23, 1999; *70 FR 40166*, July 12, 2005.]
EDITORIAL NOTE: For miscellaneous amendments to cross references in this Part 21 see *31 FR 9211*, July 6, 1966.
[PUBLISHER'S NOTE: For Federal Register citations concerning Part 21 Special Conditions, see *68 FR 2183*, Jan. 16, 2003; *69 FR 10315*, Mar. 5, 2004; *72 FR 64529*, Nov. 16, 2007; *72 FR 73579*, Dec. 28, 2007.]
[PUBLISHERS' NOTE: For Federal Register citations concerning Part 21 Disposition of Comments, see: *68 FR 43883*, July 24, 2003].
[PUBLISHERS' NOTE: For Federal Register citations concerning Part 21 Final Airworthiness Design Standards, see: *73 FR 24497*, May 5, 2008.]

267 words

CODE OF FEDERAL REGULATIONS
Title 14: Aeronautics and Space
PART 33—AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES
Subpart G—Special Requirements: Turbine Aircraft Engines

Appendix A to Part 33—Instructions for Continued Airworthiness

a33.1 general

(a) This appendix specifies requirements for the preparation of Instructions for Continued Airworthiness as required by §33.4.

(b) The Instructions for Continued Airworthiness for each engine must include the Instructions for Continued Airworthiness for all engine parts. If Instructions for Continued Airworthiness are not supplied by the engine part manufacturer for an engine part, the Instructions for Continued Airworthiness for the engine must include the information essential to the continued airworthiness of the engine.

(c) The applicant must submit to the FAA a program to show how changes to the Instructions for Continued Airworthiness made by the applicant or by the manufacturers of engine parts will be distributed.

a33.2 format

(a) The Instructions for Continued Airworthiness must be in the form of a manual or manuals as appropriate for the quantity of data to be provided.

(b) The format of the manual or manuals must provide for a practical arrangement.

a33.3 content

The contents of the manual or manuals must be prepared in the English language. The Instructions for Continued Airworthiness must contain the following manuals or sections, as appropriate, and information:

(a) *Engine Maintenance Manual or Section*. (1) Introduction information that includes an explanation of the engine's features and data to the extent necessary for maintenance or preventive maintenance.

(2) A detailed description of the engine and its components, systems, and installations.

(3) Installation instructions, including proper procedures for uncrating, deinhibiting, acceptance checking, lifting, and attaching accessories, with any necessary checks.

(4) Basic control and operating information describing how the engine components, systems, and installations operate, and information describing the methods of starting, running, testing, and stopping the engine and its parts including any special procedures and limitations that apply.

(5) Servicing information that covers details regarding servicing points, capacities of tanks, reservoirs, types of fluids to be used, pressures applicable to the various systems, locations of

lubrication points, lubricants to be used, and equipment required for servicing.

(6) Scheduling information for each part of the engine that provides the recommended periods at which it should be cleaned, inspected, adjusted, tested, and lubricated, and the degree of inspection the applicable wear tolerances, and work recommended at these periods. However, the applicant may refer to an accessory, instrument, or equipment manufacturer as the source of this information if the applicant shows that the item has an exceptionally high degree of complexity requiring specialized maintenance techniques, test equipment, or expertise. The recommended overhaul periods and necessary cross references to the Airworthiness Limitations section of the manual must also be included. In addition, the applicant must include an inspection program that includes the frequency and extent of the inspections necessary to provide for the continued airworthiness of the engine.

(7) Troubleshooting information describing probable malfunctions, how to recognize those malfunctions, and the remedial action for those malfunctions.

(8) Information describing the order and method of removing the engine and its parts and replacing parts, with any necessary precautions to be taken. Instructions for proper ground handling, crating, and shipping must also be included.

(9) A list of the tools and equipment necessary for maintenance and directions as to their method of use.

(b) *Engine Overhaul Manual or Section.* (1) Disassembly information including the order and method of disassembly for overhaul.

(2) Cleaning and inspection instructions that cover the materials and apparatus to be used and methods and precautions to be taken during overhaul. Methods of overhaul inspection must also be included.

(3) Details of all fits and clearances relevant to overhaul.

(4) Details of repair methods for worn or otherwise substandard parts and components along with the information necessary to determine when replacement is necessary.

(5) The order and method of assembly at overhaul.

(6) Instructions for testing after overhaul.

(7) Instructions for storage preparation, including any storage limits.

(8) A list of tools needed for overhaul.

(c) *ETOPS Requirements.* For an applicant seeking eligibility for an engine to be installed on an airplane approved for ETOPS, the Instructions for Continued Airworthiness must include procedures for engine condition monitoring. The engine condition monitoring procedures must be able to determine prior to flight, whether an engine is capable of providing, within approved engine operating limits, maximum continuous power or thrust, bleed air, and power extraction required for a relevant engine inoperative

diversion. For an engine to be installed on a two-engine airplane approved for ETOPS, the engine condition monitoring procedures must be validated before ETOPS eligibility is granted.

A33.4 airworthiness limitations section

The Instructions for Continued Airworthiness must contain a section titled Airworthiness Limitations that is segregated and clearly distinguishable from the rest of the manual.

(a) For all engines:

(1) The Airworthiness Limitations section must set forth each mandatory replacement time, inspection interval, and related procedure required for type certification. If the Instructions for Continued Airworthiness consist of multiple documents, the section required under this paragraph must be included in the principal manual.

(2) This section must contain a legible statement in a prominent location that reads: "The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of Title 14 of the Code of Federal Regulations unless an alternative program has been FAA approved."

(b) For rotorcraft engines having 30-second OEI and 2-minute OEI ratings:

(1) The Airworthiness Limitations section must also prescribe the mandatory post-flight inspections and maintenance actions associated with any use of either 30-second OEI or 2-minute OEI ratings.

(2) The applicant must validate the adequacy of the inspections and maintenance actions required under paragraph (b)(1) of this section **A33.4**.

(3) The applicant must establish an in-service engine evaluation program to ensure the continued adequacy of the instructions for mandatory post-flight inspections and maintenance actions prescribed under paragraph (b)(1) of this section **A33.4** and of the data for §33.5(b)(4) pertaining to power availability. The program must include service engine tests or equivalent service engine test experience on engines of similar design and evaluations of service usage of the 30-second OEI or 2-minute OEI ratings.

[Amdt. 33–9, 45 FR 60181, Sept. 11, 1980, as amended by Amdt. 33–13, 54 FR 34330, Aug. 18, 1989; Amdt. 33–21, 72 FR 1878, Jan. 16, 2007; Amdt. 33–25, 73 FR 48124, Aug. 18, 2008]

Title 14: Aeronautics and Space

PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

§ 43.13 Performance rules (general).

(a) 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.

(b) Each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner and use materials of such a quality, that the condition of the aircraft, airframe, aircraft engine, propeller, or appliance worked on will be at least equal to its original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness).

(c) *Special provisions for holders of air carrier operating certificates and operating certificates issued under the provisions of Part 121 or 135 and Part 129 operators holding operations specifications.* Unless otherwise notified by the administrator, the methods, techniques, and practices contained in the maintenance manual or the maintenance part of the manual of the holder of an air carrier operating certificate or an operating certificate under Part 121 or 135 and Part 129 operators holding operations specifications (that is required by its operating specifications to provide a continuous airworthiness maintenance and inspection program) constitute acceptable means of compliance with this section.

[Doc. No. 1993, 29 FR 5451, Apr. 23, 1964, as amended by Amdt. 43–20, 45 FR 60182, Sept. 11, 1980; Amdt. 43–23, 47 FR 41085, Sept. 16, 1982; Amdt. 43–28, 52 FR 20028, June 16, 1987; Amdt. 43–37, 66 FR 21066, Apr. 27, 2001]

APPENDIX I

U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject:	Instructions for Continued Airworthiness	Date: 8/27/99	AC No. 33.4-1
		Initiated by: ANE-110	Change:

1. PURPOSE. This advisory circular (AC) provides information and guidance on acceptable methods, but not the only methods of compliance with § 33.4 of the Federal Aviation Regulations, Title 14 of the Code of Federal Regulations. This section (§ 33.4) contains requirements for preparing Instructions for Continued Airworthiness (ICA's) for aircraft engines. Although this AC does refer to regulatory requirements that are mandatory, this AC is not, in itself, mandatory. This AC neither changes any regulatory requirements nor authorizes changes in or deviations from the regulatory requirements.

2. RELATED REGULATIONS, ORDERS and ADVISORY CIRCULARS.

a. 14 CFR Part 21, Certification Procedures for Products and Parts,

b. 14 CFR Part 33, Airworthiness Standards: Aircraft Engines,

c. 14 CFR Part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration

d. 14 CFR Part 91, General operating and flight rules

e. 14 CFR Part 119, Certification: Air carriers and commercial operators

f. 14 CFR Part 121, subpart L, Maintenance, Preventive Maintenance, and Alterations

g. 14 CFR Part 125, subpart G, Maintenance

h. 14 CFR Part 135, subpart J, Maintenance, Preventive Maintenance, and Alterations

i. FAA Order 8110.4A, Type Certification Process

j. AC 20-114, Manufacturers' Service Documents

3. BACKGROUND.

a. In 1994, the FAA established a team comprised of engineers from the Aircraft Certification Service and airworthiness inspectors from the Aircraft Maintenance Division of the Flight Standards Service. The team was tasked to provide guidance to assist

with the compliance requirements of §§ 21.50, 23.1529, 25.1529, 27.1529, 29.1529, 31.82, 33.4 and 35.4, and the Appendices of parts 23, 25, 27, 29, 33 and 35. This AC is an outgrowth of that team effort to provide the guidance on the preparation of ICA's.

b. This AC provides information and guidance to applicants for aircraft engine design approvals that may be used to demonstrate compliance with the requirements of §§ 33.4 and Appendix A to part 33, and 21.50(b) on the preparation of ICA's.

4. DISCUSSION.

a. The applicant for an aircraft engine type certificate must prepare ICA's as part of that aircraft engine's type certification process. The ICA's would provide information for proper maintenance that would ensure engines of that type design in an ongoing state of eligibility for installation on aircraft. Holders of aircraft engine type certificates use the Airworthiness Approval Tag (FAA Form 8130-3) to document that eligibility at the time of initial production. A new aircraft engine with an airworthiness approval tag is viewed as "airworthy", and adherence to the ICA's will play a key role in keeping that engine airworthy through its operational life, or in a state of "continued airworthiness."

b. The term "airworthy" has no specific statutory or regulatory definition. In order to use an Airworthiness Approval Tag on a new aircraft engine, however, the holder of the type certificate must first establish that the engine conforms to its type certificate, and is in a condition for safe operation. This two-part test constitutes a practical definition of "airworthiness",

and is consistent with the test applied to the initial issuance of an aircraft's standard airworthiness certificate, and in the context of adjudication of the question of aircraft airworthiness. Therefore, for the purpose of this AC, an aircraft engine is considered "airworthy" when the following two conditions are met:

(1) The engine conforms to its type certificate. An engine conforms to its type certificate when the engine configuration is consistent with the type design and other data that is part of the type certificate, as well as other approved data such as these data related to repairs, modifications or alterations.

(2) The engine is in a condition for safe operation. An engine is in a condition for safe operation when the condition of the engine considering factors such as wear, damage, and deterioration does not prevent the engine from demonstrating compliance with those requirements of part 33 that relate to the safe operation of the engine, and does not result in an unsafe condition to the aircraft. This means, for example, that a turbine engine in a condition for safe operation could still comply with the safety analysis required by § 33.75.

The contents of this AC is arranged in three sections corresponding to the regulations in §§ 21.50(b), 33.4, and Appendix A to part 33.

SECTION 1

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND MANUFACTURER'S MAINTENANCE MANUALS HAVING AN AIRWORTHINESS LIMITATIONS SECTION (§ 21.50(b))

5. GUIDANCE FOR § 21.50(b).

a. General. Section 21.50(b) requires that the holder of a design approval for an aircraft engine for which application was made after January 28, 1981, shall furnish at least one set of complete ICA's to the owner of each type of aircraft engine upon its delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft, whichever occurs later, and thereafter make the ICA's available to any other person required to comply with any of the terms of those instructions.

b. Aircraft Maintenance Manuals. It is acceptable for the engine TC holder to furnish to the aircraft manufacturer for incorporation into the aircraft maintenance manual, the instructions that deal with maintenance of the engine installed on an aircraft. If this method is used however, the engine TC holder remains responsible for controlling the content and distribution of the engine section of the aircraft ICA's. The engine TC holder should establish a program, acceptable by the FAA, to control and distribute those sections of the aircraft ICA's that are used to show compliance with the engine TC requirements, including any component manuals. In this context, it should be clear that the aircraft manufacturer must adopt the engine TC holder's maintenance instructions, and should not alter those instructions.

Also, only the engine TC holder may make changes to the engine maintenance portion of the aircraft ICA's, and the aircraft manufacturer should accurately incorporate those changes. In the event the engine TC holder does not or can not provide a program to control the content and distribution of the engine maintenance section of the aircraft ICA's, then the engine TC holder should produce and distribute its own engine ICA's. In either instance, the engine "overhaul" manual should always be provided separately by the engine TC holder, since it deals with maintenance of the uninstalled engines.

c. STC's and PMA's, Repairs and Alternations. ICA's are also necessary for supplemental type certificates (STC's), part manufacturer approvals (PMA's), design changes, and any repairs or alterations that introduce new features that the existing ICA's do not adequately cover. In such instances, it is the responsibility of the STC or PMA holder, or the individual who receives the repair or alteration approval, to produce the required ICA's. The process of reviewing and acceptance of ICA's for STC's, PMA's, design changes, and repairs or alterations will be the same as that described in section 6.b. of this AC for type certifications. To assess the safety of such changes for type certification basis, the required ICA's should be in accordance with the current regulatory amendment. In cases where it is determined that the existing ICA's are adequate for the continued airworthiness of the altered product, then that determination should be noted in the design change approval to ensure the continued airworthiness of the product, for example in the "limitations and conditions" section of STC certificate.

SECTION 2

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS UNDER § 33.4

6. GUIDANCE FOR § 33.4, INSTRUCTIONS FOR CONTINUED AIRWORTHINESS.

a. In the context of a certification program under part 33, the ICA's prepared by the applicant should be submitted to the FAA for acceptance before the issuance of the engine TC. The ICA's may be incomplete at the time of type certification if a program exists to ensure their completion prior to delivery of the first aircraft with the engine installed, or upon issuance of a standard airworthiness certificate for the aircraft with the engine installed, whichever occurs later. The rule accommodates applicants who could not complete the ICA's until a specific aircraft application is identified. However, every effort should be made to complete the ICA's at the time of engine TC issuance. For airworthiness certification, it is not acceptable for the FAA to issue the certificate of airworthiness for an aircraft without complete ICA's. However, the availability of overhaul section, or manual portion of the ICA's for overhaul or other forms of heavy maintenance may be delayed until after the engine has entered service. In such cases, the applicant should provide a schedule that is acceptable to the FAA to complete the overhaul manual or section, normally within six months after the engine entering service. Meanwhile, no person, including the engine manufacturer, should be allowed to overhaul or perform any form of heavy maintenance without an overhaul or heavy maintenance manual; and the manual, when completed, becomes part of the

ICA's. The engine TCDS should incorporate a note prohibiting the overhaul or other form of heavy maintenance of engines until the overhaul manual is available.

b. Applicants should submit ICA's for acceptance to the Aircraft Certification Office (ACO) responsible for overseeing that type certification project. That same ACO will approve any airworthiness limitations and associated maintenance procedures. The Aircraft Evaluation Group (AEG) will review the ICA's and make recommendations on the maintenance and operational aspects of the ICA's. The ACO and AEG offices are jointly responsible for determining the acceptability of the ICA's, however, the final acceptance of the completed ICA's is the responsibility of the ACO.

c. If the engine ICA's are not completed prior to the time the engine TC is issued, applicants should include as part of the plan for completion, a process for keeping the ACO responsible for certifying the aircraft informed of the status and acceptance of the engine ICA's. Only with the ICA's completed, may the FAA issue a certificate of airworthiness on the aircraft. If an engine TC is issued before the ICA's are completed, a statement should be placed on the engine TCDS, stating that the engine ICA's are not completed and any aircraft with that engine installed is not eligible for airworthiness certification until the engine ICA's are completed and accepted by the FAA office certificating the engine.

SECTION 3

APPENDIX A TO PART 33

7. GUIDANCE FOR A33.1 - GENERAL.

a. The ICA's should include instructions for all engine parts. The instructions should provide for the continued airworthiness of the entire engine to the extent that the lack of specific instructions for any given part should not adversely affect an operator's ability to maintain the engine in an airworthy condition.

b. The determination of need for instructions regarding parts, subassemblies, assemblies or modules should include consideration of airworthiness limitations, safety assessments, classification of parts, and compliance requirements. Each part needs to be addressed either individually or as part of a group or system.

c. Specific inspections with "threshold" or "opportunity" schedule requirements should be clearly established in the ICA's. Additionally, when the engine is in the shop and the engine parts and components are exposed, the parts and components should be subjected to appropriate inspections to determine their eligibility for reinstallation in an engine for continued service. An adequate inspection program or opportunity inspections, is essential for the continued airworthiness of the engine.

d. The applicant should provide in the ICA's, a means to ensure accurate configuration control that complies with the type certificate for all parts, components, and

any combinations of parts or components, allowing the engine configuration to be properly identified during assembly or replacement.

e. For highly complex engine parts and components, the ICA's may be furnished by the manufacturers of those parts or components through the engine TC holder. However, if this is done, the engine TC holder's ICA's should clearly cross-reference the part or component manufacturer's instructions in the ICA's by revision level and date of publication, since those instructions become part of the complete ICA's as required by § 33.4, and should also be furnished to the owners or operators under § 21.50(b).

f. To comply with § 33.4, the engine TC holder should have a program for controlling the content and distribution of all engine ICA's, including part or component manuals or sections. The procedure for how to distribute the changes to the ICA's should be documented in the applicant's internal procedures manual. The program for managing changes to the ICA's is not required to be included in the ICA's that are distributed to owners and operators, but the revision history records, including revision number or level, affected pages or sections, and dates, should be included in the ICA's. These revision history records are important to establish the content of the "current manual," required to be used under part 43.

8. GUIDANCE FOR A33.2 - FORMAT.

a. The ICA's should be organized and cross-referenced in a clear, logical and usable fashion. Service Bulletins (SB's), as described in AC 20-114, form a different class of service document than those required for type

certification, and it is not recommended as a substitute for acceptable ICA's. Service Bulletins may be used as a vehicle for disseminating information, although the use of a temporary manual revisions is more appropriate for this purpose. It is not considered an undue burden to the TC holder to incorporate the appropriate information directly into the manuals using temporary manual revisions instead of using SB's. However, should the applicant desire to use SB's for incorporation by reference into the ICA's, the following criteria should be as follows:

(1) The SB referenced in the ICA's should be version specific. The use of a future revision note such as "the latest revision" is not acceptable.

(2) The technical content of the SB should be FAA approved.

(3) The SB should be distributed to the all owners of the engine as provided in § 21.50(b).

b. As noted in § A33.4, Airworthiness Limitations, there should be a "principal manual" in the ICA's when there are multiple volumes. To provide for "practical arrangement," that principal manual should also include a description of the break down and application of the manuals or sections, including a table of contents listing all of the other manuals or sections that constitute the complete ICA's under § 33.4.

c. The FAA has accepted a variety of formats including the Air Transport Association (ATA) 100 Specification. The documents that constitute the complete ICA's need to be clearly identified as

containing the ICA's required under § 33.4, regardless of format used.

9. GUIDANCE FOR A33.3 - CONTENT. It should be noted that the ICA's are intended to be a complete document, therefore it should be emphasized that the "information" must be contained in the manuals or sections, and should not be in unreferenced documents, such as service letters. ICA's must be prepared using the English language, but, metric system units may be used for the technical aspects of the product in the areas of design, production, operation, or maintenance.

a. Guidance for A33.3(a) Engine Maintenance Manual or Section.

(1) A33.3(a)(1) and(a)(2). The description of the engine features and data, its components, systems, and installations should contain sufficient details to the extent necessary to perform engine maintenance. This may include any necessary warnings, cautions and guidance, such as applicable metric system or U.S. Standard System requirements. This is necessary to meet the regulatory requirements relating to the performance of maintenance for recording and surveillance of the actual work performed, and the methods, techniques and practices employed.

(2) A33.3(a)(3). The instructions should also address all accessories, cover-plates, etc., that may be attached to, mounted on, or driven by the engine, since their interfaces affect the engine. Complete installation instructions are required for those parts and accessories that are a part of the engine type design. Minimum interface instructions and any appropriate

specifications, warnings, or cautions should be provided for those areas where non-engine TC accessories or parts could be installed on the engine at a later date.

(3) A33.3(a)(4). The ICA's should provide adequate information in engine control and operations described in this paragraph to the extent necessary to perform the maintenance at the levels specified in the ICA's.

(4) A33.3(a)(5). The servicing information includes both engine type design parts, and systems or components that are not part of the engine TC, but are installed integrally with or dependent upon the engine. For example, shared oil systems with accessories or propellers, gear drive interfacing with the engine. In these instances, it is important to coordinate with the ACO that is responsible for the engine installation and the acceptance of the servicing information.

(5) A33.3(a)(6).

(a) Scheduling information need not be provided for "every part", but rather the scheduling information should provide for the continued airworthiness of the entire engine to the extent that the lack of specific scheduling information on any part will not adversely affect the continued airworthiness of the engine. The substantiation for scheduling information may be derived from engine certification testing, development testing, service experience of the same or similar type design engine, or a combination thereof. The ICA's should state that those parts not scheduled need not be serviced other than to be inspected when exposed.

(b) A single top level "overhaul" time between overhaul (TBO) for the engine could be sufficient when it provides an appropriate interval to ensure the continued airworthiness of the entire engine.

(c) An applicant should provide one or several scheduling options for the ICA's. The engine parts, components and accessories should be monitored and serviced while installed, otherwise the products should be scheduled for appropriate maintenance or overhaul to ensure their continued airworthiness. For example, this could mean "soft times" for each module, assembly, sub-assembly, accessory, or part of the engine. If the engine is taken off aircraft, then the ICA's should provide maintenance or overhaul instructions that are necessary to determine their eligibility for reinstallation in an engine and continued service use. This could also mean that the disassembly of the engine, module or component assembly to the piece part level may be required before returning the engine to service if the exposure occurs after a considerable number of hours or cycles in service. Refer to paragraphs in Section 9b for more information.

(d) The applicant may refer to a component manufacturer as the source for the scheduling information. However, in that case the manufacturer's component manual is part of the ICA's and the TC holder remains responsible, even though the information contained in the component manual originates with the component manufacturer. It is the responsibility of TC holder to provide the scheduling information in the principal ICA's (e.g., engine maintenance manual), defining when the maintenance referenced in the component manual should be

performed. There may be instances where only the original equipment manufacturer (OEM) is approved to work on a part or component due to the complexity of the maintenance task. In such instance, when approved by the cognizant ACO, only the recommended scheduling periods and the manufacturer's name and address would be referenced in the ICA's.

(e) The ICA's should clearly identify and reference any component manuals that are part of the ICA's. In such cases, the TC holder remains responsible to control the content and changes in component manuals in accordance with the program provided to the FAA under section A33.1(c) of the Appendix to part 33. The TC holder may work in conjunction with the component manufacturer to distribute changes to component manuals.

(f) The TC holder should clearly define what level or amount of inspection and repair or replacement of parts constitutes an "overhaul". This is critical for several reasons. Section 33.19 requires that an engine be designed and constructed to minimize the development of an unsafe condition between overhaul periods, which includes components and accessories that are part of the type certificate. Further, for the issuance of an export airworthiness approval on a "newly overhauled" product defined under § 21.321(b)(4), it is necessary to know what work constitutes a complete overhaul of the product in order to make the correct airworthiness determination for export. Section 43.2 describes in general terms what constitutes overhaul, but the ICA's should detail what work on the particular engine type meets that definition. The recommended overhaul periods should

be included in the ICA's, and the necessary cross-references would typically not be in the airworthiness limitations section, unless it was necessary to prevent a failure or malfunction that could directly lead to an unsafe or hazardous condition.

(g) The applicant must include an inspection program in the ICA's necessary to provide the continued airworthiness of the engine. The initial maintenance inspection requirements, derived from § 33.90 testing, in conjunction with other certification tests, analyses, and service experience, if available, are typically used to develop the inspection program for parts, subassemblies, assemblies or modules. The program need not be defined in the airworthiness limitations section. However, such recommendations should cross-reference any airworthiness limitations that are required to be accomplished in conjunction with the inspection program. The development of an adequate inspection program should also include subsequent inspections (periods, frequency, and parts involved) and, when applicable, the procedures for increasing inspection periods, such as a sampling program or service experience of the same or similar type design engine. For systems, it is necessary to include an assessment of the entire system which may require joint engine, aircraft, or propeller systems review and coordination with the engine installing ACO.

(6) A33.3(a)(7). The troubleshooting information should assure that the engine and its modules, assemblies, sub-assemblies and parts perform their intended functions within the approved flight envelope and prevent engine malfunctions. The probable malfunctions that could occur should be addressed

either to rectify them or replace the affected part or component before continued operation.

(7) A33.3(a)(8). The applicant should provide in the ICA's a means to ensure configuration control such that the proper parts, components, and any combinations are identified and comply with the type certificate.

(8) A33.3(a)(9). The list of tools should be adequate enough to complete the work. The list may consist of several lists located in the appropriate sections of the ICA's where the work is described. It is recommended however, that the list of tools and equipment be centrally located in the front of the manual or section, to better facilitate locating and ordering tools and equipment. Also, the list should include a cross-reference to the appropriate section where directions to the method of using each tool is located. Special tools should be highlighted, since there is a specific regulatory requirement for the use of a special tool when performing maintenance.

b. A33.3(b). Engine Overhaul Manual or Section.

It is not necessary to define a single overhaul time for the entire engine, or even modules or assemblies. However, the experience has shown that every part of the engine is exposed for inspection at some point during the life of the engine.

The TC holder should clearly define what level or amount of inspection and repair or replacement of parts constitutes an "overhaul". Utilizing the modular maintenance concept is a method of achieving this overhaul in an efficient manner, though each part may

effectively be overhauled at different times or cycles. The recommended overhaul periods should be included in the ICA's, and the necessary cross-references would typically not appear in the airworthiness limitations section, unless it was necessary to prevent a failure or malfunction that could directly lead to an unsafe or hazardous condition.

Specific inspections with "threshold" or "window" schedule requirements should be established in the ICA's. The "window" schedule, for example, may be established to coincide with a life limited component removal. Additionally, when an engine is in the shop and areas of the engine are exposed on an opportunity basis, parts and components of those areas should be subjected to appropriate inspections to determine the eligibility of a part or assembly for reinstallation and continued service use.

(1) A33.3(b)(1). The engine overhaul manual or section should contain sufficient details to the extent necessary for disassembly, overhaul and reassembly to be performed. This also includes any necessary warnings, cautions, and guidance.

(2) A33.3(b)(2):

(a) The determination of adequate inspection criteria should provide for appropriate inspection of each part of the engine, subassembly, assembly, and module as well as systems and components. Inspections should identify the required action at each level, such as part replacement, repair, or further detailed inspection.

(b) The accuracy and reliability of inspection techniques need to be consistent with the criticality of

the parts being inspected, and the types of defects for which the inspection is being conducted. During inspections, when special emphasis or a higher awareness is needed, the ICA's should clearly identify those critical parts and key features or areas. The cleaning could have a significant effect on inspectability, since improper cleaning can result in missed inspection of potentially hazardous defects. Therefore, the proper cleaning methods should be emphasized with the appropriate cautions where improper cleaning could be a factor.

(c) A33.3(b)(3). The overhaul manual should contain details for all fits and clearances relevant to the engine and components, structural integrity, and functionality a for new and worn parts. While these fits and clearances may be identified in the manual as "limits," they are not considered "airworthiness limitations". However, these limits, if exceeded, may mean that the component or part is not airworthy. Therefore, such limits need to be analyzed and adjusted accordingly.

(4) A33.3(b)(4):

(a) The main objective of this requirement is that worn or substandard parts that do not meet the ICA's inspection limits can not be returned to service. Such parts should be either replaced or repaired in order to make the engine airworthy. While the ICA's need not contain repairs for all engine parts, the ICA's should identify when or under what conditions parts must be replaced or repaired. If a part or component fails to meet the requirements in the Inspection/Check section of the ICA's, replacement is an acceptable alternative to repair in order to maintain the continued airworthiness of the engine.

(b) Repairs in the ICA's should be complete, and may include personnel training requirements, but should not contain provisions driven solely by economic concerns. When the repair is accomplished in accordance with the ICA's, the result is a part that conforms to the approved type design data, and if it is safe for operation would constitute an airworthy part.

(c) The FAA may allow, and approve of other repair data that is not part of the TC and is not reflected in the ICA's. However, when design change data for repair or alteration constitutes a substantial change to the type design, and therefore could be considered major, the need for information in the ICA's for such a repair or alternation should be evaluated, since any repair or alteration could introduce a new feature that does not exist in the original type design. This is particularly true for an STC. Any major design change data, whether in support of a repair or alteration, which is substantive enough to require significant additions to the ICA's, should be approved as an STC or amended TC.

(5) A33.3(b)(5). The ICA's should also contain a means to ensure configuration control such that the proper parts, components, and any combinations that comply with the type design, are identified during assembly or replacement.

(6) A33.3(b)(6):

(a) The ICA's should contain test acceptance criteria that are identified as "limits," even though not "airworthiness limitations." However, changes to such engine test acceptance criteria that is safety related should be considered major design changes and, may

be changed with appropriate FAA approved data to substantiate the change.

(b) The manual or section should include instructions for testing an engine after overhaul. This should also include any minimum testing requirements for a single overhauled component or model when applicable.

(7) A33.3(b)(7). Any special containers, equipment and tools that may be necessary to comply with the instructions for storage should be included. The storage limits should also include any environmental restrictions, such as limits for temperature, humidity, etc.

(8) A33.3(b)(8). The list of tools should be adequate to complete the work. The list may consist of several lists located in the appropriate sections of the ICA's where the work is described. It is recommend however, that the list of tools necessary for overhaul is centrally located in the front of the manual to facilitate locating and ordering them. Also, the list should include a cross-reference to the appropriate section where the directions to the method of using each tool is located or where the tools are utilized. Special tools should be highlighted, since there is a specific regulatory requirement for the use of a special tool when performing maintenance.

10. GUIDANCE FOR A33.4 - AIRWORTHINESS LIMITATIONS SECTION.

a. Sections 43.16 and 91.403 provide that the requirements stated in an airworthiness limitations section (ALS) must be complied with, however, "inspection intervals" and "maintenance actions"

required by an ALS may be adjusted or changed under an FAA approved alternative program. "Airworthiness limitation mandatory replacement times," however, may not be changed without FAA engineering approval. The ALS should include only information that is approved, by the cognizant FAA certificating office.

b. The ALS should appear in the "Principal Manual." If the ICA's consist of an engine maintenance manual and an engine overhaul manual, the principal manual should be the engine maintenance manual. Although the owners must receive all manuals in accordance under § 21.50(b), they may only be concerned with the day to day maintenance instruction contained in the engine maintenance manual. The ALS may appear in both manuals, which is acceptable as long as both ALS are identical and revised concurrently. The ALS should be prominently located, should be entitled "The Airworthiness Limitation Section" and should be identified as having been "FAA Approved" at the beginning of the section or on the cover page of the section.

/s/

Jay J. Pardee

Manager, Engine and Propeller Directorate

Aircraft Certification Service

APPENDIX J

[SEAL] Federal Aviation Administration

Memorandum

Date:	March 23, 2012
To:	See Distribution List
From:	David W. Hempe, Manager, Aircraft Engineering Division, AIR-100 [/s/ D. Hempe]
Prepared by:	John Cerra, Engineering Procedures Office, AIR-110
Subject:	Policy Statement, PS-AIR-21.50-01: Type Design Approval Holder Inappropriate Restrictions on the Use and Availability of Instructions for Continued Airworthiness
Memo No:	AIR-100-11-100-002
Regulatory Reference:	Title 14 of the Code of Federal Regulations (14 CFR) 21.50
Policy Reference:	Order 8110.54A, *Instructions for Continued Airworthiness*

Summary

This policy statement addresses actions taken by some Type Certificate (TC) and Supplemental Type Certificate (STC) Design Approval Holders (DAHs), hereafter referred to as DAHs, to inappropriately restrict the availability, distribution, and use of Instructions for Continued Airworthiness (ICA) through restrictive language in the ICA or through restrictive access or use agreements. This guidance is intended to help:

1) FAA employees determine whether DAH actions for distributing ICA meet the intent of Title 14 Code of Federal Regulations (14 CFR) 21.50(b), and

2) DAHs determine whether their practices meet the intent of the CFR.

Background

ICA constitute only those maintenance instructions recommended by a DAH in compliance with the airworthiness standards (e.g., 14 CFR 23.1529, 25.1529, 27.1529, 29.1529, 31.82, 33.4 and 35.4) that are acceptable to or approved by the FAA to maintain a type certificated product in an airworthy condition. Section 21.50(b) requires the DAH to "furnish at least one set of complete Instructions for Continued Airworthiness to the owner of each type aircraft, aircraft engine, or propeller …. Thereafter, the holder of a design approval must make those instructions available to any other person required … to comply

with any of the terms of those instructions." The same regulation requires that "changes to the Instructions for Continued Airworthiness shall be made available to any person required … to comply with any of those instructions."

The intent of §21.50(b) is to provide for the development and distribution of the information necessary to maintain products in an airworthy condition. The scope of who ICA is distributed to is limited to owners/operators and those authorized by the FAA to perform maintenance on those products (or components thereof). It is not intended to require that ICA be made available to any person seeking ICA for purposes other than preventive maintenance, maintenance, or alteration, unless that person has a regulatory requirement to comply with the terms of ICA.

Making ICA Available to Maintenance Providers

Recent questions have emerged regarding requirements for a DAH to make ICA available to a maintenance provider. FAA Order 8110.54A, paragraph 6-4(a), explains the criteria that must be met if the person requesting the ICA is not the product owner or operator. For example, if a maintenance provider lacks the proper rating, but desires to perform maintenance for an owner/operator, the maintenance provider would need to obtain the necessary ICA directly from the owner/operator. Once the DAH furnishes ICA to the owner/operator, the owner/operator can provide it to the maintenance provider(s) of their choice. The maintenance provider could then seek the proper rating from the FAA under the provisions of Part 145.

It is not appropriate for a DAH to place limitations on the use of its ICA between the owner/operator and the maintenance provider, whether the maintenance provider is rated or not, to perform that maintenance. A maintenance provider that is not rated, or is seeking the appropriate FAA rating to perform maintenance on the owner/operator's products, may obtain ICA from the owner/operator. For those maintenance providers that have the necessary FAA rating, FAA Order 8110.54A, chapter 6 paragraph 4.a, states that the DAH would be required to make the ICA and any subsequent revisions available directly to the maintenance provider upon its request.

Regulatory Justification for Owner/Operator Distribution of ICA to Maintenance Providers

From the Final Rule discussion, Federal Register Volume 45, No. 178, Page 60168, dated September 11, 1980, it is clear that the regulations intended for owners/operators to be able to share ICA with those whom they seek to perform their maintenance.

> "The Instructions for Continued Airworthiness must be furnished to the aircraft owner/operator who is the person responsible for maintaining the aircraft (including the propeller). The owner/operator may not be authorized to maintain the propeller, but the owner/operator can place the instructions in the hands of persons who are authorized."

Although this particular FAA response to a comment concerns propellers, it is clearly applicable to all aspects of maintenance. Few, if any, owners, operators, or maintenance entities are qualified to perform

maintenance on all kinds of aircraft and related products and articles, creating the need for owners and operators to be able to pass the instructions to their maintainers. Based on the above discussion, a DAH may not inhibit an owner/operator from distributing ICA to current or potential future maintenance providers. Therefore, it is not acceptable for a DAH to limit the distribution of ICA through restrictive access or use agreements, or by adding restrictive language that would control the use of ICA by an owner/operator with respect to the maintenance of its product.

In addition, while a DAH must identify the applicability of its ICA, the FAA will not accept restrictive statements or terms in ICA documents, or restrictive access or use agreements that limit the appropriate availability or use of the ICA where the FAA has determined the ICA are acceptable for maintaining a DAH's product with FAA-approved replacement parts, articles, or materials installed (e.g., Parts Manufacturer Approval (PMA) items).

While not exhaustive, the FAA finds the following practices of using restrictive language in the ICA or through restrictive access or use agreements unacceptable under the provisions of 14 CFR §21.50(b) and related ICA airworthiness requirements:

1) Requiring the owner/operator to only install DAH-produced or authorized replacement parts, articles, appliances, or materials.

2) Requiring that alterations or repairs must be provided or otherwise authorized by the DAH.

3) Requiring the use of only maintenance providers or other persons authorized by the DAH to implement the ICA.

4) Establishing, or attempting to establish, any restriction on the owner/operator to disclose or provide the ICA to persons authorized by the FAA to implement the ICA.

This policy was coordinated with the Aircraft Maintenance Division, AFS-300. If you have any questions or comments, please contact John Cerra, AIR-110, at (405) 954-7075 or at john.cerra@faa.gov.

DISTRIBUTION:
All Managers, Aircraft Certification Offices
Manager, Aircraft Maintenance Division, AFS-300
Manager, Technical and Administration Support Branch, AIR-113
Manager, Technical Programs Branch, AIR-120
Manager, Avionics Systems Branch, AIR-130
Manager, Safety Management Program Branch, AIR-150
Assistant Chief Counsel, Regulations Division, AGC-200
Manager, Long Beach Aircraft Evaluation Group, LGB-AEG
Manager, Boston Aircraft Evaluation Group, BOS-AEG
Manager, Kansas City Aircraft Evaluation Group, MKC-AEG
Manager, Ft. Worth Aircraft Evaluation Group, FTW-AEG
Manager Seattle Aircraft Evaluation Group, SEA-AEG

APPENDIX K

ORDER 8110.54

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS RESPONSIBILITIES, REQUIREMENTS, AND CONTENTS

[SEAL - FEDERAL AVIATION ADMINISTRATION]

July 1, 2005

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: **A-W (IR/FS)-3; A-X (CD/FS)-3; A-FFS-1, 5 (ALL); A-FAC-0 (ALL); AMA-220 (25 copies); AMA-250 (10 copies); AFS-600 (3 copies); AEU-100**

Initiated By: AIR-140

* * *

CHAPTER 1. PURPOSE AND ORDER ADMINISTRATION

1-1. Purpose. This order rescinds previous policy memorandums on interpretation of FAR 21.50B dated August 3, 1982 and August 8, 1983, and shows aircraft/engine certification office (ACO/ECO) and aircraft evaluation group (AEG) staffs how to review and find Instructions for Continued Airworthiness (ICA) acceptable. We also include their responsibilities for these tasks. This order supplements Title 14 of the Code of Federal Regulations (CFR) § 21.50(b) and the appendixes of §§ 23.1529, 25.1529, 27.1529, 29.1529, 31.82, 33.4, and 35.4. From now on, we refer to these 14 CFR sections and appendixes as the "applicable airworthiness regulations."

1-2. Distribution. Distribute this order to branch levels of the Aircraft Certification Service, Flight Standards Service, and the Office of Aviation Systems Standards in Washington Headquarters; to branch levels in the aircraft certification directorates and regional flight standards divisions; to aircraft evaluation groups; to international field offices and flight standards district offices; to all aircraft certification offices; to the Flight Standards Branch and Aircraft Certification Branch at the FAA Academy; to the Suspected Unapproved Parts Program Office; and to the Brussels Aircraft Certification Staff and Flight Standards Staff.

1-3. Cancellation. This order cancels Order 8110.50, *Submitting Instructions for Continued Airworthiness for Type Certificates, Amended Type Certificates and Supplemental Type Certificates*, dated October 20, 2003.

1-4. Related Publications (Latest Revisions). See appendix 8.

1-5. Definitions. See appendix 9.

1-6. Acronyms. See appendix 10.

1-7. Authority to Change this Order. The Aircraft Certification Service, Aircraft Engineering Division (AIR-100), and the Flight Standards Service, Aircraft Maintenance Division (AFS-300), can revise or cancel this order after coordinating with each other.

1-8. Records Management. For guidance on keeping or disposing of records, refer to FAA Orders 0000.1, *FAA Standard Subject Classification System*; 1350.14, *Records Management*; and 1350.15, *Records, Organization, Transfer, and Destruction Standards*. Or, see your office Records Management Officer or Directives Management Officer.

CHAPTER 2. REGULATORY REQUIREMENTS FOR ICA

2-1. Requirement for ICA.

a. Title 14 CFR § 21.50(b) requires design approval holders to furnish ICA per the applicable airworthiness regulations to the product owners. Design approval holders must furnish ICA on delivery of the affected aircraft or issuance of the aircraft's first standard airworthiness certificate, whichever occurs later. They must also make those instructions available to any other person required to comply with any of the terms of those instructions. The applicable airworthiness regulations also require that ICA be

acceptable to the Administrator. That is the basis for our review and finding of acceptability. The design approval holder is responsible for ensuring there is enough information in the ICA to maintain the continued airworthiness of the product.

b. Title 14 CFR § 21.50(b) requires ICA for design approvals applied for after January 28, 1981. We do not use the original certification basis to determine if ICA are required. We use the date of the application for design approval. For example, in 1965 we required applicants for a type certificate (TC) with a certification basis of Civil Air Regulation 4b to develop maintenance instructions. However, we did not require them to furnish the instructions to product owners. Today, design approval holders of a supplemental type certificate (STC) or amended TC for this same product must furnish ICA for the areas changed on the product that meet the applicable airworthiness regulations per 14 CFR § 21.50(b). They must do this, even though the original certification basis did not require this.

c. We will not retroactively require design approval holders to develop, or change, ICA on any previous design approvals. However, we will require ICA for these approvals if we (which includes the ACO, ECO, and AEG) determine there isn't enough information to maintain the product's airworthiness, or issue new regulations requiring ICA (that is, SFAR 88). We find these ICA deficiencies during investigations of airworthiness concerns, assessments of potential unsafe conditions, or special certification reviews.

2-2. Purpose of ICA. ICA keep the product airworthy. They provide documentation of necessary methods, inspections, processes, and procedures.

2-3. Design Approvals Needing ICA. As stated in paragraph 2-1, we require design approval holders to furnish acceptable ICA to product owners per 14 CFR § 21.50(b). We also require that they make the ICA available to any other persons required to comply with the ICA. We classify *all* the following as design approvals:

a. TCs

b. Amended TCs

c. Changes to type design approved under 14 CFR §§ 21.97 and 21.99

d. STCs

e. Amended STCs

2-4. Parts Manufacturer Approval (PMA) May Change ICA. Although a PMA is a design and production approval, effect on the eligible product ICA must still be considered and furnished per Order 8110.42, *Parts Manufacturer Approval Procedures*.

2-5. ICA for TSO Authorization and Import TSOs (Letter of TSO Design Approval) only apply to applicants of technical standard order (TSO) authorizations if the TSO requires ICA or maintenance instructions. If so, as with all other design approvals, we must review the ICA and determine if it is acceptable. For example, see Appendix 4 of TSO-C77b,

Gas Turbine Auxiliary Power Units. In it, applicants must provide ICA similar to that required in 14 CFR § 33.4, Appendix A.

2-6. Major Repairs May Change ICA. Because major repairs can change existing maintenance practices or inspection intervals, we require the developer of the repair to assess them for changes to the ICA or existing maintenance practices. For example, major structural repairs may need more inspection. Repairs on static engine components could even influence the life limits on critical rotating parts. The person holding the inspection authorization or authority to approve the return to service is responsible for determining if any changes are necessary to the existing product ICA resulting from the major repair. Then, the person must ensure the revised ICA are available to the owner or operator.

2-7. Major Alterations May Change ICA. Because major alterations are subject to the same airworthiness requirements as the product, we require the developer of the alteration to assess all major alterations for changes to the product-level ICA. Then, they must make the revised ICA available to the owner of the product. See Order 8300.10, *Airworthiness Inspectors Handbook*, for more information on the requirement for ICA on major alterations.

2-8. ICA in Manufacturer's Service Documents. We find that FAA-approved parts of publications by a TC holder (or appliance or component manufacturer) about safety, product improvement, economics, and operational and/or maintenance practices can result in changes to the type design. When they change the type design, the publications constitute a design approval,

and are subject to the applicable airworthiness requirements and 14 CFR § 21.50(b). Consequently, we expect the TC holder/manufacturer to assess the change to type design and provide all necessary information to correctly maintain the product throughout its operational life.

a. Manufacturers/TC holders can use their service documents as the method of making changes to ICA available if:

(1) The documents contain all required information for the change to type design; and

(2) They furnish the documents to the FAA and all owners of the product per the program identified in section 5-1, paragraphs k and l of this document.

b. Typical publications include: service bulletins; all-operator's letters; service newsletters; and service digests or magazines. They do not include publications required for FAA type certification or approval, such as flight manuals and certain maintenance manuals.

See FAA Advisory Circular (AC) 20-114, *Manufacturer's Service Documents,* for more information.

2-9. ICA for Special Classes of Aircraft. Title 14 CFR § 21.17(b) covers special classes of aircraft, including the engines and propellers installed on them. This class of aircraft includes gliders, airships, and other non-conventional aircraft for which airworthiness standards do not exist. In these

instances, the content of a "complete set" of ICA depends on which airworthiness standards the FAA determines appropriate. To determine content, the applicant must use appendixes from the applicable airworthiness regulations determined by the FAA.

2-10. ICA for Military Surplus Aircraft.

a. Title 14 CFR § 21.25a(2) covers aircraft manufactured to meet the requirements of, and accepted for use by, one of the U.S. armed services. These aircraft were later modified for a special purpose. Before we will issue a TC under this category, we require ICA for the aircraft, engines, and alterations for the special purposes. The baseline ICA or maintenance instructions for a surplus aircraft and its engines are those instructions approved and used by the U.S. military in the maintenance of the aircraft and components or a civil counterpart that is type certified. They should submit enough data to the FAA to show these ICA are technically valid for the aircraft's intended civil use. These data include:

(1) Identification of parts of the military technical publications that are NOT used for the restricted category special purpose, such as instructions on uniquely military equipment, weapons, armor, and military avionics. These parts are removed for civil certification.

(2) ICA for equipment that replaces the existing products and appliances, and installation of new products and appliances for the special purpose.

b. When seeking a TC under 14 CFR § 21.27(b) for military surplus aircraft with a previously type

certificated civil counterpart, applicants must provide ICA if:

(1) The regulations required ICA when the aircraft was accepted for operational use by the armed forces, or

(2) The civil counterpart TC was applied for after January 28, 1981. The ICA should contain the information required by the applicable airworthiness standards for the aircraft type (14 CFR parts 23, 25, 27, or 29).

CHAPTER 3. ICA FORMAT AND TYPES OF DATA

3-1. What the ICA Should Include, Overall – Applies to all Design Approval Holders.

a. ICA for each aircraft must include:

(1) ICA for each engine, propeller, and appliance required by the applicable airworthiness regulations, and

(2) Any required information about the interface of those engines, propellers, and appliances with the aircraft.

b. If the ICA are not supplied by the manufacturer of an appliance, engine, or propeller installed in the aircraft, then the ICA for the aircraft must include the information essential to the aircraft's continued airworthiness.

3-2. How to Format the ICA.

a. If you are in an ACO, you should tell applicants to prepare ICA in English, as a manual or manuals, depending on how much data they provide. The manuals need to be easy to read and follow. Each chapter or section should give detailed instructions for completing a task. All manuals should have a method of recording updates to their content, such as a list of effective pages. You can refer applicants to sample formats in the Air Transport Association's iSpec 2200, *Information Standards for Aviation Maintenance*, latest edition, and General Aviation Manufacturers Association's Specification No. 2, *Maintenance Manual*, dated September 1, 1982.

b. If there are multiple manuals, there should be a principal manual that describes the other manuals and how to apply them. It should also have a table of contents of all other manuals. The principal manual is the one used for day-to-day maintenance of the aircraft, engine, or propeller. Overhaul manuals, component maintenance manuals (CMM), maintenance review board (MRB) reports, and service bulletins do not offer this information.

c. If previous ICA or maintenance documents do not exist, or were developed before January 28, 1981, the ICA submitted for a subsequent design change (after January 28, 1981) should follow the format requirements in the applicable airworthiness regulations. Regardless of the format, you should review any submittal of ICA containing the essential information for acceptability.

3-3. ICA Content for Specific Design Approvals.

a. The appendixes in the applicable airworthiness regulations specifically say what must be in the ICA. Chapter 4 of this order provides more detail on the information required per the applicable airworthiness regulations. Besides the information in paragraphs 3-3b through 3-3e, all ICA submitted to you:

(1) Must be specific to the product, not general. It's been our experience that applicants rely too much on "standard practices" or other general guidance as the only installation and maintenance details. Often, type design data packages refer to AC 43-13-1B, *Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair*, for installation and maintenance instructions. That guidance is general, in that it is acceptable only when there are no manufacturer repair or maintenance instructions. It allows an owner, operator, or installer to choose many options for installation or maintenance. Although some standard practice manuals are acceptable for use on a specific task, they are not acceptable as the "complete set" of ICA. We must have product-specific ICA to find that the configuration complies with criteria set by the certification basis. Applicants should substantiate any use of standard practices documents applicable to the configuration being certified.

(2) Must contain the Airworthiness Limitations Section (ALS) statement shown in the applicable airworthiness regulations even when the design approval does not affect the ALS. We require

this to document that the ALS has been reviewed and the applicant addressed any changes or impacts.

(3) Must include applicants' program showing how they plan to distribute changes to the ICA made by them or by the manufacturers of products and appliances installed.

b. *ICA for a TC* must have all information required by the appendix of the applicable airworthiness regulations, as shown in chapter 4 of this document. For example, for a new aircraft being type certificated to 14 CFR part 25, applicants' ICA should include all items marked in this order as "(Aircraft)." An engine TC project should include all information marked "(Engine)." The maintenance manual is marked for both "(Aircraft) and (Engine)," because the regulations require maintenance manuals for both the aircraft and engine.

c. *ICA for an Amended TC* that designates a new model product must include all required information in the appendix of the applicable regulations, as shown in chapter 4 of this order. Applicants can use ICA from the baseline product where the processes and procedures are identical with the new model. Applicants must develop new ICA to cover differences between the earlier version and a new product.

d. *ICA for an STC or Amended STC* should cover only the items changed or affected by the design change for which application is made. This includes other systems, parts, or areas of the aircraft. For example, if an STC describes how to install a global

positioning satellite (GPS) system, it will not affect – and doesn't need to address – ICA for the engine.

(1) However, the submitted ICA must include all applicable items from the regulations for the installation. Also, the ICA must include any appropriate information about the GPS antenna and its installation. If the GPS is critical to operations, requirements for periodic performance checks must also be in the ICA. We consider ICA that cover only the affected design change as complete under 14 CFR § 21.50(b).

(2) If the design change does not affect or change the existing ICA or maintenance documentation, the applicant can submit an *impact assessment* of the need for ICA. This satisfies the "complete set" requirement. The assessment must show that the STC project does not change any information, procedures, process, requirements, or limitations in the current ICA or maintenance documentation. Therefore, the original design approval holder's ICA still applies. After completing the assessment, the applicant must submit either recommended changes or a statement that the existing ICA apply.

e. *ICA for All Other Changes to Products* must cover the systems, parts, or areas of the aircraft affected or changed by the design change for which application is made. Other product changes include changes to type design approved under 14 CFR §§ 21.97 and 21.99, PMAs, and major repairs or alterations. Managing ACOs/ECOs, AEGs, and FSDOs will help an applicant determine the final content requirements.

(1) If the design change does not affect or change the existing ICA or maintenance documentation, the applicant can submit an *impact assessment* of the need for ICA. This satisfies the "complete set" requirement. The assessment must show that the certification project did not change any information, procedures, process, requirements, or limitations in the current ICA or maintenance documentation.

(2) Therefore, the original design approval holder's ICA still apply. After completing the assessment, the applicant must submit either recommended changes or a statement that the existing ICA apply.

f. To ensure completeness, appendixes 1-7 of this order are checklists for each specific product, and must be a basis for review. There may be design features or product mission considerations that need specific ICA that are not on the checklists. Therefore, do not view the checklists as all-inclusive. The engineer and AEG inspector should always use their best judgment when determining if the ICA are complete.

CHAPTER 4. REQUIRED MANUALS OR SECTIONS

4-1. Airworthiness Limitations Section (ALS).

a. For an aircraft, balloon, engine, or propeller, there must be a separate and distinguishable ICA section, called "Airworthiness Limitations." The ALS must prominently display the statement as shown in the appendix of the applicable airworthiness

regulations. The applicable airworthiness regulations require the applicant to include the following in the ALS:

(1) Approved mandatory replacement times for type certification;

(2) Approved mandatory inspection times for type certification; and

(3) Inspection procedures for those approved mandatory times.

b. If the ICA consists of multiple manuals, require applicants to include the ALS in the "principal manual" and do not allow reference to any other documents. Work with the applicant to identify the principle manual. In general, the principle manual will be the document used for maintenance. However, it may also be the document used for scheduled maintenance to ensure all required inspections and associated limitations are contained within a single document. ICA complexity and the type of product will determine assignment of the principle manual.

c. We consider paragraphs 4-1(a)(1) through 4-1(a)(3) critical. The product's airworthiness could be compromised if an aircraft, balloon, engine, or propeller does not comply with the inspection and replacement times and procedures in those paragraphs. Applicants typically identify these items when they perform safety assessments on the product's structure and systems.

d. Examples of items required for type certification are structural inspections per 14 CFR

§ 25.571, § 27.571, and § 29.571, and fuel system requirements per § 25.981 (Transport Category Aircraft).

e. For regulatory requirements, see:

∞ Title 14 CFR § 23.1529, Appendix G, G23.4;
∞ § 25.1529, Appendix H, H25.4;
∞ § 27.1529, Appendix A, A27.4;
∞ § 29.1529, Appendix A, A29.4;
∞ § 31.82, Appendix A, A31.4;
∞ § 33.4, Appendix A, A33.4; and
∞ § 35.4, Appendix A, A35.4.

4-2. Certification Maintenance Requirements (CMR) (for Transport Category Airplane) are required inspections or maintenance tasks. They apply to equipment, systems, and power plant installations. They are performed at certain times to detect or correct safety-significant latent failures (failures not known to the flight crew). CMRs are required by the type design and to maintain a product's airworthiness. CMRs are equal to a limitation and required as part of the ICA. See AC 25-19, *Certification Maintenance Requirements*, for more information.

4-3. Aircraft Maintenance.

a. These manuals or sections must explain aircraft/rotorcraft features, and give information to the extent necessary to conduct aircraft/rotorcraft maintenance or preventive maintenance, including:

(1) Description of all systems and installations, including engines, propellers, and

appliances (for aircraft/rotorcraft) and accessories (for engines).

(2) Removal and installation instructions for parts, including any required equipment and precautions.

(3) Description of how the aircraft components, installed appliances, and systems operate and are controlled, including special procedures and limitations.

(4) Servicing information, including servicing points (location and access), capacities of tanks and reservoirs, types of fluid used, pressures applicable to the various systems, and any required equipment and precautions.

(5) Location of access panels for inspection and servicing.

(6) Location of lubrication points and lubricants to use, including any required equipment, and precautions.

(7) Aircraft towing instructions, including any required equipment, precautions, and limitations.

(8) Aircraft jacking, mooring, and leveling instructions, including any required equipment, precautions, and limitations.

(9) Lifting and shoring instructions, including required equipment and precautions.

(10) Weight and balance instructions to determine the center of gravity.

b. For regulatory requirements, see:

∞ Title 14 CFR § 23.1529, Appendix G, G23.3(a);
∞ § 25.1529, Appendix H, H25.3(a);
∞ § 27.1529, Appendix A, A27.3(a); and
∞ § 29.1529, Appendix A, A29.3(a).

4-4. Aircraft Maintenance Instructions.

a. These manuals and sections must include:

(1) Scheduling information for each part of the aircraft, its engines, auxiliary power units, propellers, accessories, instruments, and equipment. This information should give recommended times for cleaning, inspecting, testing, lubricating, and adjusting each part. It includes the degree of inspection required, the wear tolerances, and work recommended. Applicants can refer to an accessory, instrument, or equipment manufacturer as the source of this information. They can do this only if they show that the item has an exceptionally high degree of complexity requiring specialized maintenance techniques, test equipment, or expertise. Applicants must provide information on these techniques, test equipment, or expertise to the FAA for review.

(2) The recommended overhaul periods that show when to overhaul the product, accessories, instruments, or equipment. Information on overhaul periods should include the necessary cross-reference to the ALS if the overhaul time is a limitation identified

in paragraph 4-1 of this order. If the ICA gives an overhaul time, then the ICA must include overhaul information or refer to an overhaul manual. The applicant must provide the information or manual to the FAA for review.

(3) An inspection program consisting of the thresholds for inspection, inspection intervals, type of inspection required, and the extent of inspections necessary to ensure the continued airworthiness.

(4) Troubleshooting information describing probable malfunctions, and how to recognize and correct them.

(5) Information describing the order and method of removing and replacing products and parts with any necessary precautions to be taken.

(6) Description of how to adjust and test the system, including flight control systems functional checkout procedures after maintenance, and any required equipment and precautions.

(7) Diagram of structural access plates, and how to gain access when access plates are not provided.

(8) Details for applying special inspection techniques, including procedures where these techniques are specified.

(9) Identification of primary structure and recommended inspection times, locations, and types such as ultrasonic, eddy current, and so on.

(10) All data on structural fasteners, such as identification, discard recommendations, and torque values.

(11) List of special tools needed to accomplish recommended maintenance.

b. The applicant can choose to conduct a maintenance review board (MRB). The MRB report (MRBR) can be picked up by the design approval holder and included as part of the ICA. Inclusion of the MRB report in the ICA is only required when one was developed and subsequently requested by the owner or operator. The MRB report is intended for air carriers. This report contains the initial minimum scheduled maintenance and inspection requirements for a particular transport category aircraft and on-wing engine program. Air carriers can use the MRB report, and its associated requirements, to develop maintenance programs. See AC 121-22A, *Maintenance Review Board Procedures*, for additional information.

c. For regulatory requirements, see:

∞ Title 14 CFR § 23.1529, Appendix G, G23.3(b);
∞ § 25.1529, Appendix H, H25.3(b);
∞ § 27.1529, Appendix A, A27.3(b);
∞ § 29.1529, Appendix A, A29.3(b); and
∞ § 31.82, Appendix A, A31.3.

4-5. Balloon Maintenance.

a. These manuals or sections must explain the balloon's features and provide information to the

extent necessary to conduct maintenance or preventive maintenance. They include:

(1) Description of the balloon, its systems, and installations. This description should include, but is not limited to, the controls, basket structure, fuel systems, and heating assembly.

(2) Description of how the system operates and is controlled, including special procedures and limitations.

(3) Servicing information that covers balloon components, including burner nozzles, fuel tanks, valves during operation, and any required equipment and precautions.

(4) Maintenance information for each part of the balloon and its envelope, controls, basket structure, fuel systems, instruments, and heater assembly that provides recommended times for cleaning, inspecting, testing, lubricating, and adjusting the balloon and its components. It includes the degree of inspection required, the wear tolerances, and work recommended. Applicants may refer to an accessory, instrument, or equipment manufacturer as the source of this information if they show that the item has an exceptionally high degree of complexity requiring specialized maintenance techniques, test equipment, or expertise.

(5) The recommended overhaul periods that show when to overhaul the product, accessories, instruments, or equipment. Information on overhaul periods should include the necessary cross-reference to the ALS if the overhaul time is a limitation identified

in paragraph 4-1 of this order. If the ICA gives an overhaul time, then the ICA must include the overhaul information or refer to an overhaul manual. The applicant must provide the information or manual to the FAA for review.

(6) An inspection program consisting of the thresholds for inspection, inspection intervals, type of inspection required, and the extent of inspections necessary to ensure the continued airworthiness.

(7) Troubleshooting information describing probable malfunctions, and how to recognize and correct them.

(8) Hard landing inspection items and procedures.

(9) Balloon storage preparation and limits.

(10) Description of how to repair the balloon envelope, its basket, or trapeze.

(11) Description of how to inflate and deflate the balloon envelope.

b. See 14 CFR § 31.82, Appendix A, A31.3 for the regulatory requirement.

4-6. Engine Maintenance.

a. These manuals or sections must explain engine features, and provide information to the extent necessary to conduct engine maintenance or preventive maintenance. They include:

(1) Detailed description of the engine and its components, systems, and installations.

(2) Installation instructions, including proper procedures for uncrating, deinhibiting, acceptance checking, lifting, and attaching accessories. These instructions should include any necessary checks, warnings, cautions, and notes that are part of the engine type design.

(3) Description of how the engine components, systems, and installations operate. Applicants should also describe how to start, run, test, and stop the engine and its parts. These descriptions must include any special procedures and limitations.

(4) Servicing information, including servicing points (location and access), capacities of tanks and reservoirs, types of fluid used, and pressures applicable to the various systems. It includes any required equipment and precautions.

(5) Scheduling information for each part of the engine that provides recommended times for cleaning, inspecting, testing, lubricating, and adjusting the engine. It includes the degree of inspection required, the wear tolerances, and work recommended. Applicants can refer to an accessory, instrument, or equipment manufacturer as the source of this information. They can do this only if they show that the item has an exceptionally high degree of complexity requiring specialized maintenance techniques, test equipment, or expertise.

(6) The recommended overhaul periods that show when to overhaul the product, accessories,

instruments, or equipment. Information on overhaul periods should include the necessary cross-reference to the ALS if the overhaul time is a limitation identified in paragraph 4-1 of this order.

(7) An inspection program consisting of the thresholds for inspection, inspection intervals, type of inspection required, and the extent of inspections necessary to ensure the continued airworthiness.

(8) Troubleshooting information describing probable malfunctions, how to recognize and correct them, and precautions.

(9) Information describing the order and method of removing and installing the engine and its parts and accessories. These instructions must include any warnings, cautions, and notes that are part of the engine type design.

(10) List of tools and equipment necessary for maintenance and directions as to their method of use.

b. See 14 CFR § 33.4, Appendix A, A33.3(a) for the regulatory requirement.

4-7. Engine Overhaul.

a. This manual or section offers the owner information on inspecting, repairing, or replacement information necessary to restore the airworthiness of the product. It covers engine disassembly, overhaul, reassembly, and necessary cautions or warnings. The manual or section also gives:

(1) Cleaning and inspection instructions that cover the materials and apparatus to use and methods and precautions to take during overhaul. It must include methods of overhaul inspection.

(2) Details on all fits and clearances of the engine and components, and structural integrity and functionality for new and worn parts.

(3) Details of repair methods for worn or otherwise substandard parts and components along with information necessary to determine when replacement is necessary.

(4) Instructions for testing an engine after overhaul, including test acceptance criteria.

(5) Instructions for storing engines. These instructions identify special containers and required equipment or tools. The ICA should also include environmental restrictions for storage and storage limits.

(6) List of tools and equipment necessary for overhaul and directions as to their method of use.

b. See 14 CFR § 33.4, Appendix A, A33.3(b) for the regulatory requirement.

4-8. Propeller Maintenance.

a. These manuals or sections must explain propeller features, and provide information to the extent necessary to conduct propeller maintenance or preventive maintenance. They include:

* * *

(3) Details of repair methods for worn or otherwise substandard parts and components along with information necessary to determine when replacement is necessary.

(4) Description of how to test the propeller after overhaul, including test acceptance criteria.

(5) Instructions for storing propellers. These instructions identify special containers and required equipment or tools. The ICA should also include the environmental restrictions for storage and storage limits.

(6) List of tools and equipment necessary for overhaul and directions as to their method of use.

b. See 14 CFR § 35.4, Appendix A, A35.3(b) for the regulatory requirement.

4-10. System Wiring Diagrams. For aircraft, engines, and propellers, these diagrams cover the aircraft's electrical or electronic circuits. They must include wire routing information detailed enough to enable maintenance personnel to troubleshoot, repair, and service the electrical system. These diagrams must also include a method of determining connector type, wire type, and wire size. We consider the system wiring diagrams as descriptive data of the systems used on the product, and part of the ICA.

4-11. Component Maintenance Manual or Section. If the aircraft, engine, or propeller maintenance information references the use of a

component maintenance manual as the appropriate location for the ICA, those applicable instructions are incorporated by reference and become part of the complete set of ICA. As part of the ICA, they must be made available to the owner and any other person required to comply with those instructions per 14 CFR § 21.50. They also must contain the following information:

a. Manuals or sections explaining the article's features, and provide information to the extent necessary on how to conduct maintenance or preventive maintenance.

b. A description of the control and operation of the article's components and systems. The description should provide enough detail to perform the maintenance at the levels specified.

c. Complete installation instructions for those parts and accessories that are part of the approved design. The instructions should include minimum interface instructions and any appropriate specifications, warnings, or cautions for those areas on which articles that are not part of the approved design could later be installed on the type-certificated product.

d. Recommended times for cleaning, inspecting, testing, lubricating, and adjusting the article and its components and systems. This scheduling information must include the depth of inspection required, the wear tolerances, and tasks performed. It should ensure the continued airworthiness of the article. Although the applicant does not have to provide specific scheduling information for each part, the lack of such

information on any part should not adversely affect continued airworthiness of the article.

e. An inspection program to ensure the continued airworthiness of the article. Certification tests, analyses, and service experience, if available, are useful when developing the inspection program for parts, assemblies, sub-assemblies, or modules.

f. Troubleshooting information to address potential malfunctions and provide procedures to correct them or replace the affected part or component before continued operation.

g. A means to ensure configuration control during maintenance. This ensures that the proper parts, components, and combinations of parts and components are identified and conform to the approved design.

h. Location of access panels for inspection and servicing. Diagram of structural access plates, and how to gain access when access plates are not provided.

i. Instructions for storing parts and components and identifying special containers and any equipment or tools. The ICA should also include environmental restrictions for storage and storage limits.

j. List of tools and equipment necessary for maintenance and directions as to their method of use.

4-12. Component Overhaul Manual or Section. If the aircraft, engine, or propeller maintenance

information references the use of a component overhaul manual as the appropriate location for the ICA, those applicable instructions are incorporated by reference and become part of the complete set of ICA. As part of the ICA, it must be made available to the owner and any other person required to comply with those instructions per 14 CFR § 21.50. This manual or section must contain the following information:

a. Cleaning and inspection instructions that cover the materials and apparatus to use and methods and precautions to take during overhaul. These instructions must include methods of overhaul inspection.

b. Details on all fits and clearances for the component relative to overhaul.

c. Details of repair methods for worn or otherwise substandard parts with information necessary to determine when to replace parts.

d. Instructions for testing the article after overhaul. This should include test acceptance criteria.

e. Instructions for storage that identify special containers and required equipment or tools. The ICA should also include the environmental restrictions for storage and storage limits.

f. List of tools and equipment necessary for maintenance and directions as to their method of use.

4-13. Non-Destructive Test (NDT) and Inspection. For aircraft, balloons, engines, and propellers, this manual or section covers testing

techniques, instructions, and required equipment for all required NDTs and inspections identified in the maintenance and inspection programs. Applicants can write the manual or section specifically for the product, or they can refer to a standard practices/procedures document.

* * *

APPENDIX 8. RELATED PUBLICATIONS

1. Code of Federal Regulations (CFR). Order copies of 14 CFR sections from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9325. Telephone 202-512-1800; fax 202-512-2250. Alternatively, you can get copies on-line at http://www.gpoaccess.gov/cfr/.

2. FAA Orders, Advisory Circulars (AC), and Technical Standard Orders (TSO). Copies of the following orders, ACs, and TSO are available from the FAA website at http://www.airweb.faa.gov/rgl.

a. FAA Order 8110.4, *Type Certification*

b. FAA Order 8110.42, *Parts Manufacturer Approval Procedures*

c. FAA Order 8300.10, *Airworthiness Inspectors Handbook* (**NOTE:** You can get copies of this order online at http://www.faa.gov/library/manuals/examiners_inspectors/8300/.)

d. FAA Order 8430.21, *Flight Standards Division, Aircraft Certification Division, and Aircraft Evaluation Group Responsibilities*

e. AC 20-114, *Manufacturers' Service Documents*

f. AC 21-40, *Application Guide for Obtaining a Supplemental Type Certificate*

g. AC 25-19, *Certification Maintenance Requirements*

h. AC 25.1529-1, *Instructions for Continued Airworthiness of Structural Repairs on Transport Airplanes*

i. AC 33.4-1, *Instructions for Continued Airworthiness*

j. AC 33.4-2, *Instructions for Continued Airworthiness: In-Service Inspection of Safety Critical Turbine Engine Parts at Piece-Part Opportunity*

k. AC 35.4-1, *Propeller Instructions for Continued Airworthiness*

l. AC 43-13-1B, *Acceptable Methods, Techniques, and Practices – Aircraft Inspection and Repair*

m. AC 121-22, *Maintenance Review Board Procedures*

n. TSO-C77b, *Gas Turbine Auxiliary Power Units*

3. Other FAA Document. *The FAA and Industry Guide to Product Certification* (CPI Guide), dated September 2004, is available from the FAA website at http://www.faa.gov/aircraft/air cert/design approvals/media/CPI guide II.pdf.

4. Air Transport Association (ATA) Document. Order copies of ATA iSpec 2200, *Information Standards for Aviation Maintenance*, latest edition, from the ATA Distribution Center, P.O. Box 511, Annapolis Junction, MD 20701. Telephone 301-490-7951; fax 301-206-9789. Alternatively, you can buy copies on-line at http://www.airlines.org/.

5. General Aviation Manufacturers Association (GAMA) Document. Order copies of GAMA Specification No. 2, *Maintenance Manual*, dated September 1, 1982, from the General Aviation Manufacturers Association, 1400 K Street NW, Suite 801, Washington, D.C. 20005. Telephone 202-393-1500; fax 202-842-4063. Alternatively, you can buy copies on-line at http://www.gama.aero/.

APPENDIX 9. DEFINITIONS

Acceptable ICA. ICA that we at the FAA evaluated and found to meet the requirements of the applicable airworthiness regulations.

ACO/ECO Engineer. Aviation safety engineer responsible for finding compliance and issuing design approvals.

Aircraft Evaluation Group (AEG). Flight standards group that is co-located with each directorate. These groups are responsible for determining the operational acceptability and continuing airworthiness requirements of newly certified or modified aircraft, engines, and propellers. These products are intended to be operated under 14 CFR requirements.

Airworthy. When a product conforms to its type design or properly altered condition and is in a condition for safe operation.

Applicant. Individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity. Includes a trustee, receiver, assignee, or similar representative of any of them.

Continued Airworthiness. When certified aircraft, engines, propellers, and appliances maintain a condition in which they can be operated safely for their intended purpose. They maintain this condition safely throughout their service life. The product shows its continued airworthiness when it meets its type design and is in a condition for safe operation.

Design Approval Holder. Holder of any design approval, including TCs, amended TCs, STCs, amended STCs, PMAs, TSO authorization, letter of TSO design approval, and field approvals (FAA Form 337).

Field Approval. Major repair or major alteration authorized by an aviation safety inspector for an individual aircraft, aircraft engine, propeller, or appliance. We approve these major repairs or alterations by either examining data only, or by physically inspecting, demonstrating, or testing the product.

Instructions for Continued Airworthiness. Documentation that gives instructions and requirements for the maintenance that is essential to the continued airworthiness of an aircraft, engine, or propeller.

Manufacturers' Service Documents. Publications by a TC holder (or appliance or component manufacturer) about safety, product improvement, economics, and operational and maintenance practices. Typical publications include: service bulletins; all-operator's letters; service newsletters; and service digests or magazines. They do not include publications required for FAA type certification or approval, such as flight manuals and certain maintenance manuals.

Operator. Person who uses, or is authorized to use, aircraft for air navigation, including piloting the aircraft.

Owner. For this order, an owner is a person who owns an aircraft, balloon, aircraft engine, or propeller.

Product. For this order, product means an aircraft, balloon, aircraft engine, or propeller.

APPENDIX 10. ACRONYMS

AC	Advisory Circular
ACO	Aircraft Certification Office
AEG	Aircraft Evaluation Group
AFS	Flight Standards Service
AIR	Aircraft Certification Service
ALS	Airworthiness Limitation Section
CFR	Code of Federal Regulations
CMM	Component Maintenance Manual
CMR	Certification Maintenance Requirements
ECO	Engine Certification Office
FAA	Federal Aviation Administration
FSDO	Flight Standards District Office
GPS	Global Positioning Satellite
ICA	Instructions for Continued Airworthiness
MRB	Maintenance Review Board
NDT	Non-Destructive Test
PMA	Parts Manufacturer Approval

STC	Supplemental Type Certificate
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TSO	Technical Standard Order

[SEAL]
U.S. Department
of Transportation

**Federal Aviation
Administration**

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive. You may also Suggest new items or subjects that should be added. Please alert us if you find an error.

Subject: Order 8100.54

To: Directive Management Officer, AIR-530

(*Please check all appropriate line items)*

□ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

□ Recommend paragraph _____ on page _____ be changed as follows:
(Attach separate sheet if necessary)

□ In a future change to this directive, please include coverage on the following subject
(Briefly describe what you want added):

□ Other comments:

□ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____
FTS Telephone Number: _____
Routing Symbol: _____

FAA Form 1320–19 (8-89) (Representation)