UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC

Served: March 10, 1994

FAA Order No. 94-3

In the Matter of:	
VALLEY AIR SERVICES, INC.	Docket No. CP91NE0236

DECISION AND ORDER

This case involves a dispute over the propriety of weld repairs to the propeller spinners[1/] on an aircraft owned and operated by Valley Air Services, Inc. (Respondent). The Federal Aviation Administration (FAA) (Complainant) alleged in the complaint that Respondent violated the following four

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1/ A spinner is a dome- or conical-shaped "fairing"--a part that produces a smooth outline and reduces drag or resistance--that is part of the propeller assembly. TR. 29, 81, 109, 161, 212; Initial Decision, Finding of Fact #15, 17. In this case, the spinners were made of aluminum. TR. 29. A spinner fits over the propeller hub and dome and rotates with the propeller. TR. 29, 109, 161. Apparently, though, spinners do not rotate with the propeller in all aircraft, for there was testimony at the hearing that in some aircraft the spinner is rigidly attached to the engine faceplate. TR. 215.

A spinner directs the air flow of the propeller into the engine cowling (the metal covering that houses the engine), which is positioned directly behind the spinner, and may help cool the engine. TR. 29, 109, 161, 212, 214-215; Initial Decision, Finding of Fact #17. A spinner also serves an aesthetic purpose--by covering the propeller hub, a spinner is intended to improve the aircraft's appearance. TR. 212; Initial Decision, Finding of Fact #18.

provisions of the Federal Aviation Regulations (FAR) by operating the aircraft with the welded spinners:

> (1) 14 C.F.R. § 135.5 (prohibiting operation of an aircraft in violation of the air taxi/commercial operator operating certificate and applicable operations specifications);
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> (2) 14 C.F.R. § 135.25(a)(2) (prohibiting operation of an aircraft under Part 135 when the aircraft is not in airworthy condition and does not meet the airworthiness requirements of the FAR);
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> (3) 14 C.F.R. § 135.413(a) (requiring certificate holders to have defects repaired between the required maintenance under Part 43 of the FAR);
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> (4) 14 C.F.R. § 135.421 (requiring compliance with the manufacturer's recommended maintenance programs for the engine, propeller, rotor, and emergency equipment).[2/]

The law judge held that Complainant failed to prove violations of these regulations and decided the case in Respondent's favor.[3/] Complainant has appealed from the law judge's decision.

Upon consideration of the parties' contentions on appeal and the record as a whole, Complainant's appeal is denied. The law judge's decision is affirmed as to the ultimate conclusion.

The facts of this case are as follows. Respondent's Director of Maintenance commissioned a building construction

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2/ The complete text of these regulations, as well as several other pertinent regulations, is found in the Appendix to this decision.

3/ A copy of the law judge's written initial decision is attached.

company that employed ASCI-certified[4/] welders to weld several small cracks in the left and right spinners[5/] on Respondent's Piper PA-31-350 Chieftain aircraft. Later, during a ramp inspection of Respondent's aircraft, an FAA inspector discovered the welds.

According to Complainant, the FAA inspector advised Respondent's Director of Maintenance that repairs to spinners were not approved by either the spinners' manufacturer or the FAA. But Respondent contends that the inspector said only that the welding of Hartzell spinners was unapproved and never said that the aircraft should be taken out of service. The inspector did not realize at the time of inspection that the spinners were manufactured by Piper Aircraft Company rather than the Hartzell Company. Upon further investigation, the inspector determined that Piper did not approve of such weld repairs. He then sent Respondent a letter stating that the spinners needed to be replaced. The inspector's letter directed Respondent to reply in writing within 15 days with an explanation of what corrective action Respondent had taken.

About a year later, during another routine inspection of Respondent's aircraft, the inspector observed the welded spinners again and realized that the spinners had not been replaced. Respondent's Director of Maintenance told the

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4/ The acronym ACSI stands for American Society of Construction Inspectors.

5/ Propeller spinners are described supra note 1.

inspector that he had sent the inspector a reply explaining why he believed the spinners did not need to be replaced, and he provided the inspector with a copy of the letter from his files. Apparently, the inspector had not received the letter sent by Respondent's Director of Maintenance.

The inspector then sent Respondent a letter expressly stating that the welds were unacceptable and that the aircraft must be taken out of service until the spinners were replaced. Upon receipt of the inspector's letter, Respondent replaced the spinners. Complainant brought this civil penalty action against Respondent, alleging that Respondent violated 14 C.F.R. §§ 135.5, 135.25(a)(2), 135.413(a), and 135.421 by operating the aircraft with the welded spinners during the period of time between the first and second inspections.

On appeal, Complainant argues that the law judge's initial decision contains several reversible errors. Specifically, Complainant challenges the law judge's findings that:

> (1) The welds to the cracked spinners in this case constituted "minor repairs" and "preventive maintenance" within the meaning of the regulations, rather than "major repairs" requiring FAA approval;
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> (2) The determination of whether a repair is major or minor requires a factual determination as to the size and type of the repair; and
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> (3) Respondent neither knew nor should have known that repairing the spinners was unacceptable.

Complainant states in its appeal brief that it is not appealing the law judge's finding of no violation of Section 135.25(a)(2). Section 135.25(a)(2) prohibits operating an

aircraft when the aircraft is not in airworthy condition and does not meet the airworthiness requirements of the regulations.

In reply, Respondent argues that by failing to appeal the law judge's finding regarding Section 135.25(a)(2), Complainant has in effect conceded that it failed to prove that Respondent's aircraft was unairworthy because of the welded spinners. According to Respondent, this concession defeats Complainant's appeal with regard to Sections 135.5 and 135.413(a), because these regulations also involve airworthiness.[6/] Respondent further argues that Complainant failed to carry its burden of proving that welds of the spinners constituted "major repairs." Respondent contends that the law judge's finding that the welds constituted "preventive maintenance" was gratuitous and did not prejudice Complainant. Finally, Respondent argues that Respondent did not know, nor should it have known, that Complainant considered welding of spinners unauthorized, because the FAA inspector was guilty of gross miscommunication.

In his initial decision, the law judge stated, "the result in this case [in Respondent's favor] was dictated largely by credibility determinations ...." Initial Decision, p. 26, n.17. According to the law judge, his observation of the witnesses' demeanor and his review of the hearing record led

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6/ Given my ultimate resolution of this case, it is unnecessary to address this issue.

him to accord greater credibility to Respondent's witnesses than to Complainant's witnesses. Initial Decision, p. 15.

At the hearing, Complainant called two witnesses, Mr. Edwards, the reporting FAA inspector, and Mr. Inglis, a regional specialist with the FAA. Respondent called two witnesses also--Mr. Minck, Respondent's Director of Maintenance, and Mr. Thurston, who was qualified at the hearing as an expert in aeronautical engineering.

The law judge erred to the extent he used a simple credibility test to evaluate the expert testimony in this case. As the National Transportation Safety Board has stated, "the evaluation of expert testimony is by no means a simple test of credibility." Petition of Nelson, 5 NTSB 8, 11 (1985). The Board has rejected attempts to convert the issue of expert testimony into a simple credibility determination, explaining that: "Expert testimony is not evaluated on the basis of credibility but on its logic, depth, and persuasiveness." Administrator v. Carroll, NTSB Order No. EA-2952, 1989 NTSB LEXIS 100 (June 15, 1989), cited In the Matter of Metcalf, FAA Order No. 93-17 at 6 (June 10, 1993). However, the use of the proper criteria in this case would lead to the same conclusion--i.e., that Complainant failed to provide convincing expert testimony that the regulations were violated.

Although Mr. Inglis testified at first that the spinner was part of the airframe, he reversed himself on this point during

cross-examination. TR. 121-122. Moreover, he was unable to explain how the regulations supported his testimony that if approved data do not exist, then a repair is a major repair. TR. 124-125. In addition, when asked if it is necessary to contact the FAA when doing a minor repair, Mr. Inglis first testified that he did not know about it being required "but they [the mechanics] normally would do that," and that it was "procedure that they would call and ask." TR. 130. Then he said that it was a judgment call for the mechanic. Id. Ultimately, however, he acknowledged that a mechanic is not required by any regulation to contact the FAA when performing a minor repair. TR. 131.

As for Mr. Edwards, he too seemed uncertain in his testimony. In determining the permissibility of repairing the spinners, Mr. Edwards consulted with several Piper employees and Mr. Marty Buckman, an FAA employee whose title Mr. Edwards could not remember, despite his heavy reliance on Mr. Buckman's expert opinion and advice.7/ At times during Mr. Edwards' testimony, he was unable to recall the specifics of these critical conversations. TR. 49. Also, when asked if he checked to see if the aircraft was operated during the time period at issue, Mr. Edwards testified at first that he did not remember. Only after some hesitation was he able to testify that he did in fact verify that the aircraft was operated

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7/ Edwards testified at one point that the only basis for his conclusion that a spinner was a part of the propeller was his conversations with Buckman. TR. 69.

during the time period at issue in the complaint. TR. 69. Thus, the hearing transcript supports the law judge's finding that Complainant's witnesses were not convincing.

In its complaint, Complainant alleged that Respondent violated Section 135.5. This regulation provides, in relevant part, that:

> No person may operate an aircraft under [Part 135] ... in violation of an air taxi/commercial operator (ATCO) operating certificate and appropriate operations specifications issued under [Part 135].

14 C.F.R. § 135.5. The particular operations specification allegedly violated is as follows:

> Aircraft operated by Valley Air Services, Inc. shall not be used in air taxi or commercial operator operations unless ... [t]he Hartzell propeller ... and its component parts are maintained in airworthy condition in accordance with the maintenance ... set forth in the Piper PA-31-350 Service Manual F761-488, as amended ....

By its own terms, the operations specification quoted above is applicable only if the spinners were part of the Hartzell propeller and its component parts. However, the law judge found that the spinners were not part of the propellers,[8/] and Complainant has not challenged this finding on appeal. Hence, Complainant failed to prove a violation of 14 C.F.R. § 135.5.

Complainant also alleged a violation of Section 135.421(a), which provides:

> (a) Each certificate holder who operates an aircraft type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats

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[8/] The law judge found that the spinners were part of the propeller installation or assembly, but not part of the propeller itself. Initial Decision, Finding of Fact #15, p. 7.

> or less, must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.

14 C.F.R. § 135.421(a). By its own terms, Section 135.421(a) applies only to "each aircraft engine, propeller, rotor, and each item of emergency equipment required by [the FAR]." As noted above, Complainant has failed to show, or even attempt to show, that the law judge erred in finding that the spinners were not part of the propeller. Likewise, Complainant has not established that the spinners fall into any other category to which Section 135.421(a) applies.

Complainant also alleged that Respondent violated 14 C.F.R. § 135.413(a). It was alleged in the complaint that Respondent violated Section 135.413(a) "in that Respondent, as a certificate holder primarily responsible for the airworthiness of its aircraft, did not have defects repaired between required maintenance under Part 43 of the Federal Aviation Regulations." Presumably, the particular provision of Part 43 that Complainant claims Respondent failed to follow is Section 43.13(a).[9/]

9/ In its response to interrogatories, Complainant stated that it was Section 43.13(a) that required Respondent to contact the manufacturer about a cracked spinner, to determine the manufacturer's requirements, and to replace rather than weld the spinners.

Although Complainant stated at the hearing that it was not alleging a violation of Section 43.13(a), agency counsel may have meant only that Complainant had not specifically alleged in the complaint that Section 43.13 had been violated. When

[Footnote continues on next page]

Section 43.13(a) provides, in relevant part, that:

> 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 .... He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices.

Respondent argues that by following Advisory Circular 43.13-1A (AC 43.13-1A) (entitled "Acceptable Methods, Techniques, and Practices: Aircraft Inspection and Repair") in welding the spinners, it was using "other methods, techniques, and practices acceptable to the Administrator" in accordance with the above-quoted language of Section 43.13(a). Complainant counterargues that:

> [U]nless the manufacturer recommends that its part be welded, the data for accomplishing the weld in AC 43.13 does not apply. That is, <u>if</u> Piper allowed its spinners to be welded, but did not provide guidance on how to do the weld, it would have been proper for Mr. Minck to consult AC 43.13 as he did. Because Piper does not so recommend the welding of its spinners, reliance on AC 43.13 is not an accepted industry[-]wide practice.

Appeal Brief at 15. While this argument may be correct, Complainant has failed to provide any support for it. Notably absent from Complainant's brief are any citations to the transcript or other evidence in the record to support

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[Footnote continued from previous page]

9/ alleging a violation of Section 135.413, it is not strictly necessary to specify the particular provision of Part 43 that was violated.

Complainant's argument. Moreover, AC 43.13-1A was not even introduced at the hearing. Complainant has not sustained its burden of proving that AC 43.13-1A contains procedures that may not be used absent manufacturer approval.

The only other regulation raised and discussed by the parties is Section 135.437(b).[10/] Section 135.437(b) provides that:

> A certificate holder may approve any airframe, aircraft engine, propeller, rotor, or appliance for return to service after maintenance, preventive maintenance, or alterations that are performed under paragraph (a) of this section. However, in the case of a major repair or alteration, the work must have been done in accordance with technical data approved by the Administrator.

14 C.F.R. § 135.437(b) (emphasis added). The law judge stated that the determination of whether the repairs to the spinners were major or minor was key to this case.[11/] However, a violation of Section 135.437 requires a finding that the spinner was part of the "airframe, aircraft engine, propeller, rotor, or appliance." Complainant has failed to establish that the spinners fell within any of these categories.

10/ Nowhere in the record does Complainant specifically connect Section 135.437(b) to the regulations allegedly violated in the complaint. Arguably, however, a violation of Section 135.437 could be included under the allegation in the complaint that Section 135.413 was violated. Section 135.413 requires each certificate holder to "have its aircraft maintained under this chapter [the Federal Aviation Regulations as a whole] ...." 14 C.F.R. § 135.413.

11/ The law judge reasoned that if the welds were not major repairs, then Respondent did not violate the regulations by failing to obtain FAA approval before returning the aircraft to service.

BASED ON THE FOREGOING, the law judge did not err in finding that Complainant failed to bear its burden of proving a violation of the four regulations cited in the complaint. The law judge's initial decision is affirmed as to the ultimate conclusion.

DAVID R. HINSON, ADMINISTRATOR
Federal Aviation Administration

Issued this 10th day of March, 1994.

APPENDIX

Regulations Cited in the Complaint

14 C.F.R. § 135.5 (1989) provides, in relevant part, as follows:

> No person may operate an aircraft under this part without, or in violation of, an air taxi/commercial operator (ATCO) operating certificate and appropriate operations specifications issued under this part ....

14 C.F.R. § 135.25(a)(2) (1989) provides, in relevant part, as follows:

> (a) ... [N]o certificate holder may operate an aircraft under this part unless that aircraft--
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> ...
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> (2) Is in an airworthy condition and meets the applicable airworthiness requirements of this chapter, including those relating to identification and equipment.

14 C.F.R. § 135.413(a) (1989) provides, in relevant part, as follows:

> Each certificate holder is primarily responsible for the airworthiness of its aircraft, including airframes, aircraft engines, propellers, rotors, appliances, and parts, and shall have its aircraft maintained under this chapter, and shall have defects repaired between required maintenance under part 43 of this chapter.

14 C.F.R. § 135.421 (1989) provides as follows:

> (a) Each certificate holder who operates an aircraft type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.
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> (b) For the purpose of this section, a manufacturer's maintenance program is one which is contained in the maintenance manual or maintenance instructions set forth by the manufacturer as required by this chapter for the aircraft, aircraft engine, propeller, rotor, or item of emergency equipment.

Other Pertinent Regulations

14 C.F.R. § 43.13(a) (1989) provides as follows:

> 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.

14 C.F.R. § 135.437 (1989) provides, in relevant part, as follows:

> (a) A certificate holder may perform or make arrangements with other persons to perform maintenance, preventive maintenance, and alterations as provided in its maintenance manual. ...
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> (b) A certificate holder may approve any airframe, aircraft engine, propeller, rotor, or appliance for return to service after maintenance, preventive maintenance, or alterations that are performed under paragraph (a) of this section. However, in the case of a major repair or alteration, the work must have been done in accordance with technical data approved by the Administrator.