UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC

In the Matter of:	FAA Order No. 97-32
FLORIDA PROPELLER & ACCESSORIES, INC.	Served: October 8, 1997
	Docket No. CP96EA0012

DECISION AND ORDER

In this case, Complainant Federal Aviation Administration (FAA) filed a complaint seeking a $3,000 civil penalty.[1] Complainant alleged that Florida Propeller and Accessories, Inc. (Florida Propeller) approved a propeller for return to service with blades that were worn too thin.[2] At the conclusion of the hearing, Administrative Law Judge Burton S. Kolko dismissed the complaint (Tr. 113),[3] leading Complainant to file the instant appeal. In its appeal brief, Complainant asks the Administrator to remand the case to the law judge so that Complainant may present rebuttal testimony and the law judge may reconsider his findings. (Appeal Brief at 12-14.) This decision denies Complainant's appeal and affirms the law judge's dismissal of the complaint.

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[1] Complaint, ¶ 10.

[2] *Id.*, at ¶¶ 5-6.

[3] The portion of the hearing transcript containing the law judge's oral initial decision is attached.

The facts of this case are as follows. Smith, Kline, Beecham (Smith, Kline), a pharmaceutical company based in Philadelphia (Tr. 9), sent a three-blade propeller from one of its fleet of five Cessna 310R aircraft to Florida Propeller for an overhaul. (Tr. 17-18.) McCauley, the manufacturer of the propeller, prescribes an overhaul for the propeller every 1500 hours. (Tr. 10.) Florida Propeller completed the overhaul on January 22, 1994. (Complainant's Exhibit 1.) On March 15, 1994, after discovering red dye leaking from one of the propeller's blades, Smith, Kline removed the propeller from the airplane and sent it to a different propeller repair station for inspection and repair of the leak.[4] (*Id.*; Tr. 14.)

By March 25, 1994,[5] the second repair station, Sensenich Propeller (Sensenich), which is located near Lancaster, Pennsylvania (Tr. 18), had completed its inspection and had advised Smith, Kline that it could not reassemble the propeller because the blades were worn too thin. (Tr. 15.) Although the manufacturer's overhaul manual lists 2.9" as the minimum measurement at the 36.35 station (Complainant's Exhibit 3; Tr. 65, 69), Sensenich found that each of the blades was less than 2.9". According to Sensenich's records, the blades measured 2.775", 2.780", and 2.795", respectively. (Complainant's Exhibit 2; *see also* Complaint, ¶ 5.) Thus, the blades were below the minimum width by 0.125", 0.120", and 0.105". After Sensenich returned the propeller to Smith, Kline, an FAA inspector measured the blades. (Tr. 15.) According to the testimony of a Smith,

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[4] A red dye leak can be caused by a broken seal or a crack in the threads of the propeller blade. (Tr. 81.) The red dye leak is unrelated to the alleged violations, other than that it led to the discovery of the undersized blades. (Tr. 13-14.)

[5] March 25, 1994, is the date on Sensenich's invoice, which lists the blades as rejected as "out of material." (Complainant's Exhibit 3.)

Kline mechanic, the FAA inspector confirmed that the blades were worn too thin, though the inspector did not testify at the hearing[6] and the Smith, Kline mechanic could not remember when the calipers he lent the inspector had last been calibrated. (Tr. 42.)

Complainant brought the instant civil penalty action against Florida Propeller, alleging that Florida Propeller failed to:

1. follow the manufacturer's maintenance manual in performing the overhaul;[7]

2. perform the overhaul so that the propeller's condition was at least equal to its original or properly altered condition;[8] and

3. perform the overhaul in accordance with the applicable standards.[9]

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[6] *See infra* p. 5.

[7] 14 C.F.R. § 43.13(a) provides, in pertinent part, as follows:

> Each person performing maintenance, alteration, or preventive maintenance on a . . . propeller . . . 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.

[8] 14 C.F.R. § 43.13(b) provides, in pertinent part, as follows:

> 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 . . . propeller . . . 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).

[9] 14 C.F.R. § 145.57(a) provides, in pertinent part, as follows:

> . . . [E]ach certificated domestic repair station shall perform its maintenance and alteration operations in accordance with the standards in part 43 of this chapter. It shall maintain, in current condition, all manufacturers' service manuals, instructions, and service bulletins that relate to the articles that it maintains or alters.

(Complaint, § 8.) Complainant's theory of the case was that it was impossible for the blades to wear down so much (from a minimum of 2.9" to 2.775", 2.780", and 2.795") in the short time that had passed since Florida Propeller's overhaul. (Tr. 5, 110-111.)[10] Therefore, according to Complainant, Florida Propeller must have returned the propeller to service with undersized blades. (*Id.*) Florida Propeller denied the allegations of the complaint, arguing that it would be not only unfair, but ruinous for the repair station industry to hold repair stations responsible for their work long after a repaired item has left a repair station. (Tr. 7-8.)

The law judge disagreed with Complainant's assertion during closing argument that this was an "open and shut case." (Tr. 112.) To the law judge, it was a very close case. (*Id.*) The law judge noted that Complainant's witnesses testified that it would be extremely rare for a propeller "to go below its measurement limits . . . in so short a time." (Tr. 112-113.) At the same time, however, the law judge found credible the testimony of the Florida Propeller mechanic that he had

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[10] According to Mr. Hladky, the mechanic for Smith, Kline, the airplane had logged 125 hours of flight time (Tr. 13, 49) on approximately 120 flights (Tr. 49) between Florida Propeller's overhaul and the discovery of the undersized blades. The aircraft logbook was not offered into evidence. The propeller's actual operating time, which would include taxiing time and other time spinning on the ground, would be somewhat higher than 125 hours. (Tr. 29-30.) Mr. Hladky gave 20 hours as a "ball park" figure for the additional time, though he stated that the actual figure could be a lot more or a lot less. (Tr. 31.)

Wear can apparently occur on the ground as well as during flight time. (Tr. 101-102.) The Florida Propeller mechanic testified that "If the flight hours are low, but the aircraft has been sitting for a while . . . that causes a lot of wear and tear because once the leading edge of the blade starts to corrode and water collects in those pores, the corrosion starts happening." He conceded, however, that the instant aircraft had not been "sitting." (Tr. 102.)

Forty-six days passed from the date the aircraft owner reinstalled the propeller on the aircraft after Florida Propeller's overhaul (January 28, 1994) until the date the owner removed the propeller to have the red dye leak checked (March 15, 1994). (Tr. 49.) Sixty-two days passed from the date Florida Propeller returned the propeller to service (January 22, 1994) until the date that Sensenich's invoice indicates that the blades had been found to be undersized (March 25, 1994). (Complainant's Exhibits 1 and 3.)

The flights occurred in the northeast United States (Tr. 25), in the snowbelt (Tr. 26), in the winter months (*Id.*), to and from paved, public-use airports (Tr. 13). No flights took place in heavy sand conditions. (Tr. 13.)

measured the blades during the overhaul and each blade was at tolerance. (Tr. 94, 107.) The law judge stated, "we have very credibly on the record that when the propeller left the hands of [Florida Propeller] it was in tolerance." (Tr. 113.) According to the law judge, "just enough time [had] passed and . . . flights [had] occurred in wintry conditions" that he felt compelled to rule in Florida Propeller's favor. (Tr. 113.) The law judge stated that he did not know whether the conditions were harsh enough to cause such measurable wear on a propeller's blades in 46 days, but neither did the witnesses. (*Id.*) Without more expert testimony on metallurgic wear and tear on propeller blades, the law judge stated, Complainant could not prevail. (*Id.*) In the law judge's view, the record was in "equipoise," and therefore, Complainant had failed to bear its burden of proof. (*Id.*)

On appeal, Complainant argues that the law judge erred in precluding its rebuttal case regarding the rate of wear on propeller blades. (Appeal Brief at 13.) Complainant asks the Administrator to remand the case to the law judge so that Complainant can introduce its rebuttal testimony. (*Id.*, at 14.)

When the law judge asked Complainant if it had any rebuttal case, Complainant offered the testimony of FAA Inspector Joseph Radowski, stating that the inspector would testify "as to how much the prop will wear out." (Tr. 108.) Florida Propeller objected to Inspector Radowski's testimony, arguing that expert testimony regarding metallurgy was improper rebuttal because Florida Propeller had not put on any expert testimony regarding metallurgy. The law judge indicated that he tended to agree, but stated that "if the FAA wants to make a rebuttal, I want to hear at least a tender or a proffer." (Tr. 109.) Counsel for Complainant then replied, "Actually, none." (*Id.*)

The Rules of Practice permit a party whose evidence has been excluded by a ruling of the law judge to offer the evidence for the record on the appeal. 14 C.F.R. § 13.225. According to THOMAS A. MAUET, FUNDAMENTALS OF TRIAL TECHNIQUES 336 (2nd ed. 1988), there are two ways to make an offer of proof:

> Under the first method the lawyer simply tells the court what the proposed testimony would be, either in a narrative or question-and-answer format . . . . The second method involves using the witness himself. . . . [The lawyer] continue[s] the examination of the witness, using the same questions to which objections had been sustained. In this way the reviewing court will have a verbatim transcript of the testimony the trial court excluded. . . . The first method has the advantage of efficiency, the second, the advantage of completeness.

Complainant's argument that the case should be remanded to permit it to introduce its rebuttal testimony is rejected. By declining to offer the substance of the rebuttal testimony for the record, Complainant failed to preserve this issue for appeal.

Complainant's broader argument on appeal is that the law judge erred in dismissing the complaint. (Appeal Brief at 10.) According to Complainant, by finding that the record was in equipoise, the law judge abdicated his responsibility to resolve the conflicting facts in the record. (*Id.*) Complainant argues that the record contained "unrebutted expert testimony" from a Sensenich supervisor that it would take approximately 8,000 hours to wear down a propeller a quarter of an inch. (*Id.*) Further, Complainant points out, this testimony was corroborated by the Smith, Kline mechanic, who testified that in the 5 years he worked for Smith, Kline, no other aircraft in his employer's fleet of five or six airplanes had a propeller wear below the limitations while operating in similar conditions. (*Id.*, at 11-12.) Thus, according to Complainant, its "unrebutted expert testimony" rendered unbelievable the claim of Florida Propeller's mechanic that he measured the blades

during the overhaul and found them within limits. (*Id.*, at 10-11.) Complainant asks the Administrator to remand the case to the law judge so that he can "reconcile his credibility finding with Complainant's unrebutted case." (*Id.*, at 13.)

The Rules of Practice provide that in order to prevail, the party with the burden of proof must prove its case by a preponderance of reliable, probative, and substantial evidence. 14 C.F.R. § 13.223. In the instant case, Complainant bore the burden of proof. (*See* 14 C.F.R. § 13.224(a), providing that "[e]xcept in the case of an affirmative defense, the burden of proof is on the agency.") Complainant attempted to prove its case using circumstantial evidence. This is not at all unusual in cases involving allegations of improper repair or inspection, because such violations often are not discovered right away.[11] Complainant may use circumstantial evidence to sustain its burden of proof. In the Matter of Hampton Air Transport Systems, FAA Order No. 97-11 at 4, 1997 FAA LEXIS 48, at *5 (February 20, 1997), *appeal docketed*, Hampton Air v. Valentine, No. 97-4054 (2nd Cir. April 3, 1997).

In the instant case, however, Complainant has not provided sufficient reason to require the law judge to revisit his findings. Although Complainant argues that the law judge failed to resolve the conflicting evidence in the record, it is more accurate to say that Complainant simply disagrees with the weight the law judge gave the conflicting evidence. In this regard, it should be noted that the law judge's

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[11] *See, e.g.*, Hinson v. Adams, NTSB Order EA-4247, 1994 NTSB LEXIS 249, at *8 (September 1, 1994), stating that:

> While the Administrator presented no direct evidence of the condition of the aircraft at the time respondent inspected it, we have long recognized that circumstantial evidence may be the only evidence available in cases such as this one where an improper repair or inspection is not discovered until some time after the alleged violation.

credibility assessments are entitled to deference. In the Matter of Werle, FAA Order No. 97-20 at 11 (May 23, 1997). The law judge specifically found credible the testimony of the Florida Propeller mechanic that he measured the propeller blades and they were not undersized at the time of the overhaul. (Tr. 113.)

Moreover, it is inaccurate to state, as Complainant does in its appeal brief at page 10, that the record contains expert testimony regarding the amount of wear and tear that can be expected on a propeller. After all, the law judge specifically declined to qualify as an expert in propeller wear and tear the witness who testified for Complainant that it would take 8,000 hours to wear down a propeller a quarter inch. (Tr. 73, 76.)[12] The witness conceded that:

- he had no metallurgy expertise;
- he had no course work or special training relative to wear and tear of metal; and
- his training was in the maintenance and repair of propeller blades, rather than in determining wear, tear, and usage.

(Tr. 79-80). Moreover, the law judge's chief concern, as expressed in his initial decision, was that the expert testimony in the record did not take into account the harsh, wintry weather in which the propeller operated. The Sensenich propeller mechanic was not asked to specify the type of weather conditions under which his assertions regarding the expected wear and tear would be true (Tr. 78), nor did he indicate that he had the experience and knowledge to address the law judge's precise concern.[13]

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[12] Note that Sensenich's written conformity check showed that the blades were worn 0.125", 0.120", and 0.105" (Complainant's Exhibit 2; see also Complaint, ¶ 5), rather than a quarter inch (0.25), as both of Complainant's witnesses testified. (Tr. 16, 69.)

[13] This is not to say that the witness does not have the requisite experience and knowledge. It may be that he was simply unable to articulate it for the record of this case.

As for Complainant's "corroborating" testimony -- *i.e.*, that in the 5 years the witness had worked as a mechanic for Smith, Kline (Tr. 9), none of the other aircraft in the owner's fleet of five or six aircraft (Tr. 17) had worn out so soon after an overhaul (Tr. 52) -- this testimony is not particularly compelling, given the small sample size and period of time involved. Also, once again the question asked of this witness was not specific enough. (Tr. 52.) Rather than asking the witness whether he had seen a propeller *wear out* in the time frame at issue, counsel for Complainant should have asked him whether he had seen a propeller *wear down as much as this one did* (*i.e.*, 0.125", 0.120", and 0.105").

It may well be that it is impossible for propeller blades to wear down so much in such a short time, even in harsh, wintry weather, but the law judge did not err in finding that the evidence in this particular record is insufficient to prove this. As a result, Complainant's appeal is denied, and the law judge's dismissal of the complaint is affirmed.

Jane F. Garvey

JANE F. GARVEY, ADMINISTRATOR
Federal Aviation Administration

Issued this 7th day of October, 1997.