UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC

In the Matter of:	FAA Order No. 96-25
USAIR, INC.	Served: August 13, 1996
	Docket No. CP94EA0045

DECISION AND ORDER

Complainant Federal Aviation Administration (FAA) and Respondent USAir, Inc. (USAir) have each appealed from the written initial decision of Administrative Law Judge Robert L. Barton, Jr. The law judge found that USAir violated 14 C.F.R. § 43.13 (1992) by failing to perform a high energy stop inspection in accordance with the Boeing 767 maintenance manual, and assessed a $5,000 civil penalty.[1]

Complainant alleged that USAir violated the following three regulations:

1. 14 C.F.R. § 43.13 (1992) (by failing to use the methods, techniques, and practices prescribed in the manufacturer's manual when performing maintenance);[2]

2. 14 C.F.R. § 121.367(a) (1992) (by failing to have an inspection or maintenance program in effect that ensured that such maintenance was performed in accordance with the manufacturer's manual);[3] and

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[1] A copy of the law judge's decision is attached.

[2] 14 C.F.R. § 43.13(a) provides, in pertinent part, 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 manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator. . . .

[3] 14 C.F.R. § 121.367(a) provides, in pertinent part, as follows:

3. 14 C.F.R. § 121.153(a)(2) (1992) (by operating an aircraft when it was not in airworthy condition).[4]

(Complaint at 4.) Complainant sought a $40,000 civil penalty. On appeal, USAir argues that the law judge erred in finding a violation of Section 43.13, a maintenance regulation, while Complainant argues that the law judge should also have found a violation of Section 121.153(a)(2), an airworthiness regulation. Complainant has not appealed from the law judge's finding that USAir did not violate the third regulation, Section 121.367(a) (requiring air carriers to have a maintenance program in effect that ensures that maintenance is performed in accordance with the maintenance manual).

On April 10, 1992, USAir Flight 1160 was scheduled to fly from Charlotte, North Carolina, to London. (Complainant's Exhibit A.) On takeoff, the warning light for the right Pressure Regulator Valve lit up, and the crew aborted the takeoff. (*Id.*)

The valve reset itself after the crew pulled the aircraft off the runway. When USAir maintenance officials advised that there was nothing they could do if the

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> Each certificate holder shall have an inspection program and a program covering other maintenance, preventive maintenance, and alterations that ensures that--
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> (a) Maintenance, preventive maintenance, and alterations performed by it, or by other persons, are performed in accordance with the certificate holder's manual.

[4] 14 C.F.R. § 121.153(a)(2) provides, in pertinent part, as follows:

> (a) Except as provided in paragraph (c) of this section, no certificate holder may operate an aircraft 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.

plane came back to the gate, the crew taxied back out for another takeoff attempt. (Complainant's Exhibit A; Tr. 41-42.)

During the second takeoff attempt, the same warning light illuminated, and the crew again aborted the takeoff. (Complainant's Exhibit A.) Shortly after the two aborted takeoffs, while the crew waited for an open gate, two of the thermal fuse plugs in the wheel assemblies melted, causing two of the aircraft tires to deflate. (Tr. 44-45.) Complainant maintains that the fuse plugs melted as a result of the aborted takeoffs. The thermal fuse plugs are designed to melt and release tire pressure when the wheel assembly reaches a specific temperature. (Complainant's Exhibit H-1.) This prevents rupture of the tires, which can be extremely dangerous. (*Id.*)

The crew returned to the gate, where a USAir maintenance crew replaced all eight main wheel and brake assemblies on the aircraft. (Tr. 53.) However, the USAir maintenance crew did not perform a high energy stop inspection, which, Complainant contends, the Boeing 767 maintenance manual required.

The incident came to the FAA's attention when USAir reported it to the FAA as part of a required mechanical interruption report that was called in to Mario Giordano, an aviation safety inspector at the FAA Flight Standards District Office. (Tr. 33-36.) Three days after the aborted takeoffs, when Inspector Giordano contacted Dan Basinger of USAir's Maintenance Control Department, Mr. Basinger agreed that USAir should have performed a high energy stop inspection. (Tr. 69.) Mr. Basinger contacted Ted Goodlander, USAir Line Maintenance Manager in Charlotte, who could not verify that USAir had performed a high energy stop inspection. (Tr. 69-71; Complainant's Exhibit J-2.) At 3:00 p.m. on April 13, 1993,

Mr. Goodlander decided to remove the aircraft from service, which was then on its way from Los Angeles to Charlotte. (Complainant's Exhibit J-2.) When the aircraft arrived at Charlotte, USAir performed the high energy stop inspection and discovered no heat damage on either the right or left main landing gear axles. (Complainant's Exhibits J-2, U.)

USAir had operated the aircraft on eight domestic flights between the time of the aborted takeoffs on April 11, 1992, and USAir's removal of the aircraft from service on April 13, 1992. (Complainant's Exhibits K-U.)

The FAA sent a letter of investigation to USAir on April 24, 1992. (Complainant's Exhibit I.) Within the next month, USAir's director of quality assurance, J.R. Kania, sent the FAA inspector a letter responding to the letter of investigation. (Complainant's Exhibit J.) In the letter, Mr. Kania stated that USAir's afternoon maintenance foreman discussed the need for a high energy stop inspection with the midnight maintenance foreman. (*Id.* at 1.) Mr. Kania further stated that "the requirement for a high energy stop inspection as outlined in the Boeing 767 Manual was not accomplished." (*Id.*) Mr. Kania's letter specifically stated that USAir believed that the afternoon maintenance foreman should have given the midnight maintenance foreman written turnover instructions indicating the need for a high energy stop inspection. (*Id.* at 2.) Mr. Kania promised in the letter that USAir would monitor turnover reports more comprehensively in the future. He also indicated that USAir had counseled all mechanics involved with the subject aircraft about the maintenance required after aborted takeoffs. (*Id.*)

Need for High Energy Stop Inspection

Absent the performance of other methods, techniques, or practices acceptable to the Administrator, USAir is required to follow the manufacturer's maintenance manual in performing maintenance. 14 C.F.R. § 43.13(a). USAir argues that the law judge erred in holding that, under the Boeing 767 manual, a high energy stop inspection was necessary in this case.

The Boeing 767 maintenance manual contains a section dealing with high energy stop conditions, entitled "HIGH ENERGY STOP/HEAT DAMAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)." The section provides as follows:

> A. This section gives an examination procedure for landing gear cylinders, wheels, and brakes after a high energy stop condition. The extent of the examination depends on the level of absorbed kinetic energy.
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> (1) The heat that is absorbed by the airplane brake is slowly transmitted to the wheel, tire, axle, and the air around them. The wheels have fuse plugs which are designed to melt and release the tire pressure. This is to stop ruptures of the tires and wheels when the wheel temperature gets too high. The fuse plugs melt at a specified design temperature.

Boeing 767 Maintenance Manual, Section 05-15-14, ¶ 1.A (Nov. 10, 1990) (Complainant's Exhibit H-1). Section 05-15-14 indicates that the following factors affect the energy absorbed:

(1) residual energy from previous stops;
(2) runway slope;
(3) wind conditions;
(4) thrust reverser use;
(5) weight of the aircraft;
(6) speed of the aircraft;
(7) pressure altitude;
(8) outside air temperature; and
(9) taxi distance.

(Id. at ¶ 1.B & 1.C.)

The manual also contains, on p. 203, the following directions for aircraft in the Fuse Plug Melt Range: "Clear runway immediately. Unless required, do not set parking brake. Do not approach gear or attempt taxi for 1 hour. Tire, wheel, and brake replacement may be required." (Complainant's Exhibit H-3.)

Regarding whether a high energy condition has occurred, the manual provides as follows:

> D. A high energy condition can be a refused takeoff. It can also be any stop or sequence of stops that collects energy in the CAUTION range (Fig. 201). An indication that a high energy stop, or equivalent, has been made is the release of a wheel plug. Energy levels are different between brakes after stops in the COOLING RECOMMENDED range. One or more brakes could have absorbed energy in the CAUTION range, and one or more wheel fuse plugs released.[5]

(Id. at ¶ 1.D.)

According to USAir, the phrases "can be," "can also be," and "indication" in ¶ 1.D. of the manual result in ambiguity. USAir further argues that the release of a wheel fuse plug is a particularly unhelpful determinant of when a high energy condition exists because it is a common occurrence.

In the present situation, USAir's argument continues, the plane never exceeded 70 knots, which is nowhere near the highest speed at which a heavy 767 may safely abort a takeoff. As a result, USAir argues, the aircraft could not have accumulated sufficient kinetic energy to cause the damage anticipated in the test. Indeed, says USAir, when it later performed the high energy stop inspection, it found no damage. USAir insists that nothing warrants a finding of violation and

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[5] As noted by Inspector Giordano at the hearing, the portions of the manual referring to the brake light and temperature gauges did not apply in this case because USAir's aircraft did not happen to have the brake temperature read-out option. (Tr. 60-61.)

imposition of a fine on what USAir calls "a compliant airline" when nothing turned out to be wrong with the aircraft.

USAir's argument lacks merit, and the law judge did not err in finding that a high energy stop inspection was necessary in this case. Not one, but two aborted takeoffs occurred. The aircraft, which was bound for London from Charlotte, a long-range, non-stop flight, had full fuel tanks and a full load. (Tr. 42.) As a result, the aircraft was heavy. (*Id.*) Moreover, as Inspector Giordano testified, the temperature does not subside merely because the aircraft has pulled off the runway; on the contrary, kinetic energy is still building. (Tr. 46.) In fact, after the second aborted takeoff, two of the wheel fuse plugs melted, resulting in two deflated tires.

Given these circumstances, a reasonable person consulting the Boeing 767 maintenance manual would have understood that the high energy stop inspection described in the manual should have been performed. Although USAir may disagree with Boeing, the airplane manufacturer, about whether the melting of a wheel fuse plug is a good indicator of whether a high energy condition has occurred, USAir is bound to follow the manufacturer's manual (or other methods, techniques, and practices acceptable to the Administrator[6]). Also, this was not a case in which the surrounding circumstances indicated that the wheel fuse plugs were defective.

USAir's appeal brief suggests that the manual needs to provide certainty as to whether heat damage had occurred, but that argument makes no sense. The purpose of the inspection is to determine whether heat damage has occurred. Thus, the manual provides for an inspection whenever there is a *reasonable possibility* of

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[6] As the law judge noted, USAir did not show that it followed other methods, techniques, and practices acceptable to the Administrator. (Initial Decision at 11.) *See* the text of 14 C.F.R. § 43.13(a), which is contained in footnote 2 above.

heat damage. It was only fortuitous in this case that USAir's aircraft sustained no heat damage.

Furthermore, although USAir may have shown a generally compliant disposition, USAir was not compliant insofar as it failed to perform the high energy stop inspection.[7]

Vagueness

USAir argues that Section 43.13(a) is unconstitutionally vague as applied in this case because the Boeing 767 manual fails to enumerate the conditions under which an air carrier must perform a high energy stop inspection. This argument is rejected, because the regulation and manual provided fair warning to USAir that a high energy stop inspection was necessary in this case.

Admission of USAir's Response to Letter of Investigation

USAir argues that the law judge erred in admitting and relying upon the letter of Mr. Kania, then Director of Quality Assurance for USAir, to FAA Inspector David Cann. The letter constituted USAir's response to the FAA's letter of investigation. Citing Federal Rule of Evidence 408, which provides that offers of compromise are inadmissible, USAir argues that the letter was in the nature of a compromise and should be excluded as against public policy.

The statements of Mr. Kania on USAir's behalf appear to be admissions of an agent that would be admissible against the principal because they were within the scope of the agent's authority and were made during the course of the agency

[7] USAir's other arguments concerning whether a high energy stop inspection was required in this case are not worthy of discussion, but have been considered and rejected.

relationship. *See, e.g.*, Shahid v. Gulf Power Company, 291 F.2d 422, 427 (5th Cir. 1961) (citing WIGMORE ON EVIDENCE).

Furthermore, USAir did not object at the hearing to the admission of the letter. A party may not assert the introduction of evidence as error unless a timely objection is made. Helminski v. Ayerst Lab., 766 F.2d 208, 211 (6th Cir.), *cert. denied*, 474 U.S. 981 (1985), cited in Building Serv. Local 47 Cleaning Contractors Pension Plan v. Grandview Raceway, 46 F.3d 1392, 1397-98 (6th Cir. 1995) (indicating that important considerations in determining whether appellate review is appropriate are: (1) the number of times the allegedly improper evidence was elicited without objection; and (2) whether counsel for the party claiming error referred to the exhibit during his or her own questioning of the witnesses). Although counsel for Complainant questioned Inspector Giordano at length about the contents of the letter, at no time did USAir's counsel object. (Tr. 95-119.) Moreover, counsel for USAir referred to the letter himself during his cross-examination of Inspector Giordano. (Tr. 168.) When Complainant moved the letter into evidence, later in the hearing, USAir's counsel stated, "No objection, your honor." (Tr. 182.) Thus, USAir's counsel's actions indicate that he did not perceive the issue as one that affected the substantial rights of his client.

Although a decisionmaker "may review the introduction of evidence in the absence of an objection if it constitutes plain error and affects a party's substantial rights," Helminski v. Ayerst Labs., 766 F.2d at 211, the admission of Mr. Kania's letter neither rose to the level of plain error nor prejudiced USAir's substantial rights. Consequently, there is no need to address the substantive merits of this argument because USAir has not presented a valid basis for appeal of this issue.

In any event, contrary to USAir's claims, the letter was not in the nature of a compromise. USAir cites Federal Rule of Evidence 408, which provides that evidence of compromise offers is inadmissible in order to promote settlement of disputes. USAir argues that the rationale for Rule 408 applies even if the Federal Rules of Evidence do not directly apply to administrative proceedings. While that may be true, Rule 408 indicates that a "compromise offer" means "furnishing or offering or promising to furnish . . . a valuable consideration in attempting to compromise a [disputed] claim . . . ." The letter merely described the actions taken by USAir. At no point in the letter did USAir furnish or offer or promise to furnish a valuable consideration in attempting to compromise the claim. Thus, even if USAir's argument were considered on the merits, it would fail because the letter cannot be considered a compromise offer.

Evidence of Alleged "Subsequent Remedial Action"

USAir argues that the law judge improperly inferred an admission that the inspection was necessary from USAir's subsequent grounding of the aircraft on April 13, 1992, to perform a high energy stop inspection. To support its argument, USAir relies on the policy considerations supporting Federal Rule of Evidence 708, which provides that evidence of subsequent remedial measures is inadmissible to prove negligence. At no point during the hearing, however, did USAir object to the admission of evidence of USAir's April 13, 1992, grounding of the aircraft for the purpose of proving negligence. As discussed above, a party may not assert the introduction of evidence as error unless a timely objection is made. By failing to object at the appropriate time, USAir has waived this argument.

In any event, the law judge's written initial decision does not indicate that he inferred an admission of a violation from USAir's grounding of the aircraft. The law judge's reasoning in support of his finding of violation of Section 43.13(a) was that: (1) under the Boeing 767 manual, a high energy stop inspection was necessary here because the aircraft had experienced two aborted takeoffs, two fuse plugs had melted, and two tires had deflated; and (2) USAir's visual inspection of the axles during its replacement of the wheel and brake assemblies on the aircraft failed to meet the requirements of a high energy stop inspection. (Initial Decision at 8-11.)

Airworthiness

Although USAir had flown the aircraft on eight flights before performing the high energy stop inspection, the law judge rejected Complainant's allegation that USAir had operated an unairworthy aircraft in violation of Section 121.153(a)(2). Complainant has appealed the law judge's finding regarding Section 121.153(a)(2).

Many aviation cases cite a two-pronged test for airworthiness. *See, e.g.*, Copsey v. National Transportation Safety Board, 993 F.2d 736, 738 (10th Cir. 1993); Morton v. National Transportation Safety Board, 525 F.2d 1302 (10th Cir. 1975); In the Matter of American West Airlines, FAA Order No. 96-3 at 29 n.27 (February 13, 1996). This test is derived from the following provision of the Federal Aviation Act: "The Administrator shall issue an airworthiness certificate when the Administrator finds that *the aircraft conforms to its type certificate and, after inspection, is in condition for safe operation.*" 49 U.S.C. § 44704(c)(1) (emphasis added).

Section 21.181 of the Federal Aviation Regulations, 14 C.F.R. § 21.181 (1992) provides as follows:

> **§ 21.181 Duration.**
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> (a) Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, airworthiness certificates are effective as follows:
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> (1) *Standard airworthiness certificates*, special airworthiness certificates--primary category, and airworthiness certificates issued for restricted or limited category aircraft *are effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 43 and 91 of this chapter* and the aircraft are registered in the United States.

14 C.F.R. § 21.181(a)(1) (emphasis added). By failing to perform the high energy stop inspection when the need arose, as called for by the Boeing 767 maintenance manual, USAir failed to perform the maintenance required by Part 43. As a result, the aircraft's airworthiness certificate was not in effect for the eight flights at issue.[8]

To support its claim that the aircraft was unairworthy, Complainant has cited two decisions finding airworthiness violations after respondents failed to conduct required inspections. In the Matter of Northwest Aircraft Rental, FAA Order No. 94-4 (March 10, 1994), and In the Matter of Flight Unlimited, FAA Order No. 92-10 (February 6, 1992). These cases are similar to the instant case in that neither case involved actual damage to the aircraft. The law judge distinguished these cases on the ground that the inspections at issue were required by airworthiness directives issued by the Administrator, whereas no such airworthiness directive required the high energy stop inspection in the instant case. The law judge's rationale for distinguishing the cited cases lacks persuasiveness. It makes no difference whether it is an airworthiness directive, or any other type of regulation (*e.g.*, Section 43.13(a), requiring compliance with the manufacturer's

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[8] Arguably, the aircraft also failed the second prong of the test: the aircraft was not found, *after inspection*, to be in condition for safe operation. USAir flew the aircraft on eight flights before performing the required high energy stop inspection.

maintenance manual), that requires the inspection.[9] What is important is that the inspection is legally required. If a required inspection has not been performed, the aircraft cannot be considered "airworthy" within the meaning of the Federal Aviation Act, as amended.

In arriving at his determination that Complainant had failed to prove an airworthiness violation, the law judge reasoned that even though USAir did not know at the time whether the aircraft was airworthy, a subsequent inspection revealed no heat damage to the axles. The law judge's reasoning is faulty. An aircraft that has flown without required inspections is not "airworthy" within the meaning of the Federal Aviation Act, as amended, simply because it is later found to be undamaged. Airworthiness is not synonymous with "flyability." Copsey v. National Transp. Safety Bd., 993 F.2d 736, 739 (10th Cir. 1993); In the Matter of USAir, FAA Order No. 92-48 at 6 (July 22, 1992). Aircraft inspections protect lives. As the court in French v. Civil Aeronautics Bd., 378 F.2d 468, 471 (10th Cir. 1967) stated, "Good luck is not an acceptable substitute for proper aircraft inspections."

Alleged FAA Violation of Own Policy

USAir argues that Complainant, in bringing this action against USAir, violated FAA policy, as set forth in FAA Order No. 2150.3A, under which enforcement action is only appropriate where the air carrier is non-compliant. Specifically, USAir's argument rests upon the emphasized portion of the following passage:

> c. While compliance can be compelled where necessary, civil aviation safety depends primarily on voluntary adherence to regulatory

[9] An airworthiness directive *is* a regulation. *See, e.g.*, In the Matter of Langley, 3 NTSB 1218, 1220 (1978) (determining that the issuance of an airworthiness directive was an exercise of the Administrator's rulemaking authority).

> requirements. Thus, our foremost efforts to achieve compliance should be directed toward programs to promote a clear awareness and understanding of the regulations. ***Only where these efforts for achieving voluntary compliance have failed should formal enforcement action be undertaken***.

FAA Order 2150.3A, § 201(c).[10] USAir further argues that the only purpose civil penalties serve is to force non-compliant airlines to conform to FAA policy. USAir insists that civil penalties serve no purpose at all in the case of USAir, given that it is, in its own description, "a compliant airline willing to participate in all programs to advance the safety of aviation and anxious to take action when anyone, and particularly the FAA, even suggests a noncompliance." (USAir's Appeal Brief at 10.)

While an airline's good compliance disposition may be taken into account in determining the amount of the civil penalty, it does not ordinarily exonerate the airline entirely. *See, e.g.*, In the Matter of [Airport Operator], FAA Order No. 91-41 at 7 (October 31, 1991) (declining to increase the civil penalty assessed by the law judge due to the airport operator's "positive compliance disposition"). At every stage in the instant case, USAir's good compliance disposition has been taken into account in setting the civil penalty. It was considered first by the inspector in determining the amount to seek in the complaint (*see, e.g.*, Tr. 130, 181), then by the law judge in his written initial decision (Initial Decision at 17), and now by the Administrator on appeal (*see* the discussion that follows regarding the appropriate sanction). While USAir's good compliance disposition is commendable, USAir cannot be considered

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[10] Complainant points out that Chapter 2 of FAA Order No. 2150.3A was revised on April 20, 1994. Paragraph 201(c) was revised and is now located at Paragraph 202(a). The sentence quoted by USAir has been deleted from the 1994 revision.

entirely compliant given that it committed a number of violations of the safety regulations in the instant case.

Sanction

After finding that USAir failed to comply with the manufacturer's maintenance manual, a violation of Section 43.13(a), the law judge assessed a civil penalty of $5,000. As discussed above, however, the law judge erred in failing also to find that USAir operated an unairworthy aircraft, a violation of Section 121.153(a)(2), on eight separate flights. As a result, the $5,000 civil penalty assessed by the law judge is too low. Failure to perform a required safety inspection is a serious violation that can result in disaster. Given that USAir flew an unairworthy aircraft on eight separate flights, a $40,000 civil penalty is appropriate, even taking into account what the inspector called USAir's "positive attitude." (Tr. 130.)

In summary, the law judge's decision is affirmed in part and reversed in part, and a $40,000 civil penalty is assessed.[11]

DAVID R. HINSON, ADMINISTRATOR
Federal Aviation Administration

Issued this 12th day of August, 1996.

[11] Unless Respondent files a petition for review with a Court of Appeals of the United States within 60 days of service of this decision (under 49 U.S.C. § 46110 (1995)), this decision shall be considered an order assessing civil penalty. *See* 14 C.F.R. §§ 13.16(b)(4) and 13.233(j)(2) (1995).