SERVED: October 15, 2008

NTSB Order No. EA-5411

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 14th day of October, 2008

ROBERT A. STURGELL, Acting Administrator, Federal Aviation Administration, Complainant, v. JOHN J. GLENNON and KEITH M. SHEWBART, Respondents.	)	Dockets SE-17500RM and SE-17615RM

OPINION AND ORDER

The Administrator and respondents have appealed from the decisional order on remand of Chief Administrative Law Judge William E. Fowler, Jr., issued on November 20, 2007.[1] The law judge found that the Administrator proved that respondents

[1] A copy of the order is attached.

violated 14 C.F.R. §§ 121.639 and 91.13(a), with regard to respondents' operation of a Delta Airlines shuttle flight from Ronald Reagan National Airport, Washington, D.C. (DCA), to LaGuardia Airport, New York (LGA).[2] The law judge also specifically found that the Administrator had not proven that respondents violated 14 C.F.R. § 121.627(a).[3] The law judge affirmed the suspension of Respondent Glennon's airline transport pilot (ATP) certificate, but reduced the suspension period from 120 days to 60 days; the law judge also affirmed the suspension of Respondent Shewbart's ATP certificate, but reduced the suspension period from 45 days to 10 days. We grant respondents' appeal and deny the Administrator's appeal.

In a previous order, we remanded this case to the law judge for clarification and further analysis. Administrator v.

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[2] Section 121.639, entitled, "Fuel supply: All domestic operations," states that no person may dispatch or take off a domestic air carrier airplane unless it has enough fuel:

(a) [t]o fly to the airport to which it is dispatched;
(b) [t]hereafter, to fly to and land at the most distant alternate airport (where required) for the airport to which dispatched; and
(c) [t]hereafter, to fly for 45 minutes at normal cruising fuel consumption….

Section 91.13(a) prohibits careless or reckless operation so as to endanger the life or property of another.

[3] Section 121.627(a) states that no pilot-in-command (PIC) may allow a flight to continue toward any airport to which it has been dispatched or released if, in the opinion of the PIC or dispatcher, the flight cannot be completed safely; unless, in the opinion of the PIC, no safer procedure exists.

Glennon and Shewbart, NTSB Order No. EA-5302 (2007). The law judge's decisional order on remand provides a detailed summary of the relevant facts, and concludes that respondents violated 14 C.F.R. § 121.639 when they accepted, prior to taking off, a new route that was 97 nautical miles longer than the originally planned route without having the requisite minimum takeoff fuel. The law judge concluded that the new route would require an additional 850 to 900 pounds of fuel above the amount originally calculated, and that respondents did not add this amount to the originally computed minimum fuel for takeoff under Delta Airlines fuel standards or coordinate the new fuel requirements with Delta Dispatch before taking off. The law judge concluded that, although the new route required approximately 11,020 pounds of fuel under these calculations,[4] respondents took off with 10,500 pounds. In addition, the law judge concluded that Respondent Shewbart, as first officer, shared responsibility for the flight and that he also violated § 121.639, as alleged.

[4] The law judge cited Delta's dispatch release for the original flight route, in conjunction with testimony, as the source of his calculations for these amounts of fuel. The dispatch release for the original route of flight, which Respondent Glennon approved, provided for minimum takeoff fuel under Delta policies in the amount of 10,170 pounds, which consisted of trip burn fuel (minus taxi-out fuel), planned contingency fuel, and reserve fuel. With regard to the new route, the law judge concluded that the amount of minimum takeoff fuel required by Delta policies rose to 11,020 pounds, based on testimony that the new route would require approximately 850 pounds of additional fuel. Decisional Order on Remand at 11.

Finally, the law judge reduced the suspensions to 60 and 10 days for Respondents Glennon and Shewbart, respectively; the law judge based these reductions on cases in which the Board reduced suspension periods when respondents had engaged in improper fuel planning.[5]

The Administrator charged respondents with the violations described above as a result of respondents' operation of a Boeing 737-300 on November 3, 2004, from DCA to LGA (Delta 1966). In articulating the basis for his complaint and appeal, the Administrator alleges that Mr. Steven Caisse, from Delta Dispatch, planned the fuel for Delta 1966 in a manner to ensure safe completion of the flight, with trip burn fuel,[6] planned contingency fuel,[7] unplanned contingency fuel,[8] and reserve

[5] See, e.g., Administrator v. Holmgaard, NTSB Order No. EA-4799 (1999); Administrator v. Knapp, NTSB Order No. EA-4696 (1998); Administrator v. Howe, NTSB Order No. EA-4242 (1994); Administrator v. Pugsley, NTSB Order No. EA-3574 (1992).

[6] The Administrator defines trip burn fuel as "the planned amount of fuel used from the takeoff roll at the departure airport to landing at the destination." Admin. Appeal Br. at 9 n.8 (citing Tr. at 191 and Exh. A-15 at 1).

[7] The Administrator defines planned contingency fuel as "the planned amount of fuel to allow for known airborne contingencies, like possible ATC delays." Admin. Appeal Br. at 10 n.10 (citing Tr. at 167-68 and Exh. A-15 at 2).

[8] The Administrator defines unplanned contingency fuel as "an allowance for unforeseen circumstances." Admin. Appeal Br. at 10 n.11 (citing Exh. A-15 at 2).

fuel,[9] all of which totaled approximately 11,000 pounds. Admin. Reply Br. at 3; Tr. at 190-93, 196. This amount, combined with other factors, such as the amount of planned taxi fuel, which could be deducted in calculating minimum fuel for takeoff along with unplanned contingency fuel, resulted in a calculation of minimum takeoff fuel in the amount of 10,170 pounds. Tr. at 281.[10]

The Administrator asserts that, in general, crewmembers rely on the dispatcher for fuel planning. Tr. at 433, 453-54. The Administrator alleges that Delta 1966 was delayed in taking off, and that respondents subsequently accepted a clearance for a modified route from the appropriate Air Traffic Control (ATC) facility. The record indicates that respondents then sent an Aircraft Communications Address & Reporting System (ACARS) message to Delta Dispatch, informing Mr. Caisse of the route

[9] The Administrator defines reserve fuel as "the planned amount of fuel to satisfy the requirement under FAR 121.639 that the aircraft have sufficient fuel to fly for 45 minutes beyond its destination." Admin. Appeal Br. at 9-10 n.9 (citing Tr. at 168-69).

[10] The Administrator's definition of "minimum fuel for takeoff" in this context is based on Delta's fuel planning policy. Admin. Appeal Br. at 10. In his brief, the Administrator cites the testimony of Mr. Caisse, and states that minimum fuel for takeoff is defined as block fuel minus taxi fuel minus unplanned contingency fuel minus tankered fuel, if applicable. Block fuel, the Administrator contends, is a term that describes the combination of taxi fuel, trip burn fuel, reserve fuel, planned contingency fuel, and unplanned contingency fuel. Id. at 9-10. The Administrator does not cite § 121.639 in his brief in defining these categories.

change, and stating that the aircraft now had 10,500 pounds of fuel. Exh. A-18 at 5 (ACARS message transcript); Tr. at 207. Mr. Caisse then inserted the new route plan into his flight planning computer, and determined that, under Delta's fuel planning policy, the aircraft had insufficient fuel for the longer route. Tr. at 208-209; Exh. A-19. Mr. Caisse sent an ACARS message to respondents, conveying that they had insufficient fuel and would need to refuse the ATC clearance for the modified route. Exh. A-18 at 6; Tr. at 209-210. The Administrator alleges that respondents had already taken off at the time Mr. Caisse sent the message to respondents indicating that they did not have a sufficient amount of fuel for the new route. Tr. at 210.

At the administrative hearing, Respondent Glennon testified that, had he received the message before taking off, respondents would not have accepted the takeoff clearance, but would have tried to resolve the discrepancy as to the amount of fuel necessary for the alternate route. Tr. at 438-39. Because they did not receive the message until shortly after takeoff, respondents informed ATC that they were "tight" on fuel and asked for more direct routing and a change of altitude. Exh. A-3 at 2; Exh. A-4 at 2. After ATC granted respondents' in-flight request to fly directly to a particular intersection, which cut approximately 40 miles off the total trip, and to alter their

cruising altitude from 21,000 to 27,000 feet, Mr. Caisse of Delta Dispatch determined that Delta 1966 did have sufficient fuel to continue at that point, under Delta guidelines. Exh. A-18 at 7; Tr. at 212. Upon respondents' approach to LGA for landing, Delta 1966 received a series of altitude, speed, and heading instructions from ATC. At a certain point, however, respondents did not execute an ATC heading change to 270 as directed, and they informed ATC that they did not have enough fuel to accept that change in heading. Exh. A-8 at 4 (ATC transcript). Approximately one minute after informing ATC that they did not have enough fuel to turn left heading 270, and in the face of another heading change directed by ATC, respondents declared a fuel emergency, which gave them immediate priority in the approach and landing sequence at LGA. Tr. at 102-103. As a result, the Administrator alleges that ATC provided an expedited route for landing, which delayed the landing of other aircraft at LGA to allow Delta 1966 to land. Tr. at 137.

Respondents' consolidated appeal brief raises five principal issues: (1) whether the law judge used incorrect estimates and calculations in determining whether respondents took off with insufficient fuel under 14 C.F.R. § 121.639; (2) whether the law judge misinterpreted references to planned contingency fuel in the Delta Flight Operations Manual; (3) whether the law judge erred in finding that respondents

violated 14 C.F.R. § 91.13(a), in addition to § 121.639; (4) whether the law judge's order is subject to reversal on the basis that the law judge did not evaluate previous Board cases concerning violations of § 121.639; and (5) whether Respondent Shewbart, in his capacity as first officer for Delta 1966, was jointly responsible for the violations and should therefore suffer the penalty that the law judge issued. Respondents contend that we should resolve each of these issues in their favor, and reverse the law judge's decision.

In support of respondents' appeal, Delta Airlines filed a brief of amicus curiae in accordance with 49 C.F.R. § 821.9(b).[11] Delta contends that the minimum fuel for takeoff[12] was 10,170 pounds, and that the flight departed with 10,500 pounds of fuel.

[11] Section 821.9(b) of our Rules of Practice provides that, "[a] brief of amicus curiae in a matter on appeal … may be filed, if accompanied by written consent of all the parties, or by leave of the General Counsel if, in his or her opinion, the brief will not unduly broaden the matters at issue or prejudice any party to the proceeding." The Administrator does not consent to the filing of the brief, on the basis that it presents Delta's own interpretation of its fueling requirements, and that respondents should have presented this interpretation and supporting evidence at the hearing. We find that our acceptance of the brief does not unduly broaden the matters at issue or prejudice either party. Therefore, we have considered the brief in accordance with § 821.9(b).

[12] Delta's brief states that Delta defines the fuel that §§ 121.639 and 121.647 require as "minimum fuel for takeoff," and that Delta's practice is to subdivide this fuel into four separate categories: trip burn fuel (minus the taxi fuel that Delta places in this category), planned contingency fuel, alternate airport fuel (where required), and reserve fuel. Br. of Amicus Curiae at 3.

Delta argues that the minimum fuel amount for purposes of § 121.639 did not change as a result of respondents' acceptance of a new and longer route, because the category of planned contingency fuel (PCF) was on the aircraft to accommodate such route changes, and that Delta uses this category of fuel to accommodate any needs for extra fuel pursuant to § 121.647.[13] Delta thus contends that the law judge erred in concluding that the minimum fuel for takeoff amount increased as a result of respondents' acceptance of the new route, and argued instead that the amount of PCF on the aircraft was available to respondents for route changes, even prior to takeoff. Furthermore, Delta argues that the Administrator failed to prove that respondents took off without PCF that would accommodate the route change. Delta further asserts that our affirmation of the law judge's decision would result in confusion in the airline industry, as operators would believe that § 121.639 does not allow them to utilize PCF for route changes.

The Administrator contests respondents' arguments, and urges us to uphold the law judge's decision and increase respondents' suspension periods.[14] The Administrator argues that the law judge's reduction in sanction for both respondents was

[13] See infra note 21.

[14] The Administrator does not contest the law judge's conclusion that respondents did not violate § 121.627(a).

inconsistent with Board precedent, because previous cases state that the Board may not modify the Administrator's sanction unless the sanction is arbitrary, capricious, or not in accordance with the law. The Administrator contends that, because the Sanction Guidance Table calls for a suspension period of 30 to 150 days for mismanagement of fuel, the Administrator's issuance of a 120-day suspension for Respondent Glennon and a 45-day suspension for Respondent Shewbart was appropriate. Respondents contest the Administrator's arguments concerning sanction.

Respondents argue, as indicative of the adequacy of the fuel on board the aircraft at takeoff, that, when they landed the aircraft at LGA, the aircraft contained more than enough fuel. In addition, respondents argue that the Administrator's expert's testimony at the administrative hearing was based on a "hypothetical, generic flight plan," and therefore was not accurate with regard to the Administrator's estimate of the amount of fuel that respondents needed for the new route from DCA to LGA.

For purposes of our analysis, respondents' argument that they landed the aircraft with more than enough fuel is not particularly useful, as § 121.639 requires that aircraft have sufficient fuel upon takeoff. In addition, this argument is plainly incongruent when viewed in light of the facts of this

case, because respondents declared a fuel emergency during their final approach in order to gain priority for landing at LGA. Furthermore, at the hearing, both respondents testified that the new route would increase the aircraft's fuel consumption: Respondent Glennon estimated that the fuel consumption would increase by approximately 1,000 pounds (Tr. at 429), and Respondent Shewbart estimated that it would increase by approximately "850 to 900 pounds" (Tr. at 469). By respondents' own admissions, trip burn fuel increased by at least 850 pounds.

Respondents also contend that the law judge erred in relying on the Delta Flight Operations Manual, which provides that the captain of a flight must coordinate with the dispatcher when "fuel consumption [is] greater than planned." Exh. A-13. Respondents argue that § 121.639 does not reference the requirements of any manual, and that the Delta Manual did not require respondents to coordinate with the dispatcher prior to taking off, because respondents merely reallocated the PCF on the flight for future use. We find that this argument is also not directly relevant to our analysis, as the law judge did not base his conclusion on this provision of the Delta Manual. While the Manual lists several events about which the captain must coordinate with the dispatcher, one of which is fuel consumption greater than planned, this requirement is not directly at issue in our resolution of this case. The law judge

indicated that he considered the fact that respondents did not wait for a response concerning their new route from the dispatcher before taking off, but he did not imply that he based his decision concerning § 121.639(a) on the provisions of the Manual. Regardless of the Manual's requirements, respondents do not dispute that they took off with 10,500 pounds of fuel, even though they had accepted a route before they took off that was approximately 97 nautical miles longer than the original route, adding 850 pounds to the original trip burn fuel calculations.

Respondents' arguments concerning the Delta Manual do not address the fundamental issues of this case, which are whether they must consider a certain amount of PCF defined by Delta Airlines as part of the requisite minimum fuel for takeoff, in addition to those quantities specifically required by § 121.639, and thus whether § 121.639 restricts pilots from allocating, prior to takeoff, any or all of PCF to accommodate route changes.

Respondents also argue that the law judge erred in finding that respondents violated § 91.13(a). We have previously acknowledged that the Administrator routinely includes an allegation that a respondent has acted carelessly or recklessly, in violation of § 91.13(a), in addition to any operational violations alleged in the complaint; moreover, we have long held that the Administrator proves a violation of § 91.13(a) when he

has proven an operational violation.[15] Here, the Administrator charged respondents with violations of §§ 121.627(a) and 121.639, in addition to the § 91.13(a) charge.

Furthermore, respondents argue that the law judge's decision did not comply with our previous order, wherein we directed the law judge to evaluate previous cases regarding § 121.639. Respondents argue that the law judge reached his decision that respondents took off with insufficient fuel, but did not detail how he determined that the aircraft was 520 pounds short of the necessary amount of fuel. Finally, respondents argue that Respondent Shewbart was not jointly responsible for Delta 1966 with regard to fuel calculations and planning. Although respondents previously argued that the Delta Flight Operations Manual was not controlling with regard to its instructions to coordinate with the dispatcher, respondents now argue that the Administrator did not prove that Respondent Shewbart failed to fulfill any requirements listed in the Manual.

On appeal, we consider whether the findings of fact are supported by a preponderance of reliable, probative, and substantial evidence; whether conclusions are made in accordance with law, precedent, and policy; whether the questions on appeal

[15] See Administrator v. Seyb, NTSB Order No. EA-5024 at 4 (2003); Administrator v. Nix, NTSB Order No. EA-5000 at 3 (2002); Administrator v. Pierce, NTSB Order No. EA-4965 at 1 n.2 (2002).

are substantial; and whether any prejudicial errors occurred. 49 C.F.R. § 821.49. When evaluating a law judge's determination that a respondent violated a regulation as the Administrator has alleged, we conduct a de novo review.[16] A law judge's findings of fact are "susceptible of de novo review."[17] In reviewing the law judge's decision, the Board assesses whether the Administrator has met the burden of proof by a preponderance of the evidence.[18]

With regard to the case at hand, we have carefully reviewed the evidence on the record de novo, consistent with our precedent concerning the Board's standard of review of initial decisions on appeal. While we do not find any of respondents' arguments particularly persuasive, we have determined that the Administrator did not fulfill his burden of proof in this case.

[16] See Administrator v. Andrzejewski, NTSB Order No. EA-5263 at 3, 4 (2006); Administrator v. Frohmuth and Dworak, NTSB Order No. EA-3816 at 1 n.5 (1993).

[17] Frohmuth and Dworak, supra, at 1 n.5; Administrator v. Wolf, NTSB Order No. EA-3450 (1991) (the Board may reverse a law judge's decision if the Board cannot reconcile the law judge's findings with the evidence).

[18] Administrator v. Opat, NTSB Order No. EA-5290 at 2 (2007) (citing Administrator v. Van Der Horst, NTSB Order No. EA-5179 at 3 (2005), and stating that the Administrator has the burden to prove an aircraft is not airworthy to prevail on an allegation that respondent violated § 91.7(a), and holding the Administrator did not prove this); and Administrator v. Schwandt, NTSB Order No. EA-5226 at 2 (2006) (stating that the Board's role is to determine, after reviewing evidence the Administrator presents, whether the Administrator fulfilled the burden of proof).

First, we note that this is not a fuel starvation case. The respondent pilots continued a flight once airborne to a destination airport after obtaining route adjustments that, from testimony offered by the Administrator's own witnesses, are frequently requested and routinely granted,[19] and in this instance, after approval of Delta Dispatch.[20] Furthermore, even though respondents declared a fuel emergency to forestall an unexpected heading change directed by ATC, at that point they still had on board more than the required reserve fuel and more than both Delta's minimum and emergency fuel. Respondents then landed the aircraft, after receiving landing priority, well in excess of these fuel amounts. So, we do not have obvious evidence of fuel exhaustion before us, and must instead rely on an analysis of whether fuel on board the aircraft at takeoff met the requirements of the Federal Aviation Regulations. The Administrator is thus not challenging the decision to declare the fuel emergency, but instead the decision to take off with the fuel on board at that time.

The Administrator has essentially presented and argued his case alleging that § 121.639, in addition to its plain language, requires some additional component in the minimum fuel for takeoff. In this instance, that component is that part of

[19] See, e.g., Tr. at 42, 55, 77-78.

[20] Tr. at 212.

Delta's fuel flight planning allocation called planned contingency fuel. The Administrator argues that this additional component is mandated by § 121.647,[21] which states that certain factors shall be "considered" in the fuel planning under the governing regulations. Not well explained in the initial allegation or in the briefs accompanying this case is how 14 C.F.R. § 121.639, even when modified by § 121.647, requires a particular amount of contingency fuel that is in addition or additive to the fuel required under the express language of § 121.639. The plain language of § 121.639 requires airmen to ensure that their aircraft has sufficient fuel to fly to the airport to which it is dispatched, to fly to an alternative airport (if one is required), and to fly for 45 minutes at normal cruising fuel consumption. Under § 121.647, operators in computing their fuel requirements are also directed to "consider" factors such as anticipated traffic delays.

Although not clearly articulated by the Administrator, we

[21] Section 121.647, entitled, "Factors for computing fuel required," states that:

> Each person computing fuel required for the purposes of this subpart shall consider the following:
>
> (a) Wind and other weather conditions forecast.
>
> (b) Anticipated traffic delays.
>
> (c) One instrument approach and possible missed approach at destination.
>
> (d) Any other conditions that may delay landing of the aircraft.

have examined the regulatory basis for the apparent assertion that PCF forms a component of the minimum fuel for takeoff defined under § 121.639 that is not subject to adjustment by pilots. In this regard, although the Administrator did not expressly charge a violation of 14 C.F.R. § 121.647, we have considered whether § 121.647 would require the specific increase in minimum fuel for takeoff under § 121.639 as the Administrator has apparently sought to require here.

In this case, we note the definition of planned contingency fuel provided in the Flight Planning and Releasing section of the Delta Flight Control Operations Manual. Exh. A-15 at 2. That definition provides that PCF is for "known airborne contingencies" and gives the following examples: "[w]eather deviations due to enroute thunderstorms," and "[a]nticipated ATC delays and reroute." Id. The definition also instructs, "[d]uring situations when takeoff delays are excessive or unanticipated, a portion of this fuel may be allocated for taxi fuel to eliminate a gate return for additional fuel," implying that at least someone has the authority to allocate PCF to taxi fuel and to reduce the minimum amount required for takeoff. Id. During the hearing and in their briefs, the parties debated the meaning of the following sentence in the definition: "This fuel cannot be used prior to takeoff unless the captain has the concurrence of the dispatcher." Id. This provision, however,

appears to go to internal Delta operating practices, not whether pilots or dispatchers must reserve the entire PCF amount for minimum takeoff fuel computations.

We thus find it noteworthy that the Delta Flight Operations Manual that the Administrator quoted and ostensibly approved would have allowed Delta Dispatch to adjust the PCF prior to the aircraft taking off, or that the pilots could have adjusted the PCF with "the concurrence" of Dispatch, or that the pilots could have accepted an ATC reroute immediately after taking off that left less fuel for traffic delays at the destination. Regardless, in litigating the case, there was insufficient effort given to identifying what specific portion of Delta's PCF was devoted to addressing the requirements of § 121.647, and whether such a specific required amount remained on the aircraft at the time respondents elected to take off on the flight at issue. Without such proof, we are unable to conclude that the entire PCF as originally computed must have been available to respondents at takeoff.

Assuming, arguendo, that § 121.647 modifies the language of § 121.639, and that the Administrator fairly placed respondents on notice of this theory in the manner in which he alleged the subject violations, the Administrator still has not established what amount of fuel, if any, in addition to the fuel that § 121.639 expressly requires, is necessary to accommodate the

potential needs that § 121.647 contemplates, or how respondents should have computed this amount of fuel.

Moreover, were we to accept without proof or argument that § 121.647 required some additional specific amount be added to minimum fuel required for takeoff, there is no evidence that this specific amount of fuel was not indeed available here. Under the revised computations for the rerouted flight, substantially less PCF existed than was allocated for the original route.[22] On the other hand, the Administrator provided no evidence or argument indicating that all of the initially computed PCF was no longer available for the accepted route of flight at takeoff. Stated obversely, there appears to have been some quantity of fuel on the aircraft at takeoff in excess of the quantity that § 121.639 expressly requires, and the Administrator has presented no evidence that this quantity was insufficient to satisfy any amount that § 121.647 might require. The Administrator thus cannot enforce an interpretation of § 121.639, in conjunction with § 121.647, that would require an amorphous and arbitrary amount above that existing within Delta's PCF remaining at the time of the instant takeoff.

We are mindful of the fact that Congress has directed the

[22] PCF was the only category of fuel subject to adjustment that was available for the longer route. If trip burn fuel increased by 850 pounds, then the PCF that remained was substantially less than that which existed in the original fuel calculations.

Board to defer to the Administrator's interpretation of FAA regulations. 49 U.S.C. § 44709(d)(3); see also Garvey v. NTSB, 190 F.3d 571, 576-79 (D.C. Cir. 1999). This direction, however, is not without limitation: section 44709(d)(3) provides that the Board "is bound by all validly adopted interpretations of laws and regulations the Administrator carries out … unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law." Here, the Administrator asks the Board to defer to his interpretation of 14 C.F.R. § 121.639, in which the Administrator asserts that § 121.639 requires airmen to include a certain amount of fuel, in this instance the entire amount of Delta's original PCF computation, in the minimum fuel for takeoff category. Such an interpretation appears to be, at best, inconsistent with the plain language of the regulation and thus not according to law, and, at worst, to be arbitrary and capricious.

The Board has expended considerable energy in deliberating this case, and recognizes that some evidence appears, on the surface, to support the Administrator's position. For example, we recognize that some circumstantial evidence in the record before us indicates that respondents took off without sufficient fuel to conduct the flight in a manner consistent with the operating certificate that the FAA granted Delta Airlines, and apparently not consistent with respondents' own training and

self-defined personal margin for safety. Such evidence in the record before us includes facts highlighting the following circumstances: 7 minutes after taking off, respondents began requesting shortcuts from ATC after admitting they were "light" on fuel; the dispatcher's fuel calculations indicated that respondents did not have enough fuel to be consistent with Delta's standard practices and PCF requirements; the dispatcher therefore immediately sent messages to respondents and began coordinating with ATC to attempt to re-direct respondents to a shorter route; and respondents ultimately declared a fuel emergency after ATC attempted to re-sequence them at their destination airport on their first attempted approach. However, we are confined in our analysis to whether the Administrator has met his burden on the allegations that he presented to us.

In summary, the Board concludes that the Administrator has not met his burden of proof in pursuing a violation of § 121.639, as he specifically alleged in the initial complaint. The Administrator did not provide sufficient evidence indicating that at takeoff respondents' aircraft did not contain sufficient fuel to fly to the airport to which it was dispatched, to fly to an alternative airport (in this instance not required by the conditions), and to fly for 45 minutes at normal cruising fuel consumption, as § 121.639 requires, even incorporating factors from § 121.647 such as anticipated delays that "shall be

considered" in computing minimum fuel for takeoff. The Administrator failed to prove that the entire original PCF at issue in this case as defined by Delta was a required component of the minimum fuel for takeoff governing the flight at issue. In brief, the Administrator failed to prove the elements of the charge under a reasonable interpretation of §§ 121.639 and 121.647. Through proper rulemaking, he may one day amend this regulatory provision to require a greater margin of safety and more specificity in fuel reserves, but until then, he is bound by the language of the rule he promulgated and the rule now before us.

ACCORDINGLY, IT IS ORDERED THAT:

1. Respondents' appeal is granted;

2. The law judge's decision is reversed; and

3. The Administrator's appeal is denied as moot.

ROSENKER, Acting Chairman, and HERSMAN, HIGGINS, and SUMWALT, Members of the Board, concurred in the above opinion and order. CHEALANDER, Member, did not participate, by way of recusal.

Served: November 20, 2007

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF ADMINISTRATIVE LAW JUDGES

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ROBERT A. STURGELL,
ACTING ADMINISTRATOR,
FEDERAL AVIATION ADMINISTRATION,

Complainant,

v. Docket Nos.: SE-17500RM
SE-17615RM

JOHN J. GLENNON and
KEITH M. SHEWBART,

Respondents.

* *

DECISIONAL ORDER ON REMAND

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William E. Fowler, Jr., Chief Administrative Law Judge: In these consolidated proceedings, the Administrator of the Federal Aviation Administration ("FAA") initially issued orders suspending the airline transport pilot ("ATP") certificates of respondent Glennon on August 4, 2005 and respondent Shewbart on November 23, 2005. Both respondents filed timely appeals from those orders with the National Transportation Safety Board, and the Administrator subsequently issued amended suspension orders against each respondent — which, pursuant to Rule 31(a) of the Board's Rules of

Practice in Air Safety Proceedings (codified at 49 C.F.R. § 821.31(a)), serve as the amended complaints in this proceeding — on December 13, 2005. These certificate actions stem from a November 3, 2004 Delta Airlines flight from Ronald Reagan National Airport ("DCA"), in Arlington, Virginia, to LaGuardia Airport ("LGA"), in Flushing, New York, on which respondent Glennon served as pilot-in-command and respondent Shewbart served as first officer. The Administrator charged Captain Glennon with violations of §§ 91.13(a), 121.627(a) and 121.639 of the Federal Aviation Regulations ("FAR," codified at 14 C.F.R.), and ordered his ATP certificate suspended for 120 days. First Officer Shewbart was charged with violations of FAR §§ 91.13(a) and 121.639, for which a 45-day certificate suspension was imposed by the Administrator.[1] Copies of the amended orders of suspension/complaints are attached hereto.

Following an evidentiary hearing held on March 7 and 8, 2006, I issued an oral initial decision, in which I found that both respondents had violated FAR § 121.639 and, on a derivative or residual basis, § 91.13(a), but that the § 121.627(a) charge against Captain Glennon had not been established. With respect to sanction, I reduced the 120-day certificate suspension that the Administrator had imposed on Captain Glennon to 60 days, and the 45-day suspension that was ordered against First Officer Shewbart to 10 days.[2] Both of the respondents and the Administrator appealed that decision to the full five-member Board, and, on August 1, 2007, the Board, in NTSB Order EA-5302, remanded the case to me "for further proceedings consistent with th[at] opinion and order."[3]

The Board, in its order, observed that the Administrator's appeal maintained that I had erred in reducing the suspensions assessed against both respondents, and in my "apparent [factual] conclusion that respondents did not take off without the minimum fuel required,"[4] although I found that they had violated FAR § 121.639. It also noted that the Administrator's appeal did not contest my finding that Captain Glennon had not been shown to have violated FAR § 121.627(a). The Board related that respondents, in their

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[1] As is pertinent to this proceeding, the cited FARs provide:

"§ 91.13 Careless or reckless operation.

(a) *Aircraft operations for the purpose of air navigation*. No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

§ 121.627 Continuing flight in unsafe conditions.

(a) No pilot in command may allow a flight to continue toward any airport to which it has been dispatched or released if, in the opinion of the pilot in command or dispatcher (domestic and flag operations only), the flight cannot be completed safely; unless, in the opinion of the pilot in command, there is no safer procedure. In that event, continuation toward that airport is an emergency situation as set forth in § 121.557.

§ 121.639 Fuel supply: All domestic operations.

No person may dispatch or take off an airplane unless it has enough fuel—

(a) To fly to the airport to which it is dispatched; [and]

* * * * *

(c) Thereafter, to fly for 45 minutes at normal cruising fuel consumption."

[2] The Oral Initial Decision appears at Tr. 563-76.

[3] NTSB Order EA-5302 at 14.

[4] *Id.* at 4-5.

joint appeal, posited that I had erred: (1) in determining that they were required under FAR § 121.639 to obtain the concurrence of a dispatcher as to whether they had adequate fuel on board their aircraft before they proceeded to take off after receiving an amended clearance, with a longer route, from air traffic control ("ATC"); (2) in failing to find that they had sufficient fuel on board to comply with FAR § 121.639; and (3) in holding First Officer Shewbart, who was neither pilot-in-command nor the flying pilot on the flight in question, liable for any regulatory violations. The Board further noted that respondents had maintained in their appeal that the initial decision contained certain inconsistencies, and did not adequately explain the factual and legal bases underlying my ultimate findings. In remanding the case, the Board directed that I provide a more detailed and cogent factual and legal analysis to support the conclusions I reached in arriving at my initial decision, including those relating to sanction.[5]

I.

I have, in response to the Board's remand, thoroughly reviewed the evidentiary record in this case. Certain basic facts are largely undisputed. The subject flight was Delta Flight 1966, which was a shuttle flight that was scheduled to depart DCA for LGA at 7:30 p.m. The aircraft used on that flight was a Boeing 737-300 aircraft. In addition to being pilot-in-command, Captain Glennon served as flying pilot. First Officer Shewbart, as the non-flying pilot, handled flight communications.

Approximately two hours before the flight's scheduled takeoff, Stephen Caisse, a Delta Airlines dispatcher, performed route and fuel planning for the flight with the aid of a flight planning computer ("FPC"). He then completed a dispatch release, which Captain Glennon subsequently agreed to before Flight 1966 left the gate at DCA. For the planned route, the dispatch release designated 4,450 pounds of trip burn fuel (fuel expected to be used between the time of taxi out at DCA and landing at LGA), including 480 pounds of taxi fuel; 2,200 pounds of planned contingency fuel (fuel designated by the

[5] *Id.* at 13-14. After that remand order was issued, both respondents filed a motion for a new hearing, and the Administrator subsequently submitted a reply in opposition to that motion. The motion for a new hearing will be denied. As is noted above, the hearing that was held in this matter took two full days, during which time the parties fully had the opportunity to call, examine and cross-examine witnesses; I also had the opportunity (which I exercised liberally) to question the witnesses; and the parties were freely able to present as exhibits all documentary evidence they believed to be pertinent to the issues involved. The hearing transcript and exhibits accepted into evidence provide a complete evidentiary record in this matter, to which I have been readily able to refer in complying with the Board's remand directives. A new hearing would certainly add to the time and resources expended by the parties in this matter and likely result largely in the duplication of evidence presented for my consideration, and would, thus, seem to unduly burden the adjudicative process with little, if any, resulting benefit. I find no merit in respondents' contention that they stand to be prejudiced in the absence of a new hearing "because issuing a written opinion after the Respondent[s], Administrator, and Delta Airlines have all filed documents [in connection with the parties' cross-appeals to the Board] pointing out various contradictions in the evidence would essentially change the trial record without allowing clarifying input, on the record [from the parties]" (Motion for New Hearing ¶ 15). In reality, the evidentiary record would be changed only if a new hearing were held, and the addition of "clarifying input" from the parties could just as likely have the undesirable effect of obfuscating matters at this stage in the proceeding.

dispatcher to accommodate anticipated delays, such as for air traffic and weather); 350 pounds of unplanned contingency fuel (fuel the dispatcher designates for unfore-seen circumstances); and 4,000 pounds of reserve fuel (fuel calculated to meet the FAR § 121.639(c) requirement that the aircraft carry sufficient fuel for to fly for 45 minutes at normal cruising fuel consumption in addition to that needed to reach the destination airport). The dispatch release aircraft block fuel (which is the total of trip burn fuel, plus planned and unplanned contingency fuel, plus reserve fuel) was 11,000 pounds. Also calculated in the dispatch release was minimum takeoff fuel (which is block fuel, minus taxi fuel, minus unplanned contingency fuel; or, viewed another way, is trip burn fuel, plus planned contingency fuel, plus reserve fuel) of 10,170 pounds. The target gate arrival fuel was 6,400 pounds. According to witness testimony, Flight 1966 pushed back from the gate at DCA with between 11,000 and 11,100 pounds of fuel onboard. Delta's Fuel Service Record (Ex. A-28), which is the most reliable evidence of pushback fuel amount, indicates that the aircraft had 11,080 pounds of fuel onboard when it left the gate.

Flight 1966 pushed back from the gate at 7:30. However, takeoff was delayed due to a ground stop at LGA and/or air traffic saturation that resulted in the selected release of aircraft from DCA, Dulles Airport and Baltimore-Washington Airport, and Captain Glennon taxied the aircraft to a block holding area and shut down the engines. Flight 1966 had several communications with Dispatcher Caisse about the delay over the Aircraft Communications Address and Reporting Service ("ACARS") between 7:37 and 8:30. The crew was then advised by ATC that Flight 1966 could have an amended clearance to fly a "back door" route to LGA, which would first take the flight north over Central Pennsylvania, then east toward LGA. This alternate route was 97 nautical miles ("NM") longer than the original route provided by Dispatcher Caisse. The crew was at liberty to accept or reject this amended clearance, and the ground controller who handled Flight 1966 at DCA noted in his testimony that one reason to reject an alternate route would be to avoid having to go back to the gate for additional fuel.

At that time, there were 10,500 pounds of fuel on board the aircraft. Captain Glennon entered the new route into the aircraft's Flight Management System ("FMS") computer, and determined, on the basis of the FMS information he received, that there was sufficient fuel for the new route. First Officer Shewbart checked and confirmed this on FMS. At 8:36, the crew sent an ACARS message to Delta Dispatch, which informed it of the new route, and indicated that the aircraft had 10,500 pounds of fuel on board. Flight 1966 then took off at 8:37.

After receiving the crew's 8:36 ACARS message, Dispatcher Caisse entered the route and fuel information that was provided by the crew into the FPC, which responded that there was insufficient fuel for the new route. At 8:38, not knowing the flight had already taken off, Dispatcher Caisse sent the message "INSUFFICIENT FUEL FOR THAT ROUTE – NEC TO REFUSE" to Flight 1966 via ACARS. At 8:39, he sent another ACARS message to Flight 1966, relating that the FPC's response to the new route and fuel information was "BLOCK FUEL TOO LIGHT." At 8:43, he sent an ACARS message to the crew that he was attempting to get the flight turned back on its original route. While these messages were being sent, the aircraft was climbing, and Captain Glennon testified that, at that point, the crew was focused on flying the aircraft. At some point in

time after climb, Captain Glennon asked First Officer Shewbart to recheck the FMS data, and they found no error.

At 8:44, the crew contacted ATC Washington Center, stating “we’re gonna be real tight on fuel with this long ah westward routing that we’re getting and i wonder if there are any shortcuts we can get something like ah direct to robinsville would be really nice.” Washington Center advised the crew to contact New York Center with that request. At 8:45, the crew radioed New York Center that “we got routed on a longer western route for this which is gonna make us real tight on gas and I am wondering if we can’t get direct to allentown or something like that to get into laguardia faster.” Ultimately, Flight 1966 was given two shortcuts by ATC — first, direct to the Milton intersection, then to MARCC, which shortened the route by approximately 40 NM — and clearance to climb from 21,000 feet to 27,000 feet, which was also designed to conserve fuel.

At 8:53, Flight 1966 sent an ACARS message to Delta Dispatch, relaying the shortcuts and altitude increase, and indicating that there were 8,200 pounds of fuel onoard the aircraft and that the flight was expected to land with 6,400 pounds of fuel. Based on that information, Dispatcher Caisse informed the crew by ACARS at 8:57 that, “WITH THOSE NUMBERS WE LOOK FINE,” and provided a recalculation of the flight’s fuel numbers from that point. This became the flight’s redispatch. Thereafter, nothing remarkable occurred until the flight was on approach to LGA.

At 9:22, Flight 1966 was put on a heading to intercept the final approach course at LGA. An FAA transcript of radio transmissions between Approach Control and the crew of Flight 1966 relates that, after a series of altitude, speed and heading changes, the flight was directed to turn left to a heading of 270 at 9:25:16. Thereafter, at 9:25:19, Flight 1966 responded to the approach controller “two seven zero . . . are we going to dials [(Digital Integrated Automatic Landing System)] here shortly.” The controller then communicated to the crew at 9:25:24, “uh you’re uh about uh you’re going to be re-sequenced turn left heading two seven zero;” the crew responded, “we don’t have the fuel to do that” at 9:25:30; and the controller subsequently communicated at 9:26:07, “turn left two two zero,” which was a turn further away from LGA. The transcript indicates that Flight 1966 then made a transmission at 9:26:12 that was blocked; that the controller repeated the 220 heading instruction at 9:26:13; and that, at 9:26:15, the crew radioed “delta nineteen sixty six declaring an emergency for fuel we’re going direct to dials,” after which the controller transmitted at 9:26:21,“alright . . . turn uh right direct dials descend and maintain two thousand five hundred.” The flight was then handed off to the tower at 9:28:30.

Flight 1966 subsequently landed at LGA with between 5,300 and 5,400 pounds of fuel onboard.

II.

There is also some degree of conflict in the testimonial and documentary evidence relating to a number of matters that were placed in issue by the parties at the hearing.

One such subject was whether Flight 1966 had sufficient fuel onboard on takeoff. On this issue, both crewmembers testified that, between the time they received the amended clearance and takeoff, they used the onboard FMS to check fuel adequacy. Captain Glennon related that he calculated that the new route would require around 1,000 pounds of additional fuel than did the original route. First Officer Shewbart said that he had calculated the difference to be between 850 and 900 pounds.[6] Captain Glennon testified that this increase did not affect or change the flight's minimum fuel for takeoff because he used planned contingency fuel to make up the difference. When asked why he would decrease the contingency fuel for the flight, he responded, "My options, my fuel," and related that "[t]he planned contingency fuel is there to be used if necessary. . . . Trip burn doesn't take into account vectors, for example, that ATC gives me. All trip burn takes into account is a filed route along various specified geographic points . . . . So if I'm vectored off my route by ATC, as I was in this case for example, the only possible place that fuel can come from is planned contingency fuel, which is why it's there" (Tr. 430-31). First Officer Shewbart concurred, stating that "we could use the planned contingency fuel as part of the regular operation, such as reroutes, traffic controls and the like" (Tr. 470).

There was, however, contrary evidence relating to such use of planned contingency fuel. According to the fuel planning section of Delta's Flight Control Operations Manual (Ex. A-15), planned contingency fuel is the fuel computed by the dispatcher "to allow for known *airborne* contingencies. The fuel burn is calculated at 15,000 feet *and is included in minimum fuel for takeoff*. . . . *This fuel cannot be used prior to takeoff unless the captain has the concurrence of the dispatcher*. During situations when takeoff delays are excessive or unanticipated, a portion of this fuel may be allocated to *taxi fuel* to eliminate a gate return for additional fuel" (emphasis added). That manual section states that planned contingencies may include, but are not limited to, anticipated ATC delays and reroute, and weather deviations due to enroute thunderstorms.[7] In his testimony, FAA ASI Corbitt opined that the concurrence of Dispatch was needed to convert planned contingency fuel into trip burn fuel. Also, Dispatcher Caisse, in response to being asked, "[W]hen the aircraft takes off is it required to have planned contingency fuel on board," replied, "The requirement is at the commencement of the takeoff event, which means the application of the throttles for purposes of taking off. Once it's in the air, that fuel is there to take — to handle anything that the ATC system —" (Tr. 364-65).

Evidence was also presented on the question of whether Flight 1966 should have taken off without first obtaining the concurrence of Delta Dispatch, without regard to the crew's determination that the aircraft had adequate fuel onboard for the new route. With

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[6] Jack D. Corbitt, the FAA's aviation safety inspector ("ASI") in this matter, who was also qualified at the hearing as an expert in air carrier operations, related in his testimony that Delta Dispatch had calculated that the new route would require 1,600 more pounds of fuel than the original route, but, through his own experience, he calculated the difference to be around 1,100 pounds (Tr. 261).

[7] At the head of that section of the manual, it is noted that, under FAR § 121.647, winds and other forecast weather conditions, anticipated traffic delays, one instrument approach and possible missed approach at the destination airport, and "[a]ny other conditions that may delay landing of the aircraft," are factors to be considered in computing a flight's fuel requirements.

respect to that matter, the flight dispatch release section of Delta's Flight Operations Manual (Ex. A-13) provides that the captain is responsible for "coordinating with the Dispatcher of any significant route changes," including, as is relevant here, lateral changes from the planned route of flight by more than 100 NM, any condition that will affect estimated time of arrival by more than 15 minutes, and fuel consumption greater than planned.

Dispatcher Caisse testified that none of these conditions applied because the *cumulative* 97 NM increase in the length of flight that the amended clearance called for was far less than a *lateral displacement* of 100 NM,[8] the increase in flight time did not exceed 15 minutes, and it was taught in Delta dispatch training that "fuel consumption greater than planned" was intended to apply to a fuel leak situation, where the *rate* of fuel consumed exceeds the planned rate. In that regard, he observed that the situations enumerated in the manual for dispatch coordination could be tactical (*i.e.*, in-flight), as well as or planning (*i.e.*, preflight), in nature. Captain Glennon, in his testimony, and Delta's Chief Pilot, Gary Beck, in a September 13, 2005 letter to the Administrator (Ex. R-1), also expressed the view that the crew was not required under the Flight Operations Manual to obtain Dispatch's concurrence before accepting and taking off on the amended clearance. Captain Glennon, when questioned as to why Flight 1966 generated the 8:36 ACARS transmission to Delta Dispatch, which informed it of the amended clearance, stated that this communication was made for informational purposes only, to let Dispatch know that the flight would likely take longer than originally scheduled to arrive at LGA. Both Captain Glennon and First Officer Shewbart testified that they did not expect Dispatch to reply to that message.[9]

Expressing a contrary view was ASI Corbitt, who opined that, while the Flight Operations Manual might not have mandated dispatcher concurrence "in the literal reading" of its mileage and length of flight time provisions, "I don't think any prudent captain would fail to coordinate with the dispatcher when it involved all of this border-line information" (Tr. 253).[10] As to the "fuel consumption greater than planned" manual provision, ASI Corbitt testified that he believed that dispatcher concurrence was needed because the new route represented a significant change from the original route, and would result in significantly greater total fuel consumption than was originally planned.

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[8] In this regard, Dispatcher Caisse explained that the 100 NM lateral displacement provision is not fuel-related, but exists to prevent encounters with adverse weather conditions and facility outages not contemplated in the planned route (Tr. 339).

[9] However, Captain Glennon testified that he would not have taken off without trying to resolve the discrepancy between the crew's calculations and Dispatch's as to the adequacy of fuel on board Flight 1966 had the crew received Dispatcher Caisse's "insufficient fuel" and "block fuel too light" ACARS messages before takeoff (Tr. 438-39).

[10] The basis for ASI Corbitt's "borderline" analysis was the "preponderance" of the closeness of a 97 NM route change to the 100 NM standard and a 12-minute estimated arrival time delay to the 15-minute standard, together with the increased amount of fuel that was to be burned over the longer route (Tr. 252-53). *See also* Tr. 269, where ASI Corbitt stated, "Mr. Glennon accepted a route that was 45 percent longer. It was going to involve something along the order of 30 percent more fuel and [he] didn't seek the concurrence of the dispatcher."

Evidence was also presented concerning the implications of the crew's in-flight references, and/or lack thereof, to fuel conditions in communications with ATC. Captain Glennon testified, as to the "tight on fuel," "tight on gas" and "for gas" references that accompanied Flight 1966's shortcut requests, that he frequently asks ATC for shortcuts for purposes of fuel conservation, and regularly uses terminology of that nature when he makes such requests. In addition, Jeffrey Dillon, who was one of the New York Center controllers that communicated with Flight 1966, and was involved in getting shortcut and increased altitude clearances for that flight, related that it did not strike him as unusual when the flight communicated that it was tight on fuel. Another one of the New York Center controllers who was involved in that process (George Koehler) testified that, in his experience, it is routine for pilots to ask ATC for shortcuts for fuel, and that he found nothing out of the ordinary in Flight 1966's requests.

With respect to the flight's declaration of a fuel emergency without first declaring a minimum fuel situation on approach to LGA, ASI Corbitt testified that the crew did not follow the policy of the emergency operations section of Delta's Flight Operations Manual (Ex. A-25),[11] because "they did not declare minimum fuel in a timely fashion that would have prevented them perhaps from declaring emergency fuel" (Tr. 319), and that, had the crew declared minimum fuel, Flight 1966 would have been handled differently by ATC. The testimony of the various controllers who appeared at the hearing, as well as Captain Glennon, as to the effect of a declaration of minimum fuel, was uniform that such a declaration means that the pilot can accept no undue delays on his or her current route, but does not give the flight priority. In addition, the emergency operations section of Delta's Flight Operations Manual (Ex. A-25) states that "[m]inimum fuel is advisory and does not establish a need for priority handling."

The testimony of Captain Glennon and Eric Castelli Toll, the controller at Approach Control who handled Flight 1966, suggests that a breakdown in communications may have led to the crew's ultimate declaration of a fuel emergency. First of all, the transcript of transmissions between Flight 1966 and Controller Toll (Ex. A-8) indicates that, after the crew transmitted "slowing down to one sixty and we're still at seven thousand" at 9:22:53, the controller, at 9:22:58, radioed, "alright I gave you four a long time ago . . . descend and maintain four thousand," although the transcript fails to show that he previously gave such an instruction to Flight 1966. At the hearing, Controller Toll admitted that his 9:22:58 transmission was, in that respect, erroneous.

A further lack of adequate communication seems to have been prevalent with regard to the vectoring of Flight 1966 away from LGA. According to Captain Glennon, Flight 1966 was just about over the Verrazano Bridge when it was instructed to intercept the 225 radial to DIALS and was flying at 170 knots, at an altitude of 7,000 feet. When the crew was "reinstructed" to descend to 4,000 feet, he believed the flight was being sequenced for final approach. After the instruction to turn left to a heading of 270 was given, he directed First Officer Shewbart to ask when they would be going back to DIALS.

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[11] As has been noted above, there is no dispute that Flight 1966 landed with 5,300-5,400 pounds of fuel onboard, which is over 1,000 pounds of fuel in excess of the 4,000 pounds that the table in the emergency operations section of the Flight Operations Manual lists as minimum fuel for a Boeing 737 aircraft.

Controller Toll did not answer that question, but communicated that the flight was being resequenced. Captain Glennon then directed First Officer Shewbart to respond that they did not have the fuel for that, and Controller Toll replied to that com-munication by giving Flight 1966 an instruction to turn left, further away from LGA on a heading of 220. Five seconds after that instruction was transmitted, Flight 1966 issued the blocked communication. Captain Glennon testified that he took over the radio to make that transmission, in which he "said that I do not have the fuel to accept vectors onto a long downwind without knowing — I'm sort of paraphrasing, without knowing the length of the vector. I need to know the length of the vector before I can accept this clearance" (Tr. 399). The next transmission seen on the transcript is a repeat by the controller of the instruction to turn left heading 220. Two seconds later, the fuel emergency declaration was made by Captain Glennon.

When questioned why he did not first declare minimum fuel, Captain Glennon responded (Tr. 400-01):

> There's a couple of reasons. One is the time frame that was involved, that I had complied with all the controller's instructions up to this point. I was seven miles away from the runway. I had 5,900 pounds of gas on the airplane. . . . [I]n addition to these instructions the controller had us slow to 160, which in a 730-300 means that I have to have 15 flaps out. In order to have 15 flaps out I've got to have the gear out. So my fuel flow goes up to 6,800 pounds an hour. A quick estimate in my head told me that I had about 3 minutes to go, to go down wind, away from the airport, before I would be in what I consider to be below my personal minimum for flying an airliner around.
>
> I couldn't get any answer out of this guy as to what the length of the vector was going to be, so I really had no basis to estimate how much fuel I would have at landing. And by going farther and farther away from the airport, my situation was just going to get worse, assuming that the communications would not be answered again and being completely at his whim as to when he chose to turn me back to the airport.

In response to a question I later asked as to what caused him to declare a fuel emergency at that point, Captain Glennon stated, "There was never going to be a situation where I would be closer to the airport with that much fuel. I was sent away from the airport burning fuel at a very fast rate without any hard information on when I was going to be turned back" (Tr. 444-45). And, when I asked, in a followup question, "[I]f you had been given the information about the resequence, which was within your operating ability, you would not have declared fuel emergency," he responded, "Certainly" (Tr. 445).

Further, when Controller Toll was asked, "So after he gets pulled off on the 270 heading, would the crew have any idea how long it would be before they got resequenced," he replied "No" (Tr. 119), and Edward Garlick, III, a quality assurance support manager for New York Terminal Radar Approach Control, acknowledged the existence of communication difficulties between Flight 1966 and Approach Control.

A final matter that the evidence touches upon is the degree to which First Officer Shewbart may be held accountable for any regulatory violations that are attributable to the subject flight. As is noted above, he operated radio communications for Flight 1966 up until Captain Glennon took over the radio at 9:26:12, and checked the onboard FMS to confirm Captain Glennon's calculation that there was adequate fuel onboard the aircraft for takeoff on the new route after the amended clearance was received from ATC and concurred in the captain's determination that there was. Additionally, the first officer is charged, in the responsibility and authority section of Delta's Flight Operations Manual (Ex. A-26), "with the responsibility of immediately informing the captain of unsafe conditions or improper handling which could place the aircraft in jeopardy," and the crew duties reference chart in Delta's 737-300 Operations Manual (Ex. A-27) indicates that one of the duties of the first officer on flights in that type aircraft is to, along with the captain, "[e]nsure minimum fuel for takeoff." ASI Corbitt, in his testimony, opined that First Officer Shewbart was remiss in carrying out his duties under the Flight Operations Manual because he did not ask Captain Shewbart to wait for the concurrence of Delta Dispatch before taking off on the new route after the crew informed Dispatch of the amended clearance by ACARS at 8:36. On the other hand, Dispatcher Caisse testified that the flight dispatch release section of Delta's Flight Operations Manual (Ex. A-13) creates no responsibilities between the First Officer and Delta Dispatch.

III.

As is related above, I held, in my March 8, 2006 oral initial decision, that both respondents had violated FAR § 121.639 and, on a derivative basis, § 91.13(a). I also found that the Administrator did not establish that Captain Glennon had violated FAR § 121.627(a), as charged in the amended complaint against him. Since the Board noted in its remand that the Administrator did not contest my finding that Captain Glennon was not shown to have violated § 121.627(a), I will not revisit that issue herein, and I will limit my analysis upon my reevaluation of the evidence in light of the Board's remand to the §§ 121.639 and 91.13(a) charges.

Captain Glennon, in his answer to the Administrator's amended complaint against him, admitted the factual allegations appearing in Paragraphs 1 through 7, 9 and 10, and 13 through 15. He also pled that he was unable — for various reasons — to answer the allegations of Paragraphs 11, 12 and 15, and denied those set forth in Paragraphs 8 and 16. Because Paragraph 11 of the amended complaint against Captain Glennon alleges facts that relate solely to FAR § 121.627(a), there is no need for any discussion thereof here.

As to the amended complaint against him, First Officer Shewbart admitted the allegations of Paragraphs 1 through 5; with respect to Paragraph 6, he denied that the alternate route was "about 100 miles longer than the originally planned route," but admitted that it was approximately 97 miles longer; and he admitted the allegations appearing in Paragraphs 8 through 11. First Officer Shewbart also stated that he was without sufficient knowledge to admit or deny Paragraph 13. He categorically denied Paragraph 7. Finally, First Officer Shewbart denied the allegation of Paragraph 12, on the basis that it was not him, but Captain Glennon, who declared the fuel emergency.

Having reviewed my oral initial decision, I note that I made factual and legal findings that were internally inconsistent when I determined that the allegations of Paragraph 8 in the amended complaint against Captain Glennon, and Paragraph 7 in the amended complaint against First Officer Shewbart, both of which state, "You then proceeded [after receiving the amended clearance] to take off the aircraft out of DCA when the aircraft lacked sufficient fuel (a) to fly to the airport to which it is dispatched [(*i.e.*, LGA)]; and (b) thereafter, to fly for 45 minutes at normal cruising fuel consumption," had not been established, but found that they had violated FAR § 121.639. I will now therefore undertake to reevaluate the relevant evidence as it relates to that allegation and charge.

The evidence is clear that, at the time Flight 1966 took off on the amended clearance, at 8:37 p.m. on November 3, 2004, it had 10,500 pounds of fuel on board. Dispatcher Caisse's dispatch release for the original route of flight, which Captain Glennon approved, designated trip burn fuel of 4,450, of which 480 pounds was taxi fuel. He also designated 2,200 pounds of planned contingency fuel, 350 pounds of unplanned contingency fuel and 4,000 pounds of reserve fuel. Minimum takeoff fuel was 10,170 pounds.

The amended clearance was for a route that was 97 NM longer than the original route for which Dispatcher Caisse made those fuel designations. Calculations of the additional amount of fuel consumption that could be expected in flying the new route ranged from 850 to 1,600 pounds. Viewed in the light most favorable to the respondents, this would appear to increase the minimum amount of fuel required for takeoff from 10,170 pounds to 11,020 pounds, *which is 520 pounds more than the amount of fuel on board the aircraft on takeoff*.

Captain Glennon related in his testimony that he reallocated planned contingency fuel to make up the difference. Although both he and First Officer Shewbart believed this to be permissible, Delta's Flight Control Operations Manual unambiguously states that the purpose of planned contingency fuel is to allow for known *airborne* contingencies, and that planned contingency fuel *cannot be used prior to takeoff* without the concurrence of the dispatcher. Further, Dispatcher Caisse indicated in his testimony that planned contingency fuel cannot be tapped into freely before "the commencement of the takeoff event, which means the application of the throttles before taking off." Here, the possible events for which Flight 1966's planned contingency fuel was originally calculated (such as in-air ATC delays and weather-related rerouting) remained unchanged; what changed was that the amount of fuel that could be expected to be consumed in flying the new, longer, route, *without any contingencies*, increased by at least 850 pounds.

While there was some suggestion from Dispatcher Caisse and the crewmembers at the hearing that the reason the onboard FMS calculated that the flight had adequate fuel for takeoff, while Delta Dispatch's FPC determined that onboard fuel was insufficient for the new route, was that FMS is more accurate and less conservative than the FPC, I believe that this disparity more likely stemmed from the fact that Captain Glennon and First Officer Shewbart reallocated planned contingency fuel in making their FMS calculations, while Dispatch's FPC did not.

Consequently, I conclude that Flight 1966 did not have sufficient fuel on board for takeoff on the new route to comply with FAR § 121.639. While ATC was able to provide

the crew with two shortcuts and a fuel-saving altitude increase while in flight, there was no guarantee, at the time of takeoff, that they would be obtained.

I therefore find, as a matter of fact, that, on November 3, 2004, Delta Flight 1966 did not take off with enough fuel to fly to the airport to which it was dispatched, which was LGA, and to thereafter fly for 45 minutes at normal cruising fuel consumption. As pilot-in-command, Captain Glennon was clearly responsible for this. Consequently, I also find, as to Captain Glennon, that the allegations of Paragraph 8 of the Adminis-trator's amended complaint have been proven by a preponderance of the evidence. In view of that determination, I further find that Captain Glennon violated FAR § 121.639.

I also believe that First Officer Shewbart must be deemed to share responsibility for the takeoff of Flight 1966 with less than minimum fuel for takeoff on November 3, 2004. In this regard, I note that, after the crew received the amended clearance and before takeoff, he checked the onboard FMS to confirm Captain Glennon's calculation that there was adequate fuel on board for the new route, and that he concurred in the captain's pre-takeoff reallocation of planned contingency fuel to make up for the difference of at least 850 pounds in minimum fuel for takeoff that the longer route necessitated. It is also significant, in assessing First Officer Shewbart's culpability for Flight 1966's takeoff with insufficient fuel under FAR § 121.639, that Delta's 737-300 Operations Manual jointly charges the first officer and the captain with the responsibility to ensure minimum fuel for takeoff.

Accordingly, I find that the allegations of Paragraph 7 of the Administrator's amended complaint against First Officer Shewbart have been proven by a preponderance of the evidence, and, in view of that determination, I further find that he violated FAR § 121.639 on November 3, 2004.[12]

As to the applicability of FAR § 91.13(a), the Board has long held that a finding of a violation of an operational FAR provision (such as § 121.639) is sufficient, without more, to support a derivative or residual finding of carelessness under § 91.13(a) (and former § 91.9, which was the forerunner of § 91.13(a) prior to a recodification of the FARs in 1990).[13] It is, thus, unnecessary for me to further engage in an analysis of the

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[12] In my oral initial decision, I stated that "the Federal Aviation [R]egulation states that there must be concurrence and notification and agreement by the dispatcher where the alternate flight plans are concerned" (Tr. 570). This was erroneous. FAR § 121.639 clearly makes no mention, and imposes no requirement, of dispatcher concurrence. The above determinations that respondents violated § 121.639 are strictly based on a finding that there was insufficient fuel on board Flight 1966 at the time of takeoff to fly the aircraft on the new route to LGA, and to thereafter fly for 45 minutes at normal cruising fuel consumption. The element of dispatcher concurrence, as it relates to the acceptance of the amended clearance, is properly found in the provision of Delta's Flight Control Operations that states that contingency fuel cannot be used prior to takeoff without the dispatcher's concurrence. In the absence of respondents' § 121.639 violations, and the consequent finding of derivative FAR § 91.13(a) violations (see *infra*), the crew's reallocation of planned contingency fuel to compensate for the new route's need for additional fuel to meet the increased minimum fuel for takeoff would have been a factor relevant to an evaluation as to whether they operated Flight 1966 in a careless or reckless manner.

[13] *See*, *e.g.*, *Administrator v. Howe*, NTSB Order EA-4242 at 7 & n.9 (1994), which was another case involving fuel mismanagement; *Administrator v. Cory*, 6 NTSB 536, 538 (1988); *Administrator v.*

evidence pertaining to whether respondents operated contrary to Delta's policies or prudent pilot practices by taking off on the amended clearance without first having obtained the concurrence of Delta Dispatch and/or by declaring a fuel emergency without having first declared minimum fuel on approach to LGA (and what role a break-down in communication between the crew and LGA Approach Control may have played in warranting the emergency fuel declaration without a prior declaration of minimum fuel).[14]

I therefore find that, as a derivative of their FAR § 121.639 violations, Captain Glennon and First Officer Shewbart operated Flight 1966 in a careless manner so as to endanger the lives and property of others, and, thus, violated FAR § 91.13(a) on November 3, 2004.

IV.

Turning to the issue of sanction, I note that the FAA's Sanction Guidance Table (FAA Order 2150.3A, Appendix 4) calls for a suspension of between 30 and 150 days for fuel mismanagement/exhaustion.[15] I have also reviewed the disposition of sanction issues in cases involving fuel mismanagement and/or exhaustion in cases that have been decided by the Board since 49 U.S.C. § 44709(d)(3) was enacted in 1992, a good number of which involve violations of FAR § 121.639 (or §§ 91.151(a) and 91.167(a), which are similar regulations that relate to general aviation flight operations) and/or § 91.13(a) (or former § 91.9).

In *Administrator v. Holmgaard*, NTSB Order EA-4799 (1999), the Administrator charged a pilot who engaged in the business of carrying parachutists for hire, whose aircraft had *completely run out of fuel* upon landing at her base airport and had to be towed back to the apron of the building she used for her business at that airport, with violations of FAR §§ 91.151(a) and 91.13(a). The judge who heard that case affirmed the Administrator's charges, but reduced the 90-day suspension ordered by the Administrator to 30 days, and the Administrator appealed the sanction reduction. In affirming

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Prichett, 7 NTSB 784, 787 n.17 (1991); *Administrator v. Haney*, NTSB Order EA-3832 at 4-5 (1993); *Administrator v. Nelson*, NTSB Order EA-4533 at 5 (1997); *Administrator v. Kachalsky*, NTSB Order EA-4847 at 7 n.11 (2000); *Administrator v. Skoglund*, NTSB Order EA-5149 at 1-2 n.2 (2005).

[14] *See Administrator v. Haney*, *supra*, at 4-5. Also not warranting further discussion are the references to "tight on fuel," "tight on gas" and "for gas" made by crew in its requests for short-cuts and a higher altitude clearance, which seem to have been introduced by the Administrator in an effort to show that the crew either recognized on takeoff that the flight did not have sufficient fuel or was responding to Dispatcher Caisse's 8:38 and 8:39 ACARS insufficient fuel messages when it made those requests, to bolster the hypothesis that respondents were careless in taking off on the amended clearance without first obtaining the concurrence of Delta Dispatch.

[15] Sanction Guidance Table at § III. F. 35. Under 49 U.S.C. § 44709(d)(3), "the Board is bound by . . . written agency policy guidance available to the public related to sanctions to be imposed under this section unless the Board finds [it] arbitrary, capricious, or otherwise not in accordance with law."

the judge on the sanction issue, the Board noted (NTSB Order EA-4799 at 10 (emphasis added)):

> [T]he Administrator asserts that while fuel exhaustion cases typically bring a sanction of a 30-day suspension, Board precedent dictates a 90-day suspension because of respondent's violation history. The case relied upon by the Administrator, *Administrator v. McAllister*, 1 NTSB 1221 (1971), is inapposite. The law judge properly distinguished the precedent relied on by the Administrator, finding that neither of respondent's violations established that she had distain for regulations. Implicit in this determination was the law judge's ability to see and hear respondent. *The law judge did not exceed his authority by modifying the sanction*.

Even though the Administrator apparently believed that the pilot in *Holmgaard* had shown distain for the FARs, a lesser sanction was sought against her than the 120-day suspension ordered here against Captain Glennon. My ruling on sanction as to Captain Glennon reduced his suspension for fuel *mismanagement* to 60 days, which is twice the length of the suspension the Board approved for the more serious transgression of fuel *exhaustion* in *Holmgaard*.[16] Accordingly, I believe that my sanction reduction as to Captain Glennon was not improper, and I therefore reaffirm it.

As to First Officer Shewbart, it appears that the Administrator imposed a 45-day suspension against him on the basis that his role in Flight 1966's fuel mismanagement was minor *vis-à-vis* that of Captain Glennon. While I have, for reasons set forth above, found that First Officer Shewbart must be deemed to share in the responsibility for the flight's takeoff with insufficient fuel, I concur with the Administrator's assessment as to his relative degree of culpability in comparison with Captain Glennon's. I sought to maintain that proportionality in reducing the 45-day suspension initially assessed by the Administrator against First Officer Shewbart to a suspension of 10 days. I continue to believe that this is a fair and just result, and I therefore reaffirm it, as well.

[16] *See also*: *Administrator v. Howe*, *supra* (improper fuel planning led to fuel exhaustion and a forced premature landing; 100-day suspension reduced to 60 days); *Administrator v. Pugsley*, NTSB Order EA-3574 (1992) (fuel exhaustion led to crash landing; 120-day suspension reduced to 60 days); *Administrator v. Knapp*, NTSB Order EA-4696 (1998) (fuel exhaustion resulted in crash landing; 90-day suspension reduced to 30 days).

THEREFORE, IT IS ORDERED that the oral initial decision rendered in this consolidated proceeding on March 8, 2006 is hereby MODIFIED AS TO RATIONALE, to the extent set forth above. The findings in the oral initial decision that respondents Glennon and Shewbart both violated §§ 121.639 and 91.13(a) of the Federal Aviation Regulations on November 3, 2004 are hereby reaffirmed, as are the reductions in the suspensions imposed for those violations by the Administrator of the Federal Aviation Administration against the airline transport pilot certificates of respondent Glennon, from a 120 days to 60 days, and respondent Shewbart, from a 45 days to 10 days.

Entered this 20th day of November, 2007, at Washington, D.C.

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William E. Fowler, Jr.
Chief Judge

APPEAL (DISPOSITIONAL ORDER)

Any party to this proceeding may appeal this order by filing a written notice of appeal within 10 days after the date on which it was served (the service date appears on the first page of this order). An original and 3 copies of the notice of appeal must be filed with the:

National Transportation Safety Board
Office of Administrative Law Judges
Room 4704
490 L'Enfant Plaza East, S.W.
Washington D.C. 20594
Telephone: (202) 314-6150 or (800) 854-8758

That party must also perfect the appeal by filing a brief in support of the appeal within 30 days after the date of service of this order. An original and one copy of the brief must be filed directly with the:

National Transportation Safety Board
Office of General Counsel
Room 6401
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594
Telephone: (202) 314-6080
FAX: (202) 314-6090

The Board may dismiss appeals on its own motion, or the motion of another party, when a party who has filed a notice of appeal fails to perfect the appeal by filing a timely appeal brief.

A brief in reply to the appeal brief may be filed by any other party within 30 days after that party was served with the appeal brief. An original and one copy of the reply brief must be filed directly with the Office of General Counsel in Room 6401.

NOTE: Copies of the notice of appeal and briefs must also be served on all other parties to this proceeding.

An original and one copy of all papers, including motions and replies, submitted thereafter should be filed directly with the Office of General Counsel in Room 6401. Copies of such documents must also be served on the other parties.

The Board directs your attention to Rules 7, 43, 47, 48 and 49 of its Rules of Practice in Air Safety Proceedings (codified at 49 C.F.R. §§ 821.7, 821.43, 821.47, 821.48 and 821.49) for further information regarding appeals.

ABSENT A SHOWING OF GOOD CAUSE, THE BOARD WILL NOT ACCEPT LATE APPEALS OR APPEAL BRIEFS.