SERVED: November 12, 1997

NTSB Order No. EA-4603

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 29th day of October, 1997

JANE F. GARVEY, Administrator, Federal Aviation Administration,

Complainant,

v.

JAMES BEHNKEN and MICHAEL COX,

Respondents.

Dockets SE-14167, 14168

OPINION AND ORDER

Respondents have appealed from the oral initial decision of Administrative Law Judge William E. Fowler, Jr., rendered in this proceeding at the conclusion of an evidentiary hearing on May 8, 1996.¹ The law judge affirmed the orders of the Administrator, which alleged violations of 14 C.F.R. 91.7(a) and 91.13(a) for operating an unairworthy aircraft and careless operation;

¹An excerpt from the hearing transcript containing the

121.315(c) for failure of the flight crew to follow approved cockpit check procedures; and, as to Respondent Cox, the pilotin-command, section 91.503 for failure to use the cockpit checklist procedures, and section 121.628 for taking off in an aircraft with inoperative equipment without complying with the conditions and limitations of the minimum equipment list (MEL).²

(..continued)

initial decision is attached.

²These regulations state, in pertinent part:

§ 91.7 Civil aircraft airworthiness

(a) No person may operate a civil aircraft unless it is in an airworthy condition.

§ 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.

§ 91.503 Flying equipment and operating information.

(b) Each cockpit checklist must contain the following procedures and shall be used by the flight crewmembers when operating the airplane:

(1) Before starting engines.

- (2) Before takeoff.
- (3) Cruise.
- (4) Before landing.
- (5) After landing.
- (6) Stopping engines.
- (7) Emergencies.

§ 121.315 Cockpit check procedure.

(c) The approved procedures must be readily usable in the cockpit of each aircraft and the flight crew shall follow them when operating the aircraft.

§ 121.628 Inoperable instruments and equipment.

Sanction was waived pursuant to the provisions of the Aviation Safety Reporting Program (ASRP). We affirm all but the section 91.503 charge.

The complaint against Respondent Cox states:

1. You are the holder of Airline Transport Pilot Certificate No. 2217143.

2. On or about September 12, 1994, you were pilot-incommand of a Douglas MD-88 aircraft, Delta Airlines Flight No. 787, identification no. N912DL in the vicinity of Newark International Airport, Newark, New Jersey.

3. Prior to takeoff, you failed to adequately perform and follow Delta [Airlines'] cockpit checklist procedures. Specifically, you failed to ensure that the E/E door was closed.[³]

4. Prior to takeoff, you noted that the door warning light was illuminated.

5. You[] then[] took off with an illuminated door warning light without complying with the conditions and limitations of the minimum equipment list [MEL]. (See MD-88 Minimum Equipment List, Standard Practice 469.)

6. After takeoff, the aircraft returned for landing because the E/E door was open.

7. As a result of your actions, you operated an aircraft when it was not in an airworthy condition.

(..continued)

(a) No person may take off an airplane with inoperable instruments or equipment installed unless the following conditions are met:

(5) The airplane is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the operations specifications authorizing use of the Minimum Equipment List.

The Administrator also charged Respondent Cox with a violation of 14 C.F.R. 121.3(c), but withdrew the allegation at hearing.

³This charge was amended at hearing to read as shown above.

[Paragraph 8 was withdrawn]

9. As a result of your actions, you operated an aircraft in a careless or reckless manner so as to endanger the life and property of another.

The complaint against Respondent Behnken, first officer of the subject flight, states, in pertinent part:⁴

3. Delta Airlines' Flight Operations Manual p. 9-4 requires the first officer to make a complete exterior preflight inspection and report any discrepancies to the Captain.

4. During preflight, you failed to close the E/E door.

5. Thereafter, the aircraft took off and returned for landing because the E/E door was open.

6. As a result of your actions, you operated an aircraft when it was not in an airworthy condition.

7. As a result of your actions, you operated an aircraft in a careless or reckless manner so as to endanger the life and property of another.

After the passengers were boarded onto Flight 787 and the door was closed, respondents, while performing the checklist,

⁴Respondent Cox filed an answer to the complaint in which he admitted the allegations of paragraphs 1, 2, 4, and 6; denied the allegations of paragraphs 3, 5, 7-9, and denied the allegations in "the second set" of paragraphs 1-6 (the paragraphs delineating the specific regulatory violations alleged).

The answer filed by Respondent Behnken is identical and, as such, does not properly correspond to the complaint issued to him. The result was an admission to the charge of operating an unairworthy aircraft (paragraph 6 in his complaint), a denial to include paragraphs "8 and 9" (which do not appear in the complaint addressed to Mr. Behnken), and a general denial of all the regulatory violations. It appears that this is an administrative error and we will view it as such. Given our disposition of the appeal, the Administrator has not been prejudiced by our presumption that both respondents denied operating an unairworthy aircraft.

noticed that the light indicating an open door to the E/E (Electrical Electronic) compartment was illuminated. Captain Cox radioed the tug driver and asked him to look at the E/E door to see whether it was open or closed.⁵

The tug driver first reported that he noticed a panel door The captain advised him that they were aware of the missing. missing panel, as it had been noted in the logbook, but that panel covered the electrical ground service outlet, not the E/E compartment. The captain asked him to check the door by the nose gear. The tug driver got off the tug, disappeared from the captain's view, returned, and reported that the door was closed. Since the indicator light was still illuminated, the captain asked the tug driver to check the door again. The driver complied and, upon returning to the tug, relayed to the captain that the door was, in fact, closed. Respondents then assumed that the switch was faulty, causing the light to remain illuminated when the door was closed, and decided to placard the item while en route to Atlanta. They proceeded with pushback and takeoff. Soon after takeoff, however, it became apparent from the noise and the aircraft's failure to pressurize, that the E/E

⁵The opening is large enough to allow a man standing on the ground to fit his upper body into the E/E compartment. When the door opens, it is latched onto the belly of the airplane.

The tug driver testified that he is a Delta Customer Service Agent, responsible for loading and unloading aircraft and, as of April 1994, aircraft pushbacks. (Tr. at 18.) Prior to April 1994, pushbacks were accomplished by maintenance personnel. Although he was trained by maintenance personnel to perform pushbacks, he was never trained on matters involving the E/E door. (Tr. at 19.)

door was open.⁶ Respondents then made an uneventful return to Newark.

The law judge affirmed the violations as alleged by the Administrator, finding specifically that the exterior preflight inspection was deficient in that it did not detect the open E/E door, that the E/E light on the annunciator panel was illuminated before pushback, and that the respondents should have visually verified that the door was closed. (Tr. at 288-91.) The Preflight Inspection.

On appeal, Respondent Behnken contends that section 121.315(c) cannot be applied to his <u>preflight</u> inspection of the aircraft since the regulation speaks only to <u>cockpit</u> check procedure. The Administrator disagrees, maintaining that the preflight is part of the cockpit check procedures, namely, the first item in the "Before Start" checklist. (Exhibit (Ex.) A-6-9.) In addition, the Administrator notes, section 121.315(b) requires that "approved cockpit check procedures must include each item necessary for flight crewmembers to check for safety before starting engines...." 14 C.F.R. § 121.315(b).

The Board addressed this issue squarely in <u>Administrator v.</u> <u>Curry</u>, 5 NTSB 981 (1986), where a pilot who had performed an exterior inspection of a Convair 580 in preparation for flight, failed to ensure that the air inlet duct plugs had been removed before starting the engines. We found that:

(...continued)

⁶The aircraft ascended to no higher than 1500-2000 feet

[the airline] had a required procedure to check the air inlet ducts that is reflected in the 'Aircraft Inspection Guide' included in the Flight Manual. In our judgment, a check of those ducts is part of an approved procedure for checking necessary safety items prior to starting engines. Consequently, ... since respondent failed to follow procedure by ensuring that the ducts were clear, he was in violation of section 121.315(c).

Id. at 982-83.

In the instant case, Delta's MD-88 operating manual includes a section entitled "Normal Checklists" with a subsection of "Before Start," describing the check for "Exterior/Interior Preflight ... Complete" as depicted on the Before Start Cockpit checklist. (Ex. A-6-5 and 6-7, Operating Manual, pp. 27-28.) One of the checks on the exterior preflight checklist states, "E/E door. Check closed." It is undisputed that Respondent Behnken was responsible for performing a preflight check of the aircraft and that he performed that check. He testified that the check was, for the most part, unremarkable. While it is his normal procedure to check the nose gear and the E/E door first, Respondent Behnken could not remember specifically checking the E/E door on that occasion.⁷ It is also undisputed that the E/E

(..continued)

Mr. MacKenzie testified that he normally conducts this type of inspection within a half hour of departure. (Tr. at 40.) Typically, he checks the E/E door at the end of his inspection. (Tr. at 42.) On this occasion, he never completed his inspection

above ground. (Tr. at 166.)

⁷Mr. Behnken testified that he noticed the external power door (where outside electrical power is hooked up to the aircraft) was missing and he was thinking about this while he completed the rest of his walk-around. He also remembered encountering William MacKenzie, a Delta line mechanic, as Mr. MacKenzie was performing a pre-departure check of the aircraft.

door light illuminated on the annunciator panel; the aircraft could not be pressurized after takeoff; upon landing, the E/E door was observed in the open position; and that after the door was closed, the light on the annunciator panel went out. Therefore, we find that preponderant evidence supports the law judge's conclusion that Respondent Behnken failed to adequately check the E/E door during his preflight inspection, thus failing to follow approved cockpit check procedures.

Respondents' Performance of Pushback/Start Checklist and Implementation of the MEL.

Respondents contend that they complied fully with the regulations by following the necessary cockpit checklists and the MEL "to the letter." Further, they argue, to the extent that the MEL is ambiguous or contradictory, the FAA bears responsibility for the approval of an unclear MEL. The Administrator does not address the latter contention, but maintains that both respondents violated section 121.315(c) and Respondent Cox violated section 91.503(b) because "when the warning light was illuminated[,] they failed to follow the procedures under the

(...continued)

of the aircraft because he was interrupted and called away to another aircraft. (Tr. at 37-38.) When Mr. MacKenzie returned, Flight 787 had already departed.

While this likely contributed to the events which culminated in the aircraft taking off with the E/E door open, it does not relieve Mr. Behnken, as first officer of the flight, from his responsibility to perform a thorough walk-around inspection. Accord, Administrator v. Haney, NTSB Order No. EA-3832 at 3 (1993)("[t]hat maintenance personnel also failed in their duties illustrates the importance of respondent's function; it does not excuse his conduct").

minimum equipment list before continuing with the checklist."⁸ (Administrator's brief at 8.) The Administrator further asserts that Respondent Cox failed to comply with the MEL, in violation of section 121.628(a)(5) by unreasonably relying on the tug driver to ascertain whether the E/E door was closed and by failing to determine whether the cabin door could be pressurized prior to takeoff.

The Delta Airlines MD-88 preamble to the MEL directs the flight crew to contact Maintenance when a discrepancy occurs prior to pushback.⁹ Maintenance is then responsible for

⁹The preamble states, in pertinent part:

Before operating MD-88 aircraft with any item of equipment inoperative, the Maintenance Coordinator must be contacted in accordance with the following guidelines:

Maintenance Stations

When the discrepancy occurs **prior to pushback**, the flight crew contacts Maintenance. Maintenance is responsible for contacting the Maintenance Coordinator for inoperative airworthy items not covered by the MEL or MEL items which contain the statement "DISP. APR. REQ'D." (Dispatcher Approval Required).

When a discrepancy occurs **during or after pushback**, the captain of the aircraft is responsible for contacting:

a. The Maintenance Coordinator for items which may be placarded by the Flight Crew per 469.1.C.2 or for items the Captain determines that no maintenance action is required.

NOTE: When the MEL contains the statement "DISP. APR. REQ'D." (Dispatcher Approval Required), the Maintenance

⁸We must note that this aspect of the 121.315(c) charge (failure to comply with the MEL) cannot be sustained against Respondent Behnken for the simple reason that it was not alleged in the complaint against him. See complaint, supra, at 4.

contacting the Maintenance Coordinator in Atlanta.¹⁰ If a discrepancy that may be placarded by the crew occurs during or after pushback, the captain is responsible for contacting the Maintenance Coordinator directly and may do so in flight.

The MEL entry for "Door Warning Message System" indicates that it is an item that the flight crew may placard. In the section entitled "Limitations/Procedures," it is coded "(0)" and states:

Door Warning messages may be inoperative for all associated doors provided it is verified by visual inspection that the door(s) is CLOSED and LOCKED.

(O): Refer to proviso above.

NOTE: If a door message illuminates after aircraft has left the blocks, flight may continue provided it can be

(...continued)

Coordinator must be contacted prior to takeoff. For all other MEL items being placarded by the flight crew, the Maintenance Coordinator should be contacted at the earlier [sic] possible opportunity; this may be accomplished by radio in flight if necessary.

b. Maintenance for any inoperative airworthy items not covered by the MEL or items for which the captain determines maintenance action is required.

NOTE: If the captain is not sure if maintenance action is required, the Maintenance Coordinator should be contacted to determine if the flight may continue. With the Maintenance Coordinator's concurrence, the flight crew may placard these items per 469.1.C.2.

(MD-88 MEL and Configuration Deviation List, page 2, Exs. A-5-2 and A-11, emphasis added.)

¹⁰According to the unrefuted testimony of John Melotte, a Delta Airlines Senior MEL Coordinator and former Delta Maintenance Coordinator, the Maintenance Coordination Center is a clearinghouse that routes aircraft to repair stations, evaluates and troubleshoots problems called in by crew members in flight, and takes information to pass onto maintenance stations. (Tr. at 211-12.) determined the cabin can be pressurized prior to takeoff.

(MD-88 MEL, page 33-5, Exs. A-5-1 and A-11.)

As defined in the MEL instructions, an

"(0)" symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally these procedures are accomplished by the flight crew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are required to be published as a part of the operator's manual or in the MEL.

(MD-88 MEL, page 16, Ex. A-11, emphasis in original.)

The captain argues that, as per the MEL, it was verified by visual inspection that the door was closed. The requirement of visual verification does not specify who must perform the visual inspection and, thus, it was reasonable for him to ask the tug driver to determine whether the door was open or closed. He further asserts that, if the FAA believes the task should be accomplished only by the flight crew or Delta maintenance personnel, then the MEL should plainly so state. The MEL preamble, however, states that Maintenance must be contacted if a discrepancy arises prior to pushback. In addition, procedures identified with an "(O)" must be accomplished by the crew or other "qualified and authorized" personnel. There is no indication that the tug driver, who testified that he was never trained on the E/E door, was either qualified or authorized. Thus, this case may be distinguished from those where we found that a respondent reasonably relied on the proper performance of

duties by crew members or other personnel. <u>See</u>, <u>e.g.</u>, <u>Administrator v. Krueger</u>, NTSB Order No. EA-4302 at 4 (1994); <u>Administrator v. Fay and Takacs</u>, NTSB Order No. EA-3501 at 9 (1992).

In their answers to the Administrator's complaints, respondents admitted that the light illuminated prior to pushback.¹¹ Answers of Michael Cox and James B. Behnken, August 28, 1995, at 2. According to Peter Godshalk, a Delta maintenance foreman, Delta defines pushback as the moment when the passenger door is shut and the jetway is pulled away. FAA Inspector Marotte (airworthiness) opined that pushback occurs when the brakes are released and the aircraft is clear to be dispatched for flight. (Tr. at 65, 88-89.) The tug operator stated that he was notified of the E/E door light by the captain before the jetway had been moved. (Tr. at 97.)

A preponderance of the evidence appears to support the determination that the E/E indicator light illuminated prior to pushback, as the law judge found. As such, respondents were required to contact Maintenance before operating the aircraft, something they concede they did not do. The evidence, however, does not support the Administrator's claim and the law judge's finding that respondents were required to pressurize the aircraft

¹¹Yet, at hearing, they sought to show that pushback was already underway when the light illuminated. Respondent Behnken testified that the first time he saw the light illuminate was during pushback procedures. (Tr. at 177.) Respondent Cox recalled that when he saw the light on the indicator panel, the aircraft had not yet moved, but the entry door was closed and they were in a phase of flight when the jetway would normally

prior to takeoff. According to the MEL, ability to pressurize the cabin must be confirmed prior to takeoff if the door message light illuminates after the aircraft has left the blocks. Since the law judge found, and the evidence supports, that the light illuminated prior to pushback, a time when the aircraft had not yet left the blocks, then the crew cannot be found to have failed to follow the requirements set forth in the MEL by failing to verify pressurization. Their decision, however, does have a bearing on carelessness, as discussed infra.

Regarding the section 91.503(b) charge against Captain Cox, he contends that, as the regulation requires, he "used" the checklist when operating the aircraft, both before starting the engines and before takeoff. That he and Respondent Behnken saw the E/E light during the performance of the checklist and then asked the tug driver to look at the E/E door, he maintains, is evidence that he used the checklist. The Administrator disagrees, claiming that Respondent Cox violated the regulation by "failing to use cockpit checklist procedures before takeoff or before starting engines." Administrator's brief at 9. The regulation, however, mandates that "[e]ach cockpit checklist must contain the following procedures and shall be used by the flight crewmembers when operating the airplane.... " That he made an error in judgment in his interpretation of an item on the MEL does not mean that he did not use the cockpit checklist, as required by the regulation. We therefore find that a

(..continued) have been pulled back. (Tr. at 202-03.)

preponderance of the evidence does not support that particular charge.

91.7(a) and 91.13(a) Violations.

Respondents dispute, in general terms, the charge that they operated an unairworthy aircraft and maintain that they did not violate section 91.13(a), but instead acted "rationally, reasonably, and in a very careful manner." Respondents' brief at 11. Just as at the hearing, the Administrator devotes very little attention to these charges in his reply. He states that by operating the aircraft with the E/E door open, respondents violated section 91.7(a) and that, because the aircraft cannot be pressurized when the door is open, a condition that leads to performance degradation, respondents operated the aircraft in a careless manner.

The law judge concluded that the aircraft was not airworthy, stating concisely that FAA Aviation Inspector Peter Marotte testified that, by taking off with the E/E door open, the aircraft was rendered unairworthy. (Initial Decision at 288.)

It is well-established that, to be airworthy, an aircraft must conform to its type certificate and be in condition for safe operation. <u>Administrator v. Doppes</u>, 5 NTSB 50, 52 (1985). <u>See</u> <u>also</u> the Federal Aviation Act, 49 U.S.C. § 44704(c). While there was little discussion of the airworthiness allegation at hearing, we nevertheless are constrained to affirm the law judge's finding. While more substantiation would have been welcome, it is eminently reasonable to infer that the aircraft was designed to be operated with all doors closed and locked and that operation of the aircraft with one or more doors open would thus render the aircraft unairworthy.

As for operating an aircraft in a careless manner, we believe that the failure by Respondent Behnken to conduct a thorough preflight check supports a finding that he violated section 91.13(a). Similarly, the reliance by Respondent Cox on the assurance of the tug driver that the E/E door was closed, even when the warning light remained illuminated and especially given that the driver first mistook the electrical outlet opening for the E/E door, was careless. Further, respondents' decision to take off without either notifying Maintenance or pressurizing the aircraft on the ground was careless. Notwithstanding the argument in the record about when the light illuminated, respondents had two methods for verifying to a certainty that the door was closed. They chose to do neither. Lastly, operating an aircraft in an unairworthy condition necessarily implicates the operation of an aircraft in a careless or reckless manner so as to endanger the life or property of others. A specific finding of potential endangerment is unnecessary where an operational violation has been found. See Haney, EA-3832 at 4-5.

ACCORDINGLY, IT IS ORDERED THAT:

The appeal filed by Respondent Cox is granted as to the
91.503(b) charge only;

2. In all other respects, the initial decision is affirmed.

HALL, Chairman, FRANCIS, Vice Chairman, HAMMERSCHMIDT, GOGLIA, and BLACK, Members of the Board, concurred in the above opinion and order.