NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

December 19, 2019

Attachment 19 – Memorandum for Record

Email Conversations [Excerpts]

OPERATIONAL FACTORS/HUMAN PERFORMANCE

DCA19MA143

MEMORANDUM OF RECORD

Shawn Etcher
Aviation Safety Investigator
Operational Factors Division **December 18, 2019**

Subject: Emails with Miami Air representative

The following email excerpts were received from a representative of Miami Air. The first email was in regard to the passenger count and was dated December 18, 2019 at 1325 CST:

> *The DOD passenger manifest that you have for flight 293 is only a preliminary passenger manifest. This preliminary passenger manifest was sent to MUGM prior to the flight. It is not the final corrected passenger manifest. The preliminary passenger manifest does not include any additions or subtractions of passengers at the time of departure. That final corrected passenger manifest stays with the station after there is an agreement of the final passenger count between the flight crew and the gate agent. Then, once the crew has the correct number of passengers on board, they complete the weight and balance manifest. The Miami Air crew and Miami Air dispatch do not normally receive a copy of the preliminary passenger manifest. It is not required according to military rules. Like many airlines, the DOD does not require a passenger manifest to be carried on board a flight - it is maintained in a computer file. Only because Miami Air requested this preliminary passenger manifest after the accident, did Miami Air Dispatch receive a copy for its records. Thus explains why the preliminary passenger manifest (currently held in Dispatch) count of 142 does not match the weight and balance manifest count - 143. You are correct. 143 souls on board is the correct number – 2 pilots. 1 flight mechanic, 4 flight attendants and 136 passengers. The Weight and Balance Manifest is correct - 143. The Preliminary Passenger Manifest is incorrect - 142.*

The following email excerpts were received from a representative of Miami Air on December 18, 2019 at 1624 CST and 1640 CST, respectively, and was in regard to the MELs listed on the dispatch release:

Received 1624 CST

> *#1 Thrust Reverser inop*
>
> *On taxi out, they noticed that the left duct pressure showed 0 psi. Then when they shutdown the APU, the left duct pressure dropped to 0 psi. After the aircraft was taxied back to the gate, trouble shooting revealed that the temperature controller for the right air conditioning pack was not working. The right pack was DMI'd according to MEL 21-01-01. Further trouble shooting revealed that the both*

PRSOV (Pressure Regulator and Shut Off Valves) were inoperative. That is why the right duct pressure showed 0 psi on taxi out, and the left duct pressure showed 0 psi after the APU was shutdown.

Under normal circumstances, with the left pack working, the crew and maintenance would have opted for MEL 21-01-01-01 and operated at 25,000 feet for the flight. But with both PRSOVs inoperative, MEL 21-01-01-01 was not allowed. That left the crew and maintenance with MEL 21-01-01-06 (the correct MEL number, not 21-01-06). But under that scenario, the flight would be operated unpressurized. This would cause the flight to operate at 10,000 feet or below. It would be a very uncomfortable flight for the passengers since both packs were deactivated. Not a good option.

So, the crew/maintenance control looked at MEL 36-05-02 and saw they could operate a higher altitude (up to 17,000 feet using the APU as a bleed source/see AOM Vol 1 Limitations page L.10.4-L.10.5) and provide better passenger comfort (single air conditioning pack fed by the APU). Thus in accordance with the MEL both PRSOVs (pressure regulator and shutoff valves) were closed, preventing bleed air from the engines feeding the air conditioning packs. Look at Operations (O) item #5 that says (page 2.36.05.2):

For both engine bleeds inoperative (both PRSOVs):
A. Limit altitude to 17,000 feet
B. Operate the left pack using APU bleed and isolation valve CLOSE. Refer to Boeing Operations Manual NO ENGINE BLEED TAKEOFF AND LANDING PROCEDURE.

Received 1640 CST

Absolutely no excuse for not updating the Dispatch Release.

I accidentally pushed the send button on the previous E Mail before proofreading. It should have said the right duct pressure gauge showed 0 psi on taxi out. Then, when the APU was shutdown, the left duct pressure gauge showed 0 psi - Indicating both PRSOVs were inop, thus the MEL 36-05-02.

-END-