Docket No. SA-533

Exhibit No. 13-K

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

FAA PAI Memo – Flap Asymmetry Indication

(6 Pages)

U.S. Department
of Transportation
**Federal Aviation
Administration**

September 17, 2009

The Honorable Deborah A. P. Hersman
Chairman, National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, DC 20594

Dear Ms. Hersman:

Thank you for providing an opportunity for the Federal Aviation Administration (FAA) to explain our concerns regarding the National Transportation Safety Board (NTSB) acceptance of an exhibit offered by Empire Airlines in the investigation of the January 27, 2009 Empire Airlines accident at Lubbock, Texas, and to explain the FAA Safety Recommendation Program. The document offered by Empire Airlines as an exhibit is a copy of an internal FAA Safety Recommendation made by an FAA employee.

As described in the Pre-Hearing Conference, the FAA has historically protected FAA safety recommendations from Freedom of Information Act (FOIA) requests under FOIA Exemption 5 (5 U.S.C. 552 (b)(5)). This exemption protects deliberative, pre-decisional materials such as advice, opinions, and recommendations rendered by agency staff members in the course of reaching a final position on any particular matter under agency consideration. An FAA Safety Recommendation is not an indication of an FAA decision, position or finding. A Safety Recommendation contains the opinion of the employee.

To provide a better understanding of the FAA Safety Recommendation program, we have enclosed a summary, based substantially on FAA Order 8020.11B, Aircraft Accident and Incident Notification, Investigation and Reporting, paragraph 15.

In this instance, it appears that Empire Airlines obtained the Safety Recommendation directly from the FAA employee who prepared it, an action which is outside the processes of the FAA Safety Recommendation program.

In closing, FAA uses the Safety Recommendation process to continually improve the safety of the NAS. The program has been highly successful, with many significant safety accomplishments completed as a direct result of Safety Recommendations made by our diligent and professional employees. We are concerned that the Board's acceptance of the FAA Safety Recommendation memo offered by Empire Airlines as an exhibit might have a chilling affect. The success of this program is based on the confidence of FAA employees that their opinions, expressed in Safety Recommendations, are protected by the FAA from distribution outside the agency's Safety Recommendation program. I'm sure you share our

position that protecting systems which promote the voluntary sharing of safety information, including opinions, is vital to future advances in aviation safety.

Thank you again for the opportunity to share our perspective in this matter, and you may look forward to our continued support of this investigation.

Sincerely,

[redacted]

B. Hooper Harris
Manager, Accident Investigation Division
FAA Spokeperson

Enclosure: Summary of FAA Safety Recommendation Program

Summary of the FAA Safety Recommendation Program

The FAA Safety Recommendation Program is a process used by the FAA to identify and correct safety deficiencies in the National Airspace System (NAS). It is typically used by FAA Aviation Safety Inspectors to recommend changes on the basis of their professional observation and opinion in the conduct of surveillance, inspection and investigation duties, including accident and incident investigation.

FAA inspectors, by virtue of their qualifications and aviation experience, are expected to examine objectively the facts, conditions, and circumstances of an accident or incident and to identify and submit safety recommendations using procedures outlined below. Inspectors, FAA managers, and all other FAA personnel should be alert for issues that warrant corrective actions, whether they arise during an investigation or other duties.

To initiate the Safety Recommendation process, the inspector, FAA manager, or any other FAA employee prepares a memorandum which briefly describes the accident or incident and the deficient areas. Sufficient detail and/or substantiating information should be included so that the reader understands the development of the recommendations. In order to facilitate the free and unimpeded flow of information from the reporting employee to those in the FAA office with the authority to act upon it (the action office), the memorandum can be reviewed by the memorandum author's supervisor or other individuals, and additional pro/con statements may be added as attachments or following the memorandum. However, unlike other official correspondence, the original memorandum cannot be altered in any way without the specific consent of the author. No FAA employee, including the author's supervisor, can prevent an FAA Safety Recommendation from going forward.

The memorandum is sent to the Federal Aviation Administration, Office of Accident Investigation, Recommendation and Analysis Division, 800 Independence Avenue S.W., Washington, D.C. 20591. This office will acknowledge receipt of the recommendation, with a copy to the regional office if requested. If the inspector or other person submitting the recommendation believes that an emergency situation exists that jeopardizes life or property, then personal or telephone contact should be initiated immediately and followed up by a written recommendation.

The Recommendation and Analysis Division reviews each recommendation, enters it in the office's evaluation program, and forwards the recommendation to the FAA action office which must respond to the recommendation.

The FAA action office has 90 calendar days to evaluate the recommendation and forward its response to the Recommendation and Analysis Division. Safety Recommendations deemed as emergency or significant in nature may have suspense dates of less than 90 days. Offices that receive safety recommendations are required to address them with the thoroughness necessary to respond to the deficiency or to propose alternate actions. In no case will a recommendation be ignored.

The action office response describes their disposition of the FAA Safety Recommendation. The office may accept the Recommendation and either describe a plan with proposed milestones on how the recommendation will be implemented, e.g., when an Airworthiness Directive will be issued, or describe what has already been done to address the Recommendation, or both. In cases where the Recommendation is rejected, the action office will provide an explanation to the recommending employee.

A Safety Recommendation Review Board (SRRB) chaired by a representative of Recommendation and Analysis Division, and composed of a minimum of two other technically qualified persons reviews all responses from the FAA action offices. If the SRRB believes a recommendation has merit and the action office was not responsive to the identified safety issue, additional measures are taken by the Office of Accident Investigation to resolve the issue. At a minimum, the responsible FAA action office will be asked to reevaluate the safety recommendation and the reasons for the initial rejection of the recommendation.

A memorandum accepting or rejecting the recommendation will be forwarded to the originator of the recommendation following the final decision of the SRRB.

Federal Aviation Administration

Memorandum

Date: May 15, 2009

To: Federal Aviation Administration, Office of Accident Investigation, Recommendation and Quality Assurance Division AAI-200

From: [redacted]

Prepared by: [redacted]

Subject: ATR 42 Flap Asymmetry

Description:

On January 27, 2009 aircraft N902FX an ATR-42-320, operated by Empire Airlines sustained substantial damage when it crash landed short of the Lubbock, Texas International Airport. Both the Pilot and Co-Pilot sustained injuries.

During the final approach in icing conditions with auto pilot engaged, at approximately 1500' AGL, the flying Co-Pilot requested flaps set to 15 degrees and gear down. The Captain made the selection and during his scan noticed the flaps had not traveled to 15 degrees. Subsequently the Captain troubleshot the flap system for approximately the next 60 seconds, during this time the autopilot disconnected and the Co-Pilot tried to maintain control of the aircraft. While several theories speculate icing conditions, airspeed and Pilot inadequacies, there was no indication available to the crew that directed them to the real problem; an approximate 9 degree asymmetric flap condition. The crew continued the approach and ultimately lost control of the aircraft crashing short of the runway.

14 CFR section 25.699 (a) states:

There must be means to indicate to the pilots the position of each lift or drag device having a separate control in the cockpit to adjust its position. **In addition, an indication of unsymmetrical operation or other malfunction in the lift or drag device systems must be provided when such indication is necessary to enable the pilots to prevent or counteract an unsafe flight or ground condition, considering the effects on flight characteristics and performance.**

While the ATR-72 is equipped with an asymmetry warning circuit, the ATR-42 is not. This aircraft was manufactured in France under the direction of the French DGAC which obviously believed the aircraft met the requirements of 14 CFR section 25.699 and did not require a flap asymmetry circuit be installed. There must have been an equivalent level of safety assumption which found this asymmetric scenario controllable by flight crews but really did not take into account, this asymmetric flap condition in an icing environment.

In addition the probability of this event occurring again without an additional safety feature which alerts the crew to an asymmetric flap condition is great. Furthermore there are several other flight scenarios which could lead to this scenario of uncontrolled flight.

In reviewing the aircraft wiring schematics it is noted the aircraft is equipped with an asymmetry input to the flight data recorder. This same circuit would require a very minimal change to power a flap asymmetry warning light as well as a activate a level 2 centralized crew alerting system which would alert the crew by an additional flight control warning light and a single chime.

Recommendation:

In the interest of safety, I recommend the installation of a flap asymmetry circuit that would alert the crew of this unsafe condition. This should be required by a Federal Aviation Administration issued Airworthiness Directive. This system would have prevented this accident as well as other accidents in the future.