DOCKET No.: SA-521
EXHIBIT No. 17OO

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

Correspondence about Reversed Elevator Damper

(4 pages)

Air Line Pilots Association
535 Herndon Pkwy
Herndon VA 20170
[redacted]

> -----Original Message-----
> From:Huhn, Mike, Herndon
> Sent: Thursday, April 06, 2000 1:26 PM
> To: 'NTSB Greg Feith'
> Subject: Emery Elevator Linkage & Mx Records Group
>
> Greg,
> Per my phone msg., heres a brief synopsis of our quandary.
> The Mx Records group met 4/3-4. Hugh Seagraves was the ALPA member in
> attendance. Hugh was unable to convince Debra or the group of the need to
> pursue this issue, and we are now pushing it up to you.
>
> Background
> In Nov 1999, the accident aircraft (N8079U) had the elevator dampers
> installed on the oppsite sides (left part on right side & vice versa)
> during a D check. The elevators were rigged with this incorrect
> installation.
> Approx a week later, a log entry squawking unusual back pressure to flare
> was entered, and subsequent mx activity discovered the swapped dampers.
> The dampers were un-swapped, and the only other elevator control system
> check conducted was a 'stop-to-stop' check for binding. It was not
> recorded, nor could any of the mechs recall (if they even knew) exactly
> which stops (control column, elevator, tab?) were encountered in this
> check.
> The elevators were not re-rigged.
> No elevator, tab or cc range of travel verification was conducted.
>
> No elevator squawks were recorded on this ship between this follow-on mx &
> the accident.
>
> Subsequent to this finding on the accident aircraft, at least one other
> Emery aircraft (N873SJ) was found with a similar reversal.
>
> ALPA Concern & request
> In the interest of determining whether this mx irregularity had any effect
> on the controllability of this A/C, we are urging that the NTSB conduct a
> physical repeat of this mis-installation, rigging & subsequent damper
> swap, followed by a full travel check of all components involved (control
> column, tab, elevator) throughout the full range of stabilizer trim
> positions. Control forces should also be measured. Only in this way can we
> positively ascertain whether this situation adversely affected the
> functionality of the elevator control system (through mechanical
> interference, mis-rigging etc). Until this is accomplished, it is
> impossible for this aspect of the elevator controllability issue to be
> resolved.
>
> If any control irregularities are noted during this testing, then ALPA
> believes that the Airworthiness Group should make a concerted effort to
> locate, retreive & examine all the elevator control system components from
> the wreckage.
>
>
>
> Please give me a call when you get a chance.

EMERY
WORLDWIDE AIRLINES
A CNF COMPANY

February 28, 2000

David Hoffstetter
General Manager
Tennessee Technical Services, L.L.C.
634 Fitzhugh Blvd.
Smyrna, TN 37167

Dear Mr. Hoffstetter:

This letter is a follow-up to our telephone conversation today, February 28, 2000, regarding the discrepancy #6 noted on the attached log page 8086-11 dated November 25, 1999.

Please provide me the information of those responsible for the installation of the components during the "D" Check that was completed November 17, 1999.

Emery Worldwide Airlines (EWA) requires your immediate corrective action and a comprehensive fix to preclude any further issues as such. I will await your response to this request.

attachment

Sincerely,

Thomas M. Wood
Director Quality Control

cc: Rene' Visscher
Tim Alman
Ronald Moody

TMW/lc

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TENNESSEE TECHNICAL SERVICES, L.L.C.

CRS T64R164O

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February 28, 2000

Mr. Tom Wood
Director Quality Control
Emery Worldwide Airlines
One Emery Plaza
Vandalia, OH 45377

Dear Mr. Wood:

This letter is in response to your letter on February 28, 2000 to David Hoffstetter regarding the installation of elevator dampers.

Tennessee Technical Services (TTS) was made aware that a problem existed regarding the installation of elevator dampers on N8079U in late November 1999. At that time we conducted an internal investigation of the elevator installation procedures and reviewed our parts receiving procedures. The investigation revealed that Emery's vendor performing the flight control overhauls installed the elevator dampers with the positions reversed. A review of the technical data for the installation of the elevator did not address the damper installation, only the connection of the damper controls arm. It was also determined that parts receiving procedures were followed for the receipt of the elevators from the repair vendor. A receiving type inspection was performed which does not constitute a complete review of all installed parts and components from a repair station providing a Maintenance Release per FAR Part 43.

An additional set of elevators had been received from the same vendor at the time of our investigation. The elevators were inspected and found to contain the same reversed damper problem as encountered on the previous aircraft.

With this information, TTS took the following actions. First, the condition of the reversed elevator dampers on the elevators received form the vendor was presented to the Emery on-site Rep. for corrective action. Second, TTS published an internal document titled Maintenance–Inspection Alert, dated November 30, 1999 addressing this problem. A copy is attached. Third, all TTS Quality Assurance Inspectors were briefed on the damper problem during the weekly inspection meeting.

I trust these completed actions will satisfy your requirements. If you need any additional information, please contact me.

Sincerely,

William D. Henley
Director of Quality Assurance (Acting)

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Tennessee Technical Services

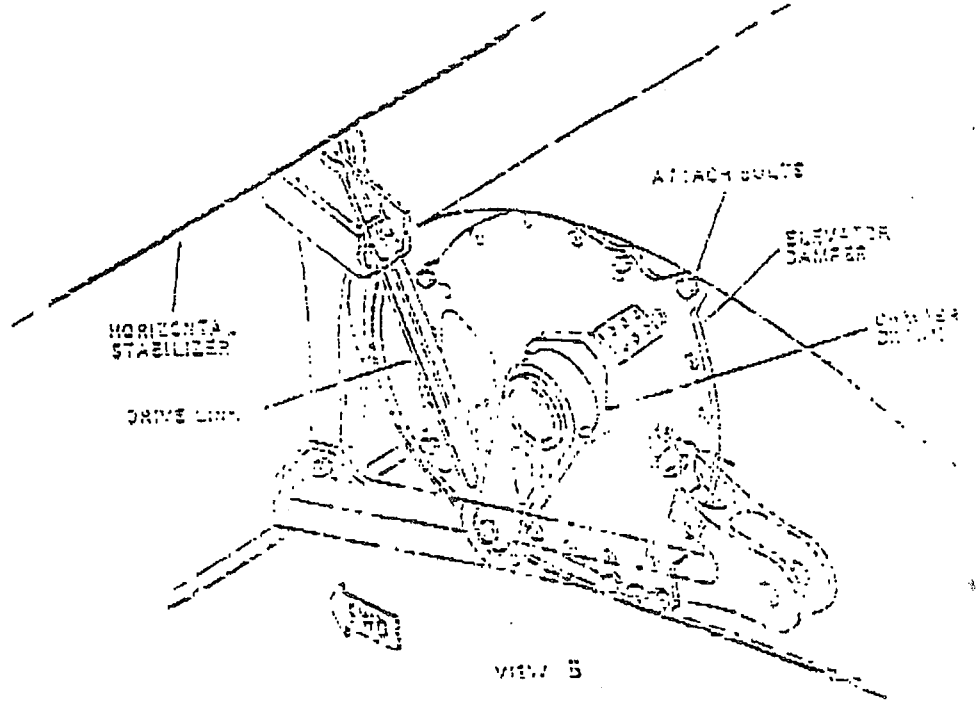
Maintenance – Inspection Alert

Date: November 30, 1999

Problem: The elevator dampers have been installed on the wrong sides (left to right and right to left) from an outside vendor overhaul causing them to be hooked up wrong when the elevator is installed on the aircraft. This problem is undetectable when doing throw checks and will only be noticed when the aircraft is being flaired in flight, when it takes undo force to pull the stick back.

Solution: Verification of the correct elevator damper part number installed on the left and right elevator when received from an outside overhaul vendor. It is also possible to detect the problem if the procedures in the maintenance manual covering installation of the elevator dampers are followed.

DRIVE LINK AND DAMPER CRANK SHOULD BE DOWN AS SHOWN



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