

ALPA SAFETY ALERT Bulletin 2002-01

SUBJECT: NTSB Safety Recommendations Regarding Rudder Operations

Background: As a result of its ongoing investigation into the American Airlines Flight 587 accident in New York, the U.S. National Transportation Safety Board (NTSB) has identified an industry-wide safety issue involving pilot training on transport category aircraft. The NTSB has determined that flight crews may not have been informed that under certain conditions, it is possible to induce structural damage or failure via a specific type of aggressive rudder input.

NOTE: This NTSB information applies to all transport category aircraft, regardless of manufacturer

It is essential to understand that the NTSB has not determined a probable cause of the American Airlines accident, nor have they concluded that pilot error and/or training was a factor in this accident. Additionally, the NTSB is not aware of any events in which rudder movements have resulted in separation of a vertical stabilizer or rudder on transport category aircraft.

ALPA Guidance: Based on the February 8, 2002 Safety Recommendations issued by the NTSB, ALPA urges flight crew personnel to be aware of the following:

- **Until and unless specifically directed otherwise by your carrier or the FAA, pilots should continue to operate their aircraft in accordance with current training and guidance material. Continue to use existing operational procedures regarding the use of flight controls for engine failure, gusty crosswind and upset recovery.**
- **The rudder use cited by the NTSB involves sequential, aggressive, full and opposite rudder inputs (e.g. Full right followed rapidly by full left). These specific rudder inputs may result in structural damage or failure, which can lead to loss of aircraft control.**
- **The rudder limiter may not prevent structural damage or failure in the event of sequential, aggressive, full and opposite rudder inputs.**
- **Flight at or below design maneuvering speed may not prevent structural damage or failure in the event of sequential, aggressive, full and opposite rudder inputs.**

ALPA is actively working with the airlines and industry to address the NTSB-noted concerns. The complete text of the NTSB Safety Recommendations is available at www.nts.gov. In addition, [Boeing](#) and [Airbus](#) articles on upset recovery are available at their respective websites.

Please direct any questions or comments to the Engineering & Air Safety Department at 800-424-2470.

Captain John Cox
Executive Air Safety Chairman

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