

ORDER: 8400.10 and 8700.10

APPENDIX: 4

BULLETIN TYPE: Joint Flight Standards Information Bulletin for Air Transportation (FSAT) and General Aviation (FSGA)

BULLETIN NUMBER: FSAT 99-12 and FSGA 99-08

BULLETIN TITLE: Maneuvering Speeds for Boeing 737-100/200/300/400/500 Series Airplanes

APPLICABILITY: This bulletin is applicable to all principal operations inspectors (POI) having oversight responsibilities of operators who operate Boeing 737-100/200/300/400/500 series airplanes.

EFFECTIVE DATE: 12/10/99

TRACKING NUMBER: N/A

NOTE: THIS BULLETIN REQUIRES PTRS INPUT, SEE PARAGRAPH #5.

NOTE: FSAT 99-02, Maneuvering Speeds and Recovery Procedures For the Boeing 737 Airplanes, is canceled as of the effective date of this bulletin.

1. PURPOSE. The purposes of this bulletin are:

A. To provide notice of the cancellation of FSAT 99-02, Maneuvering Speeds and Recovery Procedures For the Boeing 737 Airplanes, dated March 24, 1999; and

B. To advise inspectors, operators, and pilots of Boeing 737-100/200/300/400/500 series airplanes about recent information concerning recommended minimum maneuvering speeds for various flap settings.

2. BACKGROUND.

A. As a result of accident investigations involving 737 airplanes, the Federal Aviation Administration (FAA) issued FSAT 99-02 on March 24, 1999, recommending a 10 knot maneuvering airspeed increase for flap settings of UP, 1, 5, and 10 at various gross weights.

B. On May 28, 1999, Boeing issued an Operations Manual Bulletin,

"MANEUVERING SPEEDS FOR 737-100/200/300/400/500," recommending revised maneuvering speeds (Block Speeds) for flaps UP, 1, 5, and 10 for various gross weights until the airplanes are retrofitted with a new Rudder Pressure Reducer (RPR).

3. DISCUSSION.

A. Continuing Analysis. During the RPR retrofit, a team comprised of representatives from the airlines, Boeing, and the FAA continued their analysis of the revised maneuvering speeds. This analysis has resulted in a revision to the "block speeds" specified by the FAA in FSAT 99-02 and specified by Boeing in Boeing's Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated May 28, 1999.

B. New Data Availability. Boeing has new maneuvering airspeed data available and is beginning distribution of an updated operations manual bulletin titled "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999. Until the December 3, 1999, bulletin is received, it is recommended that the maneuvering speeds in Boeing's Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated May 28, 1999, be followed until the new data are available.

C. Airplane Upset Recovery Training. Equipment modifications have been implemented to prevent upsets in 737s; however, it is recommended that airplane upset recovery training be continued to keep pilots prepared in the event of an upset. FSAT 98-03, Recognition of and Recovery from Unusual Attitudes and Upsets Caused by Reverse Rudder Response Involving Boeing 737's, was issued on January 29, 1998, advising 737 pilots of the potential uncommanded yaw or restricted rudder control conditions. The expiration date of FSAT 98-03 has been extended indefinitely. To assist operators and training organizations in upset training, an "Airplane Upset Recovery Training Aid" has been developed and distributed for their use.

D. Selected Event Training. To address issues related to "hazardous in-flight situations," the FAA issued a Flight Standards Handbook Bulletin for Air Transportation (HBAT) 95-10, Selected Event Training, on August 16, 1995. This HBAT encourages operators to address in their training programs any in-flight hazards that might be encountered in the specific operator's line operations, even though those hazards may not be specifically required by rule. These in-flight hazards include airplane upset.

4. ACTION. Principal operations inspectors (POI) shall ensure:

A. That each assigned operator of 737-100/200/300/400/500 series airplanes is provided with the information contained in this bulletin;

B. That each assigned operator adhere to the speeds in Boeing's Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated May 28, 1999, until revised maneuvering speeds listed in Boeing's December 3, 1999, bulletin are received;

C. That each assigned operator of 737-100/200/300/400/500 airplanes provide the information and procedures contained in the Boeing 737 Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999, to its 737 flight crewmembers;

D. That the information and procedures contained in the Boeing 737 Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999, is incorporated into assigned operator's training programs; and,

E. That each assigned operator adhere to the speeds in the Boeing 737 Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999.

5. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS).

A. PTRS Entry. Each principal operations inspector affected by this bulletin shall make a PTRS entry to record the actions directed. The PTRS entry for distribution of this bulletin to the operator shall be listed as activity code 1381, and the "National Use" field entry shall be FSAT9912. The comments section of the PTRS shall be used to record interaction and response of the operator.

B. Specific PTRS Comment Section Entries. Because of the intense scrutiny of the issues relating to the 737 rudder, the quality of the PTRS entries is especially important. The PTRS will remain in an open (O) status until items 5. B.(1), (2), and (3) are completed. The following specific entries for the PTRS comment section are required.

(1) FSAT 99-12 provided to operator on (DATE);

(2) Boeing 737 Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999, provided to operator's flight crewmembers on (DATE);

(3) Boeing 737 Operations Manual Bulletin, "MANEUVERING SPEEDS FOR 737-100/200/300/400/500," dated December 3, 1999, incorporated into operator's training program on (DATE).

5. INQUIRIES. This bulletin was developed by the Air Transportation Division, AFS-200, with input from the Boeing Commercial Airplane Group and the Seattle Aircraft Certification Office. Any inquiry from operators may be directed to the POI having oversight responsibility at the Certificate Holding District Office (CHDO) or Certificate Management Office (CMO). Principal operations inspectors and regional office staff may direct their inquiries concerning this bulletin to either Will Swank at (202) 493-4602 or Hop Potter at (202) 267-3723.

6. EXPIRATION. This FSAT will remain in effect until superseded or canceled.

/s/ Ava L. Mims
for
L. Nicholas Lacey
Director, Flight Standards Service

Reference Only