

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.205

National Policy

Effective Date:
1/11/13

Cancellation Date:
1/11/14

SUBJ: Enhanced Stall and Stick Pusher Training

1. Purpose of This Notice. This notice discusses the principles of Advisory Circular (AC) 120-109, Stall and Stick Pusher Training, and the importance of the information contained in the aforementioned AC.

2. Audience. The primary audience for this notice is principal operations inspectors (POI) responsible for the approval and surveillance of training programs for Title 14 of the Code of Federal Regulations (14 CFR) part 121 and part 135 air carriers, 14 CFR part 91 subpart K (part 91K) program managers, and Training Center Program Managers (TCPM) responsible for the approval and surveillance of training programs for 14 CFR part 142 training centers. This notice is also addressed to POIs with oversight of testing and checking under 14 CFR part 125. The secondary audience includes other Flight Standards Service (AFS) personnel in certificate-holding district offices (CHDO), Federal Aviation Administration (FAA) branches and divisions in the regions, and headquarters (HQ) AFS personnel.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators can find this notice on the FAA's Web site at <http://fsims.faa.gov>. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background.

a. The Act. In March 2010, the FAA worked with industry leaders to address concerns arising from the increase in stall and loss of control (LOC) accidents. In August 2010, Congress enacted the Airline Safety and Federal Aviation Administration Extension Act of 2010 ("the Act"). Section 208(b) of the Act, titled "Implementation of NTSB Flight Crewmember Training Recommendations," required the FAA to convene a multidisciplinary panel to study and submit to the Administrator a report on methods to increase the familiarity and improve the response of flightcrew members on:

- Stick pusher systems;
- Icing conditions; and
- Microburst and windshear weather events.

b. Aviation Rulemaking Committee (ARC). In September, 2010, the FAA convened the Stick Pusher and Adverse Weather Event Training ARC to accomplish the tasks directed in Section 208(b) of the Act. The ARC included subject matter experts (SME) from aircraft manufacturers, simulator manufacturers, training companies, pilot associations, airlines, and the FAA. The collective views from the industry work group and the ARC are consolidated into the recommendations contained in Safety Alerts for Operators (SAFO) 10012, Information for Operators (InFO) 10010, AC 120-109, and FAA-S-8081-5F, Airline Transport Pilot (ATP) and Aircraft Type Rating Practical Test Standards (PTS) For Airplane, Change 4.

5. General Conclusion of Working Group. Information from accident and incident investigations demonstrates that pilots are failing to avoid conditions that may lead to a stall or failing to recognize the insidious onset of an approach-to-stall during routine operations in both manual and automatic flight modes. Additionally, it appears that some pilots may not have the required skills or training to respond appropriately to an unexpected stall or stick pusher event. Stall training should always emphasize “reducing the angle of attack” (AOA) as the most important response when confronted with any stall event.

6. Core Principles of AC 120-109. The core principles discussed in AC 120-109 include:

a. Reduction of AOA. Reduction of AOA is the most important response when confronted with a stall event.

b. Evaluation Criteria. Evaluation criteria for a recovery from a stall or approach-to-stall that does not mandate a predetermined value for altitude loss and should consider the multitude of external and internal variables which affect the recovery altitude. (Refer to SAFO 10012.)

c. Realistic Scenarios. Realistic scenarios that could be encountered in operational conditions including stalls encountered with the autopilot engaged.

d. Pilot Training. Pilot training which emphasizes treating an “approach-to-stall” the same as a “full stall,” and execute the stall recovery at the first indication of a stall.

e. Incorporation of Stick Pusher Training. Incorporation of stick pusher training into flight training scenarios (if installed on the aircraft).

7. ATP PTS. ATP PTS, Change 4, has incorporated the principles of stall recovery described above.

8. Repositioning. FAA guidance discourages the use of repositioning and freeze features of a full flight simulator (FFS) for airman certification events. In order to facilitate the evaluation of high altitude stalls, FAA inspectors and designees are permitted to utilize altitude repositioning and freeze to set up the event.

9. Action. Within 180 days following the issuance of this notice, POIs and TCPMs shall encourage their assigned certificate holder(s) to incorporate the educational material, training methods, and recovery procedures contained within AC 120-109.

10. Program Tracking and Reporting Subsystem (PTRS). The first entry (if there are multiple) must be within 180 days from the issuance of this notice.

a. Training Program Containing Principles of AC 120-109. When a POI, TCPM, or program manager determines their assigned certificate holder's approved training programs contain, or have been amended to contain, the training, testing, and checking core principles of AC 120-109 (as discussed in paragraph 6):

(1) Open a PTRS record using code 1380 and complete all required and any applicable optional fields.

(2) Enter "YSTALL" in the "National Use" field (without quotes).

(3) Close the PTRS record.

b. Training Program Will Be Revised to Contain Principles of AC 120-109. If a POI, TCPM, or program manager confirms their assigned certificate holder is scheduled to revise, or is actively revising, their approved training program to contain the core principles of AC 120-109 (as discussed in paragraph 6):

(1) Open a PTRS record using code 1380 and complete all required and any applicable optional fields.

(2) Enter "WSTALL" in the "National Use" field (without quotes).

(3) Close the PTRS record.

c. Training Program Will Not Be Revised to Contain Principles of AC 120-109. If a POI, TCPM or program manager determines their assigned certificate holder will not amend their approved training program to contain the core principles of AC 120-109 (as discussed in paragraph 6):

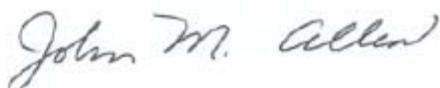
(1) Open a PTRS record using code 1380 and complete all required and any applicable optional fields.

(2) Enter "NSTALL" in the "National Use" field (without quotes).

(3) Close the PTRS record.

Note: The results of these entries will be evaluated quarterly for the next 18 months.

11. Disposition. We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Air Transportation Division (AFS-200), Robert Burke, at robert.burke@faa.gov or 202-267-8166.



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