

ORDERS: 8400.10 and 8700.1

APPENDIX: 4

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

BULLETIN NUMBER: FSAT 00-08, FSGA 00-05

BULLETIN TITLE: Standard Operating Procedures for Flightdeck Crewmembers (AC 120-71), Including Stabilized Approach

EFFECTIVE DATE: 08/23/00

TRACKING: NTSB Safety Recommendation A-99-35

APPLICABILITY: This bulletin applies to operations under parts 121, 125, and 135.

NOTE: THIS BULLETIN REQUIRES PTRS INPUT BY PRINCIPAL OPERATIONS INSPECTORS AND OPERATORS - SEE PARAGRAPH #4 AND #5.

NOTE: THIS BULLETIN CANCELS FSAT 94-22

1. PURPOSES.

A. The primary purposes of this bulletin are to promote the development of comprehensive standard operating procedures (SOPs) for use by flightcrews in training and in operations, and to emphasize the importance of strict adherence to those procedures.

B. Other purposes are to encourage the use of AC 120-71, Standard Operating Procedures for Flightdeck Crewmembers, and to emphasize Stabilized Approach as a standard operating procedure (specifically recommended in AC 120-71) for operators of transport category airplanes.

2. BACKGROUND.

A. Standard operating procedures that are clear, comprehensive, and readily available to the flightcrew are the foundation of safe air carrier operations. SOPs form the shared mental model that the flightcrew need to perform their tasks effectively as a team. Effective team performance, in turn, is the main objective of crew resource management (CRM).

B. Many aviation safety organizations including the FAA have recently reaffirmed the importance of SOPs. In accident investigations, the National Transportation Safety Board (NTSB) continues to point to flightcrews' failure to adhere to standard operating procedures as a major causal factor in many accidents; also, the NTSB continues to find that effective SOPs are sometimes partly or entirely absent in the manuals used by flightcrews and in their training. The International Civil Aviation Organization (ICAO) has recently established that each member state should require SOPs for each phase of flight be contained in the operations manual used by pilots.

C. For years various part 121 certificate holders, industry associations such as Air Transport Association of America (ATA), Air Line Pilots Association (ALPA), and Allied Pilots Association (APA), have recognized the Stabilized Approach as the safest approach profile in all but special cases. Recently that endorsement has become the consensus, ratified by all of those organizations and many others, including the FAA, under the auspices of the Commercial Aviation Safety Team (CAST).

3. CONTENTS OF AC 120-71. AC 120-71 reflects the importance of standard operating procedures and, in particular, the importance of the Stabilized Approach. It contains the following principal elements:

A. Background, basic concepts, and philosophy of SOPs, including the importance of continuing collaboration between managers and operations people, particularly flightcrews.

B. A template showing examples of important topics to be addressed in SOPs. (The AC does not list every important SOP topic or to dictate exactly how each topic should be addressed by a certificate holder.)

C. Examples of SOPs currently in use, including annotated graphic profiles and full-text renditions of specific events and maneuvers. Actions and callouts are depicted for the pilot flying (PF) and the pilot not flying (PNF).

D. Examples of briefings, including a pilot briefing, a flight attendant briefing, and a pre-takeoff briefing.

E. A recommendation to conduct a risk assessment and briefing before every approach, preferably before beginning of descent (BOD), and a cross-reference to an example of a risk assessment tool developed by Flight Safety Foundation.

F. Concepts and terms relating to the Stabilized Approach, founded on a constant-angle constant-rate of descent profile ending near the touchdown point, where the landing maneuver begins.

G. An explicit statement that a Stabilized Approach is the safest profile in all but special cases.

H. Specific guidance for conducting stabilized approaches when vertical guidance such as an electronic glideslope or a computed descent path is not displayed for tracking by the pilot.

4. ACTION. Principal Operations Inspectors (POI) should ensure that each operator of transport category airplanes for which they are responsible:

A. (Availability) is aware of the existence and ready accessibility of AC 120-71, Standard Operating Procedures for Flightdeck Crewmembers. A copy of AC 120-71 is posted at the Flight Standards Service's public web site.

<<http://www.faa.gov/avr/afs/acs/ac-idx.htm>>

B. (Special attention) is aware of certain key components of the AC, including Appendix 1, the SOPs Template; Appendix 2, Stabilized Approach; and the Template's cross-references to a controlled flight into terrain (CFIT) checklist and a risk assessment tool.

<http://www.flightsafety.org/pdf/cfit_check.pdf>

<http://www.flightsafety.org/pdf/alar_risk_tool.pdf>

C. (Calculating a constant-angle constant-rate of descent) provides training to proficiency as applicable* in the operator's recommended procedures for calculating and conducting a constant-angle constant-rate of descent ending near the touchdown point, where the landing maneuver begins. Crossing restrictions must be observed when depicted on the IAP. Acceptable procedures include:

- Tracking the Vertical Descent Angle (VDA), using the rate of descent appropriate to the estimated/actual groundspeed, when that information is depicted on the instrument approach procedure (IAP).
- Dead-reckoning the rate of descent appropriate to the estimated/actual groundspeed and the altitude to be

lost from the final approach fix (FAF) to the touchdown point.

*** NOTE: This training applies to pilots operating to runways without an electronic glideslope, using airplanes without equipment to compute and display vertical guidance derived from other sources.**

D. (Approved operating manual) refers to AC 120-71 in developing SOPs for the manuals used by its flightcrews.

E. (Training and operations) rigorously upholds the SOPs thus developed, during all phases of flightcrew training and flight operations.

5. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) INPUT. POI's shall make a PTRS entry to record the actions directed by this bulletin with each of their operators. POI's shall follow the procedures as outlined in HBAT 00-13, Program Tracking and Reporting Subsystem (PTRS) Documentation of Action Required by Flight Standards Bulletins. This PTRS entry shall be listed as Activity Code Number 1381; the "national use" field entry should be "FSAT0008." POI's should use the comments section to record comments of interaction with the operators.

6. INQUIRIES. This bulletin was developed by AFS-210. Any questions concerning this bulletin should be directed to AFS-210 at (202) 267-3723.

7. EXPIRATION. This bulletin will remain in effect until further notice.

/s/
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