



ADVISORY BULLETIN FOR STATES

Subject: INFORMATION TO STATES ON STANDARD OPERATING PROCEDURES FOR FLIGHTDECK CREWMEMBERS (STABILIZED APPROACH)

Date: 05 July, 2004

Initiated By: COSCAP-SA

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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 No: COSCAP-SA 002A, Standard Operating Procedures for Flightdeck Crewmembers, and to emphasize Stabilized Approach as a standard operating procedure (specifically recommended in AC COSCAP- SA 002A) 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 have reaffirmed the importance of SOPs. Accident investigations, continue to point to flightcrews' failure to adhere to standard operating procedures as a major causal factor in many accidents; also, 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 established that each member state should require SOPs for each phase of flight be contained in the operations manual used by pilots.

- c. Air Operator Certificate holders, industry associations and Air Line Pilots Association have recognized the Stabilized Approach as the safest approach profile in all but special cases. Such endorsement has become the consensus and ratified by all of those organizations.

3. CONTENTS OF AC No: COSCAP-SA 002A

AC No: COSCAP-SA 002A 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 cabin crew 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.
- 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 BY STATES:

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 No. COSCAP-SA 002A, Standard Operating Procedures.

- b. (Special attention) is aware of certain key components of the AC, including Appendix 1, the SOPs Template; Appendix 2, Stabilized Approach, Conceptual Terms; and the Template's cross-references to a controlled flight into terrain (CFIT) checklist and a risk assessment tool.
- 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 No: COSCAP-SA 002A 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.

Signed:
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