

Safety Bulletin

SB No.: 02/2022

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Subject: Safety Alert to Stabilized Approach

For the attention of: Thai Air Operators

Purpose:

The purpose of this bulletin is to emphasize the safety benefits and to outline the elements of a stabilized approach. CAAT also serves to complement Thailand Aviation Safety Action Plan (TASAP) 2021-2023 which requires all Thai Air Operators to exercise the existing Safety Management Systems (SMS) to address and mitigate hazards and risks associated with an unstabilized approach.

Introduction:

Unstabilized approach remains a significant factor in Controlled Flight into Terrain (CFIT) and other Approach-and-Landing Accidents (ALA). The safety benefits derived from a stabilized final approach have been recognized by many organizations including ICAO, the FAA and EASA. These benefits include:

- Increased flight crew situational awareness
- More time and attention for monitoring ATC communications, weather conditions and systems operation
- More time and attention for flight path and energy monitoring
- Defined flight parameter deviation limits and minimum stabilization heights to support the decision to land or to go-around; and,
- Landing performance consistent with expected performance values.

An approach is considered stabilized when it satisfies the associated conditions typically defined by an air operator in their Company Operations Manual or Standard Operating Procedures (SOP) as stipulated in The Air Operator Certificate Requirements; Issue 02, Revision 00 (AOCR) and the stabilized approach criteria should be defined for all approaches and should include that:

- Approaches be stabilized by no lower than 1,000 feet (ft) above aerodrome elevation (AAE) when in instrument meteorological conditions (IMC);
- All approaches be stabilized by no lower than 500 ft AAE in visual meteorological conditions (VMC);
- A call-out be made upon reaching 1000 ft AAE in IMC or 500 ft AAE in VMC as to whether the approach is stabilized or not;
- The approach remains stabilized until landing;
- If an approach is not stabilized in accordance with these requirements, a go-around is required.

In summary, maintaining a stable approach speed, descent rate, and vertical/lateral flight path in the landing configuration is commonly referred to as the stabilized approach concept. Stabilized approach criteria should always be followed and required close monitoring of airspeed, sink rate and energy state during a visual or instrument approach. All available lateral and vertical guidance and visual aids should be used to monitor the aircraft state and flight path.

Stabilized approach procedures should include the required verbal communication about the aircraft state and its progression along the approach. Any significant deviation from planned flight path, airspeed, or descent rate should be announced and promptly corrected. A go-around is required if the approach cannot be continued within stabilized approach parameters.

It is important to note that the decision to execute a go-around is not an indication of poor flight crew performance but rather prudent decision making.

Recommendations:

Commercial Air Transport Operators as well as General Aviation Operators registered under CAAT should review or institute their own stabilized approach procedures, to include the requirement for a “Stable” or “Unstable” call-out at the appropriate gate (1000’ AAE in IMC or 500’ AAE in VMC). Furthermore, the application of the stabilized approach concept should be supported by non-punitive go-around policies.

Those Air Operators not already doing so are encouraged to incorporate stabilized approach procedures into their operations manual, SOP and training syllabus.

In addition, CAAT plans to conduct surveillance activities that include a specific inspection to evaluate operator practices with respect to the stabilized approach concept.

Reference:

Stabilized Approach - Civil Aviation Safety Alerts (CASA) No. 2015-04

Contact:

For further information contact:

The Civil Aviation Authority of Thailand (CAAT),
Aviation Safety Management and Standards Assurance Office (SMO),
Aviation Safety Standards Group (AG)

E-mail: smo_ag@caat.or.th

Tel: 02-568-8813