

30th COSCAP-SA STEERING COMMITTEE MEETING

UNSTABLE APPROACHES AND ATC CONSIDERATIONS
INFORMATION PAPER (IP)

(Presented by Pakistan)

SUMMARY

This paper presents information regarding State's Safety initiative. To ensure compliance of the requirement of **COSCAP-South Asia Regional Aviation Safety Team (SARAST) vide RE 2/SASI 07** which Identify Specific Training for Pilots and Air Traffic Controllers to Avoid Unstabilized Approaches. In this regard Pakistan Civil Aviation Authority (PCAA) initiated the task and developed Air Safety Circular (ASC-003-ARAN) and conducted Awareness / Training sessions at all Major / International Airports. The 2nd Version of Air Safety Circular (ASC-003-ARAN) is readily available on Pakistan CAA website.

INTRODUCTION

Every day, there are over 100,000 landings occurring on runways at airports worldwide. Despite improvements in safety of operations, there remains a risk of an approach and landing accident. A stable approach means that the aircraft will arrive at the runway in the correct configuration, at the correct speed and power setting and on the correct lateral and vertical path. An unstable approach is where one or more of these parameters are incorrect, and as a result carries an increased risk of an approach and landing incident and/or accident. In addition, an approach which is stable for the final 1,000 feet of the approach affords the pilots the time to fulfil their flying and monitoring duties, maintain situational awareness and preserve mental capacity for any unexpected factors that may occur, during this critical phase of flight. Continuous improvement to stable approach policy compliance, including discontinuation of an unstable approach, will reduce the risk of an accident.

Keeping in view of the importance of the subject, the South Asian Regional Aviation Safety Team (SARAST) established a Safety tool Implementation Tracker and under RE 2 / SASI 07 emphasis States to conduct training sessions to Pilot & Air Traffic Controllers. In 2017 Pakistan CAA developed first Version of Air Safety Circulars (ASC-003-ARAN-1.0) titled as **“Unstable Approach and ATC considerations”** and the diligent Training / Awareness sessions for Air Traffic Controllers were conducted at all major ATS locations of Pakistan.

THE STRUCTURE OF SAFETY CIRCULAR (ASC-003-ARAN-1.0)

The said circular provides a detailed guidance material to ANSP on the subject matter. The structure of safety circular is based on following aspects;

- a) Current Requirements and Factors for unstable approach
- b) Air Traffic Control actions contributing to Unstablized Approaches
- c) Importance of Continuous Descent Operations (CDO)
- d) TIPs for ATCOs to avoid Unstablized Approaches
- e) General Causal Factors of Unstable Approaches
- f) Compliance / Actions to be taken

The Approach Radar Controllers with presenter deliberated the contributing factors which were inadvertently being performed such as sudden change of approach clearance, track shortening to arriving aircraft, and change of Runway during final approach Phase. The TIPs described in the safety Circulars present swift & key informations which is the main crux of the subject.

UNSTABLE APPROACHES / GO AROUND DECISION MAKING BY ATC

The ANS Inspector of PCAA noticed through various Incident / Occurrences reports that Aerodrome / Approach controllers did not took correct decision(s) to instruct Aircraft to **initiate Go Around** and despite of the apprehensions ATC allowed the aircraft to make attempt to land at the airport in Unstablized situation.

In 2021, Based on the above facts, the Air Safety Circular (ASC-003-ARAN-1.0) was reviewed to include vital instructions / guidance for designated investigating Manger(s) & ATC and following instructions / recommendations are quoted as under:'

“Quote” Para 7.3 GO AROUND DECSION BY ATC

C7.3.1 The Air traffic controllers Shall provide Air Traffic Control Service in accordance with the classification of Airspace, as the Control Zones established / implemented around the Aerodromes are of Airspace classification B & C, hence Approach / Aerodrome controllers are required to exercise complete command & control over the aircraft operating within that control zone.

C7.3.2 In context to surveillance Radar Approaches, the Para 8.9.6.1.8 of ICAO Doc 4444 (PANS-ATM) state that an aircraft making a radar approach should:

- a) **be directed to execute a missed approach in the following circumstances:**
 - i). when the aircraft appears to be dangerously positioned on final approach; or
 - ii). for reasons involving traffic conflicts; or

- iii). if no clearance to land has been received from the procedural controller by the time the aircraft reaches a distance of 4 km (2 NM) from touchdown or such other distance as has been agreed with the aerodrome control tower; or
- iv). on instructions by the aerodrome controller; or
- b) be advised to consider executing a missed approach in the following circumstances:**
 - i). when the aircraft reaches a position from which it appears that a successful approach cannot be completed; or
 - ii). if the aircraft is not visible on the situation display for any significant interval during the last 4 km (2 NM) of the approach; or
 - iii). if the position or identification of the aircraft is in doubt during any portion of the final approach. In all such cases, the reason for the instruction or the advice should be given to the pilot.

C7.3.3 Above requirements for instructing the aircraft to initiate Go Around / missed Approach are described under the scenario of Surveillance Radar Approaches, however it is recommended that the same provisions may be considered vital during normal Approach and / or Aerodrome control Service. In order to enhance safety of the aircraft operation the Approach / Aerodrome Controller should be encouraged for exercising the best judgment for taking such decision.

In light of the above recommendation, it is reiterated that ANSP Managers should:

- a) *Develop Non Punitive policy against ATC for taking such decision and instruct aircraft to initiate GO Around,*
- b) *Include Go Ground Decision making as mandatory aspect of Basic ATC, on the Job and Simulator Trainings,*
- c) *Not Investigate the Go Around initiated by the Pilot due to unstable approach or may be investigate to evaluate safety risk only.*
- d) *Conduct statistical analysis on the Go around incidences, and, organize awareness sessions when circumstances so warrant.*

“Unquote”

**BENEFITS OF AIR SAFETY CIRCULAR (ASC-003-ARAN-2.0) **

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Under Rule 4(3) of Civil Aviation Rules-1994 (CARs-94) , the Director General CAA is empowered to issue Air Safety Circular, therefore said ASC has a significant impact for enhancing the safety & efficiency of the aircraft operations in the region. Following visible affects are appended below:

- a) Approach & Aerodrome Controllers are more focused in implementing the safety standards.

- b) Air Traffic Controllers feels more confident in exercising the best judgment and has more courage to instruct aircraft to discontinue the approach as the aircraft indulge in Unstablized state.
- c) For Safety investigation Manager provide Improved safety investigation concepts and effective Root Cause Analysis (RCA)
- d) Improved on job training (OJT) process

CONCLUSION

The meeting is invited to:

- a) note the information contained in this paper; the said circular is available on PCAA website on following links;
<https://caapakistan.com.pk/upload/documents/ASC-003-ARAN-2.0.pdf>
- b) Discuss any relevant point (s) on subject matter

END