GOVERNMENT OF INDIA
CIVIL AVIATION DEPARTMENT
DIRECTOR GENERAL OF CIVIL AVIATION

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OPERATIONS CIRCULAR

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Subject: Unstable Approaches

1. INTRODUCTION

The Civil Air Navigation Services Organisation (CANSO) defines a runway excursion as "An event in which an aircraft veers off or overruns the runway surface during either take-off or landing." Runway excursions lead to more runway accidents than all the other causes combined.

There are many factors that may cause a runway excursion, including runway contamination, adverse weather conditions, mechanical failure, pilot error and unstable approaches. This OC will focus only on unstable approaches and is issued for guidance of all operators and pilots.

2. DEFINITION OF UNSTABLE APPROACH

An unstable approach is simply an approach that does not meet the criteria for a stable approach established by the aircraft operator. As an illustration, Flight Safety Foundation defines a stable approach in the following terms:

On the correct flight path:

- ILS Approach – ILS within 1 dot of the localiser and glide slope.
- Visual Approach – Wings level at 500 feet AGL.
- Circling Approach – Wings level at 300 feet AGL.
- Only small heading and pitch changes required.

- Speed within +20/-0 kts of reference speed.
- Aircraft must be in proper landing configuration.
- Maximum sink rate of 1,000' per minute.
- Appropriate power settings applied.
- Briefings and checklists complete.
- During IMC – Stable by 1,000 feet AGL.
- During VMC – Stable by 500 feet AGL.

If the approach is not stable by 1,000 feet AGL or 500 feet AGL (depending on weather conditions), or if the approach becomes unstable below these altitudes, the pilot should initiate a missed approach/go around. The pilot may initiate a go around at any time above or below these altitudes if deemed necessary. It is possible for a pilot to initiate a go around even after touchdown on the runway, but not after the thrust reversers have been deployed.

3. GUIDANCE FOR PILOTS TO AVOID UNSTABLE APPROACHES

- **Maintain a mental picture of the required descent profile.**
  Request distance updates from ATC if required.

- **Advise ATC as soon as possible if descent is required or additional track miles are needed to execute a stable approach.**
  The sooner ATC knows, the greater is the probability that the request can be accommodated.

- **Be aware of published local ATC procedures/airspace restrictions that impact the approach.**
  Airspace constraints may result in route and altitude restrictions.

- **Make requests for operational requirements, not for convenience.**
  The earlier ATC is informed, the easier it is to accommodate any request.
  Understand that the flight is part of a tightly integrated system with a number of arriving/departing aircraft and many operational variables (traffic patterns, airspace and airport design restrictions, noise restrictions, possible emergency operations on a different frequency), so ATC may not always be able to accommodate requests.

- **If an ATC instruction cannot be complied with, intimate ATC early.**
  Do not accept clearances that could put the flight into a situation leading to an unstable approach. The worst thing to do would be to accept an

instruction and then not comply with it.

It is acceptable to say "UNABLE". Better still, say "UNABLE" and suggest an alternative.

Use extreme caution when accepting visual approaches at unfamiliar aerdromes.

- **Be predictable,**

  As far as possible, minimise differences (ATC cannot be aware of all the variables e.g. aircraft performance, airline SOPs, etc).

- **When departing,**

  Tell ATC if it is likely that further time will be needed on the runway, prior accepting a clearance to enter the runway. ATC might be planning arrival sequences based on the take-off roll for the departure commencing without delay.

- **If there is an emergency situation,**

  ATC should be informed as soon as practicable, either by selecting the appropriate Mode A or using the standard phraseology. Once ATC are aware of the situation, they can be better prepared to accommodate whatever requests the pilot may have.

Sd/-
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