



AVOIDING UNSTABLE APPROACHES

Important Tips for ATCOs

There are many contributing factors that may lead to a landing incident/accident, but one that ATC can have a major influence on is the development of an unstable approach. In general terms, if an arriving aircraft is too high or too fast, the approach will most likely become unstable.

- **Allow the arrival/approach procedure to be flown as published.** If at all possible, minimise or avoid the use of vectoring.
- **Avoid routine vectoring** of aircraft off an arrival course to shorten the flight path. Unexpected shortcuts may lead to insufficient time and distance remaining to maintain the desired descent profile, and cause the aircraft to be high on the approach. Avoid close-in turns to final.
- **When aircraft are being vectored, issue track miles to the airport** or approach fix in a timely manner, as appropriate.
- **Keep the pilot informed** regarding runway assignment, type of approach and descent/speed restrictions. That will allow for proper planning and execution of the approach. Stable approaches require predictability and planning. Avoid last minute changes and advise the pilot as early as possible when changes are anticipated.
- **Ensure the runway assignment is appropriate for the wind.** Wet or contaminated runways, combined with cross/tail winds are often associated with runway excursions.
- **Issue accurate and timely information** related to changing weather, wind and airport/runway conditions.
- **Apply appropriate speed control/ restrictions.** Assigning unrealistic speeds (too fast or slow) may lead to unstable approaches.
- **Give preference to precision approaches** over non-precision approaches. Precision approaches have vertical guidance which assists the pilot in maintaining the proper descent profile, resulting in stable approaches.
- **Avoid instructions that combine a descent clearance and a speed reduction.** Many aircraft can't descend and slow down simultaneously.
- **Comply with operational flight requirements** related to capturing the glide slope from below. Vectoring for an approach that places an aircraft on the final approach course above the glide slope is a leading cause of unstable approaches.
- **Avoid close-in, last second runway changes,** even to a parallel runway. To comply with the company's operational procedures and requirements, the flight crew must have time to properly brief the approach and missed approach procedure to the runway being utilised. Even though a pilot may accept a runway change, the result may be an unstable approach.