



Unstable Approaches / Rwy Excursions



Wednesday Webinar – February 17, 2021

ELEVATING SAFETY & SECURITY WORLDWIDE

Why the Need for Today's Topic?

- *Runway Excursions are trending*
- *5 business jets in the last 5 months*
 - *October 22 – LR60, KPWK*
 - *November 1 – BE400, KFHB*
 - *December 21 – HS125, KFRG*
 - *February 8 – DA900, KPWK*
 - *February 13 – DA900, KMFY*



Runway Excursion - Defined

“An event in which an aircraft veers off or overruns the runway surface during either takeoff or landing”

Some definitions also include taxiing/taxiway

Primary Causes of Runway Excursions

Several causal factors including mechanical issues, weather, surface contamination, pilot error, unstable approaches

By far the biggest culprit is Unstable Approaches

- *83% of all runway excursions involved an unstable approach*

Stabilized Approach - Defined

- *“An approach in which the pilot establishes and maintains a constant angle glidepath towards a predetermined point on the landing runway. It is based on the pilot’s judgement or certain visual cues, and depends on the maintenance of a constant final descent speed and configuration.”*

But that’s a horrible, loosey-goosey definition – how do we better define it?

- *Without a standard set of parameters, it’s up to the individual operator to define – therefore, thousands of variations out there.*
- ***FSF suggests***
 - ✓ **On correct flightpath**
 - ✓ **In the correct configuration**
 - ✓ **Speed between Vref and Vref+10 (without wind adjustment)**
 - ✓ **Sink rate less than 1,000fpm**
 - ✓ **Stabilized thrust**
 - ✓ **Active communication required – “Continue/go-around callouts at 300ft**

The Numbers

- *65% of all accidents are approach and landing accidents*
- *86% of those involve unstable approaches*
- *83% of all runway excursions could have been prevented by executing a go-around*
- *Recent studies show a 3% compliance rate with SOPs regarding stabilized approaches – only 3 out of every 100 flights that should have executed a go-around, did!*

Said another way,

- *97% of approaches that should be thrown away, are not.*

The Gap

Theory vs. Practice

- **Culture**

- Do you do what you say (do what's in the manual), or have you even considered these numbers presented above?
- Ego?
- Perceived pressure from management?
- Perceived negative consequences from management?
- "Get-there-it is"?
- Ignorance/misunderstanding of the requirements/SOPs?

How do we improve?

The Gap

Theory vs. Practice

- **Theory**
 - Establish formal stabilized approach criteria
 - Share with/Train ATC on stabilized approach criteria
 - Implement FDM/FOQA programs
- **Practice**
 - ***Include*** these parameters in the approach briefing
 - ***Encourage & continuously promote*** no-fault compliance
 - ***Re-enforce*** when crews do not comply
 - ***Use*** data

WYVERN actions

- *WYVERN has added a review of operators' stabilized approach criteria to all Wingman audits.*
- *Wingman Safety Group forming to be chaired by WYVERN CEO, to focus on the establishing of standard stabilized approach criteria – a collaboration to establish best-practices and implement industry-wide*

We Need to Stop Doing This



Let's Get This Right!