Overview of Runway Excursion Statistics
A statistical Analysis of Commercial Aviation Accidents 1958-2016
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10 year moving average Runway Excursion rate by aircraft generation per million flights
Focus on Runway Overruns

Reported events on Airbus aircraft since 2005

- Average of 3 events per year
- 80% of events with weather as contributor

Every deviation counts in a landing distance.

- Nominal In-Flight Landing Distance
- 5kt Tail-Wind (additional ground speed)
- Each additional 10ft above threshold over 50ft
- Each additional 1s of flare over 7s
- Each additional 1s delay of pedal braking
- Each additional 3s delay applying max reverse
- Runway Friction 10% worse than expected
Focus on Runway Veer-Offs

Reported events on Airbus aircraft since 2005
• Average of 7 events per year
• 75% of events with weather as contributor

High CROSSWIND
• Know the AFM limits and
• Reduced limits recommended if runway wet or contaminated

Low Visibility
• Loss of visual contact with runway or approach lights, below minima
  ➔ Go Around

Brief combinations of weather hazards

Use Correct technique
Focus on Undershoots

Reported events on Airbus aircraft since 2005

- Average less than 1 event per year
- 7 events with weather identified as contributor:
  - Wind shear, Downburst, Thunderstorm
  - Fog, Mist, Heavy rain, Drifting Snow
- Majority of events were non precision approaches

Weather as a Contributor
78%

SOP and training - Respect the minima...keep visual at or below minimum...if not go around

Aircraft Guidance - xLS Landing System concept

- Common procedures and symbology for almost all types of approach
- ILS « look alike » guidance for Non Precision Approach
- Precision approach capability when no ILS
Thank you