

The air traffic control perspective on runway excursion hazards

Session 3 Presentation 3



Runway excursion hazards associated with ATC are generally related to:

1. Unstable approaches
2. Inaccurate surface/meteorological information
3. ATC knowledge of prevailing conditions and ability to update the pilot
4. Runway state reporting
5. Local Runway Safety Teams will help

Communication Hazards

- Inaccurate/Out of date Information
 - Surface Conditions
 - Wind
- Cockpit workload
- Knowing each others roles
- Local Runway Safety Teams are critical

Construction Hazards

- Airports are constantly being upgraded, repaired, maintained
- AIP documentation on status of airport may differ from current airport works
- NOTAM and ATC advice very important
- Procedures to keep pilot up to date e.g. operations on shortened runways
- Local Runway Safety Teams are critical

Airport Design Hazards

- Tower location that prevents the monitoring of multiple runway operations
 - Inability to detect confusion events
- Complex taxiway configuration
- Itinerant pilots – local knowledge gaps
- Off airport development
- Local Runway Safety Teams are critical
 - Training
 - Signage

Operational Hazards

Factors - unstable approach

Balancing efficiency with safety

- Pressure to meet performance targets – i.e. reduce delays, increase capacity
- Cost: reduced resources available for maintenance of equipment and training of personnel

ATC

- Ineffective Traffic Flow Management leading to...
 - Unpredictability in traffic management expectations
 - Last-minute approach and/or runway changes
 - Vectoring into short final
 - Speed control to avoid compression on final
 - Intercepting glide path from above
 - Unstable approach
- Inadequate Training
- Failure of approach aids

Operational Hazards (cont.)

- **ATC provides approach profile - incompatible with met conditions**
- **Met information not inconsistent with conditions experienced by the aircraft**
- **Meteorological / runway condition information systems not available or inaccurate**
- **Ineffective ATC handover - meteorological and aerodrome information**
- **Conflicting runway selection criteria**
- **Changing surface or wind conditions**
 - Reporting windshear to ATC
- **Local Runway Safety Teams will help**
 - Understanding each others roles
 - Communication and briefings
 - Shared identification/ mitigation of hazards

Visibility Hazards

- Inability of the tower to direct Rescue and Fire Fighting (RFF) services to excursion events
- Construction sites
 - Cranes

Local Runway Safety Teams

THANK YOU

