Subject: Training For Maximum Performance Landings on Contaminated Runways

Purpose: To emphasize the importance of including maximum performance landings on contaminated runways in simulator training.

Background: The National Transportation Safety Board (NTSB) investigated two runway overrun accidents which occurred within a short period of time. In both accidents, the flightcrew did not fully utilize the braking capabilities available to them on the contaminated runway. In light of these accidents, the Federal Aviation Administration (FAA) would like to emphasize to Title 14 Code of Federal Regulations (14 CFR) part 121, 135, and 91 subpart K (91K) operators the importance of including maximum performance landings on contaminated runways in initial, upgrade, transition, and recurrent simulator training for pilots and operators of turbojet airplanes.

Recommended Action: Directors of safety, directors of operations, chief pilots, check airmen, pilot instructors, line pilots of certificate holders, and training providers should develop a program with the following minimum elements:

- Standard operating procedures (SOP)/profiles should incorporate the stabilized approach terminating with a landing in the touchdown zone, the proper application of aircraft landing performance data, the proper deployment of aircraft deceleration devices, and the proper braking concept. SOPs should specify minimum altitudes for the airplane to be established in a stabilized approach condition. If the airplane is not stabilized, SOPs should emphasize that pilots should execute a go-around rather than attempt a landing from an unstabilized approach.
- SOPs should outline proper procedures to use during the flare and touchdown to ensure a landing in the touchdown zone. Training curricula should emphasize the proper deployment and application of ground spoilers and thrust reverse (if installed) and the correct use of brakes during the ground roll.
- Landing distance calculations should include the safety margin required by company SOPs and the appropriate regulation. Company SOPs should also articulate a process for conducting a landing distance assessment under the conditions existing at the time of arrival. These procedures should ensure that a full stop landing, with a reasonable safety margin beyond the actual landing distance, can be made on the runway to be used.


Contact: Questions or comments concerning this SAFO should be addressed to the Air Transportation Division, AFS-200, (202) 267-9836.