Subject: Guidance Material for Contaminated Runway Landing Operations

Purpose: This SAFO identifies Federal Aviation Administration (FAA) published guidance material that all operators are encouraged to incorporate into their standard operating procedures (SOP) to mitigate the risk of landing operations on contaminated runways.

Background: The aviation industry continues to experience accidents and incidents associated with landing operations on contaminated runways. These events are seldom caused by one factor but are typically the result of several combined factors that lead to the accident or incident. Some of the elements that have been identified as causal factors in these runway overrun events are:

- Misunderstanding or lack of knowledge of the stopping performance capability of the aircraft on contaminated runways and the assumptions that are built into landing performance data, both normal and advisory, as supplied in Aircraft Flight Manuals (AFM) and associated documentation.
- Landing long—Basing landing distance requirements on AFM data but landing farther down the runway than would be assumed by the AFM landing data.
- Approach and landing speeds higher than those specified by the AFM.
- A different approach angle from that used during certification.
- The effect on landing distance caused by techniques used with brakes, thrust (prop) reversers, and aircraft ground lift dumping and drag devices that differ from those used during certification.
- Insufficient flightcrew training for planning and execution of landings on contaminated runways.

Discussion: In cooperation with industry, the FAA has produced and published the following two guidance documents that operators are encouraged to incorporate into their SOP for all landing operations with special emphasis for landing operations on contaminated runways. For your convenience, hyperlinks to the documents are included in the titles below.
SAFO 06012 Landing Performance Assessments at Time of Arrival (Turbojets), which can be found at http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2006/safo06012.pdf

Advisory Circular (AC) 91-79, Runway Overrun Prevention, which can be found at http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/0052F2A2A00D91B28625738E0071E44C?OpenDocument

**Recommended Action:** Directors of safety, directors of operations, aviation instructors, those responsible for operational control, and flight crewmembers should become familiar with the safety recommendations provided in these two documents and incorporate them into their SOP. Air carriers and air operators should incorporate the safety elements of these two documents into their operating procedures. Training programs should incorporate training for appropriate personnel to acquire the necessary knowledge and skill required to put the safety elements identified in these two documents into everyday operational practice.

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