

CERTALERT

ADVISORY CAUTIONARY NON-DIRECTIVE

AIRPORT SAFETY AND OPERATIONS DIVISION AAS-300

FOR INFORMATION, CONTACT, Freddie James AAS-300, (202) 267-8792

DATE: 2-26-09

No. 09-04

TO: Airport Operators, FAA Airport Certification Safety Inspectors

TOPIC: Aircraft surface excursions during winter operations

Background: From December 17, 2008 to February 17, 2009, the FAA received 19 incident reports involving the departure of airplanes from paved airport surfaces during taxi, takeoff, and landing operations. These excursions were due to a loss of stopping capability and/or steering control due to winter weather contamination on airport surfaces. In nine of these reported cases, the aircraft departed the runway turnoff after completing a safe landing due to excess speed and/or surface conditions being worse than anticipated by the flight crew. In other cases, flight crews reported the obscuration of surface markings and airport signage, leading to the airplane departing the paved area or becoming stuck in the surface contamination in areas that had not been cleared.

While an analysis of these cases identifies several systemic deficiencies, the maintenance of airport surfaces and the accuracy of airport surface condition reporting figure prominently in several instances. In some cases, airport operators have failed to maintain airport surfaces in a satisfactory condition for safe operations. In other cases, airports have failed to provide accurate and timely surface condition information to the airport users. The FAA has received anecdotal reports from flight crews citing airport NOTAMs that were many hours old, and no longer reflected current airport conditions. Yet another report identified an airport that kept the same NOTAM in place throughout the winter, which warned of surface hazards that may not be present. In both cases, airport users are deprived of the information they need to make sound operational decisions.

Action: In an attempt to bring greater awareness to the icy condition that occur during winter operations we are advising airport operator's highlight the preventive measures outlined in AC 150/5200-30C. Airport operators are also advised to take additional precautions to ensure pilots and crews are advised of the potential dangers of freeze over effects that could accumulate during snow removal operations. In addition, the FAA is putting forth the following to airport operators:

Snow Removal Plans: The prioritization of contamination removal and treatment should focus on the primary runway (s) and associated taxiway turnoffs. As nine of these

sixteen incidents indicate, it is very important that the runway turnoffs be maintained to the same level as the primary runway surface for safety. Airplanes typically have better straight-ahead stopping capability than they do cornering capability on contaminated surfaces, thus the increased incident rate on the runway turnoffs. Additionally, priority should be given to primary taxi routes to and from the primary runway and the ramp area. All runways and taxiways that are considered open for operations should have markings and signage clearly visible from the aircraft type likely to utilize that surface, including pavement boundary markings. Ramp surface areas within the responsibility of the airport authority should be maintained in an operable safe condition for both aircraft and service vehicles.

Communicating Airport Surface Condition Information: Safe aircraft operations depend on timely and accurate surface condition information. The current NOTAM system does not lend itself to accurate and timely dissemination of airport surface condition information. Under some circumstances, these limits prevent the airport operator from accurately portraying the airport surface conditions. If the system prevents the accurate portrayal of the surface condition information, and or its timely dissemination, the current surface conditions should be provided to ATC and all available airport users in plain language by the most expeditious means available. The airport operator needs to be mindful that they are the most knowledgeable of the actual surface conditions. It is imperative that flight crews have surface condition information in accurate terms and a timely manner in order to base their operational decisions.

For example, some of the referenced incidents indicate that the current FAA guidance for the use of the term "Patchy" may be misleading and misunderstood by airport users. Current guidance considers a "Patchy" condition to exist anytime the surface is covered by less than 100% of the contaminate. New airport surface condition reporting terminology is being developed by a joint FAA/Industry group. However until the new guidance is completed and published the FAA is directing that only contaminate conditions that cover 50% or less of the surface be classified as "Patchy." Conditions covering more than 50% should be considered as covering the total surface area for surface condition reporting purposes. This breakdown will more closely match the breakdown provided to airplane operators by the aircraft manufacturers for performance on contaminated surfaces.

Airport Surface Area Closure: As prescribed in Cert Alert 09-03, airport operators must close a runway upon the receipt of a nil braking condition report. When such a report is received, or when poor conditions are reports, airport operators must also view other airports surfaces with a critical eye to make sure they too are able to safely support aircraft operations.

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