



INCURSIONS, EXCURSIONS & Confusions

In an industry that produces volumes of data to assure the safety of flight, the absence of guidance for landing on slick runways stands out in sharp relief. During a two-day runway safety workshop in Amsterdam in early February, it became clear that pilots landing airplanes on runways that are anything but dry and clean have very little information for judging landing performance. When standing water is deep or snow and ice are on the runway, the landing becomes, in a very real sense, a “physics experiment,” as one participant described it.

Runway surface condition information and runway friction criteria available to pilots range from little to none. The only consistent advice is to add 50 percent to stopping distances if the runway is wet. If it is snow- or ice-covered, good luck, you’re on your own. The situation is so bad that National Air Traffic Services (NATS), the U.K. air traffic control provider, will relay only subjective reports from pilots whose own physics experiments turned out well, adding the type of aircraft and the time of the report. Should 10 minutes pass and the next airplane is significantly larger or smaller, we’re back to “good luck.” An effort to produce friction standards

appears to be five years or more away from conclusion.

This lack of data was one of many issues discussed during the workshop.

The genesis for this meeting of regulators, air traffic service providers, pilots, airline groups and airport groups was an uncomfortable feeling, based on increasing incidents but only a few accidents, that a number of unresolved problems are lurking about. While “runway safety” was the theme of the meeting, the specific issues were runway incursions, runway excursions and runway confusions.

Incursions have been the subject of many regional and national efforts, driven by a rising rate, a number of scary near-collisions and, of course, the tragic MD-87/CJ2 collision in 2001 at Linate, Italy. However, these efforts’ best result has been to halt the rise of the incursion rate.

Efforts to reduce the number of runway excursions during landing or takeoff are nearly nonexistent because the subject has not been addressed in a comprehensive manner. There aren’t even any good data on the frequency of these events, many of which do not result in aircraft damage or personal injury; those that do often are shunted off into pilot error

categories. Sketchy data on excursions say the frequency is increasing to the point of setting off alarms in our data-driven safety-alerting structure.

The poster case for runway confusion is last year’s tragic Comair Bombardier CRJ-100 accident at Lexington, Kentucky, U.S., on a clear, quiet morning. Not too long ago, a Singapore Airlines Boeing 747 succumbed to a runway confusion accident: Both accidents were catastrophic.

What if, it was asked, controllers don’t give a takeoff clearance until the aircraft is at the departure end of the correct runway, as is the practice in some places? And what if pilots emphasize the importance of checking the aircraft magnetic heading against the runway heading before starting to roll?

Questions such as these, and more, drove the workshop group to continue its work, with a follow-up meeting set for late May in Brussels. And a name for the effort emerged: Runway Safety Initiative.

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