SURPRISE
Surprise

Surprises in aviation are rarely pleasant, and that's what a couple of Continental Airline pilots got in late 2008 when they taxied for departure from Denver International Airport (DEN) with the tower reporting winds of 11 kt, 70 degrees off the nose. No one, absolutely no one who flies aircraft with hard sides, hears danger alarms when the wind is 11 kt, even when it's a direct crosswind. When, as the U.S. National Transportation Safety Board (NTSB) reports, the local controller upped the ante to 27 kt when issuing the takeoff clearance, even that fell short of being a critical issue.

If, however, the pilots had known that control tower displays were showing a 35-kt wind with 40-kt gusts, then one would expect at least a "wait a minute" moment and further consideration of conditions. But they didn't know, and the peak gusts actually were more like 45 kt, and the aircraft departed the runway.

Frankly, at first blush, this data gap sounds like the kind of safety-of-flight information issue that I thought had been pretty well hammered out in the 1930s. And, I suppose, this might be the overriding takeaway one can extract from this accident: Just because we're not talking about the old threats, don't assume they have gone away.

We discussed in these pages the wind threats posed by "gravity waves," including the kind of conditions encountered in DEN's downslope location (*ASW*, 2/10, p. 32).

In fact, despite these special conditions that are known to occur there, the NTSB reports that the airport air traffic control facility had in place no special procedures to allow for and warn of the effects of winds such as this.

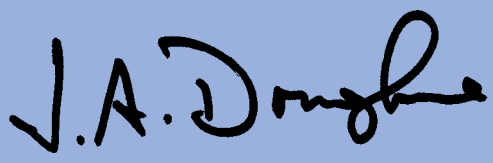
Moreover, Continental's training did not include near-ground handling in strong and gusting crosswinds. And finally, "Boeing did not adequately consider the dynamic handling qualities of the Boeing 737 during takeoff or landing in strong and gusty crosswinds," NTSB said, adding that other manufacturers probably don't do this, either.

So it appears as if every major entity involved in this accident didn't pay sufficient attention to the threat of strong gusting crosswinds close to the ground. I'm amazed.

Everyone who learns how to fly in the regular progression, from light aircraft to light twins, starts out knowing full well what a strong crosswind can do to an aircraft. But as the progression of equipment continues to heavier and more capable aircraft, and it takes more and more wind to create concern, the attention given to the threat apparently declines. But, as is shown by the DEN accident, plus several other airliner events that have been filmed and posted on the Internet, it is, indeed, an issue that needs continued attention.

Maybe this is the next frontier of aviation safety: Trying to figure out what threats we are beginning to take for granted in our quest to train and plan and create mitigations for increasingly specific threats.

Letting an airplane get blown off of a runway, or scraping a wing tip or rolling an airplane into a big ball of aluminum might be considered a runway excursion or approach and landing accident, but it also is a loss of control accident in my book, and should be added to the growing list of events indicting the level of planning, training and airmanship in some parts of the industry today.



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