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Opinion

By Arnold Barnett

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See Lightning? Shut Airports

Now that the thunderstorm season is at hand, the risks for American air travelers have increased dramatically. Four of the eight major crashes since 1975 involving domestic jetliners have taken place during such storms - and three of the four occurred during landing or takeoff. Indeed, landing or taking off during a thunderstorm is by far the most hazardous activity to which domestic passengers are exposed.

The statistics are striking if we consider the rarity with which thunderstorms arise. A typical city has perhaps 25 a year, each averaging an hour. Yet these few hours have seen as many passenger deaths since the mid-1970's as all the other hours combined. Arrival and departures during thunderstorms are at least 400 times more dangerous than those during more tranquil periods.

Then, why not close an airport completely whenever a thunderstorm cell appears within, say, five miles of the control tower? This simple policy would have prevented all three domestic wind shear catastrophes since 1975 (Eastern at Kennedy in New York, Pan American at New Orleans, Delta at Dallas-Fort Worth). But despite growing public concern about air safety, the notion that we should close our airports completely when a thunderstorm approaches has been dismissed as unworthy of adult discussion or answered with specious arguments.

The main arguments against the proposal are these:

Closing the airport when the five-mile rule is violated would cause aerial paralysis. If it's true that thunderstorms occur only 25 hours a year in typical American cities, this is implausible on its face. Besides, most thunderstorms happen during the summer, when the balance of traffic shifts from time-sensitive business travelers to pleasure travelers.

The show must go on. Aside from its foolishness, such a philosophy is inconsistent with that which prevails at other times. Blizzards close airports for days on end; fog shuts a field down to all but a few specially equipped planes. After the American Airlines crash

in 1979 raised fears about the McDonnell-Douglas DC-10, the nation's entire DC-10 fleet was grounded for 37 days.

It is not technologically feasible to identify all thunderstorms within a given radius of the control tower. This is inconceivable.

It would cost too much money. But what of the costs of the existing policy? Replacing the three domestic jets destroyed in thunderstorms (two 727-200's and one L-1011) cost something like \$100 million. Payments to the families of the 400 deceased travelers could ultimately run into the hundreds of millions. And there is always the possibility that widely publicized disasters may lead some people to avoid or reduce flying. If the traffic loss is only one-third of 1 percent, that still works out to a revenue drop of a billion dollars per decade.

It is the American way to solve problems, not to succumb to them. Alas, it is also the American way to substitute cliches for real thought. No one is suggesting that we end our efforts to devise a foolproof defense against wind shear. But until such work reaches fruition, why not avoid the deadly conditions that have made the work so important?

In fact, the problem is virtually solved. At a minimum, we must distinguish between the latest advances in the laboratory and the status quo at the airport. Even at Dallas-Fort Worth, where a thunderstorm last summer brought tragedy to one of the world's safest airlines, a new Doppler radar system for detecting microbursts will not be complete until mid-1990. Likewise, in both pilot training and on-board equipment, the state of the art and the prevailing norm are substantially different.

Perhaps a five-mile policy would not be sufficient to prevent all wind-shear accidents. Then base the rule on a larger radius or whatever geometric configuration would protect the endangered planes.

Perhaps aviation experts can readily recognize the inadequacy of such arguments. Unless they share their insights with us, we have a right to insist that a maxim be heeded: when lightning sears the airport sky, no passenger should have to witness it from any place but the ground.

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