

Air safety a numbers game

Piracy and terrorism aloft are not the only issues worrying airline professionals. Underway is a less dramatic but no less serious debate: Are twin-engine jets safe and should they be allowed to fly on North Atlantic routes?

Earlier this year, the U.S. Federal Aviation Agency (FAA) bowed to airline industry pressure and, for the first time, authorized TWA and other carriers to use their new twin-engine Boeing 767s on trans-Atlantic routes. For airlines being punished by fierce competition and high fuel costs, using two-engined aircraft instead of those with three or four means important savings.

But a growing number of aviation professionals are now questioning the FAA's new policy. They contend that twin-engine jets, and particularly the extended-range 767, are inherently unsafe for such long, over-water routes. TWA and Boeing reply that flying under the FAA's "75-minute rule" — that is, the ability, flying on one engine, to reach an airport within 75 minutes — provides ample security.

Opponents of this view cite some particular problems of twin-engine jets. Of prime concern is the loss of an engine, an event by no means rare: During the past three weeks, two aircraft have lost engines in North America alone. When a large 767, or a smaller DC-9 loses an engine, 50% of its power fails and the aircraft may become unstable, especially in bad weather.

The 767 also has what some critics term a major design flaw: It lacks the ability to rapidly jettison fuel in the event of an emergency. Getting rid of the 128,000 pounds of volatile fuel carried by a 767 would be vital in such emergencies as bomb damage, jammed landing gear or control surfaces, engine failure or a mid-air collision.

Punch



"What's that? No one likes Yorkshire pudding?"

**ERIC
MARGOLIS**



This question recently surfaced, interestingly, during consideration of a replacement for President Reagan's old 707 aircraft, Air Force One. An extended-range 767 was proposed. The air force reportedly vetoed the twin-engine aircraft and went so far as to suggest that even a three-engine craft, such as the DC-10 or L-1011, was not sufficiently safe. For the president, four engines would be required.

If the president must have four engines, then why not air travellers? In fact, I never feel comfortable on twin-engine aircraft and try to avoid DC-9s, 737s, airbuses and the new 757 and 767s in favor of three- and four-engine craft. I know that twin-engine jets are very safe, but having extra engines gives me a welcome sense of added security.

The new generation of aircraft represented by the 757, 767 and airbus, will make more money for the airlines; for passengers, however, they offer less margin of safety than the previous, 20-year-old generation of those truly great aircraft, the indestructible Boeing 727 and 747. What's more, the new claustrophobic twin-engine aircraft are miserably uncomfortable.

As a veteran air traveller, I was sorry to see the world's finest airframe manufacturer, Boeing, produce such dismal aircraft as the 757 and 767; less will be said of the steerage-class European airbus. Economic pressure has, alas, damaged quality and safety in plane-making just as much as in the auto industry. One must also wonder just how well the FAA and Canadian regulators are doing their job. Are they really regulating or just rubber stamping decisions made by the old boys' aviation club?

Airline safety is steadily improving and flying is unquestionably the least perilous means of travel outside of walking. Yet major problem areas still remain: Finding less explosive fuels; using interior materials and seat padding that do not emit toxic fumes when burned; improving escape exits and making aircraft more crashworthy. Neither regulators nor airlines are giving enough attention to these dangers; the money, they say, just is not there.

Are three or four engines really safer than two? Statistics tell us that twin-engine craft are indeed very safe. But ask a passenger, strapped in his seat, looking out of the window into a raging storm as his aircraft gets ready to take off. Ask him what would happen in the event of massive water ingestion into the engines, a catastrophic turbine failure or electrical power loss, a bird or foreign matter being sucked into the massive engine inlets.

I, for one, about to be hurled into the ether, would gladly pay another \$20 just to know that three or four engines were there, in the unlikely but still terrifying event that an engine did fail.