

Nowhere to Run for Air Safety



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Framework of Analysis

- Worldwide Safety Data for the Decade 1987-96
- Passenger Safety Metric:
Death Risk per Randomly-Chosen Flight

General Point:

When two airlines fly a route nonstop, very rarely is there a reason related to safety to prefer one to another.

US Domestic Trunklines

Death Risk per Flight, 1987-96:

1 in 7 million

<u>Airline</u>	<u>Number of Domestic Full-Crash Equivalents</u>	<u>Number of Flights(Millions)</u>
American	0	7.2
Continental	0.32	4.5
Delta	0.16	8.5
Northwest	1.21	4.9
TWA	0	2.7
United	1.40	6.5
US Air	3.53	8.6
TOTAL	6.63	44.7

BUT:

Had fatal crashes been randomly distributed among the domestic trunklines, the chances are 11% that the biggest “loser” would have suffered as lopsided a share of crash-equivalents as US Air actually did.

Death Risk per Flight on Three Kinds of US Domestic Jet Services, 1987-96

Trunkline	1 in 7m
Established Regional	0
New Entrants	1 in 3m

BUT:

These differences are not statistically significant. Based on the fatal-accident rate of the trunklines, the chance was roughly 40% that the new entrants would have suffered a major crash over 1987-96.

Death Risk per Flight for Two Kinds of US Air Carriers, 1987-96

Jets 1 in 2 million

Commuter Propjets 1 in 7 million

This Difference in Mortality Risk IS Statistically Significant.

Death Risk Per Scheduled Jet Flight for First and Developing World Carriers, 1987-96

	<u>Domestic</u>	<u>International</u>
First-World	1 in 8m	1 in 3m
Developing World	1 in 500,000	1 in 400,000

But does this disparity mean that, given a choice, we should fly First-World airlines rather than Developing World ones?

TABLE 6: Death Risk Per Scheduled Jet Flight Between The First World and The Developing World, For Two Groups Of Airlines and 1987-96:

Carrier Group	Full-Crash Equivalents	Estimated Number of Flights (millions)	Death Risk per Flight
First-World	4.03	2.5	1 in 600,000
Developing World	4.98	3	1 in 600,000

BUT:

Commuter propjets and
jets generally fly on
different routes.

**OVERALL
MESSAGE:**

**Don't think twice;
it's all right.**

