

# World Aircraft Accident Trend

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World Aircraft Accident Trend

The global improvement in *air safety* in recent years is a ‘good news story’ but the public’s perception of our industry is not, necessarily, the same as ours



## One in six adults in the US is afraid to fly

Journal of Travel Research

Some 10 to 40% of the population in industrialised countries suffer varying degrees of fear of flying.

Various studies

That fear of flying is so common seems a paradox given the industry's safety record

Psychological Perspectives on Fear of Flying (2003)

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As 'emotional beings' we react to the perceived rather than the true risk (of flying)

Passenger Behaviour (2003)

Public perception of mortality risk largely mirrors the way deaths are reported in the newspapers

Journalism Quarterly 1979

'It (the fear) happened gradually (with) lots of publicity of plane crashes.'

Cognitive Processes underlying Fear of Flying. McLean, N.J. (1995)

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## Media Insight on Air Safety

'To say flying is the safest form of transport is a dubious statistic...figures used by the airline insurance industry.. show flying to be less safe than car travel.' – The Daily Mail.

'Are some airlines just too dangerous to fly?' – press headline

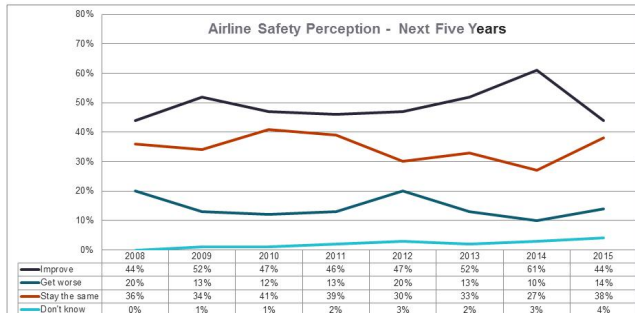
'Airline safety... cause for concern' – Consumer Warning Network

'The McDonnell Douglas Horror Jet' – headline Daily Express

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## Changing expectations for airline 'safety' over the 'next five years'



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## Why aircraft crash – what the media 'blames'

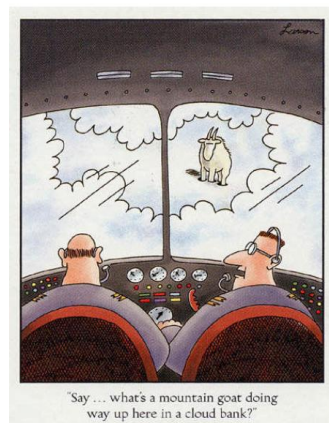
- High ground and/or bad weather
- The aircraft was unsafe
- Airline cost cutting
- The airline industry is just unsafe in general
- And of course UFOs

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## Or, It's our Fate!

'Another one is Sun exactly square the Ascendant of the moment, and that surely can't have happened by chance. Next is an applying Moon Mercury trine which became exact a few minutes after the crash. Other astoundingly close aspects are formed between Jupiter, Neptune, Chiron (conjunctions, the two first house rulers all posited in the XIIth house) and Uranus (semisextiles from the 1st house). Saturn is becoming extremely close to the opposition of the Ascendant. Of other nasties, there's a conjunction between Mercury and Sedna, a real destroyer of travel, in the IIIrd house. Mars is in the first degree of Taurus. Widening the orbs to 2°, it's **take your pick for all the nasty planetary aspects, which would help explain all the airline tragedies that occurred in the few weeks before and after this crash**' - Posting on Squidoo re AF447

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Media - 'The crash was caused by high ground and bad weather'

or

A loss of situational awareness but why?

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## Airline safety rankings – it's simple

- The airline has never had an accident = SAFE
- The airline has had an accident = UNSAFE (less safe)
- The more accidents over whatever period = MORE UNSAFE

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## Public perception of safety -

### The challenge to commercial aviation growth

*'If the accident rate remains the same..., the expected growth in commercial aviation... will result in an unacceptable number of accidents. This will, ultimately, limit this growth.'*

Report to the U.S. Government.

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## The challenge to aviation – is not a new one!

*'If the accident rate remains the same as in the 1930s, the expected growth in commercial aviation after the War will result in an unacceptable number of accidents. This will, ultimately, limit this growth.'*

Report for the U.S. Government by the Curtiss-Wright Corporation - 1943

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## The White Queen explains air safety to Alice

*'You have to run as fast as you can to stay where you are... if you want to get anywhere you must run a whole lot faster!'*

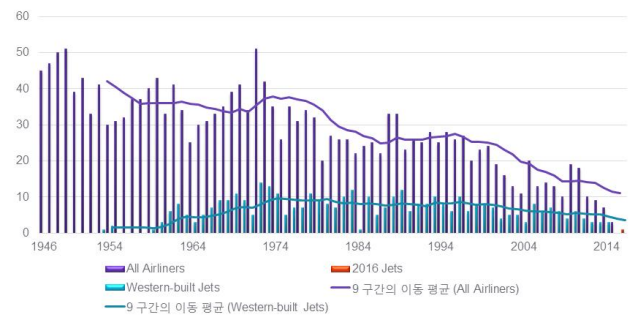
Based on a passage in *Through the Looking-Glass* by Lewis Carroll

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## How safe is the airline industry?

### Annual Fatal Accidents to Passengers

on Revenue Passenger Flights World Wide 1946 -2016 (to date)



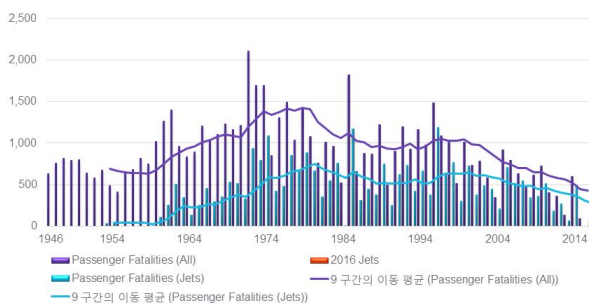
Aircraft of >14 passengers seats. Excludes acts of violence (but includes first Malaysia Loss in 2014)

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### Annual Passenger Fatalities

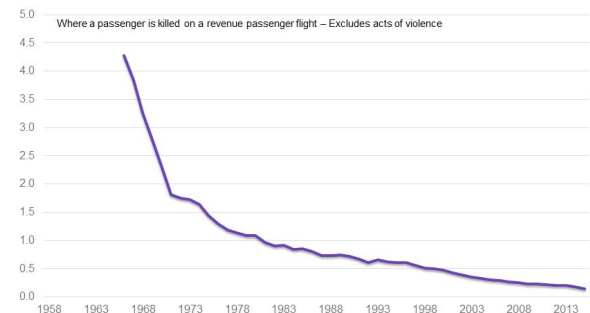
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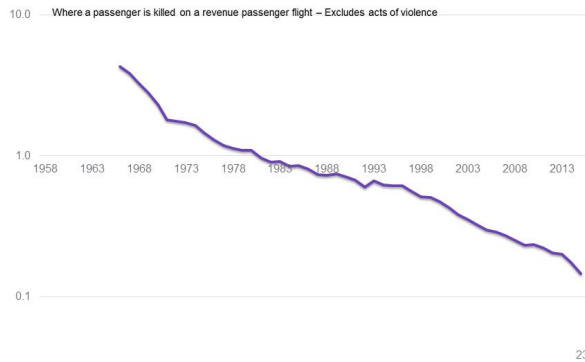
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### Fatal Accidents per Million Flights (9 Year Moving Average) Western-built Jet Airlines



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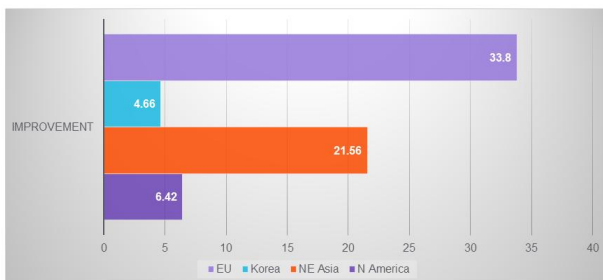
### Fatal Accidents per Million Flights (9 Year Moving Average, log scale) Western-built Jet Airliners



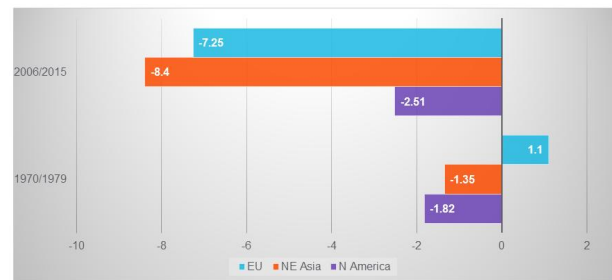
### The Republic of Korea, Northeast Asia and North America Fatal Accidents (All) per Million Flights (10 Year Moving Average, log scale)



### Fatal Accident Rate Improvement 1970/1979 compared to 2006/2015



### Fatal Accident Rate Korea Compared to NE Asia, North America and the EU



### Siderodromophobia?



Thank You