



14 February 2020

Sensemaker Daily

Kessler on Speed

BA Flight 112 made the fastest ever subsonic commercial flight from New York to London last week when it crossed the Atlantic in four hours and 48 minutes, around 100 minutes faster than its scheduled flight time. In doing so it brought back memories of Concorde, futurism's ghost of Christmas past.

Flying east over the North Atlantic, airlines always try to take advantage of the jet stream because it blows west to east at (roughly) cruising altitude, and saves them time and fuel. It just hasn't saved them quite so much before.

Cruising at a ground speed of over 800mph, flight 112 broke the record in an ageing Boeing 747. Though technically faster than the speed of sound, the aircraft did not actually break the sound barrier since it remained subsonic relative to the air around it.

But flight 112 wasn't the only plane to take advantage of the wind. That evening, a Virgin Atlantic flight VS4 made the same journey only one minute slower. Second place may be first loser, but it did so in a modern Airbus A350. With two engines rather than the 747's four, it crossed the ocean burning roughly half as much fuel, and bragged about it on Twitter:



Flightradar24 @flightradar24 · Feb 9, 2020
Fastest across the Atlantic tonight from New York to London so far is #BA112 at 4hr56m. #VS4 in 4:57, and #VS46 in 4:59.
[flightradar24.com/data/flights/b...](#) [flightradar24.com/data/flights/v...](#)

If we're not mistaken, BA now retakes the fastest subsonic NY-London crossing from Norwegian.

FLIGHT	OPERATOR	MODEL	STATUS	CRUISE ALTITUDE	CRUISE SPEED	CRUISE ALTITUDE	CRUISE SPEED	CRUISE ALTITUDE	CRUISE SPEED
BA112	BA	747	ARRIVED	0 ft	0 mph	0 ft	0 mph	0 ft	89°
VS4	VS	747	ARRIVED	N/A	N/A	N/A	N/A	N/A	0000
VS46	VS	747	ARRIVED	N/A	N/A	N/A	N/A	N/A	0000

Virgin Atlantic @VirginAtlantic
It's true that we were narrowly beaten by a BA Boeing 747, however they had twice the amount of engines and burnt twice as much fuel as Captain Chris in our brand new, fuel efficient Airbus A350-1000 😊

2,986 likes · 10:08 PM - Feb 9, 2020

740 people are talking about this

Was the jet stream accelerated by climate change? It's produced by the difference between Arctic and equatorial temperatures, and the resulting pressure differential, which in turn produces high-altitude winds normally of around 105mph.

Jet streams weren't discovered until the 1920s, and little is known about how fast they blew before the industrial revolution. As climate change warms the cool Arctic air, some scientists forecast that the jet stream will meander south and slow. Others say global warming will cause it to accelerate and move north.

Despite newer, more fuel efficient aircraft like the Airbus A350 and Boeing 787, greenhouse gas emissions from aviation are projected to rise dramatically. They already account for over 2 per cent of the global total. Indeed if aviation were a country, it would rank in the top 10 of global emitters, and the Civil Aviation Organisation forecasts that emissions from aviation could rise by 300-700 percent by 2050.

If we're going to keep flying we'll need all the tailwind we can get.