



APRIL 1838: CROSSING THE ATLANTIC



➔ **COMMERCIAL SAILING SHIPS** had long taken three, sometimes four weeks to make the eastbound crossing of the Atlantic; the westbound route, against the wind, usually took six weeks. The first steamship made the eastward crossing only in 1833, when the Quebec-built *SS Royal William* went to England, after stopping to take on coal in Nova Scotia. It was only in April 1838—180 years ago this month—that steamships pioneered the westward route. It happened in an unexpectedly dramatic way. • Isambard Kingdom Brunel, one of the great 19th-century British engineers, built the *SS Great Western* for the Great Western Steamship Company's planned Bristol-New York run. The ship was ready on 31 March 1838, but fire damage scared most of its passengers away, delaying departure until 8 April. • Meanwhile, the British and American Steam Navigation Company tried to steal a march by chartering the *SS Sirius*, a small wooden paddle-wheel vessel built for the Irish (London-Cork) service. The *Sirius* left Cobh, Ireland, on 4 April 1838, its boilers operating under 34 kilopascals (4.9 pounds per square inch), for a peak engine power of 370 kilowatts. With 460 metric tons of coal on board, the ship could travel nearly 5,400 kilometers (2,916 nautical miles)—almost but not quite all the way to New York Harbor. • In contrast, the *Great Western* was the world's largest passenger ship, displacing 1,360 metric tons, with 128 beds in first class. The ship's boilers also worked at 34 kPa, but its engines could deliver about 560 kW, and on its first transatlantic journey it averaged 16.04 kilometers per hour. Even with its four-day head start, the *Sirius* (averaging 14.87 km/h) barely beat the larger and faster ship, arriving in New York on 22 April 1838 after 18 days, 14 hours, and 22 minutes. • Later stories

dramatized the final dash by claiming that the *Sirius* ran out of coal and had to burn furniture and even its spars to reach the port. Not true, but it did have to burn several drums of resin to make port. When the *Great Western* arrived the next day, after 15 days and 12 hours, it still had 200 metric tons of coal to spare.

Steam more than halved the transatlantic travel time, and new records kept coming. By 1848, Cunard's *SS Europa* made it in eight days and 23 hours. By 1888, it took barely over six days, and in 1908, the steam-turbine-powered *RMS Lusitania* won the Blue Riband with a crossing time of four days, 20 hours, and 22 minutes. The final record holder, *SS United States*, made it in three days, 10 hours, and 40 minutes in 1952.

The next era, in which commercial piston-engine aircraft crossed in 14 or more hours, was a brief one. By 1958, America's first commercial turbojet, the Boeing 707, was making regularly scheduled flights from London to New York in less than 8 hours. Cruising speeds have not changed much: The Boeing 787 Dreamliner cruises at 913 km/h, and London-New York flights still last about 7.5 hours.

The expensive, noisy, and ill-fated supersonic Concorde could do it in 3.5 hours, but that bird will never fly again. Several companies are now developing supersonic transport planes, and Airbus has patented a hypersonic concept with a cruising speed of 4.5 times the speed of sound. Such a plane would arrive at JFK International 1 hour after leaving Heathrow. Crossing westward would take longer.

I wouldn't complain. Compared with the *Sirius*'s time in 1838, we have cut the crossing time by more than 98 percent. The time aloft is just right for reading a substantial novel. ■

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