

What if it had happened here?

The accidents listed below have been transposed to Heathrow. Four of them did not involve fatalities on the ground, as the aircraft fell in open country; two that did kill residents happened at European hubs cited as Heathrow's main competitors. At Heathrow, landings and takeoffs occur (*continued on back page*)

1 United Airlines Boeing 737 crash near Colorado Springs, 09.43hrs local time, 3rd March 1991. All 25 people aboard aircraft killed, no fatalities on ground. (Flight UAL585, crash report: NTSB AAR 92/06)

On final approach to Colorado Springs airport, the aircraft suddenly yawed, rolled to the right, pitched nose-down and crashed a little under 4 nautical miles (4.5 miles) short of the runway, aligned with the extended centreline. From onset of problems, at an altitude of about 1,000 feet, to impact with the ground took around 10 seconds. The crash of USAir Flight 427 (see crash number 4) was similar to this incident.

Transposed to Heathrow (westerly operations) the crash site would have been in the Spring Grove area, north of Isleworth station (north runway) or the West Middlesex Drainage Works (south runway). On easterly operations, the plane would have come down near Datchet (north runway) or in the Thames (south runway).

2 Air Transport International DC-8 freighter crash near Toledo-Express airport, 03.26hrs local time, 15th February 1992. All 4 people aboard aircraft killed, no ground fatalities. (Flight ATI805, crash report: NTSB AAR 92/05)

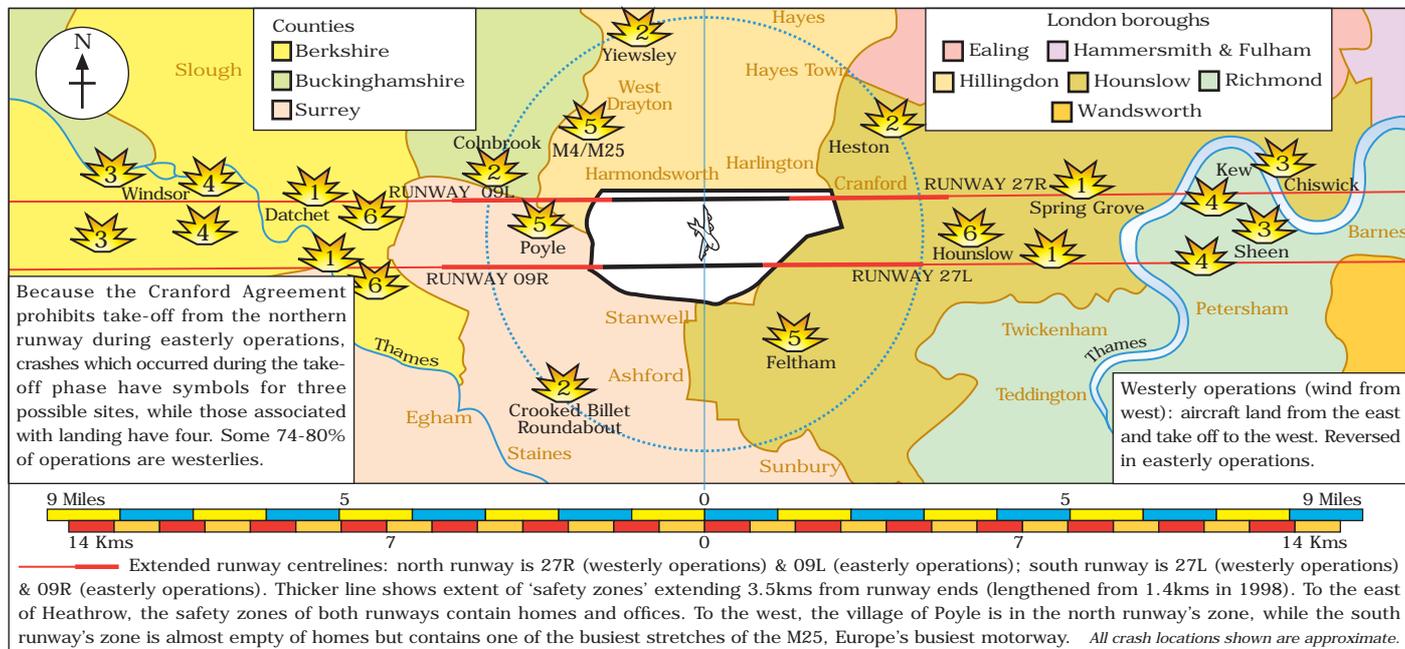
For undetermined reasons, the aircraft twice failed to pick up the instrument landing system localizer and/or the glideslope. The US National Transportation Safety Board report suggests the Captain had become spatially disorientated and the aircraft was put in a nose-low and left-bank angle attitude. The First Officer was attempting to recover the aircraft when it hit the ground about three miles from the airport.

The location of the crash site relative to the airport is not given. The map below shows a circle at a radius of three miles from Heathrow's central terminal area. The circle passes through areas of open ground, but also through the M4's Heston service area, Ashford, Colnbrook and the streets between Hayes and Hayes Town.

3 El Al 747 freighter crash in Amsterdam, 18.35hrs local time, 4th October 1992. All 4 aboard aircraft killed and 47 fatalities on the ground. (Flight LY1862)

Shortly after take-off from Schiphol, the No3 engine and pylon separated from the wing, taking No4 engine with them. The crew tried to land on runway 27 (the same heading as Heathrow's runways) but reported loss of control and that they were going down. The aircraft hit a block of flats 11kms short of the runway and about 0.5 km north of the extended runway centreline.

Transposed to Heathrow (westerly operations), the plane would have come down on the north bank of the Thames, opposite the Public Record Office (north runway) or near Chalker's Corner, a very busy junction at rush hour (south runway). During easterly operations, the crash site would have been in Windsor, about 1km southwest of the racecourse (north runway) or a little to the northeast of Legoland (south runway).



4 USAir Boeing 737 crash near Pittsburgh, 19.03hrs local time, 8th September 1994. All 132 people aboard aircraft killed, no fatalities on the ground. (Flight USAir427, crash report: NTSB AAR 99/01)

The aircraft was approaching Pittsburgh when it suddenly crashed into woodland northwest of the airport. The accident is thought to have been caused by rudder malfunctions. The aircraft impacted with such force that parts of it were buried 8 feet deep. Wreckage was scattered in a 350-foot radius of the main crater.

Transposed to Heathrow, the crash site would have been about 6 miles from the runway end but to the left of the extended runway centreline. On westerly operations, the crash site would have been in the Kew Road/Sandycombe Road area (north runway) or along Sheen Road, west of Manor Road (south runway). On easterly operations, the aircraft would have come down in the Windsor area (either runway).

5 Crossair Saab 340B crash near Zurich airport, 17.56hrs local time, 10th January 2000. All 10 people aboard aircraft killed, no fatalities on the ground. (Flight LX498)

The aircraft took off from Runway 28. Instead of turning left it turned right, entered a high speed spiral descent and crashed in a field two kilometres northwest of the airport. The Flight Management System might have been at fault.

Transposed to Heathrow (westerly operations), the crash site would have been in the area between the M4/M25 interchange and the A4 (north runway). From the south runway, the plane might have come down in Poyle or near the Longford Roundabout. The Saab 340 is not a large aircraft and if it, or a similar-size aircraft, were to become airborne about halfway down Runway 27L, a flight of 2kms northwest might end on the site of the proposed Terminal 5. During easterly operations, the crash site would have been in the East Bedfont/Feltham area.

6 Air France Concorde crash near Gonesse, 16.44hrs local time, 25th July 2000. All 109 people aboard aircraft killed, 4 fatalities on the ground. (Flight AF4590)

The aircraft took off with its port wing on fire, there was a lack of power from both port engines and the undercarriage would not retract. The aircraft was trying to divert to Le Bourget when it crashed into an hotel about 5kms from the end of the runway and about 0.5kms left of the extended runway centreline. (A Russian Tu-144 'Concordski' crashed at the 1973 Paris air show, killing 8 residents of nearby Goussainville.)

Transposed to Heathrow (westerly operations), the crash site would have been on open ground near Sunnymeads station (north runway) or in a flooded gravel pit near Welley Road (south runway). On easterly operations, however, the aircraft would have come down in a residential area between Hounslow and Hounslow Central stations (south runway).

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(continued from page 6) over much more densely-populated areas. A Dutch report¹ estimates that the number of crashes in the vicinity of an airport such as Heathrow is roughly one or two per ten million movements.

The last crash near Heathrow was in 1972, near the Crooked Billet Roundabout (shown on the map in relation to accident number 2). Since then, there have been about 9 million PATMs (passenger air transport movements) alone at Heathrow. Total annual movements are currently about 458,000 and rising.

Sources: 1 *Public health impact of large airports*, Gezondheidsraad, 1999/14E, page 96. This document uses research from the 1997 DETR paper, *Third party risk near airports and public safety zone policy*, by Evans, Jones-Lee and others. 2 The Netherlands National Aerospace Laboratory (reported in *Flight International*, 11th-17th April 2000) found accident rates for cargo aircraft of major North American scheduled cargo operators to be three times that for passenger planes. Accident reports can be found on the internet at: www.nts.gov, www.aaib.detr.gov.uk and www.aviation-safety.net. SNAP (Safety and Noise as Airport Problems) is an email discussion group at www.mailbase.ac.uk, put snap in the searchbox.

Two of the accidents listed were to freight aircraft. As well as being the world's busiest international passenger airport, Heathrow is also the UK's main freight airport, with traffic growing by over 7% in 1999-2000, to 1.3 million tonnes. Another new freight terminal is planned and, although most cargo is still carried on passenger aircraft, Heathrow is increasingly used by dedicated freight aircraft.

The accident rate for freight planes is higher than that for passenger aircraft.²