

LearJet 25B, EC-CKR, 13 August 1996

AAIB Bulletin No: 9/96 Ref: EW/C96/8/6 Category: 1.1

Aircraft Type and Registration: LearJet 25B, EC-CKR

No & Type of Engines: 2 General Electric CJ 6106-6 turbofan engines

Year of Manufacture: 1974

Date & Time (UTC): 13 August 1996 at 0857 hours

Location: RAF Northolt, Middlesex

Type of Flight: Public Transport (Charter)

Persons on Board: Crew: 2 Passengers: 1

Injuries:	Crew:	Passengers:	Other:
	1 (serious)	1 (minor)	1 (serious)
	1 (minor)		

Nature of Damage: Major disruption of fuselage

Commander's Licence: Airline Transport Pilot's Licence (Spanish)

Commander's Age: 39 years

Commander's Flying Experience: Estimated 5,000 hours
(of which 2,500 hours were on type)

Information Source: AAIB Inspector's Investigation

History of the flight

The crew designated for the charter flight took-off from their home base at Zaragoza in north-east Spain at approximately 0420hrs on the morning of the accident. Due to a fault in the directional gyro (DG) system and the known requirement to fly a Precision Approach Radar (PAR) on arrival at RAF Northolt, the crew decided to return to Zaragoza and change aircraft. The flight finally departed Zaragoza at 0525 hrs in the LearJet 25, EC-CKR, and flew to Palma de Mallorca Airport on the island of Mallorca in the Balearic Islands.

At Palma de Mallorca the crew refuelled the aircraft and, after their passenger had boarded, they departed at approximately 0645hrs on an Instrument Flight Rules (IFR) flight plan for their destination airfield, RAF Northolt. The flight to the UK was flown at FL 390 and was uneventful.

After crossing the UK Flight Information Region (FIR) boundary, the aircraft was descended under radar control to transit to RAF Northolt via the Biggin Hill VOR beacon. Handover from the Heathrow Director was effected with the aircraft descending from FL 70 to 4000 feet on a heading of 360°(M). Northolt Director then cleared the aircraft to continue its descent to 3000 feet and passed the Northolt weather which was a surface wind of 340°/9kt, 12 km visibility, nil weather, cloud one octa at 1500 feet, 5 octas at 2200 feet, temperature +16°C and QFE 1010 mb. Shortly afterwards, the aircraft was instructed to turn onto the down wind leg on a heading of 070°M and advised of the minima for the approach, the touchdown zone elevation and the fact that the procedure was based on a 3 1/2° glide path to Runway 25.

Due to the presence of priority traffic which was due to depart Northolt at that time, the flight was extended down wind to a distance of 10 nm before being turned onto a heading of 160°M. This instruction was followed shortly afterwards by an instruction to turn onto 250°M and descend to 1800 feet to intercept the final approach. At a range from the airfield of 9.5 nm, the aircraft was identified by the PAR controller and given a further turn onto a heading of 260°. Initially the aircraft was observed to be slightly high on the glide slope but this was corrected and at 3.5 nm it was on the glide slope. At this point the pilot was asked to confirm that his landing gear was down and locked as is normal procedure at Northolt. After some rephrasing of this question, the landing gear was confirmed down, however during this exchange the aircraft was seen to deviate above the glide path. At 2.5 nm, landing clearance was confirmed and the aircraft was advised of the surface wind and the fact that there was a 4 kt tailwind. The aircraft was also advised that it was above the glide path. At the decision altitude which was at approximately half a mile from the runway the aircraft was still above the glide path although seen to be correcting to it.

On arrival at the runway the aircraft was observed to land some distance beyond the normal touchdown point. Towards the end of the landing roll it veered to the right and then swerved to the left and overran the end of the runway. It collided with three lighting stanchions and continued in a south-westerly direction towards the airfield boundary which is marked by a high chain-link fence. After bursting through the boundary fence the aircraft ran onto the A40 trunk road and was almost immediately in collision with a Ford Transit van on the east bound carriageway, and seriously injuring its driver. The aircraft came to rest in the left hand lane of the road with the van embedded in the right side of the fuselage immediately forward of the right wing.

The accident was observed by the crew of an Air Ambulance Helicopter which was holding 2 nm south of Northolt awaiting clearance to cross the airfield en route. After receiving clearance to attend the accident, the helicopter was landed some 50 metres from the aircraft on the airfield and the co-pilot, together with a doctor and a paramedic who were also on board, attended the accident victims.

RAF Northolt Fire Service were rapidly in attendance and applied foam to the wreckage from which aviation fuel was leaking. There was no fire and all the accident victims were taken by ambulance to nearby hospitals.

The aircraft wreckage has been removed to the AAIB facility at Farnborough for detailed examination. Under existing Spanish airworthiness requirements the aircraft, by virtue of its weight category, was not required to be equipped with flight recorders but recordings of ATC exchanges and radar have been obtained for analysis. Under the provisions of Annex 13 to the Convention on International Civil Aviation, an accredited representative from the Spanish Directorate General of Civil Aviation is participating in the investigation.

Aircraft Accident Regulations

Because the accident involved a civilian aircraft landing at a military airfield, the Secretaries of State for Defence and Transport have agreed that the investigation falls within the scope of The Air Navigation (Investigation of Air Accidents involving Civil and Military Aircraft or Installations) Regulations 1986. In accordance with Regulation 10, notice is hereby given that the Chief Inspector has ordered an Inspector's Investigation into this accident and any persons who desire to make representations concerning the circumstances or causes of the accident are invited to do so in writing to the Chief Inspector within 21 days of the date of publication of this Bulletin.