

Airbus Industrie A300B4-605R, G-MONS

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INCIDENT

Aircraft Type and Registration: Airbus Industrie A300B4-605R, G-MONS

No & Type of Engines: 2 General Electric CF6-80C2A5 turbofan engines

Year of Manufacture: 1989

Date & Time (UTC): 1 February 2002 at 2230 hrs

Location: London Gatwick Airport

Type of Flight: Public Transport

Persons on Board: Crew - 3 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Cowling damage to No 2 engine

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 45 years

Commander's Flying Experience: 10,177 hours (of which 1,981 were on type)

Last 90 days - 58 hours

Last 28 days - 22 hours

Information Source: AAIB Field Investigation

The aircraft was operating an empty positioning flight from Manchester Airport to London Gatwick Airport. The sector was being used for training purposes and there were three flight deck crew members on board. A captain under training occupied the left seat and operated as the handling pilot for the sector. The commander occupied the right seat and a safety pilot occupied the jump seat. The captain under training was completing a re-conversion course, having over 3,000 hours flying experience on the A300 type.

The aircraft made an ILS approach to Runway 26L at Gatwick. The crew reported that the flight conditions were turbulent. At about 1,000 feet amsl, the commander recalled noticing an Inertial Reference System (IRS) wind speed readout of 70 kt. The crew recalled that the reported surface wind was from 210° at 18 kt with gusts to 30 kt shortly before landing.

The pilot flying began to flare the aircraft, but then experienced a left wing drop. He attempted to correct this by application of right aileron and additional power. However, the aircraft touched

down heavily, first on the left main gear, followed by the right main gear. The aircraft rebounded into the air and, following a nose down elevator input, touched down in a nose down pitch attitude with right roll. The right main gear, nose landing gear and right engine contacted the runway surface. The aircraft completed two more brief bounces during the landing roll. The crew were unaware that the engine had contacted the runway surface but requested a hard landing inspection after taxi in and shutdown.

The hard landing inspection showed damage to the underside of the cowling of the right engine. Further inspections were carried out on the engine but no further damage was evident.

The Flight Data Recorder indicated that there was a reduction in airspeed of about 10 kt just before touchdown. The recorded peak vertical acceleration sustained was 1.96 g, which occurred on the first touchdown. The peak vertical acceleration was 1.46 g for the second touchdown, with the aircraft at 2.5° nose down pitch attitude and 11.25° right roll attitude, at which time the engine cowling contacted the runway. The peak vertical acceleration for the third touchdown was 1.54 g.

The nose down pitch attitude of the aircraft appeared to have resulted from a forward control column input. The aircraft response in pitch appeared to be consistent with the demanded control inputs.

The aircraft's actual landing mass was 105,000 kg and the Maximum Landing Mass is 140,000 kg. The manufacturer's maximum computed and demonstrated crosswind for the aircraft is 32 kt. This was the figure adopted by the operator for the A300 fleet crosswind limit.

The manufacturer's computations and demonstrations of crosswind performance assumed a steady state crosswind.

The United Kingdom Aeronautical Information Publication entry for London Gatwick Airport contains the following warning:

'Pilots are warned, when landing on Runway 26L/R in strong southerly/south-westerly winds, of the possibility of building induced turbulence and windshear effects.'