

ACCIDENT

Aircraft Type and Registration:	Airbus A319-131, G-EUOA
No & Type of Engines:	2 International Aero Engine V2522-A5 turbofan engines
Year of Manufacture:	2001 (Serial no: 1513)
Date & Time (UTC):	23 February 2013 at 0813 hrs
Location:	London Heathrow Airport
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 6 Passengers - 103
Injuries:	Crew - None Passengers - None
Nature of Damage:	Left navigation light cover broken and dent to underside of left wing adjacent to winglet. Ground equipment vehicle damaged
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	50 years
Commander's Flying Experience:	11,450 hours (of which 4,440 were on type) Last 90 days - 176 hours Last 28 days - 65 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot, report by the aircraft operator and information from the airport operator.

Synopsis

A mobile steps vehicle was parked in the inter-stand clearance area with the front of the vehicle protruding part-way into the stand area. As the aircraft taxied onto stand following the electronic guidance system, its left wingtip struck the steps, knocking them over. A number of safety actions were taken by the aircraft operator to prevent recurrence.

Description of the event

The aircraft had flown from Basel to Heathrow with 103 passengers and 6 crew members on board. Its allocated parking position was Stand 503, which was

adjacent to the north end of Heathrow's Terminal 5 main building. Mobile steps were to be required for passenger disembarkation.

As the aircraft taxied onto stand, its left wingtip collided with the set of mobile steps, knocking them over. Once it was assessed by ground staff as safe to do so, the aircraft continued forward to park at the designated point. Both the aircraft's wingtip and the mobile steps sustained damage.

Report by the aircraft commander

The first officer was the handling pilot. Both flight crew were aware of the steps protruding into the stand safety area “by about 18 inches”, but their assessment was that it was safe to proceed. The stand guidance was active, and as the aircraft approached the parking position it was aligned with the stand centreline. Before the aircraft reached the parking position, the Turn Round Manager (TRM) indicated an emergency stop to the crew, who complied. It was then established that the aircraft’s left wingtip had collided with the steps. The flight crew requested the attendance of the airfield emergency services. The aircraft subsequently taxied forward to park without further incident. The steps ended up on their side and protruding about five to six feet into the stand safety area.

Both the flight crew had assessed the stand to be clear and, at the time, were positioning the aircraft by reference to the stand guidance system. The commander reported that stands at Terminal 5 have different clearance margins, and that the flight crew in this case were not aware how relatively little clearance existed between the parking area boundary and the aircraft’s wingtip.

Report by the aircraft operator

The aircraft operator conducted an investigation and made its findings available to the AAIB. It established that the driver parked his mobile steps in the inter-stand clearway at right angles to the aircraft’s line of approach with the engine running and steps raised to the appropriate height. It was also established that the vehicle was physically too large to park in this manner without infringing sterile stand areas, and that it had protruded into the Stand 503 safety area by about 18 inches. Clearance between each wingtip and the edge of the inter-stand clearway was determined to be 0.925 m (about 36 inches), for an A319 on the stand centreline.

The TRM proceeded to the head of the stand as the aircraft approached, and positioned himself near the centreline stop bar. He believed that when he completed a visual check of the stand area it was clear of equipment.

An examination of the steps vehicle found that the parking brake operating lever was defective, such that normal activation of the lever did not fully apply the brakes. It was determined that factors such as vehicle orientation and vibration from the engine could have caused the vehicle to move forward after being parked.

Airport operator’s safety instructions

Instructions, standards and recommended practices for airside operations are published by Heathrow Airport Limited. Operational Safety Instruction (OSI) 07/12 states that a member of the airline/handling agent staff should be nominated to carry out a safety check of the stand before arrival of an aircraft (in this case, the TRM). This check is to include ensuring that the stand is unobstructed by vehicles or equipment and is clear of Foreign Object Debris (FOD).

In OSI/11/09, Heathrow Airport Limited sets out policies and procedures to be followed by operators and drivers of wheeled vehicles whilst airside. The OSI states that vehicles may only be parked in designated areas, and unattended vehicles must have their engine switched off and the parking brake applied. Parking in inter-stand clearways is specifically prohibited.

Safety actions

The aircraft operator produced a number of safety actions intended to prevent recurrence. These included reminding ramp staff that vehicles are not permitted to be left unattended in the inter-stand clearway and of the need for a full walkround inspection of the stand prior to aircraft arrival. Flight crews were to be reminded

that relatively little wingtip clearance exists at some stands and airports, including Heathrow. Additionally, all ground equipment with parking brakes of the type

fitted to the mobile steps were to be checked for similar defects and correct operation.