

INCIDENT

Aircraft Type and Registration:	Embraer 135, LX-LGK
No & Type of Engines:	2 Rolls Royce AE3007 A3 turbofan engines
Year of Manufacture:	2005
Date & Time (UTC):	1 January 2006 at 1915 hrs
Location:	London City Airport
Type of Flight:	Public Transport (Passenger)
Persons on Board:	Crew - 4 Passengers - 29
Injuries:	Crew - None Passengers - None
Nature of Damage:	Two small punctures in the aircraft skin
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	33 years
Commander's Flying Experience:	6,525 hours (of which 3,811 were on type) Last 90 days - 203 hours Last 28 days - 71 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft's parking brake was not set prior to engine start. After engine start, ground crew removed the chocks and the aircraft rolled forwards and struck ground equipment.

As departure time approached, a single member of the ground crew arrived to assist in the aircraft's departure. The communication between flight crew and the ground crew was to be by hand signals; no headset was provided.

History of flight

After they had parked the aircraft on stand and chocks had been inserted, the flight crew noticed that the brake temperatures were close to the amber range, indicating the brakes were hot. To assist cooling of the brakes during the turnaround, the parking brake was selected OFF. A Ground Power Unit (GPU) and its tractor were positioned approximately one metre in front of the aircraft. The weather was windy, with rain, and it was dark.

The flight crew completed the appropriate checks in preparation for engine start, but did not select the parking brake ON (the commander later attributed this oversight to human error). This omission was not identified by either pilot during the before start checklist. The engines were started and the commander signalled to the ground crew that the chocks should be removed. The ground crew removed the chocks from

behind the wheels without difficulty, but had to strike the chocks in front of the wheels with another chock to displace them. With the chocks removed, the aircraft began to move forward slowly. It collided with the GPU and its tractor, damaging the aircraft skin in two places. Recognising that a collision had taken place, the commander stopped the aircraft and applied the parking brake. The commander reported that the dark and rainy conditions had prevented him realising that movement had taken place, until the collision occurred, and that in the absence of headset communication the ground crew was unable to instruct the commander to apply the brakes.

The operator believes that this incident would not have occurred if procedures had required the ground crew to use headset communication (or required two ground crew where hand signals were used), or if ground crew were required to obtain confirmation that the parking brake was set prior to engine start, or if the tractor and GPU had not been parked close in front of the aircraft. The operator is in discussion with the ground handling service provider on these matters.