AIR ACCIDENT INVESTIGATION UNIT

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PRELIMINARY INCIDENT REPORT

This is preliminary information, subject to change, and may contain errors. Any errors in this Report will be corrected when the Final Report has been completed.

Report No:	2006-016
1. AIRCRAFT MANUFACTURER:	Airbus
Model:	A320
State of Registry:	Spain
Registration:	EC-HUK
Serial Number:	1318
Year of Manufacture:	2000
2. OPERATOR:	Iberia
3. TYPE OF OPERATION:	Public Transport
4. DATE / TIME:	3 May 2006 @ 18.53hrs
5. POSITION OF OCCURRENCE:	Dublin Airport, Ireland
6. PERSONS ON BOARD:	Crew: 6 Passengers: 97
7. INJURIES:	Crew: Nil Passengers: Nil
8. DAMAGE:	Fire in APU
9. INVESTIGATOR-IN-CHARGE:	Graham Liddy

This aircraft is equipped with a Honeywell 131-9A Auxiliary Power Unit (APU) mounted in the tail of the aircraft. After landing at Dublin, at the end of a flight from Barcelona, the crew attempted to start the APU. The APU achieved normal speed on this cycle, but an over-temperature on-speed condition was then detected and the APU automatically shut down. The crew made two further attempts to start the APU. Normal APU running was not achieved in either of these starts attempts and each start was terminated by the APU protection system. During these start attempts, the Control Tower observed smoke and then flames emanating from the APU. The Tower advised the aircraft crew of the problem and alerted the airport fire services. The crew stopped the aircraft on the Taxiway B3.

As the fire crew vehicles approached the aircraft from behind, debris was observed on the taxiway. The fire service tackled the fire, which was confined to the APU exhaust pipe, with foam and successfully extinguished it. Before the fire was extinguished, the Airport Fire Officer (AFO), who was in charge of the response team, called over the RT that there was a confirmed fire in the APU. ATC repeated this message to the aircraft.

The Captain initiated an emergency evacuation, which was conducted through the forward doors and the over-wing exits. The evacuation was accomplished quickly and without injuries. The debris noted above was subsequently recovered and identified as components of the APU rear bearing assembly. Examination of the aircraft found that the fire was confined to the APU exhaust pipe and that the failure of the APU was totally contained.

The APU was removed from the aircraft, as was the Flight Data Recorder and the Cockpit Voice Recorder. Supervised examination of the APU at the Honeywell facility at Raumheim, in Germany, showed that the APU rear bearing had seized and that the rear bearing support assembly was severely disrupted. The central tie shaft was grossly distorted in the rear bearing area and the forward end of the tie shaft had disconnected from the load compressor.

Further tests and examinations on the relevant APU components are continuing in order to determine the initial cause of the failure. The Investigation is ongoing and a Final Report will be published in due course.

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