

ACCIDENT

Aircraft Type and Registration:	ERJ 170-100 STD Embraer 170, G-LCYF
No & Type of Engines:	2 General Electric CF34-8E5A1 turbofan engines
Year of Manufacture:	2009
Date & Time (UTC):	25 July 2010 at 1710 hrs
Location:	Edinburgh Airport, Scotland
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 4 Passengers - 68
Injuries:	Crew - None Passengers - None
Nature of Damage:	Damage to APU intake on underside of tail
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	38 years
Commander's Flying Experience:	6,500 hours (of which 450 were on type) Last 90 days - 160 hours Last 28 days - 40 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries

Synopsis

During pushback for departure, the underside of the aircraft's tail struck a blast fence. Investigations by the organisations involved identified a number of factors which contributed to the event, and contained recommendations to prevent recurrence.

History of the flight

During pushback from Stand 34, the aircraft's tail was pushed over, and then impacted, a blast fence behind the stand. The ground crew halted the pushback, pulled the aircraft slightly forward, and informed the flight crew. The flight crew aborted the engine starts and shut down the APU. A set of mobile steps were brought to the aircraft and the passengers disembarked normally.

Investigations conducted by the organisations involved

Investigations into the accident were carried out by both the aircraft operator and the ground handling company which carried out the pushback. Both companies identified a number of factors relevant to the accident, including the fact that Stand 34 is the only stand at the airport requiring a 'dog-leg' pushback.

An engineer who attended stated that most of the damage to the aircraft was done when it was pulled forward after impact, rather than in the initial collision with the blast fence. The aircraft operator found that ground handling companies should be reminded not to move an aircraft which has sustained damage until it has been inspected by an engineer.

Several recommendations were made by the companies conducting these investigations, focussing on:

- Risk assessment of push-back operations
- Design of push-back procedures
- Promulgation of clear instructions to staff
- Training of ground handling staff
- The design and marking of Stand 34
- ‘Near-miss’ reporting within the ground handling company

Discussion

Ground handling of aircraft is not regulated to the same degree as aircraft operations. The investigations carried out by the organisations involved identified opportunities for improvement in several areas and produced recommendations that, if implemented, may reduce the likelihood of a recurrence.