BAe.146-200, G-JEAX

AAIB Bulletin No: 12/2002	**Ref: EW/G2002/07/15**	**Category: 1.1**
Aircraft Type and Registration:	BAe.146-200, G-JEAX	
No & Type of Engines:	4 Lycoming ALF502R-5 turbofan engines	
Year of Manufacture:	1989	
Date & Time (UTC):	9 July 2002 at 0900 hrs	
Location:	London Heathrow Airport	
Type of Flight:	Public Transport	
Persons on Board:	Crew - 5	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Fuselage skin and internal damage.	
Commander's Licence:	Airline Transport Pilots Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	12,570 Hours (of which 5,578 were on type)	
	Last 90 days 212 Hours	
	Last 28 days 56 Hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

The aircraft was parked on Stand F11 at Heathrow Terminal 2 and was being prepared for a flight to Toulouse on behalf of another operator.

A Charlett 810 electric baggage truck was being used to transport transfer bags to the aircraft for the flight. As the truck approached the aircraft from the front and to the right, the driver intended to position the vehicle near the forward hold, but under the wing, so that the bags were protected from the rain. As he approached the forward cargo hold he attempted to slow down, by braking, but the vehicle started to slide. The top right corner of the truck then struck the right side of the aircraft, just forward of the top corner of the forward cargo door aperture. The damage to the aircraft fuselage skin was a gash approximately 4 inches wide and 14 inches in vertical length and, in

addition, there was internal structural distortion. The commander of the aircraft expressed an opinion that the baggage truck had approached the aircraft at a fast speed, although the driver claims his speed was not excessive.

The aircraft was removed from revenue service so that a temporary repair could be carried out to allow a ferry flight to the operators maintenance base.

Police and the airport authorities inspected the baggage truck at the scene. They observed that both the front tyres on the truck were excessively worn, with little tread remaining, and with additional damage to the outer edges of the tyre. The servicing company that owned the vehicle removed it from service for further investigation.

An aircraft ramp area easily becomes contaminated by oil, grease and fuel during the normal operation and servicing of aircraft. In this case it was observed that the ramp area around Stand F11 was contaminated with oil and, prior to the accident, there had been a large amount of rainfall which left the ramp area with some standing water. Coupled with the oil contamination, this led to slippery conditions which were likely to reduce the traction and braking capability of any of the servicing vehicles in the vicinity of the aircraft.

The vehicle was being operated airside at London Heathrow Airport and was not required to comply with the landside Road Traffic Act and Vehicle Construction and Use regulations. However, local by-laws and operational safety instructions require that all vehicles operating airside must have an apron pass and must be in a roadworthy condition similar to that required by the Road Traffic Act. In addition, it is the drivers responsibility to ensure that any vehicle being used airside is actually roadworthy. The servicing company has more stringent regulations, one of which requires that any servicing vehicle should not approach within six feet of an aircraft.

The driver of the vehicle was on his first day back at work after a roster day off. However, prior to this break, he had worked for 14 days without any days off and in that time had completed numerous double shifts. As a result it is possible that the driver may not have been adequately rested.

Conclusion

The baggage vehicle was not in a roadworthy condition due to the lack of tread on the forward tyres, and this would have significantly reduced traction in the wet and slippery conditions of the contaminated ramp area. The vehicle was operated close to the fuselage in contravention of the servicing companys six feet rule and the driver may not have been adequately rested due to a lengthy work period, with just one days rest, prior to the accident. The combination of these factors led to a reduced ability of the vehicle to stop, resulting in its collision with the aircraft fuselage. The servicing company have embarked on a communication and training campaign to reinforce the six feet rule, the manner of operation of vehicles airside and when in the vicinity of aircraft. They are also reviewing their procedures on working time, operations in inclement weather and approach protocol when delivering baggage to aircraft.