Airbus Industrie A320-211, EI-CVD

AAIB Bulletin No: 10/2002	Ref: EW/G2002/02/04	Category: 1.1
INCIDENT		
Aircraft Type and Registration:	Airbus Industrie A320-211, EI-CVD	
No & Type of Engines:	2 CFM56-5A1 turbofan engines	
Year of Manufacture:	2001	
Date & Time (UTC):	4 February 2002 at 2215 hrs	
Location:	Stand N84 at London Heathrow Airport	
Type of Flight:	Public Transport (Passenger)	
Persons on Board:	Crew - 7	Passengers - 151
Injuries:	Crew - None	Passengers - None
Nature of Damage:	One metre long gash in No 1 engine outboard cowling.	
Commander's Licence:	Airline Transport Pilots Licence	
Commander's Age:	39 years	
Commander's Flying Experience:	Total 6,500 hours (of which 450 were on type)	
	Last 90 days - 120 hours	
	Last 28 days - 26 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries.	

The incident

The aircraft approached Stand N84, at Heathrow Terminal 1, from the west and turned right to enter it. The stand has a short taxi distance from the Inner Taxiway which means that the pilots have little time to view the stand after turning on to the centreline. The stand appeared, to the commander, to be clear as the aircraft entered it and he observed that the stand guidance system was switched on and seemed to be working correctly. He had, as was standard practice, turned off the aircraft taxi lights before turning into the stand to avoid 'blinding' the ground staff. The commander followed the AGNIS (Azimuth Guidance Nose-In Stands) centreline guidance system

and stopped the aircraft at the position required by the PAPA (Parallax Aircraft Parking Aid) stop point indication board situated on his right hand side at the front of the stand, close to eye level. He was then advised by one of the ground technicians that the outer side of the No 1 engine nacelle had struck a parked vehicle. The vehicle was one of a pair of baggage belt loaders, belonging to a different airline, which had been left on the stand by a ground crew dispatching an aircraft that had departed earlier.

Subsequent examination of the stand

The aircraft and stand were subsequently examined by personnel from the Airport Police, Airline and Airport Authority. It was found that the aircraft had stopped on the stand centreline and at the correct distance from the terminal. The collision with the belt loader had resulted in a gash, about one metre long, in the lower outboard quadrant of the No 1 engine cowling.

The two belt loaders, which had been left unattended, were outside the marked zones for safe vehicle parking and in the area beyond where the airbridge had been parked. As found, the belt loader that was struck had been projecting about 4 metres into the stand beyond the marked parking area.

Pre-arrival activity at the stand

It was, according to the handling agents, a dark, wet and windy night, and flights, including this one, were operating up to three hours late. The flight dispatcher, who was responsible for ensuring that the stand was clear of obstructions, was busy checking details of the cargo load on the incoming aircraft so he asked the ramp agent to turn on the stand guidance systems, on his behalf. The ramp agent agreed to do this and, believing the stand to be clear, turned on the guidance systems.

When the dispatcher had finished checking the paperwork, he went to the control position on the end of the airbridge jetty. He arrived as the aircraft was turning into the stand but he did not see the belt loaders that were obstructing the stand. As the aircraft approached its stopping point, the dispatcher noticed one of the ground handling staff gesticulating to indicate a problem, but by that time the aircraft had struck one of the belt loaders.

Observations

The belt loaders had been parked in the area of the stand in front of the airbridge jetty, on the left side of the stand as viewed from the approaching aircraft. In this position, with the stand being lit mainly from the front, they would have been, at least partially, in the shadow of the airbridge. Since the aircraft taxi lights were off, the reflective markings on the ends of the belt carrier would not have been highly visible to the commander whose attention was predominantly ahead and to the right, to observe the AGNIS and PAPA indicators. It was also a wet and windy night. Rain on the aircraft's windshields would have partially interfered with both pilots' clear view ahead and to the side. Moreover, once the aircraft was on the stand centreline, the belt loaders would have been invisible to the co-pilot because they were obscured by the aircraft's fuselage. From the control position at the end of the jetty, the dispatcher could not have seen the belt loaders either since they were outside his field of view. From the aspect of the ground handling staff at the front of the stand, the belt loaders would have been partly masked from view by the airbridge leg and probably partially camouflaged by general stand clutter beyond.

Comments

Above all, this incident emphasises the need for ground handling staff to exercise the correct discipline when parking vehicles adjacent to the stands. It also emphasises the need for staff awaiting the arrival of an aircraft on stand to carry out a thorough check for obstructions before switching on the stand guidance systems. Although pilots are ultimately responsible for the safe manoeuvring of their aircraft, they have a right to expect that if the stand guidance systems are illuminated, the stand has been checked for obstructions by a competent person shortly before their arrival.