No: 9/89 **Ref: EW/C1107** **Category: 1a**

Aircraft Type and Registration:	McDonnell Douglas DC8-62 N 1805
No & Type of Engines:	4 Pratt and Whitney JT3D-3B turbofans
Year of Manufacture:	1967
Date and Time (UTC):	28 April 1989 at 1158 hrs
Location:	Stansted Airport, Essex
Type of Flight:	Passenger (charter)
Persons on Board:	Crew - 7 Passengers - 147
Injuries:	Crew - None Passengers - 1 (serious)
Nature of Damage:	Right main landing gear rear bogey collapsed following wheel rim failure
Commander's Licence:	USA Airline Transport Pilot's Licence
Commander's Age:	37 years
Commander's Total Flying Experience:	8000 hours (approximately)
Information Source:	AAIB Field Investigation

The crew joined the aircraft at Vienna on the morning of the accident and operated the first sector of the flight to Stansted Airport without incident. Fuel was uplifted at Stansted for the onward sector of the flight which was to Miami, Florida. This technical stop was completed in about one hour and at 1148 hrs the aircraft taxied out to the holding point for runway 23 via holding points 'J' and 'R'. At 1153 hrs the controller cleared the aircraft to line up on the runway and gave the crew their departure clearance. The controller then cleared the aircraft for take-off and reported the surface wind as 010°/10 knots. Upon receipt of this information the crew requested permission to "switch runways" since their take-off weight exceeded that permissable with such a tail wind. With clearance from the tower controller, the aircraft backtracked along the whole runway length. When it was adjacent to the 'K' hold there was a muffled bang and the crew agreed with the controller that they had suffered a compressor stall. The controller then reported that they had burst a tyre and instructed the aircraft to hold position. He also initiated an airport full alert . The aircraft continued to the end of the runway and turned off at the 'L' hold. On passing the 'N' hold a second bang was heard and the crew declared a second tyre burst and then shortly afterwards the controller informed them "Your

undercarriage is on fire". The crew replied that they were aware of this and asked "Which side are we burning, left or right?". The controller replied "on your left side". He also upgraded the full alert to an Aircraft Ground Incident (AGI).

Once the aircraft had halted, the commander ordered an evacuation on the right and emergency slides were deployed from the forward and aft exits. Passengers had meanwhile opened the overwing exit and some of them were standing on the wing. The evacuation continued under the supervision of the cabin crew and the first officer. One passenger fell from the aft slide and sustained minor head injuries which required his detention in hospital.

Upon being notified of the AGI, which included the information that there were 2 persons on board, the Airport Fire Service attended the aircraft. The right hand landing gear was on fire but this was almost immediately extinguished with a single line from the Meteor fire appliance using light water (foam). The watch leader persuaded those passengers remaining on the wing to re-enter the cabin and make their exit via the escape slides since he considered them to be at risk in their position over where the fire had been burning. The passengers were then transferred to the terminal building by the operator's handling agent.

The number 8 wheel assembly had failed around the mid tubewell in fatigue from multiple initiation sites based on corrosion pits, releasing the outer rim and the tyre. The adjacent no 7 tyre subsequently failed from overload. The aircraft had rolled on the remaining rims until the turn off the runway was commenced, at which time the rims failed, causing the no 7 and 8 wheels to skid and erode the hubs through to the brake units.

The no 8 wheel assembly, part number 152075-1, had been manufactured in 1959 and was cleared to a maximum gross take-off weight of 315,000 lbs, 20,500 lbs less than the actual take-off weight. The no 7 wheel assembly was identified as part number 152075-2, cleared to a maximum gross take-off weight of 300,000 lbs (35,500 lbs less than the actual take-off weight).

The mainwheels are lifed on condition and are checked visually at tyre removal, and using eddy current techniques at a periodicity determined by the operator based on guidelines published by the manufacturer. The no 8 wheel had last been checked using eddy current methods on 27 February 1987, 629 landings prior to this accident, and had had three visual checks since that date.