



AIB Bulletin

AIB Bulletin No: 15/98 **Ref:**CAV/ACC/15/99 **Category:** 1.1
Aircraft Type and Reg.: Boeing 737-200; 5H-MRK **Serial No.** 21711
No & Type of Engines: Two Pratt & Whitney JT8D-17
Year of Manufacture: 1978
Date: & Time (UTC): 31 October 1999 at 1020 hours
Location: Kilimanjaro International Airport, Tanzania
Type of Flight: Scheduled flight
Persons on Board: Crew - 8 Passengers - 74
Injuries: Crew - Nil Passenger - 7
Nature of Damage: Six fan blades of left engine damaged, two main tyres deflated, No. 2 main tyre damaged.
Commander's Licence: ATPL
Commander's Age: 45 YEARS
Commander's Experience: 11000 hours of which 2000 were on type
Last 90 days 151 hrs
Last 28 days 40 hrs
Information Source: Telephone call from ATS

The aircraft was operating Air Tanzania flight TC 734 covering sectors Dar es Salaam – Kilimanjaro – Dar es Salaam. The outbound leg of the flight was uneventful and the aircraft landed at Kilimanjaro at 0932 hours. 80 passengers disembarked and aircraft was refueled to three hours endurance. 72 passengers boarded the aircraft for the flight to Dar es Salaam.

At 1013 hours 5H-MRK requested start up clearance for the flight which was granted by the Kilimanjaro Tower. The aircraft taxied to the threshold of runway 09 and at 1020 hours take-off for Dar es Salaam was initiated.

The Bulletin contains facts relating to the accident which have been determined up to the time of issue. This information is published to inform the public and the aviation industry of the general circumstances of the accidents at the preliminary/stage and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

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The pilot said that the initial phase of the take off roll was normal. Shortly before the decision speed (V_1) a loud bang was heard from the port side and the aircraft veered to the left. The pilot decided to abort the take off. As 5H-MRK was brought to rest on the runway there was smell of burning material in the cockpit which caused the pilot to order immediate evacuation of the aircraft. Four emergency chutes were deployed.

In the evacuation process seven passengers were injured, two of them seriously. All the Crew members were not injured. A passenger who jumped from the cabin to the ground suffered a leg fracture.

Examination of the aircraft showed that the No.2 main wheel tyre retread had peeled off and some of its debris were ingested in the No.1 engine damaging six fan blades. The port landing gear modular hydraulic lines were also ruptured causing fluid leakage.

The No.2 main when tyre which failed during the take-off roll was manufactured by the Aviator company (USA) and was imported by the operator in 1996 bearing serial number 5279N 00380. By the time of the accident it had logged 471 landings since new and 32 landings since the fourth retread. The complete history is as follows:

| Tyre condition | Date assembled | Landings Done |
|-----------------------|-----------------------|-------------------------|
| New | 5 June 1996 | 101 |
| R1 (Maeder) | 23 June 1997 | 131 |
| R2 (Maeder) | 11 December 1998 | 78 |
| R3 (Maeder) | 12 February, 1999 | 32 |
| R4 (Maeder) | 26 October 1999 | 32 (up to failure date) |

Total landings since new: 471

Further examination of the No. 2 tyre showed that part of the tread had separated in the accident sequence but the carcass was left inflated. Tyres No.1 and No.3 were later deflated by the operation of fusible plugs, due to braking effect.

The circumstances leading to this accident are being investigated.