Aviation Safety Investigation Report 199503351

Bell Helicopter Co Jetranger

09 October 1995

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

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The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number: 199503351 **Occurrence Type:** Incident
Location: Melbourne
State: VIC **Inv Category:** 4
Date: Monday 09 October 1995
Time: 1030 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Bell Helicopter Co
Aircraft Model: 206B
Aircraft Registration: VH-JGE **Serial Number:**
Type of Operation: Miscellaneous Parachute Jump
Damage to Aircraft: Nil
Departure Point: Olympic Park VIC
Departure Time:
Destination: Olympic Park VIC

Approved for Release: Wednesday, March 6, 1996

The pilot was tasked to fly parachutists to altitude where they would exit for a display at the Melbourne Masters Games.

Prior to any jumps, the pilot had held a safety briefing for about 50 parachutists involved in the event. According to the Safety Support Officer of the Australian Parachuting Safety Council, the safety briefing stipulated that every jumper would climb out onto the helicopter's landing gear skids and then leave one at a time at five second intervals without pushing off.

On about the eighth jump run, four parachutists climbed out onto the skids of VH-JGE. This placed two parachutists on the left skid and two on the right. The pilot flew from the right front seat, which is normal practice in a Bell 206.

When the helicopter was at 3,500 ft and 50 kts over Olympic Park, the target area, one parachutist from the left rear position departed the skid, immediately followed by the second parachutist from the left side. With the two remaining parachutists still standing on the right skid, plus the pilot in the right front, the helicopter's lateral centre of gravity limits were exceeded. According to the pilot, he was unable to prevent the helicopter from rolling to the right. At some point during the roll, the two parachutists standing on the right skid also departed. In the opinion of the pilot, the right side parachutists pushed off rather than stepping off and that the push aggravated the rate of roll. The roll continued through 360 degrees. The helicopter recovered at 70 kts after a height loss of six or seven hundred feet. The pilot advised that torque and rotor RPM limits were not exceeded during the incident.

After the incident the pilot landed and inspected the aircraft. He discovered evidence of a slight mast bump. He then flew the helicopter to Essendon where further inspections were performed by engineers. The main rotor mast was removed and checked for ovality and runout. The manufacturer was consulted during the inpsections. When no fault was found with the helicopter, it was returned to service.

Just prior to the incident there had been some reorganisation of jump loads due to a six place helicopter arriving. The parachutists involved in the incident had, in rapid succession, been assigned to a four place load, then a six place load and finally to a different four place load. The Safety Support Officer subsequently determined that the two parachutists on the left side thought that all four parachutists were going to exit simultaneously on an exit count of `ready set go' given by the parachutist on the front left. The parachutists on the right side had previously briefed with a different group which had planned to exit alternatively left and right at five second intervals; they believed this was the standard briefing and had not discussed it with the left side jumpers after being reassigned to the Bell 206.

Since the incident, the Australian Parachute Federation, via a News Sheet and News Letter, has reinforced the importance of the pre-jump safety briefings, and the exit practice. Also, parachutists have been reminded of the need for extra care at special events where normal exit procedures may be varied due to operational requirements.

The following factors were considered relevant to the development of the incident:

1. The pre-jump safety briefing was probably inadequate.