Aviation Safety Investigation Report 198903784

Bell 206-B

25 June 1989

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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.

Occurrence Number: 198903784 **Occurrence Type:** Accident
Location: Pelorus Island (30 km NE Ingham) QLD
Date: 25 June 1989 **Time:** 916
Highest Injury Level: Serious
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	0	0
Ground	0	0	0	-
Passenger	0	4	0	0
Total	**0**	**4**	**1**	**0**

Aircraft Details: Bell 206-B
Registration: VH-NRS
Serial Number: 1406
Operation Type: Charter
Damage Level: Not Known (Aircraft not recovered)
Departure Point: Dunk Island QLD
Departure Time: 0840
Destination: Pelorus Island QLD

Approved for Release: 20th October 1989

Circumstances:

The pilot reported that at the time of the occurrence the aircraft was over water descending through 650 feet at 80 knots for a beach landing on Pelorus Island. Engine power was set at about 70 percent torque. A strong airframe vibration suddenly began, accompanied by a noticeable bang. The helicopter yawed left and the pilot saw the engine out light illuminate and the engine tachometer reading decreasing. He did not recall any other instrument indications. As the pilot corrected the yaw and lowered the collective pitch control, the vibration ceased. He transmitted a mayday call and then, with his left hand, operated the switch on the overhead console to arm the emergency floatation bags. As the aircraft approached the water, the pilot attempted to operate the float inflation trigger at the same time as he returned his hand to raise the collective pitch control to complete the forced landing. The floats did not inflate. However, the pilot was not sure as to whether he had operated the trigger properly. The pilot thought that the helicopter contacted the water in a slightly tail-low attitude. He kicked open his door and was able to egress from the helicopter as it rolled left. The front left seat pasenger and the rear right seat passenger escaped from the cabin without assistance as the fuselage became inverted. The passengers in the left and centre rear seat positions were assisted from the helicopter by the pilot. Attempts to locate and recover the helicopter were hampered by the water depth in the area, strong tidal currents, and an uneven, rocky sea bed. While some possible sonar contacts were identified, the position of the helicopter could not be positively determined. Consequently, the search was called off and the wreckage remains unrecovered. The descriptions of the occurrence provided by the passengers matched that given by the pilot and indicated that the engine probably suffered a complete power loss. However, because the wreckage was not recovered, no positive conclusion can be drawn as to the causal factors involved. The helicopter had flown some 7 hours since undergoing scheduled maintenance, during which a new engine compressor was fitted. The turbine was also removed and refitted to facilitate the compressor change.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. The helicopter probably suffered a sudden and complete engine failure.

2. The helicopter was operating over water.

3. For reasons which could not be established, the emergency floatation bags did not inflate.