

**Aviation Safety Investigation Report
198700097**

Hiller UH12E

13 April 1987

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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: 198700097
Location: Perth WA
Date: 13 April 1987
Highest Injury Level: Fatal
Injuries:

Occurrence Type: Accident

Time: 1030

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

Aircraft Details: Hiller UH12E
Registration:
Serial Number: 2232
Operation Type: Aerial Work-Sling cargo operations
Damage Level: Destroyed
Departure Point: Perth WA
Departure Time: 1030
Destination: Perth WA

Approved for Release: November 5th 1987

Circumstances:

The pilot intended to position a beacon on the roof of the Perth Control Tower. The task was to be accomplished by sling loading the beacon, which weighed 199 kilograms, below the helicopter. The aircraft was positioned about 40 metres to the north and about 25 feet above the tower. The pilot carried out an approach to the roof and hurriedly deposited the load. The load was then released from the sling, which was left attached to the helicopter. The aircraft was then manoeuvred across the roof with the sling being dragged over the surface. The hook on the sling became snagged on the tower guard rail and halted the helicopter's progress away from the tower and causing it to pitch nose down and roll to the right. With the cable being tensioned by the pull of the helicopter the hook freed itself from the railing and the sudden relaxation of the load on the cable caused it to spring towards the helicopter. The cable flew up around the tail boom and became entangled in one of the main rotor blades. The other main rotor blade severed the tail boom which fell free of the helicopter striking the side of the tower on its way to the ground. The major section of the helicopter then fell to the ground at the base of the tower, caught fire and was burnt out. The tower roof was 90 metres above the ground and the baseplate, onto which the beacon was to be positioned, was triangular in shape with sides of about 60 centimetres long. Specialist opinion was that such a task would be difficult even under ideal conditions but there is evidence that a wind shear was present at about 300 feet at the time of the accident. The pilot's licence was not endorsed for sling loading operations and he was not sufficiently current on the aircraft type, considering its handling characteristics and suitability for sling operations, to undertake such a job. The ground crew were inadequately briefed about the job and their duties, and an inappropriate communication system between the ground crew and the pilot was used. The electric quick release for the lifting hook fitted to the helicopter was unserviceable although the alternate manual system was checked and found to be working. The pilot had recently been retrenched from his permanent employment and had not found other work. It is likely therefore,

that he was excessively motivated to complete the task even though he was experiencing difficulty in accurately controlling the helicopter.