Aviation Safety Investigation Report 199300092

Hiller Aviation UH-12E

23 January 1993

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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.

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: | 199300092 | Occurrence Type | : Accident | | |
|---|--------------------------|------------------------|---------------------|--|--|
| Location: | 28km S Smithton | | | | |
| State: | TAS | Inv Category: | 4 | | |
| Date: | Saturday 23 January 1993 | | | | |
| Time: | 1400 hours | Time Zone | ESuT | | |
| Highest Injury Level: None | | | | | |
| Aircraft Manufacture Aircraft Model: Aircraft Registration: Type of Operation: Damage to Aircraft: Departure Point: Departure Time: | UH-12E VH-AGK | Agriculture/Baiting | Serial Number: G358 | | |
| Destination: | Nabageena TAS | | | | |
| Crew Details: | | | | | |

| | Hours on | | |
|------------------|-------------------------|---------|-----------|
| Role | Class of Licence | Туре Но | urs Total |
| Pilot-In-Command | Commercial | 900.0 | 2800 |

Approved for Release: Thursday, June 10, 1993

During the procedure turn at the end of a spray run the engine power failed. During the ensueing forced landing the pilot had to overpitch the rotor to avoid power lines. The helicopter landed heavily fracturing the tail boom, damaging the main rotor blades, and collapsing the skids.

Inspection of the engine disclosed that the left exhaust pipe had fractured inside the carburettor heat shroud. The exhaust gases were then ingested by the engine with consequent total loss of power.

The exhaust pipe fracture was caused by fatigue occasioned by the unsupported nature of the installation. The shroud would have masked the fracture growth, which was not in evidence at the last inspection some 40 hours prior to failure.

Significant Factors:

- 1. The engine power failed due to a fractured exhaust pipe.
- 2. The pilot was forced to overpitch to avoid obstructions.
- 3. The helicopter landed heavily.