

SAS Accident Investigation Case Study 3

Improper installation of an engine's hydromechanical unit caused crash of UH-60L Black Hawk

The purpose of this exercise is to review the following information and to use it to complete the provided Accident Investigation Workshop Evaluation Worksheet

This summary is incomplete so use the opportunity to expand the answers to take account of potential root causes and contributing causes which have not been (in your opinion) adequately addressed

Introduction

The crew was conducting a maximum power check on the Number 1 engine which failed during the check and the Number 2 engine was in the idle setting, causing a dual engine out condition.

The crew did not recover the aircraft from this condition and it subsequently impacted the ground at a high rate of speed."

General Findings

The investigation summary revealed multiple factors that led to the accident.

Pre Flight Factors

- The hydromechanical unit was incorrectly installed in the first engine
- The inspection of the hydromechanical unit's installation wasn't conducted according to proper procedure.

Post Event Factors

- After the first engine failed. "The Maintenance Test Pilot failed to respond to a critical situation during a maintenance manoeuvre, - Failed to execute an autorotative descent and landing."
- Leadership decisions led to the crash.

Additional Factors

- The aircraft mechanic — should not have even been on the flight.
- The leaders did not adequately assess the technical inspector's ability to perform his duties while pending administrative actions."

Conclusions / Recommendations

- Additional training for maintenance test pilots.
- Additional training for all pilots in responding to emergency procedures.
- Review of policies for maintenance test flights.
- Additional Administrative Action for the Mechanic
- Additional Administrative Action for the Inspector