

## **EXECUTIVE SUMMARY**

### **AIRCRAFT ACCIDENT INVESTIGATION**

**HH-60G HELICOPTER, S/N 89-26201**

**PORTLAND AIR NATIONAL GUARD BASE, PORTLAND, OREGON**

**30 MAY 2002**

On 30 May 2002, at 1351 local time (2051 Zulu), an HH-60G helicopter, 89-2601 crashed near the summit of Mount Hood in Oregon at a level of 10,700 feet MSL. The helicopter, assigned to the 304<sup>th</sup> Rescue Squadron (RQS), 939<sup>th</sup> Rescue Wing RQW, Portland Air National Guard Base, Portland Oregon, was assisting civilian authorities to rescue three critically injured climbers who had fallen into a crevasse on Mount Hood. The pilot, co-pilot, flight engineer, and 4 pararescuemen egressed safely with non-life threatening injuries. The helicopter sustained \$4,750,385.00 in damages. There was no injury to civilians or damage to other property as a result of this accident.

Shortly before impact, the helicopter was in a thirty-foot hover at 10,700 feet MSL, over the rescue site, which is located on the southwestern flank of Mt Hood. The flight engineer was preparing to commence lifting one of the victims of the climbing accident who was on a litter hooked to the hoist cable when main rotor RPM slowed and the helicopter began to descend. The aircraft then went into an uncontrolled right yaw, which put the pilot's intended escape route behind him. The flight engineer cut the hoist cable. While attempting to maneuver to land the helicopter on the 45-degree slope of the mountain, the main rotor blades impacted the steeply sloping terrain. The helicopter began to roll side over side down the mountain slope. The helicopter rolled seven and one half times before coming to rest inverted, approximately 200 feet below site of impact.

By clear and convincing evidence I have determined that the crew used inaccurate performance planning data, and therefore lacked the power required to accomplish the mission. The pilot immediately recognized the slowing of his main rotor RPM, which was most likely caused by the loss of favorable headwinds. These headwinds had very probably initially compensated for the crew's inaccurate performance data. However, the pilot chose to delay the execution of his pre-briefed go around procedure. The pilot's hesitation prior to executing his go around and utilizing his escape route resulted in the helicopter's main rotors drooping to the point where the helicopter lost altitude, and was difficult to control. Due to the helicopter's 30 degree uncommanded yaw to the right, the mishap pilot's intended escape route was no longer available.

By substantial evidence I have determined that changing winds on Mount Hood, a common occurrence at the Bergschrund, where the rescue operations took place, contributed to the accident. Additionally, I have determined that the mishap crew either lacked an understanding of or did not adequately consider the effects of unpredictable mountain winds on flying performance when selecting a method for executing the survivor recovery. Further, I have determined that cumbersome performance-planning charts, (specifically hover torque required charts, which are difficult to calculate and read, especially in flight) when coupled with the mishap crew's use of a decertified method for confirming power numbers, aided in the crew's faulty assessment of their actual power needs.

**Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.**