

# Cascadia Contractor Hazard Alert

Date of Incident: December 27, 2005

Unit: Stillwater Timberlands

we believe in zero

## Incident: Helicopter pilot struck by rotor blade

### Description:

Helicopter pilot was flying a Hughes 500, transporting piles of shake blocks to roadside. During the day he had refueled the helicopter on two previous occasions, landing at a pre-determined area, in close proximity to a small flat deck. This truck had 4 fuel drums inside a steel containment box and also had a portable fuel pump that was moved by hand from the top of drum to drum as required. This flat deck had been strategically positioned in a wide area of the road, at the beginning of the day, to allow for refueling while not blocking road passage.

To refuel, the pilot landed, exited the running helicopter and ran two rubber fuel hoses, coupled together, between the helicopter and the fuel drum located on top of the flat deck. He also ran the electrical cord which, when connected, automatically started the fuel pump. At the end of the second refueling cycle, the fuel drum was empty.

After landing for the third refueling of the day, the pilot positioned one of the skids of the helicopter 7' from the edge of the flat deck. This in turn, positioned the main rotors to extend 2'3" over top of the flat deck. The pilot shut down the helicopter, knowing the fuel pump had to be moved from one drum to the other. He exited the helicopter and went around to the back of the flat deck and started to have a conversation with one of the shake cutters while the rotor blades were coming to a stop. The pilot then proceeded to climb onto the flat deck to change the fuel pump to a new drum, while the shake cutter proceeded towards the other pickup truck. As the pilot pulled himself onto the flat deck and proceeded to stand up, he was struck on the right side of his head by one of the revolving rotor blades. The shake cutter heard a bang and turned and saw the pilot lying on the floor of the flat deck. He rushed over and comforted the pilot while summoning first aid. The pilot was then transported by ambulance to Powell River Hospital before being flown to Lions Gate Hospital in Vancouver with serious head injuries.

### Upset Conditions:

1. Fuel tank position and helicopter landing area were in too close proximity to each other.
2. Pilot climbed up onto flat bed with rotors still turning.



### Learnings and Suggestions

1. Perform a pre-planning exercise including a risk assessment before starting task.
2. Develop a written SOP for refueling that includes safe clearances, location of fuel barrels, etc.
3. Always remain totally focused on the task at hand, especially when the consequences may result in serious injury or death.