

National Transportation Safety Board
Washington, DC 20594

Printed on : 6/19/2009 2:17:06 PM

Brief of Accident

Adopted 05/29/2007

SEA06GA158 File No. 21514		08/13/2006	Yellow Pine, ID	Aircraft Reg No. N355EV	Time (Local): 17:10 MDT		
Make/Model: Eurocopter / AS-350-B3					Fatal	Serious	Minor/None
Engine Make/Model: Turbomeca / Arriel 2B				Crew	1	0	0
Aircraft Damage: Destroyed				Pass	3	0	0
Number of Engines: 1							
Operating Certificate(s): None							
Type of Flight Operation: Public Use							
Reg. Flight Conducted Under: Public Use							
Last Depart. Point: Williams Peak, ID					Condition of Light: Day		
Destination: Krassel USFS, ID					Weather Info Src: Weather Observation Facility		
Airport Proximity: Off Airport/Airstrip					Basic Weather: Visual Conditions		
					Lowest Ceiling: None		
					Visibility: 10.00 SM		
					Wind Dir/Speed: Variable / 005 Kts		
					Temperature (°C): 23		
					Precip/Obscuration: No Obscuration; No Precipitation		
Pilot-in-Command		Age: 42		Flight Time (Hours)			
Certificate(s)/Rating(s)				Total All Aircraft: 4386			
Flight Instructor; Commercial; Private; Single-engine Land; Helicopter				Last 90 Days: Unk/Nr			
				Total Make/Model: 1640			
Instrument Ratings				Total Instrument Time: 15			
Airplane							

The helicopter collided with a tree as it flew over a mountain ridgeline. The helicopter was under contract to the U.S. Forest Service and was assigned to Krassel Helibase (24K), Idaho. The pilot was requested to fly a relief Fire Lookout to a lookout tower on Williams Peak, which was 4 nautical miles (nm) and a 2,844 feet elevation gain away. There were several forest fires in the area and visibility in the lower valley was approximately 1 nm. The relief Fire Lookout, who was dropped off, said that as the helicopter flew up the ridge, visibility got much better. He said that there were two forest service personnel on board, to assist in off-loading and on-loading equipment, supplies, and refuse from the two open-top external cargo baskets that were secured to the helicopter's skid gear. Cargo was secured in the cargo baskets by multiple bungee cords. The return flight would have been flown directly into the late afternoon sun. There were no witnesses to the accident. Thirteen cubitainers (5 gallon plastic containers for potable water), two large plastic refuse bags, yellow crepe paper and several chips of green helicopter paint were found near a freshly downed and up rooted snag (a dead, defoliated conifer) located on the ridgetop. The snag was estimated to have been 90 feet tall. Further down the mountain side was a tail rotor paddle which had separated at its cuff. The burned out wreckage of the helicopter was found on a forest service road, approximately 2,000 feet down the mountain and 1,230 foot elevation loss from the initial downed snag. Postaccident examination of the engine revealed that the power turbine's blades were sheared from their disc, which indicated an over speed event. This would occur with a main rotor blade strike/sudden-stoppage event, and the subsequent compromised engine to main rotor power train. Additionally, 11 of the containers that had been in one cargo basket had 3 to 9 inch slashes in them from the tail rotor. Interviews were conducted by U.S. Forest Service personnel with four Helitack crew members who were assigned to the helicopter. They said the pilot did like to do "showy" flying at times, but would always ask the passengers if they were comfortable. He would "buzz" a ridge every now and then, and perform a

Brief of Accident (Continued)

SEA06GA158

File No. 21514

08/13/2006

Yellow Pine, ID

Aircraft Reg No. N355EV

Time (Local): 17:10 MDT

maneuver he called the "sleigh ride." One of the Helitack crew members said that a "sleigh ride was where you top a ridge then drop the collective, drop the nose a bit....it was a common maneuver for him." No preimpact engine or airframe anomalies, which might have affected the helicopter's performance, were identified.

Brief of Accident (Continued)

SEA06GA158

File No. 21514

08/13/2006

Yellow Pine, ID

Aircraft Reg No. N355EV

Time (Local): 17:10 MDT

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

Findings

1. TERRAIN CONDITION - MOUNTAINOUS/HILLY
 2. OBJECT - TREE(S)
 3. (C) LOW ALTITUDE FLIGHT/MANEUVER - INTENTIONAL - PILOT IN COMMAND
 4. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
 5. TERRAIN CONDITION - ROADWAY/HIGHWAY
-

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.

The pilot's intentional low altitude flight and his failure to maintain an adequate altitude to clear the trees.