



National Transportation Safety Board Aviation Accident Data Summary

Location:	Monticello, UT	Accident Number:	DEN03LA020
Date & Time:	12/02/2002, 1125 MST	Registration:	N20840
Aircraft:	Aerospatiale AS-350BA	Injuries:	1 Minor
Flight Conducted Under:	Part 133: Rotorcraft Ext. Load		

Analysis

According to the pilot, he had moved approximately 80 bags of seismic sensor cable earlier that morning with no problems. At approximately 1120, the pilot stopped operations to change lines. He proceeded to pick up five bags and was en route to the drop off point. During the approach to the north, the pilot "noticed that the Nr (rotor rpm) was high at roughly 400 rpm as [he] turned to the west." As the pilot slowed down, he added collective to reduce the rotor speed. The rotor rpm began to slow, at which point the pilot lowered the collective and applied forward cyclic to maintain forward airspeed. The rotor speed continued to decrease and the "low rotor speed warning horn" sounded. The pilot lowered the collective and flared, at which point the bags contacted the ground. The pilot then "noticed that the Nr was low" at approximately 320 rpm. The pilot "zeroed the airspeed, pumped the collective once[,] trying to slow the rate of decent and pulled up on the collective," just before impacting the ground. The helicopter settled onto the load beneath it, and subsequently rolled over on its right side causing substantial damage. An examination of the helicopter revealed no anomalies.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain rotor rpm. A related factor was the presence of an object in the path during the touchdown.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH

Findings

1. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. AUTOROTATION - ATTEMPTED - PILOT IN COMMAND

Occurrence #3: ROLL OVER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. (F) OBJECT - OTHER

Pilot Information

Certificate:	Commercial	Age:	41
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	6790 hours (Total, all aircraft), 815 hours (Total, this make and model), 6590 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 52 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aerospatiale	Registration:	N20840
Model/Series:	AS-350BA	Engines:	1 Turbo Shaft
Operator:	CREW CONCEPTS INC	Engine Manufacturer:	Turbomeca
Operating Certificate(s) Held:		Engine Model/Series:	Aerial 1B
Flight Conducted Under:	Part 133: Rotorcraft Ext. Load		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BDG, 5865 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	4 knots / , 130°
Temperature:	8° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Monticello, UT (NONE)	Destination:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	37.937222, -109.327778		

Administrative Information

Investigator In Charge (IIC): James F Struhsaker

Adopted Date: 03/02/2004

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.