



National Transportation Safety Board Aviation Accident Final Report

Location:	Hamilton, MT	Accident Number:	SEA07LA114
Date & Time:	04/28/2007, 1105 MDT	Registration:	N634MA
Aircraft:	Britten-Norman BN-2A-20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

During the initial climb after takeoff, just after the aircraft passed 400 feet above ground level (agl), the pilot shut off the fuel boost pumps in preparation for the en route climb. Soon thereafter, one of the engines lost power without warning, and because he was carrying a heavy load, he immediately feathered the propeller and started looking for a place to put the aircraft down. Because there was rising terrain and scattered houses south of the airport, he had to maneuver to get to an open area. During the forced landing on the uneven terrain, one of the landing gear legs collapsed, and the aircraft impacted the terrain and slid into a power pole. A post-accident teardown inspection of the engine and the aircraft systems did not reveal any anomalies that would have resulted in the failure of the engine that lost power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of power in one engine, for undetermined reasons, soon after establishing the takeoff departure climb. Factors include rough/uneven terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: GEAR COLLAPSED
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

2. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On April 28, 2007, at 1105 mountain daylight time, a Britten-Noman BN-2A-20, N634MA, experienced a gear collapse during an engine-out forced landing about two miles south of Ravalli County Airport, Hamilton, Montana. The airline transport pilot, who was the sole occupant, received minor injuries, and the aircraft, which is operated by McCall Aviation, McCall, Idaho, sustained substantial damage. The 14 CFR Part 135 cargo flight was departing for Selway Lodge, Idaho, and was being operated in visual meteorological conditions. The aircraft was on a company VFR flight plan, and there was no report of an ELT activation.

According to the pilot, during the initial climb after takeoff, as he was passing 400 feet above ground level (agl), he shut off the fuel boost pumps in preparation for the en route climb. Soon thereafter, one of the engines quit without warning, and because he was carrying a heavy load, he immediately feathered the propeller and started looking for a place to put the aircraft down. Because there was rising terrain and scattered houses south of the airport, he had to maneuver to get to an open area. During the forced landing on the uneven terrain, one of the landing gear legs collapsed, and the aircraft impacted the terrain and then slid into a power poll.

A post-accident teardown inspection of the engine and the aircraft systems did not reveal any anomalies that would have resulted in the failure of the engine that lost power.

Pilot Information

Certificate:	Airline Transport	Age:	61, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	03/01/2007
Occupational Pilot:		Last Flight Review or Equivalent:	08/01/2006
Flight Time:	13000 hours (Total, all aircraft), 2750 hours (Total, this make and model), 12500 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Britten-Norman	Registration:	N634MA
Model/Series:	BN-2A-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	464
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	03/01/2007, Continuous Airworthiness	Certified Max Gross Wt.:	6560 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	16257 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-K1B5
Registered Owner:	Wilderness Aircraft, LLC	Rated Power:	300 hp
Operator:	McCall Aviation	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:	McCall Air	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	16° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hamilton, MT (6S5)	Type of Flight Plan Filed:	Company VFR
Destination:	Selway Lodge, ID	Type of Clearance:	None
Departure Time:	MDT	Type of Airspace:	

Airport Information

Airport:	Ravalli County Airport (6S5)	Runway Surface Type:	
Airport Elevation:	3642 ft	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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
Total Injuries:	1 Minor	Latitude, Longitude:	46.255556, -114.123611

Administrative Information

Investigator In Charge (IIC):	Orrin K Anderson	Adopted Date:	12/20/2007
Additional Participating Persons:	Gerry Byrd; Helena FSDO		
Publish Date:			
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.ntsbt.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.