



National Transportation Safety Board Aviation Accident Data Summary

Location:	Burnsville, NC	Accident Number:	ERA10CA343
Date & Time:	07/02/2010, 1310 EDT	Registration:	N220WJ
Aircraft:	CIRRUS DESIGN CORP SR22	Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that he was low on the final approach to runway 32 at the mountaintop airport, but thought he could "make the numbers." The airplane encountered a downdraft, and the pilot wasn't able to compensate for it. The airplane impacted terrain about 3 feet short of the runway, bounced, then veered off the right side of the runway and struck an embankment, resulting in substantial damage to the right wing and fuselage. The pilot also stated that there was a 7-knot tailwind "from the right," and that the density altitude was about 6,300 feet at the time of the accident. The flight was the pilot's seventh arrival into the airport, and his first time landing there with a tailwind. There were no preaccident mechanical anomalies noted with the airplane, which "was performing great." According to the airport's pilot manual, runway 32 was the preferred landing runway due to its upslope and fewer obstructions at the arrival end. There was no displaced threshold, and the terrain rose sharply to the approach end of the runway. A visual glideslope indicator was located to the left of the runway. The pilot's manual also advised, "consider flying a steeper approach to compensate for the 'burble' downdraft typically present at the end of the runway," and noted that the hills on either side and the runway's upslope "will combine to produce the optical illusion of being too steep an approach path." The manual further stated, "consider carefully the effects of density altitude on the performance of your aircraft," as well as, "many pilots will not consider landing with SSE winds, and will simply divert" to another airport.

Flight Events

Landing-flare/touchdown - Landing area undershoot
Landing-flare/touchdown - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The pilot's failure to maintain a proper visual glideslope during final approach.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Descent/approach/glide path-Not attained/maintained - C
Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C
Environmental issues-Conditions/weather/phenomena-Wind-Tailwind-Effect on operation
Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-High density altitude-Effect on operation

Pilot Information

Certificate:	Private	Age:	55
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	393 hours (Total, all aircraft), 207 hours (Total, this make and model), 330 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CIRRUS DESIGN CORP	Registration:	N220WJ
Model/Series:	SR22	Engines:	1 Reciprocating
Operator:	XT APPLICATIONS LLC	Engine Manufacturer:	CONT MOTOR
Air Carrier Operating Certificate:	None	Engine Model/Series:	IO-550 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KAVL, 2165 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Broken / 4000 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	Light and Variable, Variable
Temperature:	22° C / 12° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Manassas, VA (KHEF)	Destination:	BURNSVILLE, NC (2NC0)

Airport Information

Airport:	Mountain Air Airport (2NC0)	Runway Surface Type:	Asphalt
Runway Used:	32	Runway Surface Condition:	Dry
Runway Length/Width:	2900 ft / 50 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Shawn Etcher	Adopted Date:	12/20/2010
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=76513		

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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.

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