



National Transportation Safety Board Aviation Accident Data Summary

Location:	PAUL, ID	Accident Number:	SEA99LA079
Date & Time:	06/01/1999, 1200 MDT	Registration:	N1665S
Aircraft:	Snow S2C	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that after the airplane lifted off, it was not flying as well as it had on the previous six flights that morning. The pilot immediately opened the emergency dump which also controls the rate of application. The pilot reported that as he flipped the metal tab out of the way of the dump handle, the tab would not flip clear of the handle because of interference with the seat frame. The pilot was aware of this problem, however, he stated that he could hold the stop up with one finger and force the handle around the stop. The airplane continued to fly in ground effect as the pilot continued to try to dump the load. About one mile off the end of the airstrip, the airplane collided with a slight rise in the terrain. The pilot stated that he thought that he could have cleared the rise if he could have dumped the load more quickly. The type certificate data sheet for this aircraft indicates a gross weight of 4,400 pounds. The pilot reported that he was not aware of the requirement, and had not demonstrated the maximum set gross weight for the conditions to the FAA per Part 137 certification. The pilot reported that he estimated the weight of the load based on visual volume that had been previously weighed (approximately 1,000 to 1,100 pounds). The density altitude was estimated and determined to be approximately 5,684 feet at the time of the accident which utilized the pilot's estimated temperature. The weather reporting facility closest to the accident site reported a temperature 10 degrees warmer than the pilot's estimate. Utilizing the weather reporting facility, the density altitude would have been about 6,277 feet.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inaccurate weight and balance calculations, and his delay in jettisoning the load which resulted in his failure to clear rising terrain. Contributing to the accident was the high density altitude, and the pilot's intentional operation with known deficiencies in equipment.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF

Findings

1. (C) AIRCRAFT WEIGHT AND BALANCE - INACCURATE - PILOT IN COMMAND
2. (C) LOAD JETTISON - DELAYED - PILOT IN COMMAND
3. (C) ALTITUDE - INADEQUATE - PILOT IN COMMAND
4. TERRAIN CONDITION - RISING
5. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND
6. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE

Pilot Information

Certificate:	Commercial	Age:	50
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	456 hours (Total, all aircraft), 20 hours (Total, this make and model), 384 hours (Pilot In Command, all aircraft), 83 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Snow	Registration:	N1665S
Model/Series:	S2C S2C	Engines:	1 Reciprocating
Operator:	SPAULDING AERIAL APPLICATION	Engine Manufacturer:	P&W
Operating Certificate(s) Held:		Engine Model/Series:	R-985
Flight Conducted Under:	Part 137: Agricultural		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Weather Information Source:	Pilot
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	4 knots / , 270°
Temperature:	17° C	Visibility:	15 Miles
Precipitation and Obscuration:			
Departure Point:		Destination:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	DEBRA J ECKROTE	Adopted Date:	08/03/2000
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/ .		

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