



National Transportation Safety Board Aviation Accident Data Summary

Location:	Loa, UT	Accident Number:	SEA07GA142
Date & Time:	06/01/2007, 0825 MDT	Registration:	N9602R
Aircraft:	Christen Industries A-1	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Public Aircraft - Federal		

Analysis

The pilot and gunner were participating in a low-level, aerial predatory control operation. They were operating over terrain that was approximately 8,300 feet above mean sea level. While maneuvering in a turn at slow airspeed to make an additional pass over an area with coyotes, the airplane impacted the ground with the right wing tip, and then came to rest inverted. A witness, who was working with the pilot from the ground, was in a drainage wash while the airplane circled overhead. They had just identified a coyote den and there were coyotes traversing up and down the wash. The airplane went out of the witness's view, and then the witness heard the impact of the airplane with the ground. No evidence of any preimpact mechanical anomalies was discovered. Weight and balance calculations showed that the airplane was out of its aft center of gravity limits by 1.6 inches, which would result in less stable flight characteristics, especially during slow flight. Previous accidents involving similar flight regimes have been associated with wake vortices encounters. Although it is possible that the airplane encountered its own wake vortices, this could not be determined with the available evidence. Based on standard atmospheric conditions and the temperatures at the closest reporting stations, the density altitude would have been about 10,000 feet.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain an adequate airspeed during low altitude maneuvering flight that resulted in a stall. The pilot's decision to operate the airplane at a center of gravity beyond the rear limit, the low altitude of the flight, and the high density altitude were contributing factors.

Findings

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

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
 2. (F) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
 3. (F) LOW ALTITUDE FLIGHT/MANEUVER - ATTEMPTED - PILOT IN COMMAND
 4. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
 5. (C) STALL/MUSH - ENCOUNTERED - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - GROUND

Pilot Information

Certificate:	Commercial	Age:	32
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	2261 hours (Total, all aircraft), 2081 hours (Pilot In Command, all aircraft), 195 hours (Last 90 days, all aircraft), 76 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Christen Industries	Registration:	N9602R
Model/Series:	A-1	Engines:	1 Reciprocating
Operator:	United States Department of Agriculture	Engine Manufacturer:	Textron Lycoming
Operating Certificate(s) Held:	None	Engine Model/Series:	O-360-C1G
Flight Conducted Under:	Part 91: General Aviation - Public Aircraft - Federal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KMLF, 5039 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	3 knots / , 230°
Temperature:	18° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Richfield Muni, UT (RIF)	Destination:	Loa, UT

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	38.396667, -111.820833		

Administrative Information

Investigator In Charge (IIC): Kristi Dunks

Adopted Date: 04/30/2008

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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