



Aviation Investigation Final Report

Location:	Boise, Idaho	Accident Number:	SEA05LA014
Date & Time:	November 9, 2004, 04:20 Local	Registration:	N162WA
Aircraft:	Swearingen SA226TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

During a night instrument landing system (ILS) approach to minimums, the airplane collided with the runways approach lighting system. In a written report the pilot stated that during the transition from instruments to visual references he "apparently went below the glide slope and took out two approach lights." The weather conditions recorded 16 minutes after the time of the accident were: visibility 1/4 statute mile in fog; scattered clouds at 100 feet AGL (above ground level); overcast skies at 600 feet AGL. The published decision height/altitude for the straight-in ILS runway 10R approach at Boise is 3,036 feet above mean sea level (200 feet AGL). The published minimum visibility for a straight-in ILS approach is 1/2 mile or an RVR of 1,800 feet.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain the required glidepath, and his failure to maintain obstacle clearance after visual contact with the runway during the instrument approach.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (C) PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On November 9, 2004, about 0420 mountain standard time, a Swearingen SA226TC, N162WA, sustained substantial damage after colliding with the runway 10R approach lighting system at the Boise Air Terminal (Gowen Field), Boise, Idaho. The airplane is registered to Western Airlines LC of Boise, Idaho, and was being operated by Western Air Express as a domestic non-scheduled cargo flight under the provisions of Title 14 CFR Part 135, when the accident occurred. The commercial pilot, the sole occupant of the airplane, was not injured. Instrument meteorological conditions were reported at Boise at 0353 and 0436. The flight originated at Salt Lake City, Utah, (SLC) on an instrument flight rules (IFR) flight plan at 0310. The pilot's flight planned destination was Boise, with Twin Falls, Idaho, as an alternate.

In a written statement the pilot reported that while holding at the outer marker, the Boise tower advised him that the runway visual range (RVR) was 1800 and cleared him for the approach. The pilot stated that he "...picked up the glide slope, lowered the landing gear, and continued on normal descent. At approximately 250 AGL I picked up the glow of the rabbit, at 200 feet (3,036' [feet] on the altimeter) I looked outside and could see the rabbit and approach lights. I then continued to 100' [feet] where I could see the runway and continued to a normal landing. During my transition from instruments to visual at 2,936' [feet] I apparently went below the glide slope and took out two approach lights."

The 0436 Boise SPECI METAR observation reported weather conditions, in part, as: visibility 1/4 statute mile in fog; scattered clouds at 100 feet AGL (above ground level); overcast skies at 600 feet AGL.

The published decision height/altitude for the straight-in ILS runway 10R approach at Boise is 3,036 feet above mean sea level (200 feet AGL). The published minimum visibility for a straight-in ILS approach is 1/2 mile or an RVR of 1,800 feet.

Pilot Information

Certificate:	Commercial	Age:	63, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 1, 2003
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 1, 2004
Flight Time:	25000 hours (Total, all aircraft), 5000 hours (Total, this make and model), 25000 hours (Pilot In Command, all aircraft), 132 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Swearingen	Registration:	N162WA
Model/Series:	SA226TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TL-418
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	AAIP	Certified Max Gross Wt.:	13230 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:		Engine Manufacturer:	Garrett
ELT:	Installed, not activated	Engine Model/Series:	TPE-331
Registered Owner:	Western Airlines	Rated Power:	840 Horsepower
Operator:	Transportation Systems Inc	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Western Airlines	Operator Designator Code:	QTVA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	BOI,2871 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	04:36 Local	Direction from Accident Site:	280°
Lowest Cloud Condition:	Scattered / 100 ft AGL	Visibility	0.25 miles
Lowest Ceiling:	Overcast / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	0 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	2°C / 2°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	SALT LAKE CITY, UT (SLC)	Type of Flight Plan Filed:	IFR
Destination:	Boise , ID (BOI)	Type of Clearance:	IFR
Departure Time:	03:10 Local	Type of Airspace:	

Airport Information

Airport:	BOISE AIR TERMINAL /GOWEN FLD/ BOI	Runway Surface Type:	Asphalt
Airport Elevation:	2871 ft msl	Runway Surface Condition:	Unknown
Runway Used:	10R	IFR Approach:	ILS
Runway Length/Width:	9763 ft / 150 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	43.564445,-116.222778

Administrative Information

Investigator In Charge (IIC):	Hogenson, Dennis
Additional Participating Persons:	Brent Morrow ; FAA FSDO; Boise , ID
Original Publish Date:	September 13, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=60520

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).