



Aviation Investigation Final Report

Location:	LAS CRUCES, New Mexico	Accident Number:	DEN00LA068
Date & Time:	March 24, 2000, 10:30 Local	Registration:	N442C
Aircraft:	Stinson 108-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot said that shortly after he took off from runway 26, he felt the engine was not developing enough power, so he made a 180 degree turn and landed on runway 8 with an estimated tailwind velocity of 5 knots. He said he failed to maintain directional control and the airplane skidded to the left and off the runway, bending the right rear spar. The engine was later disassembled and examined. The no. 6 intake valve was found burnt and was not seating properly. The mechanic told the pilot this condition would account for the loss of power.

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 directional control, resulting in an inadvertent ground loop/swerve. Factors were a burnt and unseated intake valve, and the tail wind.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND
2. (F) ENGINE ASSEMBLY, VALVE, INTAKE - BURNED
3. (F) ENGINE ASSEMBLY, VALVE, INTAKE - OPEN
4. (F) WEATHER CONDITION - TAILWIND
5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

6. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Factual Information

On March 24, 2000, approximately 1030 mountain standard time, a [Universal] Stinson 108-2, N442C, registered to and operated by the pilot, was substantially damaged when it collided with terrain during a precautionary landing at Las Cruces International Airport, Las Cruces, New Mexico. The private pilot and three passengers were not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the personal flight being operated under Title 14 CFR Part 91. The flight had just originated.

The pilot said that shortly after he took off from runway 26, he felt the engine was not developing enough power, so he made a 180 degree turn and landed on runway 8 with an estimated tailwind velocity of 5 knots. "[During] rollout, I failed to maintain directional control and, as a result, the airplane skidded to the left," he wrote. "When I departed the asphalt, the right wheel dug in to soft soil and tipped the left wing up and the right wing down, which bent the rear spar."

The engine was later disassembled and examined. The no. 6 intake valve was found burnt and was not seating properly. The mechanic told the pilot this condition would account for the loss of power.

Pilot Information

Certificate:	Private	Age:	67, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 16, 1998
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	683 hours (Total, all aircraft), 638 hours (Total, this make and model), 646 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N442C
Model/Series:	108-2 108-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-3442
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	March 27, 1999 Annual	Certified Max Gross Wt.:	2230 lbs
Time Since Last Inspection:	79 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2231 Hrs	Engine Manufacturer:	Franklin
ELT:	Installed, not activated	Engine Model/Series:	6A4-165-B3
Registered Owner:	PAUL E. JOHNSON	Rated Power:	165 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(LRU)	Type of Flight Plan Filed:	None
Destination:	(LRU)	Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	LAS CRUCES INTERNATIONAL LRU	Runway Surface Type:	Asphalt
Airport Elevation:	4456 ft msl	Runway Surface Condition:	Dry
Runway Used:	8	IFR Approach:	None
Runway Length/Width:	6073 ft / 100 ft	VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	32.260143,-106.820175(est)

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	RANDALL W ROUNDTREE; ALBUQUERQUE , NM
Original Publish Date:	December 4, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=48882

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](#).