Aviation Investigation Final Report

Location:	HAILEY, Idaho	**Accident Number:**	SEA97LA081
Date & Time:	March 20, 1997, 07:16 Local	**Registration:**	N123CD
Aircraft:	North American NA-265-40	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot reported that during the landing roll, the thrust reversers were deployed, and the airplane began to slowly veer to the left. The pilot applied rudder control to correct the situation; however, the airplane continued to the left. The pilot stated that he then applied hard right braking action. When the airplane slowed to below 60 knots, the pilot centered the rudder and tried twice to engage the nosewheel steering and then the standby steering system. Neither system seemed to engage, and the airplane continued off the side of the runway and collided with a runway marker and a snowbank. The nose gear collapsed, and the airplane came to rest off the runway. Postaccident investigation of the electrical system revealed a short to the command potentiometer, which affected the primary and standby nosewheel steering systems.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an electrical short in the electrical system, which resulted in a malfunction of the nosewheel steering system and loss of directional control.

Findings

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

Findings
1. (C) ELECTRICAL SYSTEM - SHORTED
2. (C) LANDING GEAR,STEERING SYSTEM - MALFUNCTION
3. DIRECTIONAL CONTROL - NOT MAINTAINED

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

Findings
4. TERRAIN CONDITION - SNOWBANK

Factual Information

On March 20, 1997, at 0716 mountain standard time, the pilot of a North American NA-265-40, N123CD, operated by Southwest Jet as a 14 CFR Part 91 business flight, was unable to maintain directional control of the airplane during the landing roll at the Friedman Memorial airport, Hailey, Idaho. The airplane swerved to the left and collided with a snowbank off the side of the runway. Visual meteorological conditions prevailed at the time and an instrument flight rules flight plan was filed. The airplane was substantially damaged; both airline transport pilots and their one passenger were not injured. The flight had originated from Kansas City, MO, about two hours and thirty minutes before the accident.

In a written statement, the pilot-in-command reported that the approach for landing was normal. The airplane touched down approximately 1,000 feet down the runway on the centerline. The pilot stated that during the landing roll, the thrust reversers were deployed and the airplane began to slowly veer to the left. The pilot applied right rudder control and right braking action, however, the airplane continued to the left. The pilot applied "hard" right braking action which had no effect. The pilot stated that he re-stowed the thrust reversers and continued to apply right braking action which seemed to have some affect. The speed had decreased to 60 knots at this time and the pilot centered the rudder and tried two times to engage the nosewheel steering. The nosewheel steering would not engage, so the pilot selected standby steering, it did not automatically "fall down" like it should, and the airplane continued to travel off the side of the runway, colliding with a runway marker and subsequently a snowbank. The nose gear collapsed and the airplane came to rest off the west side of the runway.

Inspection of the nose wheel steering system identified a short in the wiring to the command potentiometer, which affected the primary and standby nose wheel steering systems.

The National Transportation Safety Board was not notified of the structural damage to the airplane until March 31, 1997.

Pilot Information

Certificate:	Airline transport; Commercial	**Age:**	43,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:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	November 8, 1996
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	6000 hours (Total, all aircraft), 126 hours (Total, this make and model), 5600 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 34 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	North American	**Registration:**	N123CD
Model/Series:	NA-265-40 NA-265-40	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal; Transport	**Serial Number:**	282-23
Landing Gear Type:	Retractable - Tricycle	**Seats:**	9
Date/Type of Last Inspection:	February 16, 1995 Continuous airworthiness	**Certified Max Gross Wt.:**	19035 lbs
Time Since Last Inspection:	76 Hrs	**Engines:**	2 Turbo jet
Airframe Total Time:	8393 Hrs	**Engine Manufacturer:**	P&W
ELT:	Not installed	**Engine Model/Series:**	JT12A-8
Registered Owner:	M.E. CAPITOL CORP	**Rated Power:**	3300 Lbs thrust
Operator:	SOUTHWEST JET	**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:	SUN ,5315 ft msl	**Distance from Accident Site:**	
Observation Time:	06:55 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Unknown	**Visibility**	30 miles
Lowest Ceiling:	Broken / 9000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	340°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	-2°C / -9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KANSAS CITY , MO (GVW)	**Type of Flight Plan Filed:**	IFR
Destination:		**Type of Clearance:**	IFR
Departure Time:	05:40 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	FRIEDMAN MEMORIAL SUN	**Runway Surface Type:**	Asphalt
Airport Elevation:	5315 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	31	**IFR Approach:**	None
Runway Length/Width:	6602 ft / 100 ft	**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	43.570129,-114.210609(est)

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	RUSS GRAVES; BOISE , ID JOHN J MECALO; ST. LOUIS , MO
Original Publish Date:	May 29, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42579