



Aviation Investigation Final Report

Location:	SIoux FALLS, South Dakota	Accident Number:	DEN88LA094
Date & Time:	April 9, 1988, 12:15 Local	Registration:	N33SV
Aircraft:	AGUSTA A109A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial	Age:	44, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 10, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13615 hours (Total, all aircraft), 120 hours (Total, this make and model), 13150 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AGUSTA	Registration:	N33SV
Model/Series:	A109A A109A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7154
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 20, 1987 Annual	Certified Max Gross Wt.:	9800 lbs
Time Since Last Inspection:	5 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	2303 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C20B
Registered Owner:	ICON GROUP INC.	Rated Power:	420 Horsepower
Operator:	ROCKY MOUNTAIN HELICOPTERS	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	DYNA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FSD	Distance from Accident Site:	
Observation Time:	12:38 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	23 knots / 35 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	8°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SIOUX FALLS , SD (1SD9)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:10 Local	Type of Airspace:	Class D

Airport Information

Airport:	JOE FOSS FIELD FSD	Runway Surface Type:	Asphalt
Airport Elevation:	1429 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Collins, Robert
Additional Participating Persons:	LYLE W ERIKSON; RAPID CITY , SD JOHN TORVIK; SIOUX FALLS , SD
Original Publish Date:	February 28, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=17463

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](#).