



Aviation Investigation Final Report

Location:	ENGLEWOOD, Colorado	Accident Number:	DEN90LA056
Date & Time:	February 12, 1990, 17:30 Local	Registration:	N409EX
Aircraft:	CESSNA 404	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT REPORTED THE NOSE GEAR COLLAPSED DURING TAKEOFF GROUND RUN AT 85 KNOTS. THE AIRPLANE SKIDDED 2,500 FEET ON RUNWAY 17L, BEFORE COMING TO REST ON THE ASPHALT RUNWAY. A POST-ACCIDENT INVESTIGATION FAILED TO REVEAL ANY EVIDENCE TO EXPLAIN THE REPORTED NOSE GEAR COLLAPSE. REPEATED GEAR RETRACTION AND EXTENSION TESTS FAILED TO DUPLICATE THE MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE COLLAPSE OF THE NOSE GEAR ASSEMBLY FOR UNDETERMINED REASONS.

Findings

Occurrence #1: NOSE GEAR COLLAPSED
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

- 1. (C) LANDING GEAR, NOSE GEAR - UNDETERMINED
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Occurrence #2: NOSE DOWN
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

2. TERRAIN CONDITION - RUNWAY

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial	Age:	35, 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 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	February 16, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3680 hours (Total, all aircraft), 1932 hours (Total, this make and model), 2808 hours (Pilot In Command, all aircraft), 195 hours (Last 90 days, all aircraft), 58 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N409EX
Model/Series:	404 404	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	C404-00436
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	February 12, 1990 Continuous airworthiness	Certified Max Gross Wt.:	8400 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	6560 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	GTSIO-520-M
Registered Owner:	CASPER AIR SERVICE	Rated Power:	375 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	9°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(APA)	Type of Flight Plan Filed:	IFR
Destination:	RIFLE , CO (RIL)	Type of Clearance:	IFR
Departure Time:	17:30 Local	Type of Airspace:	TRSA

Airport Information

Airport:	CENTENNIAL APA	Runway Surface Type:	Asphalt
Airport Elevation:	5583 ft msl	Runway Surface Condition:	Dry
Runway Used:	17L	IFR Approach:	None
Runway Length/Width:	10000 ft / 101 ft	VFR Approach/Landing:	None

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:	39.579204,-104.859046(est)

Administrative Information

Investigator In Charge (IIC):	Collins, Robert
Additional Participating Persons:	DEL GREGG; DENVER , CO
Original Publish Date:	September 10, 1992
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=17891

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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](#).