



Aviation Investigation Final Report

Location:	BURLINGTON, Colorado	Accident Number:	DEN83LA167
Date & Time:	July 16, 1983, 11:30 Local	Registration:	N1584M
Aircraft:	CESSNA 188A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE ACFT STALLED INTO THE GROUND AFTER A DIVE AND ACCELERATED PULL-UP DURING AERIAL APPLICATION. THE PILOT STATED THAT HE WAS DOING THE STEEP PULL-UPS AND DIVES BECAUSE OF PROXIMITY TO THE CITY OF BURLINGTON CO. HE SAID THE ACFT WAS JUST ABOUT EMPTY OF GAS AND CHEMICAL SPRAY AS HE MADE THE CLEANUP PASS WHEN THE ACCIDENT HAPPENED. HE DOVE FROM ABOUT 300 FT AT A 60-70 DEGREE DIVE TO WITHIN 50 FT OF THE GROUND BEFORE BEGINNING TO FLARE. HE ESTIMATED THE IAS AT 105 KTS WHEN HE STARTED THE FLARE. DURING THE FLARE THE ACFT SHUDDERED. HE STATED THAT DURING THE PULL-UP WING OVER TURN AROUND MANEUVER THE ACFT NEVER SHUDDERED AND THE STALL WARNING DID NOT SOUND. WHEN THE ACFT SHUDDERED DURING THE PULL-OUT OF THE DIVE THE PILOT SAID HE RELEASED BACK PRESSURE FOR A SECOND AND THE ACFT IMPACTED THE GROUND IN A 3 POINT ATTITUDE. THE ACFT PANCAKED HARD AND SLID 75 YARDS. THE LANDING GEAR COLLAPSED ON IMPACT. THE GROUND ELEVATION AT THE ACCIDENT SITE IS ABOUT 4178 FT. THE DENSITY ALT WAS FIGURED TO BE 7500 FT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (F) PROCEDURES/DIRECTIVES - IMPROPER - PILOT IN COMMAND
3. (C) PROPER DESCENT RATE - EXCESSIVE - PILOT IN COMMAND
4. (C) FLARE - NOT POSSIBLE - PILOT IN COMMAND
5. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

6. LANDING GEAR,MAIN GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Commercial	Age:	33, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 22, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3200 hours (Total, all aircraft), 70 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1584M
Model/Series:	188A 188A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18800684
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 4, 1983 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2270 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520
Registered Owner:	RONALD F. SEELHOFF	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	
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	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	35°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:		Runway Surface Condition:	Rough;Vegetation
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

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:	39.29911,-102.27024(est)

Administrative Information

Investigator In Charge (IIC): Winningham, Fred

**Additional Participating
Persons:**

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=16117>

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](#).