

# **Aviation Investigation Final Report**

Location:	ESTERBROOK, Wyon	ning	Accident Number:	SEA95LA147
Date & Time:	July 11, 1995, 10:30	Local	Registration:	N70062
Aircraft:	CESSNA	A188B	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultura	I		

#### **Analysis**

THE PILOT ATTEMPTED A LANDING NEXT TO A SHORT DIRT FARM ROAD FOLLOWING AN AGRICULTURAL AERIAL APPLICATION FLIGHT. HIGH DENSITY ALTITUDE CONDITIONS EXISTED IN THE LANDING AREA. THE PILOT LANDED BEYOND THE PROPER TOUCHDOWN POINT WITH EXCESSIVE AIRSPEED AND WAS UNABLE TO STOP THE AIRPLANE IN THE DISTANCE AVAILABLE BEYOND HIS ACTUAL TOUCHDOWN POINT. HE ATTEMPTED A GO-AROUND TOO LATE TO RECOVER FROM THE SITUATION AND OVERRAN THE LANDING SURFACE.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO ATTAIN THE PROPER TOUCHDOWN POINT AND AIRSPEED FOR LANDING. CONTRIBUTING TO THE ACCIDENT WERE HIGH DENSITY ALTITUDE, THE SHORT LANDING AREA, AND THE PILOT'S FAILURE TO INITIATE A GO-AROUND IN TIME TO ALLOW RECOVERY FROM THE SITUATION.

#### **Findings**

Occurrence #1: OVERRUN Phase of Operation: LANDING - ABORTED

Findings 1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE

- 2. (C) PROPER TOUCHDOWN POINT NOT ATTAINED PILOT IN COMMAND 3. (C) AIRSPEED EXCESSIVE PILOT IN COMMAND
- 4. (F) TERRAIN CONDITION SHORT RUNWAY/LANDING AREA
- 5. (F) GO-AROUND DELAYED PILOT IN COMMAND

### **Factual Information**

On July 11, 1995, approximately 1030 Mountain daylight time (MDT), a Cessna A188B, N70062, received substantial damage in a landing overrun 6 miles north of Esterbrook, WY. The commercial pilot/owner of the single-seat agricultural aircraft was not injured. The flight was an agricultural aerial application flight conducted under 14 CFR 137 originating from Glendo, WY. A company visual flight rules flight plan had been filed for the flight. The nearest weather observation facility, Casper, WY, reported visual meterological conditions with calm winds.

The pilot stated to the FAA on-scene investigator that he landed on grass next to a dirt farm road. According to the pilot's accident report, the landing attempt was made on a heading of approximately 120 degrees magnetic and "basically into the wind." The pilot reported to the FAA investigator that his landing was long and fast, touching down approximately halfway down the available landing area. The FAA investigator assessed the available stopping distance from the actual touchdown point as approximately 600 feet. The pilot stated that he made a delayed decision to attempt a go-around, but before regaining flying speed, the airplane ran off the end of the intended landing area, struck an irrigation ditch where the airplane's right main gear was knocked off, and came to rest in a field.

Data in the airplane flight manual indicates that at 5,000 feet and 41 degrees Fahrenheit, a 2,300 pound airplane requires 559 feet to stop on dry grass with zero wind, 20 degrees of flaps and heavy braking. A 3,300 pound airplane requires 754 feet on dry grass under the same conditions. The flight manual does not list landing distances for elevations greater than 5,000 feet. Density altitude at Casper (elevation 5,348 above sea level, 57 nautical miles to the northwest), based on their surface observation at the time, was 7,532 feet. Terrain in the accident area, according to the Cheyenne sectional aeronautical chart, is generally about 5,500 feet above sea level.

#### **Pilot Information**

Certificate:	Commercial	Age:	30,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
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 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	May 22, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3600 hours (Total, all aircraft), 1000 hours (Total, this make and model), 3100 hours (Pilot In Command, all aircraft), 81 hours (Last 90 days, all aircraft), 81 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

# Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N70062
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801826
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 29, 1995 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	68 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4193 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D23
Registered Owner:	SHEPARD, ROBERT B.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	PV8G

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CPR ,5348 ft msl	Distance from Accident Site:	57 Nautical Miles
observation racinty, Lievation.	611(,35461(113)	Distance from Accident Site.	37 Nautical Miles
Observation Time:	09:50 Local	Direction from Accident Site:	290°
Lowest Cloud Condition:	Scattered / 12000 ft AGL	Visibility	50 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:	25°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	GLENDO , WY (76V )	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

# **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

# 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:	42.75082,-105.389663(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Nesemeier, Gregg	
Additional Participating Persons:	JIM HERZFELD; CASPER , WY	
Original Publish Date:	October 13, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42189	

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 <u>here</u>.