



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	BURLINGTON, CO	<b>Accident Number:</b>	DEN83LA212
<b>Date &amp; Time:</b>	09/10/1983, 0525 MDT	<b>Registration:</b>	N400AM
<b>Aircraft:</b>	BEECH B90	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

DURING ARRIVAL, THE PLT CHECKED THE LIGHTED WIND SOCK & ESTIMATED THAT THE WIND WAS FROM 020 DEG AT 10 KTS. HE ELECTED NOT TO LAND ON RWY 31 SINCE THERE WERE OBSTACLES NEAR THE APCH END. HE STATED THAT WHEN THE ACFT WAS ABOUT TO TOUCH DOWN ON RWY 13, THERE WAS A BIG GUST OF WIND WHICH MADE THE ACFT LAND LONG. AS THE ACFT LANDED. THE PLT SELECTED MAX REVERSE, BUT GOT NO RESPONSE. HE DECIDE HE COULD NOT MAKE A SUCCESSFUL GO-AROUND SO HE APPLIED MAX BRAKING, BUT WAS UNABLE TO STOP ON THE REMAINING RWY. SUBSEQUENTLY, THE ACFT DEPARTED THE RWY, WENT THRU A FENCE, CROSSED A ROAD, HIT A POLE & THEN THE GEAR COLLAPSED AS IT WENT OVER RAILROAD TRACKS. A WITNESS ESTIMATED THAT AT ABOUT THE TIME THE ACFT WAS LANDING, THE WIND SHIFTED TO THE NORTH & INCREASED TO ABOUT 35 TO 40 MPH. REPORTEDLY, THE FINAL APCH SPEED WAS ABOUT 13 KTS TOO FAST. SKID MARKS WERE FOUND ON THE RWY, STARTING ABOUT 2000 FT FROM THE APCH END. WITH A 35 KT TAIL WIND, LANDING ROLL WITHOUT REVERSE THRUST WOULD HAVE BEEN 3015 FT. NO MALFUNCTIONS FOUND, BUT IT WAS NOTED THAT REVERSE SYS WAS INOP ABOVE 90 KTS.

## Probable Cause and Findings

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

## Findings

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Occurrence #1: OVERRUN

Phase of Operation: LANDING - ROLL

### Findings

1. (F) LIGHT CONDITION - DARK NIGHT
2. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
3. (F) WEATHER CONDITION - UNFAVORABLE WIND
4. (F) WEATHER CONDITION - TAILWIND
5. (F) WEATHER CONDITION - GUSTS
6. (C) DISTANCE - MISJUDGED - PILOT IN COMMAND
7. (C) AIRSPEED - MISJUDGED - PILOT IN COMMAND
8. (C) GO-AROUND - NOT PERFORMED - PILOT IN COMMAND
9. THRUST REVERSER - INOPERATIVE
10. (F) AIRSPEED - EXCESSIVE - PILOT IN COMMAND
11. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
12. ABORTED LANDING - NOT POSSIBLE - PILOT IN COMMAND

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Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

### Findings

13. (F) OBJECT - FENCE
14. (F) OBJECT - UTILITY POLE

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Occurrence #3: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

### Findings

15. (F) TERRAIN CONDITION - ROUGH/UNEVEN
16. LANDING GEAR - OVERLOAD

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	26, Male
<b>Airplane Rating(s):</b>	Multi-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	06/17/1983
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3030 hours (Total, all aircraft), 1200 hours (Total, this make and model), 2860 hours (Pilot In Command, all aircraft), 114 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BEECH	<b>Registration:</b>	N400AM
<b>Model/Series:</b>	B90 B90	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	LJ 354
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	09/06/1983, AAIP	<b>Certified Max Gross Wt.:</b>	9650 lbs
<b>Time Since Last Inspection:</b>	11 Hours	<b>Engines:</b>	2 Turbo Prop
<b>Airframe Total Time:</b>	10540 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, activated	<b>Engine Model/Series:</b>	PT6A-20
<b>Registered Owner:</b>	MAYO AVIATION INC.	<b>Rated Power:</b>	550 hp
<b>Operator:</b>	MAYO AVIATION INC.	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	GLD, 3654 ft msl	Distance from Accident Site:	28 Nautical Miles
Observation Time:	0450 MDT	Direction from Accident Site:	70°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	20 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18° C / 12° C
Precipitation and Obscuration:			
Departure Point:	DENVER, CO (DEN)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	0443 MDT	Type of Airspace:	Class G

## Airport Information

Airport:	BURLINGTON MUNICIPAL (3V1)	Runway Surface Type:	Asphalt
Airport Elevation:	4178 ft	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	3600 ft / 50 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	FRED WINNINGHAM	Report Date:	
Additional Participating Persons:			
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).