



National Transportation Safety Board Aviation Accident Final Report

Location:	BUFFALO, WY	Accident Number:	DEN86FA175
Date & Time:	06/27/1986, 0545 MDT	Registration:	N40443
Aircraft:	Martin Company 404	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

N40443 WAS CONTRACTED BY THE WYOMING DEPT OF AG TO SPRAY GRASSHOPPERS. INVESTIGATION REVEALED THE PLT HELD A PVT CERTIFICATE WITH AS MEL RATINGS. HIS MEDICAL CERTIFICATE WAS DENIED BECAUSE HE FAILED TO PROVIDE INFORMATION CONCERNING HIGH BLOOD PRESSURE AND ALCOHOLISM. CO-PLT HELD A COMMERCIAL CERTIFICATE WITH ASEL RATING. NO EVIDENCE WAS FOUND TO INDICATE THAT EITHER PLT HAD ANY OPERATING EXPERIENCE IN THE MARTIN 404 ACFT. FORMER EMPLOYEES OF OPERATOR STATED THAT N40443 WAS NOT WELL MAINTAINED. THE ADI SYSTEM AND INTERIOR LIGHTS WERE INOP. WEIGHT OF ACFT AT THE TIME OF ACCIDENT WAS CALCULATED TO BE 44,492 POUNDS. THE MAX GROSS TOTAL WEIGHT FOR A 'DRY' TAKEOFF FROM A 4,500 FOOT RWY WAS APPROXIMATELY 37,900 POUNDS. THE FLT MANUAL PERFORMANCE CHARTS INDICATE THAT A RWY LENGTH OF OVER 5,500 FEET WOULD BE NEEDED FOR AN ACFT AT 44,492 POUNDS. THE ACFT COLLIDED WITH A DIRT BANK DURING TAKEOFF.

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: TAKEOFF

Findings

1. (F) FLUID,ADI FLUID - INOPERATIVE
2. (F) PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
3. (F) LACK OF TOTAL EXPERIENCE IN KIND OF AIRCRAFT - PILOT IN COMMAND
4. (C) INADEQ CERTIFICATION/APPROVAL,OPERATION/OPERATOR - COMPANY/OPERATOR MGMT
5. (C) AIRCRAFT PERFORMANCE,TAKEOFF CAPABILITY - EXCEEDED
6. (C) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
7. (F) LACK OF RECENT EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
8. (F) LACK OF TOTAL EXPERIENCE - COPILOT/SECOND PILOT
9. (C) AIRSPEED(VLOF) - NOT ATTAINED - PILOT IN COMMAND
10. (C) PROPER CLIMB RATE - NOT POSSIBLE - PILOT IN COMMAND
11. (C) REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

12. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Unknown Unknown	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Martin Company	Registration:	N40443
Model/Series:	404 404	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	14228
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	4500 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R2800-CBC
Registered Owner:	FRONTIER AIRWAYS, INC.	Rated Power:	1250 hp
Operator:	FRONTIER AIRWAYS, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dawn
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	20° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	

Airport Information

Airport:	JOHNSON COUNTY (BYG)	Runway Surface Type:	Asphalt
Airport Elevation:	4951 ft	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	4500 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	3 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	3 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	GREGORY A FEITH	Report Date:	
Additional Participating Persons:	LEE AZLAKSON; MONTANA, OH		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).