



National Transportation Safety Board Aviation Accident Final Report

Location:	ALBUQUERQUE, NM	Accident Number:	FTW96TA195
Date & Time:	05/01/1996, 2140 MDT	Registration:	N773W
Aircraft:	Rockwell NA-265-80	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General Aviation - Public Aircraft		

Analysis

The captain was taking off on runway 21 with the wind from 330 degrees at 6 knots. After the airplane had attained about 120 knots and had traversed about half the 10,000 foot runway, the captain aborted the takeoff, when he heard a loud noise and felt a severe vibration. Subsequently, the airplane angled off the departure end of the runway and encountered soft terrain. It came to rest about 300 feet beyond the end of the runway with the nose landing gear collapsed. According to a tire analysis report, the left outboard tire failed in fatigue, followed by the left inboard tire, 'as the result of operation in an overdeflected condition.' The report stated, 'Over-deflection is caused by operating the tire overloaded or underinflated.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: overdeflection of the left outboard main landing gear tire, probably due to underinflation and inadequate inspection, which resulted in fatigue failure of the left outboard tire and subsequent failure of the left inboard tire.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) LANDING GEAR,TIRE - PRESSURE TOO LOW
2. (F) MAINTENANCE,INSPECTION - INADEQUATE
3. (C) LANDING GEAR,TIRE - FATIGUE
4. (C) LANDING GEAR,TIRE - FAILURE

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ABORTED

Findings

5. TERRAIN CONDITION - SOFT

Factual Information

On May 1, 1996, approximately 2140 mountain daylight time, a Rockwell International NA-265-80, N773W, owned and operated by the U.S. Department of Agriculture Forest Service Aviation, was substantially damaged when the pilot aborted takeoff at Albuquerque, New Mexico. There were no injuries to the airline transport rated captain and first officer and three passengers. Visual meteorological conditions prevailed, and a company VFR flight plan had been filed. The flight was originating at the time of the accident.

According to the operator, takeoff was initiated on runway 21 (10,000 ft x 150 ft., concrete). Approximately 90 to 100 knots, the aircraft moved to the left of the runway centerline, requiring right aileron correction. When the airplane had achieved approximately 120 knots and was about 5,000 feet down the runway, there was a loud noise followed by a severe vibration, and the airplane pulled hard to the right. The captain initiated aborted takeoff procedures by applying brakes and reverse thrust. The aircraft tracked across and departed the left side of the runway. The nose landing gear collapsed and the aircraft came to a halt 300 feet beyond the departure end of the runway.

Federal Aviation Administration inspectors reported there was evidence that the left main tires blew out at the 3,800-foot mark. At the 5,000-foot mark, the airplane went onto the right shoulder of the runway. At the 9,800-foot mark, the airplane departed the left side of the runway. In addition to the blown left tires, the right tires were found flattened. Three runway lights were also damaged.

A Sabreliner Corporation report noted that there was no evidence of failure or malfunction of the aircraft brakes or thrust reversers.

According to the Aircraft Braking Systems Corporation, all of the wheel flanges fractured in tensile overload. Although some fatigue cracking was noted in several flange segments, "there was no fractographic evidence to show that these cracks had initiated the primary fractures."

Goodyear Aviation Products reported the left outboard tire failed in fatigue, followed by the left inboard tire, "as the result of operation in an overdeflected condition." The report added, "Over-deflection is caused by operating the tire overloaded or underinflated."

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	49, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	12/11/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	6500 hours (Total, all aircraft), 250 hours (Total, this make and model), 5000 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N773W
Model/Series:	NA-265-80 NA-265-80	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	380-20
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	06/08/1995, Continuous Airworthiness	Certified Max Gross Wt.:	23300 lbs
Time Since Last Inspection:	150 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	10758 Hours	Engine Manufacturer:	GE
ELT:	Installed, not activated	Engine Model/Series:	CF700
Registered Owner:	USDA FOREST SERVICE AVIATION	Rated Power:	4500 lbs
Operator:	USDA FOREST SERVICE AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	ABQ, 5352 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2140 MDT	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:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22° C / -12° C
Precipitation and Obscuration:			
Departure Point:	(ABQ)	Type of Flight Plan Filed:	Company VFR
Destination:	SANTA FE, NM (SAF)	Type of Clearance:	None
Departure Time:	2140 MDT	Type of Airspace:	Class C

Airport Information

Airport:	ALBUQUERQUE INTERNATIONAL (ABQ)	Runway Surface Type:	Asphalt
Airport Elevation:	5352 ft	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	9000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	09/19/1996
Additional Participating Persons:	FLOYD A DOCKUM; ALBUQUERQUE, NM JAMES M MORRISON; OGDEN, UT		
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/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).