



National Transportation Safety Board Aviation Accident Final Report

Location:	TORREON, NM	Accident Number:	FTW95LA079
Date & Time:	01/01/1995, 0735 MST	Registration:	N30898
Aircraft:	CESSNA 177B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE AIRPLANE STALLED WHILE THE PRIVATE PILOT WAS ATTEMPTING A TAKEOFF FROM A DIRT AIRSTRIP WITH FROST ON ITS WING. THE AIRPLANE CLIMBED OUT OF GROUND EFFECT WITHOUT SUFFICIENT FLYING SPEED AND THE PILOT RAISED THE FLAPS PREMATURELY. THE AIRPLANE STALLED AND IMPACTED THE GROUND. THE PILOT HAD NOT SLEPT FOR OVER 24 HOURS.

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 PROPER LIFTOFF SPEED RESULTING IN AN INADVERTENT STALL AND THE FAILURE TO REMOVE FROST FROM THE WING. A FACTOR WAS FATIGUE.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF

Findings

1. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 2. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
 3. (F) FATIGUE(LACK OF SLEEP) - PILOT IN COMMAND
 4. (C) AIRSPEED(VR) - NOT ATTAINED - PILOT IN COMMAND
 5. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On January 1, 1995, at 0735 mountain standard time, a Cessna 177B, N30898, was substantially damaged during takeoff near Torreon, New Mexico. The private pilot and his passenger were not injured. Visual meteorological conditions prevailed for the cross country flight.

The enclosed Pilot/Operator report stated the following information. The pilot had been awake for "over 24 hours." The weather was good for flying, but very cold. "The dirt runway was frozen rock hard." The pilot performed a soft field takeoff in an attempt to protect his nose gear from the rough frozen dirt runway. This was done by using flaps and by rotating the front landing gear off the ground as soon as possible on the takeoff roll. The aircraft lifted into the air and the pilot continued maintaining the aircraft in this attitude above ground effect without allowing the aircraft to accelerate to flying speed. At this same moment, the pilot raised his flaps. With flaps retracting "lift was lost," and the airplane subsequently stalled, impacting the ground.

The pilot reported to the NTSB investigator-in-charge, that after the accident, he examined the upper wing surface much more closely. He discovered that there was a thin "uniform pockmark matrix" of frost over most of the wing.

Pilot Information

Certificate:	Private	Age:	44, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/22/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	464 hours (Total, all aircraft), 100 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N30898
Model/Series:	177B 177B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17701535
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1F6
Registered Owner:	MOSLEY, WILLIAM	Rated Power:	180 hp
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dawn
Observation Facility, Elevation:	4SL, 6910 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	0815 MST	Direction from Accident Site:	40°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	15°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-9° C / -12° C
Precipitation and Obscuration:			
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	FLAGSTAFF, AZ (FLG)	Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class G

Airport Information

Airport:	TORREON (E93)	Runway Surface Type:	Dirt
Airport Elevation:	6372 ft	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2386 ft / 45 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	JAMES F STRUHSAKER,	Report Date:	08/23/1995
Additional Participating Persons:	KARRY D RAY; ALBUQUERQUE, NM		
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 pubinquiry@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](#).