



Aviation Investigation Final Report

Location:	JUSTIN, Texas	Accident Number:	FTW98LA105
Date & Time:	January 23, 1998, 18:00 Local	Registration:	N377V
Aircraft:	Cessna 140A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was taking off north from a 1,500 foot grass airstrip. The non-rated passenger, who was seated in the left seat, stated that 'the tail wheel came up at the midpoint of the airstrip.' The pilot added that the airplane became airborne with a little less than 1/3 of the runway remaining. During initial climb, the main landing gear struck the top of a 4 strand barbed wire fence at the end of the airstrip. The airplane decelerated and touched down in a muddy plowed field just north of the airstrip boundary. After rolling about 40 yards, the main landing gear tires sank in the soft ground, and the airplane nosed over. In a telephone interview after the accident, the pilot added that due to recent rains, the north-south grass airstrip was 'soggy and mushy,' but he thought the airplane would have had no problem clearing the marked 4 foot tall barbed wire fence at the departure end of the airstrip.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper planning/decision and failure to ensure that the airplane would be able to remain clear of the fence during takeoff. Factors relating to the accident were: the wet/soft/short runway (and terrain) conditions.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - GRASS
3. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - WET
4. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SHORT RUNWAY/LANDING AREA
5. (F) OBJECT - FENCE
6. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: NOSE OVER

Phase of Operation: OTHER

Findings

7. (F) TERRAIN CONDITION - SOFT

Factual Information

On January 23, 1998, at 1800 central standard time, a Cessna 140A airplane, N377V, was substantially damaged following a loss of control during initial takeoff climb from an airstrip near Justin, Texas. The commercial pilot and his passenger were not injured. The airplane was owned and operated by two private individuals under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the personal flight for which no flight plan was filed. The flight originated from Denton, Texas, at 1745.

The pilot stated that after departing Denton with his passenger, they headed over to the passenger's 1,500 foot private airstrip located approximately 6 miles northeast of the Alliance Airport. After circling the airstrip and observing the winds, the pilot elected to execute the approach to the north. After an uneventful landing, the pilot taxied back to the south end of the airstrip to prepare for a takeoff to the north.

In a telephone interview conducted by the IIC, the pilot added that due to recent rains, the ground on the north-south grass airstrip was "soggy and mushy;" however, he did not think his airplane would have any problems clearing the marked 4 foot tall barbed wire fence at the departure end of the airstrip. The pilot added that the tailwheel equipped airplane had been modified by the installation of a 100 horsepower Continental O-200 series engine.

The non-rated passenger, who was seated in the left seat, stated that "the tail wheel came up at the midpoint of the airstrip." The pilot further stated that the airplane became airborne with a little less than 1/3 of the runway remaining. During initial climb, the main landing gear struck the top of the 4 strand barbed wire fence. The ensuing deceleration from the impact with the fence resulted in the airplane touching down on a muddy plowed field just north of the airstrip boundary. The pilot stated that he was initially able to keep directional and pitch control as the airplane rolled for approximately 40 yards. The main landing gear tires sank in to the soft ground until the airplane nosed over and came to rest in the inverted position. The pilot added that the winds were light and variable at the time of the accident.

Examination of the airplane by the FAA inspector revealed that the right horizontal stabilizer and engine mounts were damaged. The right wing strut and the vertical stabilizer sustained structural damage.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	29, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 8, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1400 hours (Total, all aircraft), 200 hours (Total, this make and model), 1290 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N377V
Model/Series:	140A 140A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	15367
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 26, 1997 Annual	Certified Max Gross Wt.:	1680 lbs
Time Since Last Inspection:	28 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8689 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-200-A
Registered Owner:	JARRETT C. MATHEWS	Rated Power:	100 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	RANGER DRUG, INC.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AFW ,722 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	240°
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Overcast / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	6°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DENTON , TX (DTN)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	KEN WOODALL'S PRIVATE NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	650 ft msl	Runway Surface Condition:	Wet
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	1500 ft / 60 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:	33.079246,-97.289779(est)

Administrative Information

Investigator In Charge (IIC):	Casanova, Hector
Additional Participating Persons:	CHRIS H KEYES; FORT WORTH , TX
Original Publish Date:	May 21, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=20520

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