Aviation Investigation Final Report

Location:	OKLAHOMA CITY, Oklahoma	**Accident Number:**	FTW00LA075
Date & Time:	January 26, 2000, 11:00 Local	**Registration:**	N7VS
Aircraft:	Cessna 414	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 Minor
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The pilot reported that light snow was falling, with approximately 2 inches already on the ground, and the runway had been plowed approximately one hour prior to his departure. About 20 minutes had elapsed since the airplane had been towed from the '68 degree F' hangar. During the takeoff, the airplane accelerated 'normally' and became airborne after traveling about 2,160 feet down the 3,240-foot runway. After liftoff, the airplane did not climb above 25 or 30 feet agl. The airplane impacted an embankment at the end of the runway, continued across railroad tracks, and through a fence coming to rest in a brick storage yard about 800-1,000 feet from the departure end of the runway. The pilot stated that someone told him that the airport did not have any deicing equipment, therefore, he did not deice the airplane. The weather facility, located 5 miles from the accident site, reported the wind from 100 degrees at 7 knots, visibility 1/2 mile with snow and freezing fog, temperature 27 degrees F.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to deice the airplane prior to departure.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF

Findings

1. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
2. WING - CONTAMINATION
3. AIRCRAFT PERFORMANCE,CLIMB CAPABILITY - DETERIORATED
4. TERRAIN CONDITION - BERM
5. OBJECT - FENCE

Factual Information

On January 26, 2000, at 1100 central standard time, a Cessna 414 twin-engine airplane, N7VS, was substantially damaged when it impacted terrain during takeoff at the Downtown Airpark Airport near Oklahoma City, Oklahoma. The aircraft was registered to Malibu Boats West, Inc., of Merced, California, and operated by a private individual. The commercial pilot and pilot rated passenger sustained minor injuries. Instrument meteorological conditions prevailed, and an IFR flight plan was filed for the 14 Code of Federal Regulations Part 91 positioning flight. The cross-country flight to El Paso, Texas, was originating at the time of the accident.

The pilot reported that light snow was falling, with approximately 2 inches on the ground, and the runway had been plowed at 1000, for another aircraft departure. About 1015, the pilot filed a flight plan and received a weather briefing. After completing a preflight of the airplane in the hangar, he had the airplane towed to the midfield taxiway. At 1045, the aircraft's engines were started. The pilot was unable to contact approach control and clearance delivery to obtain an IFR clearance, and after about 5-6 minutes, he sent his passenger to the FBO to get the telephone number for clearance delivery. The passenger returned to the aircraft with the telephone number, and the pilot called clearance delivery on his cellular phone. After obtaining an IFR clearance and release time, the pilot completed run-up and preflight checks. The pilot back taxied the airplane to the departure end of runway 16 for takeoff.

About 20 minutes had elapsed since the airplane had been towed from the "68 degree F" hangar. During the takeoff, the airplane accelerated "normally" and became airborne after traveling about 2,160 feet down the 3,240-foot runway. After liftoff, the airplane did not climb above 25 or 30 feet agl. Airspeed began to deteriorate and the landing gear and flaps were raised; however, "airspeed continued to degrade to just above stall speed." The airplane impacted an embankment at the end of the runway, continued across railroad tracks, through a fence, and came to a stop in a brick storage yard about 800-1,000 feet from the departure end of the runway.

The pilot stated that someone told him that the airport did not have any deicing equipment, therefore, he did not deice the airplane.

Examination of the aircraft by FAA inspectors revealed that the left wing was separated from the fuselage, and the fuselage and right wing were bent.

At 1053, the weather observation facility at the Will Rogers World Airport, located 5 miles southwest of the accident site, reported in part, wind 100 degrees at 7 knots, visibility 1/2 mile with snow and freezing fog, temperature 27 degrees F, dew point 25 degrees F, and altimeter 30.07 inches of mercury.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	66,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 multi-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	April 30, 1999
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	14432 hours (Total, all aircraft), 1350 hours (Total, this make and model), 14276 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N7VS
Model/Series:	414 414	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	414-0276
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	6350 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed	**Engine Model/Series:**	TSIO-520-J
Registered Owner:	MALIBU BOATS WEST, INC.	**Rated Power:**	310 Horsepower
Operator:	ROBERT R. ALKEMA	**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	OKC ,1295 ft msl	**Distance from Accident Site:**	5 Nautical Miles
Observation Time:	10:53 Local	**Direction from Accident Site:**	280°
Lowest Cloud Condition:	Unknown	**Visibility**	0.5 miles
Lowest Ceiling:	Unknown	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	100°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	-3°C / -4°C
Precipitation and Obscuration:	N/A - None - Snow		
Departure Point:	(2DT)	**Type of Flight Plan Filed:**	IFR
Destination:	EL PASO , TX (ELP)	**Type of Clearance:**	VFR
Departure Time:	11:00 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	DOWNTOWN AIRPARK 2DT	**Runway Surface Type:**	Asphalt
Airport Elevation:	1180 ft msl	**Runway Surface Condition:**	Wet
Runway Used:	16	**IFR Approach:**	
Runway Length/Width:	3240 ft / 85 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Minor	**Latitude, Longitude:**	35.429332,-97.52069(est)

Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	RONALD J BECKER; OKLAHOMA CITY , OK
Original Publish Date:	April 6, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=48531