



National Transportation Safety Board Aviation Accident Final Report

Location:	ANCHORAGE, AK	Accident Number:	ANC93LA051
Date & Time:	04/03/1993, 1400 AST	Registration:	N4190V
Aircraft:	CESSNA 170	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

AFTER MAKING A DOWNHILL TAKEOFF, AND JUST AFTER PASSING THE END OF THE RUNWAY, THE SKI EQUIPPED AIRPLANE DESCENDED AND COLLIDED WITH TREES AND A SNOWBANK. THE RUNWAY WAS COVERED WITH ABOUT 12 INCHES OF SLUSHY WET SNOW. THE 57 HOUR PRIVATE PILOT SAID THAT THE AIRPLANES TAIL WHEEL (NOT EQUIPPED WITH A SKI) DRAGGING IN THE SNOW KEPT THE AIRPLANE FROM GETTING AIRBORNE SOONER. AFTER HE GOT THE TAIL OUT OF THE SNOW, HE ATTEMPTED TO ROTATE BEFORE GAINING SUFFICIENT TAKEOFF AIRSPEED, WHICH PUT THE TAIL WHEEL BACK INTO THE SNOW. THE AIRPLANE GOT AIRBORNE ABOUT 3/4 WAY DOWN THE RUNWAY, THEN FLEW IN GROUND EFFECT UNTIL PASSING OVER THE END OF THE RUNWAY AND LOWER TERRAIN. THE PILOT HAD JUST RECENTLY PURCHASED THE AIRPLANE, AND FLEW IT (FOR THE FIRST TIME) FOR 1.8 HOURS WITH A MORE EXPERIENCED PILOT/FRIEND ON THE PREVIOUS DAY. THAT WAS ALSO HIS ONLY TIME AS THE PILOT OF AN AIRPLANE EQUIPPED WITH SKIS OR WITH A TAIL WHEEL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT IN COMMAND'S PREMATURE LIFT-OFF. CONTRIBUTING FACTORS WERE THE PILOT'S FAILURE TO ABORT THE TAKEOFF, HIS LACK OF TOTAL EXPERIENCE IN THE TYPE AIRPLANE AND TYPE OPERATION, AND THE SLUSH COVERED RUNWAY.

Findings

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

Findings

1. OBJECT - TREE(S)
2. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SLUSH COVERED
3. (F) ABORT - NOT PERFORMED - PILOT IN COMMAND
4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
5. TERRAIN CONDITION - DOWNHILL
6. (C) LIFT-OFF - PREMATURE - PILOT IN COMMAND
7. (F) LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

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

Findings

8. TERRAIN CONDITION - SNOWBANK

Factual Information

On April 3, 1993, at 1400 Alaska standard time, a ski equipped Cessna 170 airplane, N4190V, crashed during takeoff from the Sky Harbor Private Airport, aka O'Malley Airstrip, Anchorage, Alaska. The private pilot and one passenger were not injured, and the airplane was substantially damaged. The personal flight, operating under 14 CFR Part 91, was destined for Kotzebue, Alaska. Visual meteorological conditions existed, and a VFR flight plan was filed.

Immediately after the accident, during a telephone interview, the pilot said the following in part: "I was taking off downhill to the south. The runway condition was very slushy with about a foot of heavy wet snow on the surface. The main gear had skis, but the tail gear had a wheel. The tail wheel dragging in the snow kept me from getting airborne until I was about 3/4 way down the runway. I got the tail up once, then I tried to rotate too soon and put the tail wheel back into the snow, and that slowed me down more. I should have aborted then, but thought I could still get off okay. I got airborne and was flying in ground effect, but never did get the desired takeoff airspeed. When I reached the end of the runway there was a kind of a drop off. I lost ground effect, and the airplane dropped and would not gain altitude. The airplane then collided with some trees and hit a snowbank. I was close, but not over, the maximum gross weight of the airplane." The pilot and several persons who went to the crash site immediately after the accident described substantial damage that was done to both of the airplanes wings.

The pilot stated that he had only about 2 hours as pilot of an airplane equipped with skis. Those 2 hours had been while flying the accident airplane with a more experienced pilot/friend on the day prior to the accident. That was also the only time he had flown an airplane with a tailwheel. The pilot had just recently purchased the airplane. At the time of the accident he was starting his flight back home after completion of the airplanes annual inspection on the previous day.

Pilot Information

Certificate:	Private	Age:	24, 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:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/10/1992
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	57 hours (Total, all aircraft), 2 hours (Total, this make and model), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N4190V
Model/Series:	170 170	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18523
Landing Gear Type:	Ski	Seats:	2
Date/Type of Last Inspection:	04/02/1993, Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3228 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-300A
Registered Owner:	NORDGREN, CRAIG D.	Rated Power:	145 hp
Operator:	NORDGREN, CRAIG D.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
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	60 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	7° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	VFR
Destination:	KOTZEBUE, AK (OTZ)	Type of Clearance:	None
Departure Time:	1400 AST	Type of Airspace:	Class G

Airport Information

Airport:	SKY HARBOR	Runway Surface Type:	Snow
Airport Elevation:	340 ft	Runway Surface Condition:	Slush covered; Snow--wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	1800 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:	

Administrative Information

Investigator In Charge (IIC):	ROY C DAW	Report Date:	06/30/1994
Additional Participating Persons:	LAWRENCE L LYBARGER; ANCHORAGE, AK		
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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