

NATIONAL TRANSPORTATION SAFETY BOARD

NTSB Form 6120.1

PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

The pilot/operator aircraft accident/incident report may be filed by mailing in this form, per instructions on the last page. Copies of this form may be obtained from the NTSB Web site <<http://www.nts.gov>>, the National Transportation Safety Board Regional Offices, and the Federal Aviation Administration Flight Standards District Offices.

Rules pertaining to aircraft accidents/incidents, overdue aircraft, and safety issues are contained in Part 830 of the National Transportation Safety Board's Regulations, 49CFR. These rules state the authority of the Board, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall file a report with the Regional Office of the National Transportation Safety Board nearest the accident or incident for which immediate notification is required by section 830.5(a). **The report shall be filed within ten (10) days after an accident for which notification is required by Section 830.5 or when, after seven (7) days, an overdue aircraft is still missing.** An aircraft accident, as defined in 49CFR 830.2, is determined as an occurrence that involves a fatality, serious injury, or substantial damage. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, National Transportation Safety Board, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

The Pilot/Operator Aircraft Accident/Incident Report Form is used in determining the facts, conditions, and circumstances for aircraft accident prevention activities and for statistical purposes. It is necessary that **ALL** questions be answered completely and accurately to serve the above purposes.

B. DEFINITIONS

1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined at 49 C.F.R. 830.2.

2. "Substantial Damage" means damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.

3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM

It is necessary that ALL questions on this report be answered completely and accurately.
If more space is needed, continue on a blank sheet.

Nearest City/Place: Use the name of the nearest community that has a Post Office in the state where the accident/incident occurred.

Date & Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of manufacturer of the kit or plans when appropriate.

Max Gross Weight: Enter the certificated max gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Airworthiness Certificate: For light sport aircraft, if aircraft certificated as "Light Sport - Experimental", check both the "Light Sport" and "Experimental" check boxes.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle,

cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Engine: Enter engine make and model information as indicated on the engine data plate.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "Doing Business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting **revenue** sightseeing operations under FAR Part 91 at the time of the accident.

Public Use: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Military operations should not be included under public use. If public use, also indicate whether the flight was conducted by Federal, State, or Local government.

Air Medical Flight: Indicate whether accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Purpose of Flight (FAR 91, 103, 133, 137): Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

PERSONAL—Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

BUSINESS—Includes all personal flying **without** a paid, professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE—Company flying **with** a paid, professional crew.

OTHER WORK USE—Miscellaneous flight operations conducted for compensation or hire such as construction work (not FAR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

INSTRUCTIONAL—Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

FERRY—Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

POSITIONING—Non-revenue flight conducted for the primary purpose of moving the aircraft to a maintenance facility or to load passengers or cargo, etc.

AERIAL APPLICATION—Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION—Aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP—Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW—Includes any flight operations conducted as part of an organized air race or public demonstration.

FLIGHT TEST—Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component, or evaluating an applicant for a pilot certificate or rating.

PUBLIC USE—See definition above.

UNKNOWN—Use only if the primary purpose of flight is not known.

Other Aircraft - Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, takeoff, or within 3 miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identification: Provide the official 3 or 4 character airport identifier.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident site.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident (reported as broken or overcast).

NOTAMs ((D), (L) and FDC), AIRMETs, SIGMETs, PIREPs: Describe all NOTAMs, AIRMETs, SIGMETs, PIREPs in effect near the accident/incident. For NOTAMs, state if they were distant (D), local (L), or Flight Data Center (FDC), if known.

Pilot Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Pilot A" and "Pilot B" do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the Instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none". If the pilot holds a pilot certificate other than student, and was flying an aircraft requiring an endorsement enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as Instructor".

Additional Flight Crew Members: Complete this section if there were more than two required flight crew members on the aircraft. This also includes a check airman performing official duties, but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Please enter identification and injury severity information for all passengers and other personnel involved in the accident. See page 1 of the instructions for the official definition of injury levels. Occupants are considered "Revenue" passengers if they were being carried for compensation or hire. The option "FAA" refers to any FAA personnel performing a flight related function, including flight check, airman practical test, etc.

Several questions throughout the form allow for multiple responses; when appropriate choose all responses that apply.

These instructions only pertain to major issue areas covered by the NTSB Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report. For additional definitions of questions and responses, please refer to <<http://www.nts.gov>>.

**NATIONAL TRANSPORTATION SAFETY BOARD
PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT**

This form to be used for reporting civil and public use aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Eden Prairie State: MN
 ZIP: 55347 Country: USA
 Latitude: 44:49:41 (dd:mm:ss N/S) Longitude: 93:28:18 (ddd:mm:ss E/W)

Date/Time

Date: 03/09/2014 Local Time: ~8:15-a.m.
 mm/dd/yyyy Time Zone: Central

Phase of Operation

☐ Standing ☒ Takeoff (incl. initial climb) ☐ Cruise ☐ Hover
☐ Taxi ☐ Climb ☐ Maneuvering ☐ Other
☐ Descent ☐ Landing ☐ Approach ☐ Unknown

Collision with Other Aircraft

☐ Midair
☐ On-ground
☒ None

Altitude of In-Flight Occurrence

906 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Cessna
 Model: A185F
 Serial Number: 185 3371
 Registration Number: N4764B Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 3,350 lbs
 Weight at Time of Accident/Incident: 2,688 lbs
 Location of Center of Gravity at Time of Accident/Incident:
41.35 inches from ☐ nose or ☒ datum
 -or- Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft

☒ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyrocraft
☐ Helicopter
☐ Powered lift
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate
 (Check all that apply)

Standard **Special**
☒ Normal ☐ Restricted
☐ Utility ☐ Limited
☐ Acrobatic ☐ Provisional
☐ Transport ☐ Experimental
☐ Special Flight
☐ Light Sport

Number of Seats: 6

If Large Aircraft, how many seats for:

Flight Crew: 2

Cabin Crew: _____

Passengers: 4

Landing Gear ☐ Retractable

Check any additional landing gear configuration that applies:

☐ Tricycle ☒ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☒ Ski/Wheel
☐ Unknown

Type of Maintenance Program

☒ Annual
☐ Conditional (Amateur-built only)
☐ Manufacturer's Inspection Program
☐ Other Approved Inspection Program (AAIP)
☐ Continuous Airworthiness
☒ Other, specify: Pre-Buy inspection

Last Inspection Type

☐ 100 Hour ☐ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☒ Annual ☐ Unknown

Date Last Inspection: 03/07/2013
 mm/dd/yyyy

Airframe Total Time: 3,750 hrs
 hours measured at (check one)
☐ Last Inspection ☒ Time of Accident/Incident

IFR Equipped

☒ Yes ☐ No ☐ Unknown

Stall Warning System Installed

☒ Yes ☐ No ☐ Unknown

Type of Fire Extinguishing System

☐ None
☒ Specify portable hand held fire extinguisher

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: Dorne & Margolin

Model/Series: DM ELT 6.1

Serial Number: 1287

Battery Type: BP-1020

Battery Exp. Date: May 2015

Engine Type

☒ Reciprocating ☐ Turbo Jet
☐ Turbo Shaft ☐ Turbo Fan
☐ Turbo Prop ☐ Unknown

Reciprocating Fuel System Type

☐ Carburetor
☒ Fuel Injected

Propeller

☐ Fixed Pitch
☒ Controllable Pitch

Manufacturer: McCauley

Model: D2A34C58-NO/S-90AT-4

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	Continental	IO/520D116	832514-R	06/04/2006	285/300	3,750	38	239
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Frank J. Pernat</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: <u>Chaska</u> State: <u>MN</u> ZIP: <u>55318</u> Country: <u>USA</u>	
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		Operator Address ☒ Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ Public Use (select type) ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ Federal ☐ State ☐ Local ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ Unknown ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces		Revenue Sightseeing Flight ☐ Yes ☒ No Air Medical Flight ☐ Yes ☒ No	
Purpose of Flight for FAR 91, 103, 133, 137 (Select one) ☒ Personal ☐ Business ☐ Executive/Corporate ☐ Other Work Use ☐ Instructional ☐ Ferry ☐ Positioning ☐ Aerial Application ☐ Aerial Observation ☐ Air Drop ☐ Air Race / Show ☐ Flight Test ☐ Public Use ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 (Select one) ☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi Domestic or International ☐ Domestic ☐ International	Type of Commercial Operating Certificate Held (Select all that apply) ☐ None ☐ Flag Carrier Operating Certificate (121) ☐ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (129) ☐ Commuter Air Carrier (135) ☐ On-Demand Air Taxi (135) ☐ Large Helicopter (127) ☐ Rotorcraft External Load (133) - or - ☐ Agricultural Aircraft (137) ☐ Other Operator of Large Aircraft	
OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)			
Aircraft Registration Number _____	Manufacturer: _____ Model: _____	Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☐ None	
Registered Owner of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)			
Was there Mechanical Malfunction/Failure? ☐ Yes ☒ No ☐ Unknown (If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)			Total Time/Cycles On Part _____ Hours _____ Cycles Time Since This Part Inspected/Overhauled _____ Hours
DAMAGE TO AIRCRAFT AND OTHER PROPERTY			
Aircraft Damage ☐ None ☒ Substantial ☐ Minor ☐ Destroyed	Aircraft Fire ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground	Aircraft Explosion ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground	

Description of Damage to Aircraft and Other Property (use additional sheet if necessary)

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)

Airport Identifier: KFCM

Distance From Airport Center: 0 SM

Airport Name: Flying Cloud

Direction From Airport: N/A degrees MAG

Proximity to Airport ☐ Off Airport/Airstrip ☒ On Airport ☒ On Airstrip

Airport Elevation: 906 ft. MSL

Approach Segment (Select one)

☐ On Instrument Approach ☐ Landing ☐ Base leg ☐ Final ☐ Go Around
☐ Crosswind ☐ Downwind ☐ Low Approach ☐ Aborted Landing (after touchdown)

IFR Approach (Check all that apply)

☒ None ☐ PAR ☐ MLS ☐ Practice
☐ ADF/NDB ☐ Sidestep ☐ LDA ☐ GPS
☐ SDF ☐ ILS ☐ ASR ☐ Loran
☐ VOR/TVOR ☐ Localizer Only ☐ Visual ☐ Unknown
☐ VOR/DME ☐ LOC-back course ☐ Contact
☐ TACAN ☐ RNAV ☐ Circling

VFR Approach (Check all that apply)

☒ None ☐ Stop and Go
☐ Traffic Pattern ☐ Touch and Go
☐ Straight-In ☐ Simulated Forced Landing
☐ Valley/Terrain Following ☐ Forced Landing
☐ Go Around ☐ Precautionary Landing
☐ Full Stop ☐ Unknown

Runway Information

Runway ID: 28R (L/R/C) Length: 3,900 ft Width: 75 ft

Runway/Landing Surface (Check all that apply)

☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☒ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow

Condition of Runway/Landing Surface (Check all that apply)

☒ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☐ Wet
☐ Rubber Deposits ☐ Soft ☐ Unknown
☐ Slush Covered ☐ Vegetation

FLIGHT ITINERARY INFORMATION

Last Departure Point

Airport ID: KFCM

City: Eden Prairie

State: MN

Country: USA

Time of Departure

Time: 8:15-a.m.

Time Zone: Central

Destination

Airport ID: Private

City: Waconia

State: MN

Country: USA

Type Flight Plan Filed

☒ None ☐ VFR/IFR
☐ Company VFR ☐ IFR
☐ Military VFR ☐ Unknown
☐ VFR

Activated? ☐ Yes ☐ No

Type of ATC Clearance/Service (Check all that apply)

☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise
☒ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA

Airspace where the accident/incident occurred (Check all that apply)

☐ Class A ☐ Class E ☐ Prohibited Area ☐ Jet Training Area ☐ Special
☐ Class B ☐ Class G ☐ Restricted Area ☐ TRSA ☐ Air Traffic Control Area
☐ Class C ☐ Demo Area ☐ Military Operations Area (MOA) ☐ FAR 93 ☐ Unknown
☒ Class D ☐ Warning Area ☐ Airport Advisory Area

Aircraft Load Description (Check all that apply)

☒ None ☐ Towing Glider ☐ Parachutists ☐ Livestock
☐ Passengers ☐ Towing Banner ☐ Water ☐ Unknown
☐ Cargo ☐ Other External ☐ Chemical/Fertilizer/Seeds

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(convert from pounds, as necessary)

80 Gallons

Fuel Type

☐ 80/87 ☐ 115/145 ☐ JP3 ☐ Other, specify _____
☒ 100 Low Lead ☐ Jet A ☐ JP4
☐ 100/130 ☐ Automotive ☐ JP5

Other Services, if Any, Prior to Departure

none

EVACUATION OF AIRCRAFT									
Was an emergency evacuation of the aircraft performed? ☐ Yes ☒ No									
Method of Exit – Describe how the occupants exited and how many occupants evacuated each location									
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE									
Weather Observation Facility Facility ID: <u>KFCM</u> Observation Time: <u>8:15-a.m.</u> Time Zone: <u>Central</u> Distance from Accident Site: <u>0</u> NM Direction from Accident Site: <u>0</u> degrees MAG		Source of Weather Information <i>(Check all that apply)</i> ☐ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☒ TV/Radio ☒ Internet ☒ Automated Report ☐ Unknown ☐ Commercial Weather Service (DUATS)		Method of Briefing <i>(Check all that apply)</i> ☐ In Person ☐ Teletype ☒ Telephone/Computer ☒ Aircraft Radio ☒ TV/Radio ☐ Unknown					
Briefing Type/Completeness ☐ Full ☐ Abbreviated ☐ Partial / Limited By Pilot ☐ Unknown ☐ Partial / Limited By Briefer ☐ Not Pertinent		Light Condition ☒ Dawn ☐ Dusk ☐ Dark Night ☒ Day ☐ Night ☐ Bright Night ☐ Not Reported		Visibility <u>10</u> miles					
Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered		Ceiling ☒ None (clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown		Restriction to Visibility <i>(Check all that apply)</i> ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown					
Lowest Cloud Condition Height <u>10,000</u> ft AGL		Ceiling Height <u>10,000</u> ft AGL							
Wind Direction ☒ Indicated: <u>200</u> degrees MAG ☐ Variable	Wind Speed Velocity: <u>12</u> KTS -or- ☐ Calm ☐ Light and Variable	Wind Gusts Velocity: <u>19</u> KTS ☒ Gusting ☐ Not Gusting	Type of Turbulence <i>(Check all that apply)</i> ☐ None ☐ In Clouds ☐ Clear Air ☐ Vicinity of Thunderstorm Severity of Turbulence ☐ Extreme ☐ Moderate ☐ Light ☐ Severe ☐ Moderate Chop						
NOTAMs (D, L and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident									
Temperature: _____ (C) or _____ -4 (F) Altimeter Setting: <u>29.91</u> in. HG or _____ MB Density Altitude: <u>-3,300</u> ft Dew Point: _____ (C) or _____ -8 (F)		Icing Forecast <table style="width: 100%;"> <tr> <th style="text-align: left;">Amount</th> <th style="text-align: left;">Type</th> </tr> <tr> <td> ☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light </td> <td> ☐ Rime ☐ Clear ☐ Mixed </td> </tr> </table>		Amount	Type	☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed	Type of Precipitation <i>(Check all that apply)</i> ☒ None ☐ Drizzle ☐ Rain ☐ Ice Pellets ☐ Snow ☐ Snow Pellets ☐ Hail ☐ Snow Grains ☐ Rain Showers ☐ Ice Crystals ☐ Freezing Rain ☐ Ice Pellets Shower ☐ Snow Shower ☐ Freezing Drizzle	
Amount	Type								
☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed								
Icing Actual <table style="width: 100%;"> <tr> <th style="text-align: left;">Amount</th> <th style="text-align: left;">Type</th> </tr> <tr> <td> ☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light </td> <td> ☐ Rime ☐ Clear ☐ Mixed </td> </tr> </table>		Amount	Type	☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed	Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy			
Amount	Type								
☒ None ☐ Moderate ☐ Trace ☐ Severe ☐ Light	☐ Rime ☐ Clear ☐ Mixed								

PILOT "A" INFORMATION																																																																																																				
Pilot "A" Responsibilities at the Time of Accident/Incident ☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew																																																																																																				
Pilot "A" Identification First Name: <u>Frank</u> Middle Initial: <u>J</u> Last Name: <u>Pernat</u> City: <u>[REDACTED] Chaska</u> State: <u>MN</u> ZIP: <u>55318</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>46</u> Date of Birth: <u>[REDACTED]</u> mm/dd/yyyy Certificate Number: <u>[REDACTED]</u> +																																																																																																				
Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious			Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single			Seat Belt Used ☒ Yes ☐ No Available ☐ Yes ☐ No			Shoulder Harness Used ☒ Yes ☐ No Available ☐ Yes ☐ No																																																																																											
Pilot Certificate(s) <i>(Check all that apply)</i> ☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign ☒ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military																																																																																																				
Principal Occupation ☐ Pilot ☒ Other ☐ Unknown		Medical Certificate ☐ None ☒ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown			Medical Certificate Validity ☒ Without limitations/waivers ☐ With limitations/waivers ☐ Unknown			Date of Last Medical <u>11/11/2013</u> mm/dd/yyyy																																																																																												
Medical Certificate Limitations none																																																																																																				
Medical Certificate Waivers none																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>8/21/2013</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Cessna</u> Model: <u>180</u>																																																																																																
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PILOT "B" INFORMATION																																																																																																				
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Pilot "B" Identification First Name: _____ Middle Initial: _____ Last Name: _____ City: _____ State: _____ ZIP: _____ Country: _____ Age at time of Accident/Incident: _____ Date of Birth: _____ <i>mm/dd/yyyy</i> Certificate Number: _____																																																																																																				
Degree of Injury ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious			Seat Occupied ☐ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single			Seat Belt Used ☐ Yes ☐ No Available ☐ Yes ☐ No		Shoulder Harness Used ☐ Yes ☐ No Available ☐ Yes ☐ No																																																																																												
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Principal Occupation ☐ Pilot ☐ Other ☐ Unknown		Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown			Medical Certificate Validity ☐ Without limitations/waivers ☐ With limitations/waivers ☐ Unknown		Date of Last Medical _____ <i>mm/dd/yyyy</i>																																																																																													
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ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)																
Pilot Name and Address						Degree of Injury										
First Name: _____			City: _____			☐ None		☐ Fatal								
Middle Initial: _____			State: _____ ZIP: _____			☐ Minor		☐ Unknown								
Last Name: _____			Country: _____			☐ Serious										
Pilot Certificate(s) (Check all that apply)						Seat Occupied										
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer								
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military								
☐ Foreign																
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs												
Pilot Name and Address						Degree of Injury										
First Name: _____			City: _____			☐ None		☐ Fatal								
Middle Initial: _____			State: _____ ZIP: _____			☐ Minor		☐ Unknown								
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PASSENGER(S) / OTHER PERSONNEL (Include flight attendants; continue on separate sheet if necessary)																
Name and Address						Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown
First Name: _____																
Middle Initial: _____																
Last Name: _____																
City: _____																
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NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State time and point of departure, intended destination, and services obtained.

After KFCM tower cleared me for the active runway (28R), I rolled into alignment for take-off; ~8:15-a.m. Central Standard Time, 03/09/2014. The first destination was Lake Waconia, secondly Mille Lacs Lake and then returning to KFCM by noon 03/09/2014.

ATIS departure reported wind at 200°, 12-mph, with gusts to 19-mph.

While in set-position, on the runway:

- Flaps were adjusted to 20° and trim set for departure
- Tail wheel was then locked.
- Yolk turned full into the wind.

Brakes were released with gradual acceleration to ~1/2 throttle with right rudder pressure applied to ensure an initial straight departure start.

Then I gradually advanced to full throttle with additional right rudder being applied.

Simultaneously with full throttle acceleration, the yolk was pushed forward, to lift the tail.

As soon as the tail lifted, the plane started a rapid left (southerly) veer. Upon lifting the tail, it felt as though the plane encounter a wind gust that caught the tail, pushing the tail right (northerly), forcing the plane to veer more quickly left (south). The runway direction is 280° (east/west).

Not aligning straight down the runway, I didn't sense there was sufficient speed to pull the yolk back for flight.

I then pulled power back (full power off), and applied brake pressure before the wheels hit the snow bank on the south side of 28R.

At some point, forward momentum was stopped when the wheels hit the snow bank, thus flipping the plane over on the fuselage back.

After the plane came to a rest, I was suspended upside down in my harness.

I unharnessed, turned the electronics and gas off and exited the airplane.

RECOMMENDATION (How could this accident/incident have been prevented?)**Operator/Owner Safety Recommendation**

First and foremost, a more thoughtful and precise departure plan (or landing) given the specific weather/wind conditions, at that time; wind direction, wind speed, wind gusts, runway direction, runway options, P-Factor relative to that wind, lifting the tail or keeping it down, degree of flaps for that specific condition, aileron position/control, C.G. and weight distribution for that wind, etc.... A very precise departure plan needs to be thoroughly thought through prior to advancing the throttle (or landing). Secondly, in a cross wind situation keeping the tail wheel down while advancing the throttle to full, being mindful of keeping the plane pointed straight down the runway with rudder and yolks turned into the wind, is critical.

1) With a 28 departure

- after full acceleration with this x-wind, keep the tail-wheel on the runway until the plane flies. In this instance, I had 3-factors against me: P-factor pulling left and upon lifting the tail, a gust of wind enhanced the left turn and a very light tail. In a cross wind departure, keep the tail wheel on the runway until the plane is ready to fly, keep full ailerons in and as much right rudder as necessary to keep the plane straight down the runway as possible.

2) Alternatively I could have requested a 18 departure.

- Slightly less cross wind but more importantly the x-wind would have countered acted against the engine P-factor, verses enhancing it (as stated above). Again, keeping the tail on the runway until the plane is ready to fly.

ADDITIONAL INFORMATION *(Please type or print in ink)*

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**Date of this Report**03/13/2014
*mm/dd/yyyy***Signature and Name of Pilot/Operator**Signature: Type or Print Name: Frank J. Pernat**Signature and Name of Person Filing Report if Other than Pilot/Operator**

Signature: _____

Type or Print Name: _____

Title: _____

FOR NTSB USE ONLY

NTSB Accident/Incident No. _____

Reviewed by NTSB Regional Office _____

Name of Investigator _____

Date Report Received _____