

NATIONAL TRANSPORTATION SAFETY BOARD

NTSB Form 6120.1

PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

Email the pilot/operator aircraft accident/incident report to the investigator-in-charge of your accident/incident. If email is not available, mail the report per the instructions below.

If your accident/incident occurred in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, the District of Columbia, Puerto Rico, or the US Virgin Islands, send the form to: NTSB, ERA, 45065 Riverside Parkway, Ashburn, VA 20147.

If your accident/incident occurred in Ohio, Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, Arkansas, Louisiana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Colorado, or New Mexico, send the form to: NTSB, CEN, 4760 Oakland Street, Suite 500, Denver, CO 80239.

If your accident/incident occurred in Montana, Wyoming, Idaho, Utah, Arizona, Nevada, Washington, Oregon, California, Hawaii, or the territories of Guam or American Samoa, send the form to: NTSB, WPR, 505 South 336th Street, Suite 540, Federal Way, WA 98003.

If your accident/incident occurred in Alaska, send the form to: NTSB, ANC, 222 West 7th Avenue, Room 216, Box 11, Anchorage, AK 99513.

Rules pertaining to notification of aircraft accidents and incidents, as well as overdue aircraft are found in 49 *Code of Federal Regulations* (CFR) Part 830 http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr830_main_02.tpl. These rules state the authority of the NTSB, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification of accidents and incidents by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall send a report to the office listed above, based on accident/incident location; immediate notification is required by 49 CFR 830.5(a). **The report shall be filed within 10 days after an accident for which notification is required by Section 830.5, or after 7 days if an overdue aircraft is still missing.**

An aircraft accident, as defined in 49 CFR 830.2, is determined as an occurrence that involves a fatality or serious injury, or substantial damage to the aircraft. 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, NTSB, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

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 of paper.

Nearest City/Place: Use the name of the nearest community 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 the producer of the kit or plans, unless an NTSB employee instructs otherwise.

Maximum Gross Weight: Enter the certificated maximum 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.

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

The NTSB uses this form for aircraft accident prevention activities and for statistical purposes. NTSB regulations (49 CFR Part 830) require that **ALL** questions be answered completely and accurately. Completion of this form will take approximately 60 minutes. The NTSB does not guarantee the privacy of any information provided in this form. You need not complete this form unless it displays a valid OMB control number, in accordance with 5 C.F.R. § 1320.5(b), which applies to this collection of information.

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 CFR 830.2.

2. "Substantial Damage" means damage or failure that adversely affects the structural strength, performance or flight characteristics of the aircraft, and that 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 cowlings, 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.

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.

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 14 CFR Part 91 at the time of the accident.

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

Public Aircraft: 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. Indicate whether the flight was conducted by the armed forces, federal, state, or local government.

Purpose of Flight: 14 CFR Parts 91, 103, 133, 136, and 137: Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

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--These flights include 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.

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.

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

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.

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.

OTHER WORK USE--Miscellaneous flight operations conducted for compensation or hire such as construction work (not 14 CFR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

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.

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

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, landing, takeoff, departure, or within 3 statute miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

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

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.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident/incident 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/incident (reported as broken or overcast).

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

Flight Crewmember Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Flight Crewmember 1" and "Flight Crewmember 2" 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 Crewmembers: Complete this section if there were more than two required flight crewmembers 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: Enter identification and injury severity information for all passengers, cabin crew, and other personnel involved in the accident. See Page 1 of the instructions for the official definition of injury levels.

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 NTSB Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report. For additional definitions of questions and responses, please refer to www.ntsbgov.

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

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

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Prescott State: AZ
 ZIP: 86301 Country: USA
 Latitude: 34:39:47.3 Longitude: 112:24:48.2
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 01/25/2020 Local Time: 1235
mm/dd/yyyy
 Time Zone: MST

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N31ER

Manufacturer: Cessna

Model: C150E

Serial Number: 15061072

Year of Manufacture: 1964

Amateur-Built: ☐ Yes ☒ No
 If Yes: ☐ Kit/Plans ☐ Make: _____
☐ Original Design

- ☐ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft

Maximum Gross Weight: 1760 lbs

Weight at Time of Accident/Incident: 1450 lbs

Number of Seats: 2 Flight Crew Seats: 1

Cabin Crew Seats: _____ Passenger Seats: 1

Number of Engines: 1

Category of Aircraft

- ☒ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift
☐ Rocket
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate (Check all that apply)

Standard

- ☒ Normal
☐ Aerobatic
☐ Balloon
☐ Commuter
☐ Transport
☒ Utility
☐ Certificate of Authorization or Waiver (COA)
☐ None

Special

- ☐ Restricted
☐ Limited
☐ Provisional
☐ Special Flight
☐ Experimental
☐ Special Light-Sport
☐ Experimental Light-Sport
☐ Unknown

Landing Gear

(Check all that apply)

- ☐ Retractable
☒ Tricycle
☐ Tailwheel
☐ Amphibian
☐ High Skid
☐ Emergency Float
☐ Skid
☐ Float
☐ Ski
☐ Hull
☐ Ski/Wheel
☐ Other Launch/Recovery System
☐ None
☐ Unknown

Engine Type (Select one)

- ☒ Reciprocating
☐ Liquid Rocket
☐ Turbo Shaft
☐ Solid Rocket
☐ Turbo Prop
☐ Hybrid Rocket
☐ Turbo Jet
☐ None
☐ Turbo Fan
☐ Unknown
☐ Electric

Fuel System Type (Reciprocating)

- ☒ Carburetor ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Lycoming	O-320-E2D	L-21955-27A	UNK	150	7370.3	31.8	936.3
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 12/12/2019

mm/dd/yyyy

Airframe Total Time: 9841.2 hrs

hours measured at (Select one)

- ☐ Last Inspection ☒ Time of Accident/Incident

Type of Maintenance Program (Select one)

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

Description of Fire Extinguishing System

- ☐ None
☐ Specify: _____

Propeller 1

- ☒ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: Sensenich

Model: 74DM6S5-0-60

Propeller 2

- ☒ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: Artex

Model or Part No.: ME406

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☒ C126 (406 MHz)

Was ELT still mounted in aircraft? ☒ Yes ☐ No

Was ELT still connected to antenna? ☒ Yes ☐ No

Did ELT Activate? ☐ Yes ☒ No

If activated:

Did ELT Aid in Locating Aircraft: ☐ Yes ☐ No

If not activated:

- Indicate Reason: ☐ Impact Damage
☐ Fire Damage
☐ Battery Expired/Damaged
☐ Unknown

Additional Equipment (Check all that apply)

- ☒ ADS-B
☐ Airframe Parachute
☒ Angle of Attack Indicator
☐ Autopilot
☐ Data Recorder
☒ Electronic Flight Bag or Handheld Device
☐ Electronic Multifunction Display
☐ Electronic Primary Flight Display
☐ Handheld GPS
☐ Heads Up Display
☐ Onboard Weather
☐ Satellite Tracking Device
☒ Stall Warning System
☐ Video Recording Device
☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: Embry-Riddle Aeronautical UniversityCity: PrescottState: AZZIP: 86301Fractional Ownership Aircraft: ☐ Yes ☒ NoCountry: USA**Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered Owner

Name: _____

City: _____

Doing Business As: _____

State: _____

ZIP: _____

Air Carrier/Operator Designator (4 Character Code): _____

Country: _____

Operating Certificates Held

(Check all that apply)

- ☐ None
☐ Flag Carrier Operating Certificate (FAR 121)
☐ Supplemental
☐ Air Cargo
☐ Foreign Air Carriers (FAR 129)
☐ Rotorcraft External Load (FAR 133)
☐ Commuter Air Carrier (FAR 135)
☐ On-Demand Air Taxi (FAR 135)
☐ Commercial Air Tour (FAR 136)
☐ Agricultural Aircraft (FAR 137)
☒ Pilot School (FAR 141)
☐ Certificate of Authorization or Waiver (COA)
☐ Commercial Space Transportation
Experimental Permit
☐ Commercial Space Transportation License
☐ Other Operator of Large Aircraft

Regulation Flight Conducted Under

- ☒ FAR 91 ☐ FAR 129 ☐ FAR 415
☐ FAR 103 ☐ FAR 133 ☐ FAR 431
☐ FAR 121 ☐ FAR 135 ☐ FAR 435
☐ FAR 125 ☐ FAR 137 ☐ FAR 437

- ☐ FAR 91 Special Flight
☐ Non-US, Commercial
☐ Non-US, Non-commercial

☐ Public Aircraft (Select one)

- ☐ Armed Forces
☐ Federal
☐ State
☐ Local

☐ Unknown**Revenue Operation for FAR 121, 125, 129, 135**

(Select one for each group)

- ☐ Scheduled or Commuter ☐ Domestic
☐ Non-Scheduled or Air Taxi ☐ International

- ☐ Passenger
☐ Cargo
☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137

(Select one)

- ☐ Aerial Application ☐ Firefighting ☐ Unknown
☐ Aerial Observation ☐ Flight Test
☐ Air Drop ☐ Glider Tow
☐ Air Race/Show ☐ Instructional
☐ Banner Tow ☐ Other Work Use
☐ Business ☒ Personal
☐ Executive/Corporate ☐ Positioning
☐ External Load ☐ Skydiving
☐ Ferry

Revenue Sightseeing Flight☐ Yes ☒ No**Air Medical Flight**☐ Yes ☒ No**AIRPORT INFORMATION (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)**Airport Name: Prescott Regional - Ernest A Love FieldAirport Identifier: KPRCProximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/A

Distance From Airport Center: _____ sm

Direction From Airport: _____ degrees true

Airport Elevation: 5045 ft. msl**Runway Information**Runway ID: 21R (L/R/C) Length: 4846 ft Width: 60 ft**Runway/Landing Surface (Check all that apply)**

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

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
☐ Slush-Covered ☐ Vegetation ☐ Unknown

Approach/Departure Segment (Select one)

- ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach
☐ Takeoff ☐ IFR Departure Procedure/Clearance ☒ Landing ☐ Base ☐ Go Around
☐ Initial Climb ☐ Final ☐ Aborted Landing (after touchdown)
☐ Crosswind ☐ Unknown

IFR Approach (Check all that apply)

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

VFR Approach (Check all that apply)

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

“Flight Crewmember 1” Responsibilities at the Time of Accident/Incident

"Flight Crewmember 1" was pilot flying ☒ Yes ☐ No

First Name: Douglas

City of Residence: Phoenix

Middle Initial: **M**

State: **AZ** ZIP: **85086**

Last Name: Niemela

Country: USA

Age at time of Accident/Incident: 20 Date of Birth: [REDACTED] 1999 mm/dd/yyyy

Certificate Number: [REDACTED]

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious		Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single		Restraint Type Available ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Pilot Certificate(s) <i>(Check all that apply)</i> ☒ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☒ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer						
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 ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance		Date of Last Medical <u>01/14/2019</u> <i>mm/dd/yyyy</i>

Medical Certificate Limitations

None

Medical Certificate Special Issuance

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>05/23/2019</u> <i>mm/dd/yyyy</i>	Flight Review Aircraft Make: <u>Cessna</u> Model: <u>172S Nav III</u>
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Airplane Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) <i>(Check all that apply)</i> ☒ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) <i>(Check all that apply)</i> ☒ None ☐ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) <i>(Check all that apply)</i> ☒ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

Student Endorsements *(Include dates)*

[illegible]

"FLIGHT CREWMEMBER 2" INFORMATION**"Flight Crewmember 2" Responsibilities at the Time of Accident/Incident**

☐ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 2" was pilot flying ☐ Yes ☐ No

"Flight Crewmember 2" Identification

First Name: _____

City of Residence: _____

Middle Initial: _____

State: _____ ZIP: _____

Last Name: _____

Country: _____

Age at time of Accident/Incident: _____ Date of Birth: _____ mm/dd/yyyy

Certificate Number: _____

Degree of Injury

☐ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Seat Occupied

☐ Left ☐ Front ☐ Unknown
☐ Right ☐ Rear
☐ Center ☐ Single

Restraint Type**Available**

☐ None
☐ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Used

☐ None
☐ Lap only
☐ 3-point
☐ 4-point
☐ 5-point
☐ Unknown

Inflatable Restraints

☐ Not Installed
☐ Installed
☐ Not Deployed
☐ Deployed
☐ Unknown

Pilot Certificate(s) (Check all that apply)

☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military
☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign
☐ Student ☐ Sport ☐ Flight Engineer

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 ☐ Unknown
☐ With limitations/waivers ☐ N/A
☐ Special Issuance

Date of Last Medical

____ mm/dd/yyyy

Medical Certificate Limitations**Medical Certificate Special Issuance****Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:**

____ mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

Airplane Rating(s)
(Check all that apply)

☐ None
☐ Single-Engine Land
☐ Single-Engine Sea
☐ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s)
(Check all that apply)

☐ None
☐ Airship
☐ Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s)
(Check all that apply)

☐ None
☐ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s)
(Check all that apply)

☐ None
☐ Airplane Single-Engine
☐ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift
☐ Instrument Airplane
☐ Instrument Helicopter
☐ Helicopter
☐ Glider
☐ Sport

Type Ratings**Student Endorsements** (Include dates)**Flight Time** (Enter appropriate number of hours in each box)

	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time										
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)							
Crew Name and Address First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____				Seat Occupied ☐ Left ☐ Center ☐ Right ☐ Front ☐ Rear ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
Crew Name and Address First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____				Seat Occupied ☐ Left ☐ Center ☐ Right ☐ Front ☐ Rear ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☐ Commercial ☐ Airline Transport ☐ Flight Engineer ☐ US Military ☐ Foreign				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet if necessary)							
Name and Address		Seat	Injury	Restraint Type		Inflatable Restraints	Age
First Name: <u>Andrew</u> City: <u>Boise</u> Middle Initial: _____ State: <u>ID</u> ZIP: <u>83702</u> Last Name: <u>Nelson</u> Country: <u>USA</u> ☐ Crew ☒ Passenger ☐ Other		☐ Left ☐ Center ☒ Right ☐ Unknown Row: _____	☒ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>KPRC</u> City: <u>Prescott</u> State: <u>AZ</u> Country: <u>USA</u>	Time of Departure Time: <u>1225</u> Time Zone: <u>MST</u>	Destination Airport ID: <u>KPRC</u> City: <u>Prescott</u> State: <u>AZ</u> Country: <u>USA</u>	Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
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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 G ☐ Military Operations Area (MOA) ☐ Special ☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area ☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown ☒ Class D ☐ Prohibited Area ☐ TRSA ☐ Class E ☐ Restricted Area ☐ FAR 93			Altitude of In-Flight Occurrence: _____ ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply) ☒ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☒ Internet ☒ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☐ On-Board Weather	Weather Observation Facility Facility ID: <u>KPRC</u> Observation Time: <u>1153</u> Time Zone: <u>MST</u> Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true
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Basic Conditions ☒ VMC ☐ IMC ☐ Unknown	Light Condition ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night
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Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered Lowest Cloud Condition Height _____ ft agl	Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl	Temperature: <u>12</u> (C) or _____ (F) Dew Point: <u>-3</u> (C) or _____ (F) Altimeter Setting: <u>30.17</u> in. Hg or _____ MB
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Wind Direction ☒ Variable - or - Direction: _____ degrees true	Wind Speed ☐ Calm ☐ Light and Variable - or - Speed: <u>3</u> kts	Wind Gusts ☐ Not Gusting - or - Speed: _____ kts	Visibility <u>10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: <u>5650</u> ft
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Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☒ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals	Restriction to Visibility (Check all that apply) ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown
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Icing Forecast Amount Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Icing Actual Amount Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Turbulence Type (Check all that apply) Severity ☐ None ☒ Light ☐ Clear Air ☐ Moderate ☒ Terrain-Induced ☐ Severe ☒ Convective Turbulence ☐ Extreme
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NOTAMS (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:

!PRC 01/003 PRC APRON WHISKEY RAMP CLSD 2001011634-2006302359
!PRC 08/109 PRC TWY C2 CLSD 1808200800-PERM

DAMAGE TO AIRCRAFT AND OTHER PROPERTY**Aircraft Damage**

- ☐ None ☒ Substantial
☐ Minor ☐ Destroyed
 ☐ Unknown

Aircraft Fire

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Aircraft Explosion

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Explosion at Unknown Time
☐ On-Ground ☐ Unknown

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

The aircraft sustained substantial damage to the lower members (bending loads) of the engine mount assembly from the nose gear strut collar attach point of the engine mount. The propeller struck the runway surface, resulting in abrasion and bending damage to the outermost 2 to 3 inches of the blades. Engine damage resulting from the propeller contacting the runway surface at near idle power has not yet been assessed.

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 departure time and location, services obtained, and intended destination. Provide as much detail as possible.

I was competing in a NIFA power off landing event. It was a graded power off 180, the first of the year. I was the last one to go of the day. I did my preflight in the run-up area off 21R at Prescott Regional airport, KPRC. I am considered a junior flyer, pretty inexperienced in flying competitively in weather, as well as power off landings. However, I felt confident in my abilities to have a good set. Everything on the airplane looked good during my preflight. I followed the checklists, and within 10 minutes, I was holding short of the runway. We held short for longer than usual, and I felt a little nervous, but that's to be expected. I was cleared for takeoff and extended upwind. As I flew abeam the tower, tower instructed to make a left 360, and I complied. Everything looked where I wanted it to. My track was straight, altitude and airspeed at 6000 feet and 100 mph, where I wanted them to be. I pulled carb heat and power abeam my spot, and started my descent. I was on a good descent path until final approach, when I realized we had stopped sinking and were high. I trimmed aft and put in 40 degrees of flaps. The plane momentarily descended but was picked up again. I leveled the nose because I had heard that if you level the nose, then the plane will descend enough to get back on glide path. Instead of descending, however, we stayed high, and in fact experienced another updraft sensation as we approached my expected touchdown point. It felt as if the airplane was on a blanket, and I could feel a tailwind. I began to lower the nose and accepted that we were going to land long (past the beginning of the 3rd runway stripe). I could see out of my peripheral that we still had yellow dots on the Angle of Attack indicator, so I continued with my decision to execute the touch and go, believing we still had an excess of energy. At this point, something changed and we lost all energy. The plane just dropped, obviously stalling, and I followed the go-around procedure, but the plane did not have enough power or energy to recover, and we landed hard on the runway. I never heard the stall horn in the lead up to the stall. We bounced a couple times, and I held backpressure on the yoke, while keeping the plane headed on centerline with my feet. The only thing I knew at this point was that my landing had been very unsafe, and I told tower that Eagle 1 was exiting the runway at A3. I then taxied back to the run-up area, and followed the normal shutdown procedure. I backed my actions up with the checklist, and exited the aircraft, placing chocks under the tire. As I exited the aircraft, the team's head coach approached, and I heard him say something about the propeller. This was when I saw the damage on the ends of the prop. My heart sank, and at this point, I allowed the head coach to take control of the situation, handed him the keys and was ready to help with anything I could.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

This could have been prevented if I had more experience with tailwinds and updrafts, because I could have turned final at a lower altitude, or recognized the potential danger, and initiated a go-around sooner. I also should not have been relying on the AOA indicator as much as I did. Furthermore, the stall warning should be adjusted so that it goes off sooner. I do not believe I had adequate warning how close I was to losing energy. Furthermore, I didn't realize how much drag was produced by the combination of trim and 40 degrees of flaps. I should have practiced more go-arounds and stalls in the power off landing configuration while in the practice area.

One recommendation is to have flyers do practice area slots with the 150's more often, so that they can learn the limits of the airplane while there is sufficient altitude to do so. I should have practiced the power off landing approach many times in the practice area before going in and learning an unfortunate lesson so close to the runway surface.

The things I will personally do differently are as follows: I will not use full aft trim anymore, and I will stay away from 40 degrees of flaps. The combination is too much drag for a safe go-around option. I will also keep my speed a safe amount higher than stall speed, because an unexpected wind shear situation can steal all of my energy quickly. I also plan on taking an energy management class.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)Was there Mechanical Malfunction/Failure? ☐ Yes ☒ No

(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

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

16 Gallons

Fuel Type

☐ 80/87☐ 115/145☐ Jet B☐ Other, specify _____☒ 100 Low Lead☐ Jet A☐ JP8☐ 100/130☐ Jet A-1☐ Automotive

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location

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

Pilot of Other Aircraft

Name: _____

Name: _____

City: _____

City: _____

State: _____ ZIP: _____

State: _____ ZIP: _____

Country: _____

Country: _____

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

02/03/2020

mm/dd/yyyy

Name of Pilot/Operator: Douglas NiemelaSignature: [REDACTED]

-- or --

☐ Check here to electronically sign this document**If a Person Other than Pilot/Operator is Filing Report**Name: Brian RoggenTitle: Aviation Safety Program ManagerSignature: [REDACTED]

-- or --

☐ Check here to electronically sign this document**FOR NTSB USE ONLY**

NTSB Accident/Incident No.

WPR20CA084

Reviewed by NTSB Regional Office

AS-WPR

Name of Investigator

Andrew Swick

Date Report Received

02/05/2020