

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.

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,

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.

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: Falcon State: CO
 ZIP: 80831 Country: USA
 Latitude: 38:5644N (dd:mm:ss N/S) Longitude: 104:34:11W (ddd:mm:ss E/W)

Date/Time

Date: 07/15/2017 Local Time: 1300L
 mm/dd/yyyy Time Zone: MDT

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

_____ ft MSL

AIRCRAFT INFORMATION

Manufacturer: Glasair
 Model: SH2
 Serial Number: 181
 Registration Number: N181AL Amateur-built: ☒ Yes ☐ No

Max Gross Weight: 1,600 lbs
 Weight at Time of Accident/Incident: 1,500 lbs
 Location of Center of Gravity at Time of Accident/Incident:
UNK 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: 2

If Large Aircraft, how many seats for:

Flight Crew: _____

Cabin Crew: _____

Passengers: _____

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: _____

Last Inspection Type

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

Date Last Inspection: 05/31/2017

mm/dd/yyyy

Airframe Total Time: 1,100 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 Hand-held fire extinguisher

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: Unk

Model/Series: _____

ELT Aided in Locating Accident/Incident

☐ Yes ☒ No

Serial Number: _____

Battery Type: _____ Battery Exp. Date: _____

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: _____

Model: _____

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	Lycoming	O-320			160		20	
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: <u>Mark Hadley</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address
Operator of Aircraft ☐ Same As Registered Owner Name: <u>Paul Carlton</u> Doing Business As: <u>Pilot in Command</u> Air Carrier/Operator Designator (4 Character Code): _____		Operator Address ☐ Same As Registered Owner
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces ☐ Public Use (select type) ☐ Federal ☐ State ☐ Local ☐ Unknown		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 Cargo Operation ☐ Passenger/Cargo ☐ Passenger _____ How many? ☐ Cargo _____ lbs ☐ Mail	Type of Commercial Operating Certificate Held (Check 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 <i>other</i> 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.) Based on passenger testimony and my late observations, I believe the aircraft was on fire from some point after the run up. I do not know exactly what caused the fire or the extent of the damage before the aircraft came to a complete stop. After inspection with the FAA inspector, we believe the fire originated behind the firewall, between the firewall and the instrument panel where the fuel shutoff valve, electric fuel boost pump and brake reservoir are found.		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)

The aircraft was consumed by a fire after it came to a stop. The aircraft was on fire before coming to a complete stop on the taxiway; I remember seeing flames in the passenger right wheel well, and the passenger called "engine fire" then for an emergency ground egress. The passenger also recalls an unusual heat source by his legs approximately 1,000' down the runway, before any corrective maneuvers take place.

The aircraft came to a stop on the intersection of taxiway A and A4 and burned on the taxiway. There is some damage to the taxiway, likely from the burning aircraft. The aircraft also hit and knocked over a single taxiway light.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)Airport Identifier: KFLYDistance From Airport Center: 0 SMAirport Name: Meadow Lake AirportDirection From Airport: 0 degrees MAGProximity to Airport ☐ Off Airport/Airstrip ☒ On Airport ☒ On AirstripAirport Elevation: 6,873 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 InformationRunway ID: 15 (L/R/C) Length: 6,000 ft Width: 60 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: _____

City: _____

State: _____

Country: _____

Time of Departure

Time: _____

Time Zone: _____

Destination

Airport ID: _____

City: _____

State: _____

Country: _____

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)

18 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 on the day.

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

Both occupants exited the aircraft. The Passenger observed heat and flames in his leg well and called "engine fire." When the aircraft came to a complete stop, both of us released our seat belts and egressed the aircraft through the doors/windows. I paused long enough to get the fire extinguisher to attempt to put out the fire.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**

Facility ID: KFLY AWOS

Observation Time: Unk, listened at 1255L

Time Zone: Mountain

Distance from Accident Site: 0 NM

Direction from Accident Site: 0 degrees MAG

Source of Weather Information

(Check all that apply)

- | | |
|---|-----------------------------------|
| ☐ National Weather Service | ☐ Company |
| ☐ Flight Service Station | ☐ Military |
| ☐ TV/Radio | ☐ Internet |
| ☒ Automated Report | ☐ Unknown |
| ☐ Commercial Weather Service (DUATS) | |

Method of Briefing

(Check all that apply)

- | |
|--|
| ☐ 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

10 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 (Check all that apply)

- | | |
|--|-------------------------------------|
| ☒ None | ☐ Fog |
| ☐ Blowing Dust | ☐ Ground Fog |
| ☐ Blowing Sand | ☐ Haze |
| ☐ Blowing Snow | ☐ Ice Fog |
| ☐ Blowing Spray | ☐ Smoke |
| ☐ Dust | ☐ Unknown |

Lowest Cloud Condition Height

3,000 ft AGL

Ceiling Height

4,000 ft AGL

Wind Direction

☒ Indicated:
50 degrees MAG

☐ Variable

Wind Speed

Velocity: 7 KTS

-or-

- ☐ Calm
☐ Light and Variable

Wind Gusts

Velocity: 0 KTS

- ☐ Gusting
☐ Not Gusting

Type of Turbulence (Check all that apply)

- | | |
|--|---|
| ☒ 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

There was a NOTAM for the Meadowlake AWOS being out of service that day, but it was functional when I listened.

Temperature: _____ (C)
or 75 (F)

Altimeter Setting: 30.40 in. HG
or _____ MB

Density Altitude: _____ ft

Dew Point: _____ (C)
or _____ (F)

Icing Forecast**Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Icing Actual**Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Type of Precipitation (Check all that apply)

- | | |
|--|---|
| ☒ None | ☐ Drizzle |
| ☐ Rain | ☐ Ice Pellets |
| ☐ Snow | ☐ Snow Pellets |
| ☐ Hail | ☐ Snow Grains |
| ☐ Rain Showers | ☐ Ice Crystals |
| ☐ Freezing Rain | ☐ Ice Pellets Shower |
| ☐ Snow Shower | ☐ Freezing Drizzle |

Intensity of Precipitation

- | | | |
|--------------------------------|-----------------------------------|--------------------------------|
| ☐ Light | ☐ Moderate | ☐ Heavy |
|--------------------------------|-----------------------------------|--------------------------------|

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: Paul City: [REDACTED]
 Middle Initial: K State: [REDACTED] ZIP: [REDACTED]
 Last Name: Carlton Country: [REDACTED]
 Age at time of Accident/Incident: 43 Date of Birth: [REDACTED] Certificate Number: [REDACTED] ⁺
mm/dd/yyyy

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) (Check all that apply)

☐ 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

12/21/2017
mm/dd/yyyy

Medical Certificate Limitations

None. It was a military medical, used in lieu of an FAA-designated medical examiner.

Medical Certificate Waivers

None.

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:

04/13/2017
mm/dd/yyyy

Flight Review Aircraft

Make: Cessna
 Model: 182RG

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
☐ Free 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
 ☒ Instrument Airplane
☒ Airplane Single-Engine
 ☐ Instrument Helicopter
☐ Airplane Multi-Engine
 ☐ Helicopter
☐ Gyroplane
 ☐ Glider
☐ Powered Lift
 ☐ Sport

Type Ratings

None

Student Endorsements (Include dates)

N/A

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	3,400	20	2,350	700	500			2	10	0
Pilot in Command (PIC)	3,000	14	2,300	650	498			0	0	0
Time as Instructor	2,000	0	1,350	500	300			0	0	0
This Make/Model					0					
Last 90 Days	50	19	47	5	2			0	0	0
Last 30 Days	25	14	22	3	0			0	0	0
Last 24 Hours	1	0	1	0	0			0	0	0

PILOT "B" INFORMATION

Pilot "B" Responsibilities at the Time of Accident/Incident

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

Pilot "B" Identification

First Name: _____ City: _____
 Middle Initial: _____ State: _____ ZIP: _____
 Last Name: _____ Country: _____
 Age at time of Accident/Incident: _____ Date of Birth: _____ Certificate Number: _____
mm/dd/yyyy

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) (Check all that apply)

☐ 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

_____ mm/dd/yyyy

Medical Certificate Limitations

Medical Certificate Waivers

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
☐ Free 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
 ☐ Instrument Airplane
☐ Airplane Single-Engine
 ☐ Instrument Helicopter
☐ Airplane Multi-Engine
 ☐ Helicopter
☐ Gyroplane
 ☐ Glider
☐ Powered Lift
 ☐ 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 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											
						☐ Left ☐ Front ☐ Right ☐ Rear ☐ Center ☐ Single ☐ Unknown											
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											
						☐ Left ☐ Front ☐ Right ☐ Rear ☐ Center ☐ Single ☐ Unknown											
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											
						☐ Left ☐ Front ☐ Right ☐ Rear ☐ Center ☐ Single ☐ Unknown											
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: Micah						R	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐
Middle Initial: _____																	
Last Name: Hayden																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	
First Name: _____							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Middle Initial: _____																	
Last Name: _____																	

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.

The event:

On 15 July, I met Mr Micah Hayden at Meadowlake airport to take him flying in Glassair N181AL. Pre-flight, start, taxi seemed normal. As I approached Taxiway A, the windsocks were conflicting on which runway they were favoring, so I stopped and listened to the AWOS. The AWOS called the winds 050 at 7 knots, a near direct crosswind to either runway (150 or 330). This was approximately 1300L. I chose 15 because a Decathalon or Citrabria had just landed on 15 and it is the favored runway for the airfield. I taxied to the north end of the airfield and performed a normal run-up, paying particular attention to the Mag check and carb heat check.

I took the active runway 15 for takeoff and all indications were normal initially. At some point, I continued to creep to the left side of the runway (logical with a left crosswind), despite efforts (via brake and rudder) to correct back to the centerline. I made one last big effort to correct back to the right and got to the right of centerline, though swerving to accomplish it. Tire marks show I made it to the right side of the centerline with both wheels but not much more. Correcting back, I brought the airplane back to the left but my vector was too great to the left and decided to abort the takeoff rather than continue. I accepted going into the grass and likely ground loop in the aircraft. I reduced the power to idle at and at some point the wreckage shows I pulled the mixture to Idle Cutoff. The aircraft continued off the prepared surface into the grass, eventually coming to a stop on the intersection of Taxiway A and A4.

As we approached stopping, my passenger exclaimed "Engine Fire" and called for an emergency ground egress. I looked over and saw flames coming from the right leg well and consciously remember those flames before the aircraft came to a complete stop. We emergency ground egress, I pause to grab the fire extinguisher, then run to the front of the aircraft in an attempt to put the fire out; flames were coming from near the firewall-fuselage intersection of the aircraft, on the right side. My extinguisher had no effect on the fire and the aircraft is completely on fire within 3-5 minutes. It eventually burns on the taxiway for 5-7 minutes until the fire department came and put the fire out. The aircraft is destroyed after the fire. After talking to the NTSB and the FAA, they released the aircraft to be placed in the hangar.

Analysis:

Known facts after examining the aircraft with the FAA inspector, Mr Dale Shuel and Mr Richard Hosker, along with the airfield manager, Mr Dave Elliot and field A&P Mr Mike Barr.

1. The fire did not appear to originate from the engine compartment, forward of the fire wall. There is rubber tubing still present.
2. The worst scorching appears to be in the area where the design gives an optional header tank to be installed; none was installed in this aircraft. Wires are melted, all rubber tubing is clearly melted. When the area was revealed, the group exclaimed this was the likely source of the felt/seen in the cockpit fire.
3. In this area, the fuel shutoff valve AND electric fuel boost pump are installed, along with the brake reservoir in front of the pilot's feet on the left side. This means fuel lines and hydraulic lines are inside the cockpit.
4. Tire marks show the aircraft near the left side of the runway, approximately 1,000' down the runway, a clear movement to the right side of the centerline, then a vector back across the runway to the left, eventually off the runway on the left (east) side of runway 15.
5. The tire marks show some skidding but the brakes are not locked up.
6. Once departing the runway, the right tire is skidding and disturbing the grass/gravel making a clear mark, the left side appears to bounce several times with times of skidding as well.
7. There is nothing to hit along the runway to cause a spark until ~10-20 feet away from the aircraft stopping where the aircraft took out a blue taxiway light.
8. Before this taxi light is hit, there is clear scorching of the grass along the track of the right wheel, for approximately 10-15'. This says the aircraft is already on fire before hitting the light. The scorching on the ground is along the path of the right wheel well and appears to be a light dousing, consistent with a liquid hitting it, burning briefly and then going out for lack of fuel.

9. The passenger remembers seeing a heater hose leak. He says the aircraft is on the left side of the runway before the right engine catches fire and then he notices the fire.

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

Operator/Owner Safety Recommendation

If the fuel/brake line theory does not hold up under scrutiny, I do not know why I was unable to keep the aircraft on the centerline. I was properly endorsed and trained. Training may have been a player in this accident, but I cannot point to anything directly. I consciously thought about the differences between tricycle and tail wheel flying before the flight and explained them to Mr Hayden as the takeoff and landing would be different than he was used to.

I cannot pinpoint a reason for the aircraft to catch on fire. Perhaps the electric fuel pump leaked after an unknown hours of use. Pressurized fuel or brake fluid, seem to put as many of the pieces together as possible.

There is a minor point worth noting about accepting any tailwind. I consciously accepted a 1-2 knot tailwind (1.21 knots to be exact) in favor of the aircraft that just landed. This may have made a slight difference.

However, I believe the decision to abort, accept entering the grass and possible ground loop is what saved my life and the life of the passenger. The aircraft had already swerved twice and was not going in the desired direction. At that point, I aborted the takeoff rather than trying to continue to salvage a bad takeoff, careening down the runway to get control of the aircraft. That decision to not accept the aircraft performance, however it got there (my inability or mechanical degradation of the brakes by coating them with a fluid), likely saved the lives of the two people in the aircraft. This does not explain or prevent the fire, but helps in decision making for the future.

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

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

Mr Micah Hayden is a cadet at the Air Force Academy. He has gone through a 10 sortie introduction to powered flight course in a T-53, a Cirrus SR-20. For his clear communication of "engine fire" and commanding a "Ground Egress," he should be commended.

My flight hours are approximate. My current civilian log book was burned in the fire and the only recoverable portion of the logbook was the current BFR from this year. If desired, I should be able to get my recent tricycle gear hours from the flight school's computer, but all of my tail wheel time was in the burned logbook.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report <u>07/23/2017</u> <i>mm/dd/yyyy</i>	Signature and Name of Pilot/Operator Signature: _____ Type or Print Name: <u>///SIGNED/// Paul Carlton III</u>
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. CEN17LA274	Reviewed by NTSB Regional Office CHICAGO	Name of Investigator MITCHELL GALLO	Date Report Received 07/23/17
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