

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 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.

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.nts.gov.

**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: Goodyear State: Az
 ZIP: 85323 Country: USA
 Latitude: _____ Longitude: _____
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time
 Date: 01/25/2020 Local Time: 0855
mm/dd/yyyy Time Zone: MST
Collision with Other Aircraft: Midair On-ground None

AIRCRAFT INFORMATION

Registration Number: N399A
Manufacturer: James Merwin
Model: Kit Fox
Serial Number: _____
Year of Manufacture: 2019
Amateur-Built: Yes *If Yes:* Kit/Plans *Make:* Kit Fox
 No Original Design

IFR-Equipped and Certified
 Commercial Space Flight
 Unmanned Aircraft
Maximum Gross Weight: 1320 lbs
Weight at Time of Accident/Incident: _____ lbs
Number of Seats: 2 Flight Crew Seats: 2
 Cabin Crew Seats: _____ Passenger Seats: _____
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
 Amphibian
 Emergency Float
 Float
 Hull
 Other Launch/Recovery System
 None
 Tailwheel
 High Skid
 Skid
 Ski
 Ski/Wheel
 Unknown

Engine Type *(Select one)*
 Reciprocating
 Turbo Shaft
 Turbo Prop
 Turbo Jet
 Turbo Fan
 Electric
 Liquid Rocket
 Solid Rocket
 Hybrid Rocket
 None
 Unknown
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 <input type="radio"/> Horsepower or <input type="radio"/> lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Rotax	912						
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type
 100-Hour
 AAIP
 Annual
 Continuous Airworthiness
 Conditional Inspection
 Unknown

Propeller 1
 Fixed Pitch
 Controllable Pitch
 Ground Adjustable
 Manufacturer: _____
 Model: _____

Propeller 2
 Fixed Pitch
 Controllable Pitch
 Ground Adjustable
 Manufacturer: _____
 Model: _____

Date Last Inspection: _____
mm/dd/yyyy
Airframe Total Time: _____ hrs
 hours measured at *(Select one)*
 Last Inspection Time of Accident/Incident

ELT Installed: Yes No
If Yes:
ELT Manufacturer: _____
Model or Part No.: _____
TSO No.: C91 (121.5 MHz) C91a (121.5 MHz)
 C126 (406 MHz)

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: _____

Type of Maintenance Program *(Select one)*
 Annual
 Conditional (Amateur-built only)
 Manufacturer's Inspection Program
 Other Approved Inspection Program (AAIP)
 Continuous Airworthiness
 Other, specify: _____

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:

Description of Fire Extinguishing System
 None
 Specify: _____

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

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: James Merwin

City: _____

Fractional Ownership Aircraft: Yes No

State: _____ ZIP: _____

Country: _____

Operator of Aircraft Same As Registered Owner Same Address as Registered OwnerName: James Merwin

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: Phoenix GoodyearDistance From Airport Center: .4 smAirport Identifier: GYR

Direction From Airport: _____ degrees true

Proximity to Airport: Off Airport/Airstrip On Airport/Airstrip N/AAirport Elevation: 978 ft. msl**Runway Information**Runway ID: 21 (L/R/C) Length: 10000 ft Width: 150 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 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 <input type="radio"/> None <input type="radio"/> Fatal <input type="radio"/> Minor <input type="radio"/> Unknown <input type="radio"/> Serious	Seat Occupied <input type="radio"/> Left <input type="radio"/> Front <input type="radio"/> Unknown <input type="radio"/> Right <input type="radio"/> Rear <input type="radio"/> Center <input type="radio"/> Single	Restraint Type <table style="width:100%;"> <tr> <th style="text-align: left;">Available</th> <th style="text-align: left;">Used</th> </tr> <tr> <td><input type="radio"/> None</td> <td><input type="radio"/> None</td> </tr> <tr> <td><input type="radio"/> Lap only</td> <td><input type="radio"/> Lap only</td> </tr> <tr> <td><input type="radio"/> 3-point</td> <td><input type="radio"/> 3-point</td> </tr> <tr> <td><input type="radio"/> 4-point</td> <td><input type="radio"/> 4-point</td> </tr> <tr> <td><input type="radio"/> 5-point</td> <td><input type="radio"/> 5-point</td> </tr> <tr> <td><input type="radio"/> Unknown</td> <td><input type="radio"/> Unknown</td> </tr> </table>	Available	Used	<input type="radio"/> None	<input type="radio"/> None	<input type="radio"/> Lap only	<input type="radio"/> Lap only	<input type="radio"/> 3-point	<input type="radio"/> 3-point	<input type="radio"/> 4-point	<input type="radio"/> 4-point	<input type="radio"/> 5-point	<input type="radio"/> 5-point	<input type="radio"/> Unknown	<input type="radio"/> Unknown	Inflatable Restraints <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown
Available	Used																
<input type="radio"/> None	<input type="radio"/> None																
<input type="radio"/> Lap only	<input type="radio"/> Lap only																
<input type="radio"/> 3-point	<input type="radio"/> 3-point																
<input type="radio"/> 4-point	<input type="radio"/> 4-point																
<input type="radio"/> 5-point	<input type="radio"/> 5-point																
<input type="radio"/> Unknown	<input type="radio"/> Unknown																

Pilot Certificate(s) *(Check all that apply)*

<input type="checkbox"/> None	<input type="checkbox"/> Flight Instructor	<input type="checkbox"/> Commercial	<input type="checkbox"/> US Military
<input type="checkbox"/> Private	<input type="checkbox"/> Recreational	<input type="checkbox"/> Airline Transport	<input type="checkbox"/> Foreign
<input type="checkbox"/> Student	<input type="checkbox"/> Sport	<input type="checkbox"/> Flight Engineer	

Principal Occupation <input type="radio"/> Pilot <input type="radio"/> Other <input type="radio"/> Unknown	Medical Certificate <input type="radio"/> None <input type="radio"/> Class 3 <input type="radio"/> Class 1 <input type="radio"/> Driver’s License (Sport Pilot only) <input type="radio"/> Class 2 <input type="radio"/> Unknown	Medical Certificate Validity <input type="radio"/> Without limitations/waivers <input type="radio"/> Unknown <input type="radio"/> With limitations/waivers <input type="radio"/> N/A <input type="radio"/> Special Issuance	Date of Last Medical _____ mm/dd/yyyy
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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: _____
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Airplane Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Single-Engine Land <input type="checkbox"/> Single-Engine Sea <input type="checkbox"/> Multiengine Land <input type="checkbox"/> Multiengine Sea	Other Aircraft Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airship <input type="checkbox"/> Balloon <input type="checkbox"/> Glider <input type="checkbox"/> Gyroplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift	Instrument Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift	Instructor Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Airplane Multi-Engine <input type="checkbox"/> Gyroplane <input type="checkbox"/> Powered Lift <input type="checkbox"/> Instrument Airplane <input type="checkbox"/> Instrument Helicopter <input type="checkbox"/> Helicopter <input type="checkbox"/> Glider <input type="checkbox"/> Sport
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Type Ratings _____	Student Endorsements <i>(Include dates)</i> _____
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Flight Time <i>(Enter appropriate number of hours in each box)</i>	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		Seat Occupied	Injury
First Name: _____	City of Residence: _____	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown
Middle Initial: _____	State: _____ ZIP: _____	<input type="radio"/> Front <input type="radio"/> Rear <input type="radio"/> Single <input type="radio"/> Unknown	
Last Name: _____	Country: _____		
Pilot Certificate(s) (Check all that apply)		Restraint Type:	Inflatable Restraints
<input type="checkbox"/> None	<input type="checkbox"/> Flight Instructor	Available	Used
<input type="checkbox"/> Private	<input type="checkbox"/> Recreational	<input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown
<input type="checkbox"/> Student	<input type="checkbox"/> Sport		<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown
<input type="checkbox"/> Commercial	<input type="checkbox"/> US Military		
<input type="checkbox"/> Airline Transport	<input type="checkbox"/> Foreign		
<input type="checkbox"/> Flight Engineer			
Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> No		Total Flight Time at the Time of this Accident/Incident: _____ hrs	

Crew Name and Address		Seat Occupied	Injury
First Name: _____	City of Residence: _____	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown
Middle Initial: _____	State: _____ ZIP: _____	<input type="radio"/> Front <input type="radio"/> Rear <input type="radio"/> Single <input type="radio"/> Unknown	
Last Name: _____	Country: _____		
Pilot Certificate(s) (Check all that apply)		Restraint Type:	Inflatable Restraints
<input type="checkbox"/> None	<input type="checkbox"/> Flight Instructor	Available	Used
<input type="checkbox"/> Private	<input type="checkbox"/> Recreational	<input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown
<input type="checkbox"/> Student	<input type="checkbox"/> Sport		<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown
<input type="checkbox"/> Commercial	<input type="checkbox"/> US Military		
<input type="checkbox"/> Airline Transport	<input type="checkbox"/> Foreign		
<input type="checkbox"/> Flight Engineer			
Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> 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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown	Available <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown Used <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown	<input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown	Available <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown Used <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown	<input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown	Available <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown Used <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown	<input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other	<input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____	<input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown	Available <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown Used <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> Unknown	<input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown	<input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown

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)*

Right Main gear wheel center damaged. Tail wheel torn from acft. Ruder and Rudder post bent

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.

On Saturday, January 25, at approximately 0855 MST, at GYR airport, Kitfox N399A, piloted by me, suffered a landing accident. The flight departed GYR at approximately 0755 MST. The flight was a familiarization flight to determine takeoff and landing characteristics of the aircraft.

As permitted by the aircraft operating limitations, I was the pilot flying and the owner, James Merwin, was monitoring aircraft systems and assisting in the testing.

Approximately 8 takeoffs and 7 landings had been accomplished prior to the incident landing.

N399A had been cleared to land on runway 21. The winds were calm. No abnormalities in aircraft systems or performance were noted.

The initial portion of the approach was slightly high and about 5 knots fast at about 80 mph IAS. Normal approach speed with this aircraft ranges from 65 to 75 mph depending on configuration.

At about ½ to ¼ mile from touchdown I remember remarking to Mr. Merwin that we would "hold it off" a little longer to allow the extra airspeed to dissipate.

I proceeded to put the aircraft in final landing configuration with full flaps. I entered a slip to steepen the descent angle without increasing airspeed. After exiting the slip I began to flare the aircraft; landing pitch attitude was achieved and the aircraft was held in the landing pitch attitude as airspeed decayed toward V_{so}.

At approximately V_{so} the aircraft touched down on or near the center line with no drift or yaw. The aircraft began to uneventfully "roll out." After a second or two I felt the rudder pedals jerk and the nose began to yaw left rapidly.

There was no swerving from side to side.

I applied right rudder pedal pressure but the aircraft continued to yaw left.

The aircraft left the runway and stopped facing and almost perpendicular to the runway after 270 degrees of rotation.

The Right main landing gear wheel failed in the center. The axle and axle bearing was pulled from the wheel when the wheel failed. Since the direction of the yaw was to the left and the right main gear wheel failed it is likely the failure occurred as the aircraft yawed left and slid right on the runway.

The tail wheel was torn from the bottom of the fuselage and the tail wheel spring attachment bolt was bent over opposite the direction of the yaw. The tail wheel spring retaining plate (shackle) was found near the aircraft with one bolt missing and one bolt sheared. I do not know if the retaining plate attachment bolts failed or dropped out before or after the landing.

The tail wheel chains and steering springs are intact but the chains are not attached to the springs. I suspect one of the tail wheel steering chains may have disconnected during the forward slip since the chain on the side of the aircraft to which the rudder is deflected during the slip slackens. If the chain did disconnect in flight, it would have resulted in loss of tail wheel steering after touchdown. I do not know if the tail wheel steering springs and chains became disconnected prior to or during the incident; and probably never will.

The nut retaining the tail wheel spring was not recovered and the spring hole appears to be undamaged. I do not know if it loosened prior to the landing or was stripped from the attachment bolt by impact forces.

In summation; although this appears to be a classic "ground loop" incident, I believe, but obviously can not be sure, there were causal factors that contraindicate a typical loss of control accident.

The wind was calm. The touchdown was at or very near V_{so}. There were no side loads and no drift or yaw at touchdown and this aircraft rolls very straight if not disturbed. Several uneventful landings were executed in the previous hour and the tail wheel steering chains were disconnected at some point.

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

Operator/Owner Safety Recommendation

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.)

Tailwheel steering spring disconnected

**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)

_____ 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 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**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**

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

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 <u>05/22/2020</u> <small>mm/dd/yyyy</small>	Name of Pilot/Operator: <u>James P. Mayfield (Pilot in Command)</u> Signature: _____ -- or -- <input checked="" type="checkbox"/> Check here to electronically sign this document
--	---

If a Person Other than Pilot/Operator is Filing Report

Name: _____ **Title:** _____

Signature: _____

-- or -- Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No. WPR20CA080	Reviewed by NTSB Regional Office AS-WPR	Name of Investigator Tealeye Cornejo	Date Report Received 05/27/2020
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