

**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: <u>Porterville</u> State: <u>CA</u> ZIP: <u>93257</u> Country: <u>USA</u> Latitude: <u>36.025612</u> Longitude: <u>-119.058478</u> <i>(Enter in decimal degrees or degrees:minutes:seconds)</i>	Accident/Incident Date/Time Date: <u>09/01/2018</u> Local Time: <u>09:10 am</u> <i>mm/dd/yyyy</i> Time Zone: <u>PST</u> Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None
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AIRCRAFT INFORMATION

Registration Number: <u>N575DG</u> Manufacturer: <u>Eggleston Daniel</u> Model: <u>S-18 Thorp</u> Serial Number: <u>218</u> Year of Manufacture: <u>2007</u> Amateur-Built: ☒ Yes <i>If Yes:</i> ☒ Kit/Plans ☐ No <i>Original Design</i> Make: <u>Thorp S-18</u>	☐ IFR-Equipped and Certified ☐ Commercial Space Flight ☐ Unmanned Aircraft Maximum Gross Weight: <u>1600</u> lbs Weight at Time of Accident/Incident: <u>1223</u> lbs Number of Seats: <u>2</u> Flight Crew Seats: <u>1</u> Cabin Crew Seats: <u>0</u> Passenger Seats: <u>1</u> Number of Engines: <u>1</u>
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Category of Aircraft ☒ Airplane ☐ Balloon ☐ Blimp/Dirigible ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift ☐ Rocket ☐ Ultralight ☐ Unknown	Type of Airworthiness Certificate <i>(Check all that apply)</i> <table style="width:100%;"> <tr> <td style="width:50%; vertical-align: top;"> Standard ☐ Normal ☐ Aerobatic ☐ Balloon ☐ Commuter ☐ Transport ☐ Utility </td> <td style="width:50%; vertical-align: top;"> Special ☐ Restricted ☐ Limited ☐ Provisional ☐ Special Flight ☒ Experimental ☐ Special Light-Sport ☐ Experimental Light-Sport </td> </tr> </table> ☐ Certificate of Authorization or Waiver (COA) ☐ None ☐ Unknown	Standard ☐ Normal ☐ Aerobatic ☐ Balloon ☐ Commuter ☐ Transport ☐ Utility	Special ☐ Restricted ☐ Limited ☐ Provisional ☐ Special Flight ☒ Experimental ☐ Special Light-Sport ☐ Experimental Light-Sport	Landing Gear <i>(Check all that apply)</i> ☐ 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
Standard ☐ Normal ☐ Aerobatic ☐ Balloon ☐ Commuter ☐ Transport ☐ Utility	Special ☐ Restricted ☐ Limited ☐ Provisional ☐ Special Flight ☒ Experimental ☐ Special Light-Sport ☐ Experimental Light-Sport				

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-21991-27A	1968	150	2439.4	6.5	N/A
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type ☐ 100-Hour ☐ Continuous Airworthiness ☐ AAIP ☒ Conditional Inspection ☐ Annual ☐ Unknown Date Last Inspection: <u>07/21/2018</u> <i>mm/dd/yyyy</i> Airframe Total Time: <u>348.4</u> hrs hours measured at <i>(Select one)</i> ☐ Last Inspection ☒ Time of Accident/Incident	Propeller 1 ☒ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: <u>Aymar-Demuth</u> Model: <u>3200</u> Propeller 2 ☐ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: _____ Model: _____	ELT Installed: ☒ Yes ☐ No <i>If Yes:</i> ELT Manufacturer: <u>Ameri-King</u> Model or Part No.: <u>AK-450</u> TSO No.: ☐ OC91 (121.5 MHz) ☒ OC91a (121.5 MHz) ☐ OC126 (406 MHz) Was ELT still mounted in aircraft? ☒ Yes ☐ No Was ELT still connected to antenna? ☒ Yes ☐ No Did ELT Activate? ☒ Yes ☐ No <i>If activated:</i> Did ELT Aid in Locating Aircraft: ☐ Yes ☒ No <i>If not activated:</i> 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: _____
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: _____		

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: Jonathan M AbercrombieCity: Three RiversState: CA ZIP: 93271Fractional 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: Porterville AirportDistance From Airport Center: 0.25 smAirport Identifier: KPTVDirection From Airport: 190 degrees trueProximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/AAirport Elevation: 443 ft. msl**Runway Information**Runway ID: 30 (L/R/C) Length: 5960 ft Width: 150 ft**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

Runway/Landing Surface (Check all that apply)

- ☒ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood
☐ Dirt ☐ Ice ☐ Snow ☐ 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 ☐ Visual
☐ VOR/DME ☐ Localizer Only ☐ Visual ☐ Contact
☐ TACAN ☐ LOC-back course ☐ Circling
☐ RNAV ☐ 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" INFORMATION																																																																																																				
"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident ☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew																																																																																																				
"Flight Crewmember 1" was pilot flying ☒ Yes ☐ No																																																																																																				
"Flight Crewmember 1" Identification First Name: <u>Jonathan</u> Middle Initial: <u>M</u> Last Name: <u>Abercrombie</u> City of Residence: <u>Three Rivers</u> State: <u>CA</u> ZIP: <u>93271</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>45</u> Date of Birth: [REDACTED] <i>mm/dd/yyyy</i> 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>05/16/2017</u> <i>mm/dd/yyyy</i>																																																																																											
Medical Certificate Limitations None.																																																																																																				
Medical Certificate Special Issuance N/A																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>06/28/2017</u> <i>mm/dd/yyyy</i>						Flight Review Aircraft Make: <u>Cessna</u> Model: <u>172</u>																																																																																														
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																																																																																											
Type Ratings None.						Student Endorsements <i>(Include dates)</i> N/A																																																																																														
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 5px;">Flight Time <i>(Enter appropriate number of hours in each box)</i></th> <th rowspan="2" style="padding: 5px;">All Aircraft</th> <th rowspan="2" style="padding: 5px;">This Make & Model</th> <th rowspan="2" style="padding: 5px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 5px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 5px;">Night</th> <th colspan="2" style="padding: 5px;">Instrument</th> <th rowspan="2" style="padding: 5px;">Rotorcraft</th> <th rowspan="2" style="padding: 5px;">Glider</th> <th rowspan="2" style="padding: 5px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 5px;">Actual</th> <th style="padding: 5px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 5px;">Total Time</td> <td>209</td> <td>12</td> <td>209</td> <td>0</td> <td>28</td> <td>0</td> <td>26</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 5px;">Pilot in Command (PIC)</td> <td>160</td> <td>12</td> <td>160</td> <td>0</td> <td>25</td> <td>0</td> <td>26</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 5px;">Time as Instructor</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 5px;">This Make/Model</td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 90 Days</td> <td>18</td> <td>12</td> <td>18</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 30 Days</td> <td>7</td> <td>7</td> <td>7</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 24 Hours</td> <td>1</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>											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	209	12	209	0	28	0	26	0	0	0	Pilot in Command (PIC)	160	12	160	0	25	0	26	0	0	0	Time as Instructor	0	0	0	0	0	0	0	0	0	0	This Make/Model					0	0	0				Last 90 Days	18	12	18	0	0	0	0	0	0	0	Last 30 Days	7	7	7	0	0	0	0	0	0	0	Last 24 Hours	1	1	1	0	0	0	0	0	0	0
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																																																																																										
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Last 24 Hours	1	1	1	0	0	0	0	0	0	0																																																																																										

[illegible]

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 ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			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 ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			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: _____ 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	
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>O42</u> City: <u>Woodlake</u> State: <u>CA</u> Country: <u>USA</u>		Time of Departure Time: <u>8:20 am</u> Time Zone: <u>PST</u>		Destination Airport ID: <u>KPTV</u> City: <u>Porterville</u> State: <u>CA</u> Country: <u>USA</u>		Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
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: <u>N/A</u> 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>KPTV ATIS</u> Observation Time: <u>9:06 am</u> Time Zone: <u>PST</u> Distance from Accident Site: <u>0</u> nm Direction from Accident Site: <u>0</u> degrees true			
Basic Conditions ☒ VMC ☐ IMC ☐ Unknown		Light Condition ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night				
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: _____ (C) or _____ (F) Dew Point: _____ (C) or _____ (F) Altimeter Setting: _____ in. Hg or _____ MB		
Wind Direction ☐ Variable -or- Direction: <u>250</u> degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>4</u> kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft			
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		
Icing Forecast Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☒ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☒ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme		
NOTAMS (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: None.						

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)*

Ground damage to propeller, possible engine damage due to prop strike, damaged wheel pants, broken canopy, damaged vertical stabilizer, dented skin on fuselage, tailwheel not swiveling to one side. Damage to the vertical stabilizer was deemed as structural.

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.

The flight was a local day VFR flight with the intention of departing from Woodlake Airport (O42), practicing maneuvers over Eckert Field (1Q1), wheel and three-point landings at Porterville Airport (KPTV), and then returning to Woodlake Airport. I departed Woodlake Airport at approximately 8:20 a.m. on 9/01/2018 and was the sole occupant of the aircraft. I executed a normal takeoff and climb, turned crosswind, then downwind and departed to the southeast toward Eckert Field.

Over Eckert Field I practiced turns, slow flight, stalls, and descents. Satisfied with the maneuvers, I decided to proceed to KPTV to practice wheel and three-point landings.

I proceeded southeast over Lake Success and approached KPTV from the east. ATIS indicated winds from the south (160, I believe) at 6 knots so I decided to use Runway 12. I setup on a 45 degree entry to downwind, and proceeded to enter the downwind leg for Runway 12. I flew a normal pattern and was planning to execute a wheel landing. The approach was stable but speeds were about 5 MPH higher than my target. I rounded out and flew just above the runway surface along the centerline for a few hundred feet. I descended and briefly touched the mains down on the runway surface. While looking at the end of the runway, I noticed a white pickup truck crossing the departure end of Runway 12. It was traveling from my right to my left, from the closed Runway 25 to Taxiway A. Although I had three to four thousand feet of runway remaining and the vehicle had finished crossing and was clear of the runway, I decided to execute a touch and go by taking off instead of completing the landing and rolling out along the runway due to the speed of my aircraft having started about 5 MPH higher than my target speed, and disliking a vehicle crossing an active runway. I made a normal climb and continued a left hand pattern for Runway 12.

For the second approach to KPTV I decided on a 3-point landing. The approach was stable and speeds were well-maintained and on target. I rounded out and completed a 3-point landing, exiting the runway at Taxiway Charlie. After clearing the runway, I stopped and completed post landing checks. Then I looked at the windsock at about my 2 o'clock, and saw that the winds were shifting and might favor using Runway 30. I switched to the ATIS frequency, which reported winds from 250 at 4 knots. Since this favored Runway 30, I decided to use that runway.

I switched back to the CTAF frequency and taxied via the ramp to Runway 30. I stopped at the hold short line of Runway 30 at Taxiway A to conduct pre-takeoff checks. I noticed a white pickup truck drive up and stop behind me, presumably waiting to cross Runway 30 and head to the CalFire helicopter on the closed Runway 25. This appeared to be the same truck that crossed the runway earlier on my first approach at KPTV that day. I thought about walking back to the truck to discuss the earlier crossing of the runway while I was actually using the approach end of that same runway (I believe this constitutes a runway incursion), but did not want to block runway access by parking my aircraft at its current location. I also considered crossing the runway and proceeding to the CalFire helicopter location to meet the truck and discuss the earlier runway crossing. I also decided against this as the surface on the other side of the runway looked to be thick gravel that would likely cause damage to my aircraft. I decided to shelf the idea of talking to the pickup truck driver at this time, and instead complete a normal takeoff from Runway 30. I had planned to park on the ramp later to visit the restroom and take a break after a few more takeoffs and landings. I figured that I could talk with the pickup truck driver at this later time, if I still felt so inclined.

I completed pre-takeoff checks, then looked for any traffic in downwind, base, and final. I didn't see any traffic or hear any on the radio, so I made my radio call and proceeded onto Runway 30. I taxied onto the runway and lined up on the centerline. I initiated a normal takeoff, advancing the throttle to full power while maintaining centerline. I began lifting the tail at 45 MIAS and continued to maintain centerline. The aircraft continued to accelerate, with the last glance at the airspeed indicator showing over 60 MPH. The plane continued to accelerate a few seconds and then suddenly turned left at what seemed like 45 degrees or more. I applied full right rudder, feeling like I was standing on the right rudder pedal, but the airplane continued left, veering off the runway into plowed dirt, nosing over and coming to a rest upside down.

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Full right rudder seemed to have no effect, and as the aircraft left the runway I thought a rudder cable may have broke. After exiting the aircraft I looked at the rudder cables and saw nothing abnormal with them. They appeared normal, unbroken, and had tension on them. Being as the plane was still upside down with the rudder in dirt, I could not verify the ability of the rudder cables to move the rudder, but no malfunction was evident. I noticed a flat spot on the tailwheel. The tailwheel is steerable, but should swivel freely after turning to either side enough to "breakout". I checked the tailwheel by turning it to the side and saw it would breakout when the rear of the wheel was turned to one side, but it would not breakout when turned to the other side.

The day after the event, I walked the runway and saw skid marks left by my aircraft. The exact starting point is hard to tell due to blending in with all the rubber marks in the middle of the runway from previous landing aircraft. Outside of the rubber marks, the skid marks are easy to see and show a continual arc to the left all the way to the edge of the runway. Upon leaving the runway surface, the airplane left tire ruts in the dirt before nosing over. The skid marks on the runway appear to be from two tires, the right most mark aligning with the rut left in the dirt by the right main. The close proximity of the second mark (the left-most skid mark) is too close to the right mark to be the left main, which would seem to indicate the left skid mark was made by the tailwheel. This is likely what caused the flat spot observed on the tailwheel, and possibly also why the tailwheel would not break out to one side following the accident.

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

I was the PIC and failed to maintain directional control of the aircraft when it veered left and exited the runway. No evidence of mechanical failure to cause the sudden change of direction has been found to this point. Other possible causes are weather (such as a dust devil or crosswind) or pilot action. Without knowing the specific cause of the veering, it is difficult to say how to prevent this accident.

Based on the last known speed and the distance traveled, the aircraft was off the runway in less than 1.5 seconds. If a takeoff must be aborted, the pilot may only have a second or two to execute aborted takeoff procedures. Frequent practice of aborted takeoffs is critical to ensure the response is automatic.

Before I entered the runway I had an internal dialogue about talking to the driver of the white pickup truck. I decided not to talk to him at that time and was satisfied with that decision. Although I don't specifically recall this being on my mind once I proceeded onto the runway, it is possible that I underestimated the potential this situation had to distract me from the task at hand.

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.)

The aircraft completed two prior takeoffs and taxied onto the runway for the third takeoff with no mechanical malfunctions observed. After the accident, the tailwheel would not swivel to one side. The exact time this malfunction of the tailwheel began is unknown. It could have occurred prior to the aircraft leaving the runway since skid marks apparently from the tailwheel were observed on the runway surface. It also could be a result of the tailwheel going through plowed dirt after the aircraft left the runway. During the annual Condition Inspection completed on 07/21/2018, the tailwheel was inspected and the tailwheel assembly bolt was replaced with a longer bolt. After replacing the bolt, the tailwheel was found to be in a condition for safe operation and the aircraft was approved for return to service.

**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)

approximately 21 _____ Gallons

Fuel Type

☐ 80/87

☒ 100 Low Lead

☐ 100/130

☐ 115/145

☐ Jet A

☐ Jet A-1

☐ Jet B

☐ JP8

☐ Automotive

☐ Other, specify _____

Other Services, if Any, Prior to Departure

None.

EVACUATION OF AIRCRAFT

Was an emergency evacuation of the aircraft performed? ☒ Yes ☐ No

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

The aircraft came to rest upside down, preventing the sliding canopy from being opened. A group of CalFire employees located at the airport lifted the tail of the aircraft and the single occupant crawled out through the broken canopy.

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

09/11/2018
mm/dd/yyyy

Name of Pilot/Operator: Jonathan Abercrombie**Signature:** 

-- or -- ☒ 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.
GAA18CA523

Reviewed by NTSB Regional Office
GAA

Name of Investigator
Eric Swenson

Date Report Received
09/13/2018