

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

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

Accident/Incident Location Nearest City/Place: <u>KGEH</u> State: <u>AZ</u> ZIP: <u>85307</u> Country: <u>USA</u> Latitude: _____ Longitude: _____ <i>(Enter in decimal degrees or degrees:minutes:seconds)</i>		Accident/Incident Date/Time Date: <u>08/22/2017</u> Local Time: <u>0901</u> <i>mm/dd/yyyy</i> Time Zone: <u>MST</u>	
Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None			

Registration Number: <u>N52PD</u> Manufacturer: <u>Enstrom</u> Model: <u>F2BF</u> Serial Number: <u>807</u> Year of Manufacture: <u>1996</u> Amateur-Built: ☐ Yes ☒ No <i>If Yes:</i> ☐ Kit/Plans ☐ Original Design <i>Make:</i> _____		☐ IFR-Equipped and Certified ☐ Commercial Space Flight ☐ Unmanned Aircraft Maximum Gross Weight: <u>2600</u> lbs Weight at Time of Accident/Incident: <u>2350</u> lbs Number of Seats: <u>2</u> Flight Crew Seats: _____ Cabin Crew Seats: _____ Passenger Seats: _____ 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> <th style="text-align: left;">Standard</th> <th style="text-align: left;">Special</th> </tr> <tr> <td>☒ Normal</td> <td>☐ Restricted</td> </tr> <tr> <td>☐ Aerobatic</td> <td>☐ Limited</td> </tr> <tr> <td>☐ Balloon</td> <td>☐ Provisional</td> </tr> <tr> <td>☐ Commuter</td> <td>☐ Special Flight</td> </tr> <tr> <td>☐ Transport</td> <td>☐ Experimental</td> </tr> <tr> <td>☐ Utility</td> <td>☐ Special Light-Sport</td> </tr> <tr> <td></td> <td>☐ Experimental Light-Sport</td> </tr> </table> ☐ Certificate of Authorization or Waiver (COA) ☐ None ☐ Unknown	Standard	Special	☒ Normal	☐ Restricted	☐ Aerobatic	☐ Limited	☐ Balloon	☐ Provisional	☐ Commuter	☐ Special Flight	☐ Transport	☐ Experimental	☐ Utility	☐ 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	Special																		
☒ Normal	☐ Restricted																		
☐ Aerobatic	☐ Limited																		
☐ Balloon	☐ Provisional																		
☐ Commuter	☐ Special Flight																		
☐ Transport	☐ Experimental																		
☐ Utility	☐ 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 Overhaul (hours) (hours)
Eng. 1	<u>Lycoming</u>	<u>HIO-360-F1AD</u>	<u>L-22658-51A</u>		<u>190</u>	<u>964.9</u>	<u>12.7</u> <u>New</u>
Eng. 2							
Eng. 3							
Eng. 4							

Last Inspection Type ☒ 100-Hour ☐ Continuous Airworthiness ☐ AAIP ☐ Conditional Inspection ☒ Annual ☐ Unknown Date Last Inspection: <u>07/06/2017</u> <i>mm/dd/yyyy</i> Airframe Total Time: <u>6264.3</u> hrs hours measured at (Select one) ☒ Last Inspection ☐ Time of Accident/Incident	Propeller 1 ☐ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: _____ Model: _____ Propeller 2 ☐ Fixed Pitch ☐ Controllable Pitch ☐ Ground Adjustable Manufacturer: _____ Model: _____
Type of Maintenance Program (Select one) ☐ Annual ☐ Conditional (Amateur-built only) ☒ Manufacturer's Inspection Program ☐ Other Approved Inspection Program (AAIP) ☐ Continuous Airworthiness ☐ Other, specify: _____	ELT Installed: ☐ Yes ☒ No <i>If Yes:</i> ELT Manufacturer: _____ Model or Part No.: _____ 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
Description of Fire Extinguishing System ☒ None ☐ Specify: _____	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: _____

[illegible]

"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: <u>Daniel</u> City of Residence: <u>Glendale</u> Middle Initial: <u>J</u> State: <u>AZ</u> ZIP: <u>85308</u> Last Name: <u>Ennis</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>43</u> Date of Birth: <u>1974</u> mm/dd/yyyy Certificate Number: <u> </u>										
Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious			Seat Occupied ☐ Left ☐ Front ☐ Unknown ☒ Right ☐ Rear ☐ Center ☐ Single			Restraint Type Available ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown			Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☒ Flight Instructor ☒ Commercial ☐ US Military ☒ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer										
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown		Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown			Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☒ With limitations/waivers ☐ N/A ☐ Special Issuance			Date of Last Medical <u>04/03/17</u> mm/dd/yyyy		
Medical Certificate Limitations <u>Must wear corrective lenses</u>										
Medical Certificate Special Issuance										
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>12/10/2015</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Enstrom</u> Model: <u>F28F</u>						
Airplane Rating(s) (Check all that apply) ☒ None ☐ Single-Engine Land ☐ Single-Engine Sea ☐ Multiengine Land ☐ Multiengine Sea			Other Aircraft Rating(s) (Check all that apply) ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☒ Helicopter ☐ Powered Lift			Instrument Rating(s) (Check all that apply) ☐ None ☐ Airplane ☒ Helicopter ☐ Powered Lift		Instructor Rating(s) (Check all that apply) ☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☒ Helicopter ☐ Glider ☐ Sport		
Type Ratings						Student Endorsements (Include dates)				

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	1300	1280			50		50	1700		
Pilot in Command (PIC)	1220	1220			40		50	1220		
Time as Instructor	960	960			40			960		
This Make/Model										
Last 90 Days	90	90			7			90		
Last 30 Days	0									
Last 24 Hours	0									

Crew Name and Address		Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ 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		Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ 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			

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 <i>If Under 5,</i> ☐ 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 <i>If Under 5,</i> ☐ 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 <i>If Under 5,</i> ☐ 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 <i>If Under 5,</i> ☐ Child Restraint ☐ Lap-Held ☐ Unknown

Last Departure Point Airport ID: <u>KGEU</u> City: <u>Glendale</u> State: <u>AZ</u> Country: <u>USA</u>		Time of Departure Time: <u>08:20</u> Time Zone: <u>MST</u>		Destination Airport ID: <u>KGEU</u> City: <u>Glendale</u> State: <u>AZ</u> Country: <u>USA</u>		Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown	
Type of ATC Clearance/Service (Check all that apply) ☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☒ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA							
Airspace where the accident/incident occurred (Check all that apply) ☐ Class A ☐ Class G ☐ Military Operations Area (MOA) ☐ Special ☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area ☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown ☒ Class D ☐ Prohibited Area ☐ TRSA ☐ Class E ☐ Restricted Area ☐ FAR 93						Altitude of In-Flight Occurrence: _____ ft msl	
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>KGEU AWOS</u> Observation Time: _____ Time Zone: <u>MST</u> Distance from Accident Site: <u>0</u> nm Direction from Accident Site: <u>N/A</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: _____ degrees true		Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: _____ kts		Wind Gusts ☐ Not Gusting -or- Speed: _____ kts		Visibility _____ 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 Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown		Icing Actual Amount Type ☒ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Light ☐ Clear Air ☐ Moderate ☐ Terrain-Induced ☐ Severe ☐ Convective Turbulence ☐ Extreme			
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: 							

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

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.

Departed GEM @ approx 0820 MST w/ 25 gallons of fuel. Conducted training flight in airports east practice area. At time of incident we were performing practice hovering autorotations. We performed several. On the last one the engine appeared to have stalled, but it still sounded as if it were running but very rough. The cockpit filled with smoke. I turned off all electrical components, pulled mixture to ID, turned off both magnetos, and turned off the fuel valve. We exited the aircraft & ran to a safe distance. The engine was still running. Smoke was coming out of the right side air scoop. I went back to the aircraft, retrieved the fire extinguisher and deployed it into the air scoop where the smoke was coming from. After about 5 minutes, from when the aircraft was evacuated, the engine stopped running.

Operator/Owner Safety Recommendation

Was there Mechanical Malfunction/Failure? ☐ Yes ☐ No
(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)

Total Time/Cycles
On Part
____ Hours
____ Cycles

Time Since This Part
Inspected/Overhauled
____ Hours

Fuel on Board at Last Takeoff
(Convert from pounds, as necessary)

25

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

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 student exited the left side, I the right side

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: _____

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

Date of this Report

09/25/2017
mm/dd/yyyy

Name of Pilot/Operator: Daniel J. Ennis

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

NTSB Accident/Incident No.

WPR17IA198

Reviewed by NTSB Regional Office

WPR-AS

Name of Investigator

Albert Nixon

Date Report Received

09/25/17