

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

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

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Colorado Springs State: CO
 ZIP: 80916 Country: USA
 Latitude: 38.85 N (dd:mm:ss N/S) Longitude: 104.71W (ddd:mm:ss E/W)

Date/Time

Date: 04/15/2018 Local Time: 12:50 PM
 mm/dd/yyyy Time Zone: MDT

Phase of Operation

☐ Standing ☐ Takeoff (incl. initial climb) ☐ Cruise ☐ Hover
☐ Taxi ☐ Climb ☐ Maneuvering ☐ Other
☒ Descent ☐ Landing ☒ Approach ☐ Unknown

Collision with Other Aircraft

☐ Midair
☐ On-ground
☒ None

Altitude of In-Flight Occurrence

9,400 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Cessna

Model: T210 L

Serial Number: Logs are with FAA

Registration Number: N6988N

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 3,800 lbs

Weight at Time of Accident/Incident: 2,960 lbs

Location of Center of Gravity at Time of Accident/Incident:

Approx 45 inches from ☐ nose or ☒ datum
 -or- _____ Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft

☒ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyrocraft
☐ Helicopter
☐ Powered lift
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate (Check all that apply)

Standard

☒ Normal
☐ Utility
☐ Acrobatic
☐ Transport

Special

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

Number of Seats: 6

If Large Aircraft, how many seats for:

Flight Crew: _____

Cabin Crew: _____

Passengers: _____

Landing Gear ☒ Retractable

Check any additional landing gear configuration that applies:

☒ Tricycle ☐ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Unknown

Type of Maintenance Program

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

Last Inspection Type

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

Date Last Inspection: 02/2018?

mm/dd/yyyy

Airframe Total Time: _____ hrs

hours measured at (check one)

☐ Last Inspection ☐ Time of Accident/Incident

IFR Equipped

☒ Yes ☐ No ☐ Unknown

Stall Warning System Installed

☒ Yes ☐ No ☐ Unknown

Type of Fire Extinguishing System

☒ None
☐ Specify _____

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☐ No

ELT Manufacturer: Unknown

Model/Series: Unknown

ELT Aided in Locating Accident/Incident

☐ Yes ☒ No

Serial Number: Unknown

Battery Type: Unknown

Battery Exp. Date: Unknown

Engine Type

☒ Reciprocating ☐ Turbo Jet
☐ Turbo Shaft ☐ Turbo Fan
☐ Turbo Prop ☐ Unknown

Reciprocating Fuel System Type

☐ Carburetor
☒ Fuel Injected

Propeller

☐ Fixed Pitch
☒ Controllable Pitch

Manufacturer: McCauley

Model: D3A32C88-M ?

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	Continental	TSIO-520	Unknown	Unknown	285			
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION		
Registered Aircraft Owner Name: _____ Fractional Ownership Aircraft: ☐ Yes ☐ No		Owner Address City: _____ State: _____ ZIP: _____ Country: _____
Operator of Aircraft ☐ Same As Registered Owner Name: _____ Doing Business As: <u>Fly Elite Aviation</u> Air Carrier/Operator Designator (4 Character Code): _____		Operator Address ☐ Same As Registered Owner City: <u>Longmont</u> State: <u>CO</u> ZIP: <u>80503</u> Country: _____
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces ☐ Public Use (select type) ☐ Federal ☐ State ☐ Local ☐ Unknown		Revenue Sightseeing Flight ☐ Yes ☒ No
Purpose of Flight for FAR 91, 103, 133, 137 (Select one) ☒ Personal ☐ Business ☐ Executive/Corporate ☐ Other Work Use ☐ Instructional ☐ Ferry ☐ Positioning ☐ Aerial Application ☐ Aerial Observation ☐ Air Drop ☐ Air Race / Show ☐ Flight Test ☐ Public Use ☐ Unknown		Revenue Operation for FAR 121, 125, 129, 135 (Select one) ☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi Domestic or International ☐ Domestic ☐ International
Cargo Operation ☐ Passenger/Cargo ☐ Passenger _____ How many? ☐ Cargo _____ lbs ☐ Mail		Type of Commercial Operating Certificate Held (Check all that apply) ☐ None ☐ Flag Carrier Operating Certificate (121) ☐ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (129) ☐ Commuter Air Carrier (135) ☐ On-Demand Air Taxi (135) ☐ Large Helicopter (127) ☐ Rotorcraft External Load (133) - or - ☐ Agricultural Aircraft (137) ☐ Other Operator of Large Aircraft
OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)		
Aircraft Registration Number _____	Manufacturer: _____ Model: _____	Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☐ None
Registered Owner of Other Aircraft First Name: _____ Middle Initial: _____ Last Name: _____ City: _____ State: _____ ZIP: _____ Country: _____		
Pilot of Other Aircraft First Name: _____ Middle Initial: _____ Last Name: _____ City: _____ State: _____ ZIP: _____ Country: _____		
MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)		
Was there Mechanical Malfunction/Failure? ☐ Yes ☐ No ☒ Unknown <i>(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)</i> <u>Unknown. Suspect mechanical fuel pump.</u>		Total Time/Cycles On Part _____ Hours _____ Cycles Time Since This Part Inspected/Overhauled _____ Hours
DAMAGE TO AIRCRAFT AND OTHER PROPERTY		
Aircraft Damage ☐ None ☐ Substantial ☐ Minor ☒ Destroyed	Aircraft Fire ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground	Aircraft Explosion ☒ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground

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

Fuselage bent and compressed, landing gear collapsed, right wing leading edge damaged, horizontal elevator damaged, engine & propeller damaged.

Guard rail section bent.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)Airport Identifier: KCOSDistance From Airport Center: 5 SMAirport Name: City of Colorado Springs Municipal AirportDirection From Airport: 350 degrees MAGProximity to Airport ☒ Off Airport/Airstrip ☐ On Airport ☐ On AirstripAirport Elevation: 6,187 ft. MSL**Approach Segment** (Select one)☐ On Instrument Approach ☐ Landing ☐ Base leg ☒ Final ☐ Go Around
☐ Crosswind ☐ Downwind ☐ Low Approach ☐ Aborted Landing (after touchdown)**IFR Approach** (Check all that apply)☒ None ☐ PAR ☐ MLS ☐ Practice
☐ ADF/NDB ☐ Sidestep ☐ LDA ☐ GPS
☐ SDF ☐ ILS ☐ ASR ☐ Loran
☐ VOR/TWOR ☐ Localizer Only ☐ Visual ☐ Unknown
☐ VOR/DME ☐ LOC-back course ☐ Contact
☐ TACAN ☐ RNAV ☐ Circling**VFR Approach** (Check all that apply)☐ None ☐ Stop and Go
☐ Traffic Pattern ☐ Touch and Go
☒ Straight-In ☐ Simulated Forced Landing
☐ Valley/Terrain Following ☐ Forced Landing
☐ Go Around ☐ Precautionary Landing
☐ Full Stop ☐ Unknown**Runway Information**Runway ID: 17R (L/R/C) Length: 11,000 ft Width: 150 ft**Runway/Landing Surface** (Check all that apply)☒ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow**Condition of Runway/Landing Surface** (Check all that apply)☒ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☐ Wet
☐ Rubber Deposits ☐ Soft ☒ Unknown
☐ Slush Covered ☐ Vegetation**FLIGHT ITINERARY INFORMATION****Last Departure Point**Airport ID: KLMOCity: LongmontState: COCountry: USA**Time of Departure**Time: 12:45 PMTime Zone: MDT**Destination**Airport ID: KCOSCity: Colorado SpringsState: COCountry: USA**Type Flight Plan Filed**☒ None ☐ VFR/IFR
☐ Company VFR ☐ IFR
☐ Military VFR ☐ Unknown
☐ VFRActivated? ☐ Yes ☐ No**Type of ATC Clearance/Service** (Check all that apply)☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise
☒ VFR ☐ IFR ☐ VFR On Top ☒ Traffic Advisory ☐ Unknown / NA**Airspace where the accident/incident occurred** (Check all that apply)☐ Class A ☐ Class E ☐ Prohibited Area ☐ Jet Training Area ☐ Special
☐ Class B ☐ Class G ☐ Restricted Area ☐ TRSA ☐ Air Traffic Control Area
☒ Class C ☐ Demo Area ☐ Military Operations Area (MOA) ☐ FAR 93 ☐ Unknown
☒ Class D ☐ Warning Area ☐ Airport Advisory Area**Aircraft Load Description** (Check all that apply)☐ None ☐ Towing Glider ☐ Parachutists ☐ Livestock
☒ Passengers ☐ Towing Banner ☐ Water ☐ Unknown
☐ Cargo ☐ Other External ☐ Chemical/Fertilizer/Seeds**FUEL & SERVICES INFORMATION****Fuel on Board at Last Takeoff**

(convert from pounds, as necessary)

50 Gallons**Fuel Type**☐ 80/87 ☐ 115/145 ☐ JP3 ☐ Other, specify _____
☒ 100 Low Lead ☐ Jet A ☐ JP4
☐ 100/130 ☐ Automotive ☐ JP5**Other Services, if Any, Prior to Departure**

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☒ Yes ☐ No**Method of Exit** – Describe how the occupants exited and how many occupants evacuated each location

All occupants exited via the pilot side door.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**Facility ID: KCOS ATISObservation Time: unknownTime Zone: MDTDistance from Accident Site: 5 NMDirection from Accident Site: 170 degrees MAG**Source of Weather Information**

(Check all that apply)

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

Method of Briefing

(Check all that apply)

- | |
|--|
| ☐ In Person |
| ☐ Teletype |
| ☐ Telephone/Computer |
| ☒ Aircraft Radio |
| ☐ TV/Radio |
| ☐ Unknown |

Briefing Type/Completeness

- | | |
|---|---|
| ☐ Full | ☐ Abbreviated |
| ☐ Partial / Limited By Pilot | ☐ Unknown |
| ☐ Partial / Limited By Briefer | ☒ Not Pertinent |

Light Condition

- | | | |
|---|--------------------------------|---------------------------------------|
| ☐ Dawn | ☐ Dusk | ☐ Dark Night |
| ☒ Day | ☐ Night | ☐ Bright Night |
| ☐ Not Reported | | |

Visibility100 miles**Sky/Lowest Cloud Condition**

- | | |
|--|--|
| ☒ Clear | ☐ Thin Broken |
| ☐ Few | ☐ Thin Overcast |
| ☐ Partial Obscuration | ☐ Unknown |
| ☐ Scattered | |

Ceiling

- | | |
|--|-------------------------------------|
| ☒ None (clear) | ☐ Obscured |
| ☐ Broken | ☐ Indefinite |
| ☐ Overcast | ☐ Unknown |

Restriction to Visibility (Check all that apply)

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

Lowest Cloud Condition Height ft AGL**Ceiling Height** ft AGL**Wind Direction**☐ Indicated:
 degrees MAG☐ Variable**Wind Speed**Velocity: KTS

-or-

- | |
|--|
| ☐ Calm |
| ☒ Light and Variable |

Wind GustsVelocity: KTS

- | |
|--------------------------------------|
| ☐ Gusting |
| ☐ Not Gusting |

Type of Turbulence (Check all that apply)

- | | |
|---|---|
| ☐ None | ☐ In Clouds |
| ☒ Clear Air | ☐ Vicinity of Thunderstorm |

Severity of Turbulence

- | | | |
|----------------------------------|--|---|
| ☐ Extreme | ☐ Moderate | ☒ Light |
| ☐ Severe | ☐ Moderate Chop | |

NOTAMs (D, L and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident**Temperature:** (C)
or (F)**Altimeter Setting:** in. HG
or MB**Density Altitude:** ft**Dew Point:** (C)
or (F)**Icing Forecast****Amount**

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

Type

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

Icing Actual**Amount**

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

Type

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

Type of Precipitation (Check all that apply)

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

Intensity of Precipitation

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

PILOT "A" INFORMATION

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

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

Pilot "A" Identification

First Name: Robert City: Lyons
 Middle Initial: D State: CO ZIP: 80540
 Last Name: Freeman Country: USA
 Age at time of Accident/Incident: 63 Date of Birth: mm/dd/yyyy Certificate Number: mm/dd/yyyy

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☐ Left ☒ Front ☐ Unknown ☒ Right ☐ Rear ☐ Center ☐ Single	Seat Belt Used ☒ Yes ☐ No Available ☐ Yes ☐ No	Shoulder Harness Used ☒ Yes ☐ No Available ☐ Yes ☐ No
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Pilot Certificate(s) (Check all that apply)

☐ None ☐ Student ☐ Recreational ☐ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☒ Flight Instructor ☐ Sport ☒ Airline Transport ☐ U.S. Military

Principal Occupation ☒ Pilot ☐ Other ☐ Unknown	Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown	Medical Certificate Validity ☐ Without limitations/waivers ☒ With limitations/waivers ☐ Unknown	Date of Last Medical <u>05/11/117</u> <i>mm/dd/yyyy</i>
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Medical Certificate Limitations

Must wear glasses for reading while operating the a/c.

Medical Certificate Waivers

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

06/01/2017
mm/dd/yyyy

Flight Review Aircraft

Make: American Champion
 Model: 8KCAB

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 ☐ Free Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☒ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

None

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	5,174	137	2,755	2,409	419	203	79	0	0	0
Pilot in Command (PIC)	3,186	137	3,000	225	50	10	79	0	0	0
Time as Instructor	215	5	215	0	0	10	0	0	0	0
This Make/Model					0	0	0			
Last 90 Days	45	1	45	0	0	0	0	0	0	0
Last 30 Days	16	1	16	0	0	0	0	0	0	0
Last 24 Hours	1	1	1	0	0	0	0	0	0	0

PILOT "B" INFORMATION

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

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

Pilot "B" Identification

First Name: Theodore City: Lyons
 Middle Initial: R State: CO ZIP: 80540
 Last Name: Freeman Country: USA
 Age at time of Accident/Incident: 23 Date of Birth: mm/dd/yyyy Certificate Number: mm/dd/yyyy

Degree of Injury

☒ None
 ☐ Fatal
☐ Minor
 ☐ Unknown
☐ Serious

Seat Occupied

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

Seat Belt

Used ☒ Yes ☐ No
 Available ☐ Yes ☐ No

Shoulder Harness

Used ☒ Yes ☐ No
 Available ☐ Yes ☐ No

Pilot Certificate(s) (Check all that apply)

☐ None
 ☒ Student
 ☐ Recreational
 ☐ Commercial
 ☐ Flight Engineer
 ☐ Foreign
☐ Private
 ☐ Flight Instructor
 ☐ Sport
 ☐ Airline Transport
 ☐ U.S. Military

Principal Occupation

☐ Pilot
☒ Other
☐ Unknown

Medical Certificate

☐ None
 ☒ Class 3
☐ Class 1
 ☐ Driver's License (Sport Pilot only)
☐ Class 2
 ☐ Unknown

Medical Certificate Validity

☒ Without limitations/waivers
☐ With limitations/waivers
☐ Unknown

Date of Last Medical

08/22/2011
 mm/dd/yyyy

Medical Certificate Limitations

Medical Certificate Waivers

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

NA

mm/dd/yyyy

Flight Review Aircraft

Make: NA

Model: NA

Airplane Rating(s)

(Check all that apply)
☒ None
☐ Single-Engine Land
☐ Single-Engine Sea
☐ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s)

(Check all that apply)
☒ None
☐ Airship
☐ Free Balloon
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift

Instrument Rating(s)

(Check all that apply)
☒ None
☐ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s)

(Check all that apply)
☒ None
☐ Airplane Single-Engine
☐ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift
☐ Instrument Airplane
☐ Instrument Helicopter
☐ Helicopter
☐ Glider
☐ Sport

Type Ratings

Student Endorsements (Include dates)

Soloed in Dec 2011. Instruction stopped 2012 to 2017.
 Restarting in 2018.

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	30	5	30							
Pilot in Command (PIC)	0	0	0							
Time as Instructor										
This Make/Model										
Last 90 Days	3	1	3							
Last 30 Days	3	1	3							
Last 24 Hours	1	1	1							

ADDITIONAL FLIGHT CREW MEMBERS (Exclusive of cabin attendants, complete the following information)																	
Pilot Name and Address						Degree of Injury											
First Name: _____			City: _____			☐ None		☐ Fatal									
Middle Initial: _____			State: _____ ZIP: _____			☐ Minor		☐ Unknown									
Last Name: _____			Country: _____			☐ Serious											
Pilot Certificate(s) (Check all that apply)						Seat Occupied											
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer									
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military									
								☐ Foreign									
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front									
						☐ Right		☐ Rear									
						☐ Center		☐ Single									
								☐ Unknown									
Pilot Name and Address						Degree of Injury											
First Name: _____			City: _____			☐ None		☐ Fatal									
Middle Initial: _____			State: _____ ZIP: _____			☐ Minor		☐ Unknown									
Last Name: _____			Country: _____			☐ Serious											
Pilot Certificate(s) (Check all that apply)						Seat Occupied											
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer									
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military									
								☐ Foreign									
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front									
						☐ Right		☐ Rear									
						☐ Center		☐ Single									
								☐ Unknown									
Pilot Name and Address						Degree of Injury											
First Name: _____			City: _____			☐ None		☐ Fatal									
Middle Initial: _____			State: _____ ZIP: _____			☐ Minor		☐ Unknown									
Last Name: _____			Country: _____			☐ Serious											
Pilot Certificate(s) (Check all that apply)						Seat Occupied											
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer									
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military									
								☐ Foreign									
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front									
						☐ Right		☐ Rear									
						☐ Center		☐ Single									
								☐ Unknown									
PASSENGER(S) / OTHER PERSONNEL (Include flight attendants; continue on separate sheet if necessary)																	
Name and Address						Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown	
First Name: <u>Pamela</u> City: <u>Lyons</u>						4	□	□	□	□	□	□	□	□	□	□	□
Middle Initial: <u>J</u> State: <u>CO</u> ZIP: <u>80540</u>																	
Last Name: <u>Freeman</u> Country: <u>USA</u>																	
First Name: _____ City: _____																	
Middle Initial: _____ State: _____ ZIP: _____																	
Last Name: _____ Country: _____																	
First Name: _____ City: _____																	
Middle Initial: _____ State: _____ ZIP: _____																	
Last Name: _____ Country: _____																	
First Name: _____ City: _____																	
Middle Initial: _____ State: _____ ZIP: _____																	
Last Name: _____ Country: _____																	
First Name: _____ City: _____																	
Middle Initial: _____ State: _____ ZIP: _____																	
Last Name: _____ Country: _____																	

NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State time and point of departure, intended destination, and services obtained.

I rented the airplane from the Elite Aviation FBO at the Vance Brand airport (KLMO). The airplane had about 20 gallons on board initially (during the walk around), as indicated by the gauges in the cockpit; approx 10 gallons per wing. I had the FBO add another 30 gallons to the airplane, 15 gallons per side. So we had approximately 25 gallons per wing on board at take off. I figured this to comfortably be 2.5 hours of fuel at our expected power setting for a 1 hour and 15 min flight. The fuel gauges after fueling showed closer to 35 gallons in the left wing and 25 in the right wing after fueling. We had three people on board; my son Ted and I in the front, and my wife Pam in the 2nd row. We had shoulder harnesses in the front but only lap belts in the back.

We took off from KLMO sometime around 11:45 AM (my estimate) and flew north of Longmont for about 15 minutes at cruise power, doing 360 turns left and right to let Ted get a feel for the airplane. We had selected the left wing tank as it was the fullest tank. We then flew west of Longmont to avoid the parachute drop zone, over the top of Rocky Mountain Metro airport (KBJC), turned south and descended below the corner of the class B airspace and turned toward KCOS. At about 22 miles (estimated) north of KCOS we observed two aircraft performing aerobatics at our altitude so we deviated east and had our attention on them, trying to keep them in sight, as we passed the area.

I listened to the ATIS information for KCOS and then contacted Colorado Springs approach with our position 18.5 (as I recall) miles north and stated our intention to land. I was given a squawk code. I read back and entered the code and they confirmed that they had radar contact. They asked for our altitude which was 9400' as I recall. We were instructed to maintain VFR at or above 9500' and were given an advisory for traffic immediately below us. We initiated a climb to 9500' and confirmed the altitude restriction while looking for the traffic when the engine lost power.

After a short delay, I informed approach that we were unable to maintain 9500' due to some engine trouble. I switched from the left fuel tank to the right fuel tank and turned the aux boost pump on. The engine power came back and seemed to be running. I informed approach that we thought we had the issue resolved and started climbing. We were handed off to KCOS tower and checked in. Ted was manipulating the flight controls and I had been handling the radios and managing the engine power until this point. They gave us landing clearance for a straight in approach to 17R. They reported that they had the emergency equipment standing by as a precaution.

I started to configure the airplane for a nice, long, stabilized straight-in approach and put the gear down. Shortly after the gear was down, we lost engine power again. The fuel flow shown on the JPI engine monitor showed zero. The fuel pressure gauge was unsteady. After several attempts to restart by adjusting the mixture, I took the flight controls, reprioritized the restart efforts to focus on finding a place to put the airplane down that would avoid injury to us in the plane, and people on the ground. I intended to return to the engine once a suitable landing spot was identified. There were not any really attractive options and I never got back to the engine recovery efforts.

North Powers Drive looked good except that there was way too much traffic for it to be safely usable. The next N/S road to the east also looked good except again too much traffic and too many street light poles. To our east (left side) was Sand Creek, with a dirt path on the west side of the embankment. I considered putting the plane there but could not get down to it quickly enough and the heading would have put us on course with Sonic Burger if we overshot. I thought I might be able to make a turn to the east-south-east to land on Constitution, but at that point the airplane was too low and too slow for a turn. I put down full flaps and ballooned the plane over the embankment on the north side of Constitution to avoid hitting the north side embankment. We landed hard on the gear, in the west bound lanes of Constitution and bounced over the median, landing again in the east bound lanes. We rolled forward nose first and hit the guard rail on the south side of Constitution at about a 70 degree angle. The airplane somehow flipped tail up, over and rotated 180 degrees. The nose ended pointing up the embankment on south side of Constitution. We shut off the fuel selector and electrical switches. Ted and I helped Pam climb out of the back seat and we all cleared the aircraft with the help of people on the ground. I could smell fuel and so I yelled for everyone to clear the a/c area as fast as possible because of the fire hazard.

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

Operator/Owner Safety Recommendation

At this point I am not sure what the problem was that caused the 2nd power loss. If I assume that the left tank actually ran dry, then carrying more fuel for the flight or switching the tanks sooner may have prevented the 1st power loss. This in itself was not an issue regardless, given the tank switch and boost pump recovered the power.

Having switched tanks and getting power back, it's not clear to me what this issue was that caused the 2nd power loss. A quick glance at the JPI fuel flow gauge showed zero fuel flow and the fuel pressure gauge (steam gauge) had unsteady fuel pressure. With the fuel aux pump on, mixture adjustments did not recover the engine. It's not clear to me what caused the 2nd power loss nor how to have prevented it.

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

04/28/2018

mm/dd/yyyy

Signature and Name of Pilot/Operator

Signature:

Type or Print Name: Robert D Freeman

4/29/2018

Signature and Name of Person Filing Report if Other than Pilot/Operator

Signature:

Type or Print Name:

Title:

FOR NTSB USE ONLY

NTSB Accident/Incident No.

CEN18LA142

Reviewed by NTSB Regional Office

DENVER, COLORADO

Name of Investigator

ARNOLD W, SCOTT

Date Report Received

MAY 1, 2018