

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: Cheyenne State: WY
ZIP: _____ Country: _____
Latitude: _____ Longitude: _____
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 07/01/2019 Local Time: 2100
mm/dd/yyyy Time Zone: MST

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N387G
Manufacturer: Grumman
Model: AA-5A
Serial Number: AA5A-0387
Year of Manufacture: 1977
Amateur-Built: ☐ Yes ☒ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

☒ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft

Maximum Gross Weight: 2200 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 | Special |
|---|---|
| ☒ Normal | ☐ Restricted |
| ☐ Aerobatic | ☐ Limited |
| ☐ Balloon | ☐ Provisional |
| ☐ Commuter | ☐ Special Flight |
| ☐ Transport | ☐ Experimental |
| ☐ Utility | ☐ Special Light-Sport |
| | ☐ Experimental Light-Sport |
| ☐ Certificate of Authorization or Waiver (COA) | |
| ☐ None ☐ Unknown | |

Landing Gear

(Check all that apply)

- ☐ 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

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	LYCOMING	0-320-E2G	L-47116-27A	UNK	160	UNK	8.99	320.39
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 04/09/2019

mm/dd/yyyy

Airframe Total Time: 4245.6 hrs

hours measured at (Select one)

- ☒ Last Inspection ☐ Time of Accident/Incident

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: _____

Propeller 1

- ☒ Fixed Pitch
- ☐ Controllable Pitch
- ☐ Ground Adjustable

Manufacturer: MCCAULEY

Model: 1C172 BTM 7359

Propeller 2

- ☐ Fixed Pitch
- ☐ Controllable Pitch
- ☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: NARLO

Model or Part No.: ELT 10

TSO No.: ☒ C91 (121.5 MHz) ☐ C91a (121.5 MHz)

☐ C126 (406 MHz)

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:

- 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: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: THUNDER FIGHTER, LLCFractional Ownership Aircraft: ☐ Yes ☐ NoCity: ENGLEWOODState: CO ZIP: 80112Country: USA**Operator of Aircraft**☐ Same As Registered OwnerName: WESTERN AIR FLIGHT ACADEMY

Doing Business As: _____

Air Carrier/Operator Designator (4 Character Code): _____

☐ Same Address as Registered OwnerCity: BROOMFIELDState: CO ZIP: 80021Country: USA**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: CHEYENNE REGIONAL / Jerry OlsonAirport Identifier: KCYS FieldProximity to Airport: ☐ Off Airport/Airstrip ☒ On Airport/Airstrip ☐ N/A

Distance From Airport Center: _____ sm

Direction From Airport: _____ degrees true

Airport Elevation: 6160 ft. msl**Runway Information**Runway ID: 27 (L/R/C) Length: 9270 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 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: JENNIFER

City of Residence: BOULDER

Middle Initial: H

State: CO ZIP: 80303

Last Name: FRASER

Country: USA

Age at time of Accident/Incident: 43 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	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		Medical Certificate Validity ☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance	
Principal Occupation ☐ Pilot ☒ Other ☐ Unknown	Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown	Date of Last Medical <u>02/25/2019</u> mm/dd/yyyy	

Medical Certificate Limitations

NONE

Medical Certificate Special Issuance

NONE

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 05/03/2019
mm/dd/yyyy

Flight Review Aircraft

Make: Grumman

Model: Cheetah

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)

N/A

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	965.9	56.9	183.8	2.8	159.5	195.9	216.5	773.5	0.0	0.0
Pilot in Command (PIC)	486.5	37.8	103.3	0.0	153.8	186.5	179.6	383.2	0.0	0.0
Time as Instructor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
This Make/Model					2.1	0.0	20.7			
Last 90 Days	59.5	45.4	59.5	2.8	2.1	0.0	20.7	0.0	0.0	0.0
Last 30 Days	50.2	33.4	50.2	2.8	2.1	0.0	20.7	0.0	0.0	0.0
Last 24 Hours	1.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

"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: Chad

City of Residence: Colorado Springs

Middle Initial: M

State: CO ZIP: 80927

Last Name: Temple

Country: _____

Age at time of Accident/Incident: 38 Date of Birth: [REDACTED] mm/dd/yyyy

Certificate Number: _____

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

02/18/2019
 mm/dd/yyyy

Medical Certificate Limitations

None

Medical Certificate Special Issuance

None

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

mm/dd/yyyy

Flight Review Aircraft

Make: _____

Model: _____

Airplane Rating(s)

(Check all that apply)

☐ None
☒ Single-Engine Land
☐ Single-Engine Sea
☒ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s)

(Check all that apply)

☐ None
☐ Airship
☐ 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	1,637	130	225	13	419	2	61	1400		
Pilot in Command (PIC)	1,010	121	177		316		45			
Time as Instructor										
This Make/Model										
Last 90 Days	195	116	182	13	38		29			
Last 30 Days	121	95	121		19					
Last 24 Hours	10	10	10							

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)							
Crew Name and Address <u>N/A</u> First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown		
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ 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 <u>N/A</u> First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown		
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ 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 <u>N/A</u> First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		Seat ☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	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	Age ☐ 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>KCPR</u> City: <u>Casper</u> State: <u>WY</u> Country: <u>USA</u>	Time of Departure Time: <u>1830</u> Time Zone: <u>MST</u>	Destination Airport ID: <u>KBJC</u> City: <u>Broomfield</u> State: <u>CO</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 CYS APPR	☐ 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	Altitude of In-Flight Occurrence: _____ ft msl
☐ 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		

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply) ☒ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☒ Automated Report (ATIS) ☐ Commercial Weather Service (DUATS) ☒ On-Board Weather (Foreflight, NEXRAD composite radar)	Weather Observation Facility Facility ID: <u>KCYS (INFO M)</u> Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ 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 <u>4500</u> ft agl	Ceiling ☐ None (Clear) ☐ Obscured ☒ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height <u>6000</u> 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 <u>UNR</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 <table border="0"> <tr> <th>Amount</th> <th>Type</th> </tr> <tr> <td>☒ None</td> <td>☐ N/A</td> </tr> <tr> <td>☐ Trace</td> <td>☐ Rime</td> </tr> <tr> <td>☐ Light</td> <td>☐ Clear</td> </tr> <tr> <td>☐ Moderate</td> <td>☐ Mixed</td> </tr> <tr> <td>☐ Severe</td> <td>☐ Unknown</td> </tr> <tr> <td>☐ Unknown</td> <td></td> </tr> </table>	Amount	Type	☒ None	☐ N/A	☐ Trace	☐ Rime	☐ Light	☐ Clear	☐ Moderate	☐ Mixed	☐ Severe	☐ Unknown	☐ Unknown		Icing Actual <table border="0"> <tr> <th>Amount</th> <th>Type</th> </tr> <tr> <td>☒ None</td> <td>☐ N/A</td> </tr> <tr> <td>☐ Trace</td> <td>☐ Rime</td> </tr> <tr> <td>☐ Light</td> <td>☐ Clear</td> </tr> <tr> <td>☐ Moderate</td> <td>☐ Mixed</td> </tr> <tr> <td>☐ Severe</td> <td>☐ Unknown</td> </tr> <tr> <td>☐ Unknown</td> <td></td> </tr> </table>	Amount	Type	☒ None	☐ N/A	☐ Trace	☐ Rime	☐ Light	☐ Clear	☐ Moderate	☐ Mixed	☐ Severe	☐ Unknown	☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme
Amount	Type																													
☒ None	☐ N/A																													
☐ Trace	☐ Rime																													
☐ Light	☐ Clear																													
☐ Moderate	☐ Mixed																													
☐ Severe	☐ Unknown																													
☐ Unknown																														
Amount	Type																													
☒ None	☐ N/A																													
☐ Trace	☐ Rime																													
☐ Light	☐ Clear																													
☐ Moderate	☐ Mixed																													
☐ Severe	☐ Unknown																													
☐ Unknown																														

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:
CONVECTIVE SIGMET SOUTH OF KCYS. NOT AFFECTING FLIGHT.

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.)

Total Time/Cycles
On Part

_____ Hours

_____ Cycles

Time Since This Part
Inspected/Overhauled

_____ Hours

FUEL & SERVICES INFORMATIONFuel on Board at Last Takeoff
(Convert from pounds, as necessary)51 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

None

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

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: _____

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)

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.

Please see attached statements:

(1) Statement of Jenn Fraser to FAA regarding landing at KCYS on July 1, 2019

(2) Statement by Chad Temple for Robert Nance regarding the aircraft incident of N387G at approx. 2100 MST in Cheyenne, Wyoming

Statement of Jenn Fraser to FAA regarding landing at KCYS on July 1, 2019

On July 1, 2019, I was flying N387G, a Grumman Cheetah, with another pilot Chad Temple. I was at the controls in the left seat during the final portion of the landing phase at KYCS, when the aircraft suddenly lost airspeed and descended rapidly towards the runway. I executed a go-around procedure when the high sink rate was detected. Following impact with runway, the aircraft veered left and struck obstacles on the ground left of the runway. When the aircraft would not respond to a climb out, I reduced power and landed the plane.

Prior to landing at KCYS, we had landed at KCPR to refuel and check weather en route and at our final destination, KBJC. After taking off from KCPR, we consistently monitored the weather on Foreflight using composite radar, and with AWOS and ATIS. When the weather was not improving en route and at KBJC, we decided to divert to KCYS and evaluate the remainder of our flight.

After contacting Approach and later KCYS Tower, we set up in the pattern for a full stop runway 27 at approximately 9:00 pm MST. During the base leg, we completed a three-way positive change of controls and I took controls. We set 1/3 flaps during the base leg and then added another 1/3 flaps during the final approach for a total of 2/3s flap setting. Tower cleared us to land runway 27. Chad checked the windsock and said we had a right quartering crosswind. I established a stable approach and flew on glideslope at 70 KIAS. I confirmed landing checks were complete.

During the final stages of the landing, during the transition to the roundout, the following things occurred very quickly: I saw a nose level attitude and 65 KIAS on the airspeed gauge, the stall horn sounded, the aircraft rapidly descended and developed a high sink rate, the aircraft came down quickly, I executed a go-around procedure when I recognized the high sink rate and heard Chad call for Power, the aircraft impacted the runway flat, the nose veered left and the aircraft was airborne again. I attempted to regain runway centerline and the aircraft struck obstacles left of the runway impacting the wing and the bottom of the fuselage. When a go-around was not possible due the aircraft's inability to climb, I reduced power and landed the aircraft in a grassy area to the left of runway 27 and short of a taxiway.

We shut down the aircraft and exited to inspect the damage. We then restarted the aircraft and contacted Ground. After taxiing to the FBO and shutting down the aircraft, I went inside the FBO and telephoned Tower. Chad and I then spoke with the Chief Pilot at the flight school where we rented the aircraft, the NTSB, and the FAA.

Due to the sudden loss of altitude and airspeed on a stable approach, I believe this was a wind shear event. When the aircraft impacted the runway, the aircraft hit flat and I believe the impact of the free casting nose wheel caused the aircraft to veer left. Despite executing a go-around procedure as soon as the high sink rate was detected, the combination of the wind and the sudden altered direction of the aircraft to the left, the aircraft struck obstacles on an attempted climb out. The aircraft was unstable due to damage to the flap and wing; however, we were able to execute a landing in the grass and ultimately taxi to a taxiway.

Jennifer H. Fraser
July 3, 2019

Statement by Chad Temple for Robert Nance regarding the aircraft incident of N387G at approx. 2100 MST in Cheyenne, Wyoming.

Jenn Fraser and I were flying N387G from Casper, WY (KCPR) to Rocky Mountain Metro airport (KBJC) which was the last leg of our trip that day. During the flight to KBJC we were watching weather and saw that the forecasted weather in the vicinity of KBJC was not moving out as predicted but getting worse. We decided to divert to Cheyenne, WY (KCYS) and wait out the weather. We approached KCYS from the west and contacted approach and then handed off to tower when we were within 10 miles of the airport.

We saw a storm that was estimated greater than 10 miles southeast of the field and continuing to move east which we deemed not a factor. Tower instructed me to call base for RWY 27. Jenn and I completed a before landing check prior to entering the downwind leg for the runway. I turned base and was cleared to land by tower. Jenn asked if she could take the landing and we did a three-way positive transfer of flight controls.

Jenn turned base to final and her approach was textbook with a 2/3 flap setting, no greater than 500 fpm, pitched for 70kts and on glideslope (two white/two red papi). I saw the windsock on the north side of the runway and announced that she will have a right quartering headwind. The windsock was moving back and forth showing variable wind direction, but we were stable.

As we crossed the threshold of the runway the stall horn sounded, and I looked over at the airspeed and the needle was now between 65-70 and as I looked back up to the runway our sink rate was increasing rapidly. It felt like the aircraft stopped mid-air and just fell. I called for power to catch the sink rate and we bounced hard on the runway landing flat on the mains. After that everything happened really fast. The aircraft went left suddenly as Jenn attempted the go-around procedure. I heard us hit something which I assume was a sign on the left side and we tipped right. Jenn said "she's not climbing" as she tried to get it back over the runway and I heard us hit a couple other signs or lights. At that point I knew we couldn't climb out and called to Jenn to abort and put it in the grass. The aircraft touched down the in the sod between the taxiway and runway stopped just short of B4. Tower called asking if we needed assistance and I said we are down and safe and will be getting out of the aircraft to assess.

After assessing the status of the aircraft, we determined the aircraft could be taxied out of the grass and to the FBO. I climbed back into the right seat and we got the aircraft started, called ground and taxied to the FBO. After shutdown we contacted ground via phone as instructed and our Chief Pilot, Jackie Burant, to inform the school of the incident.

It is my belief that the aircraft experienced a wind shear event over the threshold of the runway. The next day, we had a couple local pilots speak with us and both had made unsolicited comments about known local knowledge of unstable weather conditions within the approach end of runway 27 at KCYS. They both said they do not make approaches to the numbers and land long with a higher than normal approach speed. If this is local knowledge it should be broadcast via NOTAMS or ATIS to pilots unfamiliar with local conditions.

Chad Temple



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

07/11/2019

mm/dd/yyyy

Name of Pilot/Operator:

JENNIFER H. FRASER

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.

GAA19CA384

Reviewed by NTSB Regional Office

GAA

Name of Investigator

Kate Benhoff

Date Report Received

7/12/2019