

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: <u>Blum</u> State: <u>TX</u> ZIP: <u>76627</u> Country: <u>USA</u> Latitude: <u>32°03'16"N</u> (dd:mm:ss N/S) Longitude: <u>97°18'31"W</u> (ddd:mm:ss E/W)		Date/Time Date: <u>07/21/2018</u> Local Time: <u>11:30</u> <u>mm/dd/yyyy</u> Time Zone: <u>CDT</u>	
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 <u>3500</u> ft MSL	

AIRCRAFT INFORMATION

Manufacturer: <u>Cessna</u> Model: <u>210C</u> Serial Number: <u>21058111</u> Registration Number: <u>N3611Y</u> Amateur-built: ☐ Yes ☒ No		Max Gross Weight: <u>3000</u> lbs Weight at Time of Accident/Incident: <u>2542</u> lbs Location of Center of Gravity at Time of Accident/Incident: <u>37.6</u> inches from ☐ nose or ☒ datum -or- <u> </u> Percent Mean Aerodynamic Cord (% MAC)	
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Category of Aircraft ☒ Airplane ☐ Balloon ☐ Blimp/Dirigible ☐ Glider ☐ Gyrocraft ☐ Helicopter ☐ Powered lift ☐ Ultralight ☐ Unknown	Type of Airworthiness Certificate <i>(Check all that apply)</i> Standard ☒ Normal ☐ Utility ☐ Acrobatic ☐ Transport Special ☐ Restricted ☐ Limited ☐ Provisional ☐ Experimental ☐ Special Flight ☐ Light Sport	Number of Seats: <u>4</u> If Large Aircraft, how many seats for: Flight Crew: <u> </u> Cabin Crew: <u> </u> Passengers: <u> </u>	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
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Type of Maintenance Program ☒ Annual ☐ Conditional (Amateur-built only) ☐ Manufacturer's Inspection Program ☐ Other Approved Inspection Program (AAIP) ☐ Continuous Airworthiness ☐ Other, specify: <u> </u>	Last Inspection Type ☐ 100 Hour ☐ Continuous Airworthiness ☐ AAIP ☐ Conditional Inspection ☒ Annual ☐ Unknown	Date Last Inspection: <u>09/01/2017</u> <u>mm/dd/yyyy</u> Airframe Total Time: <u>1547.3</u> hrs hours measured at (check one) ☐ Last Inspection ☒ Time of Accident/Incident
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IFR Equipped ☒ Yes ☐ No ☐ Unknown	Stall Warning System Installed ☒ Yes ☐ No ☐ Unknown	Type of Fire Extinguishing System ☒ None ☐ Specify <u> </u>
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ELT Installed ELT Activated ☒ Yes ☐ No ☐ Yes ☒ No	ELT Manufacturer: <u>ACK Technologies, Inc.</u> Model/Series: <u>E-04</u> Serial Number: <u>not recorded in logbook</u> Battery Type: <u>Lithium</u> Battery Exp. Date: <u>05/08/2022</u>	
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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: <u>McCauley</u> Model: <u>D2A36C33</u>
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Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	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	IO-470S	102886-3-S-1	09/26/1963	260	1632.0	1.0	474.45
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Mimi Muldrow Andrews</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: [REDACTED] State: [REDACTED] Country: <u>USA</u>	
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		Operator Address ☒ Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ Public Use (select type) ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ Federal ☐ State ☐ Local ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces ☐ Unknown		Revenue Sightseeing Flight ☐ Yes ☒ No Air Medical 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 (Select 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: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ 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> Fuel injection system failed to deliver a combustible mixture to the cylinders. Suspect vapor lock.			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)
Damage to belly (which I have not yet seen) and wrinkling of tailcone skin due to gear-up landing.

AIRPORT INFORMATION (If the accident/incident occurred on approach, takeoff or within 3 miles of an airport, complete this section)

Airport Identifier: _____ Distance From Airport Center: _____ SM
Airport Name: _____ Direction From Airport: _____ degrees MAG
Proximity to Airport ☐ Off Airport/Airstrip ☐ On Airport ☐ On Airstrip Airport Elevation: _____ 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: _____ (L/R/C) Length: _____ ft Width: _____ 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: KGDJ City: Granbury State: TX Country: USA	Time of Departure Time: 11:00 am Time Zone: CDT	Destination Airport ID: OTE4 City: Hilltop Lakes State: TX Country: USA	Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No
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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) 65 Gallons	Fuel Type ☐ 80/87 ☐ 115/145 ☐ JP3 ☐ Other, specify _____ ☒ 100 Low Lead ☐ Jet A ☐ JP4 ☐ 100/130 ☐ Automotive ☐ JP5
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Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ NoMethod of Exit – Describe how the occupants exited and how many occupants evacuated each location
Pilot opened left-side door and stepped out.**WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE****Weather Observation Facility**

Facility ID: KINJ

Observation Time: 1635

Time Zone: Z

Distance from Accident Site: 9 NM

Direction from Accident Site: 076 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 |

Visibility

10+ 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:
220 degrees MAG☐ Variable**Wind Speed**

Velocity: 9 KTS

-or-

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

Wind Gusts

Velocity: 15 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: 35 (C)
or _____ (F)Altimeter Setting: 29.99 in. HG
or _____ MB

Density Altitude: 3100 ft

Dew Point: 19 (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: Mimi City: [REDACTED]
 Middle Initial: M State: [REDACTED]
 Last Name: Andrews Country: USA
 Age at time of Accident/Incident: 76 Date of Birth: [REDACTED] Certificate Number: [REDACTED]
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

03/09/2017
mm/dd/yyyy

Medical Certificate Limitations

Corrective Lenses

Medical Certificate Waivers

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

04/20/2017
mm/dd/yyyy

Flight Review Aircraft

Make: Cessna
 Model: 150

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
 ☒ Instrument Airplane
☐ Instrument Helicopter
☒ Airplane Single-Engine
☒ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift
☒ 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	2598.3	605.2	1840.9	342.8	176.7	32.0	80.6		414.6	
Pilot in Command (PIC)	2206.6	605.2	1796.4						410.5	
Time as Instructor	845.4		454.9						390.5	
This Make/Model										
Last 90 Days	1.1	0.5								
Last 30 Days	1.1	0.5								
Last 24 Hours	0.5	0.5								

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: _____ City: _____
 Middle Initial: _____ State: _____ ZIP: _____
 Last Name: _____ Country: _____
 Age at time of Accident/Incident: _____ Date of Birth: _____ 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

mm/dd/yyyy

Medical Certificate Limitations

Medical Certificate Waivers

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
☐ 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
 ☐ Instrument Airplane
☐ Airplane Single-Engine
 ☐ Instrument Helicopter
☐ Airplane Multi-Engine
 ☐ Helicopter
☐ Gyroplane
 ☐ Glider
☐ Powered Lift
 ☐ 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										
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

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: _____			☐ 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																					
Pilot Name and Address						Degree of Injury																			
First Name: _____			City: _____			☐ None		☐ Fatal																	
Middle Initial: _____			State: _____			☐ 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																					
Pilot Name and Address						Degree of Injury																			
First Name: _____			City: _____			☐ None		☐ Fatal																	
Middle Initial: _____			State: _____			☐ 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																					
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: _____						_____	□	□	□	□	□	□	□	□	□	□									
Middle Initial: _____																									
Last Name: _____																									
City: _____						_____	□	□	□	□	□	□	□	□	□										
State: _____																									
ZIP: _____																									
Country: _____						_____	□	□	□	□	□	□	□	□	□										
First Name: _____																_____	□	□	□	□	□	□	□	□	□
Middle Initial: _____																									
Last Name: _____																									
City: _____						_____	□	□	□	□	□	□	□	□	□										
State: _____																									
ZIP: _____																									
Country: _____						_____	□	□	□	□	□	□	□	□	□										
First Name: _____																_____	□	□	□	□	□	□	□	□	□
Middle Initial: _____																									
Last Name: _____																									
City: _____						_____	□	□	□	□	□	□	□	□	□										
State: _____																									
ZIP: _____																									
Country: _____						_____	□	□	□	□	□	□	□	□	□										
First Name: _____																_____	□	□	□	□	□	□	□	□	□
Middle Initial: _____																									
Last Name: _____																									
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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. Intended flight was to be from Granbury Regional Airport (KGDJ) to Hilltop Lakes Airport (0TE4).

I used a computer at my residence to access Intellicast radar images and to get Metar and TAF info for my route from aviationweather.gov. Stations checked, if I recall correctly, were KGDG, KACT, KLXY, KCLL, and KUTS. KCLL and KUTS were showing some low cloud typical of early morning conditions in that part of the state. All others were clear.

I also used the internet access at my residence to download current flight and weather information from Foreflight into my primary and backup iPads.

I had purchased fuel for the aircraft at KGDJ the previous afternoon.

Preflight was conducted using my usual procedures.:

Drained a fuel sample from each of 5 points in the fuel system (2 Wing tank drains, 2 Low point drains in belly, main fuel strainer drain). All 5 samples were clean and contained no water.

Confirmed fuel quantity in tanks using a hollow plastic dipstick.

Checked oil quantity and confirmed that oil filler cap was secure.

Did a rough check of alternator belt tension by reaching through the dipstick access.

Conducted a thorough walk-

around inspection starting at left wing root and checking each item as I came to it attach bolts, hinges, brakes, pitot and static ports, etc. Confirmed that protective covers had been removed from pitot tube and fuel tank drain ports.

My first attempts to start the engine were unsuccessful, so I went to the terminal building to wait for the starter to cool for about 30 minutes. While there I updated my weather information from aviationweather.gov using the airport's computer. This check confirmed that the low layer at KCLL and KUTS had burned off and that those stations were now clear.

The second engine start attempt was successful and the engine stabilized and ran normally. I accomplished the appropriate checklists and taxied for takeoff on Runway 14. Engine runup was normal—mag drops within limits, prop cycled normally, alternate air source operated normally.

I completed the Before Takeoff Checklist, made a 360 degree turn on the taxiway to check for traffic, announced my intentions on CTAF, and made a normal takeoff on Granbury's Runway 14. Crosswind was from the right.

CONTINUED ON ATTACHED PAGES

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

Develop a means for a pilot to vent the fuel injection vapor return line overboard in an emergency to clear a vapor lock.

Develop a modification to give the pilot of early-series Cessna 210's (engine-driven hydraulic pump) a reliable means to extend the landing gear after an engine failure.

ADDITIONAL PAGE FOR NTSB REPORT

ENGINE FAILURE AND FORCED LANDING N3611Y, JULY 21, 2018

CONTINUED FROM PAGE 10 OF THE REPORT FORM

I reduced to climb power (top of the green on manifold pressure, then RPM), retracted the gear, and trimmed the airplane.

At around 500' AGL I turned crosswind (right traffic for that runway) and then turned left to exit the pattern. I transmitted this on CTAF.

I proceeded on course, crosschecking between pilotage navigation and the GPS position on my iPad (The airplane had no installed GPS equipment). Retrimmed for a cruise-climb airspeed. All engine indications were normal.

At 3500' I established a cruise attitude, allowed the airspeed to build, set cruise power (22" MP and 2300 RPM), and set the mixture for approximately 13 gph on the fuel flow gauge. Engine indications were normal, and the airplane achieved the cruise speed I was accustomed to seeing.

Note: All times given in this document are estimates.

Approximately 20 minutes into the flight, in the area of Blum, TX, the engine began to run rough. Suspecting vapor lock because of the hot day, I switched the fuel selector from the right tank to the left, per Cessna's vapor lock checklist. The roughness got worse, so I switched back to the right tank. I selected the boost pump switch to low, and it had no effect. The engine began to lose power rapidly. I tried the high position of the boost pump switch, also with no effect. I tried retarding the throttle rapidly per Cessna's checklist, and that had no effect. While the engine did run briefly a time or two, it never caught hold and started to produce power. Time and workload did not permit me to find and read the actual checklist, although it was in the left-side map pocket.

During the above activity, I let the airplane slow to best glide speed and trimmed it to that speed.

Meanwhile, I checked the Foreflight map for a nearby airport and found none. The two possibilities were Hillsboro and a private strip listed as Barnstormer. Hillsboro was too far away, so I continued toward Barnstormer while attempting to get a restart. I scanned the ground for an indication of surface wind and found none. It soon became evident that Barnstormer was also out of reach.

At an altitude I estimate to be around 1000' AGL, I selected a field and directed my attention to the approach and landing. I was on a right base leg for that field, it looked long enough, and was into the wind (assuming the takeoff wind direction still existed). I elected to comply with Cessna's procedure and land with the gear up, because the engine-driven hydraulic pump had only windmilling power and consequences of a landing with the gear partially extended would be worse. Once I knew I had the field made, I held the flap handle in the down position. There was enough pressure to operate the flaps. I do not know the exact flap setting when I landed, but I suspect it was around 30 degrees. At some point during the final approach I think I advanced the throttle to silence the gear horn. I turned off the ignition switch on short final.

Flare and touchdown were as normal as I could expect (never having landed gear up, the sight picture was different). Touchdown was firm, but not what I would normally describe as a hard landing. The airplane slid to a stop very quickly. I turned the fuel selector to the off position and turned off the master switch. The ELT did not activate.

I estimate that the time between the initial onset of engine roughness until landing was around two minutes. No checklists were performed because of the intense workload and the need to place aircraft control above all else.

I exited the aircraft, taking my purse which contained my licenses and ID, then turned my attention to getting some help. The house on the property proved to be unoccupied as did nearby structures. What finally worked was a cellphone call to 911. The Hill County sheriff's deputies and their Emergency Coordinator were very helpful.

The terrain was a smooth, flat pasture. The grass was short.

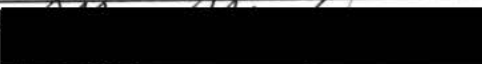
The aircraft was intact, resting on its belly on a heading about 30 degrees to the left of the landing heading. The tailcone had damage aft of the baggage compartment.

ADDITIONAL INFORMATION *(Please type or print in ink)*

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

The flight times I have given on Page 7 include only the time recorded in my logbooks. I was employed as a simulator instructor by American Airlines for 22 years, and obtained my DC-9 type rating in the simulator. I did not log the simulator time at work, except for check rides that were legal substitutes for a flight review.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report 08/06/2018 <i>mm/dd/yyyy</i>	Signature:  Signature:  Type or Print Name: Mimi M. Andrews
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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. CEN18LA287	Reviewed by NTSB Regional Office Central Region	Name of Investigator Mitchell Gallo	Date Report Received 08/06/18
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