

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: Strum State: WI
 ZIP: 54770 Country: United States
 Latitude: 44.549758 Longitude: -91.391335
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 12/24/2018 Local Time: 22:15
mm/dd/yyyy Time Zone: Central

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

AIRCRAFT INFORMATION

Registration Number: N145EC

Manufacturer: Airbus Industries

Model: BK117C2

Serial Number: 9181

Year of Manufacture: 2008

Amateur-Built: ☐ Yes ☒ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

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

Maximum Gross Weight: 7887 lbs

Weight at Time of Accident/Incident: 7480 lbs

Number of Seats: 5 Flight Crew Seats: 2

Cabin Crew Seats: 3 Passenger Seats: 0

Number of Engines: 2

Category of Aircraft

- ☐ Airplane
- ☐ Balloon
- ☐ Blimp/Dirigible
- ☐ Glider
- ☐ Gyroplane
- ☒ Helicopter
- ☐ Powered Lift
- ☐ Rocket
- ☐ Ultralight
- ☐ Unknown

Type of Airworthiness Certificate

(Check all that apply)

Standard

- ☐ Normal
- ☐ Aerobatic
- ☐ Balloon
- ☐ Commuter
- ☒ Transport
- ☐ Utility

☐ Certificate of Authorization or Waiver (COA)
☐ None

Special

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

☐ Unknown

Landing Gear

(Check all that apply)

☐ Retractable

- ☐ Tricycle
- ☐ Amphibian
- ☐ Emergency Float
- ☐ Float
- ☐ Hull
- ☐ Tailwheel
- ☐ High Skid
- ☒ Skid
- ☐ Ski
- ☐ Ski/Wheel
- ☐ Other Launch/Recovery System
- ☐ None
- ☐ Unknown

Engine Type *(Select one)*

- ☐ Reciprocating
- ☒ Turbo Shaft
- ☐ Turbo Prop
- ☐ Turbo Jet
- ☐ Turbo Fan
- ☐ Electric
- ☐ Liquid Rocket
- ☐ Solid Rocket
- ☐ Hybrid Rocket
- ☐ None
- ☐ Unknown

Fuel System Type *(Reciprocating)*

- ☐ Carburetor
- ☒ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Serial	Manufacturer's Serial Number	Date of Mfg. mm dd yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Inspection (hours)	Time Since: Overhaul (hours)
Eng. 1	Turboméca	Arriel 1E2	18932	08/28/2007	790	5916.8	4.4	2330.8
Eng. 2	Turboméca	Arriel 1E2	18984	12/21/2007	790	5916.8	4.4	2330.8
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 12/24/2018
mm/dd/yyyy

Airframe Total Time: 6055.7 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: Airbus

Model: BK117C2 Model Blades

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: ARTEX

Model or Part No.: C406-N

TSO No.: ☒ OC91 (121.5 MHz) ☐ OC91a (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

Propeller 2

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

Manufacturer: _____

Model: _____

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: _____

Outerlink - IRIS Flight Data Monitoring System

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: Mayo Clinic / U.S.Bank (lease holder)City: [REDACTED]State: [REDACTED]Fractional Ownership Aircraft: ☐ Yes ☒ NoCountry: United States**Operator of Aircraft**☐ Same As Registered Owner☒ Same Address as Registered OwnerName: Mayo Clinic

City: _____

Doing Business As: Mayo Clinic

State: _____

ZIP: _____

Air Carrier/Operator Designator (4 Character Code): 15MA

Country: _____

Operating Certificates Held

(Check all that apply)

- ☐ None
☐ Flag Carrier Operating Certificate (FAR 121)
☐ Supplemental
☐ Air Cargo
☐ Foreign Air Carriers (FAR 129)
☐ Rotorcraft External Load (FAR 133)
☐ Commuter Air Carrier (FAR 135)
☒ On-Demand Air Taxi (FAR 135)
☐ Commercial Air Tour (FAR 136)
☐ Agricultural Aircraft (FAR 137)
☐ Pilot School (FAR 141)
☐ Certificate of Authorization or Waiver (COA)
☐ Commercial Space Transportation
Experimental Permit
☐ Commercial Space Transportation License
☐ Other Operator of Large Aircraft

Regulation Flight Conducted Under

- ☐ FAR 91 ☐ FAR 129 ☐ FAR 415
☐ FAR 103 ☐ FAR 133 ☐ FAR 431
☐ FAR 121 ☒ FAR 135 ☐ FAR 435
☐ FAR 125 ☐ FAR 137 ☐ FAR 437
- ☐ FAR 91 Special Flight
☐ Non-US, Commercial
☐ Non-US, Non-commercial

- ☐ Public Aircraft (Select one)
☐ Armed Forces
☐ Federal
☐ State
☐ Local
☐ Unknown

Revenue Operation for FAR 121, 125, 129, 135

(Select one for each group)

- ☐ Scheduled or Commuter ☒ Domestic
☒ Non-Scheduled or Air Taxi ☐ International
- ☒ Passenger
☐ Cargo
☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137

(Select one)

- ☐ Aerial Application ☐ Firefighting ☐ Unknown
☐ Aerial Observation ☐ Flight Test
☐ Air Drop ☐ Glider Tow
☐ Air Race/Show ☐ Instructional
☐ Banner Tow ☐ Other Work Use
☒ Business ☐ Personal
☐ Executive/Corporate ☐ Positioning
☐ External Load ☐ Skydiving
☐ Ferry

Revenue Sightseeing Flight☐ Yes ☒ No**Air Medical Flight**☒ Yes ☐ No**AIRPORT INFORMATION (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)**

Airport Name: _____

Distance From Airport Center: _____ sm

Airport Identifier: _____

Direction From Airport: _____ degrees true

Proximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A

Airport Elevation: _____ ft msl

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
☐ 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 ☐ Crosswind ☐ Aborted Landing (after touchdown)
☐ 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: <u>Curt</u> Middle Initial: <u>R</u> Last Name: <u>Conlin</u> City of Residence: <u>Eau Claire</u> State: <u>WI</u> ZIP: <u>54701</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>52</u> 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 ☐ Private ☐ Student ☐ Flight Instructor ☐ Recreational ☐ Sport ☒ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer						Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☒ With limitations/waivers ☐ N/A ☐ Special Issuance		Date of Last Medical <u>01/11/2018</u> mm/dd/yyyy																																																																																												
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown																																																																																																				
Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown																																																																																																				
Medical Certificate Limitations MUST HAVE AVAILABLE GLASSES FOR NEAR VISION.																																																																																																				
Medical Certificate Special Issuance																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>10/22/2018</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Airbus</u> Model: <u>BK117C2</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)																																																																																														
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 5px;">Flight Time (Enter appropriate number of hours in each box)</th> <th rowspan="2" style="padding: 5px;">All Aircraft</th> <th rowspan="2" style="padding: 5px;">This Make & Model</th> <th rowspan="2" style="padding: 5px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 5px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 5px;">Night</th> <th colspan="2" style="padding: 5px;">Instrument</th> <th rowspan="2" style="padding: 5px;">Rotorcraft</th> <th rowspan="2" style="padding: 5px;">Glider</th> <th rowspan="2" style="padding: 5px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 5px;">Actual</th> <th style="padding: 5px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 5px;">Total Time</td> <td style="padding: 5px;">3,842</td> <td style="padding: 5px;">1,064</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">1,298</td> <td style="padding: 5px;">348</td> <td style="padding: 5px;">225</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Pilot in Command (PIC)</td> <td style="padding: 5px;">3,842</td> <td style="padding: 5px;">1,064</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">1,298</td> <td style="padding: 5px;">348</td> <td style="padding: 5px;">108</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Time as Instructor</td> <td style="padding: 5px;">240</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">50</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">This Make/Model</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">375</td> <td style="padding: 5px;">42</td> <td style="padding: 5px;">35</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 90 Days</td> <td style="padding: 5px;">42</td> <td style="padding: 5px;">42</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">16</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 30 Days</td> <td style="padding: 5px;">9</td> <td style="padding: 5px;">9</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">1</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 24 Hours</td> <td style="padding: 5px;">0</td> <td style="padding: 5px;">0</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">0</td> <td style="padding: 5px;">0</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </tbody> </table>											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	3,842	1,064			1,298	348	225				Pilot in Command (PIC)	3,842	1,064			1,298	348	108				Time as Instructor	240				50						This Make/Model					375	42	35				Last 90 Days	42	42			16	6	4				Last 30 Days	9	9			3	1					Last 24 Hours	0	0			0	0				
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	3,842	1,064			1,298	348	225																																																																																													
Pilot in Command (PIC)	3,842	1,064			1,298	348	108																																																																																													
Time as Instructor	240				50																																																																																															
This Make/Model					375	42	35																																																																																													
Last 90 Days	42	42			16	6	4																																																																																													
Last 30 Days	9	9			3	1																																																																																														
Last 24 Hours	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: _____ Middle Initial: _____ Last Name: _____ City of Residence: _____ State: _____ ZIP: _____ Country: _____ Age at time of Accident/Incident: _____ Date of Birth: _____ 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				Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance			Date of Last Medical mm/dd/yyyy																																																																																													
Principal Occupation ☐ Pilot ☐ Other ☐ Unknown		Medical Certificate ☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown			Medical Certificate Limitations 																																																																																															
Medical Certificate Special Issuance 																																																																																																				
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) 																																																																																														
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 5px;">Flight Time (Enter appropriate number of hours in each box)</th> <th rowspan="2" style="padding: 5px;">All Aircraft</th> <th rowspan="2" style="padding: 5px;">This Make & Model</th> <th rowspan="2" style="padding: 5px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 5px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 5px;">Night</th> <th colspan="2" style="padding: 5px;">Instrument</th> <th rowspan="2" style="padding: 5px;">Rotorcraft</th> <th rowspan="2" style="padding: 5px;">Glider</th> <th rowspan="2" style="padding: 5px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 5px;">Actual</th> <th style="padding: 5px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 5px;">Total Time</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Pilot in Command (PIC)</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Time as Instructor</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">This Make/Model</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 90 Days</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 30 Days</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: left; padding: 5px;">Last 24 Hours</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>											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										
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 CREWMEMBERS (Exclusive of cabin crew, complete the following information)									
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					
PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet if necessary)									
Name and Address			Seat	Injury	Restraint Type		Inflatable Restraints	Age	
First Name: <u>Brian</u> City: <u>Altoona</u> Middle Initial: <u>M</u> State: <u>WI</u> ZIP: <u>54720</u> Last Name: <u>Murley</u> Country: <u>USA</u> ☐ 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: <u>Jason</u> City: <u>Onalaska</u> Middle Initial: <u>B</u> State: <u>WI</u> ZIP: <u>54650</u> Last Name: <u>Santos</u> Country: <u>USA</u> ☐ 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>KEAU</u> City: <u>Eau Claire</u> State: <u>Wisconsin</u> Country: <u>United States</u>		Time of Departure Time: <u>2154</u> Time Zone: <u>Central</u>		Destination Airport ID: _____ City: <u>Strum</u> State: <u>Wisconsin</u> Country: <u>54770</u>		Type Flight Plan Filed ☐ None ☐ VFR/IFR ☒ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
Type of ATC Clearance/Service (Check all that apply) ☒ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☐ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA						
Airspace where the accident/incident occurred (Check all that apply) ☐ Class A ☒ Class G ☐ Military Operations Area (MOA) ☐ Special ☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area ☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown ☐ Class D ☐ Prohibited Area ☐ TRSA ☐ Class E ☐ Restricted Area ☐ FAR 93					Altitude of In-Flight Occurrence: <u>919</u> ft msl	
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE						
Source of Pilot Weather Information (Check all that apply) ☒ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☐ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☐ On-Board Weather			Weather Observation Facility Facility ID: <u>KEAU</u> Observation Time: <u>2056</u> Time Zone: <u>Central</u> Distance from Accident Site: <u>22</u> nm Direction from Accident Site: <u>355</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		Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown		Temperature: _____ (C) or <u>18</u> (F) Dew Point: _____ (C) or _____ (F)		
Lowest Cloud Condition Height _____ ft agl		Ceiling Height _____ ft agl		Altimeter Setting: <u>30.24</u> in Hg or _____ MB		
Wind Direction ☐ Variable -or- Direction: <u>350</u> degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>5</u> kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft			
Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown		Type of Precipitation (Check all that apply) ☒ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals		Restriction to Visibility (Check all that apply) ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown		
Icing Forecast Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme		
NOTAMS (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:						

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 <i>(Use additional sheet if necessary)</i> 1. The landing gear skids were spread. 2. Tail rotor damage to both blades. 3. Probable mast moment exceedance. 4. Damaged searchlights (2) 5. Damaged lower wire strike protection system 6. Unknown items: Engines and drive-train components. After aircraft is released from the NTSB, the aircraft will be further inspected. 7. 2 inch cut located on the top of a fire trucked parked near the landing zone.		
NARRATIVE HISTORY OF FLIGHT <i>(Please type or print in ink)</i>		
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 and location, services obtained, and intended destination. Provide as much detail as possible. Narrative provided by the pilot, Curt Conlin: "About five minutes before landing on scene at the Strum Wisconsin Fire Department, the crew hailed the LZ coordinator on MARC 2 frequency. The brief given talked about the fire trucks blocking the north and south sides of the LZ and confirmed that there were no overhead obstructions. On approach to the Strum Wisconsin Fire Department, the crew was calling out obstacles: trees, fire trucks, flag poles. At about 30' AGL, I noticed that there was a street sign on a pole on the corner of the intersection where I planned on terminating my approach. Once I noticed the street sign, I decelerated forward movement and thus, dipped the tail a few feet. This is when the tail rotor contacted the hose rack on top of the fire truck. After feeling the bump of the tail rotor contacting the fire truck, I immediately felt a vibration in the pedals and the aircraft started spinning. I instinctively put in pedal to oppose the spin and then lowered the collective to reduce torque on the airframe. I believe the aircraft spun about 180 degrees to the right before landing, facing south. I immediately rolled the throttles to idle to stop the sliding. I think we slid about 30 degrees while in contact with the ground before coming to rest facing southwest. After checking with my crew on ICS to see if everyone was ok, I rolled the throttles to off. We immediately checked the scene to see if any of the ground personnel were injured. While checking on the ground crew, I called our flight tracking center and notified them of the incident and zero injuries."		

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

Review current company policies regarding confined area/ scene landing to verify pilots are provided the proper guidance and training to land at a non-airport/helipad environment.

Provide training to all pilots regarding expectations in these landing scenarios and steps to assist in decision making and determining the suitability of a landing area.

Develop an off airport landing checklist that emphasizes the unique aspects of those landings. This would include:

1. Ensure the size of the area is adequate,
2. The landing surface is suitable. Is it level is there mud, ice, blowing snow, etc.
3. Review obstacles in or around the landing zone (towers, wires, vehicles, flagpoles, fences, street signs, etc.).
4. The best approach direction and type of approach (Normal, steep, vertical).
5. The best departure direction and type of departure (Normal, vertical).
6. Power requirements needed to avoid obstacles.

Introduce scene landing scenarios into annual simulator training

Develop annual syllabi for pilots to complete annually to refresh themselves and medical crew on basic confined area/scene landing protocols.

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 INFORMATION**Fuel on Board at Last Takeoff**

(Convert from pounds, as necessary)

168 _____ 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 AIRCRAFT

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

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

Emergency engine shutdown was initiated. Pilot and two medical personnel evacuated the aircraft after shutdown.

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)

Aircraft Registration Number

Manufacturer: _____

Model: _____

Damage to Other Aircraft

- ☐ Destroyed ☐ Minor
☐ Substantial ☐ None

Registered Owner of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

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

Mayo Clinic has waited nine days for the NTSB to review of this aircraft. To date, we have neither a review, visit, or release of the aircraft from the FAA or NTSB. The government shutdown is creating an economic hardship for the Mayo Clinic and is negatively impacting patient safety because this aircraft cannot be repaired until the NTSB releases the aircraft for repair.

Mayo Clinic is known within the medical industry as a world leader in providing complex, life saving health care to patients that have exhausted their options at other facilities. In many cases, Mayo Clinic is their last hope. Without this aircraft released for repair, many neonatal, pediatric and invasive procedures cannot be performed for patients in the four state regions. Transportation to Mayo Clinic using company aircraft is a necessity for their complicated care. Not all medical helicopter programs are the same. Mayo Clinic uses equipment and provides medical care, protocols, and procedures not available or provided by most other programs in the country.

The aircraft is currently located in Janesville Wisconsin at Helicopter Specialties Inc.

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

Date of this Report mm/dd/yyyy	Name of Pilot/Operator: _____ Signature: _____ -- or -- ☐ Check here to electronically sign this document
--	--

If a Person Other than Pilot/Operator is Filing Report

Name: <u>Joel Kozlowski</u>	Title: <u>Director of Operations, Mayo Clinic</u>
Signature: _____ -- or -- ☒ Check here to electronically sign this document	<u>joel I kozlowski</u> Digitally signed by joel I kozlowski Date: 2019.01.03 15:22:13 -0600

FOR NTSB USE ONLY

NTSB Accident/Incident No. CEN19TA075	Reviewed by NTSB Regional Office Central	Name of Investigator Folkerts	Date Report Received January 31, 2019
---	--	---	---