

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: Mantoloking State: NC
ZIP: 27954 Country: USA
Latitude: 35.92°N Longitude: 75.70°W
(Enter in decimal degrees or degrees-minutes-seconds)

Accident/Incident Date/Time
Date: 06/30/2019 Local Time: 2:50pm
mm dd yyyy Time Zone: EST
Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N78658
Manufacturer: Cessna
Model: 172K
Serial Number: 172-5770
Year of Manufacture: 1969
Amateur-Built: ☒ Yes ☐ No If Yes: ☐ Kit Plans ☐ Make ☐ Original Design

☐ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft
Maximum Gross Weight: 2300 lbs
Weight at Time of Accident/Incident: unknown lbs
Number of Seats: 4 Flight Crew Seats: 1
Cabin Crew Seats: 0 Passenger Seats: 3
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 ☒ Normal ☐ Aerobatic ☐ Balloon ☐ Commuter ☐ Transport ☐ Utility
Special ☐ Restricted ☐ Limited ☐ Provisional ☐ Special Flight ☐ Experimental ☐ 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 ☐ Skid ☐ Ski ☐ Ski Wheel
☐ Float ☐ Hull
☐ 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	<u>Lycoming</u>	<u>O-320-E2D</u>	<u>L-24018-27A</u>		<u>150</u>		<u>70.3</u>	
Eng 2								
Eng 3								
Eng 4								

Last Inspection Type
☒ 100-Hour ☐ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☐ Annual ☐ Unknown
Date Last Inspection: 05/29/2019
mm dd yyyy
Airframe Total Time: 3918.9 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 small cockpit fire extinguisher
accessed by crew/pilot

Propeller 1 ☒ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable
Manufacturer: McClellan
Model: C172/MTM 7653 S/N E11231
ELT Installed: ☒ Yes ☐ No
If Yes
ELT Manufacturer: Narco
Model or Part No.: Model 10
ISO 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

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 _____

OWNER/OPERATOR INFORMATION

Registered Aircraft Owner

Name: OBX Airplanes LLC

Fractional Ownership Aircraft: ☐ Yes ☒ No

City: Manteo

State: NC ZIP: 27954

Country: USA

Operator of Aircraft ☒ Same As Registered Owner

Name: _____

Doing Business As: _____

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

☐ Same Address as Registered Owner

City: _____

State: _____ ZIP: _____

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: Pare County Regional Airport

Airport Identifier: KMA

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

Distance From Airport Center: .5 sm

Direction From Airport: 350 degrees true

Airport Elevation: 13 ft. msl

Runway Information

Runway ID: 35 (L/R/C) Length: 3301 ft Width: 73 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
☐ 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 ☐ M/S ☐ Practice
☐ SDF ☐ Sidestep ☐ LDA ☐ GPS
☐ VOR/VOR ☐ 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: Nikolas

Middle Initial: J

Last Name: Koehler

City of Residence: Burlington ✓

State: VT ZIP: 05408

Country: USA

Age at time of Accident/Incident: 27 Date of Birth: [REDACTED] mm dd yyyy

Certificate Number: [REDACTED]

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Restraint Type <table border="0"> <tr> <th>Available</th> <th>Used</th> </tr> <tr> <td>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☒ Lap only</td> <td>☐ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☐ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☐ 5-point</td> <td>☐ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>	Available	Used	☐ None	☐ None	☒ Lap only	☐ Lap only	☐ 3-point	☐ 3-point	☐ 4-point	☐ 4-point	☐ 5-point	☐ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraint ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Available	Used																
☐ None	☐ None																
☒ Lap only	☐ Lap only																
☐ 3-point	☐ 3-point																
☐ 4-point	☐ 4-point																
☐ 5-point	☐ 5-point																
☐ Unknown	☐ Unknown																
Pilot Certificate(s) (Check all that apply) <table border="0"> <tr> <td>☐ None</td> <td>☐ Flight Instructor</td> <td>☒ Commercial</td> <td>☐ US Military</td> </tr> <tr> <td>☐ Private</td> <td>☐ Recreational</td> <td>☐ Airline Transport</td> <td>☐ Foreign</td> </tr> <tr> <td>☐ Student</td> <td>☐ Sport</td> <td>☐ Flight Engineer</td> <td></td> </tr> </table>				☐ None	☐ Flight Instructor	☒ Commercial	☐ US Military	☐ Private	☐ Recreational	☐ Airline Transport	☐ Foreign	☐ Student	☐ Sport	☐ Flight Engineer			
☐ 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 Examination <u>04/24/20</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: 05/26/2019
mm dd yyyy

Flight Review Aircraft

Make: N/A

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
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Type Ratings

none

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	L. TT
						Actual	Simulated			
Total Time	417.3	61.9	417.3							
Pilot in Command (PIC)	2									
Time as Instructor	2									
This Make Model										
Last 90 Days	34.8									
Last 30 Days	?									
Last 24 Hours	2									

FLIGHT ITINERARY INFORMATION

Last Departure Point		Time of Departure	Destination	Type Flight Plan Filed	
Airport ID <u>KM61</u>		Time <u>2:50pm</u>	Airport ID <u>KM61</u>	☒ None ☐ VFR IIR ☐ Company VFR ☐ IIR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown	
City <u>Manteo</u>		Time Zone <u>EST</u>	City <u>Manteo</u>		
State <u>NC</u>			State <u>NC</u>		
Country <u>USA</u>			Country <u>USA</u>		

Type of ATC Clearance/Service (Check all that apply)					
☒ VFR (Tower)	☐ Special VFR	☐ Special IIR	☐ VFR Flight Following	☐ Cruise	
	☐ IIR	☐ 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: <u>N/A</u> 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)	Weather Observation Facility
☐ National Weather Service ☐ Flight Service Station ☐ TV Radio ☒ Automated Report ☒ Commercial Weather Service (DCAJS) ☐ On-Board Weather	Facility ID _____ Observation Time _____ Time Zone _____ Distance from Accident Site _____ nm Direction from Accident Site _____ degrees true
Basic Conditions	Light Condition
☒ VMC ☐ IMC ☐ Unknown	☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night
Sky/Lowest Cloud Condition	Ceiling
☒ Clear ☐ Thin Broken ☐ Few ☐ High Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered	☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown
Lowest Cloud Condition Height _____ ftagl	Ceiling Height _____ ftagl
Wind Direction	Wind Speed
☐ Variable <u>between 360 - 250°</u> -or- <u>10-15</u> degrees true	☐ Light ☐ Light and Variable -or- <u>10-15</u> kts
Wind Gusts	Wind
☐ Not gusting -or- <u>15</u> kts	☐ None ☐ Light ☐ Moderate ☐ Heavy
Intensity of Precipitation	Type of Precipitation (Check all that apply)
☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown	☐ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals
Icing Forecast	Icing Actual
Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☐ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown	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	

Temperature: _____ (C) or <u>93</u> (F)
Dew Point: <u>unknown</u> (F)
Altimeter Setting: <u>unknown</u> Hg or _____ MB
Visibility <u>unlimited</u> miles
RVR _____ feet
RVA _____ miles
Density Altitude: <u>~2300</u> ft
Restriction to Visibility (Check all that apply)
☐ None ☐ Fog ☐ Ground Fog ☐ Blowing Dust ☐ Haze ☐ Blowing Sand ☐ Ice Fog ☐ Blowing Snow ☐ Smoke ☐ Blowing Spray ☐ Unknown ☐ Dust

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:	
<u>none.</u>	

More stringent FAA testing for pilots to be commercially licensed and carry passengers for hire.

/ with emphasis

on preventing departure stalls + performance characteristics
of different planes

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

N/A Hours
Cycles

Time Since This Part
Inspected/Overhauled

N/A Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

approx. 18 Gallons

Fuel Type

☐ 80/87

☒ 100 Low Lead

☐ 100/130

☐ 115/145

☐ Jet A

☐ Jet A-1

☐ Jet B

☐ JP8

☐ Automotive

☐ Other, specify _____

Other Services, if Any, Prior to Departure

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

according to P.I.C. passengers exited through pilot's door

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)*

Right hand gear & wing separated from the fuselage caused by collision with a large pine tree off the departure end of the runway. Canopy also separated caused by collision into thick brush & other damages.

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.

Pilot failed to maintain a safe airspeed throughout takeoff & initial climb. As seen on footage from airport surveillance camera the pilot never got to a speed to safely rotate at & initiated a climb at a very slow speed which then caused him to lose lift under his left wing then shortly after his right wing & then entered a spin to the right where he crashed just short of Airport Road in a level attitude. He was supposedly clear the tree line at this point according to witnesses. This statement is based on surveillance footage, witness accounts & tower observation.