

NATIONAL TRANSPORTATION SAFETY BOARD

NTSB Form 6120.1

PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

Email the pilot/operator aircraft accident/incident report to the investigator-in-charge of your accident/incident. If email is not available, mail the report per the instructions below.

If your accident/incident occurred in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, the District of Columbia, Puerto Rico, or the US Virgin Islands, send the form to: NTSB, ERA, 45065 Riverside Parkway, Ashburn, VA 20147.

If your accident/incident occurred in Ohio, Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, Arkansas, Louisiana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Colorado, or New Mexico, send the form to: NTSB, CEN, 4760 Oakland Street, Suite 500, Denver, CO 80239.

If your accident/incident occurred in Montana, Wyoming, Idaho, Utah, Arizona, Nevada, Washington, Oregon, California, Hawaii, or the territories of Guam or American Samoa, send the form to: NTSB, WPR, 505 South 336th Street, Suite 540, Federal Way, WA 98003.

If your accident/incident occurred in Alaska, send the form to: NTSB, ANC, 222 West 7th Avenue, Room 216, Box 11, Anchorage, AK 99513.

Rules pertaining to notification of aircraft accidents and incidents, as well as overdue aircraft are found in 49 *Code of Federal Regulations* (CFR) Part 830 http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr830_main_02.tpl. These rules state the authority of the NTSB, define accidents, incidents, injuries, and other terms, and provide procedures for initial and immediate notification of accidents and incidents by aircraft pilots/operators.

A. APPLICABILITY

The pilot/operator of an aircraft shall send a report to the office listed above, based on accident/incident location; immediate notification is required by 49 CFR 830.5(a). **The report shall be filed within 10 days after an accident for which notification is required by Section 830.5, or after 7 days if an overdue aircraft is still missing.**

An aircraft accident, as defined in 49 CFR 830.2, is determined as an occurrence that involves a fatality or serious injury, or substantial damage to the aircraft. For occurrences that do not involve a fatality, the determination that the occurrence is an accident can be appealed by writing to the Director, Office of Aviation Safety, NTSB, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.

INSTRUCTIONS TO PILOTS/OPERATORS FOR COMPLETING THIS FORM

It is necessary that ALL questions on this report be answered completely and accurately.

If more space is needed, continue on a blank sheet of paper.

Nearest City/Place: Use the name of the nearest community in the state where the accident/incident occurred.

Date/Time: Indicate the date and local time of the event. Be sure to indicate the time zone.

Phase of Operation: Indicate the phase of operation during which the accident/incident occurred.

Aircraft Information: Enter aircraft make and model information as indicated on the aircraft registration certificate, including series. If the involved aircraft is certified as "amateur-built," include the name of the producer of the kit or plans, unless an NTSB employee instructs otherwise.

Maximum Gross Weight: Enter the certificated maximum gross weight for the aircraft involved in the occurrence. This should be the same as the maximum gross weight indicated on the aircraft weight and balance documents.

Engine: Enter engine make and model information as indicated on the engine data plate.

The NTSB uses this form for aircraft accident prevention activities and for statistical purposes. NTSB regulations (49 CFR Part 830) require that **ALL** questions be answered **completely** and **accurately**. Completion of this form will take approximately 60 minutes. The NTSB does not guarantee the privacy of any information provided in this form. You need not complete this form unless it displays a valid OMB control number, in accordance with 5 C.F.R. § 1320.5(b), which applies to this collection of information.

B. DEFINITIONS

1. "Aircraft Accident" means an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death, or serious injury, or in which the aircraft receives substantial damage. For purposes of this form, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined at 49 CFR 830.2.

2. "Substantial Damage" means damage or failure that adversely affects the structural strength, performance or flight characteristics of the aircraft, and that would normally require major repair or replacement of the affected component. NOTE: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairing or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for purposes of this report.

3. "Operator" means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

4. "Fatal Injury" means any injury that results in death within thirty (30) days of the accident.

5. "Serious Injury" means any injury that (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fracture of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Type of Fire Extinguishing System: If a fire extinguishing system was used to fight an aircraft fire, specify the type(s) of extinguishing system(s) used. Examples include handheld extinguisher, engine fire bottle, cargo/baggage compartment fire suppression system, or airport emergency ground equipment.

Owner/Operator Information: Enter the owner information as shown on the registration certificate. Commercial operators, enter the operator information, including "doing business as" when applicable, as shown on the operator certificate.

Revenue Sightseeing Flight: Indicate whether the accident aircraft was conducting **revenue** sightseeing operations under 14 CFR Part 91 at the time of the accident.

Air Medical Flight: Indicate whether the accident flight was being conducted for the purpose of carrying medical personnel, patient(s), or organs.

Public Aircraft: Federal, state or local government flight operations such as official travel, law-enforcement, low-level observation, aerial application, firefighting, search and rescue, biological or geological resource management, or aeronautical research. Indicate whether the flight was conducted by the armed forces, federal, state, or local government.

Purpose of Flight: 14 CFR Parts 91, 103, 133, 136, and 137: Indicate the type of operation that was being conducted at the time of the occurrence using the following definitions:

AERIAL APPLICATION--Operations using an aircraft to perform aerial application or dispersion of any substance. Examples include agricultural, health, forestry, cloud seeding, firefighting, insect control, etc.

AERIAL OBSERVATION--These flights include aerial mapping/photography, patrol, search and rescue, hunting, highway traffic advisory, ranching, surveillance, oil and mineral exploration, criminal pursuit, fish spotting, etc.

AIR DROP--Aerial operations, other than aerial application, that are intended to release items in flight.

AIR RACE/SHOW--Includes any flight operations conducted as part of an organized air race or public demonstration.

BUSINESS--includes all personal flying without a paid professional crew for reasons associated with furthering a business, including transportation to and from business meetings or work. This does not include corporate/executive operations, air taxi, or commuter operations.

EXECUTIVE/CORPORATE--Company flying with a paid, professional crew.

FERRY--Non-revenue flight under a special flight or "ferry" permit. Refer to 14 CFR 21.197 for details of special flight permit issuance.

FLIGHT TEST--Flight for the purpose of investigating the flight characteristics of an aircraft/aircraft component or evaluating an applicant for a pilot certificate or rating.

INSTRUCTIONAL--Flying while under the supervision of a flight instructor or receiving air carrier training. Personal proficiency flight operations and personal flight reviews, as required by federal air regulations, are excluded.

OTHER WORK USE--Miscellaneous flight operations conducted for compensation or hire such as construction work (not 14 CFR Part 135 operation), parachuting, aerial advertising, towing gliders, etc.

PERSONAL--Flying for personal reasons (excludes business transportation) including pleasure or personal transportation. This also includes practice or proficiency flights performed under flight instructor supervision and not part of an approved flight training program.

POSITIONING--Non-revenue flight conducted for the primary purpose of relocating the aircraft. Examples include moving the aircraft to a maintenance facility or to load passengers or cargo etc.

UNKNOWN--Use only if the primary purpose of flight is not known.

Other Aircraft--Collision: For all accidents involving a collision with another aircraft, including parked aircraft, check "Collision with other aircraft" under Basic Information and complete this section indicating details about the OTHER aircraft involved in the collision.

Airport Information: Complete this section if the accident/incident occurred on approach, landing, takeoff, departure, or within 3 statute miles of an airport. Please refer to the FAA Airport/Facility Directory or other official source for airport information.

Airport Identifier: Provide the official 3 or 4 character airport identifier number.

Runway: Indicate the number of the runway used, including L, R, or C if applicable.

Runway/Landing Surface: Indicate the type of intended runway/landing surface (do not indicate surface conditions). If the surface type was mixed, check all that apply.

Condition of Runway/Landing Surface: Indicate the condition of the intended runway/landing surface. If multiple conditions existed at the time of the accident, check all that apply.

Weather Information at the Accident/Incident Site: Indicate the weather conditions reported at the accident/incident site at the time of occurrence. If no weather reporting was available for the accident/incident site, indicate the reported conditions at the nearest reporting site. Specify the weather reporting site identifier, the observation time, and distance from the accident/incident.

Sky/Lowest Cloud Condition: Indicate the height above ground level of the lowest cloud condition present at the time of the accident/incident and whether coverage was reported as few, scattered, broken or overcast. Also indicate the height above ground level and coverage of the lowest cloud ceiling present at the time of the accident/incident (reported as broken or overcast).

NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs: Describe all NOTAMs (distant (D) or Flight Data Center (FDC), if known), AIRMETs, SIGMETs, and PIREPs in effect near the accident/incident.

Flight Crewmember Information: Indicate the category that best describes the capacity served by this flight crewmember at the time of the accident. The designators "Flight Crewmember 1" and "Flight Crewmember 2" do not refer to a specific pilot position or responsibility. If more than one pilot is aboard, they may be entered in any order and their capacity entered as appropriate.

Degree of Injury: See Definitions on the top half of Page 1 of the instructions. Minor injury is not defined. If an injury does not meet the criteria for another injury category, select Minor.

Date of Last Flight Review or Equivalent: Enter the date of the most recent flight review, or equivalent, completed by this pilot. Refer to 14 CFR 61.56 for accepted equivalents.

Type Ratings: List all type ratings on the pilot certificate. If the pilot holds no type ratings indicate "none." If the pilot holds a pilot certificate other than student and was flying an aircraft requiring an endorsement, enter the type and date of any logbook endorsement(s) for that aircraft. See 14 CFR 61 for examples of required endorsements.

Student Endorsements: If the pilot holds a student pilot certificate, enter all solo endorsements and dates on the student pilot certificate.

Flight Time: Complete the flight time matrix. Solo flight time should be included as "Pilot-in-Command (PIC)" and all dual flight instruction given should be included as "Time as Instructor."

Additional Flight Crewmembers: Complete this section if there were more than two required flight crewmembers on the aircraft. This also includes a check airman performing official duties but does not include cabin crew. State the capacity served by each included crewmember at the time of the accident.

Passenger(s)/Other Personnel: Enter identification and injury severity information for all passengers, cabin crew, and other personnel involved in the accident. See Page 1 of the instructions for the official definition of injury levels.

Several questions throughout the form allow for multiple responses; when appropriate, choose all responses that apply.

These instructions only pertain to major issue areas covered by NTSB Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report. For additional definitions of questions and responses, please refer to www.nts.gov.

**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: Jolon State: CA
 ZIP: 93930 Country: USA
 Latitude: 35.97087 Longitude: -121.17582
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time
 Date: 02/16/2022 Local Time: 09:58
mm/dd/yyyy Time Zone: PST
Collision with Other Aircraft: Midair On-ground None

AIRCRAFT INFORMATION

Registration Number: N542AJ
Manufacturer: Joby Aero Inc
Model: JAS4-2
Serial Number: JAS4-201
Year of Manufacture: 2019
Amateur-Built: Yes No *If Yes:* Kit/Plans Original Design *Make:* _____

IFR-Equipped and Certified
 Commercial Space Flight
 Unmanned Aircraft
Maximum Gross Weight: _____ lbs
Weight at Time of Accident/Incident: _____ lbs
Number of Seats: 5 Flight Crew Seats: 1
 Cabin Crew Seats: 0 Passenger Seats: 4
Number of Engines: 6

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
 None
 Tailwheel
 High Skid
 Skid
 Ski
 Ski/Wheel
 Other Launch/Recovery System
 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/Series | Manufacturer's Serial Number | Date of Mfg. <i>mm/dd/yyyy</i> | Rated Power <input type="radio"/> Horsepower or <input type="radio"/> lbs of Thrust | Total Time (hours) | Time Since: Inspection (hours) | Overhaul (hours) |
|--------|---------------------|---------------------|------------------------------|-----------------------------------|---|------------------------------|--|-----------------------------------|
| Eng. 1 | | | | | | | | |
| Eng. 2 | | | | | | | | |
| Eng. 3 | | | | | | | | |
| Eng. 4 | | | | | | | | |

Last Inspection Type
 100-Hour
 AAIP
 Annual
 Continuous Airworthiness
 Conditional Inspection
 Unknown
Date Last Inspection: _____
mm/dd/yyyy
Airframe Total Time: 95.7 hrs
 hours measured at *(Select one)*
 Last Inspection Time of Accident/Incident

Propeller 1
 Fixed Pitch
 Controllable Pitch
 Ground Adjustable
 Manufacturer: _____
 Model: _____

Propeller 2
 Fixed Pitch
 Controllable Pitch
 Ground Adjustable
 Manufacturer: _____
 Model: _____

Type of Maintenance Program *(Select one)*
 Annual
 Conditional (Amateur-built only)
 Manufacturer's Inspection Program
 Other Approved Inspection Program (AAIP)
 Continuous Airworthiness
 Other, specify: Condition Inspection for E

ELT Installed: Yes No
If Yes:
ELT Manufacturer: _____
Model or Part No.: _____
TSO No.: OC91 (121.5 MHz) OC91a (121.5 MHz)
 OC126 (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: _____

Description of Fire Extinguishing System
 None
 Specify: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: JOBY AERO INCCity: Santa CruzFractional Ownership Aircraft: Yes NoState: CA ZIP: 95060Country: USA**Operator of Aircraft** Same As Registered Owner Same Address as Registered Owner

Name: _____

City: _____

Doing Business As: _____

State: _____ ZIP: _____

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

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 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 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: _____ City of Residence: _____
 Middle Initial: _____ State: _____ ZIP: _____
 Last Name: _____ Country: _____
 Age at time of Accident/Incident: _____ Date of Birth: _____ mm/dd/yyyy
 Certificate Number: _____

| Degree of Injury <input checked="" type="radio"/> None <input type="radio"/> Fatal <input type="radio"/> Minor <input type="radio"/> Unknown <input type="radio"/> Serious | Seat Occupied <input type="radio"/> Left <input type="radio"/> Front <input type="radio"/> Unknown <input type="radio"/> Right <input type="radio"/> Rear <input type="radio"/> Center <input type="radio"/> Single | Restraint Type <table style="width:100%;"> <tr> <th style="text-align: left;">Available</th> <th style="text-align: left;">Used</th> </tr> <tr> <td><input type="radio"/> None</td> <td><input type="radio"/> None</td> </tr> <tr> <td><input type="radio"/> Lap only</td> <td><input type="radio"/> Lap only</td> </tr> <tr> <td><input type="radio"/> 3-point</td> <td><input type="radio"/> 3-point</td> </tr> <tr> <td><input type="radio"/> 4-point</td> <td><input type="radio"/> 4-point</td> </tr> <tr> <td><input type="radio"/> 5-point</td> <td><input type="radio"/> 5-point</td> </tr> <tr> <td><input type="radio"/> Unknown</td> <td><input type="radio"/> Unknown</td> </tr> </table> | Available | Used | <input type="radio"/> None | <input type="radio"/> None | <input type="radio"/> Lap only | <input type="radio"/> Lap only | <input type="radio"/> 3-point | <input type="radio"/> 3-point | <input type="radio"/> 4-point | <input type="radio"/> 4-point | <input type="radio"/> 5-point | <input type="radio"/> 5-point | <input type="radio"/> Unknown | <input type="radio"/> Unknown | Inflatable Restraints <input checked="" type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown |
|--|---|---|-----------|------|----------------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---|
| Available | Used | | | | | | | | | | | | | | | | |
| <input type="radio"/> None | <input type="radio"/> None | | | | | | | | | | | | | | | | |
| <input type="radio"/> Lap only | <input type="radio"/> Lap only | | | | | | | | | | | | | | | | |
| <input type="radio"/> 3-point | <input type="radio"/> 3-point | | | | | | | | | | | | | | | | |
| <input type="radio"/> 4-point | <input type="radio"/> 4-point | | | | | | | | | | | | | | | | |
| <input type="radio"/> 5-point | <input type="radio"/> 5-point | | | | | | | | | | | | | | | | |
| <input type="radio"/> Unknown | <input type="radio"/> Unknown | | | | | | | | | | | | | | | | |

Pilot Certificate(s) *(Check all that apply)*

| | | | |
|----------------------------------|--|--|--------------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Flight Instructor | <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> US Military |
| <input type="checkbox"/> Private | <input type="checkbox"/> Recreational | <input type="checkbox"/> Airline Transport | <input type="checkbox"/> Foreign |
| <input type="checkbox"/> Student | <input type="checkbox"/> Sport | <input type="checkbox"/> Flight Engineer | |

| | | | |
|---|---|--|---|
| Principal Occupation <input checked="" type="radio"/> Pilot <input type="radio"/> Other <input type="radio"/> Unknown | Medical Certificate <input checked="" type="radio"/> None <input type="radio"/> Class 3 <input type="radio"/> Class 1 <input type="radio"/> Driver's License (Sport Pilot only) <input type="radio"/> Class 2 <input type="radio"/> Unknown | Medical Certificate Validity <input type="radio"/> Without limitations/waivers <input type="radio"/> Unknown <input type="radio"/> With limitations/waivers <input type="radio"/> N/A <input type="radio"/> Special Issuance | Date of Last Medical _____ mm/dd/yyyy |
|---|---|--|---|

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) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Single-Engine Land <input type="checkbox"/> Single-Engine Sea <input type="checkbox"/> Multiengine Land <input type="checkbox"/> Multiengine Sea | Other Aircraft Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airship <input type="checkbox"/> Balloon <input type="checkbox"/> Glider <input type="checkbox"/> Gyroplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift | Instrument Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airplane <input type="checkbox"/> Helicopter <input type="checkbox"/> Powered Lift | Instructor Rating(s) <i>(Check all that apply)</i> <input type="checkbox"/> None <input type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Airplane Multi-Engine <input type="checkbox"/> Gyroplane <input type="checkbox"/> Powered Lift <input type="checkbox"/> Instrument Airplane <input type="checkbox"/> Instrument Helicopter <input type="checkbox"/> Helicopter <input type="checkbox"/> Glider <input type="checkbox"/> Sport |
|--|---|---|--|

| | |
|---------------------|--|
| Type Ratings | Student Endorsements <i>(Include dates)</i> |
|---------------------|--|

| Flight Time <i>(Enter appropriate number of hours in each box)</i> | 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: _____ | <input type="radio"/> Left <input type="radio"/> Front <input type="radio"/> Center <input type="radio"/> Rear <input type="radio"/> Right <input type="radio"/> Single <input type="radio"/> Unknown | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown |
| Pilot Certificate(s) (Check all that apply) <input type="checkbox"/> None <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Commercial <input type="checkbox"/> US Military <input type="checkbox"/> Private <input type="checkbox"/> Recreational <input type="checkbox"/> Airline Transport <input type="checkbox"/> Foreign <input type="checkbox"/> Student <input type="checkbox"/> Sport <input type="checkbox"/> Flight Engineer | Restraint Type: Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | Inflatable Restraints <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown |
| Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> 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: _____ | <input type="radio"/> Left <input type="radio"/> Front <input type="radio"/> Center <input type="radio"/> Rear <input type="radio"/> Right <input type="radio"/> Single <input type="radio"/> Unknown | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown |
| Pilot Certificate(s) (Check all that apply) <input type="checkbox"/> None <input type="checkbox"/> Flight Instructor <input type="checkbox"/> Commercial <input type="checkbox"/> US Military <input type="checkbox"/> Private <input type="checkbox"/> Recreational <input type="checkbox"/> Airline Transport <input type="checkbox"/> Foreign <input type="checkbox"/> Student <input type="checkbox"/> Sport <input type="checkbox"/> Flight Engineer | Restraint Type: Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | Inflatable Restraints <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown |
| Type Rating/Endorsement for Accident/Incident Aircraft? <input type="checkbox"/> Yes <input type="checkbox"/> 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: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other | <input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____ | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown | Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown | <input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown |
| First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other | <input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____ | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown | Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown | <input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown |
| First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other | <input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____ | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown | Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown | <input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown |
| First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ <input type="radio"/> Crew <input type="radio"/> Passenger <input type="radio"/> Other | <input type="radio"/> Left <input type="radio"/> Center <input type="radio"/> Right <input type="radio"/> Unknown Row: ____ | <input type="radio"/> None <input type="radio"/> Minor <input type="radio"/> Serious <input type="radio"/> Fatal <input type="radio"/> Unknown | Available Used <input type="radio"/> None <input type="radio"/> None <input type="radio"/> Lap Only <input type="radio"/> Lap Only <input type="radio"/> 3-point <input type="radio"/> 3-point <input type="radio"/> 4-point <input type="radio"/> 4-point <input type="radio"/> 5-point <input type="radio"/> 5-point <input type="radio"/> Unknown <input type="radio"/> Unknown | <input type="checkbox"/> Not Installed <input type="checkbox"/> Installed <input type="checkbox"/> Not Deployed <input type="checkbox"/> Deployed <input type="checkbox"/> Unknown | <input type="checkbox"/> Under 5 years If Under 5, <input type="radio"/> Child Restraint <input type="radio"/> Lap-Held <input type="radio"/> Unknown |

FLIGHT ITINERARY INFORMATION

| | | | |
|---|---|--|---|
| Last Departure Point Airport ID: _____ City: _____ State: _____ Country: _____ | Time of Departure Time: _____ Time Zone: _____ | Destination Airport ID: _____ City: _____ State: _____ Country: _____ | Type Flight Plan Filed <input type="radio"/> None <input type="radio"/> VFR/IFR <input type="radio"/> Company VFR <input type="radio"/> IFR <input type="radio"/> Military VFR <input type="radio"/> Unknown <input type="radio"/> VFR Activated? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown |
|---|---|--|---|

Type of ATC Clearance/Service (Check all that apply)

| | | | | |
|-------------------------------|--------------------------------------|--------------------------------------|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Special VFR | <input type="checkbox"/> Special IFR | <input type="checkbox"/> VFR Flight Following | <input type="checkbox"/> Cruise |
| <input type="checkbox"/> VFR | <input type="checkbox"/> IFR | <input type="checkbox"/> VFR On Top | <input type="checkbox"/> Traffic Advisory | <input checked="" type="checkbox"/> Unknown / NA |

Airspace where the accident/incident occurred (Check all that apply)

| | | | |
|----------------------------------|---|---|---|
| <input type="checkbox"/> Class A | <input type="checkbox"/> Class G | <input type="checkbox"/> Military Operations Area (MOA) | <input type="checkbox"/> Special |
| <input type="checkbox"/> Class B | <input type="checkbox"/> Demo Area | <input type="checkbox"/> Airport Advisory Area | <input type="checkbox"/> Air Traffic Control Area |
| <input type="checkbox"/> Class C | <input type="checkbox"/> Warning Area | <input type="checkbox"/> Jet Training Area | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Class D | <input type="checkbox"/> Prohibited Area | <input type="checkbox"/> TRSA | |
| <input type="checkbox"/> Class E | <input checked="" type="checkbox"/> Restricted Area | <input type="checkbox"/> FAR 93 | |

Altitude of In-Flight Occurrence:
8900 ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

| | |
|---|---|
| Source of Pilot Weather Information (Check all that apply) <input type="checkbox"/> National Weather Service <input type="checkbox"/> Flight Service Station <input type="checkbox"/> TV/Radio <input type="checkbox"/> Automated Report <input type="checkbox"/> Commercial Weather Service (DUATS) <input type="checkbox"/> On-Board Weather <input checked="" type="checkbox"/> Company <input type="checkbox"/> Military <input checked="" type="checkbox"/> Internet <input type="checkbox"/> None <input type="checkbox"/> Unknown | Weather Observation Facility Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true |
|---|---|

| | |
|---|---|
| Basic Conditions <input checked="" type="radio"/> VMC <input type="radio"/> IMC <input type="radio"/> Unknown | Light Condition <input type="radio"/> Dawn <input type="radio"/> Dusk <input type="radio"/> Dark Night <input type="radio"/> Unknown <input checked="" type="radio"/> Day <input type="radio"/> Night <input type="radio"/> Bright Night |
|---|---|

| | | |
|--|--|---|
| Sky/Lowest Cloud Condition <input checked="" type="radio"/> Clear <input type="radio"/> Thin Broken <input type="radio"/> Few <input type="radio"/> Thin Overcast <input type="radio"/> Partial Obscuration <input type="radio"/> Unknown <input type="radio"/> Scattered Lowest Cloud Condition Height _____ ft agl | Ceiling <input checked="" type="radio"/> None (Clear) <input type="radio"/> Obscured <input type="radio"/> Broken <input type="radio"/> Indefinite <input type="radio"/> Overcast <input type="radio"/> Unknown Ceiling Height _____ ft agl | Temperature: <u>11</u> (C) or _____ (F) Dew Point: <u>3</u> (C) or _____ (F) Altimeter Setting: <u>28.90</u> in. Hg or _____ MB |
|--|--|---|

| | | | |
|---|--|--|--|
| Wind Direction <input type="checkbox"/> Variable -or- Direction: _____ degrees true | Wind Speed <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Light and Variable -or- Speed: _____ kts | Wind Gusts <input checked="" type="checkbox"/> Not Gusting -or- Speed: _____ kts | Visibility <u>clear</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft |
|---|--|--|--|

| | | |
|---|--|---|
| Intensity of Precipitation <input type="radio"/> Light <input type="radio"/> Moderate <input type="radio"/> Heavy <input type="radio"/> N/A <input type="radio"/> Unknown | Type of Precipitation (Check all that apply) <input checked="" type="checkbox"/> None <input type="checkbox"/> Drizzle <input type="checkbox"/> Freezing Rain <input type="checkbox"/> Rain <input type="checkbox"/> Ice Pellets <input type="checkbox"/> Snow Shower <input type="checkbox"/> Snow <input type="checkbox"/> Snow Pellets <input type="checkbox"/> Ice Pellets Shower <input type="checkbox"/> Hail <input type="checkbox"/> Snow Grains <input type="checkbox"/> Freezing Drizzle <input type="checkbox"/> Rain Showers <input type="checkbox"/> Ice Crystals | Restriction to Visibility (Check all that apply) <input checked="" type="checkbox"/> None <input type="checkbox"/> Fog <input type="checkbox"/> Blowing Dust <input type="checkbox"/> Ground Fog <input type="checkbox"/> Blowing Sand <input type="checkbox"/> Haze <input type="checkbox"/> Blowing Snow <input type="checkbox"/> Ice Fog <input type="checkbox"/> Blowing Spray <input type="checkbox"/> Smoke <input type="checkbox"/> Dust <input type="checkbox"/> Unknown |
|---|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|-------------|---------------------------------------|---------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|--|---|---------------|-------------|---------------------------------------|---------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|-------------------------------|-------------------------------|--|---|
| Icing Forecast <table style="width: 100%;"> <tr> <td>Amount</td> <td>Type</td> </tr> <tr> <td><input checked="" type="radio"/> None</td> <td><input type="radio"/> N/A</td> </tr> <tr> <td><input type="radio"/> Trace</td> <td><input type="radio"/> Rime</td> </tr> <tr> <td><input type="radio"/> Light</td> <td><input type="radio"/> Clear</td> </tr> <tr> <td><input type="radio"/> Moderate</td> <td><input type="radio"/> Mixed</td> </tr> <tr> <td><input type="radio"/> Severe</td> <td><input type="radio"/> Unknown</td> </tr> <tr> <td><input type="radio"/> Unknown</td> <td></td> </tr> </table> | Amount | Type | <input checked="" type="radio"/> None | <input type="radio"/> N/A | <input type="radio"/> Trace | <input type="radio"/> Rime | <input type="radio"/> Light | <input type="radio"/> Clear | <input type="radio"/> Moderate | <input type="radio"/> Mixed | <input type="radio"/> Severe | <input type="radio"/> Unknown | <input type="radio"/> Unknown | | Icing Actual <table style="width: 100%;"> <tr> <td>Amount</td> <td>Type</td> </tr> <tr> <td><input checked="" type="radio"/> None</td> <td><input type="radio"/> N/A</td> </tr> <tr> <td><input type="radio"/> Trace</td> <td><input type="radio"/> Rime</td> </tr> <tr> <td><input type="radio"/> Light</td> <td><input type="radio"/> Clear</td> </tr> <tr> <td><input type="radio"/> Moderate</td> <td><input type="radio"/> Mixed</td> </tr> <tr> <td><input type="radio"/> Severe</td> <td><input type="radio"/> Unknown</td> </tr> <tr> <td><input type="radio"/> Unknown</td> <td></td> </tr> </table> | Amount | Type | <input checked="" type="radio"/> None | <input type="radio"/> N/A | <input type="radio"/> Trace | <input type="radio"/> Rime | <input type="radio"/> Light | <input type="radio"/> Clear | <input type="radio"/> Moderate | <input type="radio"/> Mixed | <input type="radio"/> Severe | <input type="radio"/> Unknown | <input type="radio"/> Unknown | | Turbulence Type (Check all that apply) <input checked="" type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Clear Air <input type="checkbox"/> Moderate <input type="checkbox"/> Terrain-Induced <input type="checkbox"/> Severe <input type="checkbox"/> Convective Turbulence <input type="checkbox"/> Extreme |
| Amount | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="radio"/> None | <input type="radio"/> N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Trace | <input type="radio"/> Rime | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Light | <input type="radio"/> Clear | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Moderate | <input type="radio"/> Mixed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Severe | <input type="radio"/> Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amount | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="radio"/> None | <input type="radio"/> N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Trace | <input type="radio"/> Rime | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Light | <input type="radio"/> Clear | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Moderate | <input type="radio"/> Mixed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Severe | <input type="radio"/> Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Unknown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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 *(Use additional sheet if necessary)*

Damage to the aircraft occurred both inflight and upon impact with the ground. The inflight damage included damage to propellers and separation of several propulsion motors and propellers. Damage also occurred to the leading edge of the right tail. Aircraft systems remained functional after the inflight damage, although one battery pack went offline prior to impact. The aircraft impacted the ground in a nose low attitude with only the right inboard motor still attached. The primary structure was destroyed on impact with the ground. A localized fire occurred after impact. Components that separated inflight were recovered with minor impact damage. The flight was conducted in restricted airspace over a closed government test range and there was no damage to property.

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.

The Joby experimental prototype aircraft N542AJ was engaged in a remotely piloted airspeed and altitude envelope expansion flight test campaign in restricted airspace. The aircraft had previously cleared the dive speed on a prior flight at a lower altitude. The accident flight took off under VFR flight rules IAW 14 CFR 91 at 09:42:38 local on February 16, 2022, in calm and clear weather conditions on the ground and 30 knot winds aloft from the northwest. After a nominal departure and completion of 175 KIAS test points at 11,000 feet, the aircraft accelerated to dive speed at 8,900 feet on a southeasterly heading. Shortly after reaching the test condition at 09:58:11 local, the aircraft experienced a failure of the right inboard propeller which culminated in the release of a propeller blade. The released blade impacted the right wingtip propeller which subsequently suffered a release of the impacted blade. Cascading effects resulting from the initial inflight failures included the separation of multiple propulsion motor/propeller assemblies and loss of remote pilot control of the aircraft. The aircraft departed controlled flight after the initial inflight failure and impacted the terrain. The main crash site was in semi-mountainous and unpopulated terrain ≈1.5 nautical miles northeast of the takeoff point and ≈0.5 nautical miles down range of the initial inflight failure. A cluster of three separated motor/propeller assemblies landed ≈0.25 nautical miles south of the main crash site. Assorted low ballistic coefficient material released during the inflight failure was located in mountainous and heavily vegetated terrain between 1 and 3.5 nautical miles from the main crash site in a distribution aligned with the prevailing winds aloft. All major components of the aircraft were recovered.

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

Operator/Owner Safety Recommendation

1. Instrumentation to measure loads of rotating propeller components, including blades and pitch mechanism, should be installed and monitored during all envelope expansion flight testing
2. Envelope expansion flight test technique should include methods for detecting and analyzing propeller dynamics.
3. Analysis of propeller dynamics should consider blade pitch control system and propulsion mounting stiffness effects if applicable.
4. Be aware that, due to aerodynamic interactions, high speed cruise flight can create higher-harmonic propeller loads that low-fidelity aerodynamic analysis may not predict

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.)

Joby Propeller 102632-002

The cause of the incident is believed to be a strong modal interaction excited during a high-speed cruise test flight beyond the typical operating envelope of the aircraft. This planned flight test in conjunction with anomalous tilt system condition at a single propeller station, resulted in unanticipated aerodynamic interactions which excited a propeller mode, leading to a non a non-uniform blade pitch increase beyond design limitations. This caused a load exceedance which resulted in blade failure. Aircraft control was lost as a result of cascading effects following propeller blade separation.

Total Time/Cycles On Part80 Hours750 Cycles**Time Since This Part Inspected/Overhauled**1 Hours**FUEL & SERVICES INFORMATION**

Fuel on Board at Last Takeoff
 (Convert from pounds, as necessary)

NA 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**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**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.

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

Date of this Report

12/08/2023
mm/dd/yyyy

Name of Pilot/Operator: Joby Aero Inc.

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.
DCA22FA082

Reviewed by NTSB Regional Office
AS10

Name of Investigator
MIKE HAUF

Date Report Received
12/8/2023