

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 cowl, 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: Key West State: FL

ZIP: _____ Country: USA

Latitude: 24.78 N Longitude: 81.67 W

(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 08/13/2023 Local Time: 1020

mm/dd/yyyy

Time Zone: EST

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

AIRCRAFT INFORMATION

Registration Number: N62WE

Manufacturer: Rockwell

Model: Shrike 500S (AC-50)

Serial Number: 3317

Year of Manufacture: 1978

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

☒ IFR-Equipped and Certified

☐ Commercial Space Flight

☐ Unmanned Aircraft

Maximum Gross Weight: 6,750 LB lbs

Weight at Time of Accident/Incident: _____ lbs

Number of Seats: 6 Flight Crew Seats: 2

Cabin Crew Seats: 0 Passenger Seats: 4

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

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
- ☐ Emergency Float ☐ Skid
- ☐ Float ☐ Ski
- ☐ Hull ☐ Ski/Wheel
- ☐ Other Launch/Recovery System
- ☐ None ☐ Unknown

Engine Type (Select one)

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

Fuel System Type (Reciprocating)

☐ Carburetor ☒ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Rated Power ☐ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Lycoming (Right)	IO-540-E1B5	L-1169-48	Unknown	290	6658.4		691.5
Eng. 2	Lycoming (Left)	IO-540-E1B5	L-3557-48	Unknown	290	7227.6		212.3
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 10/28/23
mm/dd/yyyy

Airframe Total Time: 3997.9 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: Hand Held Extinguisher On Board

Propeller 1

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

Manufacturer: Hartzell

Model: HC-C3YR-2UF

Propeller 2

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

Manufacturer: Hartzell

Model: HC-C3YR-2UF

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: ACK Technologies

Model or Part No.: E-04

TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☒ C126 (406 MHz)

Was ELT still mounted in aircraft? ☒ Yes ☐ No

Was ELT still connected to antenna? ☒ Yes ☐ No

Did ELT Activate? ☐ Yes ☒ No

If activated:

Did ELT Aid in Locating Aircraft: ☐ Yes ☒ No

If not activated:

- Indicate Reason:
- ☐ Impact Damage
 - ☐ Fire Damage
 - ☐ Battery Expired/Damaged
 - ☒ Unknown

Additional Equipment (Check all that apply)

- ☒ ADS-B
- ☐ Airframe Parachute
- ☐ Angle of Attack Indicator
- ☒ Autopilot
- ☐ Data Recorder
- ☐ Electronic Flight Bag or Handheld Device
- ☒ Electronic Multifunction Display
- ☒ Electronic Primary Flight Display
- ☒ Handheld GPS
- ☐ Heads Up Display
- ☒ Onboard Weather
- ☐ Satellite Tracking Device
- ☒ Stall Warning System
- ☐ Video Recording Device
- ☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>Adam J. Barney</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		City: <u>Altamonte Springs</u> State: <u>FL</u> ZIP: <u>32701</u> Country: <u>USA</u>	
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 <i>(Check all that apply)</i> ☒ 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 103 ☐ FAR 121 ☐ FAR 125 ☐ FAR 129 ☐ FAR 133 ☐ FAR 135 ☐ FAR 137 ☐ FAR 415 ☐ FAR 431 ☐ FAR 435 ☐ FAR 437 ☐ FAR 91 Special Flight ☐ Non-US, Commercial ☐ Non-US, Non-commercial ☐ Public Aircraft <i>(Select one)</i> ☐ Armed Forces ☐ Federal ☐ State ☐ Local ☐ Unknown	Revenue Operation for FAR 121, 125, 129, 135 <i>(Select one for each group)</i> ☐ Scheduled or Commuter ☐ Non-Scheduled or Air Taxi ☐ Domestic ☐ International ☐ Passenger ☐ Cargo ☐ Mail Contract Only	
Revenue Sightseeing Flight ☐ Yes ☒ No		Air Medical Flight ☐ Yes ☒ No	
AIRPORT INFORMATION <i>(Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)</i>			
Airport Name: <u>N/A - Water Ditching Off Airport</u> Airport Identifier: _____ Proximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A		Distance From Airport Center: _____ sm Direction From Airport: _____ degrees true Airport Elevation: _____ ft. msl	
Runway Information Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft		Condition of Runway/Landing Surface <i>(Check all that apply)</i>	
Runway/Landing Surface <i>(Check all that apply)</i> ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Grass/Turf ☐ Gravel ☐ Ice ☐ Macadam ☐ Metal/Wood ☐ Snow ☐ Water ☐ Unknown		☐ Dry ☐ Holes ☐ Ice Covered ☐ Rough ☐ Rubber Deposits ☐ Slush-Covered ☐ Snow-Compacted ☐ Snow-Crusted ☐ Snow-Dry ☐ Snow-Wet ☐ Soft ☐ Vegetation ☐ Water-Calm ☐ Water-Choppy ☐ Water-Glassy ☐ Wet ☐ Unknown	
Approach/Departure Segment <i>(Select one)</i> ☐ Taxi ☐ Takeoff ☐ Initial Climb ☐ VFR Departure ☐ IFR Departure Procedure/Clearance ☐ On Instrument Approach ☐ Landing ☐ Downwind ☐ Base ☐ Final ☐ Crosswind ☐ Low Approach ☐ Go Around ☐ Aborted Landing (after touchdown) ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☐ None ☐ ADF/NDB ☐ SDF ☐ VOR/TVOR ☐ VOR/DME ☐ TACAN ☐ PAR ☐ Sidestep ☐ ILS ☐ Localizer Only ☐ LOC-back course ☐ RNAV ☐ MLS ☐ LDA ☐ ASR ☐ Visual ☐ Contact ☐ Circling ☐ Unknown		VFR Approach <i>(Check all that apply)</i> ☐ None ☐ Traffic Pattern ☐ Straight-In ☐ Valley/Terrain Following ☐ Go Around ☐ Full Stop ☐ Stop and Go ☐ Touch and Go ☐ Simulated Forced Landing ☐ Forced Landing ☐ 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>Adam</u> Middle Initial: <u>J</u> Last Name: <u>Barney</u> City of Residence: <u>Altamonte Springs</u> State: <u>FL</u> ZIP: <u>32701</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>40</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 ☐ 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 <u>11/02/2021</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 None																																																																																																				
Medical Certificate Special Issuance None																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>08/02/23</u> mm/dd/yyyy				Flight Review Aircraft Make: <u>Piper</u> Model: <u>Arrow, PA28R-180</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 Private Pilot, Sing & Miltie Engine Land, Instrument. 338.0						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; font-weight: normal;">Flight Time (Enter appropriate number of hours in each box)</th> <th rowspan="2">All Aircraft</th> <th rowspan="2">This Make & Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multiengine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> </thead> <tbody> <tr> <td>Total Time</td> <td>975.5</td> <td>338.0</td> <td>467.5</td> <td>508.0</td> <td>52.2</td> <td>70.5</td> <td>90.1</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Pilot in Command (PIC)</td> <td>895.3</td> <td>332.0</td> <td>407.2</td> <td>488.1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>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>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>Last 90 Days</td> <td>39.7</td> <td>20.3</td> <td>5.8</td> <td>33.9</td> <td>0.0</td> <td>3.5</td> <td>1.4</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Last 30 Days</td> <td>4.1</td> <td>0.0</td> <td>0.0</td> <td>4.1</td> <td>0.0</td> <td>0.2</td> <td>0.0</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Last 24 Hours</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</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	975.5	338.0	467.5	508.0	52.2	70.5	90.1	-	-	-	Pilot in Command (PIC)	895.3	332.0	407.2	488.1	-	-	-	-	-	-	Time as Instructor	-	-	-	-	-	-	-	-	-	-	This Make/Model											Last 90 Days	39.7	20.3	5.8	33.9	0.0	3.5	1.4	-	-	-	Last 30 Days	4.1	0.0	0.0	4.1	0.0	0.2	0.0	-	-	-	Last 24 Hours	0.0	0.0	0.0	0.0	0.0	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	975.5	338.0	467.5	508.0	52.2	70.5	90.1	-	-	-																																																																																										
Pilot in Command (PIC)	895.3	332.0	407.2	488.1	-	-	-	-	-	-																																																																																										
Time as Instructor	-	-	-	-	-	-	-	-	-	-																																																																																										
This Make/Model																																																																																																				
Last 90 Days	39.7	20.3	5.8	33.9	0.0	3.5	1.4	-	-	-																																																																																										
Last 30 Days	4.1	0.0	0.0	4.1	0.0	0.2	0.0	-	-	-																																																																																										
Last 24 Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-																																																																																										

FLIGHT ITINERARY INFORMATION																																	
Last Departure Point Airport ID: <u>X04</u> City: <u>Apopka</u> State: <u>FL</u> Country: <u>USA</u>		Time of Departure Time: <u>0848</u> Time Zone: <u>EST</u>		Destination Airport ID: <u>KEYW</u> City: <u>Key West</u> State: <u>FL</u> Country: <u>USA</u>																													
Type Flight Plan Filed ☐ None ☐ VFR/IFR ☐ Company VFR ☒ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☒ Yes ☐ No ☐ Unknown																																	
Type of ATC Clearance/Service (Check all that apply) ☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☐ VFR ☒ 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 ☐ FAR 93 ☐ Class E ☐ Restricted Area					Altitude of In-Flight Occurrence: <u>3000</u> ft msl																												
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE																																	
Source of Pilot Weather Information (Check all that apply) ☐ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☐ Automated Report ☐ Commercial Weather Service (DUATS) ☒ On-Board Weather			Weather Observation Facility Facility ID: <u>KEYW</u> Observation Time: <u>1020</u> Time Zone: <u>EST</u> Distance from Accident Site: <u>13</u> nm Direction from Accident Site: <u>070</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 Lowest Cloud Condition Height <u>Aprox 4,000</u> ft agl		Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl		Temperature: _____ (C) or <u>90</u> (F) Dew Point: _____ (C) or <u>Unknown</u> (F) Altimeter Setting: <u>Unknown</u> in. Hg or <u>Unknown</u> MB																													
Wind Direction ☐ Variable -or- Direction: <u>220</u> degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>10-20</u> kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>10+</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: <u>1,000 Aprox</u> ft																														
Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☒ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☒ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals		Restriction to Visibility (Check all that apply) ☒ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown																														
Icing Forecast <table style="width:100%;"> <tr> <th>Amount</th> <th>Type</th> </tr> <tr> <td>☒ None</td> <td>☐ N/A</td> </tr> <tr> <td>☐ Trace</td> <td>☐ Rime</td> </tr> <tr> <td>☐ Light</td> <td>☐ Clear</td> </tr> <tr> <td>☐ Moderate</td> <td>☐ Mixed</td> </tr> <tr> <td>☐ Severe</td> <td>☐ Unknown</td> </tr> <tr> <td>☐ Unknown</td> <td></td> </tr> </table>		Amount	Type	☒ None	☐ N/A	☐ Trace	☐ Rime	☐ Light	☐ Clear	☐ Moderate	☐ Mixed	☐ Severe	☐ Unknown	☐ Unknown		Icing Actual <table style="width:100%;"> <tr> <th>Amount</th> <th>Type</th> </tr> <tr> <td>☒ None</td> <td>☐ N/A</td> </tr> <tr> <td>☐ Trace</td> <td>☐ Rime</td> </tr> <tr> <td>☐ Light</td> <td>☐ Clear</td> </tr> <tr> <td>☐ Moderate</td> <td>☐ Mixed</td> </tr> <tr> <td>☐ Severe</td> <td>☐ Unknown</td> </tr> <tr> <td>☐ Unknown</td> <td></td> </tr> </table>		Amount	Type	☒ None	☐ N/A	☐ Trace	☐ Rime	☐ Light	☐ Clear	☐ Moderate	☐ Mixed	☐ Severe	☐ Unknown	☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Light ☐ Clear Air ☐ Moderate ☐ Terrain-Induced ☐ Severe ☐ Convective Turbulence ☐ Extreme	
Amount	Type																																
☒ None	☐ N/A																																
☐ Trace	☐ Rime																																
☐ Light	☐ Clear																																
☐ Moderate	☐ Mixed																																
☐ Severe	☐ Unknown																																
☐ Unknown																																	
Amount	Type																																
☒ None	☐ N/A																																
☐ Trace	☐ Rime																																
☐ Light	☐ Clear																																
☐ Moderate	☐ Mixed																																
☐ Severe	☐ Unknown																																
☐ Unknown																																	
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: <u>N/A</u>																																	

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)*

Aircraft was intact after ditching in the ocean. Aircraft sank immediately. No damage to any other structures or vessels. No injury to any persons.

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 and location, services obtained, and intended destination. Provide as much detail as possible.

On Sunday August 13th, 2023, I was in route to KEYW from X04 with sufficient fuel on board. At approximately 10:20 am, 15 NM, NE of KEYW @ 3,000 FT AGL the right engine suddenly stopped. My fuel totalizers stated 48 Gallons on board and my fuel gauge concurred and did not show empty. I immediately contacted ATC and declared an emergency. Then, the left engine suddenly stopped. I turn on both fuel pumps, put the mixtures, props, throttles forward and attempted to re-start each engine but was unable too. I feather the props, pitched for best glide and ditched in the ocean approximately 12NM NE of KEYW.

RECOMMENDATION (How could this accident/incident have been prevented?)													
Operator/Owner Safety Recommendation I have gone over this thousands of time in my head since the incident. As PIC, I do not know what I would do differently to prevent this from happening. I am very lucky and happy to be alive. I do not have the ability to prove the plane had sufficient fuel on board since it was not recovered. but knowing that it did, I suspect the fuel system arrangement on the commanders series of aircraft has something to do with the incident. No fuel bladder or component inspection is called for during annual aircraft maintenance other than cleaning of the fuel strainers. with the high wing fuel bladder configuration, its virtually impossible to inspect without individually opening each bladder and inspecting with a bore scope. My recommendation would be to require core scope inspection of each fuel cell/bladder during annual/100 hour inspection. Personally, I know that I will do this inspection on any future airplane I own.													
MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)													
Was there Mechanical Malfunction/Failure? ☒ Yes ☐ No <i>(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)</i> The airplane had sufficient fuel on board to reach the intended destination KEYW plus reserve. I had visually inspected the fuel quantity. The Shrike Commander AC-50 has a single fuel tank design consisting of multiple interconnected fuel bladders with a single fuel sump/pickup. My theory is a bladder failure in flight or blockage of the fuel pickup within the fuel sump starving each engine of fuel. Looking through the maintenance records for the aircraft, I could not find any entry of bladder replacement.	Total Time/Cycles On Part N/A _____ Hours N/A _____ Cycles Time Since This Part Inspected/Overhauled 9 Months _____ Hours												
FUEL & SERVICES INFORMATION													
Fuel on Board at Last Takeoff <i>(Convert from pounds, as necessary)</i> 98 _____ Gallons	Fuel Type <table style="width: 100%;"> <tr> <td>☐ 80/87</td> <td>☐ 115/145</td> <td>☐ Jet B</td> <td>☐ Other, specify _____</td> </tr> <tr> <td>☒ 100 Low Lead</td> <td>☐ Jet A</td> <td>☐ JP8</td> <td></td> </tr> <tr> <td>☐ 100/130</td> <td>☐ Jet A-1</td> <td>☐ Automotive</td> <td></td> </tr> </table>	☐ 80/87	☐ 115/145	☐ Jet B	☐ Other, specify _____	☒ 100 Low Lead	☐ Jet A	☐ JP8		☐ 100/130	☐ Jet A-1	☐ Automotive	
☐ 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 I exited the aircraft via the pilot side pilot door. The water level was up to the window of the aircraft. I put my back against the copilot hull and pushed the door open with my feet against the water pressure. I climbed on top of the airplane and put my life jacket on while the airplane sank beneath me.													
OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for <i>other</i> aircraft)													
Aircraft Registration Number N/A _____	Manufacturer: _____ Model: _____	Damage to Other Aircraft <table style="width: 100%;"> <tr> <td>☐ Destroyed</td> <td>☐ Minor</td> </tr> <tr> <td>☐ Substantial</td> <td>☐ None</td> </tr> </table>	☐ Destroyed	☐ Minor	☐ Substantial	☐ None							
☐ 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

10/14/23

mm/dd/yyyy

Name of Pilot/Operator: Adam J. Barney

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.

ERA23LA359

Reviewed by NTSB Regional Office

ERA

Name of Investigator

Alleyne

Date Report Received

10/14/2023