



ARCHER AVIATION, INC.

347 Shea Road
Waitsburg, WA 99361

[REDACTED]

5/29/2014

ATTN: VAN S. McKENNY IV

This is the accident report from Tom Archer.

I omitted pages 8 & 9 due to it does not apply.

Could not do a signature so am faxing the report.

Thank You

[REDACTED]

Tom Archer

Cover + 7 pgs.

Tom Archer - Owner

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public use aircraft accidents and incidents

Accident/Incident Location

Nearest City/Place: Waitsburg State: WA
 ZIP: 99361 Country: USA
 Latitude: 46 22.8 N (dd:mm:ss N/S) Longitude: 118 12.21 W (ddd:mm:ss E/W)

Date/Time

Date: 05/23/2014 Local Time: 4:00 PM
 mm/dd/yyyy Time Zone: Pacific

Phase of Operation

☐ Standing ☒ Takeoff (incl. initial climb) ☐ Cruise ☐ Hover
☐ Taxi ☐ Climb ☐ Maneuvering ☐ Other
☐ Descent ☐ Landing ☐ Approach ☐ Unknown

Collision with Other Aircraft

☐ Midair
☐ On-ground
☒ None

Altitude of In-Flight Occurrence

1,835 ft MSL

Manufacturer: Bell - Williams

Model: UH-1H

Serial Number: 70-15750

Registration Number: N260TA

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 9,500 lbs

Weight at Time of Accident/Incident: 6,500 lbs

Location of Center of Gravity at Time of Accident/Incident:

N/A inches from ☐ nose or ☐ datum
 -or- Percent Mean Aerodynamic Cord (% MAC)

Category of Aircraft

☐ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyrocraft
☒ Helicopter
☐ Powered lift
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate (Check all that apply)

Standard

☐ Normal
☐ Utility
☐ Aerobatic
☐ Transport

Special

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

Number of Seats: 2

If Large Aircraft, how many seats for:

Flight Crew:

Cabin Crew:

Passengers:

Landing Gear ☐ Retractable

Check any additional landing gear configuration that applies:

☐ Tricycle ☐ Tailwheel
☐ Amphibian ☒ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Unknown

Type of Maintenance Program

☐ Annual
☐ Conditional (Amateur-built only)
☐ Manufacturer's Inspection Program
☐ Other Approved Inspection Program (AAIP)
☒ Continuous Airworthiness
☐ Other, specify:

Last Inspection Type

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

Date Last Inspection: 05/23/2014

mm/dd/yyyy

Airframe Total Time: 8,315 hrs

hours measured at (check one)

☒ Last Inspection ☐ Time of Accident/Incident

IFR Equipped

☐ Yes ☒ No ☐ Unknown

Stall Warning System Installed

☐ Yes ☒ No ☐ Unknown

Type of Fire Extinguishing System

☐ None
☒ Specify 1.5 # 2-B:C Rating

ELT Installed

☒ Yes ☐ No

ELT Activated

☒ Yes ☐ No

ELT Manufacturer: Ameri-King

Model/Series: AK-451

ELT Aided in Locating Accident/Incident

☐ Yes ☒ No

Serial Number: 1078

Battery Type: 4-D

Battery Exp. Date: 06/19/2017

Engine Type

☐ Reciprocating ☐ Turbo Jet
☒ Turbo Shaft ☐ Turbo Fan
☐ Turbo Prop ☐ Unknown

Reciprocating Fuel System Type

☐ Carburetor
☐ Fuel Injected

Propeller

☐ Fixed Pitch
☐ Controllable Pitch

Manufacturer:

Model:

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since Inspection (hours)	Time Since Overhaul (hours)
Eng. 1	Honeywell	T53-703	LE-20553BRX	unk	1800	3,266	370	1,687
Eng. 2								
Eng. 3								
Eng. 4								

Registered Aircraft Owner Name: <u>Archer Aviation Inc</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: <u>Waitsburg</u> State: <u>WA</u> ZIP: <u>99361</u> Country: <u>USA</u>	
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): <u>N/A</u>		Operator Address ☒ Same As Registered Owner City: _____ State: _____ ZIP: _____ Country: _____	
Regulation Flight Conducted Under ☒ FAR 91 ☐ FAR 129 ☐ FAR 91 Special Flight ☐ Public Use (select type) ☐ FAR 103 ☐ FAR 133 ☐ Non-US, Commercial ☐ Federal ☐ State ☐ Local ☐ FAR 121 ☐ FAR 135 ☐ Non-US, Non-commercial ☐ Unknown ☐ FAR 125 ☐ FAR 137 ☐ Armed Forces		Revenue Sightseeing Flight ☐ Yes ☒ No Air Medical Flight ☐ Yes ☒ No	
Purpose of Flight for FAR 91, 103, 133, 137 (Select one) ☐ Personal ☒ Business ☐ Executive/Corporate ☐ Other Work Use ☐ Instructional ☐ Ferry ☐ Positioning ☐ Aerial Application ☐ Aerial Observation ☐ Air Drop ☐ Air Race / Show ☐ Flight Test ☐ Public Use ☐ Unknown		Revenue Operation for FAR 121, 125, 129, 135 (Select one) ☐ Scheduled or Commuter ☒ Non-Scheduled or Air Taxi Domestic or International ☒ Domestic ☐ International Cargo Operation ☐ Passenger/Cargo ☐ Passenger _____ How many? ☐ Cargo _____ lbs ☐ Mail	
Type of Commercial Operating Certificate Held (Check all that apply) ☐ None ☐ Flag Carrier Operating Certificate (121) ☐ Supplemental ☐ Air Cargo ☐ Foreign Air Carriers (129) ☐ Commuter Air Carrier (135) ☐ On-Demand Air Taxi (135) ☐ Large Helicopter (127) ☒ Rotorcraft External Load (133) - or - ☒ Agricultural Aircraft (137) ☐ Other Operator of Large Aircraft			
OTHER AIRCRAFT COLLISION (If air or ground collision occurred, complete this section for other aircraft.)			
Aircraft Registration Number _____		Manufacturer: _____ Model: _____	
Registered Owner of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____		Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☒ None	
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
MECHANICAL MALFUNCTION/FAILURE (If mechanical malfunction or failure occurred, complete this section.)			
Was there Mechanical Malfunction/Failure? ☐ Yes ☐ No ☐ Unknown (If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)			Total Time/Cycles On Part _____ Hours _____ Cycles Time Since This Part Inspected/Overhauled _____ Hours
DAMAGE TO PROPERTY AND OTHER PROPERTY			
Aircraft Damage ☐ None ☐ Substantial ☐ Minor ☐ Destroyed		Aircraft Fire ☐ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground	
Aircraft Explosion ☐ None ☐ Both Ground and In-Flight ☐ In-Flight ☐ Unknown Origin ☐ On-Ground			

Description of Damage to Aircraft and Other Property (use additional sheet if necessary)

Main Rotor & Tail Rotor & Hull damaged due to contact with ground.
Also aircraft is laying on its left side.

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

Airport Identifier: _____ **Distance From Airport Center:** _____ SM
Airport Name: _____ **Direction From Airport:** _____ degrees MAG
Proximity to Airport ☐ Off Airport/Airstrip ☐ On Airport ☐ On Airstrip **Airport Elevation:** _____ ft. MSL
Approach Segment (Select one)
☐ On Instrument Approach ☐ Landing ☐ Base leg ☐ Final ☐ Go Around
☐ Crosswind ☐ Downwind ☐ Low Approach ☐ Aborted Landing (after touchdown)

IFR Approach (Check all that apply)

☐ None ☐ PAR ☐ MLS ☐ Practice
☐ ADF/NDB ☐ Sidestep ☐ LDA ☐ GPS
☐ SDF ☐ ILS ☐ ASR ☐ Loran
☐ VOR/TVOR ☐ Localizer Only ☐ Visual ☐ Unknown
☐ VOR/DME ☐ LOC-back course ☐ Contact
☐ TACAN ☐ RNAV ☐ Circling

VFR Approach (Check all that apply)

☐ None ☐ Stop and Go
☐ Traffic Pattern ☐ Touch and Go
☐ Straight-In ☐ Simulated Forced Landing
☐ Valley/Terrain Following ☐ Forced Landing
☐ Go Around ☐ Precautionary Landing
☐ Full Stop ☐ Unknown

Runway Information

Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft

Runway/Landing Surface (Check all that apply)

☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow

Condition of Runway/Landing Surface (Check all that apply)

☐ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☐ Wet
☐ Rubber Deposits ☐ Soft ☐ Unknown
☐ Slush Covered ☐ Vegetation

FLIGHT ITINERARY INFORMATION**Last Departure Point**

Airport ID: _____
City: _____
State: _____
Country: _____

Time of Departure

Time: _____
Time Zone: _____

Destination

Airport ID: _____
City: _____
State: _____
Country: _____

Type Flight Plan Filed

☐ None ☐ VFR/IFR
☐ Company VFR ☐ IFR
☐ Military VFR ☐ Unknown
☐ VFR
Activated? ☐ Yes ☐ No

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

☒ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise
☒ VFR ☐ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA

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

☐ Class A ☐ Class E ☐ Prohibited Area ☐ Jet Training Area ☐ Special
☐ Class B ☐ Class G ☐ Restricted Area ☐ TRSA ☐ Air Traffic Control Area
☐ Class C ☐ Demo Area ☐ Military Operations Area (MOA) ☐ FAR 93 ☒ Unknown
☐ Class D ☐ Warning Area ☐ Airport Advisory Area

Aircraft Load Description (Check all that apply)

☒ None ☐ Towing Olider ☐ Parachutists ☐ Livestock
☐ Passengers ☐ Towing Banner ☐ Water ☐ Unknown
☐ Cargo ☐ Other External ☐ Chemical/Fertilizer/Seeds

FUEL & SERVICES INFORMATION**Fuel on Board at Last Takeoff**

(convert from pounds, as necessary)

_____ 200 Gallons

Fuel Type

☐ 80/87 ☐ 115/145 ☐ JP3 ☐ Other, specify _____
☐ 100 Low Lead ☒ Jet A ☐ JP4
☐ 100/130 ☐ Automotive ☐ JP5

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

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

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**

Facility ID: _____

Observation Time: _____

Time Zone: _____

Distance from Accident Site: _____ NM

Direction from Accident Site: _____ degrees MAG

Source of Weather Information

(Check all that apply)

- | | |
|---|---|
| ☐ National Weather Service | ☐ Company |
| ☐ Flight Service Station | ☐ Military |
| ☐ TV/Radio | ☐ Internet |
| ☐ Automated Report | ☒ Unknown |
| ☐ Commercial Weather Service (DUATS) | |

Method of Briefing

(Check all that apply)

- | |
|---|
| ☒ In Person |
| ☐ Teletype |
| ☐ Telephone/Computer |
| ☐ Aircraft Radio |
| ☐ TV/Radio |
| ☐ Unknown |

Briefing Type/Completeness

- | | |
|---|---|
| ☐ Full | ☐ Abbreviated |
| ☐ Partial / Limited By Pilot | ☐ Unknown |
| ☐ Partial / Limited By Briefer | ☒ Not Pertinent |

Light Condition

- | | | |
|---|--------------------------------|---------------------------------------|
| ☐ Dawn | ☐ Dusk | ☐ Dark Night |
| ☒ Day | ☐ Night | ☐ Bright Night |
| | | ☐ Not Reported |

Visibility

_____ 10 miles

Sky/Lowest Cloud Condition

- | | |
|---|--|
| ☐ Clear | ☐ Thin Broken |
| ☐ Few | ☐ Thin Overcast |
| ☐ Partial Obscuration | ☐ Unknown |
| ☒ Scattered | |

Ceiling

- | | |
|--|-------------------------------------|
| ☐ None (clear) | ☐ Obscured |
| ☒ Broken | ☐ Indefinite |
| ☐ Overcast | ☐ Unknown |

Lowest Cloud Condition Height

_____ ft AGL

Ceiling Height

_____ ft AGL

Wind Direction☐ Indicated:
_____ degrees MAG☒ Variable**Wind Speed**

Velocity: _____ KTS

-or-

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

Wind Gusts

Velocity: _____ KTS

- | |
|---|
| ☐ Gusting |
| ☒ Not Gusting |

Type of Turbulence (Check all that apply)

- | | |
|--|---|
| ☒ None | ☐ In Clouds |
| ☐ Clear Air | ☐ Vicinity of Thunderstorm |

Severity of Turbulence

- | | | |
|----------------------------------|--|--------------------------------|
| ☐ Extreme | ☐ Moderate | ☐ Light |
| ☐ Severe | ☐ Moderate Chop | |

NOTAMS (D, L and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident

Temperature: _____ (C)
or _____ 60 (F)Altimeter Setting: 2992 in. HG
or _____ MB

Density Altitude: _____ 1,835 ft

Dew Point: _____ (C)
or _____ (F)**Icing Forecast****Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Icing Actual**Amount**

- | | |
|--|-----------------------------------|
| ☒ None | ☐ Moderate |
| ☐ Trace | ☐ Severe |
| ☐ Light | |

Type

- | |
|--------------------------------|
| ☐ Rime |
| ☐ Clear |
| ☐ Mixed |

Type of Precipitation (Check all that apply)

- | | |
|--|---|
| ☒ None | ☐ Drizzle |
| ☐ Rain | ☐ Ice Pellets |
| ☐ Snow | ☐ Snow Pellets |
| ☐ Hail | ☐ Snow Grains |
| ☐ Rain Showers | ☐ Ice Crystals |
| ☐ Freezing Rain | ☐ Ice Pellets Shower |
| ☐ Snow Shower | ☐ Freezing Drizzle |

Intensity of Precipitation

- | | | |
|--------------------------------|-----------------------------------|--------------------------------|
| ☐ Light | ☐ Moderate | ☐ Heavy |
|--------------------------------|-----------------------------------|--------------------------------|

Pilot "A" Responsibilities at the Time of Accident/Incident
☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

Pilot "A" Identification

 First Name: Tom
 Middle Initial: E
 Last Name: Archer

 City: Waitsburg
 State: WA ZIP: 9361
 Country: USA

 Age at time of Accident/Incident: 61 Date of Birth: mm/dd/yyyy Certificate Number: mm/dd/yyyy
Degree of Injury
☒ None ☐ Fatal
☐ Minor ☐ Unknown
☐ Serious

Seat Occupied
☐ Left ☐ Front ☐ Unknown
☒ Right ☐ Rear
☐ Center ☐ Single

Seat Belt

 Used ☒ Yes ☐ No
 Available ☐ Yes ☐ No

Shoulder Harness

 Used ☒ Yes ☐ No
 Available ☐ Yes ☐ No

Pilot Certificate(s) (Check all that apply)
☐ None ☐ Student ☐ Recreational ☒ Commercial ☐ Flight Engineer ☐ Foreign
☐ Private ☐ Flight Instructor ☐ Sport ☐ Airline Transport ☐ U.S. Military

Principal Occupation
☒ Pilot
☐ Other
☐ Unknown

Medical Certificate
☐ None ☐ Class 3
☐ Class 1 ☐ Driver's License (Sport Pilot only)
☒ Class 2 ☐ Unknown

Medical Certificate Validity
☐ Without limitations/waivers
☒ With limitations/waivers
☐ Unknown

Date of Last Medical
01/22/2014
mm/dd/yyyy
Medical Certificate Limitations

Must wear corrective lenses

Medical Certificate Waivers
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:
06/21/2013
mm/dd/yyyy
Flight Review Aircraft

 Make: Bell
 Model: UH-1H
Airplane Rating(s) (Check all that apply)
☐ None
☒ Single-Engine Land
☐ Single-Engine Sea
☐ Multiengine Land
☐ Multiengine Sea

Other Aircraft Rating(s) (Check all that apply)
☐ None
☐ Airship
☐ Free Balloon
☐ Glider
☐ Gyroplane
☒ Helicopter
☐ Powered Lift

Instrument Rating(s) (Check all that apply)
☐ None
☒ Airplane
☐ Helicopter
☐ Powered Lift

Instructor Rating(s) (Check all that apply)
☒ None
☐ Airplane Single-Engine
☐ Airplane Multi-Engine
☐ Gyroplane
☐ Powered Lift

☐ Instrument Airplane
☐ Instrument Helicopter
☐ Helicopter
☐ Glider
☐ Sport

Type Ratings
Student Endorsements (Include dates)

Flight Time (enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	18,631	4,460						16,738		
Pilot in Command (PIC)	18,000	4,460								
Time as Instructor										
This Make/Model										
Last 90 Days		90						90		
Last 30 Days		40						40		
Last 24 Hours		0						0		

TIME SIDON OF FLIGHT

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State time and point of departure, intended destination, and services obtained.

My crew & I started out the day (5/23/14) finishing up the 25 hr inspection. Approximately 1:00 pm pulled helicopter out of the shop and rechecked all of the fluid levels. Pulled the ground handling wheels off in front of the shop. Did a walk around and then did a ground run. I ran at flight idle and Brian Rayl (Mechanic) went around and did leak checks. Then I ran the helicopter up to 100% for a few minutes, then back to flight idle and did leak checks again. I then shut it down. We rechecked fluid levels and added where necessary.

Around 3:00 pm received a call to dry cherries in the tri-cities, wa.

We then added fuel to aircraft and about 3:55 pm I started up to head to my assignment.

I pulled power around 4:00 pm, went to a hover and then a higher hover due to the dust. Began proceeding to transitional lift, when I felt a change in the aircraft, some kind of motion that wasn't normal.

I don't know how to describe it but I went to speed up to get out of what the aircraft was doing and it made it worse. I tried to bring it back to a hover but it got worse and started rolling to the right. I remember it was so violent.

Tom Archer

RECOMMENDATION FOR THE AIRCRAFT DESIGNER

Operator/Owner Safety Recommendation

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**

05/29/2014

*mm/dd/yyyy***Signature and Name of Pilot/Operator**

Signature: _____

Type or Print Name: Tom Archer

Signature and Name of Person Filing Report if Other than Pilot/Operator

Signature: _____

Type or Print Name: _____

Title: _____

NTSB Accident/Incident No.
WPR14LA206**Reviewed by NTSB Regional Office**
WPR**Name of Investigator**
McKenny**Date Report Received**
5.29.2014