

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: BELLA VISTA State: CA
 ZIP: 96008 Country: USA
 Latitude: 40.6696354 Longitude: -122.1782554
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 07/02/2017 Local Time: 5:20 PM
mm/dd/yyyy
 Time Zone: PDT

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

AIRCRAFT INFORMATION

Registration Number: N488AS

Manufacturer: ROBINSON

Model: R44

Serial Number: 12538

Year of Manufacture: 2008

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

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

Maximum Gross Weight: 2500 lbs

Weight at Time of Accident/Incident: 2462 lbs

Number of Seats: 4 Flight Crew Seats: 1

Cabin Crew Seats: 0 Passenger Seats: 3

Number of Engines: 1

Category of Aircraft

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

Type of Airworthiness Certificate

(Check all that apply)

- | Standard | Special |
|--|---|
| ☒ Normal | ☐ Restricted |
| ☐ Aerobatic | ☐ Limited |
| ☐ Balloon | ☐ Provisional |
| ☐ Commuter | ☐ Special Flight |
| ☐ Transport | ☐ Experimental |
| ☐ Utility | ☐ 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. <i>mm/dd/yyyy</i>	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time <i>(hours)</i>	Time Since: Inspection <i>(hours)</i>	Overhaul <i>(hours)</i>
Eng. 1	LYCOMING	I0-540-AE1A5	L-33193-48E	06/05/2008	205	2137	20	
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 06/01/2017
mm/dd/yyyy

Airframe Total Time: 2117.74 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: HANDHELD

Propeller 1

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

Propeller 2

- ☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____

Model: _____

ELT Installed: ☐ Yes ☒ No

If Yes:

ELT Manufacturer: _____

Model or Part No.: _____

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>AERO LEASING INC.</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		City: <u>BROOKINGS</u> State: <u>OR</u> ZIP: <u>97415</u> Country: <u>USA</u>	
Operator of Aircraft ☐ Same As Registered Owner Name: <u>AIR SHASTA ROTOR & WING INC.</u> Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		☐ Same Address as Registered Owner City: <u>REDDING</u> State: <u>CA</u> ZIP: <u>96002</u> Country: <u>USA</u>	
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 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 <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 ☒ Domestic ☒ Non-Scheduled or Air Taxi ☐ International ☒ Passenger ☐ Cargo ☐ Mail Contract Only	
Revenue Sightseeing Flight ☐ Yes ☒ No	Air Medical Flight ☐ Yes ☒ No	Purpose of Flight for FAR 91, 103, 133, 137 <i>(Select one)</i> ☐ 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	
AIRPORT INFORMATION <i>(Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)</i>			
Airport Name: _____ 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 Runway/Landing Surface <i>(Check all that apply)</i> ☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water ☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Dirt ☐ Ice ☐ Snow ☐ Unknown		Condition of Runway/Landing Surface <i>(Check all that apply)</i> ☐ 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 <i>(Select one)</i> ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach ☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☐ Go Around ☐ Initial Climb ☐ Crosswind ☐ Aborted Landing (after touchdown) ☐ Unknown			
IFR Approach <i>(Check all that apply)</i> ☐ None ☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice ☐ SDF ☐ Sidestep ☐ LDA ☐ GPS ☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Visual ☐ VOR/DME ☐ Localizer Only ☐ Contact ☐ TACAN ☐ LOC-back course ☐ Circling ☐ RNAV ☐ Unknown		VFR Approach <i>(Check all that apply)</i> ☐ None ☐ Traffic Pattern ☐ Stop and Go ☐ Straight-In ☐ Touch and Go ☐ Valley/Terrain Following ☐ Simulated Forced Landing ☐ Go Around ☐ Forced Landing ☐ Full Stop ☐ Precautionary Landing ☐ Unknown	

"FLIGHT CREWMEMBER 1" INFORMATION

"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident

☒ Pilot
 ☐ Co-Pilot
 ☐ Student Pilot
 ☐ Flight Instructor
 ☐ Check Pilot
 ☐ Flight Engineer
 ☐ Other Flight Crew

"Flight Crewmember 1" was pilot flying
 ☒ Yes
 ☐ No

"Flight Crewmember 1" Identification

First Name: JOHNATHON

City of Residence: WEAVERVILLE

Middle Initial: W

State: CA

ZIP: 96093

Last Name: PARKS

Country: USA

Age at time of Accident/Incident: 50

Date of Birth: 1967 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

Principal Occupation

☐ Pilot
☒ Other
☐ Unknown

Medical Certificate

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

Medical Certificate Validity

☐ Without limitations/waivers
 ☐ Unknown
☒ With limitations/waivers
 ☐ N/A
☐ Special Issuance

Date of Last Medical

06/24/2017
 mm/dd/yyyy

Medical Certificate Limitations

MUST HAVE AVAILABLE GLASSES FOR NEAR VISION

Medical Certificate Special Issuance

**Date of Last Flight Review
or Equivalent, Including
FAR 121/135 Checks:**

02/09/2016
 mm/dd/yyyy

Flight Review Aircraft

Make: ROBINSON

Model: R44

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
 ☐ Instrument Airplane
☐ Airplane Single-Engine
 ☐ Instrument Helicopter
☐ Airplane Multi-Engine
 ☐ Helicopter
☐ Gyroplane
 ☐ Glider
☐ Powered Lift
 ☐ 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	502	350	37		56		15	465		
Pilot in Command (PIC)	350	250			56			350		
Time as Instructor										
This Make/Model					56					
Last 90 Days										
Last 30 Days										
Last 24 Hours	1	1						1		

"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 ☐ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious		Seat Occupied ☐ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ 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>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☐ Lap only</td> <td>☐ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☐ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☐ 5-point</td> <td>☐ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>			Available	Used	☐ None	☐ None	☐ Lap only	☐ Lap only	☐ 3-point	☐ 3-point	☐ 4-point	☐ 4-point	☐ 5-point	☐ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown																																																																															
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Principal Occupation ☐ Pilot ☐ Other ☐ Unknown																																																																																																				
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ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)

Crew Name and Address		Seat Occupied	Injury
First Name: _____	City of Residence: _____	☐ Left ☐ Front	☐ None
Middle Initial: _____	State: _____ ZIP: _____	☐ Center ☐ Rear	☐ Minor
Last Name: _____	Country: _____	☐ Right ☐ Single	☐ Serious
		☐ Unknown	☐ Fatal
			☐ Unknown
Pilot Certificate(s) (Check all that apply)		Restraint Type:	Inflatable Restraints
☐ None	☐ Flight Instructor	Available	Used
☐ Private	☐ Recreational	☐ None	☐ None
☐ Student	☐ Sport	☐ Lap Only	☐ Lap Only
	☐ Commercial	☐ 3-point	☐ 3-point
	☐ Airline Transport	☐ 4-point	☐ 4-point
	☐ Flight Engineer	☐ 5-point	☐ 5-point
	☐ US Military	☐ Unknown	☐ Unknown
	☐ Foreign		
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs	

Crew Name and Address		Seat Occupied	Injury
First Name: _____	City of Residence: _____	☐ Left ☐ Front	☐ None
Middle Initial: _____	State: _____ ZIP: _____	☐ Center ☐ Rear	☐ Minor
Last Name: _____	Country: _____	☐ Right ☐ Single	☐ Serious
		☐ Unknown	☐ Fatal
			☐ Unknown
Pilot Certificate(s) (Check all that apply)		Restraint Type:	Inflatable Restraints
☐ None	☐ Flight Instructor	Available	Used
☐ Private	☐ Recreational	☐ None	☐ None
☐ Student	☐ Sport	☐ Lap Only	☐ Lap Only
	☐ Commercial	☐ 3-point	☐ 3-point
	☐ Airline Transport	☐ 4-point	☐ 4-point
	☐ Flight Engineer	☐ 5-point	☐ 5-point
	☐ US Military	☐ Unknown	☐ Unknown
	☐ Foreign		
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs	

PASSENGER(S) / OTHER PERSONNEL (Include cabin crew, continue on separate sheet if necessary)

Name and Address	Seat	Injury	Restraint Type	Inflatable Restraints	Age
First Name: <u>MAK</u> City: <u>WEAVERVILLE</u>	☒ Left	☐ None	Available	Used	☒ Not Installed
Middle Initial: <u>W</u> State: <u>CA</u> ZIP: <u>96093</u>	☐ Center	☐ Minor	☐ None	☐ None	☐ Installed
Last Name: <u>PARKS</u> Country: <u>USA</u>	☐ Right	☐ Serious	☐ Lap Only	☐ Lap Only	☐ Not Deployed
☐ Crew ☒ Passenger ☐ Other	☐ Unknown	☐ Fatal	☐ 3-point	☐ 3-point	☐ Deployed
	Row: <u>1</u>	☐ Unknown	☐ 4-point	☐ 4-point	☐ Unknown
			☐ 5-point	☐ 5-point	
			☐ Unknown	☐ Unknown	
First Name: <u>SARA</u> City: <u>WEAVERVILLE</u>	☒ Left	☐ None	Available	Used	☒ Not Installed
Middle Initial: <u>M</u> State: <u>CA</u> ZIP: <u>96093</u>	☐ Center	☐ Minor	☐ None	☐ None	☐ Installed
Last Name: <u>STURGES</u> Country: <u>USA</u>	☐ Right	☐ Serious	☐ Lap Only	☐ Lap Only	☐ Not Deployed
☐ Crew ☒ Passenger ☐ Other	☐ Unknown	☐ Fatal	☐ 3-point	☐ 3-point	☐ Deployed
	Row: <u>2</u>	☐ Unknown	☐ 4-point	☐ 4-point	☐ Unknown
			☐ 5-point	☐ 5-point	
			☐ Unknown	☐ Unknown	
First Name: <u>GIA</u> City: <u>WEAVERVILLE</u>	☐ Left	☐ None	Available	Used	☒ Not Installed
Middle Initial: <u>A</u> State: <u>CA</u> ZIP: <u>96093</u>	☐ Center	☐ Minor	☐ None	☐ None	☐ Installed
Last Name: <u>PARKS</u> Country: <u>USA</u>	☒ Right	☐ Serious	☐ Lap Only	☐ Lap Only	☐ Not Deployed
☐ Crew ☒ Passenger ☐ Other	☐ Unknown	☐ Fatal	☐ 3-point	☐ 3-point	☐ Deployed
	Row: <u>2</u>	☐ Unknown	☐ 4-point	☐ 4-point	☐ Unknown
			☐ 5-point	☐ 5-point	
			☐ Unknown	☐ Unknown	
First Name: _____ City: _____	☐ Left	☐ None	Available	Used	☐ Not Installed
Middle Initial: _____ State: _____ ZIP: _____	☐ Center	☐ Minor	☐ None	☐ None	☐ Installed
Last Name: _____ Country: _____	☐ Right	☐ Serious	☐ Lap Only	☐ Lap Only	☐ Not Deployed
☐ Crew ☐ Passenger ☐ Other	☐ Unknown	☐ Fatal	☐ 3-point	☐ 3-point	☐ Deployed
	Row: _____	☐ Unknown	☐ 4-point	☐ 4-point	☐ Unknown
			☐ 5-point	☐ 5-point	
			☐ Unknown	☐ Unknown	

FLIGHT ITINERARY INFORMATION				
Last Departure Point Airport ID: <u>KRDD</u> City: <u>REDDING</u> State: <u>CA</u> Country: <u>USA</u>		Time of Departure Time: <u>5:05 PM</u> Time Zone: <u>PDT</u>		Destination Airport ID: <u>Private Property</u> City: <u>BELLA VISTA</u> State: <u>CA</u> Country: <u>USA</u>
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				Type Flight Plan Filed ☒ None ☐ VFR/IFR ☐ Company VFR ☐ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☐ Yes ☐ No ☐ Unknown
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>75</u> ft msl
WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE				
Source of Pilot Weather Information (Check all that apply) ☐ National Weather Service ☐ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☒ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☐ On-Board Weather			Weather Observation Facility Facility ID: <u>KRDD</u> Observation Time: <u>5:05 PM</u> Time Zone: <u>PDT</u> Distance from Accident Site: <u>11</u> nm Direction from Accident Site: <u>9</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 _____ ft agl		Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl		Temperature: <u>38</u> (C) or _____ (F) Dew Point: <u>13</u> (C) or _____ (F) Altimeter Setting: <u>29.79</u> in. Hg or _____ MB
Wind Direction ☐ Variable -or- Direction: <u>170</u> degrees true	Wind Speed ☐ Calm ☐ Light and Variable -or- Speed: <u>12</u> kts	Wind Gusts ☐ Not Gusting -or- Speed: <u>0</u> kts	Visibility <u>10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: <u>3500</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 Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☒ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Icing Actual Amount ☒ None ☐ Trace ☐ Light ☐ Moderate ☐ Severe ☐ Unknown Type ☒ N/A ☐ Rime ☐ Clear ☐ Mixed ☐ Unknown		Turbulence Type (Check all that apply) ☒ None ☐ Clear Air ☐ Terrain-Induced ☐ Convective Turbulence Severity ☐ Light ☐ Moderate ☐ Severe ☐ Extreme
NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident: NONE				

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)

Both main blades damaged. One tail rotor broke off and other damaged. Tail boom bent at gearbox, upper frame bent, lower frame bent, cabin separated at firewall at left rear seat, windscreen missing on left side, right side fractured, instrument consul sheet metal buckled, belly pan skins fractured, exhaust manifolds bent upward, and rotor mast and transmission assembly collapsed downward and leaning forward.

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.

1. Preplanned flight to birthday party for 13 year old son and 3 year old cousin to give rides.
2. It was determined morning of flight to land in a vacant fenced off horse paddock for safety of grass fire hazard and spectator distance control. Water was used for dust control via hose and sprinkler. Property occupants put up a flag on southeast corner for wind indicator and two orange cones to clearly mark the watered down area for the LZ. The property occupants would be removing hose and sprinkler upon my arrival to the party, prior to me landing.
3. On the drive to pickup the helicopter, I called property occupants to give them an ETA for water to be turned on for dust control and it was.
4. Arrived at hanger at approximately 3:45 pm PDT and held a safety briefing with my family which included; passenger weights, use of doors, safety belts, approach and departure from nose only and to never walk passed the rear doors. Explained and verified the importance of NO loose articles and if you see something blowing to never chase after them as it could lead you to the tail rotor and could be deadly. I had my passengers open and close doors and put on and take off seat belts without supervision, three (3) times each, individually, before this flight. As my passengers waited at a picnic table outside of hanger, I pulled helicopter out of hanger and fueled it with 29 gallons which indicated full main and 3/4 aux then pulled helicopter away from fuel truck to preflight. The conclusion of the preflight was good except for I needed 1/2 quart of oil to be added to engine. I called Dave Everson to assist me as to which oil to use and he did. During further conversation, and the fact that we were going to give rides at this party, it was determined to take off doors and leave them at Air Shasta. I mentioned to him that I needed to do three (3) take offs and landings without passengers for currency requirements. He reminded me of the perimeters of the helicopter training area (HTA). At the conclusion of my preflight, I instructed my passengers on how to do a hot load and reminded them again to only approach the helicopter from the front and to never to walk past the rear door opening and to walk to the helicopter only after eye contact and hand gesture from me.
5. I started and warmed up helicopter, got information November, was cleared to HTA via taxiway ALFA at 4:52 pm PDT, flew my first pattern and approach to the "tires" which has been a practice landing spot for many years but the grass was tall so I hovered around until I found a clean level spot to land and I did. Departed for second pattern and shot approach to same spot and landed. Departed for third pattern and while I was on my downwind leg I heard a fire tanker call in for landing; spotted him, shot my approach and made a third landing. I then pulled into a hover and saw the tanker at midway of runway when landing, so I decide to do a fourth pattern with the landing spot being the same. I then called ATC and was cleared back to Air Shasta via taxiway MIKE with instructions to not over fly the tanker that was heading toward the forest service hanger.
6. Landed at Air Shasta, hand gestured passengers to begin loading. I then checked the passenger seat belts and that there was no loose articles, reminded them not to point out of the open door area, got information OSCAR, was cleared to depart taxiway ALFA for a Northeast departure at 5:11 pm PDT.
7. I arrived at my destination on the East side of the property of intended landing. I flew past the property to the North and made a left descending turn back into the wind, above the terrain at approximately 75-100 feet AGL, which is consistent within the HV curve and in a South Easterly direction, centered over the pond at a speed of 70 KIAS with intentions of making a right hand turn to setup landing into wind at the predetermined LZ. Just as I started my right hand turn I heard three (3) pops, followed by a low rotor horn and light. I assumed I was having an engine failure. I immediately and abruptly lowered the collective, pulled aft cyclic and rolled throttle to full open.

.....Continued to Page 11

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

Operator/Owner Safety Recommendation

Even though the flight configuration was within the HV curve more altitude and air speed in this circumstance could have change the outcome.

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.)

I am unsure. I heard three loud pops followed by low rotor rpm horn and light. At this time I figured I was having an engine failure but I am unsure.

Engine: Lycoming IO-540-AE1A5; Serial L-33193-48E

Total Time/Cycles On Part

2137 Hours

Cycles

Time Since This Part Inspected/Overhauled

20 Hours

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

(Convert from pounds, as necessary)

Est 44 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**

Added 1/2 quart of oil to engine.

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

There were four (4) occupants. Each occupant evacuated out of there own seat belt and through their own door opening while in the water.

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.

NARRATIVE Continued....

..The nose came up and I was already turning right and I knew there was a power line somewhere out in front of me which I could not see due to the nose up attitude. I also knew there was a small open field and a pond behind me in case I needed them for landing, so I then steepened and continued my right hand turn. I then realized I did not have sufficient momentum to make it to the open field and that the engine RPMs were below 50% and that we were going to land into the pond.

While still turning right, I put the helicopter in a nose low attitude to gain air speed to convert to rotor energy. I then transitioned from a nose low attitude to a nose up attitude to slow the forward momentum and prepare for final flare and collective pull to cushion the imminent water landing. However, while doing this the tail struck the top of an oak tree at approximately 60 feet above the pond which pitched the helicopter to a nose low attitude once again. I yelled, "we are going to crash", while pulling full aft cyclic with collective full down. The helicopter was sluggish to react but the nose did start to come back up. I saw a child to my right in the pond so I put in left cyclic control and the helicopter moved slightly left. At approximately 15-10 feet above the water, I pulled full collective and we hit the water in about a 5 degree, nose low and very slightly left side low attitude. I remember seeing water splash out in front of me and hitting the windshield with my head and then the water was up to my neck and that the helicopter was slowly rolling left while sinking. I took a breath of air then the helicopter was completely underwater and I released my seatbelt. I then rolled to my left to grab my son's seatbelt but it was loose and I could not feel him in the seat. I then swam to the surface and then saw the left front seat passenger and left rear seat passenger, who had already surfaced. I was the third to surface. My eight year old daughter Gia, right rear passenger, was not visible. I then took a breathe and dove to retrieve her. At some unknown depth, with me on my way down and her on her way up, we collided, my right hand hitting her on the head. We then both surfaced. There were jet-skis near us by this time and people helped all of us to the shore.

One of the people that came to the shore, unknown to me, was a Nurse. She did neurological tests on all of the passengers and encouraged us to go to the hospital. After a few minutes, Mak was placed on a board and towels for head restraints and carried to the house. Gia, Sara and myself were ushered to the house slowly. Sara was then placed on a board using towels for head restraints. Gia was transported by private car driven by my Fiancée. Mak and Sara were placed in a van and driven to Mercy Medical Center. I sat in front of the transport van and called the ER to advise that we were in route at 5:52 pm PDT. I then called Dave Everson to advise him of the accident.

In conclusion, I do not believe there was a positive or negative response when I pulled full collective before water contact. I also believe we hit the water at 35-45 mph and I am unsure if the engine was running or not at the time we contacted the water.

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

Date of this Report

07/11/2017
mm/dd/yyyy

Name of Pilot/Operator:

Signature:

-- or --

☐ Check here to electronically sign this document

If a Person Other than Pilot/Operator is Filing Report

Name:

Title:

Signature:

-- or --

☐ Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No.

WPR17LA140

Reviewed by NTSB Regional Office

Western Pacific Region

Name of Investigator

H. Plagens

Date Report Received

07/12/2017