

List of items that are not complete:

Page 3

Aircraft year of manufacture

Weight at time of accident

Engine serial number, date of manufacture, total time, time since inspection and time since overhaul

Last inspection

Propeller information

ELT Info

Additional equipment – ADSB equipped?

Page 4

Registered Aircraft Owner

Page 9

Description of damage – more detail?

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: Phoenix State: AZ

ZIP: 85003 Country: USA

Latitude: 33.784 Longitude: -112.138

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

Accident/Incident Date/Time

Date: 06/26/2018 Local Time: 1020
mm/dd/yyyy

Time Zone: MST

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

AIRCRAFT INFORMATION

Registration Number: N154ME

Manufacturer: Cessna

Model: 172 SP

Serial Number: 172S8534

Year of Manufacture: _____

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

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

Maximum Gross Weight: 2550 lbs

Weight at Time of Accident/Incident: _____ lbs

Number of Seats: 4 Flight Crew Seats: 2

Cabin Crew Seats: _____ Passenger Seats: 2

Number of Engines: 1

Category of Aircraft

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

Type of Airworthiness Certificate

(Check all that apply)

Standard

- ☒ Normal
- ☐ Aerobatic
- ☐ Balloon
- ☐ Commuter
- ☐ Transport
- ☒ Utility

Special

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

☐ Certificate of Authorization or Waiver (COA)
☐ None ☐ Unknown

Landing Gear

(Check all that apply)

☐ Retractable

- ☒ Tricycle
- ☐ Amphibian
- ☐ Emergency Float
- ☐ Float
- ☐ Hull
- ☐ Other Launch/Recovery System
- ☐ None
- ☐ Tailwheel
- ☐ High Skid
- ☐ Skid
- ☐ Ski
- ☐ Ski/Wheel
- ☐ 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. mm/dd/yyyy	Rated Power ☒ Horsepower or ☐ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	Lycoming	IO360L2A			180			
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: _____ 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: Bottle Extinguisher

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		City: _____	
Name: _____		State: _____ ZIP: _____	
Fractional Ownership Aircraft: ☐ Yes ☐ No		Country: _____	
Operator of Aircraft ☐ Same As Registered Owner		☐ Same Address as Registered Owner	
Name: <u>Westwind School of Aeronautics</u>		City: <u>Phoenix</u>	
Doing Business As: _____		State: <u>AZ</u> ZIP: <u>85027</u>	
Air Carrier/Operator Designator (4 Character Code): _____		Country: <u>USA</u>	
Operating Certificates Held (Check all that apply)		Regulation Flight Conducted Under	
☐ 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		☒ 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 Sightseeing Flight ☐ Yes ☒ No		Air Medical Flight ☐ Yes ☒ No	
		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	
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		Condition of Runway/Landing Surface (Check all that apply)	
Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft		☐ Dry ☐ Snow-Compacted ☐ Water-Calm	
Runway/Landing Surface (Check all that apply)		☐ Holes ☐ Snow-Crusted ☐ Water-Choppy	
☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water		☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy	
☐ Concrete ☐ Gravel ☐ Metal/Wood		☐ Rough ☐ Snow-Wet ☐ Wet	
☐ Dirt ☐ Ice ☐ Snow ☐ Unknown		☐ Rubber Deposits ☐ Soft	
		☐ Slush-Covered ☐ Vegetation ☐ Unknown	
Approach/Departure Segment (Select one)			
☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach			
☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☐ Go Around			
☐ Initial Climb ☐ ☐ Final ☐ Aborted Landing (after touchdown)			
☐ ☐ Crosswind ☐ Unknown			
IFR Approach (Check all that apply)		VFR Approach (Check all that apply)	
☐ None		☐ None	
☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice		☐ Traffic Pattern	
☐ SDF ☐ Sidestep ☐ LDA ☐ GPS		☐ Straight-In	
☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Visual		☐ Valley/Terrain Following	
☐ VOR/DME ☐ Localizer Only ☐ Contact		☐ Go Around	
☐ TACAN ☐ LOC-back course ☐ Circling		☐ 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>Jonghoi</u> Middle Initial: _____ Last Name: <u>Lee</u> City of Residence: <u>Phoenix</u> State: <u>AZ</u> ZIP: <u>85085</u> Country: <u>USA</u> Age at time of Accident/Incident: <u>31</u> Date of Birth: <u> </u> <u>986</u> <i>mm/dd/yyyy</i> Certificate Number: <u> </u>																																																																																																				
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) <i>(Check all that apply)</i> ☐ None ☒ Flight Instructor ☒ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer				Medical Certificate ☐ None ☐ Class 3 ☒ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown																																																																																																
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown		Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☒ With limitations/waivers ☐ N/A ☐ Special Issuance			Date of Last Medical <u>07/27/2015</u> <i>mm/dd/yyyy</i>																																																																																															
Medical Certificate Limitations Must wear corrective lessons																																																																																																				
Medical Certificate Special Issuance																																																																																																				
Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: <u>06/21/2018</u> <i>mm/dd/yyyy</i>				Flight Review Aircraft Make: <u>Cessna</u> Model: <u>172 SP</u>																																																																																																
Airplane Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Single-Engine Land ☐ Single-Engine Sea ☒ Multiengine Land ☐ Multiengine Sea		Other Aircraft Rating(s) <i>(Check all that apply)</i> ☒ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift		Instrument Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane ☐ Helicopter ☐ Powered Lift		Instructor Rating(s) <i>(Check all that apply)</i> ☐ None ☒ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☒ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport																																																																																														
Type Ratings						Student Endorsements <i>(Include dates)</i>																																																																																														
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2" style="text-align: left; padding: 2px;">Flight Time <i>(Enter appropriate number of hours in each box)</i></th> <th rowspan="2" style="padding: 2px;">All Aircraft</th> <th rowspan="2" style="padding: 2px;">This Make & Model</th> <th rowspan="2" style="padding: 2px;">Airplane Single Engine</th> <th rowspan="2" style="padding: 2px;">Airplane Multiengine</th> <th rowspan="2" style="padding: 2px;">Night</th> <th colspan="2" style="padding: 2px;">Instrument</th> <th rowspan="2" style="padding: 2px;">Rotorcraft</th> <th rowspan="2" style="padding: 2px;">Glider</th> <th rowspan="2" style="padding: 2px;">Lighter Than Air</th> </tr> <tr> <th style="padding: 2px;">Actual</th> <th style="padding: 2px;">Simulated</th> </tr> </thead> <tbody> <tr> <td style="text-align: left; padding: 2px;">Total Time</td> <td style="padding: 2px;">584</td> <td style="padding: 2px;">484</td> <td style="padding: 2px;">559</td> <td style="padding: 2px;">75</td> <td style="padding: 2px;">20</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">60</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Pilot in Command (PIC)</td> <td style="padding: 2px;">453</td> <td style="padding: 2px;">385</td> <td style="padding: 2px;">452</td> <td style="padding: 2px;">1</td> <td style="padding: 2px;">17</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">51</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Time as Instructor</td> <td style="padding: 2px;">256</td> <td style="padding: 2px;">256</td> <td style="padding: 2px;">256</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">6</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">This Make/Model</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;">20</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">60</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 90 Days</td> <td style="padding: 2px;">72</td> <td style="padding: 2px;">72</td> <td style="padding: 2px;">72</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">6</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">5</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 30 Days</td> <td style="padding: 2px;">45</td> <td style="padding: 2px;">45</td> <td style="padding: 2px;">45</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">6</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="text-align: left; padding: 2px;">Last 24 Hours</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> <td style="padding: 2px;">0</td> </tr> </tbody> </table>											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	584	484	559	75	20	0	60	0	0	0	Pilot in Command (PIC)	453	385	452	1	17	0	51	0	0	0	Time as Instructor	256	256	256	0	6	0	0	0	0	0	This Make/Model					20	0	60				Last 90 Days	72	72	72	0	6	0	5	0	0	0	Last 30 Days	45	45	45	0	6	0	3	0	0	0	Last 24 Hours	3	3	3	0	0	0	0	0	0	0
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																																																																																										
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Last 24 Hours	3	3	3	0	0	0	0	0	0	0																																																																																										

"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

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

_____ 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) (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										
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 First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Center ☐ Right ☐ Front ☐ Rear ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			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	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs				
Crew Name and Address First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			Seat Occupied ☐ Left ☐ Center ☐ Right ☐ Front ☐ Rear ☐ Single ☐ Unknown		Injury ☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			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	
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>Seongjae</u> City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: <u>Hwang</u> Country: <u>Republic of Korea</u> ☐ Crew ☐ Passenger ☐ Other	☒ Left ☐ Center ☐ Right ☐ Unknown Row: <u>1</u>	☐ None ☒ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown	
First Name: <u>Hojoon</u> City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: <u>Go</u> Country: <u>Republic of Korea</u> ☐ Crew ☐ Passenger ☐ Other	☒ Left ☐ Center ☐ Right ☐ Unknown Row: <u>2</u>	☐ None ☒ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☒ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown	
First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown	
First Name: _____ City : _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other	☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown	

FLIGHT ITINERARY INFORMATION					
Last Departure Point Airport ID: <u>KDVT</u> City: <u>Phoenix</u> State: <u>AZ</u> Country: <u>USA</u>		Time of Departure Time: <u>0920</u> Time Zone: <u>MST</u>		Destination Airport ID: <u>KDVT (Local)</u> City: <u>Phoenix</u> State: <u>AZ</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 ☐ Class E ☐ Restricted Area ☐ FAR 93					Altitude of In-Flight Occurrence: <u>N/A</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>KDVT ATIS</u> Observation Time: <u>0853</u> Time Zone: <u>MST</u> Distance from Accident Site: <u>8</u> nm Direction from Accident Site: <u>150</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>34</u> (C) or _____ (F) Dew Point: <u>01</u> (C) or _____ (F) Altimeter Setting: <u>29.92</u> in. Hg or _____ MB	
Wind Direction ☒ Variable -or- Direction: _____ degrees true	Wind Speed ☒ Calm ☐ Light and Variable -or- Speed: _____ kts	Wind Gusts ☒ Not Gusting -or- Speed: _____ kts	Visibility <u>+10</u> miles RVR: _____ feet RVV: _____ miles Density Altitude: <u>4100</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: <u>None</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 <i>(Use additional sheet if necessary)</i> Nose gear and left main sheared off. Plane flipped, causing impact damage to wings, fuselage, ailerons, rudder, and elevator.		
NARRATIVE HISTORY OF FLIGHT <i>(Please type or print in ink)</i>		
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. We got the airplane (154ME) dispatch book around 8:50 am. 2. And we did pre-flight and showed them how to check and inspect each items with 2 students. There was no problem at that time. 3. I Started the engine and Taxi to runway (7R at C2) 4. We Hold Short of 7R at C2 and Run-up checklist was completed (I explained how to do and check for students) 5. There was no problem while checking every items in checklist. 6. Contact South Tower (118.4) and Request ready for departure. 7. We took off of Runway 7R around 9:20-9:30am 8. After Taking off of the Runway 7R, We got the clearance to monitor tower 120.2 and Left Turn Approved and We were going to North bound and climbing until clearing off the traffic pattern of Deer Valley and We headed to Lake pleasant. 9. As we arrived Lake pleasant, I explained and taught them how to level turn, climb, descend 10. After then I demonstrated slow flight first and Let the student practice slow flight at 4,500 ~ 5,000 feet 11. While the student was practicing the slow flight at same altitude, Annunciator Lights suddenly turn on (L VAC R) and I felt the engine roughness immediately. 12. Engine sound was like shaking, the sound was really weird to me I never heard about that before. 13. So I decided to go back to Deer Valley right away, and after heading to deer valley, Mixture Full Rich and Fuel Pump On. 14. About 8 miles North West from KDVT, Contact Deer Valley (120.2) to request "Inbound Full Stop" and descend slowly from 4,500 to 3,500. And North Tower let me left 360 degrees turn and after left 360 turns the engine stopped and the Propeller stopped to rotate completely, simultaneously. (I didn't say anything related with emergency situation, Because the sound of engine roughness was a little weird to me but it was not serious shaking just a little roughness, So I thought we can go back to the Deer valley airport, I didn't anticipate engine failure.) 15. The Altitude was about 3,000 when the engine was completely failed. 16. So I set best glide speed and I looked for the landing spot near by me at first. (Because the altitude was already low and I thought that if we go further, there is no proper landing spot.) And I noticed that there was proper landing spot right side of me. And the spot is next to the I-17 Highway. 17. Then I tried to attempt restart the engine 3 times (Check the Fuel Selector Both, Fuel Shutoff Valve On (In), Mixture Full Rich, Fuel Pump On, Ignition Switch On) but it didn't work (When I turned on Fuel Pump, There was no cranking sound.) 18. I decided to emergency landing over the spot where I already found as we learn and then I informed the tower our condition and location. 19. I did care about and focus to avoid the power line on the Ground. 20. At that time, There were 2 options to me to land the aircraft on I-17 and open field (Where I found already), the reason I didn't choose to land on I-17 was there were too many driving cars and I worried about making additional accidents after landing on I-17 Freeway. 21. So I tried to landing over open field, when we close to the ground, there were a lot of big rocks on the ground that I didn't see and notice with altitude. So I did focus and concentrate to round out smoothly to try soft landing but there were big rocks. About 5 seconds after touching down, as the aircraft slows down and was caught in the rock and turned over upside down. 22. After the aircraft was flip over and then it was dragged a little more by itself and completed stopped. And we got out of the airplane.		

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

Operator/Owner Safety Recommendation

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.)

During maneuvers, an annunciator showed both vacuum pumps to be failed. Vacuum gauge showed no pressure. Shortly after, the engine began making a noise and vibration. Oil temperature increased above the gauge red line and oil pressure dropped below the normal range. Approximately 5 minutes later, the engine/prop seized and would not restart.

Total Time/Cycles
On Part

_____ Hours

_____ Cycles

Time Since This Part
Inspected/Overhauled

_____ Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

35 _____ 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

None

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

First - Rear left seat passenger (Hojoon Hwang) exited right side door.

Second - Front right seat flight instructor (Jonghoi Lee) exited right side door.

Third - Front left seat passenger (Seongjae Hwang) exited left side door

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)

Aircraft Registration Number

Manufacturer: _____

Damage to Other Aircraft

Model: _____

☐ Destroyed☐ Minor☐ Substantial☐ None

Registered Owner of Other Aircraft

Pilot of Other Aircraft

Name: _____

Name: _____

City: _____

City: _____

State: _____ ZIP: _____

State: _____ ZIP: _____

Country: _____

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

7/24/2018
mm/dd/yyyy

Name of Pilot/Operator: Jonghoi Lee

Signature: [REDACTED]

-- or --

☐ Check here to electronically sign this document

If a Person Other than Pilot/Operator is Filing Report

Name: Jon Miceli

Signature: [REDACTED]

-- or --

☒ Check here to electronically sign this document

Title: Chief Flight Instructor

FOR NTSB USE ONLY

NTSB Accident/Incident No.

WPR18LA181

Reviewed by NTSB Regional Office

AS-WPR

Name of Investigator

Andrew Swick

Date Report Received

07/30/2018