

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

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: US NAVAL BASE GUAM State: GU
 ZIP: 96915 Country: USA
 Latitude: 13 25 17.4N (dd:mm:ss N/S) Longitude: 144 38 31.4E (ddd:mm:ss E/W)

Date/Time

Date: 12/02/2018 Local Time: 0940
 mm/dd/yyyy Time Zone: GMT +10

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

2,500 ft MSL

AIRCRAFT INFORMATION

Manufacturer: Cessna

Model: C172P

Serial Number: 17276371

Registration Number: N98884

Amateur-built: ☐ Yes ☒ No

Max Gross Weight: 2,400 lbs

Weight at Time of Accident/Incident: 2,054 lbs

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

40.0 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
☐ Acrobatic
☐ Transport

Special

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

Number of Seats: 4

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: 10/29/2018

mm/dd/yyyy

Airframe Total Time: 9,516 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 Portable extinguisher

ELT Installed

☒ Yes ☐ No

ELT Activated

☐ Yes ☒ No

ELT Manufacturer: DRONE & MARGOLIN INC.

Model/Series: DM ELT 8.1

Serial Number: 7188E

Battery Type: ALKALINE P/N BP-1020

Battery Exp. Date: AUG 2020

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: McCAULEY PROPELLER SYSTEMS

Model: 1C160/DTM 7557M2

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	<u>Lycoming</u>	<u>O-320-D2J</u>	<u>L10017-39A</u>	<u>UNK</u>	<u>160</u>	<u>10,132</u>	<u>61</u>	<u>1,235</u>
Eng. 2								
Eng. 3								
Eng. 4								

OWNER/OPERATOR INFORMATION			
Registered Aircraft Owner Name: <u>TREND VECTOR AVIATION INTERNATIONAL INC</u> Fractional Ownership Aircraft: ☐ Yes ☒ No		Owner Address City: [REDACTED] State: <u>BARRIGADA</u> ZIP: <u>96913</u> Country: <u>U.S.</u>	
Operator of Aircraft ☒ Same As Registered Owner Name: _____ Doing Business As: _____ Air Carrier/Operator Designator (4 Character Code): _____		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	Type of Commercial Operating Certificate Held (Select 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: _____	Damage to Other Aircraft ☐ Destroyed ☐ Minor ☐ Substantial ☐ None	
Registered Owner of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
Pilot of Other Aircraft First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____			
MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)			
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.) Pilot-in-Command reported a loss of engine power.			Total Time/Cycles On Part ____ Hours ____ Cycles Time Since This Part Inspected/Overhauled ____ Hours
DAMAGE TO AIRCRAFT 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)

Aircraft departed a paved area and entered an area of tall grass, high brush, and trees. Upon impact with brush and trees the aircraft sustained heavy damage including the wings being partly sheered off rear-ward. Fuel lines and tanks were damaged causing spillage of fuel. Most aircraft windows were broken. The fixed landing gear system suffered heavy damaged upon departing the paved surface.

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: PGUMCity: TamuningState: GUCountry: USA**Time of Departure**Time: 0830Time Zone: GMT +10**Destination**Airport ID: PGUMCity: TamuningState: GUCountry: USA**Type Flight Plan Filed**☒ None☐ VFR/IFR☐ Company VFR☐ IFR☐ Military VFR☐ Unknown☐ VFRActivated? ☐ 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 Glider☐ 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)

40

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

Pilot and single passenger exited via the passenger door.

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE**Weather Observation Facility**Facility ID: PGUMObservation Time: 012254ZTime Zone: GMT +10Distance from Accident Site: 10 NMDirection from Accident Site: 254 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 |

Visibility10 miles**Sky/Lowest Cloud Condition**

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

Ceiling

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

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 |

Lowest Cloud Condition Height1,800 ft AGL**Ceiling Height**7,000 ft AGL**Wind Direction**☐ Indicated:
90 degrees MAG☐ Variable**Wind Speed**Velocity: 10 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: 30 (C)
or _____ (F)Altimeter Setting: 2996 in. HG
or _____ MB

Density Altitude: _____ ft

Dew Point: 26 (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" INFORMATION

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: Nicholas City: Normal
 Middle Initial: J State: IL ZIP: 61761
 Last Name: Manjarrez Country: USA
 Age at time of Accident/Incident: 29 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

5/23/2017
 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:

04/15/2017
 mm/dd/yyyy

Flight Review Aircraft

Make: Cessna
 Model: C172RG

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
 ☐ 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	714	58	714	0	163	17	102	0	0	0
Pilot in Command (PIC)	555	51	628	0	157	16	92	0	0	0
Time as Instructor	0	0	0	0	0	0	0	0	0	0
This Make/Model										
Last 90 Days	28	2	28	0	5	1	6	0	0	0
Last 30 Days	2	2	2	0	0	0	0	0	0	0
Last 24 Hours	0	0	0	0	0	0	0	0	0	0

PILOT "B" INFORMATION

Pilot "B" Responsibilities at the Time of Accident/Incident

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

Pilot "B" Identification

First Name: _____ City: _____
 Middle Initial: _____ State: _____ ZIP: _____
 Last Name: _____ Country: _____
 Age at time of Accident/Incident: _____ Date of Birth: _____ 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

mm/dd/yyyy

Medical Certificate Limitations

Medical Certificate Waivers

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
☐ 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
 ☐ 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 CREW MEMBERS (Exclusive of cabin attendants, complete the following information)														
Pilot Name and Address						Degree of Injury								
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal						
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown						
Last Name: _____		Country: _____				☐ Serious								
Pilot Certificate(s) (Check all that apply)						Seat Occupied								
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer						
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military						
								☐ Foreign						
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front						
						☐ Right		☐ Rear						
						☐ Center		☐ Single						
								☐ Unknown						
Pilot Name and Address						Degree of Injury								
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal						
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown						
Last Name: _____		Country: _____				☐ Serious								
Pilot Certificate(s) (Check all that apply)						Seat Occupied								
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer						
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military						
								☐ Foreign						
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front						
						☐ Right		☐ Rear						
						☐ Center		☐ Single						
								☐ Unknown						
Pilot Name and Address						Degree of Injury								
First Name: _____		City: _____		State: _____ ZIP: _____		☐ None		☐ Fatal						
Middle Initial: _____		State: _____		ZIP: _____		☐ Minor		☐ Unknown						
Last Name: _____		Country: _____				☐ Serious								
Pilot Certificate(s) (Check all that apply)						Seat Occupied								
☐ None		☐ Student		☐ Recreational		☐ Commercial		☐ Flight Engineer						
☐ Private		☐ Flight Instructor		☐ Sport		☐ Airline Transport		☐ U.S. Military						
								☐ Foreign						
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No				Total Flight Time at the Time of this Accident/Incident: _____ hrs		☐ Left		☐ Front						
						☐ Right		☐ Rear						
						☐ Center		☐ Single						
								☐ Unknown						
PASSENGER(S) / OTHER PERSONNEL (Include flight attendants; continue on separate sheet if necessary)														
Name and Address				Seat	Crew	Non-Revenue	Revenue	Non-Occupant	FAA	Fatal	Serious Injury	Minor Injury	No Injury	Unknown
First Name: <u>Caleb</u> City: <u>Liberty Hill</u>				<u>Right</u>	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐
Middle Initial: <u>J</u> State: <u>TX</u> ZIP: <u>78642</u>														
Last Name: <u>Bean</u> Country: <u>USA</u>														
First Name: _____ City: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
First Name: _____ City: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Middle Initial: _____ State: _____ ZIP: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Last Name: _____ Country: _____					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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 time and point of departure, intended destination, and services obtained.

[See attached narrative.](#)

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

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**10 Dec 2018*mm/dd/yyyy***Signature and Name of Pilot/Operator**

Signature: _____

Type or Print Name: Nicholas J. Manjarrez**Signature and Name of Person Filing Report (Other than Pilot/Operator)**

Signature: _____

Type or Print Name: Hisashi KobayashiTitle: Secretary**FOR NTSB USE ONLY****NTSB Accident/Incident No.**WPR19LA035**Reviewed by NTSB Regional Office**WPR**Name of Investigator**LINK**Date Report Received**6/12/2019

10 Dec 2018

I, Nicholas John Manjarrez, submit the following statement voluntarily. I hold a Commercial Single Engine Land Airman Certificate and Instrument Airplane Rating. # [REDACTED]. My last biennial flight review was my commercial check-ride conducted on 15 Apr 2017.

Flight Experience

I have logged 714 hours total time.

I have logged 58 hours in a C172P. Most other flight hours logged are between the: C172SP, C182T, and SR-22.

I have logged 136.4 hours pilot-in-command time in the past two years since 3 Dec 2016.

I had logged 25.8 hours pilot-in-command time in the 90 days preceding the incident.

Recency of Instruction Received

I have logged 23.9 hours of dual instruction time since (and including) my last biennial flight review in April 2017. I completed an instrument proficiency check on 29 Jun 2018.

After reviewing my ASI transcript via my AOPA account I have not logged WINGS credit during 2018. I attest to having reviewed various accident case studies in the past months via the Air Safety Institute YouTube channel but did not yet log WINGS credit via the FAAST website.

I have not attended a seminar in the past year.

I had recently enrolled in the King Schools CFI and Multi Engine Rating courses on 16 Nov 2018 and 28 Nov 2018 respectively and had completed several lessons leading up to the day of the incident.

Statement of Incident

The plan of the day, 2 Dec 2018, was for a VFR leisure and sight sighting flight with a friend, Caleb J. Bean, around the island of Guam. I had scheduled to rent N98884 from Trend Vector Aviation at Guam International Airport (PGUM). I had flown this aircraft two days prior on 30 Nov 2018 conducting solo pattern work at PGUM. I experienced no issues with the aircraft during that flight.

On 2 Dec 2018 we arrived at the airport at approximately 0800. While waiting for rental check-out I conducted a final weather self-briefing using the computer terminal provided by Trend Vector. I conducted an abbreviated self-briefing. After checking out the aircraft we proceeded to the ramp. I conducted a standard preflight and aircraft walk-around. The fuel was visually checked and both tanks were filled to the top. Fuel samples were unremarkable showing no signs of contamination. A typical pungent gasoline odor was noted upon olfactory inspection. The oil was visually checked indicating approximately 6 quarts and was not grossly soiled or obviously contaminated. The other phases of the preflight both interior and exterior were unremarkable.

We then boarded the aircraft, started up, and taxied to the edge of the company ramp where I received the current ATIS and set needed radio frequencies. The engine had started without difficulty and was operating smoothly during taxi.

I proceeded to taxi to the run-up area short of taxiway Delta. During the engine run-up checks operation was smooth and all instruments and gauges were nominal. The magnetos and carburetor heat tested normally. An equal drop of approximately 100 RPM on each magneto was observed and a drop of about 100 RPM was observed with carburetor heat engaged. A normal idle was observed at full idle with the throttle retarded to the stop.

We were given clearance to taxi-up to runway 6R and held short for about 3 minutes for landing traffic. Take-off clearance was given for 6R. Once airborne I discussed with ATC a left turn out and downwind departure due to skydiving operations and jumpers south of the field. I departed the pattern downwind of 6L climbing to 2,500 FT and then turned left crossing the approach ends of runways 6R and L. I proceeded southbound on a heading of approximately 180.

We followed the coast proceeding south and maneuvered around some dissipating scattered cloud formations including a slight climb to about 2,800FT to arrive in the practice area over Cocos Island. We loitered in the area climbing to a maximum altitude of 6,000FT to take advantage of clearing skies and a panoramic view of the island. We continued loitering for about 15 minutes awaiting some cloud banks to continue dissipating and clear the west side of the island where we intended to travel next.

While loitering I executed some basic turning maneuvers to provide photo opportunities to my friend and to clear the area. Upon descent I executed two emergency spiraling descents—for practice—one each left and right reaching a maximum speed of 120 KIAS and 1,500FT/min rate of descent leveling back at 2,500 and turned northwesterly to follow the coast towards Apra Harbor.

We continued along the coast and began a descent to 1,500 feet in the vicinity of Agat Bay. Experiencing some not unexpected orographic turbulence due to nearby terrain I maneuvered to extend our range from the terrain and initially climbed back to 2,000 FT where the ride was smoother. I then again turned to proceed inbound towards Apra Harbor and the naval base where we planned to finish our sight-seeing prior to returning to PGUM.

Again I descended to 1,500 FT and we overflew the naval base and harbor twice prior to departing the area to the south. I had intended to proceed back towards Agat Bay, climb to 3,000 FT and cross the island towards Yona and Pago to setup for a visual approach to 6R.

We had continued south and were climbing through about 2,000 -2,500 FT when I turned easterly to cross the island. In the climb, upon reaching what I believe was about 2,500 FT I heard an audible reduction and visibly observed a stark partial loss of RPM from 2,500 RPM to 1,800. RPM then abruptly dropped to zero. Prior to this point there were no mechanical clunks, bangs, or engine roughness. There was no visible oil or fuel leakage outside the aircraft. There was no odor of a hot engine or fire of any type. All conditions seemed nominal based on visual, audible, and tactile observations.

Realizing what had occurred I pitched forward to level and pitched forward to begin establishing glide speed. I recall conducting an inboard to outboard scan. Scanning that the fuel selector remained on both, the mixture was still full rich, the throttle was not disturbed, the magneto switch was engaged in both, and that the primer remained locked. I applied carburetor heat and left it engaged. I cycled the throttle two or three times and left it full open. I then cycled the mixture and left full rich. I cycled the magnetos and tried to crank with no effect.

All the above happened quickly. I continued to hone in the glide speed by trimming the aircraft. I turned northbound and hugged the coast to avoid ditching the aircraft in deep water. I transmitted a mayday call on the PGUM tower frequency which I had remained tuned into while in vicinity of Apra Harbor and intended to monitor during the entire return to PGUM. I was acknowledged and stated my intentions to land ahead along the shore and stated that I thought I could make it to the vicinity of the naval base. Hugging the coast my heading had me pointed in the vicinity of the south east side of Naval Base Guam.

My considerations for a best safe landing field was the rising terrain to my right, deep water to my left, and an array questionable beaches below. Landing on the coastal road was not a realistic option as I knew it was lined with manmade and natural obstructions as well as uneven terrain.

I maintained a glide speed that was about 5-10 KIAS greater than best glide to provide a safety margin against the expected turbulent conditions as we passed the terrain <https://www.youtube.com/watch?v=BSizVpfqFtw>. I made a judgement that I could make it to Naval Base Guam and land somewhere on the facility. Being stationed there I was familiar with the ground features and was easily able to identify them. In the back of my mind I made the judgment that the best chance for EMS response to a potential crash would happen on the base. I was initially unsure if I could stretch the glide to the old Orote Airstrip on-base.

The base has its limitations (as an emergency landing site) due to uneven terrain and manmade obstructions. I contemplated landing on a few roads on base that I knew were wide enough but I also weighed the fact that there are power lines along most of our major on base roads with cross wires that are not well visualized from the air. I further noted there was a fair amount of traffic on the roads. I wanted to avoid the housing and shopping area. I ultimately judged that I could extend the glide all the way to Orote Airstrip.

Approaching within about one mile I did not think I had adequate altitude to maneuver and enter a pattern for landing into nominal winds. Being so low, I was already setup for a very tight extended left base landing to the west. I made a final decision to land west judging inadequate altitude to maneuver for a better approach. I elected to extend the flaps ten degrees while on the base leg and turned a tight final. Given the likely tailwind above the tree line I likely excess ground speed onto final.

At this point I was fully committed and continued to descend. I passed the halfway point of the strip prior to eventually touching down very long and accepted that we would ultimately impact the vegetation off the runway departure end. I held the nose up and maintained directional control as best as possible to avoid larger brush and trees. This all happened very quickly.

I am not sure how fast we were still traveling when we departed the runway. I did not attempt to brake heavily not knowing if there was soft soil and did not want to risk tumbling over and/or cart-wheeling. We entered the vegetation and came to an abrupt stop.

Neither of us lost consciousness or sustained severe injury. Once stopped I noted significant fuel spillage from both wing tanks. I ordered my passenger to "get out", hastily secured the interior, and we both evacuated via the passenger door and proceeded aft out of the brush and onto the paved area where we met two bystanders and awaited EMS who arrived within minutes.

