

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: Santa Ynez State: CA

ZIP: 93460 Country: USA

Latitude: 34 36 28 N Longitude: 120 05 03 W

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

Accident/Incident Date/Time

Date: 12/27/2020 Local Time: 1812

mm/dd/yyyy

Time Zone: PST

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

AIRCRAFT INFORMATION

Registration Number: N5474D

Manufacturer: Beech

Model: H35

Serial Number: D-5064

Year of Manufacture: 1958

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

☐ IFR-Equipped and Certified

☐ Commercial Space Flight

☐ Unmanned Aircraft

Maximum Gross Weight: 2900 lbs

Weight at Time of Accident/Incident: 2450 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

- ☒ 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
- ☐ Tailwheel
- ☐ High Skid
- ☐ Skid
- ☐ Ski
- ☐ Ski/Wheel
- ☐ Other Launch/Recovery System
- ☐ None
- ☐ 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	Continental	IO-470N			260			
Eng. 2								
Eng. 3								
Eng. 4								

Last Inspection Type

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

Date Last Inspection: 1 / 1 / 2020
mm/dd/yyyy

Airframe Total Time: 3301 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: _____

Propeller 1

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

Manufacturer: Beech

Model: 278

Propeller 2

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

Manufacturer: _____

Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: Airtex

Model or Part No.: ELT200

TSO No.: ☐ OC91 (121.5 MHz) ☒ OC91a (121.5 MHz)
☐ OC126 (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: Robert RichCity: LompocFractional Ownership Aircraft: ☐ Yes ☒ NoState: CA ZIP: 93436Country: USA**Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered Owner

Name: _____

City: _____

Doing Business As: _____

State: _____ ZIP: _____

Air Carrier/Operator Designator (4 Character Code): _____

Country: _____

Operating Certificates Held

(Check all that apply)

- ☒ 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 (Select one)
☐ Armed Forces
☐ Federal
☐ State
☐ Local
☐ Unknown

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 ☐ Fire fighting ☐ 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

Revenue Sightseeing Flight☐ Yes ☒ No**Air Medical Flight**☐ Yes ☒ No**AIRPORT INFORMATION (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)**Airport Name: Santa YnezDistance From Airport Center: .25 smAirport Identifier: KIZADirection From Airport: West degrees trueProximity to Airport: ☒ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/AAirport Elevation: 674 ft. msl**Runway Information**Runway ID: 26/8 (L/R/C) Length: 2812 ft Width: 75 ft**Runway/Landing Surface (Check all that apply)**

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

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
☐ 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)

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

VFR Approach (Check all that apply)

- ☐ 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” Responsibilities at the Time of Accident/Incident

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

First Name: Robert

City of Residence: Lompoc

Middle Initial: M

State: CA ZIP: 93436

Last Name: Rich

Country: USA

Age at time of Accident/Incident: 48 Date of Birth: [REDACTED] mm/dd/yyyy

Certificate Number: [REDACTED]

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						

Principal Occupation	Medical Certificate	Medical Certificate Validity	Date of Last Medical
☒ Pilot ☐ Other ☐ Unknown	☐ None ☐ Class 3 ☐ Class 1 ☐ Driver's License (Sport Pilot only) ☒ Class 2 ☐ Unknown	☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance	<u>11/16/2020</u> <i>mm/dd/yyyy</i>

Must wear corrective lenses.

n/a

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:	Flight Review Aircraft
11/12/2020 mm/dd/yyyy	Make: Pilatus Model: PC-12

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 B-737 EMB-145	Student Endorsements <i>(Include dates)</i>
---	--

[illegible]

"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					Seat Occupied		Injury			
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____					☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown			
Pilot Certificate(s) (Check all that apply)					Restraint Type:		Inflatable Restraints			
☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer					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	
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: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____					☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown			
Pilot Certificate(s) (Check all that apply)					Restraint Type:		Inflatable Restraints			
☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☐ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer					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	
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>Ernesto</u> City: <u>Tucson</u> Middle Initial: <u>M</u> State: <u>AZ</u> ZIP: <u>85710</u> Last Name: <u>Duran</u> Country: <u>USA</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>Micah</u> City: <u>Tucson</u> Middle Initial: <u>S</u> State: <u>AZ</u> ZIP: <u>85747</u> Last Name: <u>Rich</u> Country: <u>USA</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>KHII</u> City: <u>Lake Havasu City</u> State: <u>AZ</u> Country: <u>USA</u>	Time of Departure Time: <u>1725</u> Time Zone: <u>MST</u>	Destination Airport ID: <u>KLPC</u> City: <u>Lompoc</u> State: <u>CA</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 B ☐ Class C ☐ Class D ☒ Class E	☒ Class G ☐ Demo Area ☐ Warning Area ☐ Prohibited Area ☐ Restricted Area	☐ Military Operations Area (MOA) ☐ Airport Advisory Area ☐ Jet Training Area ☐ TRSA ☐ FAR 93	☐ Special ☐ Air Traffic Control Area ☐ Unknown	Altitude of In-Flight Occurrence: <u>3800</u> ft msl
---	--	---	---	--

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information

(Check all that apply)

☒ National Weather Service ☐ Flight Service Station ☐ TV/Radio ☒ Automated Report ☐ Commercial Weather Service (DUATS) ☐ On-Board Weather	☐ Company ☐ Military ☐ Internet ☐ None ☐ Unknown
--	---

Weather Observation Facility

Facility ID: _____
 Observation Time: _____
 Time Zone: _____
 Distance from Accident Site: _____ nm
 Direction from Accident Site: _____ 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

4000 ft agl

Ceiling

☒ None (Clear) ☐ Obscured
☐ Broken ☐ Indefinite
☐ Overcast ☐ Unknown

Ceiling Height

_____ ft agl

Temperature: _____ (C) or 50 (F)

Dew Point: _____ (C) or _____ (F)

Altimeter Setting: 29.98 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 >10 miles

RVR: _____ feet

RVV: _____ miles

Density Altitude: _____ 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	Type
☒ None	☐ N/A
☐ Trace	☐ Rime
☐ Light	☐ Clear
☐ Moderate	☐ Mixed
☐ Severe	☐ Unknown
☐ Unknown	

Icing Actual

Amount	Type
☒ None	☐ N/A
☐ Trace	☐ Rime
☐ Light	☐ Clear
☐ Moderate	☐ Mixed
☐ Severe	☐ Unknown
☐ Unknown	

Turbulence

Type (Check all that apply)	Severity
☒ None	☐ Light
☐ Clear Air	☐ Moderate
☐ Terrain-Induced	☐ Severe
☐ Convective Turbulence	☐ Extreme

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

There was a SIGMET issued for area Southeast of RZA to 100 NM. I am not certain, but I believe this SIGMET was issued at approximately 0500z. Further, I remember the SIGMET to be for cloud development and convective activity.

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)*

Engine mount/cradle with engine, propeller and cowl broken off at firewall. Nose gear doors and main gear doors sheered off. Right wing sheered off just beyond mid-span. Underside of wings and fuselage torn/cut/deformed. Left wing tip crushed/sheered off. Main empennage torn/buckled. Left ruddervator bent/torn. Fuselage floor buckled/bent. Cockpit panel bent/buckled.

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

-The AFM lists 11.8 GPH for 65% power numbers, but this is based on the original O-470G engine. In practice, with the STC'd IO-470N, 12.5 is more typical at these altitudes and conditions. For flight planning I assumed 13.0 GPH.

-I departed KLPC planning on 1+45 enroute to KHII and 1+50 for return segment. Flight was planned for Day VFR first segment and Night VFR second segment. VFR Flight Following was used for both segments. Enroute winds were westerly until approximately PMD/KAPV then changed to northeasterly. Planned route was KLPC LHS PMD KAPV HEC KEED KHII for first segment then reverse order for second segment. The area surrounding KLPC was forecast to develop rainshowers 3-4 hours after planned KLPC arrival so both enroute and on-ground time at KHII were a consideration.

-Aircraft is equipped with STC'd IO-470N (260 HP) injected engine as opposed to original O-470G (240 HP) pressure carbureted engine. Fuel tanks are original design and fuel quantity indication system is original. The STC includes an electric auxiliary fuel pump and a combined manifold pressure/fuel flow meter gauge. Fuel system consists of Left Main 20 Gal (17.5 Usable), Right Main 20 Gal (17.5 Usable), Left and Right Auxiliary Fuel Tanks that are interconnected providing a combined 20 Gal (19.0 Usable). Fuel Selector positions are Left Main, Off, Right Main, and Aux. Unique to the design is that all return fuel returns to Left Main regardless of selector position.

-With regard to fuel planning, I was waiting to assess status upon arrival at KHII and, once again, reassess while passing KWJF which is located mid-route. In addition, I expected R2501N to be cold which would allow direct routing.

-I departed KLPC at 2217z, solo, and with all fuel tanks topped off (60 Gal total / 54 Gal usable). Surface winds were 250/15 so I expected and found more favorable winds at 9500 Ft MSL. These tailwinds lasted until mid-route and direct routing was possible. I landed uneventfully at KHII Rwy 32 at approximately 0005z. Fuel management was as described above with 1st hour on Left Main, then approximately 45 minutes on Aux, then switch back to Left Main on downwind before landing. At KHII ground time at idle was a total of 20 min as passengers on-boarded as planned. I assessed 32 Gal usable fuel remained at takeoff.

-We departed KHII Rwy 32 for the second segment at 0025z, turned west, climbed to 6500 Ft MSL, and approximately 10 minutes after takeoff, resumed VFR Flight Following. Fuel flow was as planned, direct routing was utilized and winds were initially favorable resulting in approximately 170 knots ground speed. We passed KWJF as planned and fuel status was re-assessed. I estimated that we had used 13-14 gal, until this point, which resulted in 18-19 usable remaining. Based on these calculations, present position, ground speed and expected 40 min time-to-go, I made the decision to continue. My expectation was that we were still in compliance, although very close, with CFR 91.151 45 minute Night VFR reserve fuel requirements.

-Approaching LHS area, I was assessing lighting conditions and the ability to see/avoid some cloud build-ups in the area. I made the decision to alter course slightly south to RZS then proceed direct to KLPC. Approximately 10 NM east of RZS I made a slow climb to ensure VMC as we passed over terrain and associated clouds. Upon reaching RZS the weather cleared and I was visual with KIZA and the vicinity of destination KLPC. Approximately 10 NM east of KIZA, I informed Santa Barbara Approach that I was beginning descent from now 8500 Ft MSL. KLPC AWOS was reporting clear skies below 12000 Ft, 10 NM visibility and calm winds. I continued descent with the intent to arrive at 3100 Ft MSL when 10 NM from KLPC for straight-in Rwy 25.

-We passed approximately 1 NM north of KIZA while direct KLPC. At approximately 0210z, 17 NM from KLPC, and approaching 4000 Ft MSL, I made the planned, and final, fuel selector change from Right Main (now indicating very close to Empty) to Left Main (now indicating slightly less than 1/2 full). As I made this change, the engine stumbled to approximately idle power. At this point I would assess that we were approximately 4 NM Northwest of KIZA.

-Continued to Additional Information Block.

RECOMMENDATION (How could this accident/incident have been prevented?)**Operator/Owner Safety Recommendation**

With regard to fuel planning, I realized an important fact that must be accounted for in some aircraft but not in others. It applies here. That is, in addition to accounting for unusable fuel, you must account fuel left in tanks during the management process. In this case, unless each tank is run dry before switching, there is some usable fuel, left unused, in the right main and both left and right auxiliary tanks.

I had been trained to maintain aircraft control, analyze the situation and take the appropriate action. With maintain aircraft control, it is inherent to aviate first, navigate second and communicate only when awareness and task management allow. I realize this is preliminary, but in hindsight and with time to rehash the situation and actions a thousand times, I believe that due to channelized attention, I mis-analyzed the cause of engine power loss. At the time, I believed that fuel feed to the engine was interrupted due to the position of the fuel selector valve. When taking actions to address this cause, they were unsuccessful and rather than re-analyze or simply reference general emergency procedures for this indication, I allowed multiple human factors to complicate the situation and prevent an acceptable resolution.

I now suspect that fuel cavitated from the right main coincident with the fuel selector change from right to left main. I knew, both from previous fuel management, and the most recent indication, that the left main was still nearly 1/2 full. Further, the indicating system had historically proven accurate. I believe that had I simply selected Left Main, selected Auxiliary Fuel pump-On and waited, or at least maintained this configuration while I worked selector position and/or other engine controls, this accident may have been prevented.

Continued on separate sheet.

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.)

unknown

**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)

60 _____ 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 AIRCRAFT

Was an emergency evacuation of the aircraft performed? ☒ Yes ☐ No

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

All 3 occupants egressed using the main cabin door.

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.

Continued from Narrative History of Flight Block.

-For much of the remainder of this report I can clearly remember most actions. There are specific and pertinent details where I simply cannot recall some finite flight parameter details, the exact sequence of some actions and/or the specific configuration of engine and fuel controls at a given time. I will do my best to state where I am uncertain.

-As a historical perspective, I had experienced slight stumbles before when making fuel tank selector changes and have always associated this with imperfect selector detent position. In the past, I had always re-ensured proper detent position and the engine behavior resumed as expected.

-In this case, my attention went directly to ensuring proper detent in Left Main. I continued to work the fuel selector in Left Main for 2-3 sec. This produced no change. Still concerned with selector detent position, I switch back to Right Main. Airspeed was approximately 170 MPH and I noted a descent of approximately 600-800 FPM. Again, there was no change to engine power or behavior.

-Approximately 5 seconds after occurrence, and now at approximately 3600 Ft MSL and speed near 150 MPH, I made the decision to turn 180 degrees left toward KIZA. This was a precautionary measure as my thought to fly towards a suitable runway while I worked to restore power. I began a slightly descending 180 turn. At approximately 90 degrees of turn, airspeed was now at 110-120 MPH. At this point task management became more challenging and it was compounded by onboard distractions. I began to channelize attention on maintaining optimum glide and flying the most direct flightpath toward KIZA Rwy 8 final. During the turn I attempted changes to throttle, mixture control, left/right magneto positions and auxiliary fuel pump. I also made fuel selector changes to, at a minimum, Aux and, I believe to Left Main, then back to Aux. I remember returning both throttle and mixture controls to full forward following excursions. Throttle movement had no affect on engine behavior but did cause large indicated movements to manifold pressure indicator. Mixture control had no affect. Individual left/right magneto positions had no affect. Fuel selector changes had no affect and at each position, I again, attempted to work and ensure proper detent. These actions produced no change to engine power or behavior. Along this path lies the Chumash Resort and Casino which is a relatively tall structure. At approximately 135 degrees of turn, the stall warning system activated. This required lower pitch to avoid stall, but prevented sufficient pitch to regain best glide as this flightpath was too close to the casino structure and the adjacent hillside. This also required that I stop turn until beyond the taller center of the structure. At this point, I simply tried my best to maintain above stall speed, avoid the casino structure, and once clear, resume final alignment with Rwy 8. Once past the structure it became more apparent that the current flight path would terminate short of the runway. I selected left/right landing lights to On.

-Now low, slow, without the ability to assess the landing area and without restoration of engine power, my mindset changed. I know that near this point I selected Left Main (1/2 full indication) and left it there in hopes of a change. I also turned off the Auxiliary Fuel Pump; an action I now regret. I will re-address this action later in this report. Throughout, I did not reference the AFM emergency procedures. This was primarily due to energy state, task management and the challenges associated with trying to read at night while low altitude.

-At an estimated 800-1000 Ft MSL, and approximately 1.0 NM from Rwy 8 while angling slightly left to right, for alignment, I noted a large tree that appeared directly in our flight path. I aggressively rolled right. Nearly simultaneously, I noted the terrain was higher than the runway surface and rising both ahead and to the right of our path. I immediately selected Landing Gear-Down, and nearly simultaneously rolled wings-level and aggressively pitched-up. I assess that the aircraft contacted the ground within 1 second of Landing Gear-Down selection with right wing making first contact followed by center fuselage below the engine. I assess touchdown speed was approximately 65 MPH. Almost immediately, the aircraft was spun to the right and came to a stop. I then forced the cabin door open while the front right passenger egressed onto the wing. The front right passenger then assisted the rear right passenger, with the dog, to egress onto the wing. I forced the panel door open and selected Battery Master-Off. I then egressed through the cabin door onto the wing and called 911.

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

Date of this Report

01/04/2020

mm/dd/yyyy

Name of Pilot/Operator: Robert M Rich

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.

WPR21LA075

Reviewed by NTSB Regional Office

WPR

Name of Investigator

Z.Keliher

Date Report Received

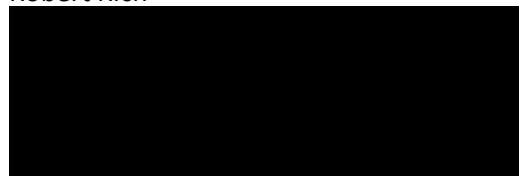
01/05/2020

Continued from Recommendation block.

When I purchased the aircraft and conducted initial type training, my instructor and I overprimed the engine during the first start attempt while using the auxiliary fuel pump. This is while the seller looked on. We were given the shutdown signal and it was stated that fuel overflow was visible. To this day, I cannot recall the details behind this occurrence, but it played a role here as this thought is the reason I selected the auxiliary fuel pump off when I assessed a forced landing was imminent.

As my primary self-critique, assuming what I believe caused the power loss, I failed to remedy the problem for one primary reason. My emergency procedures knowledge was not sufficiently rehearsed to allow application of appropriate procedures following loss of power. In addition to this, my fuel state and energy state were additional factors. With a higher fuel state, there would have not been a tendency to make the last selector change so close to empty on the feeding tank. This alone could possible have driven a different outcome. With regard to the energy state, my decision to fly a straight-in approach placed the aircraft at a lower altitude than necessary. Moreover, I allowed the aircraft to descend below the objective flightpath of 3 degrees for KLPC. As noted earlier, I was striving for 3100 Ft MSL at 10 NM but was passing 4000 Ft at 17 NM. A higher energy state likely would prevented task saturation and may have allowed both the ability to reference the AFM emergency procedures and the ability to inform ATC of the situation.

Aside from the problems that I either caused or failed to remedy, the early decision to turn to nearest suitable surface, overall good energy management following power loss, the decision to delay gear extension, the presence to use available lighting, and the attempt to keep flying the airplane likely saved our lives. We are all extremely fortunate.



Accident summary for N5474D on 27 Dec 2020, 1810 PST at KIZA

Summary of events:

-The AFM lists 11.8 GPH for 65% power numbers, but this is based on the original O-470G engine. In practice, with the STC'd IO-470N, 12.5 is more typical at these altitudes and conditions. For flight planning I assumed 13.0 GPH.

-I departed KLPC planning on 1+45 enroute to KHII and 1+50 for return segment. Flight was planned for Day VFR first segment and Night VFR second segment. VFR Flight Following was used for both segments. Enroute winds were westerly until approximately PMD/KAPV then changed to northeasterly. Planned route was KLPC LHS PMD KAPV HEC KEED KHII for first segment then reverse order for second segment. The area surrounding KLPC was forecast to develop rainshowers 3-4 hours after planned KLPC arrival so both enroute and on-ground time at KHII were a consideration.

-Aircraft is equipped with STC'd IO-470N (260 HP) injected engine as opposed to original O-470G (240 HP) pressure carbureted engine. Fuel tanks are original design and fuel quantity indication system is original. The STC includes an electric auxiliary fuel pump and a combined manifold pressure/fuel flow meter gauge. Fuel system consists of Left Main 20 Gal (17.5 Usable), Right Main 20 Gal (17.5 Usable), Left and Right Auxiliary Fuel Tanks that are interconnected providing a combined 20 Gal (19.0 Usable). Fuel Selector positions are Left Main, Off, Right Main, and Aux. Unique to the design is that all return fuel returns to Left Main regardless of selector position.

-With regard to fuel planning, I was waiting to assess status upon arrival at KHII and, once again, reassess while passing KWJF which is located mid-route. In addition, I expected R2501N to be cold which would allow direct routing.

-I departed KLPC at 2217z, solo, and with all fuel tanks topped off (60 Gal total / 54 Gal usable). Surface winds were 250/15 so I expected and found more favorable winds at 9500 Ft MSL. These tailwinds lasted until mid-route and direct routing was possible. I landed uneventfully at KHII Rwy 32 at approximately 0005z. Fuel management was as described above with 1st hour on Left Main, then approximately 45 minutes on Aux, then switch back to Left Main on downwind before landing. At KHII ground time at idle was a total of 20 min as passengers on-boarded as planned. I assessed 32 Gal usable fuel remained at takeoff.

-We departed KHII Rwy 32 for the second segment at 0025z, turned west, climbed to 6500 Ft MSL, and approximately 10 minutes after takeoff, resumed VFR Flight Following. Fuel flow was as planned, direct routing was utilized and winds were initially favorable resulting in approximately 170 knots ground speed. We passed KWJF as planned and fuel status was re-assessed. I estimated that we had used 13-14 gal, until this point, which resulted in 18-19 usable remaining. Based on these calculations, present

position, ground speed and expected 40 min time-to-go, I made the decision to continue. My expectation was that we were still in compliance, although very close, with CFR 91.151 45 minute Night VFR reserve fuel requirements.

-Approaching LHS area, I was assessing lighting conditions and the ability to see/avoid some cloud build-ups in the area. I made the decision to alter course slightly south to RZS then proceed direct to KLPC. Approximately 10 NM east of RZS I made a slow climb to ensure VMC as we passed over terrain and associated clouds. Upon reaching RZS the weather cleared and I was visual with KIZA and the vicinity of destination KLPC. Approximately 10 NM east of KIZA, I informed Santa Barbara Approach that I was beginning descent from now 8500 Ft MSL. KLPC AWOS was reporting clear skies below 12000 Ft, 10 NM visibility and calm winds. I continued descent with the intent to arrive at 3100 Ft MSL when 10 NM from KLPC for straight-in Rwy 25.

-We passed approximately 1 NM north of KIZA while direct KLPC. At approximately 0210z, 17 NM from KLPC, and approaching 4000 Ft MSL, I made the planned, and final, fuel selector change from Right Main (now indicating very close to Empty) to Left Main (now indicating slightly less than 1/2 full). As I made this change, the engine stumbled to approximately idle power. At this point I would assess that we were approximately 4 NM Northwest of KIZA.

-For much of the remainder of this report I can clearly remember most actions. There are specific and pertinent details where I simply cannot recall some finite flight parameter details, the exact sequence of some actions and/or the specific configuration of engine and fuel controls at a given time. I will do my best to state where I am uncertain.

-As a historical perspective, I had experienced slight stumbles before when making fuel tank selector changes and have always associated this with imperfect selector detent position. In the past, I had always re-ensured proper detent position and the engine behavior resumed as expected.

-In this case, my attention went directly to ensuring proper detent in Left Main. I continued to work the fuel selector in Left Main for 2-3 sec. This produced no change. Still concerned with selector detent position, I switch back to Right Main. Airspeed was approximately 170 MPH and I noted a descent of approximately 600-800 FPM. Again, there was no change to engine power or behavior.

-Approximately 5 seconds after occurrence, and now at approximately 3600 Ft MSL and speed near 150 MPH, I made the decision to turn 180 degrees left toward KIZA. This was a precautionary measure as my thought to fly towards a suitable runway while I worked to restore power. I began a slightly descending 180 turn. At approximately 90 degrees of turn, airspeed was now at 110-120 MPH. At this point task management became more challenging and it was compounded by onboard distractions. I began to channelize attention on maintaining optimum glide and flying the most direct flightpath toward KIZA Rwy 8 final. During the turn I attempted changes to throttle, mixture control, left/right magneto positions and auxiliary fuel pump. I also made fuel selector changes to, at a minimum, Aux and, I believe to Left Main, then back to Aux. I remember returning both throttle and mixture controls to full forward following excursions. Throttle movement had no affect on engine behavior but did cause large indicated movements to manifold pressure indicator. Mixture control had no affect. Individual left/right magneto positions had no affect. Fuel selector changes had no affect and at each position, I again, attempted to work and ensure proper detent. These actions produced no change to engine power or behavior. Along this path lies the Chumash Resort and Casino which is a relatively tall

structure. At approximately 135 degrees of turn, the stall warning system activated. This required lower pitch to avoid stall, but prevented sufficient pitch to regain best glide as this flightpath was too close to the casino structure and the adjacent hillside. This also required that I stop turn until beyond the taller center of the structure. At this point, I simply tried my best to maintain above stall speed, avoid the casino structure, and once clear, resume final alignment with Rwy 8. Once past the structure it became more apparent that the current flight path would terminate short of the runway. I selected left/right landing lights to On.

-Now low, slow, without the ability to assess the landing area and without restoration of engine power, my mindset changed. I know that near this point I selected Left Main (1/2 full indication) and left it there in hopes of a change. I also turned off the Auxiliary Fuel Pump; an action I now regret. I will re-address this action later in this report. Throughout, I did not reference the AFM emergency procedures. This was primarily due to energy state, task management and the challenges associated with trying to read at night while low altitude.

-At an estimated 800-1000 Ft MSL, and approximately 1.0 NM from Rwy 8 while angling slightly left to right, for alignment, I noted a large tree that appeared directly in our flight path. I aggressively rolled right. Nearly simultaneously, I noted the terrain was higher than the runway surface and rising both ahead and to the right of our path. I immediately selected Landing Gear-Down, and nearly simultaneously rolled wings-level and aggressively pitched-up. I assess that the aircraft contacted the ground within 1 second of Landing Gear-Down selection with right wing making first contact followed by center fuselage below the engine. I assess touchdown speed was approximately 65 MPH. Almost immediately, the aircraft was spun to the right and came to a stop. I then forced the cabin door open while the front right passenger egressed onto the wing. The front right passenger then assisted the rear right passenger, with the dog, to egress onto the wing. I forced the panel door open and selected Battery Master-Off. I then egressed through the cabin door onto the wing and called 911.

Personal assessment:

With regard to fuel planning, I realized an important fact that must be accounted for in some aircraft but not in others. It applies here. That is, in addition to accounting for unusable fuel, you must account fuel left in tanks during the management process. In this case, unless each tank is run dry before switching, there is some usable fuel, left unused, in the right main and both left and right auxiliary tanks.

I had been trained to maintain aircraft control, analyze the situation and take the appropriate action. With maintain aircraft control, it is inherent to aviate first, navigate second and communicate only when awareness and task management allow. I realize this is preliminary, but in hindsight and with time to rehash the situation and actions a thousand times, I believe that due to channelized attention, I mis-analyzed the cause of engine power loss. At the time, I believed that fuel feed to the engine was interrupted due to the position of the fuel selector valve. When taking actions to address this cause, they were unsuccessful and rather than re-analyze or simply reference general emergency procedures for this indication, I allowed multiple human factors to complicate the situation and prevent an acceptable resolution.

I now suspect that fuel cavitated from the right main coincident with the fuel selector change from right to left main. I knew, both from previous fuel management, and the most recent indication, that the left main was still nearly 1/2 full. Further, the indicating system had historically proven accurate. I believe that had I simply selected Left Main, selected Auxiliary Fuel pump-On and waited, or at least maintained this configuration while I worked selector position and/or other engine controls, this accident may have been prevented.

When I purchased the aircraft and conducted initial type training, my instructor and I overprimed the engine during the first start attempt while using the auxiliary fuel pump. This is while the seller looked on. We were given the shutdown signal and it was stated that fuel overflow was visible. To this day, I cannot recall the details behind this occurrence, but it played a role here as this thought is the reason I selected the auxiliary fuel pump off when I assessed a forced landing was imminent.

As my primary self-critique, assuming what I believe caused the power loss, I failed to remedy the problem for one primary reason. My emergency procedures knowledge was not sufficiently rehearsed to allow application of appropriate procedures following loss of power. In addition to this, my fuel state and energy state were additional factors. With a higher fuel state, there would have not been a tendency to make the last selector change so close to empty on the feeding tank. This alone could possibly have driven a different outcome. With regard to the energy state, my decision to fly a straight-in approach placed the aircraft at a lower altitude than necessary. Moreover, I allowed the aircraft to descend below the objective flightpath of 3 degrees for KLPC. As noted earlier, I was striving for 3100 Ft MSL at 10 NM but was passing 4000 Ft at 17 NM. A higher energy state likely would have prevented task saturation and may have allowed both the ability to reference the AFM emergency procedures and the ability to inform ATC of the situation.

Aside from the problems that I either caused or failed to remedy, the early decision to turn to nearest suitable surface, overall good energy management following power loss, the decision to delay gear extension, the presence to use available lighting, and the attempt to keep flying the airplane likely saved our lives. We are all extremely fortunate.

//signed//

Robert M Rich