

# **Aviation Investigation Final Report**

Location: Clovis, New Mexico Accident Number: WPR23LA002

Date & Time: October 2, 2022, 16:00 Local Registration: N987PS

Aircraft: Piper PA 46-350P Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Business

### **Analysis**

As the pilot approached the destination airport, the wind was reported as light and variable. He stated that as he flew the visual approach to runway 4 and prepared to land, he encountered a major gust of wind and elected to perform a go-around. The pilot reported that he applied full engine power, retracted the landing gear and flaps, and initiated a climb when the "stall shaker started shaking". The pilot lowered the nose to prevent the airplane from stalling and initiated a gear-up landing to an open field adjacent to the runway.

The pilot reported encountering a gust of wind; however, the wind reported at the airport 4 minutes before the accident was from 180 ° at 11 knots. The wind reported about an hour after the accident was from 160° at 10 knots. Neither weather report indicated wind gusts or significant changes in wind direction. The calculated crosswind component at the time of the accident was about 7 knots, with a tailwind of about 8 knots.

Postaccident examination of the airplane revealed no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Given the pilot's description of the go-around and the absence of a mechanical failure or malfunction, he likely retracted the flaps before establishing the required climb airspeed and positive rate of climb. The quartering tailwind would have contributed to the loss of expected airplane performance, resulting in an incipient stall and the subsequent gear-up landing.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to follow the go-around procedures by prematurely retracting the flaps and not establishing a proper go-around climb speed after attempting to land with a quartering tailwind, resulting in the airplane's inability to climb.

#### **Findings**

Aircraft Airspeed - Not attained/maintained

Personnel issues Aircraft control - Pilot
Personnel issues Use of checklist - Pilot

Environmental issues Tailwind - Effect on equipment

Page 2 of 7 WPR23LA002

#### **Factual Information**

#### **History of Flight**

Approach-VFR go-around Loss of control in flight (Defining event)

Approach Attempted remediation/recovery

Approach-VFR go-around Off-field or emergency landing

On October 2, 2022, about 1600 Mountain daylight time, a Piper PA-46-350P, N987PS, was substantially damaged when it was involved in an accident near Clovis, New Mexico. The pilot and passenger were not injured. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

The pilot reported that he encountered "a major wind gust" while on a visual approach to runway 4 at Clovis Regional Airport (CVN). In response, he aborted the approach, applied full engine power, and retracted the landing gear and flaps; however, the airplane did not have enough speed and power to maintain flight. The pilot subsequently felt the airplane buffet and lowered the nose. The pilot maneuvered the airplane and initiated a gear-up landing to an open field adjacent to runway 4. During the landing sequence, the right horizontal stabilizer impacted an airport sign, and the airplane came to rest upright. A postaccident fire ensued.

The automated weather observation station located on the airport reported that, about 4 minutes before the accident, the wind was from 180° at 11 knots. The same automated station reported that, about 56 minutes after the accident, the wind was from 160° at 10 knots. The calculated crosswind component at the time of the accident was about 7 knots, with a tailwind of about 8 knots.

Postaccident examination of the airplane revealed that the fuselage undercarriage, right horizontal stabilizer, and the right elevator were substantially damaged. A subsequent examination of the recovered wreckage revealed no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of the airplane's Pilot Operating Handbook (POH), Section 4.33, "GO-AROUND," states in part, "To initiate a go-around from a landing approach, the mixture should be set to full RICH, the propeller control should be a full INCREASE, and the throttle should be advanced to full power while the pitch attitude is increased to obtain the balked landing climb speed of 80 KIAS. Retract the landing gear and slowly retract the flaps when a positive climb is established. Allow the airplane to accelerate to the best angle of climb (81 KIAS) for obstacle clearance or to the best rate of climb speed (110 KIAS) if obstacles are not a factor."

Page 3 of 7 WPR23LA002

### **Pilot Information**

| Certificate:              | Private  | Age:                              | 69,Male        |
|---------------------------|--|-----------------------------------|----------------|
| Airplane Rating(s):       | Single-engine land   | Seat Occupied:                    | Left           |
| Other Aircraft Rating(s): | None   | Restraint Used:                   | 3-point        |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | No             |
| Instructor Rating(s):     | None   | Toxicology Performed:             |                |
| Medical Certification:    | Class 3 Without waivers/limitations  | Last FAA Medical Exam:            | April 12, 2022 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | June 20, 2022  |
| Flight Time:              | (Estimated) 4946 hours (Total, all aircraft), 3323 hours (Total, this make and model), 4946 hours (Pilot In Command, all aircraft) |                                   |                |

## Passenger Information

| Certificate:              | Age:                             | Female                            |  |
|---------------------------|----------------------------------|-----------------------------------|--|
| Airplane Rating(s):       | Seat Occupied:                   | Right                             |  |
| Other Aircraft Rating(s): | Restraint Used:                  | Lap only                          |  |
| Instrument Rating(s):     | Second Pilot Present:            | No                                |  |
| Instructor Rating(s):     | Toxicology Performed:            |                                   |  |
| Medical Certification:    | Last FAA Medical Exam:           |                                   |  |
| Occupational Pilot: No    | Last Flight Review or Equivalent | Last Flight Review or Equivalent: |  |
| Flight Time:              |                                  |                                   |  |

### **Aircraft and Owner/Operator Information**

| Aircraft Make:                   | Piper                          | Registration:                     | N987PS          |
|----------------------------------|--------------------------------|-----------------------------------|-----------------|
| Model/Series:                    | PA 46-350P                     | Aircraft Category:                | Airplane        |
| Year of Manufacture:             | 1999                           | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal                         | Serial Number:                    | 46-36225        |
| Landing Gear Type:               | Retractable - Tricycle         | Seats:                            | 6               |
| Date/Type of Last<br>Inspection: | August 18, 2022 Annual         | Certified Max Gross Wt.:          | 4358 lbs        |
| Time Since Last Inspection:      |                                | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 2936.8 Hrs at time of accident | Engine Manufacturer:              | Lycoming        |
| ELT:                             | C91A installed, not activated  | Engine Model/Series:              | TIO-540-AE2A    |
| Registered Owner:                | SEVEN S FARMS LLC              | Rated Power:                      | 350 Horsepower  |
| Operator:                        | On file                        | Operating Certificate(s)<br>Held: | None            |
|                                  |                                |                                   |                 |

## Meteorological Information and Flight Plan

| Conditions at Accident Site:     | Visual (VMC)                 | Condition of Light:                  | Day                      |
|----------------------------------|------------------------------|--------------------------------------|--------------------------|
| Conditions at Accident Site.     | visuai (vivic)               | Condition of Light.                  | Day                      |
| Observation Facility, Elevation: | KCVN,4216 ft msl             | Distance from Accident Site:         | 0 Nautical Miles         |
| Observation Time:                | 15:56 Local                  | Direction from Accident Site:        | 325°                     |
| <b>Lowest Cloud Condition:</b>   | Scattered                    | Visibility                           | 10 miles                 |
| Lowest Ceiling:                  | Broken / 8000 ft AGL         | Visibility (RVR):                    |                          |
| Wind Speed/Gusts:                | 11 knots /                   | Turbulence Type<br>Forecast/Actual:  | None / None              |
| Wind Direction:                  | 180°                         | Turbulence Severity Forecast/Actual: | N/A / N/A                |
| Altimeter Setting:               | 30.22 inches Hg              | Temperature/Dew Point:               | 27°C / 6°C               |
| Precipitation and Obscuration:   | No Obscuration; No Precipita | ition                                |                          |
| Departure Point:                 | Tucson, AZ (RYN)             | Type of Flight Plan Filed:           | None                     |
| Destination:                     | Clovis, NM                   | Type of Clearance:                   | VFR;VFR flight following |
| Departure Time:                  | 12:00 Local                  | Type of Airspace:                    | Class G                  |

Page 5 of 7 WPR23LA002

## **Airport Information**

| Airport:             | CLOVIS RGNL CVN  | Runway Surface Type:             | Asphalt               |
|----------------------|------------------|----------------------------------|-----------------------|
| Airport Elevation:   | 4215 ft msl      | <b>Runway Surface Condition:</b> | Dry                   |
| Runway Used:         | 04               | IFR Approach:                    | None                  |
| Runway Length/Width: | 7200 ft / 150 ft | VFR Approach/Landing:            | Go around;Straight-in |

## Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial              |
|------------------------|--------|-------------------------|--------------------------|
| Passenger<br>Injuries: | 1 None | Aircraft Fire:          | On-ground                |
| Ground Injuries:       |        | Aircraft Explosion:     | None                     |
| Total Injuries:        | 2 None | Latitude,<br>Longitude: | 34.42659,-103.07758(est) |

Page 6 of 7 WPR23LA002

#### **Administrative Information**

Investigator In Charge (IIC): Gutierrez, Eric Additional Participating Robert A. Smith; Federal Aviation Administration; Lubbock, TX David Harsanyi; Lycoming Engines; Williamsport, PA Persons: John Hirsch; Piper Aircraft Inc.; Vero Beach, FL **Original Publish Date:** August 23, 2023 Last Revision Date: **Investigation Class:** Class 3 The NTSB did not travel to the scene of this accident. Note: **Investigation Docket:** https://data.ntsb.gov/Docket?ProjectID=106042

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 7 of 7 WPR23LA002