Aviation Investigation Final Report

Location:	Fort Mohave, Arizona	**Accident Number:**	GAA17CA126
Date & Time:	January 26, 2017, 11:00 Local	**Registration:**	N6885F
Aircraft:	Piper PA32R	**Aircraft Damage:**	Substantial
Defining Event:	Landing gear not configured	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during the initial climb, he retracted the landing gear normally and then "a few minutes later the radios went blank." He believed he had a radio problem, so he decided to return to the airport. During the return, the pilot moved the landing gear selector to the down position, but the three gear down indicator lights did not illuminate. Subsequently, the pilot circled a few miles east of the airport to troubleshoot the issue.

The pilot reported that, during the circling, he "cycled the master switch and the radio master a couple times with no results." The pilot added that the airplane was equipped with an "automatic gear extension system," so he verified that the override switch was not engaged, fully extended the flaps, and slowed the airplane to 85 knots. Subsequently, the pilot believed the landing gear was down, so he returned to the airport for landing. During touchdown, the left main landing gear and nose gear collapsed (or were not extended), and the airplane veered off the runway into dirt, which resulted in substantial damage to the left wing. During a postaccident interview, the pilot reported that he believed he had "a total electrical failure."

According to a witness who owns a house on the airport property, he observed the airplane depart and about 5 minutes later, saw that the airplane had returned for landing. The witness reported that the airplane's landing gear were retracted until the point at which the pilot began the landing flare over the runway. When the airplane was about 5 ft above the runway, each landing gear began to extend, but the airplane touched down before the nose gear and left main landing gear could extend fully.

According to a Federal Aviation Administration (FAA) aviation safety inspector (ASI) who arrived at the accident site about 2 to 3 hours after the event, when he "switched the master switch on," he observed electrical equipment turn on and heard the landing gear extension motor running. During a subsequent postaccident examination, the FAA ASI reported that he found no abnormalities with the electrical system. He also extended the landing gear to the down-and-locked position with the electric/hydraulic system and observed three green indicator lights illuminate.

According to the Pilot's Operating Handbook (POH) for the accident airplane, a "pressure sensing device" in the landing gear system will lower the gear "regardless of the gear selection position," pending that the override switch is not engaged. The POH further stated, in part, "The gear is designed to extend at airspeeds below approximately103 KIAS [knots indicated airspeed] with power off even if the selector is in the up position. The extension speeds will vary from approximately 81 KTS [knots] to approximately 103 KIAS depending on power settings and altitude."

It is likely that the pilot failed to extend the landing gear for landing and that, as the airspeed slowed during the landing flare, the pressure sensing device automatically deployed the landing gear. However, due to the insufficient altitude and time, the landing gear were unable to fully extend and lock.

Probable Cause and Findings

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

The pilot's failure to extend the landing gear for landing.

Findings

Personnel issues	Forgotten action/omission - Pilot
Aircraft	Gear extension and retract sys - Not used/operated
Aircraft	(general) - Incorrect use/operation

Factual Information

History of Flight

Landing	Landing gear not configured (Defining event)
Landing-flare/touchdown	Abnormal runway contact
Landing-flare/touchdown	Runway excursion
Landing-flare/touchdown	Landing gear collapse
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	**Age:**	74,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Glider	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	February 17, 2015
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	January 21, 2016
Flight Time:	(Estimated) 2570 hours (Total, all aircraft), 1870 hours (Total, this make and model), 2570 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, 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:**	No
Medical Certification:		**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N6885F
Model/Series:	PA32R 300	**Aircraft Category:**	Airplane
Year of Manufacture:	1976	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	32R-7780048
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	January 25, 2016 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	3767 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-540-KIG5D
Registered Owner:	On file	**Rated Power:**	300 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KIFP,698 ft msl	**Distance from Accident Site:**	13 Nautical Miles
Observation Time:	18:35 Local	**Direction from Accident Site:**	50°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	17 knots / 23 knots	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.38 inches Hg	**Temperature/Dew Point:**	11°C / -5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BULLHEAD CITY, AZ (A20)	**Type of Flight Plan Filed:**	None
Destination:	REDLANDS, CA (REI)	**Type of Clearance:**	None
Departure Time:	11:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	SUN VALLEY A20	**Runway Surface Type:**	Asphalt
Airport Elevation:	725 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	36	**IFR Approach:**	None
Runway Length/Width:	3700 ft / 42 ft	**VFR Approach/Landing:**	Full stop;Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	35.005554,-114.565002(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Gary R Rucker; FAA; Las Vegas, NV
Original Publish Date:	April 4, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94665