



Aviation Investigation Final Report

Location:	Greenbrier, Arkansas	Accident Number:	CEN13LA237
Date & Time:	April 22, 2013, 11:17 Local	Registration:	N6369V
Aircraft:	ALON A2	Aircraft Damage:	Destroyed
Defining Event:	Runway excursion	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to a friend, the pilot had not flown regularly for about 20 years. However, the pilot had recently purchased an airplane and passed a biennial flight review. The flight instructor who conducted the flight review recommended to the pilot that he obtain additional flight instruction. The accident pilot then departed the location of the review to ferry the airplane to his home. A witness reported that, once the pilot reached the destination airport, the first two landing attempts were unstable, and the pilot initiated go-arounds each time. During the third landing, the airplane bounced and began to porpoise, and it then departed the left side of the runway and impacted a culvert. The pilot initiated a third go-around, during which, the airplane struck a tree and impacted terrain. A 131-foot ridge was located about 1,000 feet ahead of the approach end of the runway. Further, the runway was relatively narrow (about 40 feet) with a downslope. The combination of these factors created a challenging runway environment. It is likely that the pilot did not properly flare the airplane and then recover from the bounced landing due to his limited recent flying experience and proficiency.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper recovery from a bounced landing and porpoise. Contributing to the accident were the pilot's limited recent flying experience and proficiency and the challenging runway environment.

Findings

Aircraft	Landing flare - Incorrect use/operation
Personnel issues	Aircraft control - Pilot
Personnel issues	Recent experience - Pilot
Personnel issues	Task overload - Pilot
Environmental issues	(general) - Effect on operation

Factual Information

History of Flight

Landing	Abnormal runway contact
Landing-aborted after touchdown	Collision with terr/obj (non-CFIT)
Landing	Hard landing
Landing-landing roll	Runway excursion (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On April 22, 2013, about 1117 central daylight time, an Alon A2 airplane, N6369V, was destroyed after impact with terrain at Arkavalley Airport (12A), Greenbrier, Arkansas. The pilot was fatally injured. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91, with no flight plan filed. Day visual meteorological conditions prevailed for the flight, which originated from the Dennis F. Cantrell Airport (KCWS), Conway, Arkansas at 1055.

According to a witness, the pilot attempted two landings on Runway 18, touching down briefly on each attempt and then performing a go-around. On the third landing attempt, the airplane touched down, bounced, and began to porpoise. About 1000 feet after the first bounce, the airplane departed the left side of the runway and subsequently struck a culvert. As the pilot initiated a go around, the airplane became airborne and impacted a tree to the left of the runway. The airplane subsequently impacted terrain and a post impact fire ensued, consuming the majority of the airplane.

Pilot Information

Certificate:	Commercial	Age:	81
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	September 21, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 20, 2013
Flight Time:	(Estimated) 1910 hours (Total, all aircraft), 10 hours (Total, this make and model)		

The pilot, age 81, held a commercial pilot license with airplane single-engine land and instrument ratings. On September 21, 2011, the pilot was issued a limited Class 3 limited medical certificate, which required corrective lenses be worn. At the time of exam, the pilot reported a total 1900 flight hours, with zero flight hours in the last six months. According to a friend of the pilot, it has been about 20 years since he had flown regularly.

The pilot had recently purchased the accident airplane and traveled to North Carolina to ferry it back to Arkansas. In conjunction with picking up the airplane, the pilot completed a biennial flight review on April 20, 2013 at the Harnett County Airport (KHRJ), Erwin, North Carolina. During this flight review, the flight instructor stated the pilot flew fairly well and safely, but not great. The flight instructor recommended to the pilot that he obtain additional flight instruction after returning to Arkansas.

The flight instructor was concerned with the pilot becoming fatigued during his return flights to Arkansas. The flight instructor discussed appropriate rest periods with the pilot, who chose to stop and remain overnight during his return trip. The flight instructor was unaware of the pilot's home airport and there was no discussion of approach/landing considerations at the Arkavalley Airport.

Aircraft and Owner/Operator Information

Aircraft Make:	ALON	Registration:	N6369V
Model/Series:	A2 A-45	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	A-45
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 12, 2013 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3654 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	C-90
Registered Owner:	Charles Snyder	Rated Power:	95 Horsepower
Operator:	Charles Snyder	Operating Certificate(s) Held:	None

The accident airplane, an Alon A2 (serial number A-45) was manufactured in 1965. It was registered with the Federal Aviation Administration on a standard airworthiness certificate for normal operations. The airplane had a total time of 3,654 hours as of the last annual inspection, which was completed on November 2, 2012. The airplane was equipped with a Continental C90 series engine. As of the last annual inspection, the engine had accumulated a total of 1,661 hours, with 287 hours since last major overhaul.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLRF,311 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	11:58 Local	Direction from Accident Site:	121°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	21°C / 8°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	Conway, AR (KCWS)	Type of Flight Plan Filed:	None
Destination:	Greenbrier, AR (12A)	Type of Clearance:	None
Departure Time:	10:55 Local	Type of Airspace:	

The weather station at Little Rock Air Force Base (KLRF), located about 18 miles southeast of the accident site, reported the following conditions at 1158: wind 150 at 7 knots, visibility 10 miles, clear skies, temperature 21 degrees Celsius, dew point 8 degrees Celsius, altimeter setting 30.14.

Airport Information

Airport:	Arkavalley Airport 12A	Runway Surface Type:	Asphalt
Airport Elevation:	329 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3133 ft / 40 ft	VFR Approach/Landing:	Full stop;Go around;Traffic pattern

The Arkavalley Airport, privately owned and managed, is located in a rural area five miles southeast of Greenbrier, Arkansas. The airport has one asphalt north-south runway (36/18), with dimensions of 3,133 by 40 feet. The runway slopes downward from both approach ends toward the center. All three approaches flown by the accident pilot were to Runway 18, which has a 131 foot ridge about 1000 feet from its approach end. Due to this obstruction, a steeper than normal approach angle is required to land on Runway 18.

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	35.177501,-92.334999(est)

The airplane came to rest about 200 feet beyond the tree strike, facing southeast. The majority of the airplane was consumed by fire. Federal Aviation Administration personnel confirmed flight control continuity on scene. Examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

Medical and Pathological Information

On April 24, 2013, an autopsy was performed on the pilot by a medical examiner at the Arkansas State Crime Laboratory. The cause of death was attributed to smoke and soot inhalation. The FAA's Civil Aeromedical Institute in Oklahoma City, Oklahoma, performed toxicology tests on the pilot. The test was negative for carbon monoxide, ethanol, and tested drugs.

Administrative Information

Investigator In Charge (IIC): Folkerts, Michael

Additional Participating Persons: Nicholas Cusimano; Federal Aviation Administration; Little Rock, AR

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Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=86701>

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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](#).