

## 2013 NTSB REPORTS

NTSB Identification: **ERA13CA155**

14 CFR Part 91: General Aviation

Accident occurred Tuesday, March 05, 2013 in Newnan, GA

Probable Cause Approval Date: 05/23/2013

Aircraft: ENGINEERING & RESEARCH ERCOUPE 415-C, registration: N87172

Injuries: 2 Uninjured.

NTSB investigators used data provided by various entities, including, but not limited to, the Federal Aviation Administration and/or the operator and did not travel in support of this investigation to prepare this aircraft accident report.

According to the pilot, after landing the airplane, he taxied it to the general aviation tie-down area on the airport. The pilot stated that he normally taxied the airplane through the open space between the second and third tie-down rows on the ramp but that this space was occupied; therefore, he initiated a 180-degree turn to exit the row for an alternate tie-down location. The pilot stated that, during the turn, he misjudged the space needed to safely execute the maneuver and struck a parked airplane with his airplane's right wing tip. Post accident examination revealed that the airplane sustained substantial damage to the right wing trailing edge section main spar attachment point and buckling of the right wing flap and tip. The pilot did not report any pre-accident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
The pilot's failure to maintain proper visual lookout during taxi operations, which resulted in a collision with a parked airplane.

NTSB Identification: **WPR13LA191**

14 CFR Part 91: General Aviation

Accident occurred Sunday, April 14, 2013 in Mesquite, NV

Aircraft: ERCOUPE 415-C, registration: N87114

Injuries: 1 Minor.

NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report.

On April 14, 2013, about 1020 Pacific daylight time, an Engineering and Research Corporation (Ercoupe) 415-C, N87114, landed hard during a forced landing shortly after takeoff from Mesquite Airport, Mesquite, Nevada. The pilot was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. The private pilot sustained minor injuries; the airplane sustained substantial damage to the right wing and firewall during the accident sequence. The cross-country personal flight departed Mesquite about 1015, with a planned destination of Ely Airport, Ely, Nevada. Visual meteorological conditions prevailed, and a visual flight rules flight plan had been filed.

WPR13LA191

### HISTORY OF FLIGHT

The pilot reported that the ground run-up, takeoff, and initial climb were uneventful, with the airplane maintaining a climb rate of 500 feet per minute, at an engine speed of 2,300 rpm. About 5 minutes later, he felt a low frequency vibration, and assuming it was an engine speed related harmonic, reached forward to adjust the throttle. Just as he reached forward, the engine speed surged to 4,000 rpm, and he immediately retarded the throttle. The pilot could not see any propeller movement, and the engine did not appear to be producing thrust. In an attempt to diagnose the problem, he advanced the throttle again, and the engine surged to 4,200 rpm. The pilot realized that the propeller had separated from the engine, and began to configure the airplane for a forced

landing.

He stated that due to the altered center of gravity with the propeller missing, he was unable to maintain positive airplane control at any airspeed below 85 mph. He subsequently performed a forced landing into rocky desert scrub, about 5 miles from the airport.

The airplane had undergone an annual inspection on August 6, 2012, at a tachometer time of 264.2 hours. Maintenance records indicated that at the time of inspection, the Continental C85-12 engine, serial number 27027-7-12, had accrued 320.2 hours since overhaul in July 1996. An entry dated July 27, 2012, indicated that the propeller was removed to facilitate the installation of the crankshaft oil seal at a tachometer time of 252.3 hours. The tachometer on the airplane at the accident site indicated 294.5 hours.

The crankshaft was of the tapered type, with the propeller hub and flange assembly being held in place with a single hub nut. The tapered portion of the crankshaft was keyed to accept the propeller hub assembly. The crankshaft tip, propeller hub, and hub nut all contained four "safety holes" drilled 90 degrees apart radially. The design was such that a flat-head pin was installed through one of these holes once they were aligned, after the correct hub nut torque was applied. A cotter pin was utilized to retain the flat-head pin. According to representatives from Continental Motors, once the correct hub nut torque was applied, the flat-head and cotter pins should be loose within the assembly, a tight fit indicating that the propeller hub nut had backed off.

Neither the propeller nor its associated hub hardware forward of the crankshaft seal was recovered. The crankshaft was removed from the engine to facilitate inspection. Its threaded portion exhibited flattening and peening damage to about 45 percent of its surface. Three of the four safety holes were round and appeared undamaged, with the fourth exhibiting elongation in the plane of rotation, and material smear of its outer lip.

The owner stated that the crankshaft oil seal was replaced due to an oil leak. He did not recall seeing a cotter pin ever installed on the hub nut, noting instead the use of a cadmium plated bolt and "Nyloc" nut.

NTSB Identification: **CEN13LA237**  
14 CFR Part 91: General Aviation  
Accident occurred Monday, April 22, 2013 in Greenbrier, AR  
Probable Cause Approval Date: 01/30/2014  
Aircraft: ALON A2, registration: N6369V  
Injuries: 1 Fatal.

NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report.

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 down slope. 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.

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.

CEN13LA237  
HISTORY OF FLIGHT

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.

#### PERSONNEL INFORMATION

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 INFORMATION

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

The weather station at Little Rock Air Force Base (KLRV), 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

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

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.

NTSB Identification: **CEN13CA262**  
14 CFR Part 91: General Aviation  
Accident occurred Thursday, April 25, 2013 in Little Falls, MN  
Probable Cause Approval Date: 08/29/2013  
Aircraft: ENGINEERING & RESEARCH 415-C, registration: N94305  
Injuries: 1 Minor.

NTSB investigators used data provided by various entities, including, but not limited to, the Federal Aviation Administration and/or the operator and did not travel in support of this investigation to prepare this aircraft accident report.

The pilot reported that he was performing takeoffs and landings when the accident occurred. He said that on one of the landings, when the airplane was on the downwind leg of the traffic pattern, the engine went to idle. The pilot attempted to land the airplane on the runway, but the airplane struck a fence short of the runway. Examination of the airplane revealed that the outer flexible sheath of the throttle cable came loose from the crimped metal sleeve, which was part of the instrument panel fitting. Movement of the cockpit throttle control would not actuate the throttle arm of the carburetor. Records indicated that the airplane was manufactured in 1946 and the throttle cable appeared to be original. No entry indicating replacement of the cable was found in the airplane's maintenance records.

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
The failure of the airplane's throttle cable.

NTSB Identification: **CEN13CA510**  
14 CFR Part 91: General Aviation  
Accident occurred Saturday, August 10, 2013 in Mackinac Island, MI  
Probable Cause Approval Date: 10/21/2013  
Aircraft: ERCOUPE 415-C, registration: N99094  
Injuries: 1 Uninjured.

NTSB investigators used data provided by various entities, including, but not limited to, the Federal Aviation Administration and/or the operator and did not travel in support of this investigation to prepare this aircraft accident report.

The pilot reported that the cross-country flight was uneventful until the final approach portion of the landing to runway 27. She reported that the final approach was flown at the normal airspeed for the airplane. She said that the next thing she knew was that the airplane was on its nose and the left wing scraped the runway. The airplane then righted itself and skidded off the left side of the runway. The airplane incurred damage to the left wing spar. The pilot reported that the wind was from the west and that local pilots reported to her that wind from the west can create a swirl as it moves up the runway. The reported wind about the time of the accident was from 240 degrees at 11 knots, gusting to 16 knots.

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
The pilot's failure to maintain aircraft control while on final approach.

NTSB Identification: **ERA13LA406**

14 CFR Part 91: General Aviation

Accident occurred Friday, September 06, 2013 in Beaver Falls, PA

Aircraft: ENGINEERING & RESEARCH 415-D, registration: N3940H

Injuries: 2 Uninjured.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed. NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report.

On September 6, 2013, about 1754 eastern daylight time, an ERCO Ercoupe 415-D, N3940H, was substantially damaged during a forced landing near Beaver County Airport (BVI), Beaver Falls, Pennsylvania. The airline transport pilot and passenger were uninjured. The airplane was registered to and operated by a private owner under the provisions of Title 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed and no flight plan was filed. The flight was originating at the time of the accident.

According to the pilot, he departed runway 10 at BVI for a return flight back to his home base. While climbing through 200 feet the engine began to run rough. The pilot attempted to turn back towards the airport and halfway through the 180-degree turn, the engine experienced a total loss of power. The pilot was unable to maintain altitude and executed a forced landing, resulting in substantial damage to both wings. The airplane was recovered for further examination at a later date.