

National Transportation Safety Board - Aircraft Accident/Incident Database

Accident Rpt# ERA17FA144	04/02/2017 1532 EDT	Regis# N4017L	Knoxville, TN	Apt: N/a
Acft Mk/Mdl BUCKEYE AVIATION DREAM		Acft SN 16469	Acft Dmg: SUBSTANTIAL	Rpt Status: Prelim Prob Caus: Pending
Eng Mk/Mdl ROTAX 582E		Acft TT 139	Fatal 1 Ser Inj 1	Flt Conducted Under: FAR 091
Opr Name: DECOURSEY STANLEY L		Opr dba:		Aircraft Fire: NONE
				AW Cert: LTSP

Events

1. Maneuvering-low-alt flying - Loss of lift

Narrative

On April 2, 2017, about 1532 eastern daylight time, a Buckeye Aviation Dream Machine, N4017L, collided with trees and terrain near Knoxville, Tennessee. The powered parachute was substantially damaged. The sport pilot was fatally injured, and one passenger was seriously injured. The powered parachute was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91. Day, visual meteorological conditions prevailed, and no flight plan was filed for the local, personal flight. The flight originated at a private, grass airstrip about 1444.

The passenger reported that the preflight portion of the flight was uneventful. The takeoff was accomplished on a grass airstrip and the flight departed to the west. About 45 minutes later, the pilot overflew the passenger's residence. Subsequently, the pilot maneuvered the powered parachute to the east, over rising terrain and trees. The aircraft did not seem to be climbing quickly enough to clear the trees and the landing gear struck about three trees before the aircraft dropped into the woods, striking tree limbs on the way down. The passenger egressed his seat; however, he was unable to walk and was met by first responders and transported to a local hospital. The passenger further stated that he was not aware of any problems with the engine prior to the accident.

All structure and components of the powered parachute were accounted for at the accident site. The powered parachute was found in the upright position in a forested area. There was no fire. The landing gear remained attached to the frame. The tubular frame was buckled or bent in several places. The parachute and lines were adjacent to the airframe, and were entangled with broken tree branches. Continuity from the parachute to the cockpit flight controls was established. Both occupants were wearing helmets at the time of the accident and an intercom system was installed.

The engine mounts were broken. The three-bladed composite propeller remained attached to the engine, and the outer sections of each blade were broken and splintered. Continuity from the cockpit controls to the engine was established. The 8-gallon fuel tank contained about 4 gallons of fuel.

The pilot, who was seated in the front cockpit seat, held a sport pilot certificate. He did not hold a Federal Aviation Administration medical certificate. According to his pilot logbook, he had logged about 90 hours of total flight experience, all in Buckeye powered parachutes.

The single-engine, tandem-cockpit powered parachute incorporated a fixed, tricycle landing gear. It was equipped with a Rotax 582-series, two-stroke, twin-cylinder reciprocating engine rated at 66 horsepower. Examination of maintenance records revealed that it was built in 2005 and accumulated about 139 hours since new.

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Accident Rpt# GAA16CA499	09/17/2016 1145 EDT	Regis# N528WM	Blairstown, NJ	Apt: Blairstown 1N7
Acft Mk/Mdl ALEX MICHAEL BANTUM/TERCEL USA	Acft SN 005	Acft Dmg: SUBSTANTIAL	Rpt Status: Factual	Prob Caus: Pending
Eng Mk/Mdl ROTAX 912UL	Acft TT 60	Fatal 0	Ser Inj 0	Flt Conducted Under: FAR 091
Opr Name: TINZ GYRO LLC	Opr dba:	Aircraft Fire: NONE	AW Cert: SPE	

Events

1. Takeoff - Loss of control on ground
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Narrative

According to the solo student pilot, the experimental amateur built gyrocopter was positioned for takeoff on the runway, and stopped with the brakes set.

He recalled that he engaged the pre-rotor, increased the main rotor speed to 180 revolutions per minute (rpm), then disengaged the pre-rotator, released the brake, and applied full throttle.

He reported that, "this is where I made my mistake. At this point I should have brought the control stick all the way back, but did not." He recalled that the gyrocopter was moving forward rapidly, but the rotor rpm decreased, and he then pulled the control stick aft. He reported that the rotor blades were flapping, the control stick became uncontrollable, and the gyrocopter exited the runway to the left.

The student pilot reduced the throttle to idle, and during the runway excursion the left main and the nose landing gear separated from the gyrocopter. The main rotor blade struck the ground, the blade grip sustained substantial damage, and the rotor head partially separated from the frame.

The student pilot reported that there were no mechanical malfunctions or anomalies with the airframe or the engine that would have prevented normal flight operation.

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Accident Rpt# GAA16CA502 08/24/2016 1500 EDT Regis# N481SL St. Augustine, FL Apt: Northeast Florida Rgnl SGJ
Acft Mk/Mdl ARION SKYS OPEN SPORT AVIATION Acft SN 121 Acft Dmg: SUBSTANTIAL Rpt Status: Factual Prob Caus: Pending
Eng Mk/Mdl JABIRU 3300 Acft TT 250 Fatal 0 Ser Inj 0 Flt Conducted Under: FAR 091
Opr Name: STEVEN ALAN WILLIAMSON Opr dba: Aircraft Fire: NONE
AW Cert: SPX

Summary

According to the pilot of the experimental light-sport airplane, following a personal flight, he made a straight-in approach to runway 13. He recalled that the tower reported the wind as 070ø at 12 knots. During the approach, the airplane encountered "convective turbulence," but he established a stabilized approach over the runway centerline. He remarked that, about 5 ft above the runway, the airplane encountered what he estimated to be a 20-knot or greater wind gust. He reported that the airplane ballooned and touched down on the nosewheel, the propeller struck the ground, and he used differential braking to stop the airplane on the runway. The nose landing gear separated from the airplane, and the engine mounts and the spar box sustained substantial damage.

The METAR at the accident airport indicated that, at the time of the accident, the wind was 040ø true at 12 knots. There were no METARs throughout the day at the accident airport that indicated wind gusts.

The pilot reported that there were no mechanical failures or anomalies with the airframe or engine that would have prevented normal operation.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's improper landing flare, which resulted in a hard landing.

Events

1. Landing-flare/touchdown - Other weather encounter
2. Landing-flare/touchdown - Nose over/nose down

Findings - Cause/Factor

1. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
2. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Landing flare-Not attained/maintained - C
3. Personnel issues-Task performance-Use of equip/info-Use of available resources-Pilot

Narrative

According to the pilot in the experimental light-sport airplane, following a personal flight he made a straight-in approach to runway 13. He recalled that the tower reported the wind as 070ø at 12 knots. During the approach the airplane encountered "convective turbulence," but he established a stabilized approach over the runway centerline. He remarked that about five feet above the runway the airplane encountered what he estimated to be a 20 knot or greater wind gust. He reported that the airplane ballooned, touched down on the nose wheel, the propeller struck the ground, and he used differential braking to stop the airplane on the runway. The nose landing gear separated from the airplane, and substantial damage was sustained to the engine mounts and the spar box.

The meteorological aerodrome report (METAR) at the accident airport, indicated that at the time of the accident the wind was 040ø true, at 12 knots. There were no METAR's throughout the day, at the accident airport, that indicated wind gusts.

The pilot reported that there were no mechanical failures or anomalies with the airframe or engine that would have prevented normal operation.

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Accident Rpt# CEN17LA149	04/03/2017	1934 CDT	Regis# N580TX	Garden Ridge, TX	Apt: Kitty Hawk Flying Field TS67
Acft Mk/Mdl HUGHES WILLIAM J AVENTURA UL-UL	Acft SN UL0016			Acft Dmg: SUBSTANTIAL	Rpt Status: Prelim Prob Caus: Pending
Eng Mk/Mdl HIRTH 3202				Fatal 0 Ser Inj 1	Flt Conducted Under: FAR 091
Opr Name: BEN SCOTT MOBERLEY	Opr dba:				Aircraft Fire: NONE
					AW Cert: SPE

Events

1. Approach-VFR pattern crosswind - Loss of engine power (total)
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Narrative

On April 3, 2017, about 1934 central daylight time, an experimental amateur-built Hughes model Aventura UL amphibian airplane, N580TX, sustained substantial damage during a forced landing near Garden Ridge, Texas. The airline transport pilot sustained serious injuries. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91. Day visual meteorological conditions prevailed at the time of the accident. The local flight departed Kitty Hawk Flying Field (TS67), located near Garden Ridge, Texas, about 1915.

The pilot reported that the purpose of the flight was to simulate water landings by performing low passes over a grassy area that was situated along the western edge of runway 14/32 (700 feet by 200 feet). The pilot reported that he had completed several low passes before the accident. The pilot stated that after completing an uneventful low pass, while on the right crosswind leg, the airplane experienced a total loss of engine power and the propeller stopped rotating. The pilot subsequently completed a forced landing to a nearby clearing; however, he did not recall the impact sequence.

A Federal Aviation Administration (FAA) inspector performed the postaccident examination of the airplane at the accident site. The airplane landing gear were positioned for a water landing. The emergency ballistic parachute recovery system was armed but had not deployed. The three fuel tanks (1 main, 2 auxiliary) contained automotive gasoline premixed with engine oil. The fuel filter assembly and both carburetors contained fuel. Engine crankshaft continuity was confirmed by rotating the propeller. The spark plugs exhibited features consistent with normal engine operation. The propeller remained attached to the crankshaft and appeared undamaged. One of the three propeller blades had punctured the fabric-covered aft fuselage during the impact sequence. The propeller was removed from the engine to facilitate an operational engine test run. The engine, a 55-horsepower Hirth model 3202, serial number 901269, started and ran at various engine speeds without any hesitation or anomalies. The postaccident examination and operational test run revealed no evidence of a mechanical malfunction or failure that would have precluded normal engine operation.

At 1958, the automated surface observing system (ASOS) located at Randolph Air Force Base (RND), about 6 miles south of the accident site, reported: wind 200 degrees at 5 knots, clear sky, 10 mile surface visibility, temperature 26 degrees Celsius, dew point 8 degrees Celsius, and an altimeter setting of 29.69 inches of mercury.

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Accident Rpt# CEN15FA032	10/28/2014 1433 CDT	Regis# N70PM	Boerne, TX	Apt: John Henry Key 7TA8
Acft Mk/Mdl LANGSTON, FREDERICK L RV 4		Acft SN 2748	Acft Dmg: DESTROYED	Rpt Status: Factual Prob Caus: Pending
Eng Mk/Mdl LYCOMING O-320-D2J		Acft TT 50	Fatal 1 Ser Inj 0	Flt Conducted Under: FAR 091
Opr Name: FREDERICK L LANGSTON		Opr dba:		Aircraft Fire: GRD
				AW Cert: SPE

Events

1. Maneuvering - Loss of engine power (total)
2. Emergency descent - Loss of control in flight

Narrative

HISTORY OF FLIGHT

On October 28, 2014, about 1433 central daylight time, an experimental, amateur-built RV-4, N70PM, was destroyed during an off-airport forced landing near John Henry Key Airport (7TA8), Boerne, Texas. The pilot, who was the sole occupant, was fatally injured. The airplane was registered to and operated by the pilot. Day visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed for the 14 Code of Federal Regulations Part 91 local, personal flight. The airplane departed from Boerne Stage Field Airport (5C1), Boerne, Texas at an unknown time.

Several witnesses reported that the airplane was maneuvering between 500 and 800 ft above ground level when the engine sounds suddenly stopped. The airplane then entered a steep bank, began flying toward 7TA8, descended, and disappeared from their view. The airplane impacted trees and terrain and came to rest upright about 100 feet from the edge of runway 22 at 7TA8. There was an immediate postimpact fire that consumed much of the airplane. The pilot initially survived the accident, but succumbed to his injuries the following day.

PERSONNEL INFORMATION

The pilot, age 70, held a Federal Aviation Administration (FAA) private pilot certificate with ratings for airplane single-engine land and instrument airplane. His most recent third-class FAA medical certificate was issued on September 25, 2014, with the restriction that he must have glasses available for near vision.

Complete copies of the pilot's personal flight records were not available for examination; however, review of the pilot's most recent logbook indicated that he had 1,687 hours of total flight experience. The pilot's flight experience in the accident airplane make and model was about 50 hours, with 10.6 of those flight hours accumulated within the previous three months. The pilot's most recent flight review was completed on January 16, 2013.

AIRCRAFT INFORMATION

The airplane was issued an FAA special airworthiness certificate on March 2, 2013. The low-wing, fixed conventional landing gear, single-engine airplane was powered by a 155-horsepower Lycoming O-320-D2J carbureted engine, which drove a Performance Propellers, Inc. model 70/70, 2-bladed, fixed-pitch, wood propeller. The airplane was of conventional aluminum construction with a cantilever low-wing, conventional tail surfaces, and a 2-seat tandem cockpit, which was accessed through a hinged canopy. A maintenance logbook entry showed the airplane had an empty weight of 939 pounds and a maximum gross weight of 1,500 pounds. The airplane's most recent condition inspection was completed on May 12, 2014, at an aircraft total time of 23.7 hours.

Review of the aircraft logbook, engine logbook, pilot logbook entries and other records indicated that, at the time of the accident, the airplane had accumulated a total time of 50.1 hours, and the engine had accumulated a total time of 1,825.1 hours.

METEOROLOGICAL INFORMATION

At 1435, the automated weather observation system at 5C1, about 8 miles south of the accident site, reported wind from 200 degrees at 3 knots, visibility 10 miles, scattered clouds at 2,800 ft, temperature 27°C, dew point 17°C, with an altimeter setting of 30.03 inches of mercury. Review of a carburetor icing probability chart showed the potential for icing at cruise power and a potential for serious icing at glide power.

AIRPORT INFORMATION

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7TA8 was a non-towered airport with a field elevation of 1,400 ft msl. The only runway was 4/22, which was a turf runway 2,300 ft long by 100 ft wide. The airport was surrounded by rugged hilly terrain, with much of the area thickly wooded.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted densely-wooded, hilly terrain on a south-southwesterly heading at an estimated elevation about 1,400 ft msl. The impact location was about 200 ft northwest of the runway 22 at 7TA8.

The first impact was to upper branches of cedar trees at about 8 ft above ground level. Both impact-separated propeller blades were found nearby. Ground scars, wreckage debris, and numerous broken branches littered the area along a wreckage distribution path of about 145ø.

All flight control surfaces and all major components of the airplane were accounted for at the accident site. The main wreckage came to rest upright about 89 ft from the initial tree impact. The tip of the left wing was oriented about 190ø, and the partially-separated upright fuselage was oriented about 300ø. The engine and engine mount remained connected to the forward firewall. The engine and forward firewall were adjacent to the forward fuselage, which was almost completely separated from the fuselage by fire damage. The hub of the wood propeller remained attached to the propeller flange on the engine crankshaft, but was partially consumed by fire.

The empennage and tail surfaces were completely separated from the airplane, and came to rest partially inverted about 10 ft northwest of the engine. The vertical stabilizer had leading edge impact damage at the root. No significant impact damage was observed to the horizontal stabilizer. The elevator, rudder, and rudder trim tab remained attached. The tail wheel remained attached.

The impact-damaged right wing was mostly consumed by fire, and the right aileron remained partially attached.

The leading edge of the outboard left wing showed impact crushing damage consistent with a 70ønose-down impact angle. The left aileron exhibited impact crushing damage to the inboard trailing edge consistent with impact with a tree. The outer portion of the left wing was not consumed by fire. During wreckage removal, about 2 gallons of clean blue liquid consistent with 100LL aviation fuel (AVGAS) drained from the wing into a clean bucket. No debris or water contamination was observed. The fuel caps on both wings were secure.

The left flap was observed in the full-down position. The position of the right flap could not be determined because of fire and impact damage.

The flight control linkages and engine controls were examined. Severe impact and thermal damage prevented a confirmation of preimpact control continuity; however, all of the control linkage separations examined appeared consistent with impact damage.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Bexar County Medical Examiner's Office in San Antonio, Texas. The conclusion was that the pilot died as a result of conflagration injuries sustained in the airplane crash.

The FAA Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, performed forensic toxicology on specimens from the pilot. Lorazepam, midazolam, morphine, norketamine, and propofol was detected. These medications were traced to the pilot's post-accident hospital care. Testing also detected cetirizine, an over-the-counter antihistamine, in liver and blood; however, the amount of cetirizine detected was too low to quantify.

TESTS AND RESEARCH

The wreckage was moved to another location for further engine examination. The engine and accessories sustained impact, fire, and heat damage. The exhaust system and induction system displayed significant heat and impact damage. The carburetor had separated on impact and also displayed thermal damage. All fluid-carrying lines in the engine compartment were fire-damaged. The oil system was impact- and fire-damaged. Severe thermal damage to the engine prevented a useful examination of the magnetos, fuel pump, carburetor, or any other components. On first attempts, the engine would not rotate. After engine accessories were removed, the engine was partially disassembled to facilitate another attempt to rotate the engine. The crankshaft and valve train then rotated freely with no interference.

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Accident Rpt# ERA16CA314	09/09/2016 1900 EDT	Regis# N396DF	Cleveland, GA	Apt: N/a
Acft Mk/Mdl QUICKSILVER MANUFACTURING INC	Acft SN 0104	Acft Dmg: SUBSTANTIAL	Fatal 0	Rpt Status: Factual Prob Caus: Pending
Eng Mk/Mdl ROTAX 582		Ser Inj 0	Flt Conducted Under: FAR 091	
Opr Name: VAN GINKLE HENRY	Opr dba:		Aircraft Fire: NONE	
			AW Cert: SPE	

Events

1. Maneuvering-low-alt flying - Loss of control in flight

Narrative

The pilot of the experimental amateur-built airplane reported that he was demonstrating turns for the passenger while flying at a low altitude, when he lost control of the airplane and "stalled." The airplane collided with trees and sustained substantial damage to the fuselage, wings and the empennage. The pilot further reported that there were no preimpact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

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Accident Rpt# ERA16CA278	07/31/2016 700 EDT	Regis# N4367X	Valkaria, FL	Apt: Valkaria X59
Acft Mk/Mdl TRICK TRIKES STORM-NO SERIES	Acft SN TTS 020	Acft Dmg: SUBSTANTIAL	Fatal 0	Rpt Status: Factual Prob Caus: Pending
Eng Mk/Mdl ROTAX 582		Ser Inj 0	Fit Conducted Under: FAR 091	
Opr Name: BOWERS MICHAEL S	Opr dba:		Aircraft Fire: NONE	
			AW Cert: SPX	

Summary

The pilot of the weight-shift-control aircraft reported that, during takeoff, he pitched upward excessively early for the aircraft's weight. Several feet above the ground, the aircraft descended and bounced off the runway. The pilot tried to regain control and take off again, but the aircraft came back down and bounced on the runway. The left main landing gear collapsed, and the aircraft slid down the runway about 75 ft before coming to rest. The pilot reported there were no preimpact mechanical malfunctions or anomalies with the aircraft that would have precluded normal operation. Examination of the wreckage revealed that the fuselage was substantially damaged.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's premature rotation during takeoff, which resulted in an aerodynamic stall and a hard landing.

Events

1. Takeoff - Aerodynamic stall/spin
2. Takeoff - Abnormal runway contact

Findings - Cause/Factor

1. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
2. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C
3. Personnel issues-Action/decision-Action-Incorrect action selection-Pilot - C

Narrative

The pilot of the weight-shift aircraft reported that during takeoff he pitched upward excessively early for the aircraft's weight. Several feet above the ground, the aircraft descended and bounced off the runway. The pilot tried to regain control and take off again, but the aircraft came back down and bounced on the runway. The left main landing gear collapsed and the aircraft slid down the runway approximately 75 feet before coming to rest. The pilot reported there were no preimpact mechanical malfunctions or anomalies that would have precluded normal operation of the aircraft. Examination of the wreckage revealed that the fuselage was substantially damaged.

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Accident Rpt# ERA16LA086	01/09/2016 1600 EST	Regis# N72MT	Minneola, FL	Apt: Florida Flying Gators 3FD4
Acft Mk/Mdl WAYLAND JOHN H AVID MARK		Acft SN 1431D	Acft Dmg: SUBSTANTIAL	Rpt Status: Factual Prob Caus: Pending
Eng Mk/Mdl ROTAX 582		Acft TT 350	Fatal 0 Ser Inj 1	Flt Conducted Under: FAR 091
Opr Name: ROBERT E SALZMANN		Opr dba:		Aircraft Fire: NONE
				AW Cert: SPE

Events

1. Initial climb - Loss of engine power (total)
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Narrative

On January 9, 2016, about 1600 eastern standard time, an experimental amateur-built Avid Mark IV, N72MT, was substantially damaged following a forced landing after takeoff from Florida Flying Gators Ultralight Flightpark (3FD4), Minneola, Florida. The sport pilot was seriously injured. The airplane was privately owned and operated under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Day, visual meteorological conditions prevailed, and no flight plan was filed. The local flight was originating at the time of the accident.

The pilot reported that, after takeoff, he turned onto the crosswind leg of the traffic pattern. He performed a steep turn after takeoff to avoid horses off the end of the runway. He then noticed the smell of "burning wires" and "may have seen a wisp of smoke." At 300 feet above the ground, and while still climbing, the engine "sputtered, then died." He made a radio call that he was returning to the runway. The left wing then stalled and the airplane rolled inverted and entered a downward spiral. The airplane collided with two trees during the descent before colliding with the terrain. The airplane came to rest in a grassy area, inverted.

Inspectors with the Federal Aviation Administration (FAA) responded to the accident site and examined the wreckage. They observed structural damage to fuselage, empennage, and both wings. An FAA airworthiness inspector examined the engine and found no evidence of a mechanical failure or malfunction. There were no arcing or burn signatures on the engine's electrical wiring or connectors. A postaccident test run of the engine could not be performed due to impact damage.

The pilot received his sport pilot certificate on September 2, 2015, after taking a two-week training course. He reported 120 hours of total flight time, including 100 hours as pilot-in-command. He also reported 65 hours in the accident airplane make and model, all as pilot-in-command. He stated that, after the accident, he took additional lessons with his original flight instructor to practice emergency procedures, stalls, and stall recovery.