Accident Rpt# GAA17CA466 08/02/2017 1325 CDT	**Regis# N128LA**	**Uvalde, TX**	**Apt: Garner Field UVA**
Acft Mk/Mdl AB SPORTINE AVIACIJA LAK 17-A	**Acft SN 151**	**Acft Dmg: DESTROYED**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl SOLO 2350	**Acft TT 430**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: MILLER, KEITH R.	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

The glider pilot reported that he was competing in a national soaring championship competition and that his flight was the last of several glider tows for the day. He added that the launch procedure required that every glider have a tow rope laid out next to the glider, and then a ground crewmember would hook the Schweizer tow ring first to the Schweizer tow latch on the tow airplane and then attach the Tost tow ring to his Tost-equipped glider. He further added that his glider was loaded with water ballast so that the glider could operate at maximum gross weight for competition purposes.

The glider pilot reported that the takeoff roll and liftoff were normal, but about 100 to 150 ft above ground level (agl), "the tow rope spontaneously released from the tow plane." He added that he immediately pulled his rope release handle and pitched forward to land in a grass overrun area past the departure runway, but the glider "had too much airspeed and too little area to land." Subsequently, he pulled up to avoid a "solid line of trees," entered a "gentle" right turn, and impacted a "favorable brushy area."

The glider was destroyed during the impact sequence.

The glider pilot reported that there were no preaccident mechanical malfunctions or failures with the glider that would have precluded normal operation.

The tow airplane pilot reported that this was his seventh and last tow of the day. He added that the tow rope was attached to his airplane by a ground crewmember, and then he was given instructions to "take up slack and launch as usual." He further added that the takeoff and climb out of ground effect were normal, but about 300 ft agl, the tow airplane was climbing too fast, and he radioed, "was that a rope break?" The tow airplane pilot did not receive a response, so he continued his climb. Shortly thereafter, he observed that the glider was no longer on tow and then witnessed the impact. The tow airplane pilot reported that he subsequently completed a normal landing, which included a low pass and rope release. When he moved the rope release handle to drop the rope, he felt a "lighter than normal release pressure on the tow handle."

The ground crewmember who attached the tow rope to the tow airplane and glider reported in a written statement that he "made sure the tow rope ring was placed in the proper location at the back of the mechanism." He added that he "placed the latch over the top beam in the vertical position locking the ring in place." He further added that he "made sure there was no tension on the release cable" and used his weight "in both a straight back and back and up direction assuring the tow ring was securely locked in place."

The glider contest manager reported that the tow airplane involved in the accident was the only airplane with a Schweizer tow hitch. The other tow airplanes being used were equipped with Tost tow hitches. The manager reported that for future contests, only tow airplanes equipped with Tost tow hitches will be used.

A Federal Aviation Administration (FAA) aviation safety inspector reported that the glider tow rope and tow rope rings were found intact just beyond the end of the departure runway, and no anomalies were observed. He added that he performed a functional check of the tow hitches on the tow airplane and glider, and no anomalies were observed.

FAA Advisory Circular, "Acceptable Methods, Techniques, and Practices - Aircraft Alterations," AC No. 43.13-2B, stated, in part: "The Schweizer is a simple over center L-hook type with a rubber tension block to preload the release lever."

The FAA Glider Flying Handbook stated, in part:

Schweizer Tow Hook

Prior to use, the tow hook and release arm should be inspected for damage, cracks, deformation, and freedom of movement on the pivot bolt. Visually check the tow hook and ensure that the hook properly engages the release arm. Inspect the rubber spacer for general condition and check the condition of the release cable. Inside the cockpit, check to see that the manual release lever is not rubbing against the aircraft seat or any other obstructions, and check the security of the release handle assembly and the cable attachment.

It is likely that the ground crewmember did not fully engage the tow hook release arm during preflight, and that, during the initial climb, the tow ring prematurely released from the tow airplane.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The ground crewmember's failure to fully engage the tow hook release arm during preflight, which resulted in the premature release of the glider at insufficient altitude to complete a safe landing.

Events

1. Initial climb - Glider tow event
2. Initial climb - Collision with terr/obj (non-CFIT)

Findings - Cause/Factor

1. Aircraft-Aircraft structures-Fuselage-Aerial tow equipment section-Incorrect use/operation - C
2. Personnel issues-Task performance-Use of equip/info-Use of equip/system-Ground crew - C

Narrative

The glider pilot reported that he was competing in a national soaring championship competition and his flight was the last of several glider tows for the day. He added that, the launch procedure required that every glider have a tow rope laid out next to the glider, and then a ground crewmember would hook the Schweizer tow ring first to the Schweizer tow latch on the tow airplane, and then attach the Tost tow ring to his Tost equipped glider. He further added that, his glider was loaded with water ballast so that the glider could operate at maximum gross weight for competition purposes.

The glider pilot reported that the takeoff roll and liftoff were normal, but about 100 to 150 ft above ground, "the tow rope spontaneously released from the tow plane." He added that he immediately pulled his rope release handle and pitched forward to land in a grass overrun area past the departure runway, but the glider "had too much airspeed and too little area to land." Subsequently, he pulled up to avoid a "solid line of trees," entered a "gentle" right turn, and impacted a "favorable brushy area."

The glider was destroyed during the impact sequence.

The glider pilot reported that there were no preaccident mechanical malfunctions or failures with the glider that would have precluded normal operation.

A Federal Aviation Administration (FAA) aviation safety inspector reported that the glider tow rope and tow rope rings were found intact just beyond the end of the departure runway and no anomalies were observed. He added that he performed a functional check of the tow hitches on the tow airplane and glider and no anomalies were observed.

The tow airplane pilot reported that this was his seventh tow, and last tow of the day. He added that the tow rope was attached to his airplane by a ground crewmember, and then he was given instructions to "take up slack and launch as usual." He further added that the takeoff and climb out of ground effect were normal, but about 300 ft above ground, the tow airplane was climbing too fast and he radioed, "was that a rope break?" The tow airplane pilot did not receive a response, so he continued his climb; shortly thereafter, he observed the glider was no longer on tow and witnessed the impact. Subsequently, the tow airplane pilot reported that he completed a normal landing, which included a low pass and rope release. When he moved the rope release handle to drop the rope, he felt a "lighter than normal release pressure on the tow handle."

The ground crewmember, who attached the tow rope to the tow airplane and glider, reported in a written statement that he, "made sure the tow rope ring was placed in the proper location at the back of the mechanism." He added that he, "placed the latch over the top beam in the vertical position locking the ring in place." He further added that he "made sure there was no tension on the release cable" and used his weight "in both a straight back and back and up direction assuring the tow ring was securely locked in place."

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The FAA Glider Flying Handbook stated in part:

Schweizer Tow Hook

Prior to use, the tow hook and release arm should be inspected for damage, cracks, deformation, and freedom of movement on the pivot bolt. Visually check the tow hook and ensure that the hook properly engages the release arm. Inspect the rubber spacer for general condition and check the condition of the release cable. Inside the cockpit, check to see that the manual release lever is not rubbing against the aircraft seat or any other obstructions, and check the security of the release handle assembly and the cable attachment.

Accident Rpt# GAA17CA288 05/15/2017 1300 PDT	**Regis# N3046E**	**Lebanon, OR**	**Apt: Lebanon State S30**	
Acft Mk/Mdl AERONCA 7AC-NO SERIES	**Acft SN 7AC-6593**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
		Fatal 0 Ser Inj 0	**Flt Conducted Under: FAR 091**	
Opr Name: LARRY D. KNOX	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: LTSP	

Summary

The pilot of the tailwheel-equipped airplane reported that, during the landing roll in a crosswind, the airplane "started weathervaning.with some sideways sliding." He added that he decided to go around, but about 2 ft above the ground, "knowing I [he] couldn't climb fast enough to clear the top of the.[hangars] on the east side of the runway, I [he] pulled power back." The airplane touched down again, exited the left side of the runway, crossed a ditch, and came to rest on the taxiway.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported the wind as variable, gusting to 15 knots. The pilot landed on runway 34.

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Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain directional control during the landing roll in gusting wind conditions.

Events

1. Landing - Loss of control on ground
2. Landing-aborted after touchdown - Other weather encounter
3. Landing - Runway excursion

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
3. Environmental issues-Conditions/weather/phenomena-Wind-Gusts-Effect on operation

Narrative

The pilot of the tailwheel-equipped airplane reported that, during the landing roll in a crosswind, the airplane "started weathervaneing me[him] with some sideways sliding". He added that he decided to go-ground, but about two feet above the ground, "knowing I [he] couldn't climb fast enough to clear the top of the hangers on the east side of the runway, I [he] pulled power back". The airplane touched down again, exited the left side of the runway crossed a ditch, and came to rest on the taxi way.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported the wind as wind as variable at 10-15 knots and wind gusts at 15 knots. The pilot landed on runway 34.

Accident Rpt# GAA17CA553 09/24/2017 1206 EDT	**Regis# N7675K**	**Bridgeton, NJ**	**Apt: Woodcrest Farms Airstrip JY17**
Acft Mk/Mdl AEROTRIKE SAFARI-NO SERIES	**Acft SN 270S**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl ROTAX 503	**Acft TT 602**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: CHARLES T. MCDOWELL	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: LTSP

Summary

The pilot of the weight-shift-control aircraft reported that, during the base leg turn, a flock of small birds entered the flightpath, and he banked to avoid them. He added that, a moment later, a larger bird struck the support cable on the right wing. No control issues were evident; however, he decided to land in a cleared field to check the structure for damage. During the landing, the nosewheel hit the ground hard, which resulted in substantial damage to the fuselage and wing. The pilot reported that there were no preaccident mechanical failures or malfunctions with the weight-shift-control aircraft that would have precluded 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 while conducting an off-airport precautionary landing after a bird strike.

Events

1. Enroute - Birdstrike
2. Landing - Off-field or emergency landing
3. Landing - Hard landing
4. Landing - Collision with terr/obj (non-CFIT)

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Landing flare-Not attained/maintained - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
3. Environmental issues-Physical environment-Object/animal/substance-Animal(s)/bird(s)-Effect on operation

Narrative

The pilot of the weight-shift-control aircraft reported that, during the base leg turn, a flock of small birds entered the flight path and he banked to avoid them. He added that, a moment later a larger bird struck the support cable on the right wing. No control issues were evident, however, he decided to land in a cleared field to check the structure for damage. Subsequently, during the landing in the field, the nosewheel hit the ground hard, which resulted in substantial damage to the fuselage and wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the weight-shift-control aircraft that would have precluded normal operation.

Accident Rpt# GAA17CA561	**09/27/2017 1100 CDT**	**Regis# N200XW**	**Bessemer, AL**	**Apt: Bessemer EKY**
Acft Mk/Mdl AMERICAN LEGEND AIRCRAFT CO		**Acft SN AL-1208**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl TITAN CC-340		**Acft TT 128**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: C & D AVIATION LLC		**Opr dba:**		**Aircraft Fire: NONE**
				AW Cert: LTSP

Summary

The flight instructor, who was providing instruction to the student pilot in the tailwheel-equipped airplane, reported that, during the landing roll, the student failed to maintain directional control, and the airplane swerved right and then left. He added that, during the attempted remediation of the second swerve, the tail started to rise with an "associated tire squeal." Subsequently, the propeller struck the ground, and the airplane nosed over.

The airplane sustained substantial damage to the fuselage.

The flight instructor reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The flight instructor also reported that he believed that "the student inadvertently got on the brakes."

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The student pilot's incorrect application of the brakes and subsequent failure to maintain directional control during the landing roll. Contributing to the accident was the flight instructor's delayed remedial action.

Events

1. Landing - Loss of control on ground
2. Landing - Nose over/nose down

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Student/instructed pilot - C
3. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Surface speed/braking-Incorrect use/operation - C
4. Personnel issues-Action/decision-Action-Delayed action-Instructor/check pilot - F

Narrative

The flight instructor, who was providing instruction in the tailwheel-equipped airplane reported that, during the landing roll, the student pilot failed to maintain directional control and the airplane swerved right and then left. He added that, during the attempted remediation of the second swerve, the tail started to rise with an "associated tire squeal." Subsequently, the propeller struck the ground and the airplane nosed over.

The airplane sustained substantial damage to the fuselage.

The flight instructor reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The flight instructor also reported that, it was his belief that "the student inadvertently got on the brakes."

Accident Rpt# ERA17FA144	**04/02/2017 1530 EDT**	**Regis# N4017L**	**Knoxville, TN**	**Apt: N/a**	
Acft Mk/Mdl BUCKEYE AVIATION DREAM		**Acft SN 16469**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**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**	

Events

1. Maneuvering-low-alt flying - Low altitude operation/event

Narrative

HISTORY OF FLIGHT

On April 2, 2017, about 1530 eastern daylight time, a Buckeye Aviation Dream Machine powered parachute, N4017L, collided with trees and terrain at Knoxville, Tennessee. The sport pilot was fatally injured, and the passenger was seriously injured. The powered parachute was substantially damaged. 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 1415.

The passenger reported that the preflight portion of the flight was uneventful. The takeoff was accomplished on the grass airstrip, and the flight departed to the west. About 1an hour later, the pilot turned to the east toward the passenger's home. After overflying the passenger's home, 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 did not notice any significant change in engine speed before the collision. 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's wife was outside her home at the time of the accident. She noticed that the aircraft was flying "pretty low," and she stated that "it looked like they were flying barely high enough to go over the woods behind my house." She heard the aircraft striking tree limbs, followed by the sound of a "horrific" crash. She called 911 after asking a neighbor, who was an emergency room physician, to find the crash site.

Several local residents observed the aircraft in flight and noted that it was flying at a low altitude. One of these witnesses reported that the aircraft was "barely over the tree tops" and another reported that it appeared to be about 20 ft above the trees.

PERSONNEL INFORMATION

The pilot, who was seated in the front cockpit seat, held a sport pilot certificate. He did not hold nor was he required to hold a Federal Aviation Administration (FAA) medical certificate. According to his pilot logbook, he had logged about 90 hours of total flight experience, all in Buckeye powered parachutes.

According to FAA records, on September 24, 2016, the pilot violated a temporary flight restriction (TFR) while flying the powered parachute near Neyland Stadium in Knoxville. The TFR was established for a University of Tennessee football game. The aircraft was observed inside the TFR, at less than 1,000 ft above the ground, heading north to south. The pilot was not communicating with air traffic control and did not have an operating transponder.

AIRCRAFT INFORMATION

The single-engine, tandem-cockpit powered parachute incorporated a fixed, tricycle landing gear. It was equipped with a Rotax 582E, two-stroke, two-cylinder reciprocating engine rated at 66 horsepower. Examination of maintenance records revealed that it was manufactured in 2005 and had accumulated about 139 hours since new. A condition inspection was completed on November 1, 2016.

METEOROLOGICAL INFORMATION

McGhee Tyson Airport (TYS), Knoxville, Tennessee, was located about 9 miles east-southeast of the accident site. The TYS weather at 1553 included wind calm, visibility 10 statute miles, sky clear, temperature 24øC, dew point 6øC, and altimeter setting 30.01 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

The wreckage of the powered parachute was found in a wooded area about 880 ft northeast of the passenger's residence. The elevation at the accident site was about 100 ft higher than the elevation at the passenger's residence. All structure and components of the powered parachute were accounted for at the accident site. The powered parachute was found in the upright position. There was no fire.

The tubular metal cart was buckled or bent in several places. The fixed landing gear remained attached to the cart. The parachute wing and lines were adjacent to the cart 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-blade composite propeller remained attached to the engine, and the outer section of each blade was broken and splintered. Continuity from the cockpit controls to the engine was established. The 8-gallon fuel tank contained about 4 gallons of fuel, and no leaks were observed.

The spark plugs were removed and examined. They appeared normal in color and wear when compared to a Champion spark plug inspection chart. The ignition leads were undamaged. The exhaust manifold did not appear to completely cover the cylinder exhaust ports; however, no evidence of exhaust leakage was found. The propeller was turned by hand, and no internal restrictions were noted. Compression and suction were observed on both cylinders.

The propeller blades were removed to prepare for a test run of the engine. The throttle was found in the full forward position. It was retarded to idle for the test run. The engine was equipped with a manual pull starter. The engine started on the second pull and ran smoothly and without hesitation. No leaks were observed at the exhaust manifold. The engine was run at no higher than idle power due to the impact damage to the cart and the lack of an intact propeller. The engine run was discontinued by the National Transportation Safety Board (NTSB) investigator-in-charge after about 2 minutes. Postaccident examination of the wreckage did not reveal evidence of a preimpact mechanical malfunction or anomaly.

MEDICAL AND PATHOLOGICAL INFORMATION

The Knox County Regional Forensic Center, Knoxville, Tennessee, performed an autopsy of the pilot. The cause of death was multiple blunt force injuries, and the manner of death was accident.

Toxicological testing of the pilot was performed by a private laboratory designated by the medical examiner. Testing was negative for ethanol and major drugs of abuse, and 2% carbon monoxide was detected in blood.

Accident Rpt# GAA17CA420 07/17/2017 2000 CDT	**Regis# N445X**	**Lone Rock, WI**	**Apt: Tri-county Rgnl LNR**
Acft Mk/Mdl COSTRUZIONI AERONAUTICHE TECNA	**Acft SN 119**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl ROTAX 914	**Acft TT 66**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: PORTER, MICHAEL	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: LTSP

Summary

The solo student pilot reported that he was practicing a stop-and-go landing on the asphalt runway. He recalled that, while on the downwind leg of the approach pattern, he was headed into a bright sunset. On short final, "a medium sized, reddish brown animal ran across the runway near the numbers from right to left." The student overflew the animal, and the airplane bounced upon touchdown. He applied full power to abort the landing, but the airplane veered left and exited the left side of the runway. About 40 ft from the runway, the airplane encountered soft soil and nosed over.

During a conversation with the National Transportation Safety Board investigator-in-charge, the student pilot stated that he may have become fixated on the animal during the approach. He could not recall whether he manipulated the yoke to avoid the animal.

The airplane sustained substantial damage to the left-wing strut.

The student reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The student pilot's improper landing flare, which resulted in a bounced landing and subsequent loss of directional control and runway excursion during the aborted landing. Contributing to the improper landing flare was the student's distraction by a deer running across the runway.

Events

1. Landing-landing roll - Loss of control on ground
2. Landing-landing roll - Runway excursion
3. Landing-landing roll - Nose over/nose down

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Landing flare-Not attained/maintained - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Student/instructed pilot - C
3. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C
4. Personnel issues-Psychological-Attention/monitoring-(general)-Student/instructed pilot - F
5. Environmental issues-Physical environment-Object/animal/substance-Animal(s)/bird(s)-Effect on operation
6. Environmental issues-Physical environment-Runway/land/takeoff/taxi surface-Soft surface-Contributed to outcome

Narrative

The solo student pilot reported that he was practicing a stop and go landing on the asphalt runway.

He recalled that the downwind leg of the approach pattern, headed into a bright sunset. On short final, "a medium sized, reddish brown animal ran across the runway near the numbers from right to left." The pilot over flew the animal and the airplane bounced upon touchdown. He applied full power to abort the landing, but the airplane veered left and exited the left side of the runway. About 40-feet from the runway, the airplane encountered soft soil and nosed over.

During a conversation with the National Transportation Safety Board Investigator-in-charge, the student pilot stated that he may have become fixated on the animal during the approach. He could not recall whether he manipulated the yoke to avoid the animal.

The airplane sustained substantial damage to the left-wing strut.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Accident Rpt# GAA18CA077	**12/09/2017 1340 PST**	**Regis# N227US**	**Sacramento, CA**	**Apt: Sacramento Executive SAC**
Acft Mk/Mdl CZECH SPORT AIRCRAFT A.S. SPORT		**Acft SN P1102027**	**Acft Dmg: DESTROYED**	**Rpt Status: Prelim** **Prob Caus: Pending**
			Fatal 0 **Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: GREGORY DWYER		**Opr dba:**		**Aircraft Fire: GRD**

an airsafety.com e-product
Prepared From Official Records of the NTSB By:
Air Data Research
9865 Tower View, Helotes, Texas 78023
210-695-2204 - info@airsafety.com - www.airsafety.com

Accident Rpt# CEN16FA290 07/28/2016 821 CDT	**Regis# N527TS**	**Fond Du Lac, WI**	**Apt: Fond Du Lac County FLD**	
Acft Mk/Mdl FLIGHT DESIGN GMBH CTLS	**Acft SN 08-02-04**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl ROTAX 912ULS	**Acft TT 960**	**Fatal 1 Ser Inj 1**	**Flt Conducted Under: FAR 091**	
Opr Name: SPENCER DAVID D	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: LTSP	

Events

1. Prior to flight - Fuel contamination

Narrative

HISTORY OF FLIGHT

On July 28, 2016, about 0821 central daylight time, a Flight Design GMBH model CTLS airplane, N527TS, impacted terrain following a loss of engine power after takeoff. The pilot was fatally injured and the passenger was seriously injured. The airplane was substantially damaged. The airplane was registered to, and operated by a private individual as a 14 Code of Federal Regulations Part 91 personal flight. Visual meteorological conditions prevailed at the accident site about the time of the accident, and the flight was operated without a flight plan. The flight originated from Fond du Lac County Airport (FLD), Fond du Lac, Wisconsin at the time of the accident and its destination was not determined.

Witnesses reported seeing the airplane take off to the north and turn left, towards the airport, while still over airport property. They added that the engine sounded abnormal. The airplane did not climb above treetop height before it rolled into a steep left turn and descended into terrain. An additional witness did not see the accident occur, but heard the pilot on the radio state he was making an immediate return to the airport.

PERSONEL INFORMATION

Pilot

No pilot logbooks were located during the investigation and the pilot's time in the make and model of the accident airplane could not be determined. The pilot reported 110 total hours on his last application for medical certificate dated April 15, 2002. The pilot did not hold a current FAA medical certificate; however, he was operating the airplane under the Sport Pilot Medical rule.

Pilot-Rated Passenger

No pilot logbooks belonging to the pilot-rated passenger were located during the investigation. The pilot-rated passenger reported 2,136 total hours on his last application for medical certificate dated July 15, 1996.

AIRCRAFT DESCRIPTION

A review of the airplane's maintenance records revealed a 200 hr Carburetor Service Requirement per SI-912-021, Inspections of Carburetors, was complied with on December 9, 2014. According to the records the Hobbs meter read 829.5 hrs at the time of the inspection.

WRECKAGE DESCRIPTION

During impact, both wings separated from the fuselage and the engine intruded into the cockpit area. Flight control continuity to the elevator and rudder was verified continuous from the cockpit to each control surface. Flight control continuity was interrupted to both wings, but all observed breaks in continuity were consistent with overload failure during impact. A slight fuel smell was present at the accident scene. Both the left and right fuel tanks were compromised. Several ounces of liquid consistent with aviation fuel were recovered from the right-wing fuel tank, which appeared light blue in color and free of contaminants. The three composite propeller blades were broken and had separated near the propeller hub. The blade sections that were observed were absent chord wise scratches or leading-edge damage. The engine was removed from the wreckage and examined separately at a secure location.

MEDICAL AND PATHOLOGICAL INFORMATION

The pilot died on August 9, 2016. An autopsy was authorized and conducted on the pilot by the Fond du Lac County Medical Examiner's Office. The cause of death was attributed to multiple injuries sustained in an airplane accident. Forensic toxicology was not performed.

TESTS AND RESEARCH

Engine examination.

The engine was examined on August 17, 2016, in the presence of the NTSB Investigator in Charge. When examined, the engine remained attached to the engine mount.. The exhaust system was damaged and the muffler was not attached to the engine. No anomalies were noted of the ignition system. The fuel pump was removed and hand actuated. Liquid consistent in smell and color to aviation fuel was contained within the pump and squirted out when the pump was actuated. The oil cooler was detached and impact damaged. The engine was equipped with a non-approved aftermarket oil filter. The filter was cut open and inspected for ferrous material; no anomalies were noted. No anomalies were noted with the cylinders and cylinder heads. The engine was hand rotated; continuity was verified and no anomalies were noted. The radiator was impact damaged. The air filtration system was not available for examination.

The engine was equipped with two carburetors; one carburetor fed the number 1 and 3 cylinder, while the second carburetor fed the number 2 and 4 cylinders.

The 1/3-cylinder carburetor float bowl was removed. Flaking was noted on the floats and unidentified contamination, along with corrosion on the bottom of the float bowl. The main jet was clear of obstructions. No fuel was found within the carburetor.

The 2/4-cylinder carburetor float bowl was removed. Flaking was noted on the floats and contamination and corrosion on the bottom of the float bowl. The main jet was clear and no fuel was found within the carburetor. The piston slide was stuck on the carburetor chamber top. The piston was removed from the chamber top. An unknown substance was present that prevented the piston from sliding up and down within its respective bore. The piston slide was stuck in the idle position. Both carburetors were sent to the NTSB Materials Laboratory for further examination.

Carburetor examination.

The NTSB's laboratory removed the float bowls from each of the carburetors. Two black floats were present in each bowl, and all four floats moved freely on their respective posts. The floats were removed from the bowls and labeled by carburetor number and position relative to the side of the carburetor with the control lever. Next, each float was weighed and subsequently submerged for 12 hours in a covered container of automobile gasoline. After soaking, the floats were removed from the gasoline and then weighed again after the soak. Each float had a total weight gain of less than 1%. Additionally, the sum of the weights for the two floats from each carburetor was 5.668 grams and 5.674 grams for the 1/3 carburetor and the 2/4 carburetor, respectively. The maximum allowable combined weight for carburetor floats in each carburetor is 7 grams per the BRP-Powertrain Maintenance Manual for the Rotax 912-series engines.

The interior surfaces of the bowls had black areas along with areas of white film and other accumulations of white and yellow corrosion products. The black areas were mostly circular in shape and located on the lower surfaces of the bowls.

A white film was present in many areas, particularly on the lower surface and side of the bowl for carburetor 1/3. Isolated areas with thicker accumulations of white material was observed in some areas. When disturbed with tweezers, the accumulation had a powdery consistency, and the underlying surface of the bowl was black.

Some areas had an accumulation of yellow material. When disturbed with tweezers, the formation largely maintained its shape, but was easily broken into smaller crystalline chunks when pressure was applied. The surface under the yellow accumulation was also colored black.

Samples of the white and yellow accumulations were removed from the surface and placed onto carbon tape stuck to an aluminum stub to facilitate a compositional analysis using energy dispersive x-ray spectroscopy (EDS). Both samples had large peaks of zinc and oxygen consistent with oxides associated with the cast zinc bowl. Both samples also showed smaller peaks of sulfur and lead. The yellow sample and areas of the white sample also showed a peak of aluminum. Additionally, the yellow sample showed peaks of iron and potassium and a higher peak of carbon. Some areas of the yellow sample also showed a peak of silicon.

During the examination, the plunger from the 2/4 carburetor was reinserted into the 2/4 carburetor, and the springs and covers were put into place on their

respective carburetors, and subsequently, the plungers were moved up and down. It was noted that the plunger from the 1/3 carburetor moved relatively easily while the plunger from the 2/4 carburetor had a tendency to stick. The plungers were removed from the carburetors with the housings and were manipulated again. The plunger from the 2/4 carburetor tended to stick compared to the plunger in the 1/3 carburetor.

The plungers were removed from the covers again, and accumulations of white material of varying thickness were present within the interior surface.

The surface of the plunger shaft housing on the 1/3 carburetor cover also had white material on the surface, but the material appeared to be more evenly distributed around the housing surface.

A sample of the white material from the plunger shaft housing from the 2/4 carburetor cover was removed and examined using EDS. The resulting spectrum showed high peaks of aluminum and oxygen, consistent with oxidation from the carburetor cover, which was made of an aluminum alloy.

ADDITIONAL INFORMATION

Rotax Aircraft Engines issued Service Instruction (SI)-912-021 on November 9, 2009. The following was extracted from that SI:

1.5) Compliance

- After engine installation/initial operation/return to service of an engine.

- When engine is running rough.

- And/or at the next scheduled maintenance event of carburetor (see Maintenance Manual for engine type 912/914 Series, current issue).

WARNING: Non-compliance with these instructions could result in engine damages, personal injuries or death.

3.1) General

Several carburetors have been found with contamination (dirt, remains of rubber from fuel lines and Loctite, resin-like substance, sediments etc.) in the float chamber.

WARNING: This contamination could possibly cause a partial or complete blockage of the idle or main jet or of other ducts vital for operation, leading to poor performance or stoppage of engine.

3.1.1) Possible shortcomings in the fuel system

- Dirt in the fuel system

- Missing or unsuitable fuel filter

- Clogged fuel filter

- Unsuitable fuel lines

- Dirt in fuel manifold

- Poor float chamber venting

- Insufficient flushing of the fuel system prior to initial engine operation

- Fuel pressure too low or too high

- Unsuitable fuel tanks and tank coatings

- Contaminated float chambers (e.g. corrosion caused by high water content in the fuel)

3.1.2) Fuel

Use only quality fuel as specified.

- EN 228 regular, EN 228 premium, EN 228 Super plus or AVGAS 100LL.

NOTE: The exact defined minimum requirements for fuel are specified in the relevant operators manual (for the relevant engine type) and the Service Instructions SI-912-016/SI-914-019 and SI-2ST-008 ,Selection of suitable operating fluids", current issue.

The Rotax 912ULS engine maintenance manual specifies removal/assembly of both carburetors every 200 hours.

Accident Rpt# GAA17CA557 09/26/2017 1250 EDT	**Regis# N184SJ**	**Orange, MA**	**Apt: Orange Muni ORE**	
Acft Mk/Mdl BELLET JAMES J VANS RV	**Acft SN 81645**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl LYCOMING IO-360		**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**	
Opr Name: BELLET, JAMES J.	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: SPE	

Summary

The Federal Aviation Administration (FAA) aviation safety inspector reported that, during a telephone conversation, the pilot reported that, during the climb, he noticed the engine cylinder heat temperature gauge exceed 500øF. The pilot added that he immediately turned back to the departure airport, and while in the downwind for the landing runway, the engine lost power. The pilot further added that the airplane immediately lost altitude and cleared a tree line in the path to the runway but then impacted terrain hard in a base-to-final flightpath near the runway threshold. He added that, when he exited the airplane, he observed an engine cowl plug installed on the right side of the engine cowl and removed it.

The right wing and fuselage sustained substantial damage.

The FAA inspector reported that he traveled to the accident, and while on-site, he observed the left cowl plug melted onto the engine cylinders. He added that the right cowl plug was found on the ground near the airplane.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The pilot did not submit the National Transportation Safety Board Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to remove the engine cowl plugs during preflight, which resulted in excessive engine cylinder head temperatures during climb and a total loss of engine power.

Events

1. Prior to flight - Miscellaneous/other
2. Approach-VFR pattern downwind - Loss of engine power (total)
3. Landing - Loss of control in flight
4. Landing - Collision with terr/obj (non-CFIT)

Findings - Cause/Factor

1. Personnel issues-Action/decision-Action-Lack of action-Pilot - C
2. Personnel issues-Task performance-Inspection-Preflight inspection-Pilot - C
3. Aircraft-Aircraft power plant-Power plant-Engine cowling system-Inadequate inspection - C
4. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Descent/approach/glide path-Attain/maintain not possible
5. Aircraft-Aircraft power plant-Engine (reciprocating)-(general)-Failure

Narrative

The Federal Aviation Administration (FAA) Aviation Safety Inspector reported that, during a telephone conversation, the pilot reported that during the climb he noticed the engine cylinder heat temperature gauge exceed 500ø F. The pilot added that, he immediately turned back to the departure airport, and while in the downwind for the landing runway, the engine lost power. The pilot further added that, the airplane immediately lost altitude, cleared a tree line in the path to the runway, but impacted the terrain hard in a base to final flight path near the runway threshold. He added that when he exited the airplane, he observed an engine cowl plug installed on the right side of the engine cowl and removed it.

The right wing and fuselage sustained substantial damage.

The FAA inspector reported that he traveled to the accident, and while on-site, he observed the left cowl plug melted onto the engine cylinders. He added that the right cowl plug was found on the ground near the airplane.

The pilot did not report that there were any preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The pilot failed to submit the NTSB Form 6120.1 Pilot/ Operator Aircraft Accident/ Incident Report.

Accident Rpt# GAA17CA297	**05/17/2017 2035 EDT**	**Regis# UNREG**	**Findlay, OH**	**Apt: Weaver 9OH6**
Acft Mk/Mdl CGS HAWK		**Acft SN Unknown**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl ROTAX 503		**Acft TT 400**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: DALE WEAVER		**Opr dba:**		**Aircraft Fire: NONE**
				AW Cert: NON

Summary

The pilot of the tailwheel-equipped airplane reported that, during takeoff, the "wind got more gusty than [he] could handle being too low and slow." The airplane aerodynamically stalled and impacted the ground.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of recorded data from the automated weather observation station located about 5 nautical miles west of the accident airport revealed that, about 42 minutes before the accident, the wind was from 200ø at 18 knots, gusting to 28 knots. The takeoff direction is unknown.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack during takeoff, which resulted in an aerodynamic stall.

Events

1. Takeoff - Loss of control in flight
2. Takeoff - Aerodynamic stall/spin
3. Takeoff - Collision with terr/obj (non-CFIT)

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-Angle of attack-Capability exceeded - C
3. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C
4. Environmental issues-Conditions/weather/phenomena-Wind-(general)-Effect on equipment

Narrative

The pilot of the tailwheel-equipped airplane reported that, during takeoff, the "wind got more gusty than [he] could handle being too low and slow". The airplane aerodynamically stalled and impacted the ground.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of recorded data from the automated weather observation station located about 5 nautical miles west of the accident airport reported that, about 42 minutes before the accident, the wind was from 200ø at 18 knots, gusting to 28 knots. The takeoff direction is unknown.

Accident Rpt# GAA17CA567 09/06/2017 1330 EDT	**Regis# N1214J**	**Dunkirk, NY**	**Apt: Chautauqua County/dunkirk DKK**
Acft Mk/Mdl CHANCEY GERRY M RV-12-NO SERIES	**Acft SN 120054**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl ROTAX		**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: EMMERLING, FRANCIS	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge, the pilot reported that, immediately after takeoff, the airplane encountered a wind gust, and the right wing dipped. Subsequently, the airplane drifted to the right, and the right wing impacted terrain and a taxiway sign. He added that he "lost control during takeoff."

The right wing and fuselage sustained substantial damage.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

An automated weather observation station at the airport reported, about the time of the accident, wind from 270ø at 10 knots. The pilot reported the takeoff was from runway 33.

The pilot did not submit the NTSB Form 6120.1 Pilot/Operator Aircraft Accident/Incident Report.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain lateral/bank control during takeoff in crosswind conditions.

Events

1. Initial climb - Other weather encounter
2. Initial climb - Loss of control in flight
3. Initial climb - Collision with terr/obj (non-CFIT)

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-Lateral/bank control-Not attained/maintained - C
3. Environmental issues-Physical environment-Object/animal/substance-Sign/marker-Contributed to outcome
4. Environmental issues-Conditions/weather/phenomena-Wind-Crosswind-Effect on operation

Narrative

During a telephone conversation with the NTSB investigator-in-charge, the pilot reported that, immediately after takeoff, the airplane encountered a gust of wind and the right wing dipped. Subsequently, the airplane drifted to the right and the right wing impacted terrain and a taxiway sign. He added that he "lost control during takeoff."

The right wing and fuselage sustained substantial damage.

The pilot did not report that there were any preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

An automated weather observation station at the airport, about the time of the accident, reported wind from 270ø at 10 knots. The pilot reported the takeoff was on runway 33.

The pilot failed to submit the NTSB Form 6120.1 Pilot/ Operator Aircraft Accident/ Incident Report.

Accident Rpt# GAA17CA488 08/12/2017 1100 CDT	**Regis# N8262**	**Bowling Green, KY**	**Apt: Bowling Green-warren County Rg BWG**
Acft Mk/Mdl CHARLES D WALKER WALKER CURTISS	**Acft SN WC001**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
	Acft TT 330	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: CHARLES D. WALKER	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

The pilot of the experimental, amateur-built biplane reported that, following a normal initial climb, about 100 ft above the ground, the biplane started an uncommanded left turn, followed by a descent. He added that it became apparent that the flightpath was into the tree line, and he "attempted to climb to possibly maintain at least an altitude to clear the trees, but to no avail, nearly stalling." Subsequently, the biplane impacted the trees.

The biplane sustained substantial damage to the wings and fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the biplane that would have precluded normal operation.

The pilot added that the biplane is "not very stable once in a flying configuration, any air mass (gusts) change can disturb the balance and result in self-induced turns, climbs and descents. These movements have to be countered immediately because of the relative size (small) of control surfaces (rudder, ailerons). And corrections are slow, possibly resulting in loss of altitude. Pilots expect these upsets and become alert for them."

The automated weather observation system on the accident airport reported, about the time of the accident, the wind was from 360ø at 5 knots. The pilot was departing from runway 03. The calculated density altitude was 1,897 ft.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's exceedance of the biplane's critical angle of attack during initial climb, which resulted in an aerodynamic stall and collision with trees.

Events

1. Initial climb - Loss of control in flight
2. Initial climb - Attempted remediation/recovery
3. Initial climb - Collision with terr/obj (non-CFIT)

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Angle of attack-Capability exceeded - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
3. Environmental issues-Physical environment-Object/animal/substance-Tree(s)-Effect on operation

Narrative

The pilot of the experimental, amateur-built, biplane reported that, following a normal initial climb, about 100 ft. above the ground, the biplane started an un-commanded turn to the left, followed by a descent. He added that, it became apparent that the flight path was into the tree line, and he "attempted to climb to possibly maintain at least an altitude to clear the trees, but to no avail, nearly stalling." Subsequently, the biplane impacted the trees.

The biplane sustained substantial damage to the wings and fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the biplane that would have precluded normal operation.

The pilot added that, the biplane is "not very stable once in a flying configuration, any air mass (gusts) change can disturb the balance and result in self-induced turns, climbs and descents. These movements have to be countered immediately because of the relative size (small) of control surfaces (rudder, ailerons). And corrections are slow, possibly resulting in loss of altitude. Pilots expect these upsets and become alert for them."

The automated weather observation system on the accident airport reported, about the time of the accident, the wind was 360ø at 5 knots. The pilot was departing on runway 03. The calculated density altitude was 1,897 ft.

Accident Rpt# GAA17CA518 09/02/2017 1500	**Regis# N429NC**	**Afton, WY**	**Apt: Afton Muni AFO**
Acft Mk/Mdl CROFT ROBERT C KITFOX SUPER	**Acft SN KA10123166**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl ROTEC R2800 MKII	**Acft TT 176**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: RODERICK, JAMES J.	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

The pilot of the tailwheel-equipped airplane reported that, during landing, the airplane bounced, so he applied power for a go-around. He added that the airplane "immediately banked left sharply." He attempted to recover by using rudder and aileron inputs, but the airplane impacted terrain.

The airplane sustained substantial damage to the fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of recorded data from the automated weather observation station located on the airport revealed that, about 5 minutes before the accident, the wind was calm. The airplane was landing on runway 34.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain bank control during an attempted go-around.

Events

1. Landing - Hard landing
2. Approach-VFR go-around - Loss of control in flight
3. Approach-VFR go-around - Collision with terr/obj (non-CFIT)

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-Lateral/bank control-Not attained/maintained - C

Narrative

The pilot of the tailwheel-equipped airplane reported that, during landing, the airplane bounced, so he applied power for a go around. He added that the airplane "immediately banked left sharply". He attempted to recover by using rudder and aileron inputs, but the airplane impacted terrain.

The airplane sustained substantial damage to the fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of recorded data from the automated weather observation station located on the airport reported that, about 5 minutes before the accident, the wind was calm. The airplane was landing on runway 34.

Accident Rpt# WPR14LA327 08/05/2014 1020 PDT	**Regis# N518DT**	**Winterhaven, CA**	**Apt: N/a**	
Acft Mk/Mdl DAVID L THOMPSON CHALLENGER II	**Acft SN CH2-0711-2894**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl HKS E 700 T	**Acft TT 128**	**Fatal 0 Ser Inj 2**	**Flt Conducted Under: FAR 091**	
Opr Name: THOMPSON DAVID L	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: SPE	

Summary

The private pilot departed on a cross-country flight and climbed to cruise altitude when the engine suddenly experienced a total loss of power. The pilot attempted to restart the engine, but was unsuccessful. During the forced landing approach, at an altitude about 20 ft above ground level, the airplane encountered a wind gust, impacted the groundÿhard, and nosed over.♂♂The 2-cylinder, turbocharged engine was equipped with an electronic engine control unit (ECU) that controlled the ignition and fuel injection systems. While performing the engine prestart sequence during the wreckage examination, the No. 1 electrical system indicated an ignition fault, the source of which could not be determined; the No. 2 electrical system would not activate properly. Several attempts to start the engine were unsuccessful; the engine would stumble, backfire, produce black exhaust, and stop. Examination of the spark plugs revealed that only one plug was firing in each cylinder. The ECU did not contain non-volatile memory, and it could not be determined whether the ECU was functioning properly during the accident flight. Further, examination of the electrical system was not possible due to the damage sustained during the accident; therefore, the reason for the loss of engine power could not be determined. ♂♂

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: A total loss of engine power during cruise for reasons that could not be determined based on the available information. Contributing to the accident was the pilot's loss of control during the forced landing.

Events

1. Enroute-cruise - Loss of engine power (total)
2. Emergency descent - Off-field or emergency landing

Findings - Cause/Factor

1. Aircraft-Aircraft power plant-Engine fuel and control-(general)-Not specified - C
2. Aircraft-Aircraft power plant-Ignition system-(general)-Not specified - C
3. Not determined-Not determined-(general)-(general)-Unknown/Not determined - C
4. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - F
5. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - F

Narrative

HISTORY OF FLIGHT

On August 5, 2014, about 1020 Pacific daylight time, an experimental, David Thompson, Challenger II, N518DT, collided with terrain during a forced landing following a loss of engine power near Winterhaven, California. The private pilot and one passenger sustained serious injuries; the airplane sustained substantial damage to the fuselage. The owner/pilot was operating the airplane under the provisions of 14 Code of Federal Regulations (CFR) Part 91. The cross-country personal flight departed Yuma, Arizona, about 0940, with a planned destination of El Cajon, California. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot reported that after refueling at Yuma International Airport (YUM) they departed and climbed to 6,500 feet when the engine suddenly quit. The pilot attempted to restart the engine but was unsuccessful. During the landing and while still 20 ft high, the airplane encountered a wind gust, impacted the ground hard, and nosed over.

PERSONNEL INFORMATION

AIRCRAFT INFORMATION

METEOROLOGICAL CONDITIONS

TESTS AND RESEARCH

The airplane structure was substantially damaged during the accident sequence, but the engine appeared to be undamaged. The airplane electrical system appeared to be intact, however during the prestart sequence, the number two electrical system would not activate properly. The number one system indicated an ignition fault, which investigators were unable to correct.

Several attempts to start the engine were unsuccessful; the engine would stumble, backfire, and stop. Investigators examined the sparkplugs and determined that only one set of the plugs were firing on each cylinder. The engine was flooding out and when the engine would start to run the exhaust was black in color. The Computer Engine Control (CEC) module did not contain nonvolatile memory, and it could not be determined if the CEC was functioning properly.

Accident Rpt# ERA15LA174 03/31/2015 1435 EDT	**Regis# N376CG**	**Walhalla, SC**	**Apt: Just Aircraft Facility PVT**	
Acft Mk/Mdl G-DAWG LLC JUST ACFT HIGHLANDER	**Acft SN JAESC0141**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl ROTAX 914	**Acft TT 2568**	**Fatal 0 Ser Inj 2**	**Flt Conducted Under: FAR 091**	
Opr Name: G-DAWG LLC	**Opr dba:**		**Aircraft Fire: NONE**	

Events

1. Approach-VFR go-around - Loss of control in flight
3. Approach-VFR go-around - Controlled flight into terr/obj (CFIT)

Narrative

On March 31, 2015, about 1435 eastern daylight time, an experimental light sport Just Aircraft Highlander, N376CG, was substantially damaged when it impacted trees and terrain at a private airfield near Walhalla, South Carolina. The private pilot and passenger were seriously injured. Visual meteorological conditions prevailed, and no flight plan was filed. The local business flight was conducted under the provisions of 14 Code of Federal Regulations Part 91.

The pilot was demonstrating the airplane to a potential buyer. The pilot reported that the wind was calm when they departed, but gusty when they returned about 30 minutes later. He estimated the wind as a 20-mph tailwind during final approach, gusting to a 25 to 30-mph tailwind. The airplane approached too fast and the pilot performed a go-around. He increased the engine power to full power and the airplane began to climb, but as it approached trees at the end of the runway, "a big tailwind gust" caused the airplane to cease climbing. The airplane collided with the top of the tree, descended, and impacted the ground. The pilot did not report any preimpact mechanical malfunctions.

According to a witness, the accident flight was one of several flights performed to demonstrate the performance characteristics of the airplane to a potential buyer and his friend. The witness indicated that during the accident flight, the airplane was landing toward the east with a tailwind, and travelling faster than normal as it approached the runway. As the airplane descended toward the runway surface, the witness observed an increase in engine power, and the airplane subsequently "ballooned." Shortly thereafter the pilot "added full power" and the airplane began to climb and flew over a two-story building located about 100 ft east of the runway, along its extended centerline. The airplane then struck trees adjacent to the north side of the building before it impacted the ground in a wooded ravine. The witness added that the turf runway was 400 to 500 ft in length, oriented east-west. Due to sloping terrain, all landings are performed to the east and all takeoffs performed to the west.

The pilot held a private pilot certificate with ratings for single-engine land, airplane single-engine sea, and instrument airplane. The pilot reported a total flight experience of 6,672 hours; of which about 46 hours were in the same make and model as the accident airplane. All 46 hours were flown during the 90-day period preceding the accident.

Oconee County Regional Airport (CEU), Clemson, South Carolina was located about 10 miles east of the accident site. The recorded weather at CEU, at 1454, was: wind from 260ø at 12 knots, gusting to 21 knots; visibility 10 miles; sky clear; temperature 26ø C; dew point 2ø C; altimeter 29.92 inches of mercury.

Accident Rpt# WPR15LA029 10/28/2014 1430 MST	**Regis# N682SC**	**Murphy, ID**	**Apt: Murphy 1U3**	
Acft Mk/Mdl HENRY STEVEN J JUST ACFT	**Acft SN JA287-02-13**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl ROTAX 912	**Acft TT 430**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**	
Opr Name: HENRY STEVEN J	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: SPE	

Summary

The private pilot reported that, during takeoff, at an altitude about 100-200 ft above ground level, the engine experienced a total loss of power. The pilot checked the fuel pumps and lowered the nose to initiate a forced landing on a dirt road next to the runway. During the landing roll, the airplane collided with a fence and nosed over.

After the airplane was recovered, the pilot reported that the fuel selector was set to an empty fuel tank. The loss of engine power was likely due to fuel starvation. The pilot further stated that he observed no mechanical deficiencies during his postaccident repairs of the airframe and engine.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to properly manage the fuel supply, which resulted in a total loss of engine power due to fuel starvation.ÿ

Events

1. Prior to flight - Preflight or dispatch event
2. Takeoff - Loss of engine power (total)
3. Landing-landing roll - Nose over/nose down

Findings - Cause/Factor

1. Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid management - C
2. Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - F

Narrative

On October 28, 2014, about 1430 mountain standard time, an experimental-Steven J. Henry, Just Aircraft Superstol, N682SC, experienced a loss of engine power shortly after takeoff from the Murphy airport, Murphy, Idaho. The pilot initiated a forced landing on a dirt road where during the landing roll, the airplane collided with a fence and nosed over. The owner/pilot was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. The private pilot, and passenger were not injured. The airplane sustained substantial damage to the tail and fuselage. The local personal flight was departing with a planned destination of Nampa, Idaho. Visual meteorological conditions prevailed, and no flight plan had been filed.

In a written statement, the pilot reported that the start-up procedures were normal, and the takeoff was into the wind. About 100 to 200 feet above ground level, the engine lost power. The pilot checked the fuel pumps, lowered the nose and initiated a landing to a dirt road next to the runway. During the landing roll, the airplane collided with a fence and nosed over.

The pilot initially reported to a Federal Aviation Administration (FAA) inspector that he believed the loss of power was due to an engine malfunction or fuel contamination. A few days later, after the airplane was returned to his home base, the pilot reported that after examination of the airplane he believed the loss of engine power was a result of the fuel selector set to an empty fuel tank. He further stated he did not believe the loss of engine power had anything to do with an engine malfunction or fuel contamination.

During a follow-up conversation with the pilot, he reported that he had repaired the airplane and returned it to flying status and found no issues with the engine or the fuel system.

Accident Rpt# GAA18CA083	**12/09/2017 1315 EST**	**Regis# N750AD**	**Franklin, PA**	**Apt: FKL**	
Acft Mk/Mdl MICHAEL ADAMCZYK ZENITH CH750-NO		**Acft SN 75-8235**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Prelim**	**Prob Caus: Pending**
			Fatal 0 **Ser Inj 0**	**Flt Conducted Under: FAR 091**	
Opr Name: ADAMCZYK, MICHAEL		**Opr dba:**		**Aircraft Fire: NONE**	

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Accident Rpt# GAA17CA411A 07/16/2017 1526 PDT	**Regis# N506WS**	**San Diego, CA**	**Apt: Montgomery-gibbs Executive MYF**
Acft Mk/Mdl SPANI WAYNE M STARDUSTER TOO	**Acft SN 1407**	**Acft Dmg: MINOR**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl LYCOMING O-435-1	**Acft TT 443**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: DANIEL CALLAN	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

The pilot of the tandem-seat, tailwheel-equipped airplane reported that, while taxiing to the runway and seated in the rear seat, he had "poor [forward] visibility" and that the airplane's propeller collided with the left wing of a stationary airplane on the taxiway. The pilot reported that he "broke and turned" as soon as he saw the stationary airplane, but "it was too late."

The pilot of the stationary airplane reported that he had stopped on the taxiway due to the run-up area ahead being fully occupied with multiple airplanes waiting to depart. He added that his "first awareness" of the tailwheel airplane was the sound of a "loud bang."

The stationary airplane's left wing and aileron sustained substantial damage. The tailwheel airplane sustained minor damage to the propeller.

The pilots reported that there were no preaccident mechanical malfunctions or failures with their respective airplanes that would have precluded normal operation.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain separation from a stationary airplane during the taxi to the runway.

Events

1. Taxi-to runway - Ground collision

Findings - Cause/Factor

1. Personnel issues-Psychological-Attention/monitoring-Monitoring other aircraft-Pilot - C

Narrative

The pilot of the tandem seat, tailwheel-equipped airplane reported that, while taxiing to the runway, and seated in the rear seat, he had "poor [forward] visibility" and the airplane's propeller collided with the left wing of a stationary airplane on the taxiway. The pilot reported that he had "broke and turned" as soon as he saw the stationary airplane, but "it was too late."

The pilot of the stationary airplane reported that he had stopped on the taxiway due to the run-up area ahead being fully occupied with multiple airplane's awaiting to depart. He added that, his "first awareness" of the tailwheel airplane was the sound of a "loud bang."

The stationary airplane's left wing and aileron sustained substantial damage. The tailwheel airplane sustained minor damage to the propeller.

The pilot's reported that there were no preaccident mechanical malfunctions or failures with their respective airplane's that would have precluded normal operation.

Accident Rpt# WPR16FA154	**08/01/2016 1100 PDT**	**Regis# N528HZ**	**The Dalles, OR**	**Apt: Columbia Gorge Rgnl/the Dalles DLS**
Acft Mk/Mdl SPERLING RICHARD G LANCAIR 360-NO		**Acft SN 553-320-300**	**Acft Dmg: DESTROYED**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl LYCOMING IO-360-C1C			**Fatal 1 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: SPERLING RICHARD G		**Opr dba:**		**Aircraft Fire: NONE**
				AW Cert: STN

Events

1. Landing - Landing gear not configured

Narrative

HISTORY OF FLIGHT

On August 1, 2016, about 1100 Pacific daylight time, an experimental amateur-built Lancair 360, N528HZ, impacted terrain while landing on runway 31 at Columbia Gorge Regional/The Dalles Municipal Airport (DLS), The Dalles, Oregon. The pilot was fatally injured, and the airplane was destroyed. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed, and no flight plan was filed. The local flight originated from DLS about 1030.

Two witnesses, located on the ramp adjacent to the refueling area, observed the airplane west of the runway in a nose-low, steep-left-bank attitude with the left wing pointed directly towards the ground. A second later, the airplane impacted the terrain. One witness reported that, following the impact, the airplane cartwheeled and slid on its belly before it came to rest.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with airplane single-engine and multi-engine land ratings. He held a third-class airman medical certificate issued on April 28, 2014, with the limitation that he must have available glasses for near vision. At the time of his last medical exam, the pilot reported flight experience that included 1,860 total hours and 104 hours in the last 6 months.

AIRCRAFT INFORMATION

The two-seat, single-engine, low-wing, retractable landing gear airplane was manufactured by the pilot in 2014. It was powered by an experimental Textron Lycoming IO-360-C1C engine, rated at 240 horsepower. The airplane was equipped with a Hartzell two-bladed variable-pitch propeller, model HC-E2YR-1BF/F7068-2. A review of available maintenance records showed that the engine was disassembled and inspected on March 4, 2014, due to low oil pressure. The engine was subsequently rebuilt and installed on the accident airplane at an undetermined date. The airframe records were not available to investigators during the investigation.

METEOROLOGICAL CONDITIONS

At 0953, the weather conditions at DLS included wind from 340ø at 10 knots, 10 miles visibility, temperature of 21øC, dew point temperature of 11øC, and an altimeter setting of 30.02 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

A Federal Aviation Administration (FAA) inspector examined the accident site and the surrounding area. The examination revealed 6 equally-spaced propeller slash marks on runway 31 about 1,800 ft from the approach end. A ground scar and a part of the left-wing tip were observed in a grassy area located 385 ft from the propeller marks on a heading of about 296o magnetic. The airplane wreckage debris path was about 200 ft in length on a heading of about 235o magnetic. The airplane came to rest upright with its nose oriented northeast.

The left wing and its respective carry-through structure had separated from the fuselage, and parts were dispersed along the debris path. All airframe components were found with the main wreckage along with all flight control surfaces, which had remained attached to their respective hinges. Flight control continuity was established from the cockpit controls to all primary flight control surfaces. Multiple separations were observed in various control cables, consistent with impact.

During the wreckage recovery, the FAA inspector observed that both main and the nose landing gear were in a retracted position. The left and right main landing gear doors and the fuselage bottom skin exhibited numerous scratches and paint transfer consistent with the airplane's lower surface contacting the runway with the landing gear retracted. No evidence of pre-impact anomalies was found with the landing gear system.

The two-bladed propeller assembly remained attached to the crankshaft's propeller flange. Both blade tips were bent and curled aft, and the blades displayed numerous span-wise scratches from about mid span to the blade tips consistent with the propeller blades contacting the runway.

The engine remained attached to the airframe, and the engine mounts were intact. All engine accessories remained attached to the engine. The air filter remained attached to its bracket and exhibited signs of impact damage. The fuel pump and the fuel lines remained attached to the engine and to their respective cylinders. The fuel selector handle was found in the "RIGHT" tank position. Fuel was present in the airplane; however, the fuel quantity was not determined. The needle on the fuel gauge indicated 1/2.

The top sparkplugs were removed from their respective cylinders and exhibited signatures consistent with normal operation. The electrode areas displayed no mechanical deformation. A compression test was conducted and cylinder Nos.1, 3 and, 4 produced compression and suction during the propeller rotation. The No. 2 cylinder did not produce any compression or suction due to impact damage. The throttle and mixture controls remained attached to their respective cockpit controls and their control levers. The throttle, mixture, and propeller control levers were positioned full forward.

The examination revealed no evidence of preimpact mechanical malfunction that would have precluded normal operations.

The complete accident site summary and the examination report are available in the public docket for this accident.

MEDICAL AND PATHOLOGICAL INFORMATION

Klickitat County Coroner's Office, Goldendale, Washington, completed an autopsy on the pilot and concluded that the cause of death was blunt force injuries. The FAA's Bioaeronautical Sciences Research Laboratory in Oklahoma City, Oklahoma, performed toxicology on specimens from the pilot. No ethanol was present in urine; ketamine was detected in urine and blood. Ketamine is an injectable, rapidly acting general anesthetic agent that was administered during the pilot's postaccident transport to the hospital.

Accident Rpt# GAA17CA212 03/28/2017 1630	**Regis# N13XZ**	**Stevensville, MT**	**Apt: Stevensville 32S**
Acft Mk/Mdl THOMAS CRAIG E WITTMAN W-10-NO	**Acft SN 975**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual Prob Caus: Pending**
Eng Mk/Mdl CONTINENTAL IO-520	**Acft TT 46**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**
Opr Name: CRAIG E. THOMAS	**Opr dba:**		**Aircraft Fire: NONE**
			AW Cert: SPE

Summary

The pilot of the tailwheel-equipped airplane reported that, after landing at an airport along his route, he observed a leak from the left master brake cylinder. He added that he "wiped up [a] considerable [amount of] brake fluid from the floorboard," conducted a "thorough inspection" of the left brake, and then departed for another airport.

He further reported that, during the landing roll, the airplane weathervaned into the crosswind, and he applied "full rudder and [the] application of brake found no brake available." He added that, after pumping the brakes, they began to function. The airplane veered off the runway to the right, and the left main landing gear collapsed.

The airplane sustained substantial damage to the fuselage.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's decision to take off with a known master brake cylinder leak and his subsequent failure to maintain directional control during landing.

Events

1. Prior to flight - Preflight or dispatch event
2. Landing - Loss of control on ground
3. Landing - Runway excursion
4. Landing - Landing gear collapse

Findings - Cause/Factor

1. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
2. Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C
3. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C
4. Aircraft-Aircraft systems-Landing gear system-Master cylinder/brake valve-Malfunction - C

Narrative

The pilot of the tailwheel-equipped airplane reported that, after landing at an airport along his route, he observed a leak from the left master brake cylinder. He added that he "wiped up [a] considerable [amount of] brake fluid from the floorboard", did a "thorough inspection" of the left brake, and then departed for another airport.

He further reported that, during the landing roll at the accident airport, the airplane weathervaned into the crosswind, and he applied "full rudder and [the] application of brake found no brake available". After pumping the brake, he added that, they began to function. The airplane veered off the runway to the right and the left main landing gear collapsed.

The airplane sustained substantial damage to the fuselage.

Accident Rpt# GAA17CA350 06/18/2017 915 EDT	**Regis# N251CW**	**Williston, FL**	**Apt: Willisto X60**	
Acft Mk/Mdl WARD CHRISTOPHER BARRY RAI 6-NO	**Acft SN F16**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl LYCOMING TIO - 540 -AE	**Acft TT 34**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**	
Opr Name: WARD CHRISTOPHER BARRY	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: SPE	

Summary

The pilot, who was on the controls in the high-performance, experimental, amateur-built airplane, reported that he and a check pilot, who was familiar with the airplane and required by the insurance company, were taking off from a grass airstrip for a planned cross-country flight.

According to the check pilot, before takeoff, he advised the pilot to "begin his rotation to takeoff attitude a few knots before the normal takeoff speed of approximately 65 knots and then let the airplane lift off smoothly when it was ready to fly."

During the takeoff roll, the pilot initiated the "rotation" as instructed, but the nose pitched up too high, and the airplane drifted to the left side of the runway. The airplane exited the left side of the runway, struck the ground, and came to rest upright facing the opposite direction of the takeoff. The airplane sustained substantial damage to the right-wing spar and the lower part of the composite fuselage.

The pilots reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain the airplane's pitch control during rotation and his subsequent loss of directional control.

Events

1. Takeoff - Abrupt maneuver
2. Takeoff - Aerodynamic stall/spin
3. Takeoff - Runway excursion
4. Takeoff - Loss of control on ground

Findings - Cause/Factor

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

Narrative

The pilot, who was on the controls in the high-performance, experimental amateur built airplane, reported that he and a check pilot that was familiar with the airplane and required by the insurance company, were taking off from a grass airstrip for a planned cross-country flight.

According to the check pilot, before takeoff he advised the pilot "begin his rotation to takeoff attitude a few knots before the normal takeoff speed of approximately 65 knots and then let the airplane lift off smoothly when it was ready to fly."

During the takeoff roll, the pilot initiated the "rotation" as instructed, but the nose pitched up too high and the airplane drifted to the left side of the runway. The airplane exited the left side of the runway, struck the ground and came to rest upright and facing the opposite direction of the takeoff. The airplane sustained substantial damage to the right-wing spar and the lower part of the composite fuselage.

The pilots reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Accident Rpt# GAA17CA280 05/15/2017 1550 PDT	**Regis# N184ME**	**Vacaville, CA**	**Apt: Nut Tree VCB**	
Acft Mk/Mdl WEAVER STANLEY R/ROBINSON SCOT	**Acft SN 82158**	**Acft Dmg: SUBSTANTIAL**	**Rpt Status: Factual**	**Prob Caus: Pending**
Eng Mk/Mdl AERO SPORT POWER IO-375-M1S	**Acft TT 67**	**Fatal 0 Ser Inj 0**	**Flt Conducted Under: FAR 091**	
Opr Name: STANLEY R. WEAVER	**Opr dba:**		**Aircraft Fire: NONE**	
			AW Cert: SPE	

Summary

The pilot of the tailwheel-equipped airplane reported that, while landing in a crosswind and as the tailwheel set down, the airplane veered to the right. He added that, despite left rudder input, the airplane exited the right side of the runway and impacted a 20-ft-deep drainage ditch.

The airplane sustained substantial damage to the fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation system on the airport reported that, about the time of the accident, the wind was from 240ø at 15 knots. The pilot landed on runway 20.

Cause Narrative

THE NATIONAL TRANSPORTATION SAFETY BOARD DETERMINED THAT THE CAUSE OF THIS OCCURRENCE WAS: The pilot's failure to maintain directional control while landing in crosswind conditions.

Events

1. Landing-landing roll - Loss of control on ground
2. Landing - Runway excursion
3. Landing - Nose over/nose down

Findings - Cause/Factor

1. Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C
2. Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
3. Environmental issues-Conditions/weather/phenomena-Wind-Crosswind-Effect on equipment
4. Environmental issues-Physical environment-Object/animal/substance-(general)-Contributed to outcome

Narrative

The pilot of the tailwheel-equipped airplane reported that, while landing in a crosswind, and as the tailwheel set down, the airplane veered to the right. He added that, despite left rudder input, the airplane exited the right side of the runway and impacted a 20 ft. deep drainage ditch.

The airplane sustained substantial damage to the fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation system on the airport reported that, about the time of the accident, the wind was from 240ø at 15 knots. The pilot landed on runway 20.