



# Aviation Investigation Final Report

<b>Location:</b>	Louisa, Virginia	<b>Accident Number:</b>	ERA09LA506
<b>Date &amp; Time:</b>	September 5, 2009, 12:30 Local	<b>Registration:</b>	N3656V
<b>Aircraft:</b>	Cessna 140	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>	Ground collision	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot of the tailwheel-equipped Cessna was taxiing to the runway for takeoff when she impacted a Lancair that was holding short of the runway. The Cessna pilot had seen the Lancair in front of her, but briefly lost sight of it prior to the collision. Following the collision, both pilots shut down their airplanes and exited without incident. They observed that the Cessna's propeller had struck the right horizontal stabilizer and empennage of the Lancair several times, resulting in substantial damage to the Lancair.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The Cessna pilot's inadequate visual lookout.

## Findings

<b>Personnel issues</b>	Monitoring other aircraft - Pilot
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## Factual Information

### History of Flight

#### Taxi-to runway

Ground collision (Defining event)

On September 5, 2009, about 1230 eastern daylight time, an experimental amateur-built Lancair 235, N290W, was substantially damaged when it was struck by a taxiing Cessna 140, N3656V, at Louisa County Airport (LKU), Louisa, Virginia. The certificated private pilot of the Lancair, and the certificated private pilot of the Cessna, were not injured. Visual meteorological conditions prevailed at the time of the accident. Neither the Lancair pilot nor the Cessna pilot had filed flight plans for the personal flights, which were conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

Both pilots were attending a fly-in event held at LKU, a non-towered airport with a single east-west oriented runway. Volunteer ground personnel were present on the day of the fly-in to assist marshaling aircraft out of the parking area.

According to the pilot of the Lancair, he started his airplane and was cleared by ground personnel to taxi to runway 27. While holding short of the runway, he conducted an engine run-up and was waiting for two airplanes to land before taxiing onto the runway for takeoff. He then felt "impacts that lasted approximately 3 seconds."

The pilot of the tailwheel-equipped Cessna reported that she was taxiing to runway 27, and following the Lancair in front of her at "a safe distance" while conducting "proper turns." As she taxied up to the runway hold short line, she lost sight of the Lancair, and felt her airplane's propeller "strike something." The pilot stated that she "stopped" as soon as she realized what had happened.

Following the collision, both pilots shut down their airplanes and exited without incident. They observed that the Cessna's propeller had struck the right horizontal stabilizer and empennage of the Lancair several times, resulting in substantial damage to the Lancair.

The pilot of the Cessna held a private pilot certificate with a rating for airplane single engine land. She reported 1,875 total hours of flight experience, 1,600 hours of which were in the accident airplane make and model. Her most recent third-class FAA medical certificate was issued in July, 2009.

The pilot of the Lancair held a private pilot certificate with ratings for airplane single engine and multiengine land, and an instrument rating. He reported 3,570 hours total flight experience. His most recent third-class FAA medical certificate was issued in August, 2009.

The weather conditions reported at LKU, at 1220, included winds from 310 degrees at 4 knots, 10 statute miles visibility, and clear skies.

The Federal Aviation Administration Airplane Flying Handbook (FAA-H-8083-3A) states, "Since a tailwheel-type airplane rests on the tailwheel as well as the main landing wheels, it assumes a nose-high attitude when on the ground...Consequently, objects directly ahead of the airplane are difficult, if not impossible, to see. To observe and avoid colliding with any objects or hazardous surface conditions, the pilot should alternately turn the nose from one side to the other – that is, zigzag, or make a series of short S-turns while taxiing forward."

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	85,Female
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 23, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 1875 hours (Total, all aircraft), 1600 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N3656V
<b>Model/Series:</b>	140 A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	14927
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>		<b>Engine Model/Series:</b>	C90
<b>Registered Owner:</b>	Sara L Parmenter	<b>Rated Power:</b>	95 Horsepower
<b>Operator:</b>	Sara L Parmenter	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LKU	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	12:20 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Louisa, VA (LKU )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Louisa, VA (LKU )	<b>Type of Clearance:</b>	
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Air traffic control;Class D

## Airport Information

<b>Airport:</b>	Louisa County/Freeman Field LKU	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	493 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

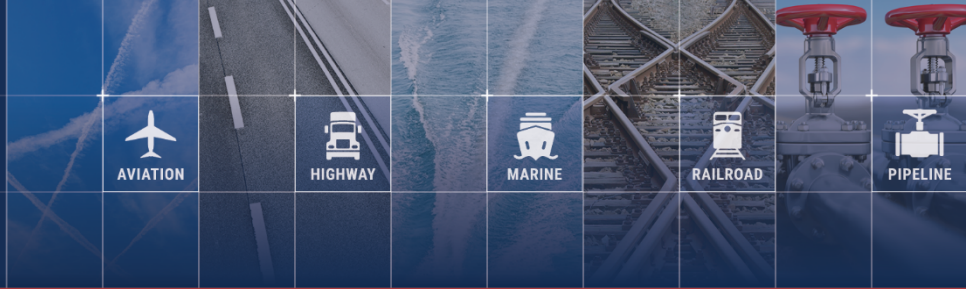
<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	38.005832,-77.968612(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Diaz, Dennis
<b>Additional Participating Persons:</b>	Mike Cook; FAA/FSDO; Richmond, VA
<b>Original Publish Date:</b>	March 3, 2010
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=74677">https://data.nts.gov/Docket?ProjectID=74677</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).



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<b>Aircraft:</b>	Lancair 235	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Ground collision	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot of the tailwheel-equipped Cessna was taxiing to the runway for takeoff when she impacted a Lancair that was holding short of the runway. The Cessna pilot had seen the Lancair in front of her, but briefly lost sight of it prior to the collision. Following the collision, both pilots shut down their airplanes and exited without incident. They observed that the Cessna's propeller had struck the right horizontal stabilizer and empennage of the Lancair several times, resulting in substantial damage to the Lancair.

## Probable Cause and Findings

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## Findings

<b>Personnel issues</b>	Monitoring other aircraft - Pilot of other aircraft
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## Factual Information

### History of Flight

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Ground collision

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### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 9, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3400 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Lancair	<b>Registration:</b>	N290W
<b>Model/Series:</b>	235	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	115
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-320
<b>Registered Owner:</b>	Richard S Williams	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	Richard S Williams	<b>Operating Certificate(s) Held:</b>	None



## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LKU	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	12:20 Local	<b>Direction from Accident Site:</b>	
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<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
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<b>Departure Point:</b>	Louisa, VA (LKU )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Louisa, VA (LKU )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Air traffic control;Class D

## Airport Information

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<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
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