		NTSB ID: IAD96FA136		Aircraft Registration Number: N2535Z	
		Occurrence Date: 08/15/1996		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place ELKTON		State MD	Zip Code 21921	Local Time 1233	Time Zone EDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Bellanca		Model/Series 8KCAB		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>HISTORY OF FLIGHT</p> <p>On August 15, 1996, at 1233 eastern daylight time (EDT), a Bellanca 8KCAB, N2535Z, crashed in a wooded area in Elkton, Maryland. Visual meteorological conditions prevailed and a flight plan was not filed. The certificated private pilot and passenger were fatally injured. The airplane was destroyed. The local, personal flight was operated under 14 CFR Part 91, and originated at the Cecil County Airpark, in Elkton, Maryland, about 1200 EDT.</p> <p>The pilot was overflying the passenger's place of business. According to several witnesses, the pilot took passengers for lunchtime airplane rides. Witnesses reported that they observed the accident airplane performing aerobatic maneuvers near the accident site. One witness reported that he was in front of the building when he saw the airplane overfly at a low altitude. He stated, "The plane was flying east and west when it went into a dive at about 200 feet. At 75 feet it pulled up and did a half barrel roll to the right reaching a height of 300 feet then it banked right and went into a 80 degree dive pulling up at about 50 feet. As it pulled up it did a near complete inverted turn...and crashed into the trees... ." Other witnesses about 100 yards from the accident site reported that the airplane was just above tree level and the engine was running. The airplane impacted trees in a wooded area before impacting the ground.</p> <p>The accident occurred during the hours of daylight at 39 degrees 42 minutes and thirty nine seconds north latitude and 75 degrees 52 minutes and 35 seconds west longitude.</p> <p>PILOT INFORMATION</p> <p>The pilot held a private pilot certificate with a single engine land rating. According to Federal Aviation Administration (FAA) records, the pilot reported over 1240 hours of flight time when he applied for a third class medical certificate that was completed on November 13, 1995.</p> <p>AIRCRAFT INFORMATION</p> <p>The 1977 year model Bellanca 8KCAB airplane, serial number 341-77 was equipped with a Lycoming AEIO-360-H1A engine, serial number L-17788-51A. According to the engine log book, the airplane had accumulated over 957 hours of total flight time. The engine had accumulated over 15 hours of flight time since the last annual inspection that was completed on February 20, 1996.</p> <p>METEOROLOGICAL CONDITIONS</p> <p>The 1251 hour surface weather observation for New Castle County Airport, Wilmington, Delaware, about 17 miles east of the accident site was as follows:</p>					
FACTUAL REPORT - AVIATION					
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National Transportation Safety Board

## FACTUAL REPORT

AVIATION

NTSB ID: IAD96FA136

Occurrence Date: 08/15/1996

Occurrence Type: Accident

## Narrative (Continued)

Sky condition, clear; visibility, 8 miles; temperature, 80 degrees Fahrenheit (F); dew point, 68 degrees F; wind out of 170 degrees at 8 knots; and altimeter, 30.13 inches Hg.

## WRECKAGE AND IMPACT INFORMATION

The airplane struck trees about 80 feet tall separating both wings and came to rest inverted about 88 feet from the initial impact point (IIP). The right wing tip was the first piece of wreckage located at the IIP. The wreckage was oriented on a magnetic heading of 340 degrees, and the inclinometer measured 35 degrees descent angle. All of the airframe structure, accessories, and flight controls were located at the crash site. All cables remained connected to their respective bellcranks. There was no evidence of preimpact airframe structural anomaly.

Both fuel tanks were ruptured. There was evidence of aviation fuel in the fuel lines. The propeller blades exhibited chordwise scratches, and the leading edges were nicked and dented. The propeller blades were twisted torsionally. At the point where the fuselage impacted the ground, there was a 8 feet long by 6 feet wide, 3 feet deep crater.

Postaccident examination was conducted at Dawn Aeronautics, New Castle, Delaware, on August 17, 1996, under the supervision of the NTSB. The examination revealed that the engine was intact, and all the accessories were attached. The cylinders were attached and secured to the crankcase. There was no evidence of uncontained internal engine components.

The propeller was manually rotated which resulted in the operation of the cylinder valves, confirmation of compression in each cylinder, and magnetos sparking. Also all the accessory gear box driven components operated. There was no mechanical resistance noted when the propeller was rotated. The engine was lubricated.


The fuel boost pump and engine driven fuel pump tested satisfactorily. The main fuel screen was clean, and the fuel injector servo separated from the engine. The flow divider of the injector and all four nozzles were removed and inspected. There was no obstruction noted. The engine oil system was intact. The oil suction screen and filter were clean. The engine air induction and exhaust systems did not disclose any anomalies. There was no evidence of preimpact engine malfunction.


## MEDICAL AND PATHOLOGICAL INFORMATION

A Medical Examination was performed by Dr J Laron Locke, Assistant State Medical Examiner of the State Medical Examiner's Office in Baltimore, Maryland, on August 16, 1996. Toxicological examination of the pilot was conducted by the State Medical Examiner's Office in Baltimore, Maryland, on August 16, 1996. Toxicological tests were negative for all screened drugs and substances.

## ADDITIONAL INFORMATION

The wreckage was released to Andy Paul, President of Crittenden Adjustment Company Inc., on August 17, 1996.

 <b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b>		NTSB ID: IAD96FA136			
		Occurrence Date: 08/15/1996			
		Occurrence Type: Accident			
<b>Landing Facility/Approach Information</b>					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
<b>Aircraft Information</b>					
Aircraft Manufacturer Bellanca		Model/Series 8KCAB		Serial Number 341-77	
Airworthiness Certificate(s): Acrobatic; Normal					
Landing Gear Type: Tailwheel					
Homebuilt Aircraft? No	Number of Seats: 3	Certified Max Gross Wt.	1800 LBS	Number of Engines: 1	
Engine Type: Reciprocating	Engine Manufacturer: Lycoming	Model/Series: AEIO-360-H1A	Rated Power: 180 HP		
- Aircraft Inspection Information					
Type of Last Inspection Annual	Date of Last Inspection 02/1996	Time Since Last Inspection 15 Hours	Airframe Total Time 957 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? Yes	ELT Aided in Locating Accident Site? Yes			
<b>Owner/Operator Information</b>					
Registered Aircraft Owner FRANK C. SHERRARD		Street Address 455 SPRING HILL RD			
		City RISING SUN	State MD	Zip Code 21911	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

 <p><b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b></p>	NTSB ID: IAD96FA136
	Occurrence Date: 08/15/1996
	Occurrence Type: Accident

**First Pilot Information**

Name On File	City On File	State On File	Date of Birth On File	Age 77
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Sex: M	Seat Occupied: Left	Principal Profession: Lawyer	Certificate Number: On File
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Certificate(s): Private

Airplane Rating(s): Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): None

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft?	Current Biennial Flight Review?
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Medical Cert.: Class 3	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 11/1995
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	1240		1240							
Pilot In Command(PIC)										
Instructor										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? Yes	Second Pilot? No
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**Flight Plan/Itinerary**

Type of Flight Plan Filed: None

Departure Point Same as Accident/Incident Location	State	Airport Identifier 2N0	Departure Time 1200	Time Zone EDT
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Destination Local Flight	State	Airport Identifier	
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Type of Clearance: None

Type of Airspace: Class G

**Weather Information**

Source of Briefing:

Method of Briefing:

 <p><b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b></p>	NTSB ID: IAD96FA136
	Occurrence Date: 08/15/1996
	Occurrence Type: Accident

**Weather Information**

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
ILG	1254	EDT	80 Ft. MSL	17 NM	91 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			0 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: None			0 Ft. AGL	Visibility: 8 SM	Altimeter: 30.00 "Hg
Temperature: 27 °C	Dew Point: 20 °C	Wind Direction: 170		Density Altitude: Ft.	
Wind Speed: 8	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

**Accident Information**

Aircraft Damage: Destroyed	Aircraft Fire: None	Aircraft Explosion: None
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Classification: U.S. Registered/U.S. Soil

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers	1				1
- TOTAL ABOARD -	2				2
Other Ground	0	0	0		0
- GRAND TOTAL -	2	0	0		2

National Transportation Safety Board

**FACTUAL REPORT**

**AVIATION**



NTSB ID: IAD96FA136

Occurrence Date: 08/15/1996

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

BEVERLEY DRAKE-NURSE

Additional Persons Participating in This Accident/Incident Investigation:

KIM BARNETT  
FAA FLIGHT STANDARDS DIST OFF  
BALTIMORE, MD 21240

EDWARD G ROGALSKI  
LYCOMING  
BELLEVIEW, FL 34421