



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Indiantown, Florida	<b>Accident Number:</b>	NYC08CA205
<b>Date &amp; Time:</b>	June 3, 2008, 12:45 Local	<b>Registration:</b>	N37012
<b>Aircraft:</b>	Luscombe 8A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Sys/Comp malf/fail (non-power)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The Luscombe 8A was taking off from a turf runway, and had climbed to an altitude of about 10 feet above ground level, when the left rudder cable failed. The airplane yawed to the right and the left wing and nose contacted the ground. The airplane subsequently came to rest on the right side of the runway and sustained substantial damage to the left wing and fuselage. Examination of the airplane revealed that the left rudder cable had separated at the first pulley under the cabin floor. The separated end of the cable was frayed and displayed evidence of corrosion. The airplane had been operated for about 25 hours since its most recent annual inspection, which was performed about 11 months prior to the accident. At the time of the inspection, a mechanic noted that the control cables were inspected for damage per a required Airworthiness Directive.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An inadequate annual inspection that failed to detect a damaged rudder cable which resulted in the cable's subsequent failure during takeoff.

## Findings

<b>Aircraft</b>	Rudder control system - Damaged/degraded
<b>Personnel issues</b>	Scheduled/routine inspection - Maintenance personnel
<b>Aircraft</b>	Rudder control system - Failure
<b>Personnel issues</b>	Aircraft control - Pilot

## Factual Information

### History of Flight

<b>Takeoff</b>	Sys/Comp malf/fail (non-power) (Defining event)
<b>Takeoff</b>	Loss of control in flight
<b>Uncontrolled descent</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	66,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>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 1, 2007
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	July 1, 2007
<b>Flight Time:</b>	631 hours (Total, all aircraft), 2 hours (Total, this make and model), 544 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	82,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 1, 2007
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8500 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Luscombe	<b>Registration:</b>	N37012
<b>Model/Series:</b>	8A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1678
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	July 1, 2007 Annual	<b>Certified Max Gross Wt.:</b>	1260 lbs
<b>Time Since Last Inspection:</b>	24 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1920 Hrs at time of accident	<b>Engine Manufacturer:</b>	Teledyne Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	A65-8
<b>Registered Owner:</b>	Treasurer Coast Sport Flyers	<b>Rated Power:</b>	65 Horsepower
<b>Operator:</b>		<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>	OBE, 34 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	12:45 Local	<b>Direction from Accident Site:</b>	300°
<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>	0 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.12 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 22°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Indiantown, FL (X58 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Stuart, FL (SUA )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:45 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Indiantown X58	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	30 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	31	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6300 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 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
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	27.0375,-80.441108

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Schiada, Luke
<b>Additional Participating Persons:</b>	Barry Byrd; FAA/FSDO; Ft. Lauderdale, FL
<b>Original Publish Date:</b>	August 28, 2008
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=68163">https://data.nts.gov/Docket?ProjectID=68163</a>

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