



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Boynton Beach, FL	<b>Accident Number:</b>	ERA15FA141
<b>Date &amp; Time:</b>	03/02/2015, 1252 EST	<b>Registration:</b>	N787Z
<b>Aircraft:</b>	COLYAER SL FREEDOM	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The airline transport pilot departed in his light sport aircraft with a friend, who held a student pilot certificate, on a cross-country flight to another airport for lunch. GPS data showed the airplane maneuvered near the accident site for about 30 minutes, performing multiple climbs, descents, and turns. Several witnesses reported hearing the engine "sputter," which was immediately followed by an advance in engine power. Although the airplane's final movements were not captured by witness reports or radar/GPS data, examination of the accident site showed that the airplane was in a steep descent when it impacted a swamp. The impact geometry was consistent with an in-flight loss of control and subsequent uncontrolled descent to ground impact. A postcrash fire ensued, which consumed most of the airplane.

Postaccident examination of the airplane and the engine did not reveal any mechanical anomalies that would have precluded normal operation. Although the environmental conditions were favorable for light icing at glide or cruise power, witnesses reported that the engine regained power after "sputtering"; such a gain in power is not consistent with a carburetor ice condition. The cause of the "sputtering" reported by the witnesses could not be determined because the extensive fire damage precluded testing of the engine-driven fuel pump, carburetors, and ignition system components.

The pilot reported a vibration in the control stick to the airplane manufacturer in the days leading up to the accident. The manufacturer responded to the pilot on the morning of the accident and stated that the vibration could be the result of an inadequately balanced engine or propeller. However, the propeller's effect on the airplane's performance could not be determined because two of the blades were not recovered from the accident site and the acetal pitch change slide block within the propeller hub was consumed by postcrash fire.

Although sedating medications were found in toxicological specimens from both occupants, and the pilot's autopsy found evidence of severe coronary artery disease, the investigation could not determine if these physiological conditions contributed to the accident.

## Flight Events

Enroute-cruise - Loss of control in flight  
Uncontrolled descent - Collision with terr/obj (non-CFIT)  
Post-impact - Fire/smoke (post-impact)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

An in-flight loss of control for reasons that could not be determined based on the available evidence.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C

Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

## Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial; Flight Engineer	<b>Age:</b>	64
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Instrument Rating(s):</b>	Airplane; Helicopter
<b>Other Aircraft Rating(s):</b>	Glider	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	19400 hours (Total, all aircraft), 132 hours (Total, this make and model)		

## Pilot-Rated Passenger Information

<b>Certificate:</b>	Student	<b>Age:</b>	66
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	35.9 hours (Total, all aircraft), 0 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	COLYAER SL	<b>Registration:</b>	N787Z
<b>Model/Series:</b>	FREEDOM S100	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Rotax
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	912ULS
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BCT, 13 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 3700 ft agl	Wind Speed/Gusts, Direction:	7 knots / 14 knots, 90°
Temperature:	26° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WEST PALM BEACH, FL (LNA)	Destination:	Okeechobee, FL (OBE)

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	26.520278, -80.222222		

## Administrative Information

Investigator In Charge (IIC):	Stephen R Stein	Adopted Date:	03/29/2017
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90801">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90801</a>		

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