



# Aviation Investigation Final Report

<b>Location:</b>	MIAMI, Florida	<b>Accident Number:</b>	MIA93FA035
<b>Date &amp; Time:</b>	December 24, 1992, 06:34 Local	<b>Registration:</b>	N6737T
<b>Aircraft:</b>	CESSNA 310D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

WHILE IN CRUISE FLIGHT AT 1,000 THE LEFT ENG QUIT. THE LEFT ENG FUEL SEL WAS MOVED FROM THE LEFT MAIN PSN TO THE LEFT AUX PSN, AND THE LEFT ENG RESTARTED. TWO MIN LATER THE RIGHT ENG QUIT. THE RIGHT ENG FUEL SEL WAS MOVED FROM THE RIGHT MAIN PSN TO RIGHT AUX PSN, AND THE RIGHT ENG RESTARTED. BOTH ENGS THEN QUIT. A FORCED LANDING WAS MADE IN THE EVERGLADES. DISASSEMBLY OF THE RIGHT FUEL SELECTOR VALVE REVEALED THAT THE VALVE WAS IN THE OFF POSITION DUE TO THE IMPROPER INSTALLATION OF THE RIGHT OUTBOARD TORQUE TUBE IN THE ASSEMBLY HOUSING.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER INSTALLATION OF THE RIGHT OUTBOARD TORQUE TUBE IN THE RIGHT FUEL SELECTOR VALVE ASSEMBLY HOUSING RESULTING IN A TOTAL LOSS OF ENGINE POWER DUE TO FUEL STARVATION.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: CRUISE - NORMAL

Findings  
1. 2 ENGINES

2. (C) FUEL SYSTEM,SELECTOR/VALVE - IMPROPER
3. (C) MAINTENANCE,INSTALLATION - IMPROPER - COMPANY MAINTENANCE PERSONNEL
4. (C) FLUID,FUEL - STARVATION

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Occurrence #2: FORCED LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	20, 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>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	December 2, 1992
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	796 hours (Total, all aircraft), 172 hours (Total, this make and model), 717 hours (Pilot In Command, all aircraft), 106 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N6737T
<b>Model/Series:</b>	310D 310D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	31039037
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	December 1, 1992 Annual	<b>Certified Max Gross Wt.:</b>	4830 lbs
<b>Time Since Last Inspection:</b>	18 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	5500 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-470-D
<b>Registered Owner:</b>	SORENSEN, MARK A.	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>	SORENSEN, MARK A.	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	TMB ,10 ft msl	<b>Distance from Accident Site:</b>	9 Nautical Miles
<b>Observation Time:</b>	06:48 Local	<b>Direction from Accident Site:</b>	159°
<b>Lowest Cloud Condition:</b>	Scattered / 3000 ft AGL	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 20°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	OPA LOCKA , FL (OPF )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	06:20 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<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>	1 Serious	<b>Latitude, Longitude:</b>	25.649915,-80.489295(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Smith, Carrol
<b>Additional Participating Persons:</b>	JORGE PRELLEZO; MIAMI , FL JAMES A DOLE; MIAMI , FL LUIS CARMONA; MIAMI , FL JEAN FERRARA; MIAMI , FL
<b>Original Publish Date:</b>	January 31, 1994
<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=33171">https://data.nts.gov/Docket?ProjectID=33171</a>

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