



Aviation Investigation Final Report

Location:	TITUSVILLE, Florida	Accident Number:	MIA90FA191
Date & Time:	September 26, 1990, 12:09 Local	Registration:	N93410
Aircraft:	ERCO 415	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT STATED THAT PRIOR TO DEPARTURE, THE ENG START & RUN UP WERE NORMAL. DURING THE GROUND ROLL TO TAKEOFF, THE ACFT ACCELERATED NORMALLY BUT AFTER ROTATION AT AN ALTITUDE OF ABOUT 100 FT AGL, THE ENG RPM DROPPED FROM 2,600 TO 2,200. A WITNESS REPORTED SEEING PUFFS OF BLACK SMOKE TRAILING THE ACFT. THE PLT INITIATED A TURN TO RETURN TO THE ARPT BUT THE ENG RPM CONTINUED TO DECREASE. HE THEN ROLLED WINGS LEVEL & THE ACFT COLLIDED WITH A TREE THEN THE GROUND. EXAM OF THE ENG REVEALED THAT THE PARTIAL LOSS OF ENG POWER WAS DUE TO A FOREIGN OBJECT OBSTRUCTING THE INLET OF THE CARBURETOR.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: WAS PARTIAL LOSS OF ENGINE POWER DUE TO FOREIGN OBJECT OBSTRUCTION OF THE INLET OF THE CARBURETOR.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM,CARBURETOR - BLOCKED(PARTIAL)

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - EMERGENCY

Findings

2. OBJECT - TREE(S)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Private	Age:	58, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 21, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1487 hours (Total, all aircraft), 12 hours (Total, this make and model), 16 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ERCO	Registration:	N93410
Model/Series:	415 415	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	733
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	June 10, 1990 Annual	Certified Max Gross Wt.:	1400 lbs
Time Since Last Inspection:	57 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2399 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	O-200A
Registered Owner:	M.L. CUNNINGHAM/ECTOR D. JONES	Rated Power:	100 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TIX ,35 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	11:51 Local	Direction from Accident Site:	167°
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	ORLANDO , FL (ORL)	Type of Clearance:	None
Departure Time:	00:01 Local	Type of Airspace:	Class G

Airport Information

Airport:	ARTHUR DUNN AIR PARK X21	Runway Surface Type:	Asphalt
Airport Elevation:	28 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	3000 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	28.630462,-80.849807(est)

Administrative Information

Investigator In Charge (IIC): Monville, Timothy

Additional Participating Persons:

Original Publish Date: November 9, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=32569>

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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](#).