



# **Aviation Investigation Final Report**

Location:	Fort Myers, Florida	Accident Number:	MIA08LA006
Date & Time:	October 23, 2007, 10:48 Local	<b>Registration:</b>	N52730
Aircraft:	Taylorcraft DCO-65	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

The pilot stated that while on approach to his home airport, he began his descent for landing. About 800 feet above ground level, he reduced engine power and noticed an extreme vibration from the engine area. He declared an emergency with air traffic control and made a forced landing into a shopping mall parking lot, hitting several cars, damaging both wing spars, the landing gear, and engine. Examination of the airplane revealed a fractured front engine mount bolt. The bolt exhibited features consistent with an overstress failure; however, the investigation could not determine if the bolt failed before or after the engine vibration. No other failures or mechanical anomalies were identified with the accident airplane.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power during approach for undetermined reasons.

#### Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: APPROACH

Findings
1. REASON FOR OCCURRENCE UNDETERMINED
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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: EMERGENCY LANDING

Findings 2. OBJECT - VEHICLE

### **Factual Information**

On October 23, 2007, at 1048 eastern daylight time, a Taylorcraft DCO-65, N52730, collided with several automobiles during a forced landing in a shopping mall parking lot in Fort Myers, Florida. The certificated private pilot, who was the owner of the airplane, reported no injuries, the passenger reported minor injuries and the airplane sustained substantial damage. The flight was operated as a personal flight under the provisions of 14 Code of Federal Regulations (CFR) Part 91, and no flight plan was filed. Visual meteorological conditions (VMC) prevailed at the time of the accident. The flight originated from the Page Field Airport (FMY), Fort Myers, Florida, at 0930 the same day.

The pilot stated that while on approach to runway 13 at FMY, he began his descent for landing. About 800 feet above ground level, he reduced engine power and noticed an extreme vibration from the engine area. He declared an emergency with air traffic control and made a forced landing into a shopping mall parking lot, hitting several cars, damaging both wing spars, the landing gear, and engine.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector found a fractured front engine mount bolt. The inspector observed that the bolt necked down near the fracture area, consistent with overstress. The inspector further stated that the bolt was located inside the engine mount, and would not be visible for examination during a routine annual inspection. The inspector did not report any additional failures or malfunctions.

The airplane was manufactured in 1943. The airplane's most recent annual inspection was completed about 4 months prior to the accident, and the airplane accumulated approximately 17 hours of operation since that inspection.

#### **Pilot Information**

Certificate:	Private	Age:	60,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 1, 2007
Flight Time:	1393 hours (Total, all aircraft), 260 hours (Total, this make and model), 1201 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N52730
Model/Series:	DCO-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	L-5665
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 1, 2007 Annual	Certified Max Gross Wt.:	1325 lbs
Time Since Last Inspection:	17 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1241 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C-85-12F
Registered Owner:	Douglas Charles Jenkins	Rated Power:	85 Horsepower
Operator:	Douglas Charles Jenkins	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FMY,17 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	130°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ft. Myers, FL (FMY )	Type of Flight Plan Filed:	None
Destination:	Ft. Myers, FL (FMY )	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	

# **Airport Information**

Airport:	Page Field FMY	Runway Surface Type:	Asphalt
Airport Elevation:	17 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	4912 ft / 150 ft	VFR Approach/Landing:	Forced landing;Traffic pattern

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	26.585277,-81.85778(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Bob Blake; FAA/FSDO; Tampa, FL
Original Publish Date:	December 24, 2008
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66942

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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.