Aviation Investigation Final Report

Location:	Punta Gorda, Florida	**Accident Number:**	MIA06LA028
Date & Time:	December 10, 2005, 10:00 Local	**Registration:**	N535BM
Aircraft:	MESTAS FELIX R Velocity LWFG-E	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot/builder of the accident airplane stated that the takeoff and initial climb were normal until the airplane reached about 200-300 feet, when the engine began "losing compression." He further stated that the airspeed began to bleed off, so he lowered the nose to maintain 80 knots and turned the airplane back toward the runway. He said that he was unable to reach the runway, so he decided to land in the grass on the airport property. According to the pilot the landing flare and touchdown were normal, but during the rollout the airplane struck a taxiway sign, became airborne, impacted the ground again on the main landing gear, and then came to a sudden stop in a ditch. It then caught fire and was mostly consumed in the flames. According to the pilot/builder, the airplane had a General Motors automobile conversion V-6 engine, and the accident flight was the first flight after the airplane had been built. Prior to the flight only ground taxi operations had been performed. During takeoff on the first and accident flight, the pilot said he noticed the engine temperature gauge needle showing that the engine was operating at a very high temperature. The pilot/builder said that postcrash examination of the engine could not be accomplished because it had been constructed largely of aluminum and the intense heat of the postcrash fire mostly consumed the engine and melted the aluminum.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings
2. TERRAIN CONDITION - DITCH

Factual Information

On December 10, 2005, about 1000 eastern standard time, a experimental Velocity LWFG-E, N535BM, registered to and operated by a private individual, experienced an in-flight loss of engine power during takeoff from Charlotte County Airport, Punta Gorda, Florida. Visual meteorological conditions prevailed at the time, and no flight plan was filed for the Title 14 CFR Part 91 personal flight. The airplane was destroyed and the private-rated pilot and one passenger were not injured. The flight was originating at the time of the accident.

The pilot stated that the takeoff and initial climb were normal until the airplane reached about 200-300 feet, when the engine began "loosing compression." He further stated that the airspeed began to bleed off, so he lowered the nose to maintain 80 knots and turned the airplane back toward the runway. He said the was unable to reach runway, so he decided to land in the grass on the airport property. According to the pilot the landing flare and touchdown were normal, but during the rollout the airplane struck a taxiway sign, became airborne, impacted the ground again on the main landing gear, and then came to a sudden stop in a ditch. The airplane then caught fire and was mostly consumed in the flames.

The pilot/builder of the accident airplane stated that he built the airplane with an General Motors automobile conversion V-6 engine, and the accident flight was the first flight after the airplane had been built. He stated that prior to the flight only ground taxi operations had been performed with the airplane as a test. He said that during takeoff, he noticed the engine temperature gauge needle displayed the that the engine was operating hotter than usual. According the pilot/builder, postcrash examination of the engine could not be accomplished because the engine had been constructed largely of aluminum and the intense heat of the postcrash fire mostly consumed the engine and the aluminum had melted.

Pilot Information

Certificate:	Private	**Age:**	52,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3	**Last FAA Medical Exam:**	October 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	December 1, 2005
Flight Time:	130 hours (Total, all aircraft), 8 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MESTAS FELIX R	**Registration:**	N535BM
Model/Series:	Velocity LWFG-E	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:		**Serial Number:**	DMO387
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	2780 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	7 Hrs at time of accident	**Engine Manufacturer:**	General Motors
ELT:	Installed, not activated	**Engine Model/Series:**	4.3L
Registered Owner:	On file	**Rated Power:**	220 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PGD	**Distance from Accident Site:**	
Observation Time:	10:05 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered	**Visibility**	3 miles
Lowest Ceiling:	Broken	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	10°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.01 inches Hg	**Temperature/Dew Point:**	18°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Punta Gorda, FL (PGD)	**Type of Flight Plan Filed:**	None
Destination:	Punta Gorda, FL (PGD)	**Type of Clearance:**	None
Departure Time:	10:00 Local	**Type of Airspace:**	

Airport Information

Airport:	Charlotte County Airport PGD	**Runway Surface Type:**	Asphalt
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:	03	**IFR Approach:**	None
Runway Length/Width:	6500 ft / 150 ft	**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	26.920278,-81.990554

Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	Linda Nevin; FAA FSDO; Tampa, FL
Original Publish Date:	April 25, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=62944