



Aviation Investigation Final Report

Location:	Fruitvale, Texas	Accident Number:	CEN11LA061
Date & Time:	November 4, 2010, 21:10 Local	Registration:	N971WA
Aircraft:	Siai-Marchetti S.205/22R	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

The airplane was serviced with 14 gallons of fuel (the gauges registered three-quarters full) prior to departure, and the pilot flew to another airport where 20 gallons of fuel were added. The pilot then returned to his home base, where the airplane was serviced with another 24 gallons of fuel. The pilot flew back to the same airport but did not refuel there. While en route back to his home airport at night, the engine lost power. The pilot made a forced landing, during which the airplane collided with a power line and trees. The pilot said that he ran out of fuel and that the airplane burned more fuel than he anticipated.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A total loss of engine power due to fuel exhaustion as a result of the pilot's inadequate fuel planning.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot

Factual Information

History of Flight

Enroute-cruise	Loss of engine power (total)
Emergency descent	Off-field or emergency landing
Emergency descent	Collision with terr/obj (non-CFIT) (Defining event)

On November 4, 2010 approximately 2110 central standard time, a Siai-Marchetti S.205/22R, N971WA, registered to and operated by FreddieMac Aviation, LLC, was destroyed during a night forced landing when the airplane struck a power line and trees and impacted terrain after the engine lost power near Fruitvale, Texas. Visual meteorological conditions (VMC) prevailed at the time of the accident. The business flight was being conducted under the provisions of 14 Code of Federal Regulations (CFR) Part 91 without a flight plan. The pilot, the sole occupant on board, was seriously injured. The cross-country flight originated at Denton (DTO), Texas, and was en route to Shreveport (SHV), Louisiana.

According to the pilot's accident report, earlier that day the airplane was serviced with 14 gallons of fuel (the gauges registered three-quarters full) and he flew from SHV to DTO. At DTO, 20 gallons of fuel were added and the pilot returned to SHV. The airplane was serviced with 24 gallons of fuel and the pilot returned to DTO to take his business partner home. He did not refuel at DTO. En route back to SHV at 7,500 feet, the engine lost power. The pilot said it was his opinion that he "ran out of fuel."

Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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:	March 24, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 24, 2009
Flight Time:	336 hours (Total, all aircraft), 295 hours (Total, this make and model), 268 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Siai-Marchetti	Registration:	N971WA
Model/Series:	S.205/22R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	380
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 1, 2010 Annual	Certified Max Gross Wt.:	2976 lbs
Time Since Last Inspection:	117 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2542 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	IO-360-A1B6D
Registered Owner:	FreddieMac Aviation, LLC	Rated Power:	200 Horsepower
Operator:	FreddieMac Aviation, LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	9°C / 2°C
Precipitation and Obscuration:			
Departure Point:	Denton, TX (DTO)	Type of Flight Plan Filed:	Unknown
Destination:	Shreveport, LA (SHV)	Type of Clearance:	None
Departure Time:	20:10 Local	Type of Airspace:	Class B;Class E

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	32.684722,-95.783889(est)

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	David Shugart; FAA Flight Standards District Office; Dallas, TX Steve Sheridan; FAA Flight Standards District Office; Dallas, TN
Original Publish Date:	April 12, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=77749

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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](#).