



Aviation Investigation Final Report

Location:	NAPLES, Florida	Accident Number:	MIA99LA100
Date & Time:	March 6, 1999, 12:10 Local	Registration:	N3588X
Aircraft:	Mooney 20G	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight was in the traffic pattern and the pilot was practicing touch-and-go landings and takeoffs. The pilot reported that he had completed a touch-and-go on runway 14, and on climb out was assigned a right hand traffic pattern. On crosswind the airplane's engine lost complete power. The pilot said, '...I pitched down and tried to restart the engine, on either tank using both the starter and windmilling.' He attempted to make a forced landing to a golf course, but decided on a road, because there were people on the golf course. The airplane landed on the road gear up, heading southbound, skidded forward, and the right wing struck two mailboxes. The airplane continued forward striking a tree, and separating a portion of the right wing. Examination of the wreckage revealed that there was no fuel in the right main tank. No fuel was found in the carburetor, and the fuel selector was found in the 'OFF' position. About 10 gallons of fuel were found in the left tank. The left fuel system operated without discrepancies, and fuel flowed from the tank. No broken fuel lines were found, and the engine displayed no discrepancies. The airplane flew 1.7 hours before the flight on March 6, 1999. The airplane was last refueled on February 11, 1999. The FAA inspector wrote in his report, '...subsequent fuel calculations revealed that at the time of the accident, the right fuel tank would have been empty of usable fuel.' In addition the pilot said, '...that when the engine failed...that he had been flying on the right tank for approximately 45 minutes prior to the accident. He also stated that he tried to select the left fuel tank but it is possible that he may have selected the 'Off' position inadvertently.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper procedure by not placing the fuel selector on the tank with the most fuel, which resulted in fuel starvation and a off airport forced landing. Contributing factors in this

accident were the pilot's inadequate pre-flight and in-flight planning.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: CLIMB

Findings

1. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
2. (C) FLUID,FUEL - STARVATION
3. (F) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
4. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
5. FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

6. OBJECT - OTHER
7. OBJECT - TREE(S)

Factual Information

On March 6, 1999, about 1210 eastern standard time, a Mooney 20G, N3588X, registered to a private individual, crashed during a forced landing near Naples, Florida, while on a Title 14 CFR Part 91 instructional flight. Visual meteorological conditions were reported, and no flight plan was filed. The airplane was substantially damaged. The private-rated pilot reported no injuries. The flight had originated at 1130.

The flight was in the traffic pattern, and the pilot was practicing touch-and-go landings and takeoffs. The pilot reported that after completing a touch-and-go on runway 14, and on climbout was assigned a right hand traffic pattern by the control tower. On crosswind the airplane's engine lost complete power. The pilot said, "...I pitched [the nose] down and tried to restart the engine, on either tank using both the starter and windmilling." He attempted to make a forced landing to a golf course, but decided on a road, because there were people on the golf course. The airplane landed on the road gear up, heading southbound, skidded forward, and the right wing struck two mailboxes. The airplane continued forward striking a tree, and separating a portion of the right wing.

Examination of the wreckage revealed that there was no fuel in the right main tank. No fuel was found in the carburetor, and the fuel selector was found in the "OFF" position. About 10 gallons of fuel was found in the left tank. The left fuel system operated without discrepancies, and fuel flowed from the tank. No broken fuel lines were found, and the engine displayed no discrepancies.

The airplane flew 1.7 hours before the flight on March 6, 1999. The airplane was last refueled on February 11, 1999. The FAA inspector wrote in his report, "...subsequent fuel calculations revealed that at the time of the accident, the right fuel tank would have been empty of usable fuel."

According to the FAA inspector's report the pilot stated to him, "...that when the engine failed...that he had been flying on the right tank for approximately 45 minutes prior to the accident. He also stated that he tried to select the left fuel tank but it is possible that he may have selected the 'Off' position inadvertently."

Pilot Information

Certificate:	Private	Age:	37, 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 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 18, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	284 hours (Total, all aircraft), 1 hours (Total, this make and model), 172 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N3588X
Model/Series:	20G 20G	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	680157
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	September 30, 1998 Annual	Certified Max Gross Wt.:	2525 lbs
Time Since Last Inspection:	94 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6960 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1D
Registered Owner:	OWLIAEI BAHRAM	Rated Power:	180 Horsepower
Operator:	GULF COAST AIRWAYS	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:	APF ,10 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	12:15 Local	Direction from Accident Site:	80°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	25°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(APF)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	

Airport Information

Airport:	NAPLES MUNICIPAL APF	Runway Surface Type:	Concrete
Airport Elevation:	10 ft msl	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	26.030857,-81.759887(est)

Administrative Information

Investigator In Charge (IIC):	Yurman, Alan
Additional Participating Persons:	MARIO R GALLO; MIAMI , FL
Original Publish Date:	April 25, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45869

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