Aviation Investigation Final Report

Location:	Sarasota, Florida	**Accident Number:**	ANC06LA079
Date & Time:	June 23, 2006, 09:05 Local	**Registration:**	N1052D
Aircraft:	Rockwell 112TCA	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private certificated pilot reported that he preflighted his airplane, and sumped the fuel tanks in preparation for the Title 14, CFR Part 91 flight. He said he found some debris, but continued to sump the tanks until he obtained clean fuel. He looked in the fuel tanks, confirmed the presence of fuel, and rocked the wings and heard a sloshing sound from each tank. The pilot reported that the fuel totalizer indicated 10 gallons of fuel in the tanks. After takeoff, he made a left turn, and the engine began to run rough. He requested a return to the departure airport, stating that he had a fuel problem. He was unable to reach the airport, and ditched the airplane with the landing gear up, about 50 yards from shore. The pilot said that the engine continued to run roughly during the emergency descent, and was running upon contact with the water. He indicated that he believed the cause of accident was debris in the fuel tank, picked up during the turn. He also said that it was "entirely possible that this circumstance could have been avoided if there was a greater quantity of fuel in the tank." After the airplane was recovered, an FAA inspector examined the airplane and found a small amount of fuel that sloshed at the bottom of the tanks. He pulled the fuel sump drain, but no fuel discharge was observed. The inspector indicated that his review of air traffic control tapes revealed that the pilot requested to land due to fuel starvation. The inspector also reported that in his conversations with the pilot, the pilot told him that the estimate of fuel in the tanks was based on the fuel totalizer indication. The pilot did not attempt to measure the fuel, but opened the fuel caps to see some fuel sloshing in the tanks.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection of the fuel system, which resulted in a partial loss of engine power during cruise flight, and a subsequent ditching. Factors contributing to the

accident were a low fuel level at departure, and fuel contamination.

Findings

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

Findings
1. (F) FLUID,FUEL - LOW LEVEL
2. (F) FLUID,FUEL - CONTAMINATION,OTHER THAN WATER
3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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

Findings
4. TERRAIN CONDITION - WATER

Factual Information

On June 23, 2006, about 0905 eastern daylight time, a wheel-equipped Rockwell 112TCA airplane, N1052D, sustained substantial damage when it ditched in the ocean waters of Sarasota Bay during a landing approach to the Sarasota/Bradenton International Airport, Sarasota, Florida. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The private certificated pilot was not injured, and the sole passenger received minor injuries. Visual meteorological conditions prevailed. The flight originated at the Sarasota/Bradenton Airport about 0858, and was en route to Venice, Florida. No flight plan was filed.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 23, a Federal Aviation Administration (FAA) inspector, Tampa Flight Standards District Office (FSDO), Tampa, Florida, reported that after departing the Sarasota Airport, the pilot radioed that he needed to return to the airport because he was low on fuel. The airplane was cleared to land on runway 04 at Sarasota, but ditched in Sarasota Bay, about 50 yards from the beach. The airplane received structural damage to the fuselage and wings.

During a telephone conversation with the NTSB IIC on June 23, the pilot reported that after departure he climbed the airplane to 1,600 feet mean sea level (msl). After contacting Tampa Approach Control, he made a left turn toward Venice. He said the engine began to run rough and lose power, and he requested a return to the airport. During the final approach to runway 04, the airplane could not maintain altitude, and he ditched the airplane in Sarasota Bay with the landing gear up. The pilot said the airplane had at least 10 gallons of fuel at departure, and his comment to the air traffic control tower was because he was having some type of fuel problem. He said he did not think the engine actually quit completely.

In the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) submitted by the pilot, the pilot indicated that he preflighted the airplane and sumped the fuel tanks. He said he found some debris, but continued to sump the tanks until he obtained clean, debris-free fuel. He looked in the fuel tanks and confirmed the presence of fuel. He rocked the wings and heard a sloshing sound from each tank. The pilot reported that the fuel totalizer indicated 10 gallons of fuel in the tanks. After making a left turn, the engine began to run rough, and he requested a return to Sarasota Airport. He said the airplane could not maintain altitude, and he was unable to reach the airport. He ditched the airplane in Sarasota Bay, and the airplane settled to the bottom in about 3 feet of water, and about 50 yards from shore. The pilot said that the engine continued to run roughly during the emergency descent, and was running upon contact with the water. The pilot indicated that he believed the cause of accident was debris in the fuel tank, picked up during the turn. He also said that it was "entirely possible that this

circumstance could have been avoided if there was a greater quantity of fuel in the tank."

After the airplane was recovered to the owner's hanger, an FAA inspector examined the airplane on July 5, 2006. The airplane remained positioned on its belly with the landing gear retracted. The inspector was unable to reach the airframe gascolator. Visual examination of the interior of the fuel tanks revealed a small amount of fuel that sloshed at the bottom of the tanks. He pulled the fuel sump drain, but no fuel discharge was observed. The inspector indicated that his review of air traffic control tapes from Sarasota Air Traffic Control revealed that the pilot requested to land due to fuel starvation. The inspector also reported that in his conversations with the pilot, the pilot told him that the estimate of fuel in the tanks was based on the fuel totalizer indication. The pilot did not attempt to measure the fuel, but opened the fuel caps to see some fuel sloshing in the tanks.

Pilot Information

Certificate:	Private	**Age:**	53,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 With waivers/limitations	**Last FAA Medical Exam:**	April 1, 2006
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	January 1, 2005
Flight Time:	327 hours (Total, all aircraft), 143 hours (Total, this make and model), 327 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	**Registration:**	N1052D
Model/Series:	112TCA	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	13152
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	2950 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	TO-360-C1A6D
Registered Owner:	Robert M. Cropper	**Rated Power:**	210 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KSRQ,30 ft msl	**Distance from Accident Site:**	
Observation Time:	09:09 Local	**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:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	27°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sarasota, FL (KSRQ)	**Type of Flight Plan Filed:**	None
Destination:	Venice, FL (KVNC)	**Type of Clearance:**	VFR
Departure Time:	08:58 Local	**Type of Airspace:**	

Airport Information

Airport:	Sarasota International KSRQ	**Runway Surface Type:**	
Airport Elevation:	30 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

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:**	27.381111,-82.56472

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	Thomas Gross; FAA Southern Region Tampa FSDO; Tampa, FL
Original Publish Date:	January 31, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64015