



National Transportation Safety Board Aviation Accident Final Report

Location:	N. Myrtle Beach, SC	Accident Number:	MIA08LA158
Date & Time:	08/01/2008, 1546 EDT	Registration:	N3424M
Aircraft:	PIPER PA-12	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Banner Tow		

Analysis

The pilot flew the airplane for 45 minutes after filling the fuel tanks, then secured the airplane. Before the next departure, the operator advised the pilot twice to fuel the airplane; however, it was not fueled. The pilot departed on a banner-tow flight, during which time he reported monitoring the fuel level. Approximately 1 to 2 minutes after noticing the left and right fuel quantity gauges indicated "1/4" and "1/3" capacity respectively, the engine sputtered once then lost power. He notified air traffic control, released the banner, and ditched the airplane. Examination of the airplane revealed that no fuel was present in the airplane's fuel tanks or carburetor. An unquantified amount of fuel was found in the gascolator.

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 (Cause)
Personnel issues	Fuel planning - Pilot (Cause)

Factual Information

On August 1, 2008, about 1546 eastern daylight time, a Piper PA-12, N3424M, registered to and operated by Barnstormer Flite Signs, Inc., experienced a total loss of engine power and was ditched in the Atlantic Ocean near Grand Strand Airport (CRE), North Myrtle Beach, South Carolina. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 Code of Federal Regulations (CFR) Part 91 banner-tow flight from CRE. The airplane was substantially damaged and the certificated commercial pilot sustained minor injuries. The flight originated about 1300, from CRE.

The pilot stated that earlier that day the fuel tanks were filled and he flew the airplane for 45 minutes, while remaining in the traffic pattern. He secured the airplane and after landing, the operator reportedly advised the pilot twice to fuel the airplane before departure. It was not fueled, and the pilot elected to depart on a banner-tow flight. While monitoring the fuel level during the flight, he noticed the left and right fuel quantity readings were "1/4" and "1/3," respectively. Approximately 1 to 2 minutes later, or at 1545, the engine sputtered once then quit. He notified CRE air traffic control tower that he would attempt to land on the runway and released the banner. After realizing that he was unable to reach the airport, he elected to ditch the airplane.

Examination of the airplane by a Federal Aviation Administration inspector revealed no fuel or water in the airplane's fuel tanks. The gascolator contained an unquantified amount of fuel only, and the carburetor contained only water.

History of Flight

Enroute-cruise	Fuel exhaustion (Defining event) Loss of engine power (total)
Emergency descent	Ditching

Pilot Information

Certificate:	Commercial	Age:	22, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	07/03/2008
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	06/16/2008
Flight Time:	310 hours (Total, all aircraft), 4 hours (Total, this make and model), 174 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N3424M
Model/Series:	PA-12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	12-2288
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	07/28/2008, 100 Hour	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	105753 Hours	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	O-320
Registered Owner:	BARNSTORMER FLITE SIGNS INC	Rated Power:	150 hp
Operator:	BARNSTORMER FLITE SIGNS INC	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	CRE, 32 ft msl	Observation Time:	1553 EDT
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 3600 ft agl	Temperature/Dew Point:	32° C / 24° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	29.8 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	N. Myrtle Beach, SC (CRE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1300 EDT	Type of Airspace:	

Airport Information

Airport:	Grand Strand Airport (CRE)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	03/23/2009
Additional Participating Persons:	Marjorie V Jake; FAA/FSDO; Columbia, SC		
Publish Date:	03/23/2009		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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