



# Aviation Investigation Final Report

<b>Location:</b>	Hyannis, Massachusetts	<b>Accident Number:</b>	NYC06CA195
<b>Date &amp; Time:</b>	August 5, 2006, 12:50 Local	<b>Registration:</b>	N7533F
<b>Aircraft:</b>	Champion 7KCAB	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Banner tow		

## Analysis

According to the pilot of the Champion 7KCAB, he performed a preflight inspection of the airplane, and estimated the fuel level by observing the fuel gauges, checking the fuel computer, and "sticking [his] finger in the tank." He did not visually check the amount of fuel in the fuel tanks. The pilot then departed on a banner towing flight, and after 40 minutes of flight time the engine lost total power. The pilot subsequently performed a forced landing to the water below, resulting in substantial damage to the airplane. Examination of the fuel tanks after the airplane was recovered from the water revealed that the right tank was empty, and the left tank contained about 1/8 inch of liquid spread across the bottom of the tank. Following the accident, the pilot learned that during the previous flight the fuel computer had been reset to indicate full fuel. Following that flight, the airplane was not serviced with fuel.

## 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, which resulted in fuel exhaustion and a subsequent total loss of engine power.

## Findings

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

Findings

1. FLUID,FUEL - STARVATION/EXHAUSTION
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. TERRAIN CONDITION - WATER

## Factual Information

According to the pilot of the Champion 7KCAB, he performed a preflight inspection of the airplane, and estimated the fuel level by observing the fuel gauges, checking the fuel computer, and "sticking [his] finger in the tank." He did not visually check the amount of fuel in the fuel tanks. The pilot then departed on a banner towing flight, and after 40 minutes of flight time the engine lost total power. The pilot subsequently performed a forced landing to the water below, resulting in substantial damage to the airplane. Examination of the fuel tanks after the airplane was recovered from the water revealed that the right tank was empty, and the left tank contained about 1/8 inch of liquid spread across the bottom of the tank. Following the accident, the pilot learned that during the previous flight the fuel computer had been reset to indicate full fuel. Following that flight, the airplane was not serviced with fuel.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	27, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1	<b>Last FAA Medical Exam:</b>	June 1, 2006
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1140 hours (Total, all aircraft), 120 hours (Total, this make and model), 177 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Champion	<b>Registration:</b>	N7533F
<b>Model/Series:</b>	7KCAB	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	273-70
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-320
<b>Registered Owner:</b>	Dylan Aviation Inc.	<b>Rated Power:</b>	
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Plymouth, MA (PYM)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(PYM)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	41.638332,-70.276664

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Muzio, David
<b>Additional Participating Persons:</b>	
<b>Original Publish Date:</b>	November 29, 2006
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=64275">https://data.nts.gov/Docket?ProjectID=64275</a>

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