



Aviation Investigation Final Report

Location:	SHIRLEY, Maine	Accident Number:	NYC96LA074
Date & Time:	March 11, 1996, 11:20 Local	Registration:	N712MY
Aircraft:	Cessna A185E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot intended to conduct a survey flight of timber property. The airplane departed with 10 and 15 gallons of fuel in the right and left fuel tanks respectively. About 5 minutes after departure the pilot repositioned the fuel selector valve from the both to right position. The flight was continued for approximately 45 minutes with the fuel selector selected to the right fuel tank. The engine then lost total power as the pilot performed a right turn. The pilot reported that there were no mechanical malfunctions with the aircraft and stated, 'I neglected to switch before the tank was completely empty.' The pilot further stated that the accident could have been prevented by, 'Better management of the fuel system. After the engine quit I should have turned the boost pump on and switched to BOTH on the fuel selector, or simply run on BOTH the entire flight.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's fuel mismanagement and improper use of the fuel selector valve which resulted in fuel starvation.

Findings

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

Findings

1. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND
2. (C) FLUID,FUEL - STARVATION
3. (C) FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Findings

4. OBJECT - TREE(S)

Factual Information

On March 11, 1996, about 1120 eastern standard time, a Cessna A185E, N712MY, was substantially damaged when it collided with trees during a forced landing, near Shirley, Maine. The commercial pilot received minor injuries, and the three passengers were not injured. Visual meteorological conditions prevailed for the local flight that departed the Greenville Municipal Airport, Greenville, Maine, about 1030. The personal flight was conducted under 14 CFR Part 91.

The pilot reported that the purpose of the flight was to survey timber property. Prior to departure it was determined that the right and left fuel tanks had 10 and 15 gallons of fuel respectively. The takeoff was performed with the fuel selector valve selected to the both position. About 5 minutes after departure, the pilot switched the fuel selector valve from the both to right position. The flight continued for approximately 45 minutes with the fuel selector selected to the right fuel tank, at which time the engine lost total power as the pilot executed a right turn. The pilot then performed a forced landing, during which the airplane struck trees and entered a nose down left turn prior to impacting the ground.

In a written statement submitted by the pilot, he stated: "I neglected to switch before the tank was completely empty." In the NTSB form 6120.1/2 under recommendations of how this accident could have been prevented, the pilot stated: "Better management of the fuel system. After the engine quit I should have turned the boost pump on and switched to BOTH on the fuel selector, or simply run on BOTH the entire flight."

Additionally, the pilot reported there were no mechanical malfunctions or failures with the airplane.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	25, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 16, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	3100 hours (Total, all aircraft), 125 hours (Total, this make and model), 2760 hours (Pilot In Command, all aircraft), 40 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 Make:	Cessna	Registration:	N712MY
Model/Series:	A185E A185E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	185-1387
Landing Gear Type:	Ski	Seats:	6
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520-D
Registered Owner:	NORTHERN FLIGHTS INC.	Rated Power:	300 Horsepower
Operator:	FOLSOM'S AIR SERVICE	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GREENVILLE , ME (52B)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	GREENVILLE SPB 52B	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Kukla, Randi-jean
Additional Participating Persons:	GARY READIO; PORTLAND , ME
Original Publish Date:	August 20, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=39158

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