



National Transportation Safety Board Aviation Accident Final Report

Location:	Clear Lake, MN	Accident Number:	CHI06LA175
Date & Time:	07/01/2006, 0953 CDT	Registration:	N1972U
Aircraft:	Cessna A185E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The amphibian airplane nosed over during landing on a turf runway. The pilot stated that during the landing the airplane initially touched down on the main landing gear, while he held the forward landing gear off the ground. The pilot reported that when the forward landing gear touched down the airplane "flipped onto its back." First responders reported that they found the airplane upside down, facing north. Local authorities reported that the airplane was located in the grass area prior to the gravel and asphalt sections of the runway. There were two distinct ground scars leading up to the main wreckage. The width between the two ground scars was consistent with the width between the airplane's two floats. Relative to the runway direction, the right and left ground scars were 103 and 92 feet long, respectively. An automated weather observation system located 7.2 nautical miles northwest of the airport, reported the winds were from 270 at 9 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged flare that resulted in a hard landing and subsequent nose over. A factor to the accident was the grass runway that the forward landing gear dug into during the hard landing, resulting in the amphibian airplane nosing over.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: NOSE OVER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (F) TERRAIN CONDITION - GRASS

Factual Information

On July 1, 2006, at 0953 central daylight time, a Cessna A185E amphibian airplane, N1972U, piloted by a private pilot, was substantially damaged when it nosed over while landing on runway 18 at Leaders/Clear Lake Airport (8Y6), Clear Lake, Minnesota. Visual meteorological conditions prevailed at the time of the accident. The personal flight was operating under the provisions of 14 Code of Federal Regulations Part 91 without a flight plan. The pilot sustained minor injuries. The passenger died on July 23, 2006, as result of injuries sustained in the accident. The flight departed Jorgensen's Landing Seaplane Base (MY34), Prior Lake, Minnesota, at 0915.

Runway 18/36 (3,000 feet by 150 feet) consisted of turf, loose gravel and asphalt surface materials. The first portion of runway 18 was turf (700 feet by 150 feet). There was a gravel strip (400 feet by 20 feet), followed by an asphalt strip (1,900 feet by 20 feet) along the center of the remaining portion of the runway. The airplane touched down and subsequently nosed over in the turf area immediately following the runway threshold.

The airplane was equipped with amphibious floats. Each float was configured with a retractable landing gear system that comprised of a main gear and a forward gear.

The pilot stated that he circled the airport to observe the runway and wind direction. The pilot reported flying a normal traffic pattern. The pilot stated that during the landing the airplane initially touched down on the main landing gear, while he held the forward landing gear off the ground. The pilot reported that when the forward landing gear touched down the airplane "flipped onto its back."

First responders reported that they found the airplane upside down, facing north. Local authorities reported that the airplane was located in the grass area prior to the gravel and asphalt sections of the runway. There were two distinct ground scars leading up to the main wreckage. The width between the two ground scars was consistent with the width between the airplane's two floats. Relative to the runway direction, the right and left ground scars were 103 and 92 feet long, respectively.

At 0953, the automated weather observation system at St. Cloud Regional Airport (STC), located 7.2 nautical miles northwest of 8Y6, reported the winds were from 270 at 9 knots.

The pilot stated that "no cones were observed" marking the runway threshold. Photographs taken after the accident show several yellow cones marking the runway threshold. The airport manager stated that the cones were present at the time of the accident.

Pilot Information

Certificate:	Private	Age:	34, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	01/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	09/01/2005
Flight Time:	726 hours (Total, all aircraft), 44 hours (Total, this make and model), 717 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1972U
Model/Series:	A185E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18501702
Landing Gear Type:	Retractable - Amphibian	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3265 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	IO-520-D
Registered Owner:	Cerulean Corporation	Rated Power:	300 hp
Operator:	Cerulean Corporation	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	STC, 1031 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	0953 CDT	Direction from Accident Site:	315°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.8 inches Hg	Temperature/Dew Point:	25° C / 18° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Prior Lake, MN (MY34)	Type of Flight Plan Filed:	None
Destination:	Clear Lake, MN (8Y6)	Type of Clearance:	None
Departure Time:	0915 CDT	Type of Airspace:	

Airport Information

Airport:	Leaders/Clear Lake (8Y6)	Runway Surface Type:	Asphalt; Grass/turf; Gravel
Airport Elevation:	990 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3000 ft / 150 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Minor	Latitude, Longitude:	45.444444, -93.971111

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox	Report Date:	08/30/2007
Additional Participating Persons:	Thomas Hager; Federal Aviation Administration - Minneapolis FSDO; Minneapolis, MN		
Publish Date:			
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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