



Aviation Investigation Final Report

Location: Sarasota, Florida Accident Number: MIA07LA074

Date & Time: April 13, 2007, 11:10 Local Registration: N8543W

Aircraft: Consolidated Aeronautics Inc. Lake LA-4-200 Aircraft Damage: Substantial

Defining Event: 1 Serious, 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot stated that no discrepancies were noted during his preflight inspection, or engine runup before takeoff. He retracted the landing gear after obtaining a positive rate of climb, but was only able to accelerate to 65 miles-per-hour, and did not climb higher than 150-200 feet. The engine then had a loss of engine power, and the pilot maneuvered the airplane for a forced landing on a street. While descending, the left wing contacted three power lines. The airplane then impacted the ground hard. Postaccident examination of the engine revealed no evidence of preimpact failure or malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The total loss of engine power for undetermined reasons during initial climb after takeoff, resulting in a forced landing, and an in-flight collision with transmission wires and terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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

Findings

2. OBJECT - WIRE, TRANSMISSION

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

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Factual Information

On April 13, 2007, about 1110 eastern daylight time, a Consolidated Aeronautics, Inc., Lake LA-4-200, N8543W, registered to N8543W, Inc., experienced a loss of engine power and collided with power lines then the ground during a forced landing shortly after takeoff from the Sarasota/Bradenton International Airport, Sarasota, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 personal flight from Sarasota/Bradenton International Airport, Sarasota, Florida, to Bartow Municipal Airport, Bartow, Florida for a seaplane rally. The airplane was substantially damaged and the private-rated pilot sustained minor injuries, while the passenger was seriously injured. The flight was originating at the time of the accident.

The pilot stated that he performed a preflight inspection of the airplane using the checklist. The main fuel tank which was full was checked for contaminants; none were found. He did not report any discrepancies associated with the engine start, and after doing so, taxied using only the mechanical fuel pump to runway 04. He performed an engine run-up and each magneto drop was approximately 100 rpm. He turned on the auxiliary fuel pump, and noted the fuel pressure was OK. He estimated the airplane was on the ground approximately 10 minutes from the time of engine start to the moment he began the takeoff. The flight was cleared to takeoff, and he gradually applied full power, noting that the airplane accelerated satisfactorily. He rotated at 60 mph and after obtaining a positive rate of climb, retracted the landing gear. The aircraft accelerated to only 65 mph instead of the usual 80 mph, and the pilot recognized that the airplane performance was low. The tower controller asked him if he was experiencing a problem, and he verified the mixture, throttle, and propeller controls were full forward. The engine then experienced a near total loss of engine power with resulting pitch-up (normal). He lowered the nose to maintain airspeed (60 mph), and after recognizing that he would be unable to land on the airport, maneuvered the airplane to land on a nearby street. While descending when the flight was approximately 30 feet above ground level, the left wing collided with a power line. The airplane then rotated approximately 90 degrees to the left, and impacted onto the road. Bystanders helped the passenger from the airplane and he (pilot) evacuated the airplane on his own. He further reported that the airplane climbed to a maximum of 150-200 feet, and there were no unusual sounds, smells, or vibrations while in-flight.

The pilot further stated that the aircraft was last fueled 6 days prior, and during his preflight inspection of the airplane, the main fuel tank was full with 40 gallons of 100LL fuel.

Postaccident examination of the airplane by an FAA airworthiness inspector revealed fire damage to the engine compartment and portion of the cabin. Eight gallons of fuel were drained from the fuselage tank. A post crash fire was noted in the area of the fuel filter. The fuel filter screen cover was approximately one quarter turn loose; the o-ring appeared "OK." The filter was located downstream of the fuel selector valve, and the safety wire was correct.

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An aluminum fuel line in the cockpit area that goes to the fuel selector valve was found to have a crack approximately 1 inch long. The line also exhibited evidence of chafing, but not through the wall thickness. The crack was not in the area of the chafing, and there was no evidence of a fuel leak from the cracked fuel line.

Post-accident examination of the engine revealed crankshaft, camshaft, and valve train continuity. The fuel manifold and mechanical fuel pump were "okay." The fuel injector servo (fuel servo) inlet screen exhibited a slight amount of rust/corrosion. The spark plugs were worn but serviceable, and the magnetos sparked at all ignition leads during rotation of the engine. The air induction system was found to be free of obstructions, and the alternate air door spring was found broken. The engine was found to contain approximately 4 quarts of oil. The oil filter was clean; the element did not contain any metal.

Pilot Information

Certificate:	Private	Age:	46,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	October 1, 2004
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 1, 2006
Flight Time:	958 hours (Total, all aircraft), 499 hours (Total, this make and model), 958 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Information

Certificate:	Commercial; Flight instructor	Age:	76,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	January 1, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3400 hours (Total, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Consolidated Aeronautics Inc.	Registration:	N8543W
Model/Series:	Lake LA-4-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1109
Landing Gear Type:	Retractable - Tricycle; Amphibian	Seats:	4
Date/Type of Last Inspection:	September 1, 2006 Annual	Certified Max Gross Wt.:	2690 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2396 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	IO-360-1AB6
Registered Owner:	On file	Rated Power:	200 Horsepower
Operator:	On file	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:	0 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	26°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sarasota, FL (KSRQ)	Type of Flight Plan Filed:	None
Destination:	Bartow, FL (KBOW)	Type of Clearance:	VFR
Departure Time:	11:08 Local	Type of Airspace:	

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Airport Information

Airport:	SARASOTA/BRADENTON INTL SRQ	Runway Surface Type:	Asphalt
Airport Elevation:	30 ft msl	Runway Surface Condition:	Dry
Runway Used:	04	IFR Approach:	None
Runway Length/Width:	5009 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	27.395555,-82.554443

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Administrative Information

Investigator In Charge (IIC):	Monville, Timothy	
Additional Participating Persons:	Stephen G Hull; FAA Flight Standards District Office; Tampa, FL	
Original Publish Date:	September 14, 2007	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65594	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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