



# **Aviation Investigation Final Report**

Location: MORGANTON, North Carolina Accident Number: MIA96LA015

Date & Time: October 28, 1995, 10:50 Local Registration: N6180V

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

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

THE FLIGHT WAS BEING CONDUCTED AS PART OF THE FAA WINGS PROGRAM, WITH A SECOND PILOT AS AN OBSERVER. THE OBSERVER STATED THAT, WHILE PRACTICING LANDINGS, THE PILOT LOWERED THE NOSE TO AN EXCESSIVE ANGLE ON SHORT FINAL RESULTING IN AN EXCESSIVE RATE OF DESCENT. BEFORE THE DESCENT RATE COULD BE STOPPED THE AIRCRAFT LANDED HARD AND THE RIGHT MAIN GEAR STRUT FAILED.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S EXCESSIVE RATE OF DESCENT ON SHORT FINAL.

#### **Findings**

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

**Findings** 

1. SHORT FIELD LANDING/PROCEDURE - IMPROPER - PILOT IN COMMAND 2. (C) PROPER DESCENT RATE - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. LANDING GEAR, MAIN GEAR STRUT - OVERLOAD

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#### **Factual Information**

On October 28, 1995, about 1050 eastern daylight time, a Consolidated Aeronautics Lake LA-4-200, N6180V, registered to Water Wings, Inc., was damaged during a hard landing at Morganton-Lenoir Airport, Morganton, North Carolina, while on a 14 CFR Part 91 instructional flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage. The commercial-rated pilot and airline transport-rated observer pilot were not injured. The flight originated from Hickory, North Carolina, the same day about 0950.

The pilot stated the flight was being conducted as part of the FAA Wings Program. He was the pilot-in-command and the second pilot was observing him. After departing Hickory, they performed airwork and then proceeded to Morganton for landing practice. After the first landing the observer asked him to demonstrate a maximum performance short field takeoff and then a maximum performance short field landing over an imaginary 50 foot object. While on final approach they passed over the runway threshold at about 84 feet agl. He lowered the nose and reduced engine power. He felt a shear and the airspeed began to drop suddenly. He added full power and airspeed continued to drop to 62 mph. As they approached the runway rapidly he raised the nose to level and they hit the runway in a flat attitude. The right main landing gear strut failed on touchdown.

The observer pilot stated that on the first approach to land at Hickory the pilot turned on short base at 1,500 feet agl. The pilot immediately put the nose down to an excessive angle of attack. He commented to the pilot about this and the pilot raised the nose and made a normal landing. On the second approach they crossed the runway threshold at about 100 feet agl. The pilot again put the aircraft in an excessive angle of descent, which caught him by surprise. He grabbed the control wheel and pulled back but it was too late to avoid contact with the runway. The aircraft hit hard in a flat attitude.

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#### **Pilot Information**

Certificate:	Commercial	Age:	32,Male	
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left	
Other Aircraft Rating(s):	None	Restraint Used:		
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes	
Instructor Rating(s):	None	Toxicology Performed:	No	
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	November 22, 1994	
Occupational Pilot:	No	Last Flight Review or Equivalent:		
Flight Time:	1092 hours (Total, all aircraft), 463 hours (Total, this make and model), 931 hours (Pilot In Command, all aircraft), 54 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)			

# Aircraft and Owner/Operator Information

Aircraft Make:	Consolidated Aeronautics Inc.	Registration:	N6180V
Model/Series:	LAKE LA-4-200 LAKE LA-4-	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	833
Landing Gear Type:	Retractable - Tricycle; Amphibian	Seats:	4
Date/Type of Last Inspection:	August 18, 1995 Annual	Certified Max Gross Wt.:	2600 lbs
Time Since Last Inspection:	17 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1346 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1B
Registered Owner:	WATER WINGS, INC.	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HKY ,1189 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	90°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:40 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	MORGANTON-LENOIR MRN	Runway Surface Type:	Asphalt
Airport Elevation:	1266 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	35.739315,-81.690803(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Kennedy, Jeffrey

Additional Participating Persons:

Original Publish Date: February 8, 1996

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=37936

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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