



National Transportation Safety Board Aviation Accident Final Report

Location:	ANDALUSIA, AL	Accident Number:	ATL87LA155
Date & Time:	06/01/1987, 1720 CDT	Registration:	N22553
Aircraft:	CESSNA 150H	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

THE CFI WAS GIVING INSTRUCTION TO A BEGINNING STUDENT. DURING PREFLIGHT HE NOTED THAT THE LT TANK FUEL GAUGE INDICATED 'FULL' WHILE THE RT TANK GAUGE INDICATED '1/2 FULL'. AFTER ABOUT 40 MINUTES OF FLYING THE ENGINE BEGAN TO RUN ROUGH, DURING CLIMBOUT AFTER A PRACTICE T&G LDG. THE CFI LANDED THE ACFT, LEFT THE ENGINE RUNNING WITH THE STUDENT HOLDING THE BRAKES, AND VISUALLY INSPECTED THE FUEL SUPPLY; HE OBSERVED A FUEL LEVEL ABOUT 'THREE INCHES IN DEPTH' IN BOTH TANKS. AFTER A RUN-UP, ANOTHER TAKEOFF WAS MADE. AT ABOUT 350 FT AGL, THE ENGINE BEGAN TO RUN ROUGH AND LOST POWER ALTOGETHER. A LDG WAS SUBSEQUENTLY MADE STRAIGHT AHEAD INTO A FRESHLY-PLOWED FIELD WHERE THE ACFT NOSED OVER INVERTED. SUBSEQUENT CALCULATIONS INDICATED THAT ABOUT 3 GALLONS OF FUEL REMAINED ON BOARD AT THE TIME OF THE LAST TAKEOFF, ACCORDING TO THE CFI. TYPE CERTIFICATE DATA FOR THE 150H INDICATES THAT 3.5 GALS OF THE ACFT TOTAL FUEL CAPACITY IS UNUSABLE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND(CFI)
3. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND(CFI)
4. (C) JUDGMENT - POOR - PILOT IN COMMAND(CFI)
5. (C) REFUELING - NOT OBTAINED - PILOT IN COMMAND(CFI)

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

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (F) TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	32, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/30/1986
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1031 hours (Total, all aircraft), 590 hours (Total, this make and model), 911 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N22553
Model/Series:	150H 150H	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	15068357
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	05/28/1987, Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	11 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1596 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-200 A
Registered Owner:	DENNIS P. HENSEN	Rated Power:	100 hp
Operator:	M & M FLYING SERVICE, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1716 CDT	Type of Airspace:	Class G

Airport Information

Airport:	ANDALUSIAOPP (79J)	Runway Surface Type:	Dirt
Airport Elevation:	330 ft	Runway Surface Condition:	Soft
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Forced Landing; Touch and Go; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	SCOTT STRICKLAND	Report Date:	05/27/1988
Additional Participating Persons:	BEN COLEMAN; ATLANTA, GA ROBERT LEMASTER; BIRMINGHAM, AL		
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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