



Aviation Investigation Final Report

Location:	JACKSON, California	Accident Number:	LAX89LA177
Date & Time:	May 3, 1989, 11:00 Local	Registration:	N1798H
Aircraft:	CESSNA 310C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE ACFT OWNER WAS TAKING MEL TRAINING FOR A CLASS RATING. HE STATED THAT THE CFI TOLD HIM TO NOT USE THE AUX ELECTRIC FUEL PUMPS DURING TAKEOFF, A PROCEDURE IN CONTRADICTION TO THE FLIGHT MANUAL. DURING THE TAKEOFF GROUND ROLL, THE STUDENT SAID THE RIGHT ENGINE QUIT AT A SPEED JUST BELOW ROTATION. THE CFI ASSUMED CONTROL OF THE ACFT AND CONTINUED THE TAKEOFF, LOST CONTROL OF THE ACFT AND LANDED IN A FIELD OFF THE DEPARTURE END OF THE RUNWAY. THE STUDENT SAID THE ACFT WAS HALFWAY DOWN THE 3,400 FT RUNWAY WHEN THE ENGINE QUIT. THE FLIGHT MANUAL LISTS VMC AS 82 MPH, AND, VYSE AS 109 MPH. THE TAKEOFF AND LANDING GROUND ROLL DISTANCE CHARTS IN THE FLIGHT MANUAL STATE THAT 960 FEET IS REQUIRED TO ACCELERATE TO 86 MPH, AND 650 FT IS REQUIRED TO DECELERATE FROM THAT SPEED. EXAM OF THE ACFT REVEALED THAT THE RIGHT PROPELLER WAS NOT FEATHERED, AND NO REASON WAS FOUND FOR THE RIGHT ENGINE POWER LOSS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE INSTRUCTOR PILOT (PILOT IN COMMAND) TO REJECT THE TAKEOFF AFTER THE LOSS OF POWER ON ONE ENGINE WHEN SUFFICIENT RUNWAY REMAINED TO STOP THE AIRCRAFT. CONTRIBUTING TO THE ACCIDENT WAS THE DISREGARD OF THE AIRCRAFT MANUAL, FAILURE TO USE THE FUEL BOOST PUMP AND EXCEEDING THE AIRCRAFT SINGLE ENGINE PERFORMANCE CAPABILITY.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. 1 ENGINE - FAILURE,TOTAL
 2. (F) FUEL BOOST PUMP SELECTOR POSITION - NOT SELECTED - PILOT IN COMMAND(CFI)
 3. (F) FLIGHT MANUALS - DISREGARDED - PILOT IN COMMAND(CFI)
 4. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND(CFI)
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

5. (F) AIRCRAFT PERFORMANCE,ENGINE OUT CAPABILITY - EXCEEDED
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Occurrence #3: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Findings

6. TERRAIN CONDITION - NONE SUITABLE
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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

7. OBJECT - POLE

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	57, Male
Airplane Rating(s):	Single-engine land; 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 multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 17, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	12068 hours (Total, all aircraft), 2205 hours (Total, this make and model), 11872 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1798H
Model/Series:	310C 310C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	35898
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	March 1, 1989 Annual	Certified Max Gross Wt.:	4830 lbs
Time Since Last Inspection:	12 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3381 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-470-D
Registered Owner:	RICHARD I MASON	Rated Power:	260 Horsepower
Operator:	MASON, RICHARD I.	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	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	JACKSON , CA (070)	Type of Flight Plan Filed:	None
Destination:	(070)	Type of Clearance:	None
Departure Time:	10:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	WESTOVER 070	Runway Surface Type:	Asphalt
Airport Elevation:	1696 ft msl	Runway Surface Condition:	Dry
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	3400 ft / 60 ft	VFR Approach/Landing:	Forced landing

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:	38.349849,-120.769569(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	JAMES NELSON; SACRAMENTO , CA
Original Publish Date:	October 24, 1990
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=26396

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