

Aviation Investigation Final Report

Location:	GUSTINE, California		Accident Number:	LAX88DVA03
Date & Time:	April 2, 1988, 07:40 Local		Registration:	N21762
Aircraft:	CESSNA	188B	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultura	I		

Analysis

DURING AN AERIAL APPLICATION MANEUVER, AT 70 FT. A.G.L., THE ENGINE LOST ALL POWER. THE PILOT LEVELED THE WINGS AND DUMPED THE REMAINING LOAD. THE ENGINE REGAINED FULL POWER, BACKFIRED, THEN LOST POWER AGAIN. THE AIRCRAFT COLLIDED WITH ALMOND TREES. AN EXAMINATION OF THE WRECKAGE REVEALED THAT THERE WAS NO FUEL IN THE FUEL INJECTION LINES. THE FUEL TANKS WERE RUPTURED AND CONTAINED NO FUEL. THERE WAS ONLY A SMALL AMOUNT OF FUEL FOUND BELOW THE RUPTURED TANKS.

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: MANEUVERING - AERIAL APPLICATION

Findings 1. (C) FLUID,FUEL - EXHAUSTION 2. (C) FUEL CONSUMPTION CALCULATIONS - NOT PERFORMED - PILOT IN COMMAND ------

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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

Findings 3. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Commercial; Private	Age:	54,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	March 26, 1988
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13560 hours (Total, all aircraft), 150 all aircraft)	hours (Last 90 days, all aircraft), 13 h	ours (Last 24 hours,

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N21762
Model/Series:	188B 188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801015
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	November 16, 1987 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	83 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3357 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	HAMILTON A. MACHADO	Rated Power:	300 Horsepower
Operator:	MACHADO DUSTER, INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC	C)	Condition of Light:	Day
Observation Facility, Elevation:			Distance from Accident Site:	
Observation Time:			Direction from Accident Site:	
Lowest Cloud Condition:	Clear		Visibility	20 miles
Lowest Ceiling:	None		Visibility (RVR):	
Wind Speed/Gusts:	/		Turbulence Type Forecast/Actual:	/
Wind Direction:	0°		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:			Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation			
Departure Point:	GUSTINE	, CA (301)	Type of Flight Plan Filed:	None
Destination:			Type of Clearance:	None
Departure Time:	06:00 Local		Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.070243,-120.839324(est)

Administrative Information

Investigator In Charge (IIC):	Moyer, John
Additional Participating Persons:	
Original Publish Date:	July 26, 1989
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=25742

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.