



Aviation Investigation Final Report

Location:	GRAND RAPIDS, Michigan	Accident Number:	CHI90LA048
Date & Time:	December 20, 1989, 13:30 Local	Registration:	N117CC
Aircraft:	CESSNA 310Q	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE AIRPLANE WAS ABOUT 3.5 MILES FROM THE DEPARTURE AIRPORT WHEN THE PILOT NOTICED SMOKE IN THE COCKPIT. THE SMOKE WAS THE RESULT OF A FIRE IN THE RIGHT ENGINE NACELLE. THE PILOT STATED THAT HE SHUT DOWN AND FEATHERED THE RIGHT ENGINE AND RETURNED TO THE AIRPORT FOR AN EMERGENCY LANDING. DUE TO THE EXTENSIVE HEAT AND FIRE DAMAGE, INVESTIGATORS WERE UNABLE TO DETERMINE THE ORIGIN OF THE FIRE. POST-ACCIDENT INVESTIGATION REVEALED THAT THE PILOT HAD NOT SHUT OFF THE FUEL TO THE ENGINE, WHICH INCREASED THE INTENSITY OF THE DAMAGE. THE AIRPLANE HAD BEEN MAINTAINED IN ACCORDANCE WITH FEDERAL REGULATIONS AND ALL APPLICABLE AD NOTES HAD BEEN ACCOMPLISHED. THE FORCED LANDING WAS SUCCESSFUL; DESPITE OVERRUNNING THE RUNWAY END, NO DAMAGE OCCURRED DURING LANDING. THE FIRE CONTINUED TO BURN AFTER THE PILOT ESCAPED AND CAUSED SUBSTANTIAL WING DAMAGE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE UNDETERMINED ENGINE COMPARTMENT FIRE DURING THE INITIAL CLIMBOUT. A FACTOR WAS THE FAILURE OF THE PILOT TO SHUT OFF THE FUEL SUPPLY TO THE ENGINE.

Findings

Occurrence #1: FIRE
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. (C) ENGINE COMPARTMENT - FIRE
3. (F) FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	May 31, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1224 hours (Total, all aircraft), 26 hours (Total, this make and model), 597 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N117CC
Model/Series:	310Q 310Q	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310Q0696
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 30, 1989 Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:	30 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	4600 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470-VO
Registered Owner:	GRAND RAPIDS AVIATION	Rated Power:	260 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	GRR ,794 ft msl	Distance from Accident Site:	
Observation Time:	13:15 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	2 miles
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	Light - Showers - Snow		
Departure Point:	GRAND RAPIDS , MI (GRR)	Type of Flight Plan Filed:	None
Destination:	SPARTA , MI (8D4)	Type of Clearance:	Special VFR
Departure Time:	13:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	GRAND RAPIDS-KENT COUNTY GRR	Runway Surface Type:	Asphalt
Airport Elevation:	794 ft msl	Runway Surface Condition:	Snow
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3400 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Reeves, Jodi
Additional Participating Persons: J. MILLER; GRAND RAPIDS , MI

Original Publish Date: July 22, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=14608>

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