



Aviation Investigation Final Report

Location:	OVERGAARD, Arizona	Accident Number:	LAX92FA305
Date & Time:	July 19, 1992, 08:20 Local	Registration:	N8048T
Aircraft:	CESSNA 175A	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	4 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A CESSNA 175A DESCENDED DURING THE INITIAL TAKEOFF CLIMB AND COLLIDED WITH A TREE ABOUT ONE QUARTER MILE FROM THE AIRPORT. THE PILOT HAND PROPPED THE AIRPLANE TO START THE ENGINE. THE AIRPLANE THEN TAXIED FOR DEPARTURE WITH THREE OTHER ADULTS IN THE AIRPLANE. THE AIRPLANE CLIMBED TO ABOUT TWENTY FEET AND DID NOT GAIN ALTITUDE. THE AIRPLANE WAS DETERMINED TO BE 21 POUNDS OVER GROSS WEIGHT. THE DENSITY ALTITUDE WAS 8,800 FEET ABOVE MEAN SEA LEVEL. EXAMINATION OF THE ENGINE REVEALED METAL PARTICLES SUSPENDED IN THE ENGINE OIL. ANALYSIS OF THE ENGINE OIL REVEALED ENGINE WEAR TO BE HIGH FOR THE 13 HOURS SINCE THE LAST OIL CHANGE. TEETH FROM A BROKEN STARTER DRIVE GEAR WERE FOUND IN THE ENGINE OIL SUMP. THE STARTER DRIVE HAD BEEN REPLACED 3.5 YEARS BEFORE THE ACCIDENT. THREE ANNUAL INSPECTIONS WERE COMPLETED IN THE 3 YEAR PERIOD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER PREFLIGHT PERFORMANCE PLANNING AND DECISION TO OPERATE THE AIRPLANE OVER THE MAXIMUM CERTIFIED GROSS WEIGHT AT A HIGH DENSITY ALTITUDE AIRPORT WHICH RESULTED IN AN INADVERTENT STALL. CONTRIBUTING TO THE ACCIDENT WAS INADEQUATE MAINTENANCE INSPECTIONS DURING THE THREE PRECEDING ANNUAL INSPECTIONS WHICH FAILED TO DETECT BROKEN GEAR TEETH FROM A PREVIOUS MAINTENANCE DEFICIENCY WHICH ACCELERATED THE ENGINE WEAR THROUGH FOREIGN OBJECT DAMAGE.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
3. (F) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
4. (F) STALL - INADVERTENT - PILOT IN COMMAND
5. (F) ENGINE ASSEMBLY - WORN
6. (F) MAINTENANCE, INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

7. OBJECT - TREE(S)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	56, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	February 22, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3100 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N8048T
Model/Series:	175A 175A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	56748
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 1992 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1238 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	GO 300A
Registered Owner:	FALK, EUGENE C.	Rated Power:	175 Horsepower
Operator:	FALK, EUGENE C.	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	50 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:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(AZ82)	Type of Flight Plan Filed:	None
Destination:	SCOTTSDALE , AZ (SDL)	Type of Clearance:	None
Departure Time:	08:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	MOGOLLON AIRPARK AZ82	Runway Surface Type:	Asphalt
Airport Elevation:	6658 ft msl	Runway Surface Condition:	Dry
Runway Used:	2	IFR Approach:	None
Runway Length/Width:	5000 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	3 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Fatal	Latitude, Longitude:	34.370479,-110.479698(est)

Administrative Information

Investigator In Charge (IIC):	Wilcox, Thomas
Additional Participating Persons:	ROMAN BUETTNER; SCOTTSDALE ,AZ PETE FOX; WICHITA ,KS
Original Publish Date:	May 26, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=27443

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