



Aviation Investigation Final Report

Location:	GLENDALE, Arizona	Accident Number:	LAX92LA327
Date & Time:	July 31, 1992, 15:05 Local	Registration:	N4581W
Aircraft:	ROCKWELL 112TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE ACCIDENT SEQUENCE WAS WITNESSED BY SEVERAL A & P MECHANICS WORKING AT THE GLENDALE AIRPORT. ONE WITNESS SAID THE ENGINE SEEMED TO BE RUNNING ROUGH AND BACKFIRING DURING THE PRETAKEOFF ENGINE RUNUP. THE AIRCRAFT INITIATED A TAKEOFF AND THE WITNESSES REPORTED THAT THE ENGINE ROUGHNESS AND BACKFIRING CONTINUED THROUGHOUT THE TAKEOFF GROUND ROLL AND INITIAL CLIMB. THE AIRCRAFT WAS OBSERVED TO MANEUVER TO THE DOWN WIND LEG AS IF THE PILOT WERE ATTEMPTING TO RETURN FOR A LANDING, THEN THE ENGINE CEASED RUNNING ALTOGETHER. THE AIRCRAFT COLLIDED WITH THE GROUND IN A CORN FIELD ABOUT ONE HALF MILE FROM THE END OF THE RUNWAY AND SHEARED OFF THE LANDING GEAR. EXAMINATION OF THE ENGINE BY AN A & P MECHANIC UNDER THE SUPERVISION OF FAA INSPECTORS REVEALED THAT THE NUMBER ONE CYLINDER EXHAUST VALVE WAS STUCK IN THE OPEN POSITION DUE TO CARBON BUILDUP ON THE VALVE STEM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A LOSS OF ENGINE POWER DUE TO EXCESSIVE CARBON DEPOSITS ON THE NUMBER ONE CYLINDER EXHAUST VALVE, AND, THE PILOTS ATTEMPTED OPERATION OF THE AIRCRAFT WITH KNOWN MECHANICAL DEFICIENCIES.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF

Phase of Operation: TAKEOFF

Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - JAMMED
2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - ATTEMPTED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

3. LANDING GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Private	Age:	38, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 5, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	155 hours (Total, all aircraft), 68 hours (Total, this make and model), 105 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROCKWELL	Registration:	N4581W
Model/Series:	112TC 112TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	13071
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 10, 1992 Annual	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:	33 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1495 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TO-360
Registered Owner:	KEVIN D. NIELSEN	Rated Power:	200 Horsepower
Operator:	KEVIN D. NIELSEN	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	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	38°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(GEU)	Type of Flight Plan Filed:	None
Destination:	VACAVILLE, CA (045)	Type of Clearance:	None
Departure Time:	15:04 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
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:	33.659675,-112.179084(est)

Administrative Information

Investigator In Charge (IIC): Rich, Jeff

Additional Participating Persons: JOHN NOEL; SCOTTSDALE , AZ

Original Publish Date: September 14, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=27713>

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