



National Transportation Safety Board Aviation Accident Final Report

Location:	SANTA MARIA, CA	Accident Number:	LAX93LA051
Date & Time:	11/22/1992, 1321 PST	Registration:	N52AK
Aircraft:	CESSNA 421C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious, 2 None

Flight Conducted Under: Part 91: General Aviation - Executive/Corporate

Analysis

TWELVE MINUTES AFTER DEPARTURE, THE LEFT ENGINE BEGAN TO RUN ROUGH & VIBRATE. THE PILOT SAID HE COULD NOT CORRECT THE PROBLEM & SHUT THE LEFT ENGINE DOWN. NO EMERGENCY WAS DECLARED & THE PILOT TOLD ATC THAT HE WOULD CONTINUE TO HIS DESTINATION, 210 NM & 1.5 HOURS AWAY. THE PILOT OVERFLEW 5 AIRPORTS WITH RUNWAYS OVER 5,000 FT LONG & A MOUNTAIN RANGE. THE PILOT EXECUTED A VOR APPROACH & ENTERED AN EXTENDED DOWNWIND PATTERN. ON SHORT FINAL THE PILOT EXECUTED A GO AROUND BECAUSE HE DID NOT GET ANY GEAR DOWN INDICATIONS. HE THEN MANEUVERED FOR A DOWNWIND LANDING ON RUNWAY 12. THE AIRCRAFT HIT THE GROUND 100 YARDS SHORT OF THE RUNWAY, THEN COLLIDED WITH A DITCH & THE AIRPORT FENCE. AN FAA INSPECTOR SAID THERE WERE THREE CLEAR TIRE TRACKS FROM THE POINT OF TOUCHDOWN TO THE DITCH, WHERE THE GEAR WAS SHEARED OFF. HE FOUND NO PROBLEMS WITH THE GEAR SYSTEM. EXAM OF THE LEFT ENGINE REVEALED A LEFT MAGNETO INTERNAL FAILURE DUE TO LACK OF LUBRICATION & WEAR, WHICH CAUSED CYLINDER CROSS FIRING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: 1) THE INTERNAL FAILURE OF THE LEFT ENGINE, LEFT MAGNETO DUE TO INADEQUATE MAINTENANCE AND NON COMPLIANCE WITH THE MANUFACTURERS SERVICE BULLETINS AND RECOMMENDATIONS, AND 2) THE FAILURE OF THE PILOT TO ATTAIN THE PROPER TOUCHDOWN POINT DURING THE LANDING ATTEMPT. FACTORS IN THE ACCIDENT WERE THE INABILITY OF THE PILOT TO SHUT OFF THE LEFT MAGNETO AND THE FALSE LANDING GEAR INDICATIONS, BOTH FOR UNDETERMINED REASONS.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. 1 ENGINE
 2. (C) IGNITION SYSTEM,MAGNETO - DISINTEGRATED
 3. (C) MAINTENANCE,SERVICE BULLETIN/LETTER - NOT FOLLOWED - COMPANY MAINTENANCE PERSONNEL
 4. (C) MAINTENANCE,INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
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Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CIRCLING (IFR)

Findings

5. (F) LANDING GEAR,GEAR WARNING SYSTEM - FALSE INDICATION
 6. REASON FOR OCCURRENCE UNDETERMINED
 7. GO-AROUND - INITIATED - PILOT IN COMMAND
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Occurrence #3: UNDERSHOOT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

8. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
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Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

9. TERRAIN CONDITION - DITCH
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Occurrence #5: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

10. OBJECT - FENCE

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	41, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/10/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4512 hours (Total, all aircraft), 503 hours (Total, this make and model), 2452 hours (Pilot In Command, all aircraft), 101 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N52AK
Model/Series:	421C 421C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	421C0204
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	07/16/1992, Annual	Certified Max Gross Wt.:	7450 lbs
Time Since Last Inspection:	128 Hours	Engines:	2 Reciprocating
Airframe Total Time:	4384 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	GTSIO-520-L1B
Registered Owner:	FARROLL EQUIPMENT COMPANY	Rated Power:	375 hp
Operator:	FARROLL EQUIPMENT COMPANY	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SMX, 259 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1330 PST	Direction from Accident Site:	1°
Lowest Cloud Condition:	Scattered / 2500 ft agl	Visibility	15 Miles
Lowest Ceiling:	Broken / 3300 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16° C / 12° C
Precipitation and Obscuration:			
Departure Point:	LAKE TAHOE, CA (TVL)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1140 PST	Type of Airspace:	Class D; Class E

Airport Information

Airport:	SANTA MARIA PUBLIC (SMX)	Runway Surface Type:	Asphalt
Airport Elevation:	259 ft	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	VOR
Runway Length/Width:	6300 ft / 150 ft	VFR Approach/Landing:	Go Around

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Serious, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JEFF RICH	Report Date:	09/14/1993
Additional Participating Persons:	RICHARD REED; VAN NUYS, CA MICHAEL J GRIMES; MOBILE, AL ROBIN HOWARD; SANTA MARIA, CA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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