



National Transportation Safety Board Aviation Accident Final Report

Location:	TEMPLE BAR, AZ	Accident Number:	LAX92FA092
Date & Time:	01/13/1992, 1550 MST	Registration:	N22592
Aircraft:	CESSNA T210L	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal, 3 Serious
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PLT SAID THAT DRG DSCNT FM 10,500 FT, THE MANIFOLD PRESSURE DROPPED TO 18 INCHES. HE DECIDED TO LND AT A NRBY ARPT. WHILE DIAGNOSING THE PROBLEM, HE TURNED ON THE BOOST PUMP & THE ENG LOST MORE PWR. THE COCKPIT BGN TO FILL WITH SMOKE. THE PLT SECURED THE ENG & TURNED THE ELEC SYS OFF. HE BGN A PWR-OFF DSCNT OVR THE ARPT & MANUALLY EXTENDED THE LNDG GEAR. HE THOUGHT HE WAS TOO HIGH, SO HE TURNED THE BATTERY 'ON' TO LOWER THE FLAPS. WITH ELEC PWR RESTORED, THE LNDG GEAR RETURNED TO THE 'UP' PSN. THE PLT AGAIN LOWERED THE LNDG GEAR. UNABLE TO REACH THE RWY, HE TRIED TO RE-START THE ENG ON FINAL APCH, BUT DID NOT HAVE ENOUGH TIME. SUBSEQUENTLY, THE ACFT IMPACTED AN UP SLOPE ABOUT 300 FT SHORT OF THE RWY & CRASHED. AN EXAM OF THE TURBOCHARGER REVEALED THE TURBINE SHAFT FAILED DUE TO MULTIPLE FATIGUE CRACKS. ABOUT 125 FLT HRS BEFORE THE FAILURE, THE TURBINE SHAFT HAD BEEN REWORKED (GROUND & CHROMIUM PLATED), BUT NOT IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. TURBOCHARGER MALFUNCTION WAS NOT ADDRESSED IN THE POH.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FATIGUE FAILURE OF THE TURBOCHARGER'S TURBINE SHAFT DUE TO INADEQUATE MAINTENANCE, AND THE PILOT'S IMPROPER IN-FLIGHT PLANNING/DECISION AFTER EXPERIENCING A TURBOCHARGER FAILURE. A FACTOR RELATED TO THE ACCIDENT WAS: THE LACK OF INFORMATION IN THE PILOT OPERATING HANDBOOK CONCERNING TURBOCHARGER FAILURE OR MALFUNCTION.

Findings

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

Findings

1. (C) EXHAUST SYSTEM,TURBOCHARGER - FATIGUE
2. (C) MAINTENANCE,OVERHAUL - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: DESCENT - EMERGENCY

Findings

3. EMERGENCY PROCEDURE - INITIATED - PILOT IN COMMAND
4. (F) AIRCRAFT MANUALS,PROCEDURE INFORMATION - INADEQUATE
5. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
6. (F) INFORMATION INSUFFICIENT - MANUFACTURER

Occurrence #3: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

7. TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

History of Flight

Pilot Information

Certificate:	Commercial	Age:	24, 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):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/27/1991
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	2039 hours (Total, all aircraft), 74 hours (Total, this make and model), 1907 hours (Pilot In Command, all aircraft), 125 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N22592
Model/Series:	T210L T210L	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	21059763
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	01/05/1992, 100 Hour	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1495 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-520-H
Registered Owner:	AIR VEGAS	Rated Power:	300 hp
Operator:	AIR VEGAS	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	AJZA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Observation Time:	0000
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Temperature/Dew Point:	
Lowest Ceiling:	None / 0 ft agl	Visibility	20 Miles
Wind Speed/Gusts, Direction:		Visibility (RVR):	0 ft
Altimeter Setting:		Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	GRAND CANYON, AZ (GCN)	Type of Flight Plan Filed:	Company VFR
Destination:	LAS VEGAS, NV (L15)	Type of Clearance:	None
Departure Time:	1510 MST	Type of Airspace:	Class G

Airport Information

Airport:	TEMPLE BAR (U30)	Runway Surface Type:	Asphalt
Airport Elevation:	1549 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3500 ft / 50 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal, 2 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal, 3 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Richard V Childress	Adopted Date:	01/11/1994
Additional Participating Persons:	RALPH PERRY; LAS VEGAS, NV JERRY SHOEMAKER; WICHITA, KS MICHAEL J GRIMES; MOBILE, AL STEVE MACON; PHOENIX, AZ		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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