



Aviation Investigation Final Report

Location:	ASHFORK, Arizona	Accident Number:	LAX87DVW01
Date & Time:	April 3, 1987, 09:00 Local	Registration:	N1451D
Aircraft:	NORTH AMERICAN P51D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE NORTH AMERICAN P-51D EXPERIENCED A TOTAL LOSS OF ENGINE POWER AFTER CRUISING AT 10,000 FEET MSL FOR 45 MINUTES. ATTEMPTS TO RESTART THE ENGINE WERE UNSUCCESSFUL. THE AIRCRAFT COLLIDED WITH SOME TREES PRIOR TO COMING TO REST IN AN OPEN FIELD. THE LANDING GEAR WAS NOT EXTENDED PRIOR TO THE FORCED LANDING. THE PILOT REPORTED THAT THE RPM READ ZERO EVEN THOUGH THE ENGINE WAS WINDMILLING. TEAR DOWN OF THE ENGINE REVEALED A FAILED BEARING ON THE VERTICAL ACCESSORY DRIVE SHAFT. THE FAILURE ALLOWED THE SHAFT TO SHIFT UPWARDS DISENGAGING THE GEARS. THE VERTICAL SHAFT DRIVES THE MAJORITY OF THE ACCESSORIES (MAGS,PUMPS,TACH,ETC.).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,BEARING - FAILURE,TOTAL
2. ENGINE ACCESSORIES - DISCONNECTED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

3. (F) EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

4. GEAR EXTENSION - NOT PERFORMED

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

5. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	49, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	December 9, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1880 hours (Total, all aircraft), 551 hours (Total, this make and model), 1608 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	NORTH AMERICAN	Registration:	N1451D
Model/Series:	P51D P51D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Limited (Special)	Serial Number:	44-74446-A
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 12, 1987 Annual	Certified Max Gross Wt.:	10500 lbs
Time Since Last Inspection:	37 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1788 Hrs	Engine Manufacturer:	PACKARD
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	V 1650
Registered Owner:		Rated Power:	1490 Horsepower
Operator:		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:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PRESCOTT , AZ (PRC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.130428,-112.520797(est)

Administrative Information

Investigator In Charge (IIC):	Shields, James
Additional Participating Persons:	JAMES J SHEILDS; LAS VEGAS , NV
Original Publish Date:	February 17, 1989
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=25351

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).