



National Transportation Safety Board Aviation Accident Final Report

Location:	MAYER, AZ	Accident Number:	LAX92LA273
Date & Time:	07/01/1992, 0900 MST	Registration:	N9455G
Aircraft:	CESSNA U206E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE ENGINE QUIT WITH A LOUD BANG ABOUT 15 MINUTES INTO THE CROSS COUNTRY FLIGHT. THE AIRCRAFT WAS OVER MOUNTAINOUS TERRAIN AND THE PILOT ATTEMPTED TO LAND IN A SMALL PASTURE. THE AIRCRAFT ENCOUNTERED ROUGH TERRAIN DURING THE LANDING ROLL OUT AND NOSED OVER. INVESTIGATION REVEALED THAT THE NUMBER 2 MAIN BEARING HAD SPUN, CLOSING OFF THE INTERNAL OIL PASSAGE IN THE CRANKSHAFT AND JOURNAL. THE ENGINE SUSTAINED A RESULTING OIL STARVATION FAILURE OF THE NUMBER 2 AND 3 CONNECTING RODS. REVIEW OF THE MAINTENANCE RECORDS ESTABLISHED THAT A MAINTENANCE FACILITY HAD FOUND A LARGE AMOUNT OF METAL PARTICLES IN THE OIL 40 HOURS PRIOR TO THE ACCIDENT. THE MAINTENANCE FACILITY WARNED THE PILOT ABOUT THE EXCESSIVE INTERNAL ENGINE WEAR, RECOMMENDING 'FURTHER INSPECTION PRIOR TO FLIGHT.' NO CORRECTIVE ACTION ENTRIES WERE NOTED IN THE LOGBOOK. THE ENGINE WAS FOUND TO HAVE ACCRUED 1,520 HOURS SINCE OVERHAUL. THE MANUFACTURER RECOMMENDS A TIME BETWEEN OVERHAUL INTERVAL OF 1,700 HOURS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE ENGINE DUE TO THE SLIPPAGE OF THE NUMBER 2 MAIN BEARING AND THE RESULTANT OIL STARVATION FAILURE OF THE NUMBER 2 CONNECTING ROD. THE NUMBER 2 MAIN BEARING SLIPPAGE WAS CAUSED BY THE FAILURE OF THE PILOT/OWNER TO OVERHAUL THE ENGINE IN A TIMELY FASHION WHEN INTERNAL WEAR PATTERNS INDICATED THAT A POTENTIAL BEARING PROBLEM EXISTED. A FACTOR IN THE ACCIDENT WAS THE UNSUITABLE NATURE OF THE TERRAIN FOR A FORCED LANDING.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,BEARING - SLIPPED
2. (C) MAINTENANCE,OVERHAUL,MAJOR - DELAYED - PILOT IN COMMAND
3. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - ATTEMPTED - PILOT IN COMMAND
4. (C) LUBRICATING SYSTEM,OIL PORT/PASSAGE,INTERNAL - BLOCKED(TOTAL)
5. (C) FLUID,OIL - STARVATION
6. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

7. (F) TERRAIN CONDITION - NONE SUITABLE
8. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
9. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

Pilot Information

Certificate:	Private	Age:	39, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/22/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	931 hours (Total, all aircraft), 200 hours (Total, this make and model), 888 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N9455G
Model/Series:	U206E U206E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	U2061655
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	01/01/1992, Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	43 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4476 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-F
Registered Owner:	COMBINED ENERGIES CORPORATION	Rated Power:	300 hp
Operator:	COMBINED ENERGIES CORP	Operating Certificate(s) Held:	None
Operator Does Business As:	YOUNG BUILDERS	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29° C
Precipitation and Obscuration:			
Departure Point:	PHOENIX, AZ (DVT)	Type of Flight Plan Filed:	VFR
Destination:	ELY, NV (ELY)	Type of Clearance:	None
Departure Time:	0845 MST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Jeff Rich	Report Date:	08/26/1993
Additional Participating Persons:	MIKE BROWN; SCOTTSDALE, 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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).