



Aviation Investigation Final Report

Location:	MAYER, Arizona	Accident Number:	LAX92LA273
Date & Time:	July 1, 1992, 09:00 Local	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:	
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:	June 22, 1992
Occupational Pilot:	UNK	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:	
Airworthiness Certificate:	Normal	Serial Number:	U2061655
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	January 1, 1992 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	43 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4476 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-F
Registered Owner:	COMBINED ENERGIES CORPORATION	Rated Power:	300 Horsepower
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 (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:	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:	No Obscuration; No Precipitation		
Departure Point:	PHOENIX , AZ (DVT)	Type of Flight Plan Filed:	VFR
Destination:	ELY , NV (ELY)	Type of Clearance:	None
Departure Time:	08:45 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:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	34.339057,-112.030143(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	MIKE BROWN; SCOTTSDALE , AZ
Original Publish Date:	August 26, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27669

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).