



Aviation Investigation Final Report

Location:	MEADE, Kansas	Accident Number:	MKC87LA162
Date & Time:	August 16, 1987, 18:20 Local	Registration:	N900K
Aircraft:	MAXFIELD PITTS S-1S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

SHORTLY AFTER TAKEOFF, WHILE DEPG TO THE SE, THE ENG SEIZED. ALL OF THE SURROUNDING TERRAIN CONSISTED OF PLOWED FIELDS, SO THE PLT TRIED TO GLIDE BACK TO THE ARPT; HOWEVER, HE HAD INSUFFICIENT SPEED & ALT TO GET ALIGNED WITH THE RWY. DRG THE LNDG, THE ACFT TOUCHED DOWN ON THE SHOULDER OF THE RWY & WAS DAMAGED. AN EXAM OF THE ENG REVEALED THE #3 ROD CAP & BOLTS HAD FAILED. THERE WAS EVIDENCE THE ROD-TO-CRANKSHAFT BEARING HAD BEEN ROTATING IN THE ROD & HAD INITIATED THE FAILURE. THE ENG HAD 21 HRS OF FLT TIME SINCE IT HAD BEEN OVERHAULED.

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

Findings

1. (C) MAINTENANCE,OVERHAUL - IMPROPER - OTHER MAINTENANCE PERSONNEL
2. (C) ENGINE ASSEMBLY,BEARING - FAILURE,TOTAL
3. ENGINE ASSEMBLY,CONNECTING ROD - OVERLOAD
4. ENGINE ASSEMBLY,CONNECTING ROD CAP - OVERLOAD

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Private	Age:	37, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
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 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 8, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	306 hours (Total, all aircraft), 64 hours (Total, this make and model), 268 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MAXFIELD	Registration:	N900K
Model/Series:	PITTS S-1S PITTS S-1S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1JM
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	July 31, 1987 Annual	Certified Max Gross Wt.:	1150 lbs
Time Since Last Inspection:	12 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	136 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	IO-360-A1A
Registered Owner:	ED FLEET	Rated Power:	200 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	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:13 Local	Type of Airspace:	Class G

Airport Information

Airport:	MEADE MUNI 8K4	Runway Surface Type:	Asphalt
Airport Elevation:	2500 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	3400 ft / 50 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.279666,-100.329582(est)

Administrative Information

Investigator In Charge (IIC):	Roth, Eugene
Additional Participating Persons:	KATHLEEN I PERSON; WICHITA , KS
Original Publish Date:	January 11, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=34432

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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](#).