



Aviation Investigation Final Report

Location:	MESA, Arizona	Accident Number:	LAX86FA167
Date & Time:	April 7, 1986, 02:28 Local	Registration:	N555KS
Aircraft:	PIPER PA-23-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

WHILE ON THE FOURTH LEG OF AN IFR BUSINESS FLIGHT FROM STOW, OHIO TO SANTA PAULA, CALIFORNIA, THE AIRPLANE EXPERIENCED FUEL EXHAUSTION AND CRASHED ABOUT 1 1/2 MILES NORTHEAST OF FALCON FIELD (FFZ), MESA, ARIZONA. THE FLIGHT WAS BEING CONDUCTED UNDER THE AUSPICES OF KENT STATE UNIVERSITY'S FLIGHT DEPARTMENT. ALL OF THE OCCUPANTS WERE CERTIFICATED PILOTS, TWO OF WHICH WERE CERTIFIED FLIGHT INSTRUCTORS, INCLUDING THE UNIVERSITY'S DIRECTOR OF FLIGHT OPERATIONS/CHIEF FLIGHT INSTRUCTOR. THE PIC OF THE ACCIDENT SEGMENT WAS A CERTIFICATED FLIGHT INSTRUCTOR. THE PIC NOTED ON THE FLIGHT PLAN AN ENROUTE FLIGHT TIME OF 4 HOURS, AND 5 HOURS TOTAL FUEL. THE POST ACCIDENT INVESTIGATION DISCLOSED NO EVIDENCE OF ANY AIRPLANE PREEXISTING MALFUNCTIONS OR FAILURES. THE AIRPLANE'S BLOCK TIME WAS 4 HOURS AND 59 MINUTES.

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) - NONMECHANICAL
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - EMERGENCY

Findings

4. OBJECT - TREE(S)
5. LIGHT CONDITION - NIGHT

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	22,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 17, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	612 hours (Total, all aircraft), 25 hours (Total, this make and model), 586 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N555KS
Model/Series:	PA-23-250 PA-23-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-3744
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	August 26, 1985 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	81 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	7583 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540-C4B5
Registered Owner:	KENT STATE UNIVERSITY AIRPORT	Rated Power:	250 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:	Night/bright
Observation Facility, Elevation:	PHX ,1132 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	01:49 Local	Direction from Accident Site:	243°
Lowest Cloud Condition:	Unknown	Visibility	35 miles
Lowest Ceiling:	Broken / 1100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	18°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	AMARILLO , TX (AMA)	Type of Flight Plan Filed:	VFR/IFR
Destination:	PHOENIX , AZ (PHX)	Type of Clearance:	IFR
Departure Time:	21:41 Local	Type of Airspace:	Class G

Airport Information

Airport:	FALCON FIELD FFZ	Runway Surface Type:	Dirt
Airport Elevation:	1392 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	2 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	3 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 Serious	Latitude, Longitude:	33.430412,-111.709106(est)

Administrative Information

Investigator In Charge (IIC): Llorente, A

Additional Participating Persons: BRADFORD W LEWIS; SCOTTSDALE , AZ
HARRY S ROBERTSON; TEMPE , AZ

Original Publish Date: August 11, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=24907>

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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](#).