



Aviation Investigation Final Report

Location:	TUCSON, Arizona	Accident Number:	LAX86LA075
Date & Time:	December 26, 1985, 11:08 Local	Registration:	XBDRL
Aircraft:	PIPER PA-34T-220T	Aircraft Damage:	Substantial
Defining Event:		Injuries:	6 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

DURING A TRANS BORDER VFR X-COUNTRY FLT, THE PLT NOTICED 'OIL SPIRTING FROM THE LEFT ENGINE' WITH SMOKE, & HE SHUT IT DOWN. AN EMERGENCY WAS DECLARED BY THE TUCSON ATCT, WHO CLEARED THE ACFT TO LAND STRAIGHT IN ON RWY 29L. TOWER PERSONNEL OBSERVED THE ACFT PORPOISE ABOUT 7,000 FT DOWN THE RWY BEFORE GROUND LOOPING AND SLIDING OFF THE LEFT SIDE. THE ACFT & ENGINES HAD ABOUT 249 HOURS TOTAL TIME. EXAMINATION OF THE LEFT ENGINE REVEALED A 3/4 INCH CRACK IN THE LOWER FRONT WELD SEAM OF THE OIL COOLER. THE CRACK WAS ONLY VISABLE UNDER PRESSURE TESTING.

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) OIL COOLER CONTROL - CRACKED
2. (C) MAINTENANCE,INSTALLATION - IMPROPER - MANUFACTURER

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

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Foreign; Private	Age:	48, Male
Airplane Rating(s):	Single-engine land; Multi-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 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 18, 1985
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	600 hours (Total, all aircraft), 40 hours (Total, this make and model), 530 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	XBDRL
Model/Series:	PA-34T-220T PA-34T-220	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-8133255
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 25, 1985 Annual	Certified Max Gross Wt.:	4750 lbs
Time Since Last Inspection:	40 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	250 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TS10-360KB
Registered Owner:		Rated Power:	220 Horsepower
Operator:	MARCO ARVIZI	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:	TUS, 2630 ft msl	Distance from Accident Site:	
Observation Time:	11:30 Local	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:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	OBREGON, SONDRA	Type of Flight Plan Filed:	VFR
Destination:	NOGALES, AZ (OLS)	Type of Clearance:	VFR
Departure Time:	08:45 Local	Type of Airspace:	Class D; Class E

Airport Information

Airport:	TUCSON INTL TUS	Runway Surface Type:	Asphalt
Airport Elevation:	2630 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	9129 ft / 75 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	32.149978,-110.930458(est)

Administrative Information

Investigator In Charge (IIC): Rich, Jeff

Additional Participating Persons: BRIAN CALENDINE; SCOTTSDALE , AZ

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=25044>

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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](#).