

# **Aviation Investigation Final Report**

Location:	TUSTIN, California		Accident Number:	LAX86LA046
Date & Time:	November 23, 198	5, 15:50 Local	<b>Registration:</b>	N5353Y
Aircraft:	PIPER	PA-23-250	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 Minor
Flight Conducted Under:	Part 91: General av	iation - Personal		

### **Analysis**

THE PLT'S MECHANIC PERFORMED A PRE-PURCHASE INSPECTION OF THE ACFT. NO MALFUNCTIONS WERE DETECTED WITH THE FUEL SYSTEM, & THE MECHANIC INFORMED THE PLT THAT THE ACFT WAS OVERALL 'IN GOOD CONDITION.' LATER IN THE DAY THE PLT PURCHASED THE ACFT, & AFTER OBSERVING THAT ITS MAIN FUEL TANKS WERE VIRTUALLY FULL HE TOOK OFF. ACCORDING TO THE PLT, WITH FULL MAIN FUEL TANKS THE ACFT'S ENDURANCE WOULD BE 2.8 HRS. DURING THE FLIGHT THE PLT OBSERVED THE MAIN TANKS' FUEL GAUGES, & THEY INDICATED THE FUEL LEVEL TO BE AT 1/2 & 1/4 CAPACITY. 10 MIN LATER BOTH ENGINES LOST ALL POWER, & PLT MADE A FORCED LDG IN AN UNDERLYING SOFT FIELD. EXAM OF THE FUEL TANKS' BLADDERS REVEALED THAT SOME OF THE SNAP FASTENERS DESIGNED TO SECURE THE TOPS OF THE BLADDERS WERE EXCESSIVELY WEATHER CHECKED & HAD SHRUNK.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

#### **Findings**

Occurrence #1: MISCELLANEOUS/OTHER Phase of Operation: STANDING

Findings

(F) FUEL SYSTEM, TANK - FAILURE, PARTIAL
(F) MAINTENANCE, INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: CRUISE - NORMAL

Findings

(F) FLUID, FUEL - EXHAUSTION
(C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
(F) ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - FALSE INDICATION

Occurrence #3: FORCED LANDING Phase of Operation: DESCENT

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - ROLL

Findings 6. TERRAIN CONDITION - SOFT

## **Factual Information**

#### **Pilot Information**

Certificate:	Airline transport	Age:	51,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	September 3, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8000 hours (Total, all aircraft), 152 hours (Total, this make and model), 225 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N5353Y
Model/Series:	PA-23-250 PA-23-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-2426
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	December 1, 1984 Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	3085 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540-A18B5
Registered Owner:	EDWIN B. DEARBORN	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:	Day
<b>Observation Facility, Elevation:</b>		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	3 miles
Lowest Ceiling:	Overcast / 2200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	MADERA , CA (CA )	Type of Flight Plan Filed:	None
Destination:	SANTA ANA , CA (SNA )	Type of Clearance:	None
Departure Time:	14:10 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:	JOHN WAYNE ARPT SNA	Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Rough
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

### Wreckage and Impact Information

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

#### **Administrative Information**

Investigator In Charge (IIC):	Pollack, Wayne	
Additional Participating Persons:	JOSEPH JORDAN; LONG BEACH , CA	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=25023	

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.