

Aviation Investigation Final Report

Location:	MODESTO, Californ	nia	Accident Number:	LAX96LA302
Date & Time:	August 9, 1996, 13	:05 Local	Registration:	N6087N
Aircraft:	Beech	B23	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General av	viation		

Analysis

The pilot reported that the two 28.8 gallon capacity fuel tanks were both full upon takeoff for her participation in the Palms-to-Pines air race. After flying for 2:10 hours the pilot arrived at Modesto, and she made a low pass over the field for timing purposes. During the go-around, all engine power was suddenly lost and the pilot attempted to land on a street. On approach, the airplane collided with power lines. The airplane impacted the street, and a fuel-fed fire erupted as the airplane slid to a stop. The pilot reported that she anticipated the fuel burn off rate during the flight was about 11.9 gallons per hour. She did not recall switching fuel tanks during the flight. No mechanical malfunctions were found during the postimpact engine examination.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: fuel starvation due to the pilot's inadequate fuel management and failure to reposition the fuel selector to a tank containing adequate fuel. The power lines were a factor.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: GO-AROUND (VFR)

Findings 1. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND 2. (C) FLUID, FUEL - STARVATION3. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

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

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

Findings 4. (F) OBJECT - WIRE, TRANSMISSION

Occurrence #4: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On August 9, 1996, at 1305 hours Pacific daylight time, a Beech B23, N6087N, owned and operated by the pilot, experienced a total loss of engine power during a go-around which followed an intentionally performed low pass over the Modesto City Airport, Modesto, California. When the engine lost power, the airplane was between 600 and 900 feet above ground level. The pilot reported that she made a forced landing on a street, but during the approach collided with power lines. As the airplane slid to a stop a fuel-fed fire erupted, which ultimately destroyed the airplane. Neither the private pilot nor the passenger were injured during the Palms-to-Pines air race. The low pass was performed for timing purposes. Visual meteorological conditions prevailed, and a visual flight rules flight plan was filed. The flight originated from Santa Monica, California, at 1050.

The pilot reported that upon departure the fuel tanks were full. The two wing tanks each held about 28.8 gallons of fuel. Fuel can only be used from one of the tanks at a time since there is no "both" fuel tank selector position. The pilot stated that she did not recall repositioning the fuel selector during the 2:10 hour-long flight. The pilot additionally reported that she anticipated the engine would use about 11.9 gallons per hour during the air race.

Airplane recovery personnel reported that they examined the engine. Compression was obtained in all cylinders. The carburetor fuel screen was found clean. All of the spark plugs appeared to be in a serviceable condition. Spark was obtained upon rotation of the magneto drive gears.

Certificate:	Private	Age:	32,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 26, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	338 hours (Total, all aircraft), 243 hours (Total, this make and model), 267 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Pilot Information

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6087N
Model/Series:	B23 B23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M-1179
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 20, 1996 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2302 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	0-360-A2G
Registered Owner:	JILL A. BAKER	Rated Power:	180 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:	MOD ,97 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:03 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Broken / 3200 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:	37°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SANTA MONICA ,CA (SMO)	Type of Flight Plan Filed:	VFR
Destination:	(MOD)	Type of Clearance:	VFR
Departure Time:	10:50 Local	Type of Airspace:	Class D

Airport Information

Airport:	MODESTO CITY MOD	Runway Surface Type:	Asphalt
Airport Elevation:	97 ft msl	Runway Surface Condition:	Dry
Runway Used:	28R	IFR Approach:	None
Runway Length/Width:	5911 ft / 150 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	37.629306,-120.969512(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne		
Additional Participating Persons:	JAMES HALLOWS; FRESNO , CA		
Original Publish Date:	August 25, 1997		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29532		

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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 <u>here</u>.