



Aviation Investigation Final Report

Location:	MOBILE, Arizona	Accident Number:	LAX91LA017
Date & Time:	October 24, 1990, 10:54 Local	Registration:	N1568A
Aircraft:	BEECH F33A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE AIRCRAFT WAS IN THE MAINTENANCE SHOP FOR CORRECTION OF A ROUGH RUNNING ENGINE AT CLIMB POWER, WITH ACCOMPANYING FUEL FLOW FLUCTUATIONS. THE MAINTENANCE DEPARTMENT REPLACED THE FUEL PUMP, FLOW DIVIDER AND THE ENGINE SPARK PLUGS. THE ACCIDENT FLIGHT WAS A POST MAINTENANCE TEST FLIGHT TO APPROVE THE AIRCRAFT FOR RETURN TO SERVICE. THE AIRPLANE WAS ON THE SECOND TOUCH AND GO DEPARTURE WHEN THE ENGINE QUIT AND AIRCRAFT COLLIDED WITH THE GROUND DURING THE ATTEMPTED FORCED LANDING. THE ENGINE WAS TEST RUN USING THE COMPONENTS IN THE AIRCRAFT AND WOULD ONLY RUN VERY ROUGH AT NO HIGHER THAN 1400 RPM. AN OBSTRUCTION WAS FOUND IN THE FUEL CONTROL UNIT. OPTICAL EXAMINATION OF THE FOREIGN OBJECT REVEALED THAT IT WAS SIMILAR IN COMPOSURE, COLOR AND TEXTURE TO FUEL SYSTEM SEAL MATERIAL. THE ENGINE WAS MANUFACTURED IN JULY OF 1990 AND INSTALLED IN THE AIRFRAME ON AUGUST 14, 1990. THE FUEL CONTROL UNIT WAS SUPPLIED BY CONTINENTAL ALREADY INSTALLED ON THE ENGINE. AS OF THE ACCIDENT, THE ENGINE HAD ACCURED A TOTAL TIME OF 256 HOURS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A FUEL FLOW INTERRUPTION DUE TO A FUEL SYSTEM SEAL FRAGMENT BECOMING LODGED IN THE FUEL CONTROL UNIT AND THE MANUFACTURER'S INADEQUATE QUALITY CONTROL PROCEDURES.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM,FUEL CONTROL - BLOCKED(PARTIAL)
2. (C) FLUID,FUEL - STARVATION
3. (C) INADEQUATE QUALITY CONTROL - MANUFACTURER

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - EMERGENCY

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	60, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	October 23, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	16796 hours (Total, all aircraft), 1574 hours (Total, this make and model), 16796 hours (Pilot In Command, all aircraft), 219 hours (Last 90 days, all aircraft), 55 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N1568A
Model/Series:	F33A F33A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	CE 1332
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3400 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated	Engine Model/Series:	IO-520-B13
Registered Owner:	AIRLINE TRAINING CENTER	Rated Power:	285 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	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GOODYEAR , AZ (GYR)	Type of Flight Plan Filed:	Company VFR
Destination:	(GYR)	Type of Clearance:	None
Departure Time:	10:28 Local	Type of Airspace:	

Airport Information

Airport:	AUXILIARY 1AZ0	Runway Surface Type:	Asphalt
Airport Elevation:	1268 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	4500 ft / 75 ft	VFR Approach/Landing:	Forced landing;Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	MIKE BROWN; SCOTTSDALE , AZ
Original Publish Date:	November 23, 1992
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27048

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