Aviation Investigation Final Report

Location:	Jerome, Arizona	**Accident Number:**	LAX03LA175
Date & Time:	May 31, 2003, 07:20 Local	**Registration:**	N111BM
Aircraft:	Gray Jerry Kitfox	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The amateur-built, experimental single-engine airplane collided with terrain following a loss of control while maneuvering. According to a witness, the airplane was flying low and slow, about 200 to 300 feet above ground level below a canyon ridge line. It flew up the canyon, and as it approached rising terrain, engine power was increased. The airplane attempted to climb above the canyon, then "winged over" and dived, nose first, into the mountainside. A post accident examination of the wreckage revealed no evidence of pre-impact anomalies to the airframe or engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate clearance/altitude from rising terrain, and his failure to maintain control of the airplane while maneuvering, which resulted in an uncontrolled descent and in-flight collision with terrain.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Findings
1. TERRAIN CONDITION - RISING
2. (C) ALTITUDE/CLEARANCE - INADEQUATE - PILOT IN COMMAND

3. LOW ALTITUDE FLIGHT/MANEUVER - PERFORMED - PILOT IN COMMAND
4. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - RISING
6. TERRAIN CONDITION - BLIND/BOX CANYON

Factual Information

On May 31, 2003, at 0720 mountain standard time, an amateur-built experimental Gray Kitfox 5 single-engine airplane, N111BM, collided with terrain while maneuvering in the vicinity of Jerome, Arizona. The airplane was owned and operated by the pilot under the provisions of 14 CFR Part 91. The private pilot and passenger were fatally injured; the airplane was destroyed. The local personal flight departed Cottonwood Airport (P52), Cottonwood, Arizona about 0715. Visual meteorological conditions prevailed and a visual flight plan had not been filed.

An acquaintance of both the pilot and passenger, reported to a Yavapai County detective that he had introduced them earlier that morning. The purpose of the flight was to take the passenger for a short, approximately 30-minute, local area flight. He stated that the men met at the airport about 0700. He watched the plane takeoff with the pilot in the right seat. He noted that the engine sounded normal during takeoff.

Officers from the Yavapai County Sheriff's Office interviewed witnesses. One witness, a local firefighter, reported that he saw the airplane flying below a ridgeline. The airplane was flying low and slow at about 200 to 300 feet above ground level (agl). It flew up a canyon, and as it approached a hill, it attempted to increase power. The airplane attempted to climb out, above the canyon, "winged over", and dived, nose first, into the mountainside. He did not hear any abnormalities with the engine. Another witness, the local Mayor, reported hearing the airplane crash. He was the first person on-scene and when he arrived the airplane was engulfed in flames.

A Deputy reported the accident location as: 34 degrees 45.30 minutes north latitude and 112 degrees 06.37 minutes west longitude.

PERSONNEL INFORMATION

A review of Federal Aviation Administration (FAA) airman records revealed the pilot held a private pilot certificate with an airplane single-engine land rating. He was issued a third-class medical certificate on September 25, 2002, with no limitations. According to the last medical certificate application, the pilot reported having accumulated a total of 1000 hours of flight time. The pilot's logbook was not recovered during the investigation.

MEDICAL AND PATHOLOGICAL INFORMATION

The Yavapai County Office of the Medical Examiner completed an autopsy and reported cause of death blunt force trauma of the torso. The FAA Toxicology and Accident Research Laboratory performed toxicological testing of specimens of the pilot. The results of the analysis were negative for carbon monoxide, cyanide, volatiles, and tested drugs.

TESTS AND RESEARCH

The wreckage was transported to Air Transport, Phoenix, Arizona. The wreckage was examined by an Federal Aviation Administration (FAA) inspector and an engine manufacturer's representative on October 21, 2003. He reported that a post accident fire had consumed the airframe structure and most engine accessories. The engine manufacturers technical representative examined the engine under the supervision of the FAA. The inspector reported that there was no evidence found of mechanical failure or malfunction of the engine. Engine and airframe logbooks were not located.

Pilot Information

Certificate:	Private	**Age:**	63,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	September 25, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	1000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Gray Jerry	**Registration:**	N111BM
Model/Series:	Kitfox	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	S97120130
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Continuous airworthiness	**Certified Max Gross Wt.:**	1550 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	O-235-L2C
Registered Owner:	William I Mosley	**Rated Power:**	115 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PRC,5045 ft msl	**Distance from Accident Site:**	17 Nautical Miles
Observation Time:	06:53 Local	**Direction from Accident Site:**	248°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	210°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.12 inches Hg	**Temperature/Dew Point:**	18°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cottonwood, AZ (P52)	**Type of Flight Plan Filed:**	None
Destination:	Jerome, AZ	**Type of Clearance:**	None
Departure Time:	07:15 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Cottonwood P52	**Runway Surface Type:**	
Airport Elevation:	3550 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	34.758335,-112.110275

Administrative Information

Investigator In Charge (IIC):	McKenny, Van
Additional Participating Persons:	George Bean; Federal Aviation Administration; Scottsdale, AZ Mark Platt; Lycoming; Van Nuys, CA
Original Publish Date:	December 28, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57115