



National Transportation Safety Board Aviation Accident Final Report

Location:	Rio Vista, CA	Accident Number:	LAX02LA078
Date & Time:	02/02/2002, 1300 PST	Registration:	N2221X
Aircraft:	Robinette Ultra Pup	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The experimental, amateur-built airplane landed off-airport following a total loss of engine power on climbout. The pilot reported that during the initial climb after a slow-flight, low pass down the 4,200-foot-long runway and while about 200 feet above ground level, the engine lost all power although the propeller continued to windmill. After the accident, there was about 9 gallons of 100-octane aviation fuel aboard. Earlier the same day he had flown a prior flight leg on the same tank of fuel. The pilot suspected that carburetor icing was the cause of the engine loss of power. The airplane was equipped with a Mosler converted automotive engine, and was equipped with carburetor heat. The carburetor heat control was in the "on" position when engine power was lost. A generic carburetor icing probability chart used by the Safety Board showed the ambient temperature and dew point conditions to have been within the region marked "serious icing - cruise or climb power."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. TERRAIN CONDITION - GROUND

Factual Information

On February 2, 2002, at 1300 Pacific standard time, a Robinette Ultra Pup, N2221X, landed off-airport following total a loss of engine power on climbout from Rio Vista Municipal Airport, Rio Vista, California. The private certificated pilot and pilot-rated passenger were not injured. The experimental, amateur-built airplane was substantially damaged. The local area personal flight was operated by the owner under 14 CFR Part 91. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that during the initial climb after a slow-flight, low pass down runway 25 (4,200feet long by 75 feet wide), while about 200 feet above ground level, the engine lost all power although the propeller continued to windmill. After the accident, there was about 9 gallons of 100-octane aviation fuel aboard. Earlier the same day he had flown from Concord, California, to Rio Vista on the same tank of fuel. The pilot suspected that carburetor icing was the cause of the engine loss of power. The airplane was equipped with a Mosler converted automotive engine, and was equipped with carburetor heat. The carburetor heat control was in the "on" position when engine power was lost.

A generic carburetor icing probability chart used by the Safety Board showed the ambient temperature and dew point conditions to have been within the region marked "serious icing - cruise or climb power."

Pilot Information

Certificate:	Private	Age:	56, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/11/2001
Occupational Pilot:		Last Flight Review or Equivalent:	03/10/2001
Flight Time:	426 hours (Total, all aircraft), 8 hours (Total, this make and model), 363 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinette	Registration:	N2221X
Model/Series:	Ultra Pup	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	UP 0062
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	01/01/2002, Condition	Certified Max Gross Wt.:	1000 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	169 Hours	Engine Manufacturer:	Mosler
ELT:	Installed, not activated	Engine Model/Series:	VW4
Registered Owner:	Gregg L. McCurdy	Rated Power:	60 hp
Operator:	Gregg L. McCurdy	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SAC, 24 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	1253 PST	Direction from Accident Site:	15°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	11 °C / 3 °C
Precipitation and Obscuration:			
Departure Point:	Rio Vista, CA (O88)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1300 PST	Type of Airspace:	Class G

Airport Information

Airport:	Rio Vista (O88)	Runway Surface Type:	Asphalt
Airport Elevation:	20 ft	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	4200 ft / 75 ft	VFR Approach/Landing:	Go Around; Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	RICHARD B PARKER	Report Date:	09/30/2003
Additional Participating Persons:	NANCY A LIPPE; FAA Flt Stnds Dist Office; Sacramento, CA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).