



National Transportation Safety Board Aviation Accident Data Summary

Location:	TUCSON, AZ	Accident Number:	LAX97LA031
Date & Time:	11/01/1996, 1743 MST	Registration:	N95HS
Aircraft:	Rainey RANS S-12	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The 2 seat, ultralight type, homebuilt aircraft was observed climbing out after takeoff toward the area of the accident site. Ground witnesses stated that they heard the high pitched hum of the engine, which went completely silent and was followed by a bang or thud; however, they did not see the aircraft crash. An FAA inspector examined the aircraft and reported that it impacted the ground in a near vertical nose down descent and that the empennage was torsionally twisted. No broken or disturbed vegetation, or other ground scars were observed beyond the immediate area of the wreckage. No preimpact mechanical problem was noted with the airframe or flight control system. The engine was examined by a power plant mechanic, who was familiar with the Rotax engine. He reported that both spark plugs had no spark due to a broken wire in the ignition coil.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a broken wire in the ignition coil, which resulted in a loss of engine power; and failure of the pilot to maintain adequate airspeed, which resulted in a stall/spin and uncontrolled collision with the terrain.

Findings

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

Findings

1. (C) IGNITION SYSTEM,IGNITION COIL - FAILURE,TOTAL

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

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
3. (C) STALL/SPIN - INADVERTENT - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Private	Age:	59
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	280 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rainey	Registration:	N95HS
Model/Series:	RANS S-12 RANS S-12	Engines:	1 Reciprocating
Operator:	HUGH S. RAINEY	Engine Manufacturer:	Rotax
Operating Certificate(s) Held:	None	Engine Model/Series:	582
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	TUS, 2641 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 300°
Temperature:	21°C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	(0AZ1)	Destination:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	JEFF RICH	Adopted Date:	08/21/1997
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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.

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