



Aviation Investigation Final Report

Location:	Richland, Washington	Accident Number:	SEA03LA061
Date & Time:	April 12, 2003, 16:00 Local	Registration:	N125MZ
Aircraft:	Avia Stroitel AC-5M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The takeoff was normal until two-thirds of the way down the runway, at approximately 150 feet above ground level, the tension on the propeller drive belts slipped resulting in a loss of power. The pilot elected to make a right turn to land on an intersecting runway; however, the pilot's failure to lower the nose resulted in the loss of airspeed and the right wing stalling. The aircraft impacted the ground with its right wing tip, spun around 180 degrees, skidded backwards across a taxiway, and came to rest in sandy soil. The reason for the slippage of the drive belts was not determined.

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 airspeed and the failure of the propeller drive assembly. A factor

contributing to the accident was the inadvertent stall.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) PROPELLER SYSTEM/DRIVE ASSEMBLY - SLIPPED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

3. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - GROUND

Factual Information

On April 12, 2003, approximately 1600 Pacific daylight time, an Avia Stroitel AC-5M powered glider, N125MZ, was substantially damaged during a forced landing following a loss of engine power at the Richland Airport (RLD), Richland, Washington. The private pilot, sole occupant and owner of the glider, was not injured. Visual meteorological conditions prevailed and no flight plan was filed for the 14 CFR Part 91 personal flight. The flight was originating at the time of the accident.

According to the Pilot/Operator Aircraft Accident Report (NTSB form 6120.1/2), the pilot reported "the takeoff on runway 1 was normal, but approximately two-thirds of the way down the runway, at approximately 150 feet above ground level, I noticed the engine 'over-revving' and the aircraft no longer climbing." The pilot reported that he failed to lower the nose to ensure proper airspeed in order to land straight ahead on runway 1. The pilot further stated that he made the wrong decision and turned right to land on the intersecting runway [runway 7], and during the turn "the airspeed was allowed to deteriorate until the right wing stalled." The airplane's right wing tip impacted the ground causing it to spin around 180 degrees, skidding backwards across a taxiway, and coming to rest in sandy soil.

The pilot reported that the tension on the propeller drive belts was checked during the aircraft preflight. The pilot also stated that the tension on the propeller drive belts "slipped" and caused a loss of thrust after takeoff. The pilot further reported that the reason for the drive belts slipping was not determined.

The pilot reported the glider had sustained damage to the right wing tip and the main gear. The bottom right front of the fuselage was scraped and cracked, the rear portion of the fuselage where it transitions with the vertical stabilizer was cracked approximately half-way through its circumference, and the tail wheel was crushed.

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 20, 2002
Flight Time:	440 hours (Total, all aircraft), 6 hours (Total, this make and model), 379 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Avia Stroitel	Registration:	N125MZ
Model/Series:	AC-5M	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	005
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	October 1, 2002 Annual	Certified Max Gross Wt.:	660 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8 Hrs at time of accident	Engine Manufacturer:	Compact Radial Engines
ELT:		Engine Model/Series:	MZ 35
Registered Owner:	Eugene A. Hess	Rated Power:	25 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Richland, WA (RLD)	Type of Flight Plan Filed:	None
Destination:	Richland, WA (RLD)	Type of Clearance:	
Departure Time:	16:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	Richland Airport RLD	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	None
Runway Length/Width:	3999 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	46.305557,-119.304168

Administrative Information

Investigator In Charge (IIC):	Little, Thomas
Additional Participating Persons:	Donald N Bird; Federal Aviation Administration; Spokane, WA
Original Publish Date:	September 30, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=56807

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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 [here](#).