

Aviation Investigation Final Report

Location:	OGDEN, Utah	Accident Number:	SEA94LA044
Date & Time:	December 31, 1993, 14:00 Local	Registration:	HBYDJ
Aircraft:	SOMMERAUER GLASAIR I RG	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AFTER EXPERIENCING A COMPLETE LOSS OF ENGINE POWER, THE PILOT ATTEMPTED A FORCED GEAR-UP LANDING ON SOFT ROUGH TERRAIN. AFTER TOUCHDOWN THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE. AN FAA INSPECTOR LATER FOUND THAT A FUEL LINE-TO-ENGINE FITTING NUT, WHICH HAD BEEN ON THE AIRCRAFT FOR OVER 85 HOURS, HAD COME LOOSE, RESULTING IN FUEL STARVATION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A LOOSE FUEL LINE FITTING, AND FUEL STARVATION. FACTORS INCLUDE AN INTENTIONAL WHEELS UP FORCED LANDING, AND SOFT ROUGH/UNEVEN TERRAIN.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: MANEUVERING

Findings 1. (C) FLUID,FUEL - STARVATION 2. (C) FUEL SYSTEM,LINE FITTING - LOOSE

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 3. (F) WHEELS UP LANDING INTENTIONAL PILOT IN COMMAND
- 4. (F) TERRAIN CONDITION ROUGH/UNEVEN
- 5. (F) TERRAIN CONDITION SOFT

Factual Information

On December 31, 1993, approximately 1400 mountain standard time (MST), a Swiss registered Glasair I RG experimental aircraft, HBYDJ, impacted the terrain during a forced landing near Ogden, Utah. The private pilot, who was the sole occupant, was not injured, but the aircraft sustained substantial damage. The pilot, who was on a local pleasure flight, departed Ogden-Hinckley Municipal Airport about 20 minutes earlier. The pilot had not filed a flight plan, and there was no report of an ELT activation.

According to the pilot, the engine lost power, and he attempted a forced landing on rough soft terrain. During the emergency descent, he made the decision to land with the gear up in an attempt to minimize the damage to the aircraft.

An FAA inspector who responded to the accident found that a stainless steel nut on the fuel line-to-engine fitting had come loose, resulting in an interruption in the fuel flow to the engine. According to the pilot/manufacturer, the nut that came loose had been used to hold the fuel line to the engine for over 85 hours of powerplant operation.

Certificate:	Private	Age:	49,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 13, 1993
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	878 hours (Total, all aircraft), 430 hours (Total, this make and model), 742 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Pilot Information

Aircraft and Owner/Operator Information

Aircraft Make:	SOMMERAUER	Registration:	HBYDJ
Model/Series:	GLASAIR I RG GLASAIR I	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	709
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	July 16, 1993 AAIP	Certified Max Gross Wt.:	2100 lbs
Time Since Last Inspection:	46 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	398 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-320-A1A
Registered Owner:	SOMMERAUER, JURG	Rated Power:	160 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:	Unknown	Visibility	20 miles
Lowest Ceiling:	Overcast / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	2°C / -3°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		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:	41.180198,-111.909523(est)

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin		
Additional Participating Persons:	TIM M	/IASON; SALT LAKE CITY,, UT	
Original Publish Date:	October 20, 1994		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://da	ita.ntsb.gov/Docket?ProjectID=41864	

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 <u>here</u>.