



National Transportation Safety Board Aviation Accident Data Summary

Location:	TOLEDO, WA	Accident Number:	SEA86FA211
Date & Time:	08/01/1986, 1607 PDT	Registration:	N5720S
Aircraft:	SCHWEIZER SGS-2-33	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE WEAK LINK AT THE TOW VEHICLE BROKE DURING LAUNCHING. THE PLT LOWERED THE NOSE OF THE ACFT AND TURNED INTO THE WIND. THE PLT STATED THAT THE ACFT WAS STALLED AND THAT HE WAS UNABLE TO STOP THE DESCENT RATE. THE ACFT STRUCK THE RUNWAY IN A SLIGHT NOSE DOWN ATTITUDE. THE WEAK LINK ROPE WAS NOT AVAILABLE FOR TESTING TO DETERMINE THE STRENGTH OF THE ROPE AND ANY DEFECTS. THE PLT ASSUMED TOO HIGH OF A PITCH ANGLE TOO LOW TO THE GROUND DURING INITIAL CLIMB FOR THIS TYPE OF LAUNCH WITH THE TOW HOOK BEING FORWARD OF THE ACFT'S C.G. BEING APPROXIMATELY 150 FT AGL WHEN THE STALL OCCURRED, THE PLT WAS UNABLE TO FULLY RECOVER PRIOR TO CONTACTING THE RUNWAY.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) GLIDER LAUNCH/TOW EQUIPMENT - DISCONNECTED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

2. (F) ALTITUDE - INADEQUATE
3. (C) STALL - INADVERTENT - PILOT IN COMMAND
4. REMEDIAL ACTION - ATTEMPTED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	49
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	Glider; Helicopter	Instructor Rating(s):	Glider; Helicopter
Flight Time:	11022 hours (Total, all aircraft), 302 hours (Total, this make and model), 10702 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SCHWEIZER	Registration:	N5720S
Model/Series:	SGS-2-33 SGS-2-33	Engines:	0 Unknown
Operator:	CIVIL AIR PATROL, INC.	Engine Manufacturer:	NONE
Operating Certificate(s) Held:	None	Engine Model/Series:	NONE
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Weather Information Source:	Pilot
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / 10 knots, 360°
Temperature:	27° C	Visibility	50 Miles
Precipitation and Obscuration:			
Departure Point:	Destination:		

Airport Information

Airport:	TOLEDO (TDO)	Runway Surface Type:	Asphalt
Runway Used:	0	Runway Surface Condition:	Dry
Runway Length/Width:	5000 ft / 150 ft		

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	CANDACE CARRERA	Adopted 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 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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