

# **Aviation Investigation Final Report**

Location:	HAMILTON, Montana	a	Accident Number:	SEA00LA144
Date & Time:	July 25, 2000, 18:10	Local	<b>Registration:</b>	N27RT
Aircraft:	Eiriavion Oy	PIK 20E	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 Serious
Flight Conducted Under:	Part 91: General avia	tion - Personal		

#### **Analysis**

The pilot returned to his departure airport in the powered glider and entered a left downwind for runway 34. During his approach he decided he was too high and fast and executed a goaround with the intention of executing a 180 degree course reversal and landing on the reciprocal runway. A witness reported that during a high angle of bank turn and climb of about 50 feet, the aircraft entered a stall. The pilot reported that he initiated a recovery but that he 'had insufficient ground clearance to re-establish level flight and impacted the ground.'

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's entering an inadvertent stall condition during a high angle of bank turn (maneuvering), and the lack of adequate altitude in which to successfully recover before ground impact.

#### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings 1. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings 2. (C) ALTITUDE - INADEQUATE

### **Factual Information**

On July 25, 2000, approximately 1810 mountain daylight time, an Eiriavion Oy PIK 20E powered glider, N27RT, co-registered to and being flown by a private pilot, was destroyed during an inflight collision with terrain following a loss of control during a go-around maneuver at Ravalli County airport, Hamilton, Montana. The pilot sustained serious injuries. Visual meteorological conditions prevailed and no flight plan had been filed. The flight, which was personal, was operated under 14CFR91, and originated at Hamilton, Montana, approximately 1715.

The pilot reported that after engaging in soaring activity for a while he returned to the Ravalli County airport and entered a left downwind for runway 34. He further reported that "...final approach was too high and too fast" and that he "resolved to travel up the runway, make a 180 [degree] turn (wind and traffic not a factor) and land on RWY [runway] 16."

The pilot also reported that he "made a climbing ste[e]p turn to the right and began a 180 [degree turn] to the left. Near the end of the turn, [he] over-banked and, sensing an on-coming accelerated stall, leveled the wings and dropped the nose to assume recovery. With recovery assured, [he] pulled the nose level but had insufficient ground clearance to re-establish level flight and impacted the ground" (refer to attached NTSB Form 6120.1/2).

A witness (and co-owner of the aircraft) reported observing the glider begin its flare for runway 34 and stated that the glider "...seemed pretty fast...." He described the glider as climbing about 50 feet and then making a "sharp" 60 degree left turn, and noted that the glider's wings were near vertical. He stated that "...the stall occurred, [and] the glider nosed down but recovered just before hitting the soft grassy sand." (refer to attached statement).

#### **Pilot Information**

Certificate:	Private	Age:	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	May 18, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	782 hours (Total, all aircraft), 6 hours (Total, this make and model), 534 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Eiriavion Oy	Registration:	N27RT
Model/Series:	PIK 20E PIK 20E	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	20208
Landing Gear Type:	Hull	Seats:	1
Date/Type of Last Inspection:	June 14, 2000 Annual	Certified Max Gross Wt.:	1036 lbs
Time Since Last Inspection:	33 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	753 Hrs	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	501
Registered Owner:	GERARDIS, SCHMIDT, & VALEO	Rated Power:	43 Horsepower
Operator:	VALEO, JAMES G.	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:	MSO ,3201 ft msl	Distance from Accident Site:	39 Nautical Miles
Observation Time:	17:56 Local	Direction from Accident Site:	345°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	33°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(6S5)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:15 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	RAVALLI COUNTY 6S5	Runway Surface Type:	Asphalt
Airport Elevation:	3638 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	4200 ft / 75 ft	VFR Approach/Landing:	Go around

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	46.159053,-114.140869(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Mccreary, Steven	
Additional Participating Persons:	RICK KOFFMAN; HELENA , MT	
Original Publish Date:	May 9, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51328	

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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.