

# **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<br>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<br>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<br>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<br>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, &<br>VALEO | Rated Power:                      | 43 Horsepower   |
| Operator:                        | VALEO, JAMES G.               | Operating Certificate(s)<br>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<br>Forecast/Actual:     | /                 |
| Wind Direction:                  | 0°                               | Turbulence Severity<br>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<br>Injuries: |           | Aircraft Fire:          | None                       |
| Ground Injuries:       | N/A       | Aircraft Explosion:     | None                       |
| Total Injuries:        | 1 Serious | Latitude,<br>Longitude: | 46.159053,-114.140869(est) |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Mccreary, Steven                             |  |
|--------------------------------------|--|--|
| Additional Participating<br>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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