



Aviation Investigation Final Report

| Location: | Batavia, Ohio | Accident Number: | CHI08CA105 |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time: | April 6, 2008, 12:00 Local | Registration: | N62GS |
| Aircraft: | Schultz Mini 500 | Aircraft Damage: | Substantial |
| Defining Event: | Sys/Comp malf/fail (non-power) | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |
| | | | |

Analysis

The pilot reported that he was air taxiing his homebuilt helicopter when the centrifugal clutch failed and the helicopter abruptly descended into the ground. The helicopter struck its right skid and then rolled onto its side.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the helicopter's centrifugal clutch during hover which led to the pilot's inability to maintain control of the craft and its subsequent impact with the ground.

| Findings | |
|------------------|------------------------------|
| Personnel issues | Aircraft control - Pilot |
| Aircraft | Main rotor gearbox - Failure |

Factual Information

History of Flight Maneuvering-hover Sys/Comp malf/fail (non-power) (Defining event) Maneuvering-hover Collision with terr/obj (non-CFIT)

Pilot Information

| Certificate: | Commercial; Private | Age: | 81,Male |
|---------------------------|--|-----------------------------------|---------|
| Airplane Rating(s): | Single-engine land; Single-engine sea; Multi-engine land | Seat Occupied: | |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | |
| Instructor Rating(s): | | Toxicology Performed: | No |
| Medical Certification: | None | Last FAA Medical Exam: | |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 2950 hours (Total, all aircraft), 150 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Schultz | Registration: | N62GS |
|----------------------------------|------------------------|-----------------------------------|-----------------|
| Model/Series: | Mini 500 | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | 36 |
| Landing Gear Type: | Skid | Seats: | |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Rotax |
| ELT: | | Engine Model/Series: | 582 |
| Registered Owner: | On file | Rated Power: | |
| Operator: | On file | 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: | | Visibility | |
| Lowest Ceiling: | | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | |
| Precipitation and Obscuration: | | | |
| Departure Point: | Batavia, OH (I69) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 12:00 Local | Type of Airspace: | |
| | | | |

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: | 39.067779,-84.200836 |

Administrative Information

| Investigator In Charge (IIC): | Brannen, John |
|--------------------------------------|---|
| Additional Participating Persons: | Dennis Tom; Cincinnati, Ohio |
| Original Publish Date: | May 28, 2008 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=67972 |

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.