



National Transportation Safety Board Aviation Accident Factual Report

| | | | |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Mesa, AZ | Accident Number: | LAX07CA262 |
| Date & Time: | 09/01/2007, 1546 MST | Registration: | N546SW |
| Aircraft: | Wessel Vortex | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

On September 1, 2007, about 1546 mountain standard time, an experimental Wessel Vortex, N546SW, made a forced landing in rough terrain about 4 miles north of the Falcon Field airport, Mesa, Arizona. The private pilot was the owner and operator of the homebuilt gyrocopter, and it was substantially damaged upon rolling over during impact with 5-foot-high brush in a ravine. The pilot was not injured. Visual meteorological conditions prevailed at the time, and no flight plan had been filed. The personal flight was performed under the provisions of 14 CFR Part 91, and it originated from Mesa about 1445.

The pilot reported to the National Transportation Safety Board investigator that during cruise flight he heard a loud noise and felt a vibration. Thereafter, the rotorcraft lost power when one of the pusher propeller blades separated, and he autorotated. The pilot additionally reported an examination of the engine assembly revealed that the muffler's mounting strap had failed, and this event resulted in the subsequent separation of one composite propeller blade.

Pilot Information

| | | | |
|----------------------------------|--|--|----------------------------|
| Certificate: | Private | Age: | 47, Male |
| Airplane Rating(s): | Single-engine Land | Seat Occupied: | |
| Other Aircraft Rating(s): | Gyroplane | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | | Toxicology Performed: | |
| Medical Certification: | Class 3 | Last FAA Medical Exam: | 07/01/2006 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 757 hours (Total, all aircraft), 66 hours (Total, this make and model), 36 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|-------------------------------|-----------------------|--------------------------------|-----------------|
| Aircraft Make: | Wessel | Registration: | N546SW |
| Model/Series: | Vortex | Aircraft Category: | Gyroplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | MEW061 |
| Landing Gear Type: | Tricycle | 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: | 618 |
| Registered Owner: | Marvin E. Wessel, Jr. | Rated Power: | |
| Operator: | Marvin E. Wessel, Jr. | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| | | | |
|----------------------------------|----------------------------------|--------------------------------------|----------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 Miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | Light and Variable / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Mesa, AZ (FFZ) | Type of Flight Plan Filed: | None |
| Destination: | Mesa, AZ (FFZ) | Type of Clearance: | None |
| Departure Time: | 1315 MST | Type of Airspace: | |

Airport Information

| | | | |
|----------------------|--------------------|---------------------------|----------------|
| Airport: | Falcon Field (FFZ) | Runway Surface Type: | |
| Airport Elevation: | 1394 ft | Runway Surface Condition: | |
| Runway Used: | NA | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced Landing |

Wreckage and Impact Information

| | | | |
|----------------------------|--------|-----------------------------|------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | |
| Total Injuries: | 1 None | Latitude, Longitude: | 33.511667, -111.698333 |

Administrative Information

| | |
|--|--|
| Investigator In Charge (IIC): | Wayne Pollack |
| Additional Participating Persons: | Christine Clark; Federal Aviation Administration; Scottsdale, AZ |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| 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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ . |