



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Encinal, Texas                       | <b>Accident Number:</b> | DFW05CA211  |
| <b>Date &amp; Time:</b>        | August 8, 2005, 17:00 Local          | <b>Registration:</b>    | N274DW      |
| <b>Aircraft:</b>               | Schleicher ASW-27b                   | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

The 5,635-hour commercial glider pilot encountered poor lift thermal conditions while attempting to fly a cross-country competition flight. The pilot lost lift and decided to turn towards an airfield. As the pilot approached the field it became clear that the airport had been abandoned and was unsuitable for landing. The pilot elected to land on a dirt road. As the glider was touching down a cactus caught the left wing, which turned the glider into a fence. The left wing then came into contact with a fence post and a 180-degree ground loop followed.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudgment of distance and altitude during a cross-country soaring flight. A contributing factor was the lack of suitable terrain for the landing.

## Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: MANEUVERING

### Findings

1. (F) WEATHER CONDITION - NO THERMAL LIFT
2. (C) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND
3. (F) PRECAUTIONARY LANDING - ATTEMPTED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE
5. TERRAIN CONDITION - HIGH VEGETATION
6. OBJECT - FENCE POST

## Factual Information

On August 8, 2005, approximately 1700 central daylight time, a Schleicher ASW-27b glider, N274DW, sustained substantial damage during an off-airport landing on a road near Encinal, Texas. The commercial rated glider pilot, sole occupant of the glider, was not injured. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The flight originated at the Garner Field Airport (UVA), near Uvalde, Texas, approximately 1300, for a cross-country competition flight, with a minimum enroute time of 4 hours and 30 minutes.

According to the 5,635-hour pilot, while attempting to fly to the Jim Hogg County Airport (HBV), near Hebronville, Texas, he encountered poor thermal lift conditions and elected to return towards the A P Ranch Airport (TX27), near Encinal, Texas, which was the only airport within gliding distance. As the pilot approached the airfield, it became clear that the ranch airport had been abandoned and was unsuitable for landing. The pilot decided the best landing area was a nearby dirt road. As the glider was touching down, the left wing of the glider collided with a mature cactus, which then turned the glider into a fence. The left wing came into contact with a fence post and a 180-degree ground loop followed.

Photos provided by the pilot, revealed structural damage to the glider when the fuselage broke aft of the cockpit. Additional damage was observed on the control surfaces of the right wing.

At 1656, the automated surface observing system (ASOS) at Laredo International Airport (LRD), near Laredo, Texas, located approximately 28 nautical miles southwest of the accident site, reported winds from 150 degrees at 10 knots, 10 statute miles visibility, a clear sky, temperature 100 degrees Fahrenheit, dew point 66 degrees Fahrenheit, and a barometric pressure setting of 29.87 inches of Mercury.

## Pilot Information

|                                  |  |  |              |
|----------------------------------|--|--|--------------|
| <b>Certificate:</b>              | Airline transport; Commercial; Flight instructor   | <b>Age:</b>                              | 52, Male     |
| <b>Airplane Rating(s):</b>       | Single-engine land; Multi-engine land  | <b>Seat Occupied:</b>                    | Front        |
| <b>Other Aircraft Rating(s):</b> | Glider   | <b>Restraint Used:</b>                   |              |
| <b>Instrument Rating(s):</b>     | Airplane   | <b>Second Pilot Present:</b>             | No           |
| <b>Instructor Rating(s):</b>     | Airplane multi-engine; Airplane single-engine; Glider  | <b>Toxicology Performed:</b>             | No           |
| <b>Medical Certification:</b>    | None None  | <b>Last FAA Medical Exam:</b>            |              |
| <b>Occupational Pilot:</b>       | UNK  | <b>Last Flight Review or Equivalent:</b> | June 1, 2004 |
| <b>Flight Time:</b>              | 5635 hours (Total, all aircraft), 195 hours (Total, this make and model), 4835 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 33 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) |  |              |

## Aircraft and Owner/Operator Information

|                                      |  |                                       |          |
|--------------------------------------|--|---------------------------------------|----------|
| <b>Aircraft Make:</b>                | Schleicher   | <b>Registration:</b>                  | N274DW   |
| <b>Model/Series:</b>                 | ASW-27b  | <b>Aircraft Category:</b>             | Glider   |
| <b>Year of Manufacture:</b>          |  | <b>Amateur Built:</b>                 |          |
| <b>Airworthiness Certificate:</b>    | Utility  | <b>Serial Number:</b>                 | 27189    |
| <b>Landing Gear Type:</b>            | Retractable - Tailwheel                                | <b>Seats:</b>                         | 1        |
| <b>Date/Type of Last Inspection:</b> | Annual   | <b>Certified Max Gross Wt.:</b>       | 1102 lbs |
| <b>Time Since Last Inspection:</b>   |  | <b>Engines:</b>                       | 0        |
| <b>Airframe Total Time:</b>          |  | <b>Engine Manufacturer:</b>           |          |
| <b>ELT:</b>                          | Installed, activated, did not aid in locating accident | <b>Engine Model/Series:</b>           |          |
| <b>Registered Owner:</b>             | David Weaver   | <b>Rated Power:</b>                   |          |
| <b>Operator:</b>                     | David Weaver   | <b>Operating Certificate(s) Held:</b> | None     |

## Meteorological Information and Flight Plan

|   |                                  |   |                   |
|---|----------------------------------|---|-------------------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)                     | <b>Condition of Light:</b>                  | Day               |
| <b>Observation Facility, Elevation:</b> | LRD,508 ft msl                   | <b>Distance from Accident Site:</b>         | 28 Nautical Miles |
| <b>Observation Time:</b>                | 16:56 Local                      | <b>Direction from Accident Site:</b>        | 227°              |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 10 miles          |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |                   |
| <b>Wind Speed/Gusts:</b>                | 13 knots /                       | <b>Turbulence Type Forecast/Actual:</b>     | /                 |
| <b>Wind Direction:</b>                  | 150°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                 |
| <b>Altimeter Setting:</b>               | 29.87 inches Hg                  | <b>Temperature/Dew Point:</b>               | 38°C / 19°C       |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                   |
| <b>Departure Point:</b>                 | Uvalde, TX (UVA )                | <b>Type of Flight Plan Filed:</b>           | None              |
| <b>Destination:</b>                     | Uvalde, TX (UVA )                | <b>Type of Clearance:</b>                   | None              |
| <b>Departure Time:</b>                  | 13:00 Local                      | <b>Type of Airspace:</b>                    |                   |

## Airport Information

|                             |                       |                                  |                      |
|-----------------------------|-----------------------|----------------------------------|----------------------|
| <b>Airport:</b>             | AP Ranch Airport TX27 | <b>Runway Surface Type:</b>      | Gravel               |
| <b>Airport Elevation:</b>   | 480 ft msl            | <b>Runway Surface Condition:</b> | Dry;Rough;Vegetation |
| <b>Runway Used:</b>         | 14                    | <b>IFR Approach:</b>             | None                 |
| <b>Runway Length/Width:</b> | 3700 ft / 50 ft       | <b>VFR Approach/Landing:</b>     | Forced landing       |

## Wreckage and Impact Information

|                            |        |                             |                      |
|----------------------------|--------|-----------------------------|----------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial          |
| <b>Passenger Injuries:</b> |        | <b>Aircraft Fire:</b>       | None                 |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                 |
| <b>Total Injuries:</b>     | 1 None | <b>Latitude, Longitude:</b> | 27.857778,-99.096389 |

## Administrative Information

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|--|---|
| <b>Investigator In Charge (IIC):</b>     | Hatch, Craig  |
| <b>Additional Participating Persons:</b> | Gary Stampler; San Antonio FSDO   |
| <b>Original Publish Date:</b>            | January 31, 2006  |
| <b>Last Revision Date:</b>               |   |
| <b>Investigation Class:</b>              | <a href="#">Class</a>   |
| <b>Note:</b>                             | This accident report documents the factual circumstances of this accident as described to the NTSB.   |
| <b>Investigation Docket:</b>             | <a href="https://data.nts.gov/Docket?ProjectID=62214">https://data.nts.gov/Docket?ProjectID=62214</a> |

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](#).