

# **Aviation Investigation Final Report**

| Location:               |   |           | Accident Number:     | LAX99LA232  |
|-------------------------|---|-----------|----------------------|-------------|
| Location.               | WAILUA, Hawaii                            |           | Accident Number.     | LAN99LAZ3Z  |
| Date & Time:            | June 27, 1999, 15:00 Local                |           | <b>Registration:</b> | N17902      |
| Aircraft:               | Schweizer                                 | SGS-2-33A | Aircraft Damage:     | Substantial |
| Defining Event:         |   |           | Injuries:            | 1 Minor     |
| Flight Conducted Under: | Part 91: General aviation - Instructional |           |                      |             |

# **Analysis**

The pilot stated the winds were blustery at 15 to 20 knots. He turned to final approach at 350 feet with full spoilers. At 200 feet he reduced spoilers to 25 percent. He was maintaining 75 to 80 miles per hour (mph) and increased spoilers to 50 percent at 100 feet. He stated he experienced a sudden loss of velocity at 25 feet, followed by a nose down attitude. After the glider contacted the runway, the nose went up and the glider became airborne again. The pilot applied full spoilers with a forward slide in an attempt to flare. The nose touched down followed immediately by the tail contacting the ground. The glider became airborne, then touched down and stopped within 15 to 20 feet.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to adequately compensate for the existing gusty wind conditions and his improper recovery from a bounced landing.

### Findings

Occurrence #1: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
1. WEATHER CONDITION - GUSTS

2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND 3. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

# **Factual Information**

On June 27, 1999, about 1500 hours Hawaiian standard time, a Schweizer SGS-2-33A glider, N17902, sustained substantial damage during a hard landing at Dillingham Field in Wailua, Hawaii. The glider was being operated by Honolulu Soaring Club under the provisions of 14 CFR Part 91 as an instructional flight. The student pilot, who suffered minor injuries, departed Dillingham about 1415 on a local unsupervised solo flight. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot stated the winds were blustery at 15 to 20 knots. He turned to final approach for runway 8 at 350 feet with full spoilers. At 200 feet he reduced spoilers to 25 percent. He was maintaining 75 to 80 miles per hour and increased spoilers to 50 percent at 100 feet. He stated he experienced a sudden loss of velocity at 25 feet, followed by a nose down attitude. After the glider contacted the runway, the nose went up and the glider became airborne. The pilot applied full spoilers with a forward slide in an attempt to flare. The nose touched down followed immediately by the tail contacting the ground. The glider became airborne again, then touched down and stopped within 15 to 20 feet. The landing gear mounting frame was crushed and a tube fractured in the fuselage frame.

| Certificate:              | Student  | Age:                                   | 51,Male               |
|---------------------------|--|--|-----------------------|
| Airplane Rating(s):       | None   | Seat Occupied:                         | Front                 |
| Other Aircraft Rating(s): | Glider   | Restraint Used:                        |                       |
| Instrument Rating(s):     | None   | Second Pilot Present:                  | No                    |
| Instructor Rating(s):     | None   | Toxicology Performed:                  | No                    |
| Medical Certification:    | None None  | Last FAA Medical Exam:                 |                       |
| Occupational Pilot:       | UNK  | Last Flight Review or Equivalent:      |                       |
| Flight Time:              | 25 hours (Total, all aircraft), 25 hour<br>aircraft) | rs (Total, this make and model), 5 hou | rs (Last 90 days, all |

#### **Pilot Information**

## Aircraft and Owner/Operator Information

| Aircraft Make:                   | Schweizer             | Registration:                     | N17902   |
|----------------------------------|-----------------------|-----------------------------------|----------|
| Model/Series:                    | SGS-2-33A SGS-2-33A   | Aircraft Category:                | Glider   |
| Year of Manufacture:             |                       | Amateur Built:                    |          |
| Airworthiness Certificate:       | Normal                | Serial Number:                    | 292      |
| Landing Gear Type:               | Ski/wheel             | Seats:                            | 2        |
| Date/Type of Last<br>Inspection: | April 21, 1999 Annual | Certified Max Gross Wt.:          | 1040 lbs |
| Time Since Last Inspection:      | 33 Hrs                | Engines:                          | Unknown  |
| Airframe Total Time:             | 8565 Hrs              | Engine Manufacturer:              |          |
| ELT:                             | Not installed         | Engine Model/Series:              |          |
| Registered Owner:                | HONOLULU SOARING CLUB | Rated Power:                      |          |
| Operator:                        |                       | 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               |
|---|----------------------------------|---|-------------------|
| <b>Observation Facility, Elevation:</b> | HNL ,13 ft msl                   | Distance from Accident Site:            | 21 Nautical Miles |
| Observation Time:                       | 14:53 Local                      | Direction from Accident Site:           | 285°              |
| Lowest Cloud Condition:                 | Scattered / 11000 ft AGL         | Visibility                              | 10 miles          |
| Lowest Ceiling:                         | None                             | Visibility (RVR):                       |                   |
| Wind Speed/Gusts:                       | 18 knots /                       | Turbulence Type<br>Forecast/Actual:     | /                 |
| Wind Direction:                         | 50°                              | Turbulence Severity<br>Forecast/Actual: | /                 |
| Altimeter Setting:                      | 30 inches Hg                     | Temperature/Dew Point:                  | 29°C / 18°C       |
| Precipitation and Obscuration:          | No Obscuration; No Precipitation |   |                   |
| Departure Point:                        | (HDH)                            | Type of Flight Plan Filed:              | None              |
| Destination:                            |                                  | Type of Clearance:                      | None              |
| Departure Time:                         | 14:15 Local                      | Type of Airspace:                       | Class G           |

## **Airport Information**

| Airport:             | DILLINGHAM HDH  | Runway Surface Type:      | Asphalt   |
|----------------------|-----------------|---------------------------|-----------|
| Airport Elevation:   | 14 ft msl       | Runway Surface Condition: | Dry       |
| Runway Used:         | 8               | IFR Approach:             | None      |
| Runway Length/Width: | 9007 ft / 75 ft | VFR Approach/Landing:     | Full stop |

# Wreckage and Impact Information

| Crew Injuries:         | 1 Minor | Aircraft Damage:        | Substantial                |
|------------------------|---------|-------------------------|----------------------------|
| Passenger<br>Injuries: |         | Aircraft Fire:          | None                       |
| Ground Injuries:       | N/A     | Aircraft Explosion:     | None                       |
| Total Injuries:        | 1 Minor | Latitude,<br>Longitude: | 21.569013,-158.120254(est) |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Plagens, Howard                              |  |
|--------------------------------------|--|--|
| Additional Participating<br>Persons: | MIKE SEES; HONOLULU , HI                     |  |
| Original Publish Date:               | August 14, 2001                              |  |
| Last Revision Date:                  |  |  |
| Investigation Class:                 | <u>Class</u>                                 |  |
| Note:                                |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=46641 |  |

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