

# **Aviation Investigation Final Report**

| Location:               | TEHACHAPI, California                     | Accident Number:     | LAX95LA050  |
|-------------------------|---|----------------------|-------------|
| Date & Time:            | December 11, 1994, 14:00 Local            | <b>Registration:</b> | N3950A      |
| Aircraft:               | Burkhart Grob G-103                       | Aircraft Damage:     | Substantial |
| Defining Event:         |   | Injuries:            | 2 None      |
| Flight Conducted Under: | Part 91: General aviation - Instructional |                      |             |

### **Analysis**

THE PILOT SAID IN A POSTACCIDENT TELEPHONE INTERVIEW THAT HE WAS RIDGE SOARING ABOUT 100 FEET ABOVE THE TREES ALONG A SOUTHEAST/NORTHWESTERLY COURSE. THE PILOT SUCCESSFULLY EXECUTED ONE PASS OVER THE RIDGE LINE. ON THE SECOND PASS, THE FLIGHT ENCOUNTERED A SEVERE DOWNDRAFT. THE GLIDER'S AIRSPEED WAS INSUFFICIENT TO CLIMB OUT OF THE IMPENDING TREE LINE AND THE GLIDER'S RIGHT WING STRUCK A TREE. THE PILOT REGAINED CONTROL OF THE GLIDER AND LANDED AT THE AIRPORT WITHOUT FURTHER INCIDENT.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's poor in-flight planning/decision and inadequate airspeed. The downdraft and trees were factors in this accident.

#### **Findings**

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER Phase of Operation: MANEUVERING

Findings 1. (F) WEATHER CONDITION - DOWNDRAFT 2. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND(CFI) Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: MANEUVERING

Findings 3. (F) OBJECT - TREE(S) 4. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND(CFI)

### **Factual Information**

On December 11, 1994, at 1400 hours Pacific standard time, a Grob G-103 glider, N3950A, collided with some trees near Tehachapi, California. The pilot was conducting a local visual flight rules instructional flight. The glider, operated by Skylark North, Tehachapi, California, sustained substantial damage. Neither the certificated commercial pilot/certified flight instructor (CFI) nor the certificated private/student glider pilot was injured. Visual meteorological conditions prevailed. The flight originated at Mountain Valley Airport, Tehachapi, California, at 1330 hours.

The CFI reported this accident to the National Transportation Safety Board on December 12, 1994. He said the flight encountered a severe downdraft while maneuvering over a ridge on a southeast/northwest course about 100 feet above the ground. The glider's right wing struck some trees. The CFI landed the glider at Mountain Valley Airport without further incident. Examination of the glider revealed that the right wing sustained structural damage.

The CFI submitted the required Pilot/Operator Aircraft Accident Report, NTSB Form 6120.1/2. He repeated his telephone statement in the report. He said that the accident occurred on the second pass over the ridge line. The first pass was uneventful.

When the glider encountered the downdraft, the airspeed was inadequate to climb successfully over the impending tree line. The CFI also said that the glider did not experience any mechanical malfunctions or failures.

| Certificate:              | Commercial; Flight instructor   | Age:                              | 36,Male           |
|---------------------------|---|-----------------------------------|-------------------|
| Airplane Rating(s):       | Single-engine land  | Seat Occupied:                    | Rear              |
| Other Aircraft Rating(s): | Glider  | Restraint Used:                   |                   |
| Instrument Rating(s):     | None  | Second Pilot Present:             | Yes               |
| Instructor Rating(s):     | Glider  | Toxicology Performed:             | No                |
| Medical Certification:    | Class 2 Valid Medicalw/<br>waivers/lim  | Last FAA Medical Exam:            | December 19, 1994 |
| Occupational Pilot:       | UNK   | Last Flight Review or Equivalent: |                   |
| Flight Time:              | 6037 hours (Total, all aircraft), 520 hours (Total, this make and model), 5980 hours (Pilot In<br>Command, all aircraft), 130 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft),<br>2 hours (Last 24 hours, all aircraft) |                                   |                   |

#### **Pilot Information**

### Aircraft and Owner/Operator Information

| Burkhart Crah           | Degistration:  | NOCEOA  |
|-------------------------|--|---|
| Burkhart Grob           | Registration:  | N3950A  |
| G-103 G-103             | Aircraft Category:   | Glider  |
|                         | Amateur Built:   |   |
| Normal                  | Serial Number:   | 3793  |
| Ski/wheel               | Seats:   | 2   |
| March 29, 1994 100 hour | Certified Max Gross Wt.:   | 1279 lbs  |
| 50 Hrs                  | Engines:   | Unknown   |
| 4097 Hrs                | Engine Manufacturer:   |   |
| Not installed           | Engine Model/Series:   |   |
| JAY DEMIRANDA           | Rated Power:   |   |
| SKYLARK NORTH           | Operating Certificate(s)<br>Held:  | None  |
|                         | Operator Designator Code:  |   |
|                         | Normal<br>Ski/wheel<br>March 29, 1994 100 hour<br>50 Hrs<br>4097 Hrs<br>Not installed<br>JAY DEMIRANDA | G-103 G-103Aircraft Category:<br>Amateur Built:NormalSerial Number:Ski/wheelSeats:March 29, 1994 100 hourCertified Max Gross Wt.:50 HrsEngines:4097 HrsEngine Manufacturer:Not installedEngine Model/Series:JAY DEMIRANDARated Power:SKYLARK NORTHOperating Certificate(s)<br>Held: |

### 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:          | Scattered / 15000 ft AGL         | Visibility                              | 100 miles |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                       |           |
| Wind Speed/Gusts:                | 13 knots /                       | Turbulence Type<br>Forecast/Actual:     | /         |
| Wind Direction:                  | 280°                             | Turbulence Severity<br>Forecast/Actual: | /         |
| Altimeter Setting:               |                                  | Temperature/Dew Point:                  | 10°C      |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |   |           |
| Departure Point:                 |                                  | Type of Flight Plan Filed:              | None      |
| Destination:                     |                                  | Type of Clearance:                      | None      |
| Departure Time:                  | 13:30 Local                      | Type of Airspace:                       | Class G   |

#### **Airport Information**

| Airport:             |   | Runway Surface Type:      |      |
|----------------------|---|---------------------------|------|
| Airport Elevation:   |   | Runway Surface Condition: |      |
| Runway Used:         | 0 | IFR Approach:             | None |
| Runway Length/Width: |   | VFR Approach/Landing:     |      |

## Wreckage and Impact Information

| Crew Injuries:         | 2 None | Aircraft Damage:        | Substantial              |
|------------------------|--------|-------------------------|--------------------------|
| Passenger<br>Injuries: |        | Aircraft Fire:          | None                     |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                     |
| Total Injuries:        | 2 None | Latitude,<br>Longitude: | 35.120933,-118.5102(est) |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Llorente, A.                                 |  |
|--------------------------------------|--|--|
| Additional Participating<br>Persons: | JAMES FORD; VAN NUYS , CA                    |  |
| Original Publish Date:               | April 5, 1995                                |  |
| Last Revision Date:                  |  |  |
| Investigation Class:                 | <u>Class</u>                                 |  |
| Note:                                |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=28992 |  |

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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 <u>here</u>.