Aviation Investigation Final Report

Location:	Llano, California	**Accident Number:**	LAX06CA189
Date & Time:	June 3, 2006, 12:13 Local	**Registration:**	N4464P
Aircraft:	Burkhart Grob Flugzeugbau G103 Twin Astir	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The glider landed hard on the runway and the empennage fractured from the remainder of the structure. On final approach, the glider entered a pilot induced oscillation. The glider then landed hard on the runway. The student pilot said that the glider did not have any mechanical failures or malfunctions during the flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the student pilot's failure to recover from a porpoise/pilot induced oscillation, which resulted in a hard landing.

Findings

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

Findings
1. (C) PORPOISE/PILOT-INDUCED OSCILLATION - NOT CORRECTED - PILOT IN COMMAND

Factual Information

On June 3, 2006, at 1213 Pacific daylight time, a Burkhart Grob Flugzeugbau G103 Twin Astir glider, N4464P, landed hard on the runway at Crystal Airport, Llano, California. Great Western Soaring School, Inc., was operating the glider under the provisions of 14 CFR Part 91. The glider sustained substantial damage. The student pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the local area instructional flight.

The student pilot stated that as he entered onto the final leg of the traffic pattern, the glider began a pilot induced oscillation. When the glider touched down hard upon the runway, the empennage separated. There were no mechanical failures or malfunctions with the glider during the flight.

Pilot Information

Certificate:	Student	**Age:**	61,Male
Airplane Rating(s):	None	**Seat Occupied:**	
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**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:	40 hours (Total, all aircraft), 40 hours (Total, this make and model), 40 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Burkhart Grob Flugzeugbau	**Registration:**	N4464P
Model/Series:	G103 Twin Astir	**Aircraft Category:**	Glider
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	3823-K-82
Landing Gear Type:	Tailwheel	**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	0
Airframe Total Time:		**Engine Manufacturer:**	
ELT:		**Engine Model/Series:**	
Registered Owner:	Gemsbok Systems, Inc.	**Rated Power:**	
Operator:	Great Western Soaring School, Inc.	**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:	Clear	**Visibility**	40 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.92 inches Hg	**Temperature/Dew Point:**	27°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Llano, CA (46CN)	**Type of Flight Plan Filed:**	None
Destination:	Llano, CA (46CN)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	Crystal Airport 46CN	**Runway Surface Type:**	Dirt
Airport Elevation:	3420 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	25	**IFR Approach:**	None
Runway Length/Width:	2700 ft / 32 ft	**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	1 None	**Latitude, Longitude:**	34.485279,-117.832778

Administrative Information

Investigator In Charge (IIC):	Dunks, Kristi
Additional Participating Persons:	Ladd Scott; Federal Aviation Administration; Van Nuys, CA
Original Publish Date:	October 3, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63847