Aviation Investigation Final Report

Location:	Los Alamitos, California	**Accident Number:**	LAX06TA234
Date & Time:	July 11, 2006, 15:00 Local	**Registration:**	N381BA
Aircraft:	LET SUPER BLANIK L-23	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Public aircraft - federal		

Analysis

The glider stalled and collided with terrain during takeoff. The operator was using a winch to launch the glider and as the winch operator watched it become airborne, he diverted his eyes from the winch gauges. When he looked back at them, he realized that he was accelerating the glider faster than desired and he reduced the winch's power momentarily. The glider stalled at 80 feet above ground level and it landed hard, which resulted in substantial damage to the left wing. The Glider Flying Handbook (FAA-H-8083-13) notes that a pilot should be ready for a takeoff any time that the towline is attached to the glider. It advises the pilot to smoothly raise the nose to the proper pitch attitude after liftoff, and watch for an increase in airspeed. The handbook says to avoid raising the nose too rapidly or steeply, as it may be difficult or impossible for the pilot to recover from the steep pitch attitude if the towline breaks or the launch mechanism loses power. It also says to avoid raising the nose too slowly, as the glider may gain excessive airspeed or not attain the planned release speed. If this situation occurs, it advises the pilot to pull the release, and land straight ahead.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the winch operator to maintain an adequate winch tow speed, resulting in a stall and hard landing.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: DESCENT - UNCONTROLLED

Findings
1. TERRAIN CONDITION - RUNWAY
2. ALTITUDE - LOW
3. (C) AIRSPEED - NOT MAINTAINED - OTHER PERSON
4. (C) STALL/MUSH - ENCOUNTERED

Factual Information

On July 11, 2006, about 1500 Pacific daylight time, a LET Super Blanik L-23 glider, N381BA, collided with terrain during takeoff from the US Army Airfield at Los Alamitos, California. The Civil Air Patrol (CAP) was operating the airplane as a local instructional flight under the provisions of 14 CFR Part 91. The commercial pilot and the student pilot were not injured; the glider sustained substantial damage. Visual meteorological conditions prevailed, and no flight plan had been filed.

The CAP reported that they were using a winch to launch the glider. They were experimenting with a new plasma launch rope. With the new rope, the winch operator could not see the glider until it became airborne. As the winch operator watched the glider become airborne, he diverted his eyes from the winch gauges. When he looked back at them, he realized that he was accelerating it faster than he desired. He reduced the winch's power momentarily. The glider stalled at 80 feet above ground level. It landed hard, which resulted in substantial damage to the left wing.

The Glider Flying Handbook (FAA-H-8083-13) discusses a normal into the wind ground launch. It notes that a pilot should be ready for a takeoff any time that the towline is attached to the glider. It advises the pilot to smoothly raise the nose to the proper pitch attitude after liftoff, and watch for an increase in airspeed.

The handbook says to avoid raising the nose too rapidly or steeply, as it may be difficult or impossible for the pilot to recover from the steep pitch attitude if the towline breaks or the launch mechanism loses power. It also says to avoid raising the nose too slowly, as the glider may gain excessive airspeed or not attain the planned release speed. If this situation occurs, it advises the pilot to pull the release, and land straight ahead.

Pilot Information

Certificate:	Commercial	**Age:**	84,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 3	**Last FAA Medical Exam:**	October 1, 1988
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 1, 2006
Flight Time:			

Student pilot Information

Certificate:	Student	**Age:**	Female
Airplane Rating(s):	None	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	LET	**Registration:**	N381BA
Model/Series:	SUPER BLANIK L-23	**Aircraft Category:**	Glider
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Utility	**Serial Number:**	018801
Landing Gear Type:	Retractable - Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	1124 lbs
Time Since Last Inspection:		**Engines:**	0
Airframe Total Time:		**Engine Manufacturer:**	
ELT:		**Engine Model/Series:**	
Registered Owner:	Civil Air Patrol	**Rated Power:**	
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SLI,35 ft msl	**Distance from Accident Site:**	
Observation Time:	14:55 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	7 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.88 inches Hg	**Temperature/Dew Point:**	28°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Los Alamitos, CA (SLI)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	15:00 Local	**Type of Airspace:**	

Airport Information

Airport:	Los Alamitos Army Airfield SLI	**Runway Surface Type:**	Asphalt;Concrete
Airport Elevation:	35 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	22L	**IFR Approach:**	None
Runway Length/Width:	8000 ft / 200 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	33.79,-118.05194

Administrative Information

Investigator In Charge (IIC):	Plagens, Howard
Additional Participating Persons:	Linda Silvertooth; Federal Aviation Administration ; Long Beach, CA
Original Publish Date:	November 29, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64138