



Aviation Investigation Final Report

Location:	BETHEL, Pennsylvania	Accident Number:	NYC97LA145
Date & Time:	July 12, 1997, 16:35 Local	Registration:	N111XX
Aircraft:	Slingsby Aviation PLC T65A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that after about 4 hours of flight, he elected to land his glider at Bethel due to a lack of updrafts. He put the gear down and 'and began making preparations for landing. Upon reaching pattern altitude...I found myself in a nose down attitude, in what may have been a spin.' He recovered from the maneuver, but lost significant altitude in the process. He deployed the spoilers to land, and heard a warning alarm. Then the glider impacted the ground hard enough for the canopy to separate. After sitting for several minutes, the pilot exited the glider. The pilot later wrote that he felt 'heat stress and physical fatigue...from working thermals as conditions weakened. Earlier termination of flight would have been prudent.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare. A factor in the accident was the pilot's fatigue.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING

Findings

1. TERRAIN CONDITION - GROUND
2. (C) FLARE - IMPROPER - PILOT IN COMMAND
3. (F) FATIGUE - PILOT IN COMMAND

Factual Information

On July 12, 1997, about 1635 Eastern Daylight Time, a Vickers-Slingsby T65A glider, N111XX, was substantially damaged during a hard landing at Grimes Airfield (8N1), Bethel, Pennsylvania. The certificated flight instructor received minor injuries. No flight plan was filed for the flight that departed Philadelphia Glider Council Airport (0PA0), Perkasio, Pennsylvania. Visual meteorological conditions prevailed for the personal flight conducted under 14 CFR Part 91.

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In a statement, the pilot wrote that he felt "heat stress and physical fatigue...from working thermals as conditions weakened. Earlier termination of flight would have been prudent."

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	42, Male
Airplane Rating(s):	None	Seat Occupied:	Center
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Glider	Toxicology Performed:	No
Medical Certification:	Unknown Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	248 hours (Total, all aircraft), 43 hours (Total, this make and model), 213 hours (Pilot In Command, all aircraft), 47 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Slingsby Aviation PLC	Registration:	N111XX
Model/Series:	T65A T65A	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1926
Landing Gear Type:		Seats:	1
Date/Type of Last Inspection:	April 17, 1997 Annual	Certified Max Gross Wt.:	1120 lbs
Time Since Last Inspection:	55 Hrs	Engines:	Unknown
Airframe Total Time:	499 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	LOUIS J FITZPATRICK	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RDG ,344 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	16:45 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	30°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PERKASIE , PA (0PA0)	Type of Flight Plan Filed:	None
Destination:	(0PA0)	Type of Clearance:	None
Departure Time:	12:05 Local	Type of Airspace:	Class G

Airport Information

Airport:	GRIMES AIRPORT 8N1	Runway Surface Type:	Grass/turf
Airport Elevation:	582 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	2825 ft / 180 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.449974,-76.420402(est)

Administrative Information

Investigator In Charge (IIC):	Kukla, Randi-jean
Additional Participating Persons:	MICHAEL IONATA; ALLENTOWN, PA
Original Publish Date:	January 28, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=39402

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