



# Aviation Investigation Final Report

<b>Location:</b>	HILLTOP LAKES, Texas	<b>Accident Number:</b>	FTW98LA207
<b>Date &amp; Time:</b>	May 1, 1998, 17:30 Local	<b>Registration:</b>	N5462
<b>Aircraft:</b>	Schrack STARDUSTER TOO	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During landing, the tailwheel-equipped biplane bounced and then touched down hard at which point the right main landing gear failed. The airplane exited the left side of the runway and nosed down. The pilot commented that the accident could have been prevented by less sink rate at touchdown.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to obtain/maintain the proper descent rate which resulted in a hard landing.

### Findings

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

#### Findings

1. (C) PROPER DESCENT RATE - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND

Occurrence #2: MAIN GEAR COLLAPSED  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

2. LANDING GEAR,MAIN GEAR - OVERLOAD

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Occurrence #3: NOSE DOWN  
Phase of Operation: LANDING - ROLL

## Factual Information

On May 1, 1998, approximately 1730 central daylight time, a Schrack Starduster Too amateur-built experimental airplane, N5462, sustained substantial damage during a hard landing at the Hilltop Lakes Airport in Hilltop Lakes, Texas. The airplane was registered to and operated by a private pilot, the sole occupant, who was not injured. No flight plan was filed and visual meteorological conditions prevailed for the Title 14 CFR Part 91 personal local flight.

The pilot reported that during a wheel landing, the tailwheel-equipped biplane "bounced at touchdown and a transition to a 3 point landing was made." He further reported that "the resulting touchdown was hard, at which point the right gear apparently failed." The airplane then exited the left side of the runway, the right main landing gear "dug into the sandy soil," and the airplane nosed down. According to the pilot, the accident could have been prevented by "less sink rate at touchdown."

According to the FAA inspector who examined the airplane, the wood spars of the right lower wing and left upper wing were broken.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	65, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 10, 1996
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	488 hours (Total, all aircraft), 25 hours (Total, this make and model), 6 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hour (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Schrack	<b>Registration:</b>	N5462
<b>Model/Series:</b>	STARDUSTER TOO STARDUSTER	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	1
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	February 17, 1998 Annual	<b>Certified Max Gross Wt.:</b>	1730 lbs
<b>Time Since Last Inspection:</b>	5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	644 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-360-A1B
<b>Registered Owner:</b>	SWAN D. PERSON	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	26°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(T38 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	17:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	HILLTOP LAKES T38	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	501 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	34	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3000 ft / 40 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	31.030858,-96.109756(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Snyder, Georgia
<b>Additional Participating Persons:</b>	BOBBY J RICHEY; HOUSTON , TX
<b>Original Publish Date:</b>	February 15, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=20596">https://data.nts.gov/Docket?ProjectID=20596</a>

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