



# Aviation Investigation Final Report

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<b>Location:</b>	Waunakee, Wisconsin	<b>Accident Number:</b>	CHI04CA211
<b>Date &amp; Time:</b>	July 31, 2004, 19:30 Local	<b>Registration:</b>	N917WT
<b>Aircraft:</b>	Stamsta Wittman Tailwind W10	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The airplane stalled while on short final approach, which resulted in a hard landing. The pilot reported that when he turned onto final approach the airplane was positioned about 500 feet above ground level (agl) with an airspeed indication of 80 miles/hour. The pilot stated that he noticed the airplane was too high while he crossed-over the approach end of the runway and that the "airspeed was at stall [speed]." The pilot stated he responded by lowering the aircraft's nose and increasing engine power. The pilot reported the increase of engine power "did not respond until nearly on the runway." The pilot stated the airplane "landed hard" and the main landing gear collapsed.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain proper airspeed during final approach, which resulted in the inadvertent stall/mush at a low altitude and subsequent hard landing. A factor to the accident was the pilot's unsuccessful remedial action to the encountered stall/mush at a low altitude.

## Findings

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Occurrence #1: HARD LANDING

Phase of Operation: LANDING

Findings

1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
2. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND
3. (C) REMEDIAL ACTION - NOT SUCCESSFUL - PILOT IN COMMAND

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Occurrence #2: MAIN GEAR COLLAPSED

Phase of Operation: LANDING

Findings

4. LANDING GEAR,MAIN GEAR - COLLAPSED

## Factual Information

On July 31, 2004, at 1930 central daylight time, an amateur-built Stamsta Wittman Tailwind W10, N917WT, built and piloted by a private pilot, was substantially damaged while attempting to land on runway 27 (2,223 feet by 30 feet, dry asphalt) at the Waunakee Airport (6P3), Waunakee, Wisconsin. Visual meteorological conditions prevailed at the time of the accident. The local flight was operated under the provisions of 14 CFR Part 91 without a flight plan. The pilot reported no injuries. The flight departed 6P3 at 1830.

The pilot reported that when he turned onto final approach the airplane was positioned about 500 feet above ground level (agl) with an airspeed indication of 80 miles/hour. The pilot stated that he noticed the airplane was too high while he crossed-over the approach end of the runway and that the "airspeed was at stall [speed]." The pilot stated he responded by lowering the aircraft's nose and increasing engine power. The pilot reported the increase of engine power "did not respond until nearly on the runway." The pilot stated the airplane "landed hard" and the main landing gear collapsed.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<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--no waivers/lim.	<b>Last FAA Medical Exam:</b>	April 15, 2004
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	September 20, 2003
<b>Flight Time:</b>	574 hours (Total, all aircraft), 201 hours (Total, this make and model), 523 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 43 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Stamsta	<b>Registration:</b>	N917WT
<b>Model/Series:</b>	Wittman Tailwind W10	<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>	00-1170
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	July 24, 2004 Annual	<b>Certified Max Gross Wt.:</b>	1425 lbs
<b>Time Since Last Inspection:</b>	13.5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	200 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-320-E2D
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MSN,887 ft msl	<b>Distance from Accident Site:</b>	6 Nautical Miles
<b>Observation Time:</b>	19:53 Local	<b>Direction from Accident Site:</b>	115°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 10000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	220°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Waunakee, WI (6P3)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Waunakee, WI (6P3)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Waukegan Airport 6P3	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	954 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2223 ft / 30 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## 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>	43.178611,-89.451385

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Fox, Andrew
<b>Additional Participating Persons:</b>	Robert K Gessert; Federal Aviation Administration - Milwaukee FSDO; Milwaukee, WI
<b>Original Publish Date:</b>	October 28, 2004
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=59950">https://data.nts.gov/Docket?ProjectID=59950</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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 [here](#).