



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Atlanta, GA	<b>Accident Number:</b>	CHI07LA035
<b>Date &amp; Time:</b>	12/03/2006, 1114 EST	<b>Registration:</b>	N46PT
<b>Aircraft:</b>	Piper PA 46-350P	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot reported that he heard a loud whistling noise while in level cruise at flight level (FL) 220 and noticed that the right side attitude indicator was "tilted." While he was leaning over adjusting the instrument, he realized that the airplane was in a dive. He leveled the wings and pulled out of the dive at FL 190. The autopilot (A/P) was re-engaged and the flight was completed to its intended destination without further incident. A visual examination after the descent revealed the left front baggage door open and buckled, and the left and right wings showed skin damage and wrinkling approximately 54 inches from the wing roots. When tested, the autopilot and flight director performed within test specifications with only "minor" deviations. Both vacuum pumps tested within test specifications. The right side attitude indicator continued to show a three degree turn even after a kink in the vacuum supply to the right side attitude indicator was removed. The "normal" static system leaked in excess of allowable limits; however, the valve was found to be in the "alternate" position before it was tested. An active noise-canceling set of headphones was found connected to the pilot's side of the cockpit. The A/P disconnect tone was found to be operating normally while the engine was at idle power. During the test, it was noted that the tone was difficult to hear while wearing the headset.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The exceedance of airplane design stress limits when the pilot did not maintain aircraft control after his attention was diverted to the right side attitude indicator during cruise flight. An additional cause was the aural detection for the autopilot disconnect was difficult to hear with the noise canceling headset. A contributing factor was the disengaged autopilot/flight director.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: CRUISE

### Findings

1. (F) AUTOPILOT/FLIGHT DIRECTOR - DISENGAGED
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (C) DIVERTED ATTENTION - PILOT IN COMMAND
4. FLIGHT/NAV INSTRUMENTS, ATTITUDE INDICATOR - FAILURE, PARTIAL
5. (C) VISUAL/AURAL DETECTION - PILOT IN COMMAND
6. VACUUM SYSTEM - OBSTRUCTED

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: DESCENT - UNCONTROLLED

#### Findings

- 7. FUSELAGE - BENT
- 8. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND
- 9. WING - BENT

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	61
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	2700 hours (Total, all aircraft), 1000 hours (Total, this make and model), 2640 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	Piper	<b>Registration:</b>	N46PT
<b>Model/Series:</b>	PA 46-350P	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Lycoming
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	TIO-540-A2A
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

### Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>		<b>Weather Information Source:</b>	Pilot
<b>Conditions at Accident Site:</b>	Instrument Conditions	<b>Lowest Ceiling:</b>	Overcast / 19000 ft agl
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	
<b>Temperature:</b>	6°C	<b>Visibility:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Ft. Meyers, FL (FMY)	<b>Destination:</b>	Indianapolis, IN (UMP)

### Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC): Mitchell F Gallo

Adopted Date: 01/31/2008

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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