Aviation Investigation Final Report

Location:	GOSHEN, Indiana	**Accident Number:**	CHI96LA187
Date & Time:	May 26, 1996, 14:00 Local	**Registration:**	N2625X
Aircraft:	CESSNA P206	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	7 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

During a parachute jump activity one of the two parachutists on the airplane's jump step began a cadence used to jump from the step. According to the jumpmaster the parachutist began an exaggerated rocking motion. During this rocking motion his reserve parachute's ripcord pin protective flap brushed against the airplane's open door. The flap opened and the pilot chute deployed, pulling the reserve parachute from its container. As the parachutists jumped a steering line from the deploying parachute struck the airplane's right horizontal stabilizer. The collision caused the stabilizer to bend downward. The jumper whose parachute prematurely deployed said the velcro on the ripcord pin's protective flap was worn. He said the flap would frequently dislodge.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the parachute equipment was not properly maintained by the parachutist. A factor related to the accident was the inadvertent deployment of the parachute.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: CRUISE

Findings
1. (F) MISC EQPT/FURNISHINGS,PARACHUTE/DRAG CHUTE - DEPLOYED INADVERTENTLY

2. (C) MAINTENANCE - INADEQUATE - OTHER PERSON
3. OBJECT - OTHER

Factual Information

On May 26, 1996, at 1400 eastern daylight time (edt), a Cessna P206, N2625X, piloted by a commercially certificated pilot, was substantially damaged when the shroud lines of a parachutist's reserve parachute collided with the airplane's right horizontal stabilizer following an inadvertent deployment. The 14 CFR Part 91 parachute jump flight was not operating on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The pilot and 6 passengers reported no injuries. The flight departed Goshen, Indiana, at 1345 edt.

According to the jumpmaster, two parachutists were standing on the airplane's jump step. One of the two parachutists began the cadence used to jump from the step. The jumpmaster said the parachutist doing the cadence rocked back and forth in an "exaggerated" manner. During this motion his reserve parachute's ripcord pin protective flap brushed against the airplane's open door.

The jumpmaster continued, "...the reserve ripcord was snagged and dislodged from the cloth closing loop resulting in an open reserve container. The reserve pilot chute entered the airflow past the airplane and pulled the reserve from the container." As the parachutists jumped from the step the parachute began to inflate. One of the steering lines struck the right horizontal stabilizer, bending it downward.

According to the jumpmaster, the reserve container of the parachutist's whose reserve parachute deployed was loose. He said the pilot chute was "...slightly tilted inside the container." After the accident the jumpmaster spoke with the parachutist whose reserve parachute had opened prematurely. He said the parachutist told him his reserve parachute's ripcord protective flap would come lose quite often. He said this was due to a worn or weak velcro fastener.

The pilot said he was not aware of what took place until after the parachutists had jumped. He said he was concentrating on flying the airplane. The outboard half of the right horizontal stabilizer was bent downward about 8 inches. The pilot said the airplane "...displayed no adverse flight characteristics..." after the event. His written statement confirms the jumpmaster's recall of the events.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	**Age:**	39,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	March 30, 1995
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	7934 hours (Total, all aircraft), 26 hours (Total, this make and model), 7766 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	**Registration:**	N2625X
Model/Series:	P206 P206	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	P206-0125
Landing Gear Type:	Tricycle	**Seats:**	1
Date/Type of Last Inspection:	April 19, 1996 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	23 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4037 Hrs	**Engine Manufacturer:**	CONTINENTAL
ELT:	Installed	**Engine Model/Series:**	IO-520-A1B
Registered Owner:	CHARLES E. ANDREWS	**Rated Power:**	285 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:	SKY DIVE-GOSHEN	**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SBN ,650 ft msl	**Distance from Accident Site:**	22 Nautical Miles
Observation Time:	14:50 Local	**Direction from Accident Site:**	290°
Lowest Cloud Condition:	Unknown	**Visibility**	10 miles
Lowest Ceiling:	Broken / 4500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots / 20 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	80°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	17°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(GSH)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	13:45 Local	**Type of Airspace:**	Class E

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	6 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	7 None	**Latitude, Longitude:**	41.569828,-85.829597(est)

Administrative Information

Investigator In Charge (IIC):	Gattolin, Frank
Additional Participating Persons:	ROBERT HILLBING; SOUTH BEND , IN
Original Publish Date:	July 25, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10266