

Aviation Investigation Final Report

| Location: | GOSHEN, Indiana | | Accident Number: | CHI96LA187 |
|-------------------------|------------------------|------|------------------|-------------|
| Date & Time: | May 26, 1996, 14:00 L | ocal | Registration: | N2625X |
| Aircraft: | CESSNA | P206 | Aircraft Damage: | Substantial |
| Defining Event: | | | Injuries: | 7 None |
| Flight Conducted Under: | Part 91: General aviat | ion | | |

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 Medicalw/ 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: | <u>Class</u> | |
| Note: | | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=10266 | |

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 <u>here</u>.