

Aviation Investigation Final Report

| Location: | DAYTONA BEACH | l, Florida | Accident Number: | MIA98LA232 |
|-------------------------|---|-------------|----------------------|-------------|
| Date & Time: | August 31, 1998, | 11:53 Local | Registration: | N15541 |
| Aircraft: | Piper | PA-34-200 | Aircraft Damage: | Substantial |
| Defining Event: | | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | | |

Analysis

The instructor stated the left engine quit as the dual-student flared for landing. The dual student initiated a go-around and the aircraft rolled uncontrollably to the left. As the instructor attempted to regain control, the dual-student froze on the controls. The instructor placed the left propeller in the feathered position and as he continued to attempt to gain control from the dual-student, the aircraft struck the ground left wing first and spun around coming to rest. The left engine and propeller were placed on a engine test stand after the accident and operated to full power with no evidence of mechanical failure or malfunction that would cause loss of power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The dual-student's attempt to perform a go-around after a reported loss of power in the left engine during landing flare and his failure to relinquish the controls to the instructor when control was lost during the go-around resulting in the aircraft rolling uncontrollably to the left and colliding with the ground left wing first.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. 1 ENGINE 2. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: GO-AROUND (VFR)

Findings

3. (C) GO-AROUND - ATTEMPTED - DUAL STUDENT
4. AIRSPEED(VMC) - NOT ATTAINED - DUAL STUDENT
5. (C) RELINQUISHING OF CONTROL - NOT PERFORMED - DUAL STUDENT
6. DIRECTIONAL CONTROL - NOT POSSIBLE - DUAL STUDENT
7. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND(CFI)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Findings

8. TERRAIN CONDITION - GROUND

Factual Information

On August 31, 1998, about 1153 eastern daylight time, a Piper PA-34-200, N15541, registered to Nurnberg Family Enterprises, Inc., crashed while on approach to land at Daytona Beach International Airport, Daytona Beach, Florida, while on a Title 14 CFR Part 91 instructional flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the commercial-rated flight instructor and private-rated dual student received minor injuries. The flight originated from Daytona Beach, the same day, about 1035.

The flight instructor stated that the dual-student flew a normal approach to runway 7 left. During the landing flare, the left engine quit. The dual-student did not recognize the left yaw caused by the failed left engine and initiated a go-around by applying full power on the operative engine and rotating the nose to a climb attitude. The aircraft began to roll to the left and the instructor attempted to gain control of the aircraft from the dual-student, who was frozen on the controls. The instructor placed the left propeller in the feathered position and attempted to perform a single engine go-around. The dual-student finally let go of the controls and as the instructor was attempting to reduce engine power and make a forced landing in the grass adjacent to the runway, the left wing struck the ground and the aircraft spun around, coming to rest.

The dual-student stated he performed a normal approach to runway 7 left. As he flared for landing, the aircraft ballooned. He applied power to increase airspeed because the aircraft was below Vmc speed. He noticed the aircraft was yawing to the left, which his instructor took as a sign that the left engine had failed. The instructor placed the left propeller in the feathered position and attempted to regain control of the aircraft. The aircraft hit the ground with the left wing and spun around, coming to rest.

Postcrash examination of the aircraft's fuel system and left engine controls showed no evidence of mechanical failure or malfunction. The left engine and propeller were removed from the aircraft and mounted on an engine test stand. The propeller was in the feathered position. The engine was started and operated to full power with no evidence of mechanical failure or malfunction. The engine-driven fuel pump was found to have a small leak in the diaphragm, which was draining overboard. The engine was operated to full power using only the engine-driven fuel with no loss of power.

Pilot Information

| Certificate: | Commercial; Flight instructor | Age: | 26,Male |
|---------------------------|---|-----------------------------------|----------------|
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane multi-engine; Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 1 Valid Medicalno waivers/lim. | Last FAA Medical Exam: | April 24, 1998 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 400 hours (Total, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Piper | Registration: | N15541 |
|----------------------------------|---------------------------------|-----------------------------------|-----------------|
| Model/Series: | PA-34-200 PA-34-200 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 34-7350074 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | August 24, 1998 100 hour | Certified Max Gross Wt.: | 4000 lbs |
| Time Since Last Inspection: | 15 Hrs | Engines: | 2 Reciprocating |
| Airframe Total Time: | 3285 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | Installed, not activated | Engine Model/Series: | IO-360-C1E6 |
| Registered Owner: | NURNBERG FAMILY ENTER., INC. | Rated Power: | 200 Horsepower |
| Operator: | WRIGHTWAY AVIATION, INC. | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

| | | | - |
|---|----------------------------------|---|------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | DAB ,35 ft msl | Distance from Accident Site: | 1 Nautical Miles |
| Observation Time: | 12:00 Local | Direction from Accident Site: | 250° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 7 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 290° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 32°C / 23°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | (DAB) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | VFR |
| Departure Time: | 10:35 Local | Type of Airspace: | Class D |

Airport Information

| Airport: | DAYTONA BEACH INT'L DAB | Runway Surface Type: | Asphalt |
|----------------------|-------------------------|---------------------------|---------|
| Airport Elevation: | 35 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 7L | IFR Approach: | ILS |
| Runway Length/Width: | 10500 ft / 150 ft | VFR Approach/Landing: | |

Wreckage and Impact Information

| Crew Injuries: | 2 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 29.189468,-81.049087(est) |

Administrative Information

| Investigator In Charge (IIC): | Kennedy, Jeffrey |
|--------------------------------------|---|
| Additional Participating Persons: | MARTIN POLOMSKI; ORLANDO , FL EDWARD ROGALSKI; WILLIAMSPORT , PA PAUL LEHMAN; VERO BEACH , FL |
| Original Publish Date: | February 22, 2001 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=43809 |

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.