

Aviation Investigation Final Report

Injuries:

1 Fatal

Location: Decatur, Illinois Accident Number: CEN11LA090

Date & Time: December 2, 2010, 14:06 Local Registration: N415US

Aircraft: SOUTHERLAND FREEBIRD LITESPORT U Aircraft Damage: Substantial

LITESFORT O

Flight Conducted Under: Part 91: General aviation - Personal

Loss of control in flight

Analysis

Defining Event:

The pilot was performing a high-speed taxi in his amateur-built airplane when it inadvertently became airborne. The inadvertent flight was the airplane's first flight. The pilot requested a landing clearance and was given one. The pilot reported that he had trouble getting the airplane's nose down. He reported a MAYDAY and indicated that he had no control of the airplane. He was given a clearance to land on any runway. During his last transmission, the pilot reported that he could not keep the nose down. The airplane was observed descending tail-end down and then nose down. The airplane impacted the ground, coming to rest about two miles east of the airport. An on-scene examination of the airplane revealed that the wing separated from the fuselage. The separation was consistent with overload. No other anomalies were detected. The on-scene investigation did not document center of gravity or trim settings.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's reported inability to control his amateur-built airplane for undetermined reasons after the airplane inadvertently became airborne while conducting a high-speed taxi.

Findings

| Aircraft | Pitch control - Attain/maintain not possible | |
|----------------|--|--|
| Not determined | (general) - Unknown/Not determined | |

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Factual Information

History of Flight

Maneuvering Loss of control in flight (Defining event)

Uncontrolled descent Collision with terr/obj (non-CFIT)

On December 2, 2010, about 1406 central standard time, an experimental amateur-built Southerland Freebird Litesport Ultra airplane, N415US, sustained substantial damage when it impacted terrain following an in-flight loss of control while maneuvering after climbout from runway 18 at the Decatur Airport (DEC), near Decatur, Illinois. The personal flight was operating under 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed at the time of the accident. No flight plan was on file. The pilot was fatally injured. The local flight departed about 1359 and was returning to DEC at the time of the accident.

The pilot had requested a high-speed taxi clearance and the air traffic control tower cleared him to perform a high-speed taxi on runway 18. During the high-speed taxi, the airplane became airborne. The pilot requested a landing clearance and was given one. The pilot reported that he had trouble getting the airplane's nose down. He subsequently told the control tower that he had a MAYDAY. He indicated that he had "no control" of the airplane. He was given a clearance to land on any runway. His last transmission was that he "can't seem to keep the nose down." The airplane was observed by airport rescue and firefighting personnel to come "tail-end down" and then "nose down."

The airplane came to rest about two miles east of DEC in a field near the 7300 block of Ridge Road. Federal Aviation Administration (FAA)inspectors examined the wreckage on-scene. The airplane's right wing separated from the fuselage in flight and it came to rest about 285 feet east of the main wreckage. The pilot was found about 63 feet west of the main wreckage. The examination and review of photographs taken of the wreckage revealed the separation was consistent with overload. No other anomalies were detected.

A FAA designated pilot examiner issued the pilot a FAA sport pilot certificate with an airplane single-engine land rating on November 1, 2010, after the pilot had passed his airman examination using the designated examiner's Flightstar IISC airplane. The pilot reported on the application for that sport pilot certificate that he had accumulated a total flight time of 60.7 hours of which 15.2 hours were as pilot-in-command flight time.

N415US was a single-engine, high-wing, experimental amateur-built Southerland Freebird Litesport Ultra airplane. Airworthiness documents indicated the airplane was powered by a Chevy Geo Metro G10 three cylinder 4 stroke engine. A FAA designated airworthiness representative inspected the airplane and issued its special airworthiness certificate on October 15, 2010. The inadvertent flight was the airplane's first flight.

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At 1354, the recorded weather at DEC was: Wind 230 degrees at 6 knots; visibility 10 statute miles; sky condition few 1,400 feet, overcast 4,300 feet; temperature 1 degree C; dew point -3 degrees C; altimeter 30.17 inches of mercury.

An autopsy was performed on the 55-year-old pilot by the Macon County Coroner's Office. The cause of death was listed as multiple injuries due to an aircraft accident.

The FAA Civil Aerospace Medical Institute prepared a Final Forensic Toxicology Accident Report. The report, in part, stated:

Desmethylsertraline detected in Spleen

Desmethylsertraline detected in Spinal Fluid

Desmethylsertraline detected in Gastric

1.101 (ug/mL, ug/g) Desmethylsertraline detected in Blood (Cavity)

Desmethylsertraline detected in Muscle

Desmethylsertraline detected in Kidney

Desmethylsertraline detected in Vitreous

Desmethylsertraline detected in Brain

Sertraline detected in Gastric

1.323 (ug/mL, ug/g) Sertraline detected in Blood (Cavity)

Sertraline detected in Muscle

Sertraline detected in Kidney

Sertraline detected in Brain

Sertraline detected in Spleen

Sertraline detected in Spinal Fluid

A family member indicated that the pilot was taking an antidepressant for work stress.

Pilot Information

| Certificate: | Sport Pilot | Age: | 55,Male |
|---------------------------|--|------------------------------------|---------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | Yes |
| Medical Certification: | Sport pilot None | Last FAA Medical Exam: | |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 61 hours (Total, all aircraft), 15 hours | s (Pilot In Command, all aircraft) | |

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Aircraft and Owner/Operator Information

| Aircraft Make: | SOUTHERLAND | Registration: | N415US |
|-------------------------------|------------------------|-----------------------------------|-----------------|
| Model/Series: | FREEBIRD LITESPORT U | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | 1 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Chevy Geo Metro |
| ELT: | Installed | Engine Model/Series: | |
| Registered Owner: | On file | Rated Power: | |
| Operator: | On file | Operating Certificate(s) Held: | None |
| | | | |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|--------------------------------------|------------------|
| Observation Facility, Elevation: | DEC,682 ft msl | Distance from Accident Site: | 2 Nautical Miles |
| Observation Time: | 13:54 Local | Direction from Accident Site: | 263° |
| Lowest Cloud Condition: | Few / 1400 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | Overcast / 4300 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 6 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 230° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.17 inches Hg | Temperature/Dew Point: | 1°C / -3°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Decatur, IL (DEC) | Type of Flight Plan Filed: | None |
| Destination: | Decatur, IL (DEC) | Type of Clearance: | VFR |
| Departure Time: | 13:59 Local | Type of Airspace: | |
| | | | |

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Airport Information

| Airport: | Decatur Airport DEC | Runway Surface Type: | |
|----------------------|---------------------|----------------------------------|------|
| Airport Elevation: | 682 ft msl | Runway Surface Condition: | |
| Runway Used: | | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | None |

Wreckage and Impact Information

| Crew Injuries: | 1 Fatal | Aircraft Damage: | Substantial |
|------------------------|---------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Fatal | Latitude, Longitude: | 39.835277,-88.840278(est) |

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Administrative Information

| Investigator In Charge (IIC): | Malinowski, Edward |
|--------------------------------------|---|
| Additional Participating Persons: | Brian L Lands; Federal Aviation Administration; Springfield, IL |
| Original Publish Date: | April 20, 2012 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=77929 |

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.

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