



National Transportation Safety Board Aviation Accident Final Report

Location:	Earlham, IA	Accident Number:	CEN09LA492
Date & Time:	08/01/2009, 1857 CDT	Registration:	N1XY
Aircraft:	STIRLING STARDUSTER	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

According to a sheriff's incident report, a witness observed the experimental amateur-built biplane perform a roll and then enter into a loop. The report indicated that, as "the plane was coming out of the loop, it did not have enough altitude and that is when it struck the ground." The airplane sustained substantial damage when it impacted a field. An examination of the airplane wreckage revealed no mechanical anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance from the ground during an aerobatic maneuver.

Findings

Aircraft	Altitude - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)

Factual Information

On August 1, 2009, about 1857 central daylight time, an experimental amateur-built Stirling Starduster biplane, N1XY, sustained substantial damage when it impacted a field following low level maneuvers near Earlham, Iowa. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 flight was not operating on a flight plan. The private pilot received serious injuries. The local personal flight originated at time unknown.

According to a Dallas County Sheriff's incident report, a witness observed the airplane perform a roll and then attempted to perform a loop. The report indicated that as "the plane was coming out of the loop, it did not have enough altitude and that is when it struck the ground."

The pilot held a private pilot certificate. His last application for a medical certificate was on October 31, 2005, and on that application he indicated that he had accumulated 900 hours of total flight time.

N1XY was an experimental amateur-built Stirling Starduster single-engine, propeller-driven, fixed tailwheel, two-seat, biplane. According to registration and airworthiness records, the biplane was powered by a 180-horsepower Lycoming O-360-A4A engine, serial number L-26691-36A and it drove a Sensenich 78 EM8 fixed pitch propeller.

Examination of the wreckage by a Federal Aviation Administration inspector revealed no mechanical anomalies.

The pilot was sent an accident report form and a completed one has not been received by the NTSB.

History of Flight

Maneuvering-aerobatics	Collision with terr/obj (non-CFIT) (Defining event)
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Pilot Information

Certificate:	Private	Age:	62, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last Medical Exam:	10/31/2005
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	900 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	STIRLING	Registration:	N1XY
Model/Series:	STARDUSTER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	466
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	O-360 A4A
Registered Owner:	PRICE JAMES F.	Rated Power:	180 hp
Operator:	PRICE JAMES F.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	DSM, 958 ft msl	Observation Time:	1854 CDT
Distance from Accident Site:	20 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	85°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 5500 ft agl	Temperature/Dew Point:	23° C / 10° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	7 knots, 290°	Visibility (RVR):	
Altimeter Setting:	29.96 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	EARLHAM, IA (PVT)	Type of Flight Plan Filed:	None
Destination:	EARLHAM, IA (PVT)	Type of Clearance:	None
Departure Time:	CDT	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious		

Administrative Information

Investigator In Charge (IIC): Edward F Malinowski **Adopted Date:** 12/20/2010

Additional Participating Persons: Donald E Land; Federal Aviation Administration; Des Moines, IA

Publish Date: 12/20/2010

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74443>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.