

N429BB– Aircraft Accident- May 30, 2016

NOTE: The information in these notes is preliminary, may contain opinion, is subject to change, and may contain errors.

Aircraft and Pilot Information Summary:

Aircraft: N429BB - 2012, Storch FI-156, S/N: CS 09008



Inspection Status: Condition Inspection Feb 2016

Aircraft Registration: Issued to (March 28, 2012, Exp March 31, 2018):
Barney L. Barnes (Builder)

Belton , South Carolina

Owner: Robert Dalzell Jr., pilot (Suspense File, Mr. Barnes reported transfer 5-28-2016, Mr. Dalzell had not requested registration as of July 27,2016 with OKC)

Airworthiness Certificate: issued on May 7, 2012, Experimental, Amateur built (Barney L. Barnes). Kit produced by Criquet Aviation, Bogota Columbia.

Engine: Rotax, 912 ULS, 5645516-P522435, 100HP, manufactured Sept 23, 2005.

Engine was removed from a Kolb Mark 3 Extra, with approx. 110 hours operating time, and installed on subject aircraft prior to certification.

Engine TBO is 12 years or 1500 hours, which this engine has not exceeded at time of accident.

N429BB– Aircraft Accident- May 30, 2016

Propeller: Tennessee Props 72-48, Wood

Airworthiness Directives:

Airframe: none

Engine:

1. 2011-12-04, N/A by model
2. 2010-20-23, N/A by model
3. 2010-18-14, N/A by model

Aircraft Performance Data: (obtained from manufactures brochure)

Top Speed: 87 mph

Cruse: 75 mph

Stall speed: 21 mph

Take off roll: 75 ft.

Landing roll: 75-100 ft.

Max gross: 1,320 lb

Empty weight: 860 lb

Wing span: 34 ft. 8 in.

Length: 24 ft. 5 in.

Engine: Rotax 912 ULS

4 cyl, 4 cycle, 100 Hp

Pilot – Robert Clinton Dalzell, Jr, deceased, sole occupant

DOB [REDACTED]

Address: [REDACTED] Owensboro Ky, [REDACTED]

Hours: 1750 reported 12/22/1998

Medical ID: 98309314, Last Exam 12/22/1998, Expired March 31, 2000, Third (Private), Must Wear Corrective Lenses

Pilot Certificate: [REDACTED] AMEL, ASEL, GLIDER, INSTA, Sport. Eligible to fly Light Sport.

Flight History: See NTSB Preliminary Report

Accident site: GPS Coordinates: N LAT 37,39.99 W LONG 86,37.73.

Aircraft Specifics:

Pitch Trim, Electric

Slats, Fixed, Entire Length of Wing

Flaps, Fowler Flaperons, Hand Crank Control

ELT Equipped

Tandem Seating, full flight controls provided in each seating position

W&B, current as of 4/29/2012: Empty Weight 768.5, Arm 37.26, Useful Load 551.5

Pilot weight: 175lbs estimated

CG Range 30% to 46% MAC

N429BB– Aircraft Accident- May 30, 2016

Accident Information Summary:

ATC Contact, none

Weather, VMC

Flight Plan, none filed

06/01/2016 The local Sheriff, Department of Fish and Wildlife and the County Coroner removed the deceased.

06/02.2016 Federal Aviation Administration (FAA) Aviation Safety Inspectors (ASI) BS and ES arrived at the property. Upon arrival in the vicinity of the crash site, the following were gathered and continued to the sight:

1. County Sheriff
2. Kentucky Department of Fish and Wildlife
3. Property Owner

N429BB– Aircraft Accident- May 30, 2016



N429BB, VFR flight, impacted a heavily forested area on a heading of approx. north to northeast, at a high angle (approx. 75 degrees) at a high velocity, with a post crash fire. **Flight History:** See NTSB Preliminary Report.

A ground search was conducted from the impact site to the point of first indication of tree impact and beyond to observe the area for investigative clues. The ground foliage was dense and time consuming to search, with no results. Tree top damage was not detected outside of the impact area. Tree damage at the impact site included trees with diameters of 6 to 8 inches.

N429BB– Aircraft Accident- May 30, 2016



The aircraft was resting in an upright position, with the engine detached, laying to the left of the firewall approx. 3 to 4 foot.

NOTE: all orientations given as if sitting in the cockpit seat.

The engine was subject to a high intensity fire that melted materials such as aluminum with a low melting point, which melted intakes, fuel pump and various components of the engine assembly (see the engine examination). The wood propeller was consumed by fire, leaving approx. 10% of the hub area to examine. The propeller mounting hardware was present and secured.

The cockpit was also exposed to multiple impacts and heat from the post crash fire. Most aluminum of the cockpit area was melted/burned to the extent of switch plates, instrument panel, doors, etc were not present to examine (high temp metal was present). Switches that were present were not contained in the switch plate and switch position could not be verified. Engine controls were pulled from the cockpit area during the crash when the engine separated, thus verification of control positions was not possible. Flight and Engine instruments, consisting of an engine monitor and GPS were damaged by multiple impact and fire and no investigative information was available.

N429BB– Aircraft Accident- May 30, 2016



The left wing fiberglass tip and left MLG were detached and laying in front of the aircraft at a 45 degree angle approx. 20 foot from the wreckage.

The right wing was attached but severely damaged by impact and consumed partially by fire in the area of the fuel tanks, indicating a substantial amount of fuel was aboard at impact. The left wing was detached due to impact and consumed partially by fire also. All attaching hardware for slat and flaperons was present. Control continuity for ailerons/flaperons verified up to the cockpit, but not including the control stick. Flaperons were retracted.

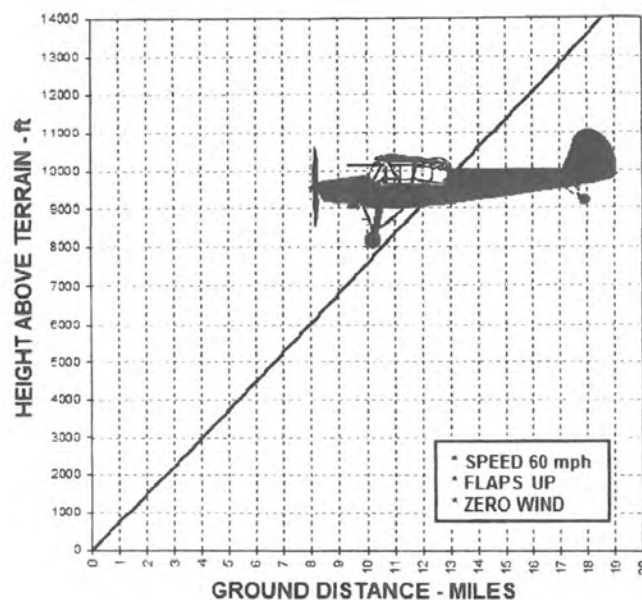


N429BB– Aircraft Accident- May 30, 2016

The empennage was intact with minimal damage as compared to the wings/cockpit. The rudder and elevator were attached and movement verified at hinges. Control cables failed due to stress overload, indicating continuity to the cockpit at time of impact. Pitch trim (elevator) was mid travel, indicating the aircraft was trimmed for level flight at approx. cruise conditions.



Engine Out Glide Ratio, Storch POH



N429BB– Aircraft Accident- May 30, 2016

Engine Investigation: The engine was recovered from the accident site and examined June 27, 2016. Engine investigation was performed by the engine manufacturer representative with FAA IIC oversight. Engine investigation findings will be prepared by the manufacturer representative and provided to the FAA and NTSB.

Contacts

NTSB: Tim Munville
FAA: Brian Shaughnessy IIC, Aviation Safety Inspector
FAA: Eric Sherman, Aviation Safety Inspector
KSP: Lt Lonnie Bell
Emergency Mgt.
KSP: Jason Pagan
CAMI: Heather Hunn
Med Examiner: Dr. Donna Stewart
Med Rev FAA: G. J. Salazar
Land Owner: Joe T. Nichols
Son of Landowner: Kenny Nichols
Friend of Landowner: Jody Ashley
Rotax: Jordan Paskevich
KY Fish and Wildlife: Gary Chambers
Pre-Buy/Friend: Chris May
David Woosley

-----END-----

Report compiled by:

*Brian Shaughnessy
Aviation Safety Inspector*

*Federal Aviation Administration
Louisville Flight Standards District Office – CE-17
[REDACTED]
Louisville, Kentucky [REDACTED]*