

NATIONAL TRANSPORTATION SAFETY BOARD Office of Aviation Safety Washington, D.C. 20594 January 14, 2016

Group Chairman's Factual Report

STRUCTURES

CEN16FA036

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A. ACCIDENT INFORMATION

Accident #: CEN16FA036

Location: Akron-Fulton International Airport (KAKR)

Date: November 10, 2015 Time: 1452 Local Time

Airplane Hawker Sidley (HS) 125 Series 700A, N237WR

B. STRUCTURES GROUP

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C. SUMMARY

On November 10, 2015, about 1452 eastern standard time (EST), ExecuFlight flight 1526, a British Aerospace HS 125-700A, N237WR, departed controlled flight while on approach to land at the Akron Fulton International Airport (AKR) and impacted a 4-plex apartment building in Akron, Ohio. The pilot, co-pilot, and seven passengers were fatally injured; there were no reported ground injuries. The airplane was destroyed by impact and postimpact fire. The airplane was registered to Rais Group International NC LLC., and operated by ExecuFlight, as a Title 14 Code of Federal Regulations Part 135 on-demand charter flight. Instrument meteorological conditions prevailed at the time of the accident, and the flight was operated on an instrument flight rules (IFR) flight plan. The flight originated from Dayton-Wright Brothers Airport (MGY), Dayton, Ohio, at 1413 EST and was destined for AKR.

D. <u>DETAILS OF THE INVESTIGATION</u>

D.1. Aircraft Description

N-number: N237WR Airplane Serial Number: NA-0252

Airplane Manufacturer: British Aerospace Model: HS 125-700A

Airplane Year: 1979 Airworthiness Certificate: Standard Approved Operations: 135

Aircraft Type: Fixed Wing Multi-Engine

Engine Type: Turbo fan Airplane Category: Transport

Number of Engines: 2

Type Certificate A3EU Revision 42

D.2. Wreckage Debris

Survey of the wreckage site revealed that the airplane first impacted tree branches approximately 55 feet up on a tree located about 1.8 nautical miles (NM) from the runway 25 threshold at Akron Fulton International airport (as shown in Figure 1). The tree was (laterally) very close to the extended runway centerline as shown with the approach overlay in Figure 2. The tree and the wreckage were located approximately halfway between the airport and the locator outer marker (LOM) and final approach fix (i.e., "AK" and the Maltese cross on the approach plate 3.7 NM from the airport)

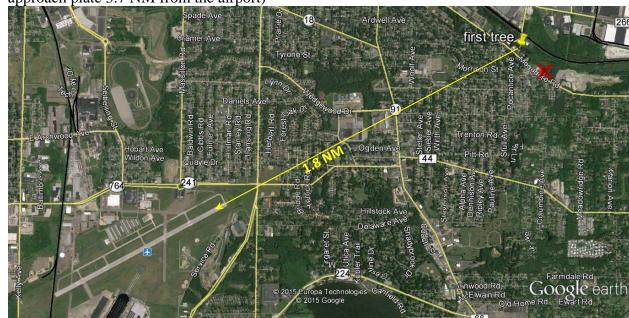


Figure 1 - Location of Initial Tree Strike Relative to Akron Fulton International Airport



Figure 2 - Location of Initial Tree Strike with AKR LOC Runway 25 Overlay: Halfway Between the Runway and the Final Approach Fix

Figure 3 shows a more detailed overview of the accident site with select landmarks and features. After striking the tree branches, the airplane hit power lines adjacent Mogadore Street before banking sharply left and traveling through the middle of three apartment "duplex" buildings. Several ground scars were identified in the front yard of the residence that was struck by the airplane (Figure 4). The left aileron mass balance weight, two sections of the left aileron and an outboard portion of the left wing including the mating outboard wing to aileron hinge fitting were located in the front yard in the area of the ground scarring (Figure 5). After traveling through the right hand side of the duplex the airplane came to rest on an embankment located behind the apartments. While most of the wreckage was consumed by fire, all "four corners" of the airplane were located between the front yard and the airplane's final location on the embankment. No airplane structure was located along the flight path prior to the first pieces of structure identified in the front yard.

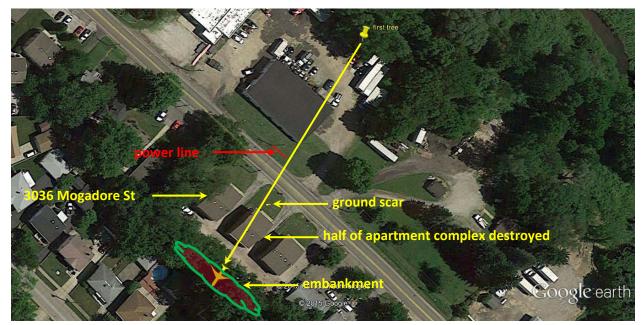


Figure 3 - Overview of Accident Site with Select Features



Figure 4 – Front yard ground scars

The burned down remains of the entire fuselage and empennage were located on the embankment (Figure 6). The right wing from about rib 9 to the tip including aileron and the burned down remainder of the inboard section from about rib 9 to about rib 2 of the right wing (Figures 7 and 8), the entire right flap (Figure 9) along with the nose landing gear (Figure 10) were also located on the embankment. Both ailerons were identified in the wreckage debris along with their tip mounted mass balance weights (Figures 6 and 7). The left main gear and associated mating wing structure were recovered in the remains of the lower floor apartment (Figure 11). The right main gear and associated mating wing structure were located on the right hand side of the wreckage path between the rear of the apartments and the embankment (Figure 12). The entire left flap was not identified in the wreckage debris.

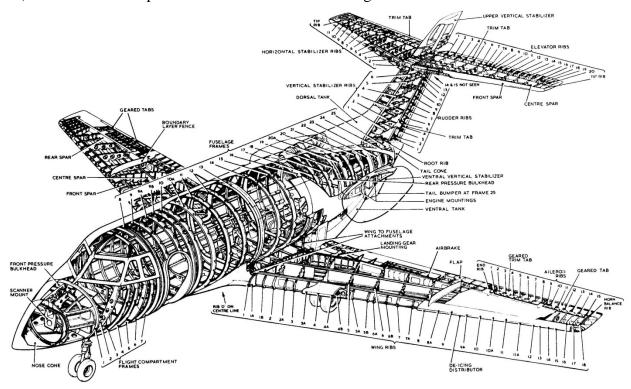


Figure 5 – Station diagram



Figure 6 – Left aileron, aileron mass balance weight and outboard left wing



Figure 7 – Outboard right wing and aileron



Figure 8 – Outboard right wing and aileron



Figure 9 – Right flap



Figure 10 – Nose landing gear



Figure 11 - Left main landing gear



Figure 12 - Right main landing gear

D.3. Fire Damage

The entire fuselage, empennage and associated control surfaces were consumed by fire and identified by the remaining melted debris and associated hardware and systems components (Figure 13). The left wing from about rib 2 outboard to about rib 12 was consumed by fire and identified by the remaining melted debris and associated hardware and systems components. The right wing from about rib 2 to about rib 9 was consumed by fire and identified by the remaining melted debris and associated hardware and systems components.



Figure 13 – Fuselage and empennage

Submitted by;

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