

STATEMENT

☐ Confidential

Page _____ of _____

1. Case No. _____

Name of Person giving Statement: _____

Ryan Wendt

Location at which Statement is taken: _____

Roberts Road, Odessa, FL 33556

01 Saw small helicopter flying low making odd noise - banked
02 around Keystone lake with smoke trailing from engine.
03 pilot was looking for clearing to land. It ~~lost~~ acceleration
04 then banked right. Lost sight as it got lower
05 but heard the bang. Ran to site where neighbors
06 heard it go. Found it crashed into the roof.
07 Gentleman had managed to crawl out of the
08 helicopter onto roof when I got on scene. Two
09 people working lawn free clean up hoisted me to
10 the individual. He was conscious, alert upon
11 initial contact. Was able to tell me his name,
12 age and mostly stayed alert. Initial eval was
13 poss. femur fracture, pain in hips, arm/shoulder
14 complex. Laceration to left forehead w/ blood into the
15 eye. Neutralized c-spine and then met w/ officer. EMS
16 showed up & held c-spine while EMT cut clothes off.
17 As soon as other EMT able he took over. Pilot
18 name ~~Brad~~ Brad Bates. Escorted off roof.
19
20

Signed this 25 day of SEPTEMBER, 2017 at 1800 hours.

Subject: _____

Witness: _____

Deputy: _____

Witness: _____



RECORD OF CONVERSATION

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: September 25, 2017
Person Contacted: Bradley Bates
NTSB Accident Number: ERA17LA335

Narrative:

Mr. Bradley Bates was interviewed while hospitalized on September 25, 2017, at 2042 EDT. Also present were FAA Inspector William Edwards, and Deputy O'Shannon of the Hillsborough County SD.

At the beginning of the introductions, he was advised that the NTSB is a federal agency mandated by Congress to investigate aircraft accidents, and NTSB has no authority to take any action against any individual. He was also informed that the purpose of an NTSB investigation is for safety only, and any person NTSB talks with has the right to representation; he agreed to the interview without representation.

He provided a cell phone number of [REDACTED], and an e-mail address of [REDACTED]. He was asked if he was medicated. A nearby nurse indicated he was given morphine about 1 hour earlier.

He indicated that he built the helicopter and finished in May 2017. He estimated that he has flown it about 18 hours in the previous 2 weeks, and reported he is current with a Robinson R22.

He departed from his home on a local flight with about 10 gallons of 93 octane fuel. After flying for about 45 minutes while descending to land at his house, flying about 400 ft mean sea level, he noted the engine had suddenly lost total power. He increased throttle and lowered collective to maintain main rotor rpm, and was attempting to land in a small yard, but did not reach there. He pulled collective to cushion his landing. He estimated that he had 5-6 gallons on-board at the time of the accident.



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: September 26, 2017
Subject: Information Provided by Inspector Scott Olson (FAA)
NTSB Accident Number: ERA17LA335

According to Inspector Olson,

He assisted on an aircraft accident with N926KB that occurred on 09/25/2017 in Odessa, FL. On initial inspection of the helicopter, it was observed that it had crashed in a residential area onto an unoccupied house roof and the fuselage was approximately halfway imbedded into the homes roof. Upon entering the home, a very strong fuel odor was present indicating the aircraft had fuel in its tanks when it impacted the roof, but no fire had occurred.

After the helicopter was extricated from the roof, they began an inspection of the engine and fuselage. The single seat helicopter experienced severe structural damage to the fuselage, the main rotor, and the tail boom, which was partially separated from the helicopter.

The engine did not appear to be damaged externally, but the throttle control cable was not operational and appeared to be severed due to the impact. The engine air metering valve throttle linkages were still intact and the throttle linkages to the valves appeared to be operational.

The engine air metering valves had a common steel line that was approximately ¼ inch in diameter. This line connected the two metering valves together. One side of this line had a rubber plug installed on the end of the line and the other side of the line was open to the atmosphere. It did not appear to have any impact related damage. No other engine related components appeared to be damaged except for the radiator and the radiator cooling fan, with some of the cooling fan blades broken due to impact with the radiator.

None of the flexible couplings used on the engine drive shaft to rotor blades and the tail rotor had any obvious damage noted. None of the rubber isolation dampeners appeared to be damaged either. Both the rotor blade and tail rotor drive belts were intact and appeared undamaged. The engine coolant system appeared to be intact and was not leaking fluid and the coolant reservoir was full of coolant. The engine oil reservoir that feed oil to the engine appeared to have an adequate amount of oil in the reservoir and was not leaking.

The external fuel tank located directly below and outside of the cockpit was damaged excessively with visible cracks and holes due to impacting the roof structure. The tank was empty and the strong fuel smell in the house was most likely came from the fuel that had leaked out of this tank. The lower external fuel tank had a capacity of 8 gallons according to the placard located near the fuel filler port. This 2nd fuel tank, which was a header tank, had a 12-gallon capacity and appeared to be almost full of fuel and did not appear to be damaged or leaking.

It was not apparent which position the fuel selector valves were in due to the first responders shutting off the fuel. Both fuel tank fuel filters were clear plastic and fuel was evident in both filters indicating fuel starvation from the tanks did not occur. There were no unusual indications of fuel problems observed at the crash site.

The tail boom was partially severed at the tail boom to fuselage connection point. There did not appear to be any pre-accident damage to the tail boom other than impact related damage. The main rotor blade damage was on one blade that had contacted the roof and was severely bent on impact. The other blade was less damaged but did have a kink or ripple that was visible from the ground on the trailing edge of the blade.



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: September 26, 2017
Subject: Information Provided by Inspector Gregory Joy (FAA)
NTSB Accident Number: ERA17LA335

According to Inspector Joy,

He assisted in the accident investigation of N926KB that occurred in Odessa, FL on September 25, 2017.

Upon arrival at the scene, it was observed that the aircraft had crashed in a residential area onto the rooftop of an unoccupied house at [REDACTED]. The helicopter's fuselage was approximately halfway imbedded into the home's roof. Upon entering the home, fuel odor was prevalent indicating the helicopter had fuel in its tanks. No fire had occurred.

After the helicopter was extricated from the roof, He assisted Inspector Scott Olson with the examination of the fuselage, engine, rotor drive components and flight controls. The single seat helicopter had experienced severe structural damage to the fuselage, the main rotor, and the tail boom, which was partially separated from the helicopter due to impacting the house's roof.

He began the examination by taking several photos of the helicopter. The tail boom was partially severed at the tail boom to fuselage connection point. There did not appear to be any pre-accident damage to the tail boom other than impact related damage. The main rotor did not appear to be at high RPM on impact and most of the rotor blade damage was on one blade that had contacted the roof and was severely bent on impact. The other blade sustained less damage but did have a ripple on the trailing edge of the blade.

It was also noted that the helicopter's hour meter indicated 17:32 hours. It was also noted that the master and the transfer pump switches were in the off position, and that the port pump, starboard pump, transfer pump and friction lock circuit breakers were pulled. He

suspected the switches and circuit breakers may have been manipulated by the first responders to safely secure the aircraft.

Next, He assisted Inspector Olson with the flight controls and rotor drive assembly assessment. Other than damage that occurred on impact to the main and tail rotor blades, all flight control linkages and control cables were intact and had continuity, except for the tail rotor control cable. This cable was cut during the reclamation process by the recovery crew. However, we were able to visually observe cable movement as the rudder pedals were manipulated. It was also noted that none of the flexible couplings used on the engine drive shaft to rotor blades and the tail rotor had any visible damage. Nor did any of the rubber isolation dampeners appear to be damaged. Both the main rotor and tail rotor drive belts were intact and appeared undamaged. This assessment led him to believe that there were no flight control or rotor drive assembly anomalies at the time of the accident.

While Inspector Olson conducted most of the engine examination, Inspector Joy did assist him with checking for throttle continuity. The throttle control cable was not operational and appeared to be severed due to impact.

The engine air metering valve throttle linkages were still intact and the throttle linkages to the valves did appear to be operational. The engine air metering valves had a common steel line that was approximately 1/4 inch in diameter. It appeared that this line connected the two metering valves together. One side of this line had a rubber plug installed on the end of the line and the other side of the line was open to the atmosphere. It was also noted that the engine had one of the four ignition wires broken. However, it appeared that the wire broke on impact.

He then took note of fluid capacities and noticed that the aircraft external fuel tank located directly below and outside of the cockpit was damaged excessively with visible cracks and holes due to impacting the roof of the house. The tank was empty and the strong fuel smell in the house most likely came from the fuel that had leaked out of this tank.

The lower external fuel tank had a capacity of 8 gallons according to the placard located near the fuel filler port. A second fuel tank, a header tank, had a 12-gallon capacity and appeared to be almost full of fuel and did not appear to be damaged or leaking.

It was not apparent which position the fuel selector valves were in due to the first responders shutting off the fuel. Both fuel tank fuel filters were clear plastic and fuel was evident in both filters indicating fuel starvation from the tanks did not occur. There were no unusual indications of fuel problems observed at the crash site. Furthermore, the engine coolant system appeared to be intact, with the reservoir full and not leaking fluid. As was the engine oil reservoir that fed oil to the 2-cycle engine and appeared to have an adequate amount of oil in the reservoir and not leaking.



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: September 29, 2017
Subject: Statements Provided by Hillsborough County Sheriff
NTSB Accident Number: ERA17LA335

Bradley J. Bates (pilot):

Mr. Bates was flying back to his home after flying his helicopter around for about an hour. When he arrived in the Odessa area, his helicopter lost power and began to descend quickly. He was trying to land in an open area but was unable to reach one. He saw that he was crashing on the house, so he tried to set the helicopter down on the roof. After the crash, he was able to crawl out of the helicopter and laid on the roof. He called 911 to report the crash. He did not have a call sign while flying because he was flying around unrestricted air space and he was not communicating with an air traffic control tower. He has a private pilot-helicopter license but left it on top of his kitchen counter with his wallet. He did not have insurance on the helicopter.

John Randolph (Witness):

He was in the back of his truck cutting down trees. He noticed a really small helicopter smoking in the air. The engine was smoking. The engine suddenly turned off. The pilot was probably flying around twenty miles per hour. He thought it was a model helicopter until he heard the loud crash.

Ryan Elizabeth Wendt (Witness):

She was jogging when she saw the helicopter flying low and to the south. There was a weird sound coming from the helicopter and a smoke trail following it. It appeared that the pilot might have been looking for a clearing to land. It banked to the right and she lost sight of it. She then heard a loud bang and ran to where it went down. She then found it crashed into the rooftop and saw the pilot crawl out. She was then hoisted up onto the rooftop by a lawn care guy. Since she was trained as a first responder, she rendered aid to the pilot. She continued to render aid until she was relieved by Hillsborough County Fire Rescue.



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: October 3, 2017
Subject: Interview with Bradley Bates (Pilot of N926KB)
NTSB Accident Number: ERA17LA335

According to Mr. Bates,

The helicopter was built by him at Composite FX as a "factory assist" build. He had not had any previous problems with the helicopter prior to the accident flight. He believed that he had about 18 to 20 hours of total operation on the helicopter when the accident occurred.

He kept the helicopter on his property. Prior to departure he did not notice anything about the helicopter that was unusual, and the liftoff was normal.

During the flight he did not talk with air traffic control and flew at altitudes of 800 to 1,000 feet to stay below Tampa International Airport's airspace.

The helicopter flew fine for 30 to 40 minutes. Then, when he was on his way home, He noticed the engine and rotor rpm decrease rapidly, and when he tried to increase power, using the manual throttle, there was no response.

He then went into an autorotation and aimed for a spot he thought would be good to land at but did not "hit my spot" and ended up on the rooftop of the house. He was able to free himself from the wreckage and call 911.

He believed that he was only a mile or two from his property when the accident occurred.



MEMORANDUM FOR RECORD

Todd Gunther
Air Safety Investigator
Eastern Region

Date: October 17, 2017,
Subject: Information Provided by Inspector Bill Edwards (FAA)
NTSB Accident Number: ERA17LA335

An on-scene examination was conducted on September 25, 2017 (The day of the accident) by Inspector Bill Edwards of the Federal Aviation Administration. The following are his observations from that examination:

1. The helicopter struck the back side of the roof perpendicular to the ridge of the home with the left skid going through the roof into the attic area.
2. The skid did not penetrate the drywall ceiling.
3. The tail boom was bent and was on the front side of the ridge of the roof.
4. One main rotor blade was damaged, and the other main rotor blade was bent 90 degrees in an upward direction.
5. The rotors showed no evidence of rotation and no strike marks were observed on the roof surface, only two holes at the point of blade impact on the roof.
6. Hillsborough County Fire Dept. reported that there were minimal fuel fumes in the home, and no evidence of pooling of fuel below the ceiling of the home.
7. The electricity to the home was shutoff after the accident.