



MEMORANDUM FOR RECORD

Michael Hicks

Air Safety Investigator

(GAAID) General Aviation Accident Investigation Division

December 11th, 2019

NTSB Accident Number: GAA20CA062

Aircraft Registration & Make/Model: N6746D, Bell, 47G-2

Accident Location: Sandia Airpark Estates East Airport (6FL0)

Accident Date: 08NOV2019@1000EST

Subject: Memorandum for Record

In support of the National Transportation Safety Board (NTSB), Air Safety Accident Investigation involving the accident helicopter, N6746D, the Federal Aviation Administration Aviation Safety Inspector provide photographs and a statement regarding the accident helicopter. Additionally, a brief synopsis of the conversation between the NTSB IIC and the student pilot is outlined below.

Student Pilot

The helicopter pilot stated that something got his attention and made him react abruptly, and he overreacted and made erratic cyclic and collective control inputs.

The pilot was not aware of and could not describe the loss of hydraulic pressure aircraft emergency procedure.

Student Pilot about 21 hours total time.

Last 90 was 21 hours.

Part 61 flight training program.

About 3-5ft AGL he felt something in the cyclic and increased collective, and climbed to about 50ft AGL, he overreacted with excessive cyclic inputs. The helicopter touched right skid first and rolled over on the left side. He did not bring the helicopter to a 3ft hover, instead he tried to put it down.

He has had hydraulic failure training and has landed previously with hydraulics off. The pilot did not follow the emergency procedure. He didn't want to let go of the cyclic or the collective to turn off the hydraulic pressure switch. When asked why he did not go around. He stated that he had overreacted, and that he was landing to a confined area on two sides (Not all 4).

FAA INSPECTOR

Mr. Hicks,

After discussing the event with the pilot of the aircraft and the flight instructor who gave him his initial training on the Bell 47 aircraft, it appears that the pilot's actions contributed directly to the accident. He stated that during the hover maneuver he overreacted to the aircraft's movement and through multiple commands to the cyclic stick caused the aircraft to have a tail strike and then hard landing and roll over resulting in the destruction of the aircraft including a subsequent fire which destroyed all soft materials on the aircraft. I do not think there were any mechanical issues during the maneuver and based on the pilot's own verbal report to me, he simply over-reacted and caused the event to occur.

I also spoke with one of our FAA Pilots in the Miramar FSDO who has over 20 years of experience in the Bell 47 and he stated that multiple "full throw" commands from the cyclic stick can result in momentary feeling of hydraulic loss which I believe the pilot may have experienced due to his extreme inputs while trying to recover from the failed hover.

If you have any further questions for me, please don't hesitate to contact me. I have released the wreckage back to the owner and will follow-up with our FAA FAST Team to facilitate any needed additional pilot training.

Hi Michael,

I received your voicemail and wanted to touch base with you. The pilot stated that he "screwed up" when I spoke to him. He said that he overreacted to the situation and caused the tail strike and hard landing. More than once, he stated to me that he had excellent flight training but just did not react properly. I also spoke with his flight instructor who agreed that the pilot's actions were the cause of the accident.

The hydraulic system is a small pump for the cyclic and a couple of lines. The pump and lines were damaged by the fire along with all of the wiring. I believe this is not a case of mechanical failure and that the pilot's actions caused the event to occur.