



HMC Helicopters Inc.

July 22, 2020

Federal Aviation Administration
South Florida FSDO

[REDACTED]
Miramar, Florida 33027

ATTN: Lead Investigator ERA20LA229 N5013G

Re: Accident Investigation, Official Statement

On July 19, 2020, myself and HMC personnel along with FAA inspectors went to the storage facility where N5013G was being housed. The purpose of this trip was to validate the integrity of the fuel system and fuel indicating system.

We first leveled and secured the aircraft to the storage skid the aircraft was sitting on. After the aircraft was pushed out of the hangar a calibrated digital level was used to ensure the aircraft was in a level position before operations began. The digital level indicated the aircraft was level to 1.2 degrees. I then removed the tape from the fuel filler neck and with a flashlight I was able to visually see there was no fuel present in the main tank. We then sumped the fuel cell into a clear jar, very little fuel came out, this was to ensure there was no water or contamination was present. The forward fuel cells was also verified empty by depressing the manual sump valves on the belly.

Upon turning on the aircraft power, I observed the fuel gauge was reading 40 pounds of fuel. We then proceed to add 5 gallons of fuel and stopped, checked for leaks and there was none present. We added an additional 5 gallons and stopped, checked for leaks and there was none present. We then proceed to add another 5 and stopped at 11 gallons because the fuel low light extinguished. The indicator at this time was indicating 100 lbs. At this point we verified the fuel low caution system was operating correctly. Per the maintenance manual the fuel low light is activated at 50 to 75 pounds of fuel, regardless of indicated fuel quantity on the gauge. We added a total of 30 gallons of fuel into the helicopter and there was no leaks present at any time.

After fueling the aircraft, I turned both boost pumps on and both lights extinguished. I proceeded to purge the engine fuel system. When I opened the line that runs from the airframe fuel filter to the engine fuel pump, a significant amount of air came out of the fuel line before any fuel began to flow. After closing the line, I instructed Daniel Rubiano to remove the line going to the engine fuel nozzle, and I motored the engine over to purge any air from the fuel control unit. The first motoring of the engine to 10% N1, produced no fuel, only air. The second attempt fuel began to flow and the third attempt a solid stream of fuel was coming out of the line and then retightened.

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Kendall-Tamiami Airport, [REDACTED]

Email: [REDACTED]

We then proceeded to start the engine with a normal start and the start was successful. We ran the engine up for approximated 15 minutes, there was no leaks and all engine indications were normal. The engine was brought up to 100% N2 and back down to idle several times. A normal shutdown was performed and we then proceeded to defuel the aircraft and aircraft was put back in storage.

Sincerely,



Mark A. Chung
Director of Maintenance



December 8, 2020

Inspectors Statement

On July 19, 2020, FAA Inspectors Juan Garcia, Derick Mayberry, Rick Beckstrom and HMC personnel went to Florida Air Recovery storage facility at Treasure Coast International Airport and Business Park (FPR) located in Fort Peirce, Florida. The accident investigation of Bell 206L1 Registration number N5013G to examine the integrity of the fuel system and fuel Indicating system.

Helicopter was secured to heavy metal skid and calibrated digital level was used to ensure the helicopter was leveled before testing operations started. The digital level indicated the helicopter was level to 1.2 degrees. FAA Inspector Juan Garcia with Director of Maintenance for HMC Mark Chung observed removal of the fuel cap and with a flashlight observed no fuel in the main tank. HMC Personnel sumped the fuel tank with 1 to 2 ounces of fuel recovered from the fuel tank with no contamination. The forward fuel cells was also verified empty with HMC Personnel operating the manual sump valves on the helicopter underside.

FAA Inspectors observed HMC personnel proceed to add 5 gallons of fuel to N5013G fuel tank and stopped, checked for leaks and observing no leaks. HMC personnel added an additional 5 gallons and stopped, checked for leaks and observed no leaks. FAA Inspectors observed HMC personnel proceed to add another 5 and stopped at 11 gallons due to the fuel low light extinguished. FAA Inspectors observed the indicator indicating 100 lbs., and verified the fuel low caution system was operating correctly, an additional 30 gallons of fuel was added into the helicopter fuel tank and no leaks observed.

FAA Inspectors observed HMC Personnel activate both boost pumps on and both indicator lights extinguished. HMC personnel then purged the engine fuel system, opened the fuel line from the airframe fuel filter to the engine fuel pump removing air from the fuel line before fuel began to flow. FAA Inspectors observed HMC Personnel start the engine with a normal start with no abnormalities, operating the engine for approximated 15 minutes with and all engine indications operating normally and no leaks observed. HMC Personnel operated engine to 100% and back down to idle several times, a normal shutdown was performed.

FAA Inspectors observed HMC Personnel defueling the helicopter and observed the fuel level decreasing on the fuel quality indicating gauge. At 70 pounds indicated by the fuel quality gauge the fuel low light illuminated on the caution warning panel indicating the helicopter fuel system operating in a normal condition.



Juan C Garcia
Aviation Safety Inspector



December 8, 2020

Inspector Beckstrom's written statement for Helicopter N5013G fuel system test on July 19th, 2020.

On July 19, 2020, I arrived at Fort Pierce where HMC Helicopter N5013G was being stored. Upon arrival I met with FAA Inspectors Derek Mayberry and Juan Garcia. Also present was HMC Director of Maintenance, Mark Chung and HMC personnel to provide Mr. Chung assistance. The fuel system of N5013G was going to be tested.

I observed as Mark Chung brought Helicopter N5013G out of the hanger in the vicinity of the ramp and attempted to level the helicopter before testing. The fuel filler neck was already removed and Mr. Chung looked visually in the fuel bladder with a flashlight for any indication of fuel present. He stated no fuel was present and all FAA Inspectors present agreed that no fuel was visible in N5013G's fuel bladders. Mr. Chung then attempted to sump fuel from the helicopter and was unsuccessful. Electrical power was applied to the aircraft. The fuel gauge indicated 40 pounds of fuel and the low fuel light was present on the caution / warning panel. Fuel was added to the aircraft in 5 gallon increments to determine when the low fuel light would extinguish. Around 10 or 11 gallons, the low fuel light extinguished. A total of 30 gallons of fuel was added to the aircraft. Mr. Chung inspected for fuel leaks and fuel bladder integrity and found that it was not compromised and no fuel was found leaking. The inspectors agreed with the findings.

Helicopter N5013G was started by HMC company personnel. The electrically driven boost pumps appeared to function normally before the engine start. The helicopter was then started successfully. The engine was brought up to full operating speed and ran for approximately 15 minutes. No abnormal indications were present. The helicopter was then defueled while in still operating. The fuel gauge showed a steady decrease in fuel as fuel was taken from the aircraft. When the fuel quantity gauge indicated 70 pounds of fuel, the low fuel light illuminated from the caution / warning panel. Then a normal shutdown was performed.

Rick Beckstrom
Aviation Safety Inspector
Principal Operations Inspector – Rotorcraft Helicopter
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