

## THE AMERICAN ROCKET SCIENTIST

By John F. Hall

A 19 year old American pilot named John Gillespie Jr., was serving with the Canadian Royal Air Force. He was killed when his Spitfire collided with another plane over England in 1941. A few months before he died, he composed "High Flight" and mailed it to his parents in America. Here are the lyrics that he composed, "Oh, I have slipped the surly bonds of earth, and have danced the skies on laughter-silvered wings; sunward I climbed and joined the tumbling mirth of sun-split clouds — and done a hundred things you have not dreamed — wheeled and soared and swung high in the sunlit silence. Hovering there I chased the shouting wind along and flung my eager craft along footless halls of air. Up, up the long delirious burning blue I've topped the wind-swept heights with easy grace, where never lark, or even eagle, flew; and while with silent, lifting mind I've trod the untrampled sanctity of space, put out my hand and touched the face of God."

I admired the pilot's words, "the untrampled sanctity of space." This past July, our nation celebrated the 50<sup>th</sup> Anniversary of man's first landing on the moon. Our nation trespassed the sanctity of space, not because it was easy, but because it was hard. It fulfilled the goal given to this nation by President John F. Kennedy, my first Commander in Chief, to put a man on the moon and return him safely to earth. In a previous story, "From the Fire to the Moon," I provided a small amount of history and no technical information about how my dad became involved in our nation's space program. NASA estimated that it had taken more than 400,000 engineers, scientist, and technicians to accomplish the moon landings due to the vast number of systems and subsystems needed to send men there.



What makes this story so incredible is the fact that my dad, Charles J. Hall, in 1953, had no job, was homeless and had no car and no money. His wife was gone and he had to put me and my sister in an orphanage for two years to be able to "fly out of the ashes of defeat." So how did an out of work, unknown, insignificant research engineer become the Chief of Planning and Control Branch at the Kennedy Space Center in 1968, one year before man's first landing on the moon?

(Pictured: Charles Joseph Hall Sr., b. 14 October 1907, Boston, Suffolk Co., MA – d. 25 March 1983, New Smyrna Beach, Volusia Co., FL, buried in Trigg Memory Acres, Montgomery, Trigg Co., KY. Inscription: "Helped with man's first landing on the moon, July 20, 1969, Apollo 11". Charles J. Hall Sr. md Marion Gertrude (Race) Hall, b. 11 December 1905, Springfield, Hampden Co., MA – d. 30 April 1983, Orlando, Orange Co., FL, buried in Trigg Memory Acres, Montgomery, Trigg Co., KY).

In March of 1983, I made a sad phone call to my Uncle John J. (Jack) Hall Jr. I notified him that my dad, his favorite brother, died unexpectedly in Fish Hospital located in

Daytona Beach, Florida. I still remember the call that I received at 5:30 in the morning from his doctor. He told me that he had planned to transport my dad to Gainesville that morning for additional tests. But he died peacefully in his sleep early that morning. It was like someone hit me in my chest with a bat. Uncle Jack did so much to help my dad. He paid his tuition to send him to MIT. Then Uncle Jack told me this story. He said that he could not go to college because he had to support the family when their dad died from the flu pandemic of 1918 at the age of 43. He said that my dad's first job after graduation from MIT was working at Dow Chemical Company. While working on a very unstable formula, it exploded and my dad was injured. Shortly there after, he suffered a nervous breakdown. At the time, Uncle Jack was the Vice President of European plumbing sales for American Standard Sanitary Manufacturing Company. He was headquartered in Paris, France with his family. He flew my dad to Paris to live with them while my dad recovered from his nervous breakdown.

The American Standard Sanitary Manufacturing Company in the 1930s was the world's largest producer of bathroom fixtures. Its European market was more profitable than its American market.

My Uncle Jack hired my dad to travel around Europe on company business. This helped my dad recover from his nervous breakdown. It also gave him the opportunity to visit many cities in Germany and to converse with the people in their native language. Harry Reed became the new President of the company in 1934. He began to consolidate his power and put his people in position of power. He recalled Uncle Jack back to the states to deal with sales and production on the west coast. So Uncle Jack, his family and my dad came back to America.

The “Winds of War,” began blowing across Europe. In 1939, France began to mobilize for war. In six weeks from May 10, 1940, German forces defeated Allied forces and conquered France, Belgium, Luxembourg and the Netherlands. Starting in September 1944, over 3,000 V—2 rockets were launched by the German Wehrmacht (unified armed forces of Nazi Germany) against Allied targets in London, Antwerp and liege. Two Nazi scientist were mainly responsible for the development of the V-2 rocket. The first scientist was Wernher von Braun. He was an officer in Himmler's SS. In 1943, he held the rank of major, thanks to Himmler's appreciation of his rocket work. According to Michael J. Neufeld, a Senior Curator at the National Air and Space Museum, in his book, “The Rocket and the Reich,” Wernher von Braun was the most important rocket engineer of the 20'h century, but his legacy will forever be tarnished by his service to a murderous regime. My dad told me something was not good about that man.

The second Nazi scientist responsible for the V-2 rocket was Kurt H. Debus. He was a member of the Nazi Party, a member of the Sturmabteilung (literally Storm Detachment). It played a significant role in Adolf Hitler's rise to power in the 1920s and 1930s. And Himmler's SS. Debus was appointed by Hitler as the V-2 flight test director and was actively engaged in the rocket research program at Peenumunde and the development of the V-2 rocket. He was the key leader in the “rocket team” of Wernher von Braun. He led

the Test Stand Group personnel at Peenumunde and was the engineer in charge of Test Stand VII.

At the end of the war, Debus and a small group of V-2 engineers led by Von Braun's brother sought out the advancing 44th Infantry Division on May 2, 1945. Wernher von Braun also surrendered to the American Army. In late 1945, Debus, Von Braun and other scientists, engineers, and technicians were secretly sent to the US. Under Operation Paperclip. In a secret directive, signed by President Harry S. Truman on September 3, 1946, Operation Paperclip was expanded to include one thousand German scientist under "temporary, limited custody." The President did not want any scientist that was a member of the Nazi Party to come to America under Operation Paperclip.

That Directive was ignored because of the fear that the Soviet Union wanted to wipe out the United States. On November 18, 1956, First Secretary Nikita Khrushchev, while addressing Western ambassadors at a reception at the Polish embassy in Moscow said, "About the capitalist states, it doesn't depend on you whether or not we exist. If you don't like us, don't accept our invitations, and don't invite us to come see you. Whether you like it or not, history is on our side. We will bury you!" The US. Army carefully excised and concealed the Nazi military records of Kurt Debus and Wernher von Braun. These two were carrying out the orders of Hitler to destroy London. Their rockets killed about 2,750 innocent civilians in London.

In 1953, the President of American Standard Sanitary, Harry Reed, terminated all of the researchers at the corporation, to include my dad. He also had the Board of Directors fire Uncle Jack. Reed was cleaning house of all those employees that he did not like.

With my dad's termination notice in his hand, he came home to see our rented house going up in flames. We lost everything but the clothes that we were wearing. My dad had no savings and no car. His wife was gone. With no options on the table, he put me and my sister in an orphanage and took a bus to Texas to find work. He was hired by a corporation in Galveston, Texas. One day, a fellow employee called him over to look at the bulletin board. A hiring notice on the board indicated that the U.S. Government was looking for research engineers. My dad told me that he only filled it out as a fluke and he mailed it in. He did not believe that the government would hire him. At the time, he did not realize that he was exactly the type of applicant that the government wanted. He was an MIT graduate with a degree in mechanical engineering and he was fluent in speaking and writing German.

After a short period of having a background check by the Office of Personnel Management Investigative Services, my dad was hired and went to work in Huntsville, Alabama at the Redstone Arsenal, an Army post. His boss was Kurt Debus. He was assigned to the Explorer 1 launch team. Kurt Debus and his team of 75 engineers and technicians, to include my dad, would drive in a convoy from Huntsville to Cape Canaveral, Florida. At the Cape, they would assemble and launch a missile. Then they would drive back to Huntsville to work on the next missile on the assembly line. On January 31, 1959, they launched a missile carrying Explorer 1, the first satellite launched

by the United States. It stayed up in space for 12 years. I put a partial list of the names of the members of the Explorer 1 team with this story.

My dad did not know anything about Kurt Debus' evil military service in Germany. He was a year older than his boss. My dad was brilliant in math and chemistry and very competent in any assignment that he was given. He could converse with Debus, and speak fluent German, and talk about the cities in Germany that he had visited. They were like minded scientists. President Dwight Eisenhower created the National Aeronautics and Space Administration (NASA) on July 29, 1958. On October 21, 1959, he approved the transfer of all Army space— related activities to NASA. Kurt Debus moved his team, to include my dad, to Cape Canaveral, Florida. I put a copy of my dad's 1958 job description with this story along with one page of pictures.

In 1968, my dad was the Chief of Planning and Control Branch at the Kennedy Space Center. In their book, “Gateway to the Moon, Building the Kennedy Space Center Launch Complex,” Charles Benson and William Faherty, on page 30 of their book, mentioned technical information that shows the interaction between my dad and Kurt Debus. They wrote, “Besides the rising costs of Launch Complex-34 (LC-34), the Missile Firing Laboratory (MFL) faced the need for a backup Saturn launch complex. While the Silverstein Committee report was pending in late 1959, MFL began its own investigation of hydrogen-filled upper stages. A committee headed by Charles Hall, examined equivalent TNT forces and concluded that an explosion would render LC 34 useless for a year. MFL reassessed its Saturn launch capability in light of that report. The LC-34 staging building, tentatively located near the pad, was moved back to the industrial area and the service structure was fitted with blow out panel around the base. In January 1960, Debus notified Eberhard Rees, Deputy Director at Huntsville, of the Hall Committee findings and strongly recommended a second Saturn complex...”

My dad died March 25, 1983. He is buried in Trigg Memory Acres, on the east side of the tall metal cross, Cadiz, Kentucky. I had these words inscribed on his flat tombstone, “HELPED WITH MAN' FIRST LANDING ON THE MOON JULY 20, 1969 APOLLO II.”

John F. Hall

\*Read more stories written by John F. Hall at: <http://www.ajlambert.com>