REFLECTIONS ON THE LIFE OF RALPH SAWYER

by

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HONORS THESIS

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ABSTRACT

This documentary aims to explore the life of Ralph Stanley Sawyer, who was a physicist and engineer at NASA. Sawyer's rigorous background in education, military, and research was the main factor that determined his employment and performance at NASA, as it rounded him into a highly qualified scientist. Sawyer was most well-known for his work on the S-Band Transponder, which for the first time allowed audio and visual signals to be exchanged between the Earth and Moon on the Apollo 11 mission. Without Ralph and his team at NASA's extensive work on communication devices such as S-Wave Transponder, the world would have never heard or seen Neil Armstrong step on the moon and say, "One small step for man, one giant leap for mankind". Ralph's work is necessary for historical education because the S-Band Transponder is responsible for recording evidence for many established scientific theories, such as the Lunar Magma Ocean Theory. Ralph, and other scientists like him, are responsible for creating the stepping-stones that have led to the technologically advanced world of communication and research equipment in present time.

ARTIST'S STATEMENT

Before this project, I believed that science and art were separate. However, I now know that science and art are two sides of the same coin, each making up for what the other lacks. Creating a documentary about science has allowed me to create the full picture of the scientist and their work's impact on the world, through art.

I. REFLECTIONS ON THE LIFE OF RALPH SAWYER

Please see documentary link: $\underline{\text{https://youtu.be/dGX-MRsZ9qY}}$