The most important work done by J. Ernest Wilkins is considered to be “the development of radiation shielding against gamma radiation, emitted during electron decay of the Sun and other nuclear sources.” Wilkins developed ways to mathematically calculate the amount of gamma radiation absorbed by a given material. The technique he developed is extremely useful among researchers in space and nuclear science projects.

Although, undoubtedly, this research has been the most important of Wilkins’ lifetime, this project will focus on another area of his extensive research. In the late 1940’s, Wilkins published two papers concerning mathematical or geometric surfaces, *The Contact of a Cubic Surface with a Ruled Surface* and *Some Remarks on Ruled Surfaces*. A geometric surface can be understood as the surface that encloses a space or is the boundary of a solid, such as a cone or sphere. The two types of surfaces that will be explored are ruled surfaces and cubic surfaces.