



## Grant Robert Fowles

*September 19, 1919 ~ February 15, 2018*

Grant was born in Fairview Utah, to parents Mary Elodia (Lola) and Jacob Timothy (Tim). He was the second of four children. The family lived in Fairview, but spent much time on a small farm outside of town. He remembered growing alfalfa, swimming in the creek with his older brother Morris, and reading books while on his horse (named Cigarette, that Grant had trained to walk home without direction, so he could concentrate on his reading). Grant thought he was fortunate to grow up on a farm during the depression, for while the family did not have much money, they always had plenty to eat. His mother occasionally used to give Grant and his sisters, Betty and Ruth, eggs to trade for candy bars.

Early on Grant found his love for math and science, as well as a gift for teaching. At North Sanpete High School, the math teacher occasionally asked Grant to take over the class. But he also had bit of mischief, and was known (with buddies) to tip over an outhouse or two.

Grant attended the University of Utah, earning a BS in physics in 1942. When not studying, he liked listening to the big band music at Saltair Resort. During a blind date Grant met the girl that swept him off his feet, Martha Garrett. He was quiet and kind, she was outgoing and beautiful, and they both loved dancing to Artie Shaw's "Begin the Beguine" -- they were the perfect match.

After graduation Grant joined the Navy in World War II as a radar countermeasure officer, and served in both the Atlantic and Pacific. While in the British Isles, Grant installed newly developed radar jamming devices in ships that participated in the Normandy invasion. As per Navy custom, he had his head shaved crossing the equator in the South Pacific. He hated the consequences of war, but was proud of his service and contribution to his country. Seeing the wider world was to whet his desire for travel.

It was during this time that he sent Martha an engagement ring (in the mail), and they were married in the Salt Lake Temple in 1942. Like many war-time marriages, the next day he shipped out. His first child was born in while Grant was in the South Pacific. Although he saw photos of his infant, he did not meet his son for another 6 months.

After the war Grant studied physics at the University of California, Berkeley, and earned his PhD in 1950, specializing in optics. Soon after graduation he joined the Physics Department at the University of Utah, where he was one of five faculty members. He enjoyed both teaching and research, and was one of the first scientists in the country working on what was to become known as the laser. In 1954 he discovered the second known visible light laser, and was instrumental in leading the department in becoming one of the top-ten laser research institutions in the country.

During his tenure at the University, he served as an Associate Editor of the American Journal of Physics and wrote several textbooks, including Introduction to Modern Optics, and Analytical Mechanics. Both are still in print and still

used in classrooms throughout the world.

Grant especially enjoyed teaching astronomy classes. For one of his evening classes, Martha worried that the students wouldn't get a chance to eat, so she made homemade donuts for the class. It was also during one of these evening astronomy classes, attended by the owner/baker of Dunford Bakery, that the new fruitcake was named "Andromeda," inspired by the celestial object.

Grant and Martha built a lovely home and a beautiful life together. They raised four children, and opened their home to countless friends and family. From New Year's Eve parties to back-yard bar-b-cues, to their Study Group gatherings, their home was filled with life and laughter. He loved math and science, his work in his lab, stopping by the UofU pool for a swim on the way home, and quietly sitting on the couch, participating in the swirl of activity that Martha brought to his life.

Grant and Martha loved to travel together, and were world voyagers in their retirement years. His hobby was to follow as many solar eclipses as possible (many!).

Grant died peacefully at his home. He is survived by his children Robert Fowles (married to Kathryn), Janice Fowles, Richard Fowles (married to Stephanie Moyle), and Marilyn Fowles Appleby (married to David Appleby); his grandchildren Keri Williams, Tim Fowles, Lacy Anderson, Madelyn Roberts, Remy Fowles, Chris Fowles, Zoe Appleby, and Peter Appleby; and his 13 great-grand-children.

A small boy's love of the stars, so long ago in Fairview, continues to enrich and inspire generations.