

Obituary for Dr. Jerry Grey

1926-2020

Dr. Jerry Grey, noted aerospace scientist and engineer, died on Tuesday, February 4, 2020, from complications of pneumonia at age 93. He was elected Honorary Fellow of the world's largest aerospace professional society, the 40,000-member American Institute of Aeronautics and Astronautics (AIAA). According to the AIAA, "This award is presented only to exceptional individuals who embody the highest standards possible in the aeronautics and astronautics field. It is the highest accolade that can be bestowed by AIAA and its Board of Directors. Those chosen are recognized as being individuals of eminence with long and contributory careers in aerospace." Orville Wright was the AIAA's first Honorary Fellow. Dr. Grey was also elected a Fellow of Great Britain's Royal Aeronautical Society.

He held Bachelor's and Master's degrees from Cornell University and a PhD from the California Institute of Technology. He was a professor of aerospace engineering at Princeton University for 55 years, where his research in rocket combustion instability was instrumental in assuring the reliability of the Redstone rocket that launched Alan Shepard, America's first astronaut, and of the Saturn launcher's giant F-1 rocket that placed the Apollo astronauts on the Moon. As Director of Princeton's Nuclear Propulsion Research Laboratory he was a pioneer in the field of space nuclear propulsion and power. At Princeton, he created and taught the first university course on space nuclear powerplants. With the eminent scientist Arthur R. Kantrowitz, he was co-inventor of the Kantrowitz-Grey molecular beam source, which is the standard tool for research in this field. He holds a dozen patents in high-temperature instrumentation, a field in which he was preeminent for years. He published over 400 technical and popular books and peer-reviewed papers covering broad areas of aerospace and energy science and technology, and consulted actively for a number of aerospace organizations and government agencies.

These included the U.S. Air Force (as a participant in several "Beyond the Horizons" studies); NASA (as a member of the NASA Advisory Council); the U.S. Department of Energy (as a member of the Secretary of Energy Advisory Board); the Department of Transportation (as vice-chairman of the Commercial Space Transportation Advisory Committee); the U.S. Congress's Office of Technology Assessment (as Chairman of a number of Advisory Panels on space, aeronautics, and energy); the National Reconnaissance Office (as Chairman and organizer of eight conferences on Space Launch Integration); Lockheed Martin Astronautics and its predecessor companies General Dynamics Space Systems (GDSS), and Martin Marietta (as a member of the President's Advisory Council); the Applied Solar Energy Corporation (as Director); the Universities Space Research Association (as a member of several Science Advisory Councils); and NASA's and the Atomic Energy Commission's joint Space Nuclear Propulsion Office.

It was on Grey's 1992 recommendation to the President of GDSS that the Russian RD-180 rocket engine was selected to power the Atlas-5 space launch vehicle. That decision was the source of a major political issue 22 years later, when U.S. – Russian tensions motivated U.S. agencies and companies to create a crash program replacing the RD-180 with a new U.S. rocket engine

Grey served as Vice President of the AIAA and of the International Academy of Astronautics, and was President of the International Astronautical Federation. He was Deputy Secretary-General of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82) and for twenty years wrote the annual report, "Highlights in Space Technology and Applications" for the UN's Committee on the Peaceful Uses of Outer Space. Dr. Grey was Chairman of the American Association of Engineering Societies' Coordinating Committee on Energy; a charter member of the Science Advisory Board of the NASA Institute for Advanced Concepts; and Chairman of the organizing committee that created the Center for Space Nuclear Research at the Idaho National Laboratory, which is operated by his client, the Universities Space Research Association. He founded *Aerospace America*, the primary monthly in the aerospace field, and was its publisher for over five years. As the founder of the AIAA's Public Policy program, Dr. Grey testified frequently at Congressional hearings and represented the aerospace profession to the public media: television, radio, newspapers, and magazines, where he was quoted frequently on aerospace issues of national interest.

Dr. Grey had homes in New York City and Bridgehampton, New York, and most recently in Key Biscayne, Florida; Palm Beach, Florida; and London, England. He was a member of Washington's Cosmos Club, The Explorers Club (New York), the Key Biscayne Yacht Club, The Dyrham Park Country Club (London), The West Heath Lawn Tennis Club (London), the Bridgehampton Tennis and Surf Club, and The East Hampton Indoor-Outdoor Tennis Club. He is survived by his companion Zena Rita Abrahamsohn, his daughter Leslie Ann Grey, and his granddaughter Rebecca Eve (Schneider) Devine.