

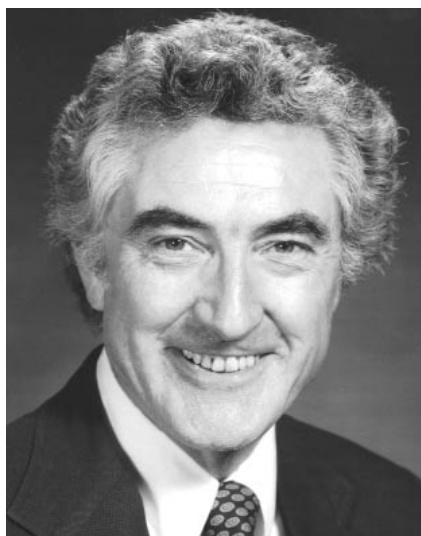
Albert Roach Hibbs

For many years, Albert Roach Hibbs was “The Voice of JPL”—one of the principal spokesmen for the Jet Propulsion Laboratory in Pasadena, California. He died in Pasadena on 24 February 2003 of complications following heart surgery.

Hibbs was born in Akron, Ohio, on 19 October 1924. At a very early age, he displayed an interest in science, probably encouraged by his father, an engineer, and his mother, a chemist. In 1942, he entered Caltech and received his BS in physics three years later. He then attended the University of Chicago and earned his MS in mathematics in 1947. He returned to Caltech for his PhD in physics under his adviser, Richard Feynman, with whom he had a great deal in common and became close friends. He received his PhD for a thesis on the interaction of wind and water to form surface waves. Together, he and Feynman would later write an undergraduate text, *Quantum Mechanics and Path Integrals* (McGraw-Hill, 1965).

Hibbs's earliest exploit that gained national attention was a project to make money from roulette tables in Nevada. He and his student roommate, Roy Walford, decided that no roulette wheel was perfect and if one knew the imperfection, one could gamble on the wheel and make money. At Las Vegas, they recorded every play on a wheel for two weeks. They then gambled and won \$15 000. With their winnings, they bought a boat and set sail out of Miami, Florida. On reaching Puerto Rico, they decided they didn't want to be sailors, and returned to Pasadena.

Hibbs joined JPL as a mathematician in February 1950. At that time, JPL was under contract to the US Army Ordnance to develop ballistic



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missiles. Hibbs's assignment was to calculate missile performance. When JPL became involved in the satellite program, he was principal mathematician on performance calculations. At the 1958 launch of Explorer-I, the first US Earth satellite, Hibbs was at Cape Canaveral, Florida, and made the initial orbit estimate using very sketchy real-time data. He did well: His orbit calculation was only eight minutes short and his estimated lifetime of 15 years in orbit was three years too long. After NASA started operations in October 1958, it took over JPL in December, and the laboratory was assigned deep space scientific missions. An important Hibbs document is *JPL Report 30-1*, published in 1959. It outlined a proposed series of planetary missions for JPL and NASA. Although his schedule was too optimistic, Hibbs established the general framework for planetary missions for the next decade.

By 1960, Hibbs had been asked to form and take charge of the space science division at JPL. The division endured a slow start in the early 1960s, beginning with a series of six failures of Ranger, a project involving robotic probes that would make close-up TV pictures of the Moon. After that, though, JPL had a long series of successful lunar and planetary missions that naturally attracted broad media interest. JPL established Hibbs in a data room, where he could interpret flight data for the media and the general public. His scientific background and his facility with the English language made him the authoritative source of information on JPL missions.

During the 1960s and 1970s, JPL was busy with the planetary program and Hibbs continued to be the pri-

mary contact with the media. Instead of missions lasting a few days, some of those missions lasted for many years. The longest mission was Voyager 2. Launched in 1977, it flew past Neptune in 1989 and, as of press date, was still communicating with Earth.

Hibbs retired from JPL in November 1986. During his retirement, he pursued underwater photography, a major interest that took him to scuba diving sites all over the world. He also worked in the joint JPL and Caltech project to use retired engineers and scientists to help the medical profession with space technology to improve health care.

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