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HARALD VON BECKH, PIONEER OF MICROGRAVITY MEDICAL RESEARCH

**Abstract**

Harald Von Beckh was born in Vienna, Austria, on November 17, 1917. He graduated as a Doctor of Medicine from the Vienna University Faculty of Medicine in 1940. He began working at the Academy of Aviation Medicine in Berlin where he helped in the development of the concept of the Keplerian trajectory to obtain periods of microgravity while collaborating with Dr. Heinz von Diringshofen. In 1941 he was appointed as a faculty member at the Academy of Medicine of the Luftwaffe.

At the end of the war, without any possibility to continue his research in Germany, Von Beckh made contacts with the Embassy of Argentina in Genoa and was offered a job in Buenos Aires. Once there he became a member of the Sociedad Argentina Interplanetaria (Argentine Interplanetary Society) and actively worked to popularize the new field of space medicine. He wrote a number of articles for the National Magazine of Aeronautics and gave a number of talks on the subject, some of them in collaboration with Dr. Von Diringshofen who also immigrated to Argentina.

Working for Argentina's National Institute of Aeronautical Medicine as a researcher and teacher, he performed the first microgravity flights in the country where he tested the inner ear response on turtles and other animals. Von Beckh developed a test performed in airplanes of the Argentine Air Force, as well as civilian planes, to understand the effects of reduced gravity on the psychomotor system.

He also formulated the bases for the understanding of eye-hand coordination in microgravity, which was essential years later with the advent of manned spacecraft. Several of his students from the Air Force were later in charge of biomedical experiments conducted during Argentine suborbital rocket flights carrying animals for experimentation such as the BIO-1 and BIO-2 tests.

In 1955 Von Beckh published the book "Fisiología del Vuelo" (Physiology of Flight). It was the first book written in Argentina on the subject and was an invaluable contribution to aerospace medicine for Latin American flight surgeons.

In 1956 Von Beckh accepted an offer from the American company Glen L. Martin Co. and went to work for the Aeromedical Research Laboratory in New Mexico. Years later he became the director of medical research for the Naval Air Development Center in Pennsylvania where he would remain until his retirement after a life dedicated to the advancement of aerospace medicine.