## **Fred Rohles**

This is Kansas Profile. I'm Ron Wilson, director of the Huck Boyd National Institute for Rural Development at Kansas State University.

"Three, two, one, liftoff!" The early days of the American space program were an exciting but scary time, with the U.S. in a space race with the Russians. We watched the countdown of the rocket launches on our tv sets. But before our astronauts made their extraterrestrial journeys, one American visitor into outer space was a chimpanzee who was trained by a scientist who ended up in Kansas. It's today's Kansas Profile.

Dr. Fred Rohles is an emeritus professor at K-State. As a teacher of psychology, he taught thousands of students – but before that, he taught an astrochimp.

Fred Rohles grew up near Chicago. He got a job helping score psychological tests and was thus introduced to the world of psychology. He graduated from Roosevelt University in 1942, enlisted and joined the Army's psychological research unit (later part of the Air Force), went to Officer Candidate School and was commissioned as a second lieutenant. He would later earn his Ph.D. at the University of Texas and was assigned to the School of Aerospace Medicine.

He was transferred to the Arctic Aeromedical Laboratory in Fairbanks, Alaska where he worked with firefighters on testing experimental clothing and equipment. "Imagine fighting fires in 40 below zero temperatures," Dr. Rohles said. His testing helped design improved ergonomic equipment.

In 1957, the Russians launched a space satellite called Sputnik, which stimulated a race into outer space with America. Dr. Fred Rohles and his whole unit were transferred to the areomedical unit in New Mexico to train chimpanzees for space flight. One chimpanzee he trained was named Ham, an acronym for the base where they were located: Holloman Aerospace Medical Center. Ham was tested and trained to perform simple motor tasks inside the space capsule.

On January 31, 1961, Ham was launched from Cape Canaveral on a suborbital flight. He passed with, um, flying colors. "Ham was the first higher primate to be launched into outer space," Dr. Rohles said. Three months later, astronaut Alan Shepard became the first American human to do so.

Dr. Rohles also trained Enos, the first chimpanzee to be launched into orbit. That set the stage for astronaut John Glenn to make America's first manned orbital space flight. In 1963, Dr. Rohles retired from the Air Force and joined the faculty at Kansas State. He became director of the Institute for Environmental Research and did considerable research on human comfort. He also taught general psychology annually, teaching nearly 5,000 students through the years. These students came from both rural and urban backgrounds. I was one of those, having grown up near the rural community of Riley, population 848 people. Now, that's rural.

Dr. Rohles was an excellent teacher. It was fascinating to learn of his historic work in training primates for the space program. Years later, Dr. Rohles sent astronaut John Glenn a limerick which said: "I will say it again and again. If you don't think I'm right, ask John Glenn; That his wisest of tips Came from chimpanzee's lips; From old Enos and Ham, not from men." Glenn responded in kind: "There once was a teacher named Rohles, who was frequently toasted with skoals, For his work with the chimps Did avoid all the crimps From those infernal manned space patrols."

Dr. Rohles compiled and edited a remarkable bibliography of research on the chimpanzee which contained some 4,000 references. He produced more than 150 publications. Those relevant to the space program were sent to the Kansas Cosmosphere, along with a copy of the large framed picture of Ham which hangs in Dr. Rohles' study. As of 2013, Dr. Rohles is 92 years old, still writing and sharp as a tack. Wow. "Three, two, one, liftoff!" That was the sound of space flight in the 1960s. It was a nerve-wracking but exciting time, especially for innovative space researchers. Ham the chimpanzee was one of those space pioneers, and he was trained by a scientist who would later share his expertise with generations of Kansans. We commend Dr. Fred Rohles for making a difference with his research expertise and his excellent teaching. That teaching helped launch many careers.

For the Huck Boyd National Institute for Rural Development, this is Ron Wilson with Kansas Profile.