

Space Spiders Bug Skylab

United Press International

The first Skylab mission may have had a lot of "bugs." But the second one will have spiders — and females ones at that.

The bugs last time were mechanical and electrical problems, but the spiders are real, live spiders, being sent to spin webs for science in space.

Dr. Peter N. Witt, consultant to the National Aeronautics and Space Administration (NASA) on the unusual experiment, says it's hoped the webs the spiders spin inside the orbiting space station will tell scientists more about the effect of zero gravity and the stress of space travel on behavior.

The 54-year-old Witt, and internationally known researcher on spiders and human behavior, said two female "cross spiders" were chosen for the experiment because "no other animal provides us with such a predicable and meaningful record of behavior."

Witt, research director for the North Carolina Department of Mental Health in Raleigh, has spent more than 25 years studying the effects of such drugs as alcohol and LSD, as well as environment, on the web building of spiders and how the changes relate to human behavior patterns.

Spider webs that housewives sweep from their ceilings are studied in minute detail by Witt and his research associate, Mrs. Mabel Scarboro.

Witt measures the size, spirals and designs of webs and then feeds the information into a computer. The computer provides him with data to analyze the behavior of the spider under both normal and abnormal conditions.

NASA contacted Witt, a native of Bern, Switzerland, about the spider experiment in 1971, after the idea was suggested in a nationwide contest the agency sponsored to get ideas for Skylab research projects.

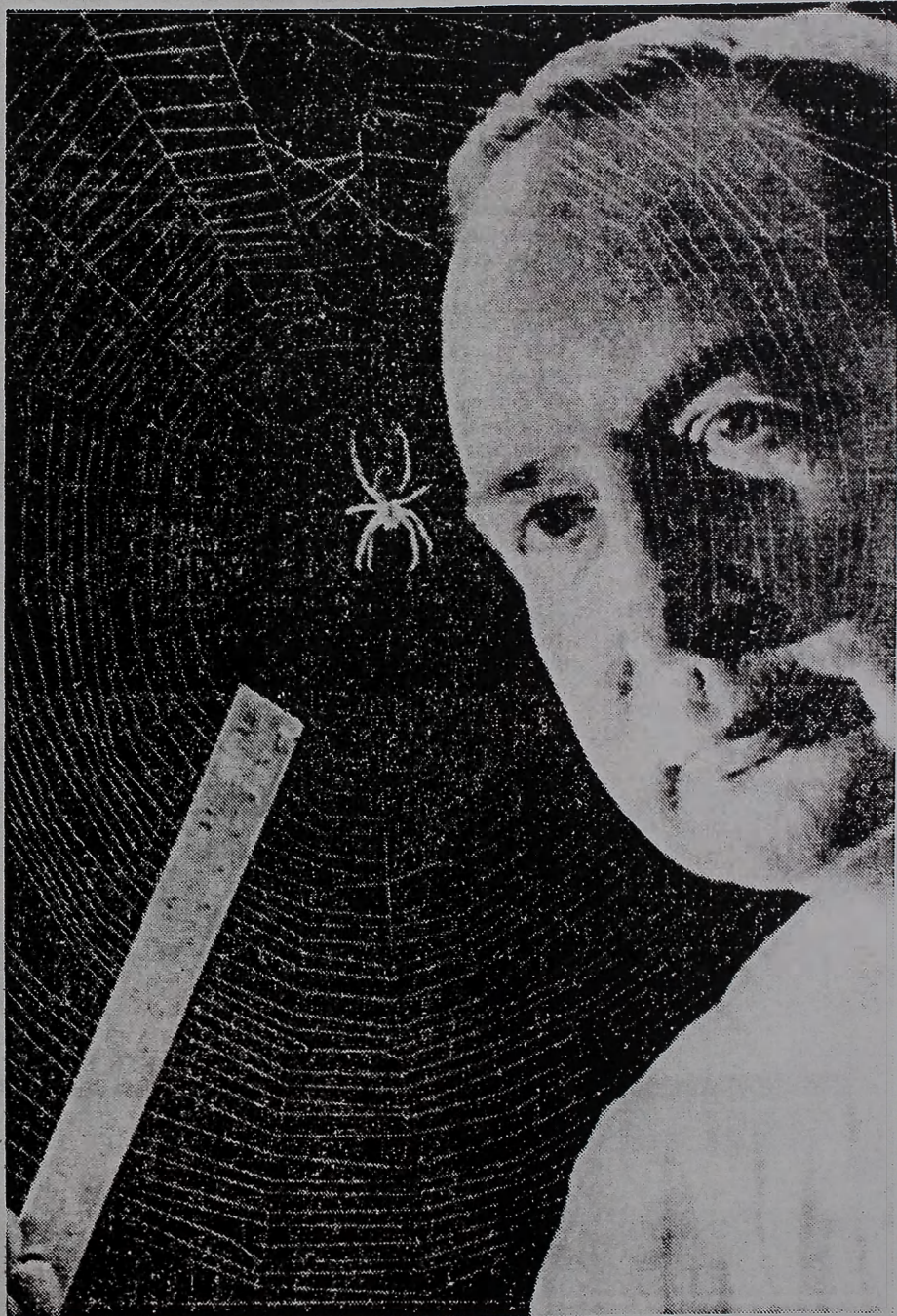
NASA already has conducted simulated tests with spiders supplied by Witt to measure the effects of all conditions on them except weightlessness, the scientist said.

The astronauts carried the spiders into space in small boxes and placed them in already prepared cages surrounded by lights and photographic equipment. While in space, the spiders will be fed by the astronauts, who have been trained in experimenting with spiders.

Should the spiders weave webs during the flight, Witt said, the cameras will transmit pictures of their actions to earth.

Witt has supplied NASA with a computer program of web building which will be used to measure any changes or effects that space travel has on the spiders' normal pattern of weaving.

Even though spiders have been instinctively building webs since the beginning of time, Witt says that in space the spiders "may just sit in a corner and sulk and do nothing."



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Dr. Witt checks on a spider similar to the ones to be used on Skylab