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WHAT IF?

KEY MOMENTS IN THE RACE
TO THE MOON REVISITED

HOWARD McCURDY
JOHN LOGSDON
JAMES HANSEN
ROGER LAUNIUS
ASIF SIDDIQI
DWAYNE DAY
JAMES VEDDA
MATT BILLE
JORDAN BIMM
EMILY CARNEY
ERIKA MAURER
SCOTT SACKNOFF
CHRISTOPHER GAINOR

Celebrating the 50th Anniversary of the First Moon Landing





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BABY SPACE STATION

What if Wernher von Braun's "Baby Space Station," proposed in the pages of Collier's magazine on 27 June 1953, had actually flown? Bimm, the winner of the 2013 Sacknoff Prize for Space History considers a simian "what if?"

By Dr. Jordan Bimm

Described by von Braun in Collier's as "our first bold venture into space," the "Baby Space Station" (characterized as "baby" since it would be followed by larger, more complex habitats) was to have been an automated orbiting laboratory containing three rhesus monkeys. Had this project launched before November 1957, the monkeys onboard would have become the first living beings in orbit. What if we followed a monkey on its journey to von Braun's Baby Space Station? This alternate history brings animal missions into the realm of space "what ifs." It is also a textual collage, comprised of gently edited fragments from existing archival material about simians in space science. See the bibliographic note following this story for the sources used.

* * *

At first, Mr. West took her out of her cage for only a few moments at a time. He stroked her gently, talking to her in a quiet voice. He wore his white hospital coat and gloves. He wanted her to get used to men in white coats, because she would later be handled by doctors.

She had to learn to lay very still, without moving. Gradually she was held lying down, her long arms and legs firmly restrained, for longer and longer periods. Then she was strapped down. She had learned that these small excursions into the land of the white-coated men were very pleasant.

The next thing she had to learn was how to "take" instrumentation. She had to get used to having various needle-like instruments inserted into her flesh. These electrical devices would make records of her heartbeat, her blood pressure, her brain waves, and other reactions in space, if she were chosen for a place on Dr. von Braun's "Baby Space Station."

As readers of *Collier's* magazine learned some months prior, the Baby Space Station was to be America's "first step in the conquest of space." Von Braun explained how it would orbit the Earth for two months, traveling 17,200 miles per hour at an altitude of 200 miles. "This trail-blazing satellite will prepare the way for the men who will follow, we'll learn more in these sixty days than the past ten years."

She earned a portion of her food by repeating two basic tasks, fifteen minutes each, twice a day. Her simulated work—pushing buttons and turning dials—was part of a series of brain studies to help prevent boredom during the mission. She was trained using newly developed errorless techniques, and two

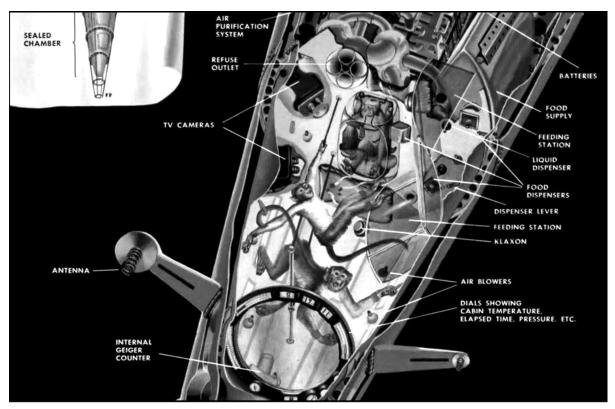
successful performances earned her one food pellet.

In the event of a national crisis or prolonged emergency she was to be sheltered in Bay 4 of building 1264. She was considered valuable Air Force material worth at least \$25,000, and was not to be destroyed even under dire circumstances. Contingency plans stated that her survival ration would consist of one chow biscuit per day.

She trained in a large group, but only three would be chosen for the flight. Meanwhile, workers in a different part of the country readied the station for launch. Just as von Braun described in *Collier's*, it would look like a thirty-foot icecream cone, with its tapered casing containing a complicated maze of instruments, pressure gauges, thermometers, Geiger counters, microphones, and cameras—all to help the white-coated men back on Earth understand spaceflight and the space environment.

She excelled in the simulator, operating levers and responding to light-flashes and tone-sounds so rapidly that an untrained volunteer would find it hard to keep pace. She tracked moving targets across a radar screen so efficiently that some of the white-coated men felt she could "fly a beam" to direct her post-orbit reentry.

"It must be a scientific choice," proclaimed the white-coated man in charge of selection, who spoke with a thick German accent. "The 'best,' and only the best, should go." After studying all the data on her training and per-



Fred Freeman (illustrator). "Baby Space Station" in Collier's (27 June 1953), 35.

formance, a team of experts decided she should be part of the historic trio to inhabit the Baby Space Station. After a long drive, one of the white-coated men knelt down and gave her an injection.

When the anesthetic wore off she was already in space. The jostle of launch was over, and the station had settled into its circular path about the Earth. A mechanical "ka-chunk" signaled the release of the restraining device that had held her and one other companion against a rubber couch. Suddenly, they both floated free inside the cabin. Soon the pair learned how to move around the station using leather handholds.

The third occupant wasn't floating. He remained immobilized, held in place by a tight-fitting fabric restraint, with wires protruding from electrodes sutured beneath his skin. He lived this way

for the entire sixty-day mission. Instruments recorded his body temperature, breathing cycle, pulse rate, heartbeat, and blood pressure. All this data was beamed down to white-coated men stationed at monitoring posts that formed a chain encircling the globe.

Inside their main headquarters, von Braun and some other white-coated men celebrated. They had succeeded in launching the first creatures into orbit and were watching them live on TV. Inside a special darkened room, footage from cameras on the station flickered over the walls. One camera showed the first real panoramic picture of our world—a breathtaking view of the land masses, oceans, and cities as seen from 200 miles up. The other three cameras monitored the occupants as they began their stay in this new

weightless place.

At specific intervals, a klaxon horn signaled mealtime, and the free-floating pair rushed to their feeding station as they were trained to do. To get solid food, they pressed a lever on a dispenser, much like a candy machine. They received about half a pound of food a day—a biscuit made of wheat, soybean meal, and bone meal, enriched with vitamins. To drink, they sucked water from bottles built into the station's The immobilized wall. received the same ration from a dispenser placed within reach of his unrestrained arms.

The white-coated men wondered what would happen over the next two months. Would the trio succumb to fright or disorientation? Perhaps cower in a corner and slowly starve? It was impossible to know how the station's occupants really felt up there, but biometric data showed that their bodies continued to function, and automatic systems signaled that food and water were being depleted at expected rates. TV footage confirmed the two, free-moving inhabitants were adapting, navigating the cone-shaped compartment with increasing ease.

In newspapers and on the radio, von Braun told Americans to look up and spot his Baby Space Station as it streaked overhead. "At dawn and dusk it will be visible to the naked eye as a bright unwinking star, traveling from horizon to horizon in about seven minutes. If you live Philadelphia, you can see it overhead just before sunup. Ninetyone minutes later, as dawn breaks over Kansas City, people there can see it, and after another hour and a half it will be visible over Los Angeles, again just before the break of dawn."

As the weeks turned into months, the station eventually dropped lower and lower in its orbit. On the sixtieth day, friction between the hull and the atmosphere caused the compartment to heat up. The white-coated men had prepared for this. An automatic thermostat set off an electric relay that triggered a capsule containing quick-acting lethal According to Dr. von Braun, the trio died instantly and painlessly inside America's Baby Space Station.

"This is quite in keeping with our whole concept of Western civilization and its philosophy of the dignity of man," one of the white-coated men said quietly. "On the phylogenetic scale, man—classically an animal himself, of course—stands higher than other animals. Insofar as we know, how-

ever, simians stand next highest, the most intelligent and 'human' of all the other animals."

After the recovery, a white-coated man placed her body in a Dermestid beetle colony where tiny insects consumed every last bit of her flesh. Two months later, they removed her skeleton and placed it in a freezer to kill off the rest of the beetles. Lastly, her pristine skeleton was soaked in ammonia and proudly displayed by the white-coated men at the Institute.

* * *

Bibliographic Note

This "what if" story is comprised of edited archival fragments. The concept of the "Baby Space Station" is outlined by Wernher von Braun and Cornelius Ryan in Collier's magazine, 27 1953 [33-39]. The only detail changed is that von Braun planned for the station, containing the gassed monkeys, to be incinerated on reentry, making recovery impossible. Passages describing the protagonist's training and selection are taken from Olive Burt's story Space Monkey: The True Story of Miss Baker (New York: John Day, 1960), which describes the life of Baker—one of two monkeys the US sent on a suborbital spaceflight in May, 1959-at the Navy's School of Aviation Medicine at Pensacola. Florida. Other fragments are taken from a 1964 US Air Force press release (No. 64-70-R) titled "School for Chimps" written by George F. Meeter, which describes the treatment of simians in aerospace research at the Balcones Research Laboratory at Austin, Texas. The cleaning of the protagonist's skeleton by Dermestid beetles is from memoranda concerning the death of Ham, the first chimpanzee NASA launched into space as part of Project Mercury in 1961, written by doctors at the Armed Forces Institute of Pathology following his death in 1983.

About the Author

Jordan Bimm is a postdoctoral research fellow at Princeton University working on a project titled, Putting Mars in a Jar: The Military Origin of Astrobiology.

He received his PhD in 2018 from York University (dissertation: Anticipating the Astronaut: Subject Formation in Early American Space Medicine, 1949-1959 and has won several awards for his research including a HSS/NASA Fellowship, the Adams Center Prize for Cold War Military History, and the Sacknoff Prize for Space History. He is also a 2019 residential fellow for the Linda Hall Library.

FROM THE ARCHIVES



North American Aviation concept, 1963. Credit: NASA

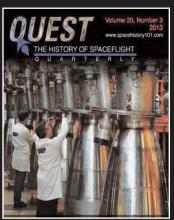


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