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In Orbit on the Road by Don Cox. An article published in Ad Astra in 1992 about the early days of the Spacemobile program.

In Orbit On The Road
by Don Cox

Thirty Years ago, an infant National Aeronautics and Space Administration was searching for a better way to tell its rapidly expanding story to the public. Instead of relying on the commercial radio and television networks, which provided instant live coverage of each spacecraft launch, it sought an alternative approach to reach the next generation.

But when the bureaucrats at NASA headquarters in Washington tried to come up with a method, they found that they had no inhouse staff members who were qualified to assume the task. Fortunately, they had recently received a communication from someone who was qualified, Dr. I.M. Levitt.

Levitt had been the Director of the Fels Planetarium at Philadelphia's Franklin Institute for a quarter of a century. After Sputnik shook the United States in October 1957, Levitt, an avid space buff as well as a leading astronomical educator, had put together a space science demonstration program that he had taken on the lecture circuit as an extracurricular activity. The program had been well received by his mostly adult audiences all around the country.

GETTING WHEELS

After the birth of NASA, Levitt came up with an idea that he took to the newly-minted NASA Technical Information and Education Program Office in Washington -- why not put a space science program on wheels and take it around to the high schools of the United States? NASA liked the idea, and gave the Franklin Institute a one-year pilot program contract to operate the first Spacemobile unit in early 1961.

The attractive red, white, and blue Spacemobile contained 20 displays in all, including a 1.2 meter tall handcrafted Saturn 5 Moon rocket, complete with a miniature Apollo command module nestled on the top. This rocket was constructed for the Spacemobile by employees of the Marshall Space Flight Center in Huntsville, Alabama, at the behest of Wernher von Braun, who was a friend of Levitt.

Other, smaller models of the Mercury capsule, the robotic RANGER and SURVEYOR Moon landers and Tiros (a weather satellite) were used, along with a series of graphic color slides depicting an artist's conception of the various steps that we planned to take to get a human to the Moon before the end of the decade.

EARLY STORIES

In February 1961, Levitt called me in New York where I was teaching at New York University. I had met him a few years earlier when I was the public relations director for the Vanguard Earth Satellite Program that was to loft the United States'

first artificial satellite into Earth orbit during the International Geophysical Year (1957-58).

I grabbed his offer to head up the number one NASA Spacemobile unit. A few months later, I marked time with my partner, John Bartram, in the Dolly Madison House just across the street from the White House. The date was April 12 and John and I were waiting to be ushered in to President John F. Kennedy with a model of the Surveyor Moon lander.

We were looking forward to the photo opportunity and to shaking hands with the President when word arrived that the meeting was canceled. We found out why a few moments later. Yuri Gargarin had just completed the first successful orbit of the Earth by a human. An embarrassed Kennedy, still recovering from the Bay of Pigs fiasco, felt that it would be a public relations "black eye" for him to be seen receiving a model of an United States spacecraft when the Soviets were flying a real one.

It sometimes seemed that the early U.S. space program was made up of one problem after another. The first Spacemobile also had its share of problems. While presenting a demonstration at a packed high school assembly in Philadelphia, everything that could go wrong did -- one technical bug after another. When I attempted to pour some liquid oxygen from a thermos onto a burning wad of cotton in a beaker, I was embarrassed to discover that my supply of LOX had evaporated!

Then the simulated Echo comsat failed to work when the balloon, suspended from the stage curtains, went out of sync wth the ground transmitter and receiver, located at either end of the stage. Furthermore, the starter pistol that was supposed to make a loud band -- simulating a rocket blastoff -- failed to function. Then the bulb on the slide projector blew out!

One of the early innovations that we made in the program was to expand the audience beyond high schools -- to all ages. As time went on, we discovered elementary school-age children were quite knowledgeable about the progress of human attempts to conquer the cosmos. They were also avid watchers of live, televised launchings, and seemed to be more curious than their older brothers and sisters about their future in space.

OFF TO SEA

When the Unit 1 Spacemobile team was invited to put on a dozen programs at various schools and colleges in Puerto Rico and the U.S. Virgin Islands during the summer of 1961, the problem arose of hose to get the Spacemobile from the continent to the islands. Airlift was out of the question, since it posed too many logistical and financial problems. Fortunately, the U.S. Navy came through and provided a panel truck and a volunteer enlisted man as a drive to chauffeur our equipment and us around the islands. The programs seemed to be appreciated, especially at a Catholic college for nuns in Ponce, where 200 black-clothed sisters giggled and laughed at our allusions of going to "heaven" in our time, via spaceflight and the cosmos.

In the first 18 months of the program, Bartram and I put on more than 550 demonstrations in elementary, junior high and high schools, colleges, teacher training courses, state fairs and at the 1962 World's Fair in Seattle. Later that year, at the Ohio State Fair, we had the pleasure of following the new American space hero, John Glenn onto the stage. Glenn had become the first American to orbit the Earth just a few months earlier.

"GET RID OF HIM"

During the course of these adventures, I had discovered that my audiences -- particularly secondary school students -- liked to ask questions at the end of the demonstration. So we always reserved five or ten minutes for these queries. In the fall of 1962, one high school student in New Jersey asked the obvious question -- the same question that had been asked at almost every program we had given -- why was the United States so far behind the Soviets in so many aspects of space flight? We had always answered this question as diplomatically as we could, and, as I normally did, I answered the question in the affirmative. I conceded that the Soviets had indeed gotten the jump on us into the cosmos. But, like the tortoise and the hare, the United States was working hard to catch up and would accomplish President Kennedy's goal of reaching the Moon with our astronauts first.

Unknown to me, an irate, super-patriotic high school teacher wrote an anonymous letter of complaint to then-NASA Administrator James Webb. The letter questioned my loyalty to the United States and NASA. Webb penned a terse, four-word order to his harried bureaucratic subordinates for follow-up action. Without exploring the truth to the assertion made in the anonymous epistle, Webb wrote: "Get rid of him." And thus, the next day, I received a registered telegram from the NASA sub-contractor then in charge of the Spacemobile program informing me that I was on a two week notice to terminate

my services. There was no explanation given. Because I was not protected by Civil Service regulations, it took me two years to discover the chain of events that led to my discharge.

SPACE EDUCATION CONTINUES

Significantly, when it came time for NASA to lift the first civilian astronaut into space, they chose a school teacher, Christa McAuliffe. McAuliffe would be in the best position to educate the public about space. Tragically, however, the Challenger exploded, killing McAuliffe, teacher and mother of two, along with six other space travellers. The loss of life emphasized not just the technological glitches that could hamper progress, but brought home the human side of space flight and its implications for the future.

What the Spacemobiles have been accomplishing on a small scale on Earth, Challenger and McAuliffe were to do on a grand scale from space. Although Challenger failed to accomplish this goal, the Spacemobile program continues.

In July 1986, NASA Spacemobile lecturers -- past and present -- held a 25th reunion at NASA's Langley Research Center in Virginia. There it was noted that more than 300 lecturers had participated in the exciting program since its inception. Today, 30 years after the first Spacemobile, there are 35 Spacemobiles operating throughout the United States. More than 100 of those lecturers attended the reunion of the program -- now named the NASA Aerospace Education Project (ARSP).

As the oldest continuous NASA program, the Spacemobiles and their motivated crews of space science lecturers have accomplished a great deal during their three decades of existence to enlighten the people of the world about NASA's mission. They will undoubtedly continue to do their job into the 21st century, even as we realize our goals of colonies on the Moon, Mars and beyond.