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The First Wave by Ellwood Johnson. Written 2001

THE FIRST WAVE

By Ellwood A. Johnson

Spacemobile 1962-65

PREFACE

The early days of the Spacemobile Program can best be described as "The Wild West." I sure do not mean that in the negative sense of the term; rather, events were moving so fast in uncharted waters that innovation and flexibility were the key operational words. We had to react to situations and circumstances. A lot of what we were asked to do was because of political considerations; i.e., a Congressman or Senator would call the office and asked us to support a classroom presentation, a congressional visit to a district, or a local or national conference. I can recall instances where a lecture was given in a location in Florida, for instance, and we were asked to respond to a congressional request in Illinois a couple of days later. Of course, the lecturer had to drive the unit from Florida to Illinois, often driving through the night to meet that event. At that time, the scheduling was handled out of headquarters and was not under the scheduling arm of the NASA Centers.

Everyone did the best they could. I don't think it could have been done by people married to structure nor those without a vision of what it could be. It was a demanding job. It was a fun job. It provided us with the environment to grow, to provide a great public service to the children of this and other nations, and afforded us the opportunity to meet the most competent, dedicated, flexible, loyal, fun-loving group of people that have ever been "thrown" together in a common purpose. I am so proud to have been a part of the program, and to this date, continue to be in very frequent contact with the many friends I made in the adventure.

There are many lecturers in the post-early days that have no idea of some of the tasks and events that the "space-science lecturers" were called upon to do. I hope that I will be able to convey some of the challenges and excitement that many of us were privileged to experience.

THE CALL

In the early 60s, I was working as the Director of Education for the Elk River (MN) Nuclear Power Plant. In this position, I delivered a lot of lectures to school children and the general public on nuclear energy. The peaceful uses of nuclear energy were new and people were either excited about the application or fearful of its destructive potential. It was my job to educate the public on the peaceful applications of atomic energy with emphasis on power generation. I had developed a number of programs to take to schools and community groups and also conducted programs and tours of the Elk River Facility.

In the fall of '61, I received a call from Harold Plummer, the Science Supervisor for the State of Minnesota's Department of

Education. Harold was doing a series of programs on nuclear energy for the Minnesota Public Television station. I worked with him on content, visuals and contacts within the industry. I also appeared on camera for several of the programs. Harold happened to be an educational consultant to NASA and suggested to Ev Collin, in early '62, that I might be interested in becoming a lecturer. Ev called me from Washington, set up an interview in St. Paul, after which I was asked to report to DC on March 1, 1962. You can be sure my co-workers and I were interested in watching John Glenn's flight on February 20th with great expectation. Keep in mind that my real first exposure to NASA and space science was watching the flights on TV.

I reported to NASA Headquarters on March 1, which was a Thursday or Friday.. The Educational Programs Division of Public Affairs was located at FOB 6, on Maryland Avenue SE The bottom four floors were occupied by the Department of Education and the top three floors by NASA. There I again met with Ev Collin and a fellow named John Sims as well as John Nesbit, a fellow lecturer and the National Scheduler for Spacemobile Programs, at that time. They gave me some educational materials on the space programs and said that I would start my training program -- on the road -- with a lecturer named Jack Callow, who lived in nearby Falls Church, VA. They then suggested that I go formalize the paper work with Herman Weinstein, the director of Educational Programs with offices on 1730 Eye Street NW, who was the prime contractor for the Spacemobile Program. This could have been the first time I realized that I would be working for a contractor and would not be a direct employee of NASA. It didn't matter. I joined the program with a salary of \$9,000 per year (I was making \$5,200 at my former position) and would also receive \$12 per diem for every day I was on the road. I had found the Holy Grail.

That day, I called Jack Callow who was at home in Virginia. He suggested that I register at the Iwo Jima Motel, which was just across the street from the Ft. Meyer Army Base, and pretty close to his home. He recommended that I do some reading on Saturday and that he would pick me up that evening for dinner at his place and to meet his family. Sunday morning we headed for Morgantown, West Virginia and my first look at the Spacemobile truck. We were to spend a week in West Virginia lecturing to high schools throughout the State. I expected to have a week to just listen and try to understand what the NASA programs were all about. Wrong. I listened to Jack give two lectures a day on Monday and Tuesday, then I gave the first half of the lecture on Wednesday morning, the second half on Wednesday afternoon, and then full unassisted lectures on Thursday and Friday. On Friday evening, I gave a presentation at the television station in Elkins, W.Va. I forgot to mention that it snowed most of the time and I remember going down a hill in Morgantown with the truck in reverse -- snow and ice don't mix well. .

ON THE ROAD

The following Monday morning I was back at NASA headquarters. There they advised me that I was to be in Los Angeles the following week and that I was to pick up "my" unit from Al Halstrunk at the airport in Pittsburgh, PA. That afternoon I flew to Pittsburgh, picked up the unit, and headed for the West Coast. I was to report to the NASA's Western Operations Office in Santa Monica, CA. Stan Miller assisted by Bob Button ran the office. They had scheduled my lecturing week and set me up to stay at a plush hotel near the beach -- I had my own cabana during the five-day stay in the Los Angeles area. They were able to negotiate a rate within my per diem rate, which was a happy surprise.

On Monday morning I reported to their office. They had me scheduled for a visit to North American Aviation in Downey, CA to see the work being done on the Apollo Spacecraft. Awaiting me was a helicopter from the NASA's Jet Propulsion Laboratory of Pasadena, CA to fly me from Santa Monica to Downey for the visit -- a first for me. During the remainder of the week, I lectured at several local schools including Hollywood High, and appeared on a local television station -- the first to carry color in the area, Channel 13, I believe.

The following week I was scheduled for a week of lecturing in Las Vegas followed by a week in the Willamette Valley in Oregon.

I then headed up to Seattle. In the mid-62s, the biggest financial commitment for NASA Public Affairs Office was the support of the NASA Pavilion at the Seattle World's Fair. We had a big NASA Pavilion with exhibit space and a 150-seat auditorium for Spacemobile demonstrations. If I recall correctly, we had six lectures scheduled for weekdays and this was bounced up to nine for the weekends. The fair lasted six months so we had lecturers fly in and out for their stint at the Fair.

The permanent lecturer at the Exhibit was Herman Oberle -- a former science teacher from Arlington, VA. Herman had some exhibit type experience with the Paris Air Show and was ideal for the position. When I arrived we stayed in a hotel. This was getting expensive as the costs for all housing went up appreciably with the coming of the fair. We looked around

and found a house for rent by the airport. Herman then checked with the management in DC and came to an agreement that all Spacemobile personnel assigned to Seattle would be required to stay at the house. This agreement made the rent very affordable within the confines of our per diem allowance. We were assigned an automobile for transport from the house to the fair and to pickup supplies, etc. We also used a Spacemobile if one came into the area.

A lot of celebrities moved through the exhibit and watched the presentations. I remember talking with Jack Lemon and his two boys after a presentation. Also, at that time, Elvis was shooting his World's Fair movie. The movie crew was using our staff room as a hang out and a place to go when they had to. I remember going into the staff room one day and looking over to the next stall and there was Elvis. So, I piddled with Elvis. Those that got to know him said he was a nice fellow and easy to get along with.

I did not spend all my time at the Fair. I would frequently get in my Spacemobile and drive to colleges in western Washington and Montana to provide support for the NASA teacher workshops. I recall doing a workshop at the University of Montana with Ev Collin and then driving down to Dillon, MT for another workshop. There was nothing to do in Dillon over the weekend -- for some reason I could not get a motel room in Butte which had a theater -- so I wrote an updated version of the Spacemobile lecture and sent it off to Washington.

I also flew to Houston to do a couple of lectures. The Manned Spacecraft Center was just being built in Clear Lake and the Public Affairs Office was in the Honeywell Building on the south side of Houston. There I met Bob Gordon, Bob Workman, and Shorty Powers. There was a major space center promotion at a couple of the big shopping centers and we were asked to give demonstrations in support of the event. There was also a debriefing and news event at the Rice Hotel in downtown Houston for Scott Carpenter and his 3-orbit flight of Mercury's Aurora 7 spacecraft flown on May 24, 1962. There were 1500 dignitaries including members of the U.S. Congress and the Governor of Texas attending. I gave a 45-minute space science demonstration. I then returned to duties at the World's Fair.

When my stint with the Fair was over I drove the unit to Fargo, ND and left it at the airport to be picked up by another lecturer. I then went to Washington for special assignments. I rented a small apartment in Arlington, VA in the same building that Lloyd Aronson lived. Lloyd and I did some lectures around the area and developed the first school district teacher workshop for elementary school teachers (workshops before then were primarily conducted at colleges during the summer). We held these series of workshops at Roanoke, VA in the fall of '62 with special emphasis to help elementary school teachers become more comfortable with teaching space science.

I also worked on special projects with Stewart Tinsman and Myles Doherty. At about that time, the Education Programs Division moved from FOB 6 to the Universal North Building off Connecticut Avenue in NW Washington. We also moved with them. I remember that our offices over looked the building site for the Washington Hilton (this was the hotel area where Reagan got shot). Parking was available in the basement at a cost me \$28 per month. At the time, I was appalled at the high cost of parking in DC.

By this time, I had moved. Around January 1, 1963, Stewart Tinsman and I rented a one-bedroom flexible apartment on the top floor of 301 G Street SW overlooking the Capital -- I think we paid around \$225 a month for rent. This apartment was used as a collection point for all International Spacemobilers. At times, we had four or five people temporarily living in the unit.

INTERNATIONAL PROGRAM

In the fall of '62 and early '63, there developed a great interest in the Spacemobile going overseas. The first overseas assignment, other than the Paris Air Show, was for Venezuela. John Nesbit, who was the National Scheduler at that time, was selected to be the lecturer on site. He could speak Spanish fairly well and he was supported by a lecturer (whose name I forget) who was born and raised in Puerto Rico and was fluent in Spanish. The effort in Venezuela was in support of a museum in Caracas. The Spacemobile unit was a four-wheel drive unit for the rugged terrain. (John was later to take this unit to Mexico City for the program in that country.) As I was slated for the next International assignment, they flew me down to Caracas to monitor the program and to gain insights on how set up the programs in a foreign country.

The effort in Venezuela was under some strain. It was at a time of violent student demonstrations and terrorism. The students would come out of the campus to do their thing, and then rush back to the safety of the campus, which was a sanctuary for students and according to law could not be penetrated by the national police. The Embassy was under high

security surveillance. We had several meetings there discussing security of the NASA program and personnel. It was a tense situation for all.

NASA received a request for support of the 1st International Space Exposition to be held in Sao Paulo, Brazil. The sponsoring agency was the Santos Dumont Foundation (Santos Dumont was a Brazilian who made a flight in France before the Wright Brothers) and had the endorsement of the Brazilian government as well as a sign off by our Embassy. The Exposition was to be held for four months at a major recreation and park site -- Ibirapuera Park. Great Britain, France and the Soviet Union were also to participate.

NASA wanted to be a major player in the Exposition. They secured Wally Schirra's Mercury Spacecraft, a full-scale model of the X-15 research rocket plane from the U.S. Air Force, and an array of exhibits that were developed for the exposition. We had a big photograph of John Glenn to welcome the attendees -- I was at Headquarters with John Glenn when he signed the photo. The Foundation agreed to hire six local lecturers, whom I would train, to deliver the space-science demonstration lecture during the course of the Exposition.

In our discussions about the assignment in DC, it was suggested that I would be dealing with some very high officials of the Brazilian government as well as local dignitaries. It was suggested that I needed an official title to put me on some par with the locals. John Sims came up with Director, South American Section, Educational Programs Division, NASA. After that, I think that all of the international lecturers had some similar title to take with them.

Prior to leaving for Brazil, I flew to Brooklyn to sign off on the models to be used in the Exposition. The models would arrive in time for the Exposition and my training of the local lecturers. The Brazilian Space Agency had agreed to hire two of the six lecturers for a tour of Brazilian schools after the Exposition. A four-wheel drive Spacemobile would arrive at the end of the Exposition and in time, we hoped, for the tour.

In late January 1963, I left for Sao Paulo, Brazil. The travel agency booked me into the international airport of Sao Paulo. Unfortunately, it was 40 miles out of the city. I arrived at midnight and was met by the U.S. Consulate's Cultural Attaché and his wife and driver. The Embassy car they sent was a Jeep Station Wagon. Apparently they forgot to repair the suspension, as it was sure an uncomfortable ride across a not well maintained road to the city. Finally, got to my hotel about 3 in the morning.

The Consulate was located in a hotel complex not far from downtown Sao Paulo. I was greeted by the Minister-Counsel and introduced to the staff, and shown my office. It was pretty heady stuff. They had a tremendous staff, very supportive, and right off made me feel like one of the family. The first weeks were spent working with the Foundation on promises to keep and in hiring and training the local lecturers. We had set up a month's training program. A lot of time was spent trying to figure out what the Russians were going to do; when push got to shove, they decided not to participate.

Finally, an U.S. Air Force cargo plan arrived with Wally Schirra's Sigma 7 Spacecraft. a full scale model of the X-15 research plane (50' long, 22' wide) and the exhibits. The X-15 was accompanied by an air force exhibit team who remained with the plane model throughout the exhibition. We set up everything at the exposition and were ready for the opening. Incidentally, the Brazilians were sure that the Sigma 7 was a model and that the X-15 was for real.

Before the opening there was Mardi Gras. Many of my friends at the Embassy wanted me to join them for the celebration in Rio. However, I was in the middle of training the lecturers and getting the exhibits ready for the opening. I decided I could not take the time. However, Mardi Gras is Mardi Gras and a friend asked me to go down to Santos -- the Coffee Capital of the World, and about 40 miles from Sao Paulo -- to celebrate with her family. I took her up on the offer and had a good time. It was not as good as Rio would have been but it did fit in with my work schedule.

On the eve of the exposition, I put on a buffet for the Consulate Staff, the Air Force contingent, several local supporters, and the trained lecturers. It was catered by Sears -- yes, the same Sears that you and I frequent -- and if I remember it correctly it cost me around \$200 for food and drink for about 100 people. Not bad, and we made a lot of friends. I said it cost me about \$200. Yes, I paid for it with my own personal funds as I took this as a very personal gesture. We had good friends getting together for a special occasion. After the buffet, the guests were invited to a special Spacemobile demonstration given by one of our local lecturers in Portuguese. A great night for all.

After the opening and shake down, the tasks became pretty routine. I still checked in with the Consulate every day. I also

met with the Brazilian Space Agency to set up the tour of schools in Brazil after the Exposition. The Agency was located on the campus of San Jose College outside of Sao Paulo -- about 100 miles if I remember and on the road to Rio. The road was quite hilly and was a busy transportation link to eastern Brazil. It was loaded with diesel trucks and I remember that they had their exhausts at almost ground level and when they passed pedestrians they got covered with diesel smoke -- not a very good design or good manners. Also, a lot of VW buses were on the road and they were involved in a lot of accidents. The locals called them -- I forget the Portuguese name but literally translated in English meant, "Jesus is Coming." They would run into the backs of trucks and got cut off at the knees. It was not a pretty sight if one came upon an accident with one of those vehicles.

It was not all work and no play. I made friends with officials from VASP airlines -- the official government airline. They made arrangements for me to take a one-day flight to Brasilia. The new capital city was in the process of being built but the business of the government had not, as yet, moved from Rio. A lot of the buildings were completed: the House and Senate, the President's residence, several agency buildings and infrastructure like hotels and restaurants and grocery stores. The sports arena was in the mid-stage of construction. Got some good pictures.

I also made a weekend trip to Rio. The consulate personnel, when they visited Rio, stayed at an ocean front hotel of modest means. It was clean, comfortable, and importantly, most of the staff spoke English. (I might add here that the Consulate had me attend a Portuguese language class -- the classes were an hour a day. I lasted less than two weeks.) I got to walk the Copacabana beach, took the cable car to the top of Sugar Loaf Mountain, and walked around the downtown area. I nice break from the demands of the Exposition.

During the end of the Exposition, most of my time was spent working with the Brazilian Space Agency and getting ready for the tour. We had already selected two of the lecturers to make the tour and they agreed to the financial arrangement between them and the Agency. Both were science college students interested in space and were pleased to get the exposure to the space scientists of the Agency. The tour started at secondary schools in Sao Paulo and then spread out to communities within the State of Sao Paulo and beyond. I stayed with the unit until I was satisfied that things were working well and they probably would not need my support. The living conditions in the communities outside of the main cities were less than desirable. I was glad to get back to the city

My immediate work in Brazil was completed. I boarded a plane to Buenos Aires, Argentina to negotiate the Spacemobile program with the Argentina Space Agency. I advised them of the current program in Brazil discussed a timetable and the responsibilities of the Agency. My work was concluded in a couple of days and I returned to Brazil to tie up loose ends and then headed back to the States.

I took some time off, going to home in Minnesota to pick up my auto that I had stored at my sisters. Coming back to Washington we began working on the plans for the having the Spacemobile Program operating out of the NASA Centers. It would seem like a simple process; however, some centers were reluctant to take on the additional responsibilities. It would take some time for them to evaluate the benefits.

NASA Headquarters then received a call from the State Department. Seems they had a request from the government of Surinam -- located on the northern coast of South America, and formerly called Dutch Guiana -- for support for a space exposition. NASA advised them that they did not have any money to support the activity so State said they would pay for it. I got the call and was soon on my way to Paramaribo.

The exposition was to be held over a month's period of time. I did not have much time to train a Surinam lecturer, as all lectures had to be given in Dutch. The Dutch Army found me a man who was a quick learner and also interested in science and space. So, within a week, we were ready to go. The exposition was held at the local fair grounds. We were located in a tent, and in Surinam it becomes very warm -- maybe hot -- to conduct the lectures. However, the lectures were well attended and welcomed by the Surinam people.

There was not much to do around Paramaribo. I did see a regular movie about the X-15 at the local theatre. They had subtitles in Dutch. I stayed at the "good" motel that catered to foreigners and had a casino on the premise. Fortunately, I am not a gambler so just checked it out to see what high rollers looked like. The Dutch Army was on maneuvers and asked me if I wanted to take a ride down the Saramaco River. We took the Army boats and headed for a native village. Interesting. We encountered locals on the river riding in a dinghy that they had cut out of a tree trunk. On the back of the dinghy was an outboard motor -- strictly out of context. The locals lived in thatch huts, washed their clothes in the river -- I did notice

plastic bottles of Ivory -- and were only wearing loincloths. It was like visiting a site in the National Geographic.

After the conclusion of the Exposition, I flew over to Georgetown, Guyana -- to the west of Surinam. This was a very interesting assignment. I lectured at several schools in Georgetown but the highlight was an open lecture in the city library. The "auditorium" was just a bit bigger than classroom size and it was packed with the spillover in the hallways and the main library. Needless to say I had to talk very loud, as they did not have an amplification system. The elected government was very sympathetic to Russia and the Communist Party and they had planted some Communists in the front seats to bait me and generally create trouble. I answered their questions or rather statements the best I could; most of which were centered on Russia beating the US up on space exploration. I replied that I had told them about our program of exploration but that I or no one outside of Russia had any idea on what the Russians were planning to do. It was impossible to make any comparisons as no information got out to the free world. That drew a standing ovation from the entire audience and the sympathizers stormed out amid laughter. It was a good day for America.

I then made a side trip to Mackenzie. This was a town south of Georgetown that was a company town of the Canadian Aluminum Company who was mining the mineral used in making aluminum. It would have taken several days to drive down there on some very bad roads so the CAC flew me in on a company plane. I lectured at the local high school and gave a talk to the local Rotary Club, then flew back to Georgetown and on to Paramaribo and returned to the States.

Shortly after I got back from Guyana, the Spacemobile tour of Brazil was winding down. NASA wanted to make sure that the documentation was as complete as possible so I returned to Sao Paulo to meet with the space agency, the lecturers, and USIA. They had a successful tour with little or no problems and everyone seemed pleased with the outcome.

The international program met with great success. Other than the Paris Air Show which was supported by Stewart Tinsman and Herman Oberle, Myles Doherty conducted the first International Spacemobile Project; that was in Pakistan in April 1962. Myles also went to England, France, Nigeria and India as well. I had mentioned previously that John Nesbit supported the program in Venezuela and Mexico. Frank Lucarelli went to Australia and New Zealand. At the moment I cannot recall the names of the other lecturers who were assigned to other countries but the numbers were significant.

All of the overseas programs were not totally directed to the educational community. In several countries, we had, with the blessing of the governments, installed tracking stations to follow particularly the manned flights. Troublemakers in some of the countries were suggesting to the population that the tracking stations would cause sterilization and they put a lot of pressure on the government for removal. The Spacemobile educational programs were, at times; focused to dispel those rumors and our personnel were aware that their influence with local contacts would be beneficial to the program. For instance, in October '62, Myles Doherty and John Twitty were sent to Nigeria with that sensitivity in mind. The tracking station continued to operate.

SPACEMOBILE COORDINATION TO NASA'S CENTERS

In 1964, NASA was turning operations of the Spacemobile Programs to the NASA centers. I was assigned to become the Spacemobile Coordinator for the Manned Spacecraft Center in Houston. I was working under the direction of the Educational Officer of the Public Affairs Office. We were responsible for an 8-state area: North Dakota, South Dakota, Nebraska, Colorado, New Mexico, Kansas, Oklahoma and Texas. At that time, the actual state scheduling was conducted by the State Office of Education, generally the Science Coordinator. Each state was allotted a certain block of time to schedule the units to schools during the school year and the Centers were generally responsible for scheduling during the summer months. At MSC, we were responsible for four Spacemobiles and from four to eight lecturers.

I can't remember all of the lecturers who were assigned to be coordinators but do remember the following: Bernie McColgan to ERC in Boston, Herman Oberle to Lewis in Cleveland, Elva Bailey to Goddard, John Nesbit to Marshall, Garth Hull and Mike Donohoe to Ames, and Ben Casades to JPL.

I became the coordinator of Spacemobile Programs in early 1964 till June of '65. Then we had the famous Langley Conference, a change in contractor, and many of the "old timers" were not asked to join the new contractor -- basically a changing of the guard.

My life with NASA did not end with the Langley conference. I worked for a couple of more years at NASA Houston exhibits where among other things we gave presentations of the results of Gemini flights at the Center's Open House on

weekends. I also became the on-site Director of the Apollo 11 Fifty State Tour in 1970. Then on to other things.

My days with Spacemobile were unique and rewarding. I like to think that we were major influences to schoolchildren both in the US and in foreign countries. I remember being approached at an airport by a young fellow who asked if I worked for NASA. I said, "at one time," and discovered that I had, indeed, given the demonstration at his school. He said that the talk changed his direction in life -- in a positive way. Made me feel good.