NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT NARRATIVE

DONALD D. BLUME TOLD TO WILLIAM A. LARSEN DALLAS, TEXAS – 21 SEPTEMBER 2002

My father's family settled in the St. Louis (Missouri) area in the mid-1800s, having immigrated from Germany some years earlier. My mother's family was originally English; some of them were early New England settlers. Both of my parents were born in St Louis and were living there when I was born on December 12, 1928. I grew up during the Great Depression and saw the considerable effects of it in our community with banks closing, people losing their jobs, property foreclosures, and the like. In that regard my family was somewhat more fortunate, and I was able to stay in school and not drop out to help my family.

After World War II started, there was major economic growth, and I was able to complete public school at Ben Blewett High School (St. Louis, Missouri) in 1945. I attended two semesters of college at the University of Missouri-Columbia (Columbia, Missouri); then I enlisted and served in the U.S. Army from 1946 until 1948. During most of that period, I was stationed in South Korea and assigned to an engineering group that worked to rebuild the country's economy after WWII by maintaining and operating railroads.

As I recall, there were U.S. contractors who operated the railroads as engineers and conductors, and American GI's overseeing construction and maintenance of trestles, rails, and equipment. The railroads were to be technically compatible with American railway standards. For a while, I was the night manager of a railroad station in the town of Taegu.

Although I was an enlisted soldier, I was in charge of the activities of several others. On one occasion, I was a witness at a court martial involving another GI practicing his "quick draw"

using an Army issue .45. I think that he shot himself in the knee, which had the effect of getting our attention to his situation.

On another occasion, a GI was transferred to my outfit from a wartime prison in Europe. He had been convicted of killing his commanding officer during battle. Apparently, there was some attempt to clean out military prisons in Europe and give former inmates an opportunity to be rehabilitated in the Army. Unfortunately, this person developed a drinking problem in Korea, stole a jeep, and destroyed it in a vehicle accident. Needless to say, I was happy to be freed from responsibility of these two individuals, and most of my work was really quite easy and rather pleasant. Obviously, in the years of the Korean War, a considerable amount of our work was destroyed again.

I returned to college at the University of Missouri-Columbia on the GI Bill in the fall of 1948. My wife, Betty, and I were married in 1949, and our son, James, was born in 1950. I graduated in 1951 with a degree in geography and history, and I also got my teaching certificate although I never had to use it. I started graduate work in Public Administration at St. Louis University (St. Louis, Missouri) and continued later at the University of Colorado (Boulder, Colorado), and at the University of Oklahoma (Norman, Oklahoma).

In 1951, I went to work at the Air Force Aeronautical Chart and Information Center in St. Louis as a cartographic specialist. In 1952, I responded to a civil service announcement for a job as a Federal investigator with the U.S. Civil Service Commission. I was selected and over the years I performed a variety of tasks as an investigator for this Agency. My assignments most often involved doing background investigations for Federal and contract employees needing security clearances, investigating violations of the Hatch Act, resolving employee performance issues, veteran preferences investigations, and postmaster selections. There were probably other types of cases that I worked on too, but I have forgotten many of those details.

One day in mid-1953 (known to the investigators as Black Friday), the St. Louis office of the U.S. Civil Service Commission announced that many investigators had to move on to other agencies or leave Federal employment. They provided virtually no assistance (this was common in this particular office), but finally I located a comparable position in New Mexico and several years later moved to Boulder, Colorado.

Those were great duty stations although there was considerable travel and extensive time away from home. In 1958, the Civil Service Commission again told us that there would be reduction in force and we all needed to find other jobs if we wanted to keep working. I was lucky enough to get a job with the Navy Department assigned to the Bureau of Astronautics in St. Louis as an industrial security officer at the McDonnell Aircraft Corporation aircraft production plant.

I learned a lot about plant physical security there, and also I became involved in evaluating and resolving employee background investigations that had uncovered derogatory information about employees. This meant that I had the authority to approve or disapprove security clearances. My boss at the time, a Navy pilot, was more interested in flying than working at a desk so I had considerable latitude and authority in my job.

It was in this connection that I spent some time with NASA security people. They anticipated that the Agency would soon have a massive hiring program to send men to the Moon and knew that there would be many new people hired who would need security clearances.

Eventually, I was offered the position, as Security Officer for the Space Task Group (STG), the predecessor organization of the Johnson Space Center, located then at the Langley

Research Center in Hampton, Virginia. On my first day of work at Langley, I found that there was to be an Agency-wide security officer's meeting and traveled to Cape Canaveral, Florida. At this meeting I met a number of NASA security folks including Charlie Buckley, the new NASA-Cape Security Officer. He was a former trooper with the Massachusetts Highway Patrol and his boss, Dr. Kurt H. Debus, pretty much let him run the base security program without interference.

While there, I had lunch with Dr. Robert R. Gilruth, my new boss. Although we ate lunch together, this was an opportunity for Gilruth to interview me. Apparently Gilruth felt comfortable with me on his staff, and over the next ten years he never failed to support my analyses and recommendations.

My initial impressions of NASA have always seemed to include the presence of water. Around Langley there were swamps. I recall standing in water while signing a rental agreement there. There were many trips to the Cape to support launches, tests, and meetings. I remember Alan B. Shepard passing me on the wet highway one night. He was driving his Corvette and going quite fast on very wet roads.

As the STG started growing, there was considerable speculation that we would be moving. At the same time, I was being promoted on a regular basis and had opportunities to recruit and hire security personnel. (As I found out, "protecting" the original seven astronauts took a lot of resources. These security men had to be dependable and able to think on their feet. The various hometown parades and national/international tours were other requirements that I had not anticipated).

In September 1961, it was announced that there was going to be a Gemini Program and also that the Manned Spacecraft Center would be opened in Houston, Texas. Most of the STG people in Virginia were to be moving to Texas. This was just a couple of days after Hurricane Carla hit that area hard, and the new complex would be near the Gulf of Mexico and more water. After we arrived in Houston, we lived in an apartment complex on the Gulf Freeway for some months.

During that time, my Security Division was housed at the East End Bank Building--one of about 13 sites NASA leased in Southeast Houston. It was an extraordinary period involving rapid growth of our workforce. My duties included developing physical security requirements for the new work site near Clear Lake, assuring security at each of the rented facilities, and providing continuing support to the Astronaut office now in Houston. At the same time, I had to figure out where my family was going to in live in Houston, which was undergoing change at a tremendous rate.

I recall the July 4th parade in 1962 and working out the security for the astronauts and their families. There was a huge turnout for the parade in downtown Houston, and almost everyone seemed really glad to see us. We were also recruiting more astronauts so I had to design an investigative screening system that the office could use to review the results of background investigations and resolve derogatory information. I believe what I put into place then is still basically in use. It was not perfect though. I recall that one astronaut was selected, and the day he reported for duty at NASA his wife announced that she was divorcing him. He then abruptly resigned from NASA.

By the way, you might be interested in knowing that the U.S. Civil Service Commission now had NASA as a customer. They completed all of our background investigations and worked very closely with us on astronaut investigations. My experience with them in the 1950s was helpful to our office, in terms of organizing the work and making certain that the Civil Service Commission's work was as accurate and useful as possible. I had also hired a number of former Commission investigators to help in personnel security and in other expanding areas of our program.

As construction work started at the Manned Spacecraft Center on the newly named NASA Rd 1, I recruited a former Atomic Energy Commission security specialist to be our onsite security resident throughout the construction period which ended in spring 1964. We knew that we would need things like parking lots, speed limit signs, a locksmith, a permanent security guard force, vaults, badging areas, etc. Some in Congress wanted to have an open site so that our streets would simply be public streets and be an integral part of the community. My experience at Langley also left some room for traffic concerns as most employees there ignored speed limits, stop signs, badging standards, and similar issues. Mostly, engineers felt that they had a better appreciation of what was needed than administrators.

Paul Purser was my liaison with Dr. Gilruth during this period, and there could not have been a better nor more reasonable person with whom I could work. There was quite a debate, for example, about whether the Center should have a fence or simply be left open. This discussion continued until 1965 when we finally fenced the Center and installed permanent guard positions at each of the gates. In the meantime, people, dogs, kids, or anything else that could walk or crawl could find its way on site and completely ignore our guards at the gates.

However, most of these issues eventually found supportive solutions if we were patient enough. Having deer onsite was an ongoing problem, and the state had to make some provisions for culling the numbers. There were predators too. Several deer and other animals were found mauled by a puma, and a couple of our guys spent nights looking for it to scare it away. Apparently they were successful. Also, we had a lot of ducks permanently residing on the Center causing extensive damage to shrubs, attracting many types of animals to prey on them, and making sidewalks somewhat hazardous. They had gotten so comfortable that they stopped migrating. Eventually, although not popular with all employees, the game wardens came out and relocated the ducks to locations outside the Center.

In 1965, the Center underwent a significant reorganization and the Security Division became one of several branches in a new organization called the Management Services Division. Chuck F. Bingman, whom I had known since Langley, was the division chief and I was his deputy. We reported to the Director of Administration, Wesley Hjornevik.

Chuck stayed with the new job about a month and then abruptly transferred to Washington. I was made the new division chief responsible for base security and a whole host of other functions and people about whom I had relatively little knowledge. Some of the people that had been placed into the Management Services Division during the reorganization had been having performance problems for one reason or another. A few tried to instigate other organizational changes where they could gain more management authority than they had in Management Services. It took a little time to sort through these matters but, with support from Center management, I resolved them.

There were so many people being hired by both the Center and its contractors, it should not be surprising that a few employees had encounters with the office due to improperly using or attempting to steal government property. In addition, after the Gemini flights started, people from all over the world would show up at the gates or call. Some, unfortunately, needed psychological or medical help while others were curious about what went on here and wanted to see first hand. In the case of the former group, we were usually successful in finding family or other caregivers to make the necessary arrangements.

Several of our Center managers seemed a little naive about some of these things and could get drawn into extended communications until they would realize their situation and call Security for assistance. For the others, in 1966 the Center's Public Affairs Office provided a kind of open house environment for the public to visit specific facilities for designated areas. For a number of years, there would be as many as 1 million visitors coming in on these self-guided tours. Although they created havoc for our employees in terms of parking, taking all the seats in the cafeteria, etc, we had remarkably few security problems and the program was probably useful in creating public interest in the space program. It also meant that we had to apply extensive security around work areas where classified materials were in use or at the Mission Control Center during simulations and spaceflight missions.

One Friday night in January 1966 we became aware of the Apollo-204 fire involving the deaths of Astronauts Edward H. White, Virgil I. "Gus" Grissom, and Roger B. Chaffee. I was not in town during that weekend but my Security personnel had to deploy to each of the family residences to protect family privacy and assure access for those needing to meet with family members. Just prior to that time, the Center had established a Protocol Office, led by one of my former security agents. This was a particularly difficult period for that group so my security people were often on the front line dealing with the media and the curious public all times of the day and night.

This situation was made a bit more difficult by the experience we had with the local and national media a couple of years earlier when one of the astronauts, Theodore C. Freeman, lost his aircraft and was killed trying to eject free from the crash site near Ellington Field, Houston,

Texas. News reporters, monitoring police radio frequencies, actually got access to Ms. Freeman before any NASA people could get to the house. Also, at the memorial services in Webster, the media had attempted to enter the church, and there was a fairly ugly confrontation between the media and security.

Over the years, the Protocol Office began doing more of the media interfaces. Also, the media and security probably began to understand each other better so that by Apollo 11, for example, the Security Branch could focus on its roles without so many distractions or confrontations.

The return of the Apollo 11 in July 1969 provided my security personnel with another challenge. Before the flight, we asked ourselves, "how should we protect and store lunar samples not in use" and "how could we assure lunar sample security for those samples being worked at investigator laboratories through out the world?" On the former, I was able to locate space in a bunker in San Antonio large enough to hold all lunar samples not in use, provide a nitrogen storage environment, and have the United States Air Force physical security support respond immediately to any security alarms in the bunker. I recall the planning that went into moving the lunar samples from the Center to the San Antonio facility. It involved one of the busiest freeways in Texas. We had the samples boxed in specialized containers on large buses with a large motorcade of security and law enforcement people.

Everything worked very well, but we were criticized by some in the media for our methods and the degree of security used. It was also NASA's desire that researchers all over the world should have access to lunar samples. It was not too long before we realized that some were being lost or stolen.

We designed a set of physical security requirements that required a security plan from all researchers, which we reviewed and also sent people out to check on how well they were being followed. All things considered, the protection of the lunar samples really worked quite well.

Although I have described mostly the security activities, other functions in the Management Services Division in the 1960s through the 1970s included data management for Apollo and Skylab programs, graphics and publications, the Center library, and printing and reproduction. At that time I had a division staff of nearly 150, which was augmented by a contractor workforce of 700 to 800. Part of our security contract included staffing for site safety including the operation of our own fire department. Eventually, we made an agreement with the City of Houston to provide the Center with emergency personnel when fire alarms went off on site.

In exchange, the City of Houston could use our trucks and facilities. This led to a permanent presence in the Clear Lake Area of a Houston fire response capability and made the annexation of Clear Lake developments and the Center by the City of Houston more cost effective for the Center. During the 1970s and into the early 1980s, we were able to make significant equipment changes using reproduction and printing technology enhancements. This does not sound like much today but it had profound effects at the Center. Due to these changes, the Center's personnel can make their own copies or have the printing plant turn around printing/reproduction using in-plant resources.

During the Gemini and Apollo flights we had large typing pools working on 8-hour shifts producing typed copies of the crew to ground communications. Copies of these were in demand by the media, Manned Spacecraft Center analysts, and researchers around the countries. At the time, having such typing pools was rather common in both government and industry. During the 1970s, we had a number of budget reductions as Congressional funding for NASA was cut. We had to make a number of changes in the way we did our work because there were major staffing reductions in many areas. The most important management tasks were to understand and preserve the most critical organizational roles and resources and to evaluate efficiencies based upon technologies enhancements. It was about this time that the first word processors were developed and we were able to take advantage of this technology long before it was common elsewhere in government.

In 1981, I told my boss, Kenneth B. Gilbreath, that I wanted to begin transitioning to a status from which I could easily retire. I moved over to his staff and took on several management projects that included chairing some source evaluation boards to select various companies to do our contract work. This was an area in which I had some prior experience and I was able to organize this process in such a way that it came to be the Center's model by which all source evaluation boards were conducted for many years.

Also, I had the opportunity to observe and support the activities of many of the people I had recruited and mentored over the years and it was gratifying to see them fitting into place and assuming key positions in the Center.

In 1983, I retired from Federal service. Subsequently, after my wife retired from public school system administration, we moved from Houston to San Antonio, and on to Dallas to our present residence.

Aside from my family, many of my most significant memories involved friends, associates, and events connected to operations of NASA and the Johnson Space Center. In particular, the extraordinary period of the entire 1960s had many events that are now part of our

national heritage. Although I still follow what is happening at JSC to some degree, it certainly does not have the same public attention that it had then, but maybe that's the way it should be.