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# **THE HUNTSVILLE HISTORICAL REVIEW**

**Winter-Spring 1996**

Volume 23

No. 1

**PUBLISHED BY**

**The Huntsville-Madison County Historical Society**

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# THE HUNTSVILLE-GERMAN CONNECTION, 1945-1995

## An Introduction

On various occasions during 1995 the people of Huntsville observed the fiftieth anniversary of the Allied victories which brought a successful end to World War II in Europe and Asia. One such observance occurred at the Burritt Museum from September 22 through October 6, during which time the museum featured an exhibit entitled "America and Germany: The Evolution of a Friendship." Put together by members of the staff of the Library of Congress and General Gerd K. Meyer, Commander of the German Armed Forces in the United States and Canada, the exhibit's brochure describes the unfolding of this friendship over the past three hundred years. In the words of General Meyer, who presided over opening ceremonies of the exhibit at Reston, VA before it began to travel to various cities in the United States:

"Most people in Germany and the United States believe that a strong relationship has developed between our nations in the decades following World War II. Whenever I have traveled in the United States, I have always experienced a warm welcome. These observations have been confirmed during the past thirteen months since I assumed the position of Commander of the German Armed Forces in the United States and Canada. A recent opinion poll conducted in Germany also revealed that eighty-one percent of the German public favored maintaining friendly relations with the United States.

"Initially, it might seem difficult to explain such a friendship, especially in view of the two World Wars and the Nazi Holocaust. Therefore, it is important to look at this friendship in its historical context, which began well before the signing of the American Declaration of Independence on July 4, 1776. In fact, the strong relationship between the German people and America began in 1683 with the settlement of Germantown, Pennsylvania. Since that time, Germans have considered America to be the "Promised Land" of unlimited opportunity, religious freedom, and economic prosperity. Throughout the last three centuries, German immigrants were quickly assimilated into American society, and through their diligence and industriousness, they have contributed substantially to the economic, political, and cultural development. In the 1990 United States Census, almost 60 million Americans claimed German ancestry, the largest single ethnic group reported. We will never forget that it was the American people who helped the vanquished German people survive the period after World War II. The Marshall Plan helped Europe, including Germany, to rebuild and to rise out of the ruins of the war. Later, America helped preserve West Berlin's freedom with the Berlin Airlift. It was largely American political support which led to the fall of the Berlin Wall in 1989, and we are fully aware that German Unification would not have been possible without the support and encouragement of the

United States. We, the German people, are deeply indebted to the American people and their political leaders.”

On Thursday, September 21, 1995, the evening before the formal opening of the exhibit in Huntsville, Dr. Ernst Stuhlinger, one of the key scientists on Dr. Wernher von Braun’s team, gave an interesting lecture entitled “German Rocketeers Find a New Home in Huntsville” which tied the “Evolution of a Friendship” to Huntsville during the last fifty years. His paper is one of those published in this issue.

On October 8, 1995, at the Huntsville Depot Roundhouse a forum organized by Alabama’s Constitution Village included Mrs. Ruth von Saurma who spoke on “Growing Up in Huntsville,” a talk which told of her experiences over more than forty years as a German who became a participating citizen in all aspects of Huntsville’s civic and cultural life. Her presentation is the second paper included in this issue of *The Review*.

The third article in this series on the Huntsville-German connection was prepared by Mrs. Ruth G. von Saurma and Mr. Walter Wiesman for the U.S. Space and Rocket Center, and is being included with permission. “The German Rocket Team: Chronology of Events and Accomplishments” traces the evolution of a German scientist’s dream which became a reality in Huntsville, Alabama.

Walter Wiesman, the youngest member of the von Braun team, came to the United States in 1945. As the only non-technical member of the original team, he served the group in many ways as a communicator, a motivator, and developer of procedures in supervision and management training programs at the Operations Office of the Guided Missile Development Division, later to become the Army Ballistic Missile Agency at Redstone Arsenal. In 1962 he transferred to the Marshall Space Flight Center where he continued his work as a communicator until his retirement in 1970.

Since his arrival in Huntsville in 1950, Wiesman has been active in all phases of civic and economic life. Shortly after his arrival, he became president of the Huntsville Junior Chamber of Commerce, and since then he has held leadership positions in the Rotary Club, the National Industrial Communications Council, the National Council for International Visitors, and the Chamber of Commerce.

In reviewing the changes which have taken place in Huntsville and the Tennessee Valley in the last fifty years, it has become evident that the Germans who came to live and work in the area helped to add important new dimensions to the area’s economic and cultural life.

The Editor

## GERMAN ROCKETEERS FIND A NEW HOME IN HUNTSVILLE

Dr. Ernst Stuhlinger

My wife and I are two of about seven million Germans who, during the past three hundred years, left their home country, crossed the Atlantic Ocean, and found a new home in America. And we are two of about 60 million Americans living in this great country today who can trace their descent from German ancestors. The professional backgrounds of those who came to the shores of the American continent cover a wide range, and so do the circumstances under which they began their voyage, as well as the ways in which they built a new existence, but for all of them, the most decisive reason why they came to America was the quest for freedom--freedom from a dictator and from political oppression, freedom from religious persecution and intolerance, freedom from the pressure of overpopulation and its consequences, such as poverty, hunger, epidemics, unemployment, and crowded living spaces. Certainly, there were also secondary reasons, but the overriding motive for Germans who emigrated to America was the desire to live in freedom.

Some of the immigrants achieved great fame. Earlier in the 19th century a German by the name of Eisenhauer settled in the United States; his grandson became supreme commander of the American armed forces during World War II and then President of the United States. Another 19th century immigrant from Bavaria by the name of Levi Strauss secured his place in history and in the hearts of millions of people in a different way; he invented, produced, and sold the all-time best seller in clothes--blue jeans. Rather than enumerate further highlights in the long history of German immigration in America, and present statistics about the flow of travelers from Germany who came here to stay, I would like to reach back into my own history and describe how it happened that my wife and I can be with you today.

While we talk about millions of immigrants who came to this country in search of new homes, we should not forget that each and every one of them, except the small children, had to make a personal decision to leave his or her old country. All of them had to part with relatives and friends, with a country whose language they understood and spoke, and whose thousand-year-old history was the background for their own histories. Immigration statistics alone do not tell of any of those innumerable thoughts, rational and emotional, which roam through the minds of those who are about to migrate.

In my own life, dreaming about traveling to another country began very early. For years, it was Africa or America--Africa because of its fabulous wild animals, America because of the unlimited opportunities available to those who were ready

to accept them. When I was a schoolboy during the late 1920s, my friends and I avidly read books about America. Most of them were adventure books; they told of the Indians, of the early settlers in the wild western territories and the various gold rushes; they told of the great railroad projects that won the west, of Henry Ford's fantastic success with the automobile, of the endless wheat fields in the midwestern plains, the cotton pickers in the south, the big cities and the enormous skyscrapers. One of our teachers had gone to America as a young man; he began as a dishwasher in New York, bought an old jalopy, and traveled to the west coast. Whenever we schoolboys did our work to his satisfaction, he told us of America, of its unlimited spaces and endless highways, of the heartwarming friendliness and hospitality of its people, of the fairy tale landscapes in the Yellowstone Park with Old Faithful, the bears, and the buffalo, the Painted Desert with its petrified tree trunks, the gigantic cacti in Arizona and the magnificent Pacific coastline, and he planted in us a seed of love for this marvelous country. After four years in America, he returned to Germany, went to the university and became a high school teacher, but whenever he began to talk about America, a happy smile lit up his face.

After my school years I first had to learn a profession. Then, I thought, would be the time to make further plans. When I was 25, World War II broke out and put an end to all personal planning. After a short time, Germany was at war with almost all of its neighbors on the continent.

I remember the day in December 1941 when Japan attacked the American fleet at Pearl Harbor, resulting in the United States' entry into the war. For many, perhaps most people in Germany at that time, and during the rest of the war, the attitude toward America was different from the attitude toward all other members of the Allied Forces. The constant flow of emigrants from Germany to the United States during the previous 300 years, the large number of relatives and friends which German citizens had in America, the familiarity of many Germans with customs and events and even with cities and landscapes in the United States, and the total absence of any mutual territorial claims between the two nations, simply did not leave much room for hostile feelings. This situation could not be changed much in Germany by the government's very negative war propaganda against the United States, nor was it even much influenced by the heavy air raids by American bombers on German cities.

During the late 1920s a young boy named Wernher von Braun lived in Berlin; he built and launched an unending sequence of rockets, some soaring straight up, some propelling rocket cars, and some exploding upon ignition. He also began writing articles for his school newspaper about rockets to the moon and to Mars.

When he was 14 years old, he decided that he would devote his life's work to the opening of the heavens for human travel. At 18 he joined and was soon made

director of the Society for Space Travel in Berlin. In 1932, the year before Hitler came to power, the German Army offered von Braun a contract to help army ordnance develop a rocket as a weapon of defense. This program led to the establishment of the rocket development center at Peenemuende on the Baltic Sea where the A-4, later called V-2, was developed. In 1943, the SS under Heinrich Himmler assumed control over production and deployment of the still unfinished rocket. Against the recommendations and the attempts at resistance of von Braun and his commanding general, Walter Dornberger, V-2 rockets were first launched against Paris and London on September 8, 1944.

Even before the end of the war, the Allies had knowledge of the work going on at Peenemuende. Several air raids were undertaken against Peenemuende by British and American bomber fleets. When the war in Germany came to an end, special task forces, under the leadership of Colonel (later General) Holger Toftoy, established contact with von Braun and many members of his Peenemuende team. General Eisenhower made a strong recommendation to his government to bring von Braun and a number of his co-workers to the United States in order to secure their expertise for American industry and the American armed forces, and also to assure that they would not fall into Russian hands. President Truman agreed with the proposal, and thus began the largest postwar technology transfer in human history.

The American government and the U.S. Army simply invited von Braun and a small number of his co-workers to come to America to continue their rocket development work under the auspices of Army Ordnance, leaving it up to the individuals whether they wished to accept or reject the offer. The Soviet authorities, eager to acquire rocket experience and know-how, proceeded in a different way to reach their goal. They first established a rocket research institute, named Institut Rabe, in Bleicherode in the Harz Mountains. Enticed by good salaries and plenty of food--rarities in war-torn Germany at that time--many of the former Peenemuende employees and other engineers and scientists joined the institute and worked on rocket research and development. One evening in October, 1946, the Russians threw a big party for all the employees with "plenty of vodka" as one of the scientists later described. At four o'clock the next morning, Soviet soldiers appeared at the apartments of the sleepy Germans, loaded the engineers and scientists and their families and some furniture on trucks, took them to the nearby railroad station, and shipped them off to Soviet Russia, brushing aside all complaints that this kidnapping violated their contractual rights. During the same night, similar kidnappings took place in Berlin, Jena, and other German cities. In total, about 5,000 German citizens were abducted and transported to Russia during that night. The German "rocket slaves" as they called themselves were stationed in isolation on a lonely island, Gorodomlija, north of Moscow, where they had to carry out development work on rocket components. Seven years later, they were allowed to return to their native Germany.

How different was the fate of von Braun and his 126 co-workers who were invited by the U.S. government to continue their work in the United States! The story of how first contacts were made between the advancing American troops and a small group of Peenemuenders, including von Braun, in an alpine resort where they had been held virtually captive by the SS, has been told numerous times. Interrogations by American technical experts followed, which soon resulted in concrete plans to find and contact other Peenemuenders who during the final chaotic phases of the war had been spread all over the country. The government granted to Colonel Toftoy for his "Project Fireball" permission for 126 individuals to be extended invitations and to prepare for their transport to the United States.

My own experience in this sequence of events was quite typical. It reflects many of those human and personal aspects that governed our thoughts when we suddenly faced the possibility of emigrating to America, leaving all the misery and hopelessness behind, and working in a peaceful environment and without the pressure of a violent dictatorship on the development of powerful precision rockets that one day might enable men and women to travel to their neighbors in space. However, we would also face the necessity to leave our relatives and friends and our country at a time of utter distress when it was so obvious that almost everything that makes up a normal nation had to be rebuilt; production and distribution of food, apartments and houses, streets, cities, bridges, railroads, a postal system, legal authorities, educational institutions, welfare organizations, hospitals, health care systems, a functioning government, a stable economy, relations with neighbor governments, and with other nations. Most important, perhaps, would be the need for Germany to find its way back into the community of respected nations and to heal the wounds that Germany's Nazi government had left all over the world.

In that situation, would it be right to leave Germany and to start working for a nation with which Germany had been at war only recently? Like many of my colleagues at Peenemuende, I had been moved with my laboratory to a place in the middle of the country late in 1944 when Russian forces began to proceed toward North Germany and Peenemuende. The place where I stayed, Stadtilm in Thuringia, was overrun by American forces in May 1945. Even with the first tanks, some civilians arrived who knew my name and whereabouts from earlier contacts with Peenemuende groups in Frankfort on Main. I was told to stay in that little town until I received further directives from American officers. In June, I was told to move toward the west. Although no reason was given, I knew why I had to move; that part of Germany had been assigned to Russian occupation forces. So I moved to Tuebingen in Germany's southwest, then under French occupation, a city where my parents lived, and where I had studied at the university. I even found employment at my alma mater as a research associate in

the Physics Department, and prepared for an academic future when, in October 1945, an American officer arrived and offered me a contract to come to America to work with von Braun and other colleagues on rocket projects. I asked for a week's time to think it over, which the officer immediately granted.

A week of intense thinking began, mixed with many talks with my parents, friends, relatives, and colleagues at the university, and all the aspects of emigrating under those special circumstances were considered and discussed. Would it be right to leave the country at this time? Would we rather be needed at home, where the gigantic task of reconstruction was waiting for every able-bodied young man? Could we hope that our move to America, and our willingness to live and work with our former enemies might help build a bridge, however tenuous at first, from people to people, and convince our American colleagues that not every German was an ardent Nazi? Could we hope that Americans would accept us as co-workers and take us at face value, in spite of all the war propaganda that had painted a very different picture of Germans? Could we hope that we would work as colleagues in a joint program of developing modern rockets and promoting space flight? Could those of us who had families be joined by their wives and children soon? Could we hope to be permitted to send gift packages to our loved ones at home where hunger and deprivation were still rampant? There were questions with no end.

Emigrating to any other country on the globe would have been a different prospect for us young German scientists and engineers in 1945. To go to America did not simply mean a change of country, or a switch in loyalty. Compared with European nations, America was a young nation, a land in which the idea of freedom, together with the striving for progress and for equal rights for everyone had moved closer to reality than everywhere else. In this process of making democratic ideals work, a nation of remarkable economic strength and political stability had come into existence. The powerful flow of German emigrants to America during the past 300 years has certainly contributed its share to this development. Emigration of young German engineers and scientists to America after World War II would not merely be a move into another country; it would be a step in a natural demographic evolution, an expansion from one nation into another one to which that nation had been related for 300 years by strong ties of kinship in body and mind. When the American officer returned to my home in Tuebingen in October 1945, I happily accepted his invitation and signed up for the voyage across the Atlantic.

Von Braun and a handful of his co-workers were transported to the United States by airplane in September 1945. The rest of his team arrived between late 1945 and the summer of 1946 by military ships. The group was given a home in the barracks of a former Army hospital annex at Fort Bliss on the outskirts of El Paso, Texas

In many respects our situation was unusual. We had entered the country without passports or visas, but with the knowledge and approval of the President. Called officially "Project Paperclip" in Washington, we had no legal status; we were not permitted to move freely outside our camp. For lack of a better designation, we called ourselves PoPs, Prisoners of Peace. Once every week, groups of four of us, each group escorted by a sergeant, were allowed to go shopping in El Paso, to have dinner in a restaurant, to see a movie, and to return to the barracks. Those of us who had learned English at school taught those who had not, with the result that a made-in-Germany accent prevailed in the English of the Paperclippers for the rest of their lives.

Our commander, Major Hamill, saw himself confronted with a difficult task. Years later, he told us during an old-timers' reunion, "Throughout my military career, I had been taught that a soldier has to out-smart, out-wit, out-trick, and out-fox the enemy at every opportunity. The Germans had been our bitter enemies for years while I received my military training. Now, I suddenly found myself surrounded by 127 Germans for whose well-being I was responsible. None of my military books told me how to tackle and resolve the many conflicting situations that arose during those years at Fort Bliss. Looking back, I'm happy and proud that we made it! Considering all the wonderful things that came out of those rough beginnings in Texas, I feel privileged that I had been chosen to be your commander!"

Our main task in Fort Bliss and nearby White Sands was to help put together and launch several dozen V-2 rockets whose parts had been shipped to the United States from Germany after the war. All of these rocket flights carried scientific instruments to study the high atmosphere and the space beyond; over a total time span of almost seven years, between 1945 and 1952, they provided a rich harvest of new knowledge of the upper atmosphere, the ionosphere, the earth's magnetic field, cosmic rays, and ultraviolet and X-rays from the sun. We had expected that we would be asked to design and build, on the basis of our Peenemuende experience, advanced and new rockets for further exploration of space beyond the atmosphere, and possibly also as weapons for defense. However, the official thinking at that time was that no military conflicts were to be expected in the future that would require military rockets, and nobody--except some forward-looking scientists at Fort Bliss and at a few other scientific installations--thought of rockets for space exploration at that time. So, no development project was assigned to the Paperclip specialists at Fort Bliss. We spent most of our time indulging in self-chosen studies of future rocket and space flight projects. Contacts with American citizens were almost non-existent, but about one year after the last members of the team had arrived at Fort Bliss, the families of the married men were brought over from Germany. We were allowed to buy second-hand cars and to travel in the vicinity of El Paso and later even to more distant

places, and we began to see and to appreciate the beauty of this land with its endless, colorful prairies, its majestic mountain ranges, and its unbelievably blue skies that seemed to extend right into infinity. However, we still had almost no contact with the people of America.

That situation changed almost abruptly in the fall of 1949; dark clouds began to form over the skies of Korea, with two immediate consequences. First, the Beaumont Army Hospital in Fort Bliss, in need of its annex for expected war casualties, asked the Paperclippers to vacate the barracks and look for another home. Second, the Army saw an urgent need for a ballistic rocket missile, and asked the former Peenemuenders to develop a missile similar to the V-2 as quickly as possible. Colonel Toftoy found a new home for "his rocket people" on the grounds of a former arsenal in Huntsville, Alabama, later to be called Redstone Arsenal. The group moved to Alabama during the summer of 1950. By that time, we had been joined by American civilian and military employees for a total strength of about 400. Immediately after the group's arrival, work on the new guided missile project, the Redstone short-range rocket, began.

The move to Huntsville was certainly the most significant event in the history of the German rocket team. First, it was definite proof that the American government intended to keep the team here and to assign important development projects to it. Second, the members of the team had become Civil Service employees of the government. Third, we were free to move around, to rent or buy houses, to join churches and civic organizations, to attend scientific congresses, to send our children to public schools, and even to start the lengthy procedures to become legal immigrants, to acquire "first papers" and eventually to become real citizens of the United States of America. It was a great feeling for us to really belong now to this country which we had come to respect and to love as a second home. This would certainly not mean that we would forget our first home with which we would remain connected through many visible and invisible ties, but the United States would now be our place to live and work; this would be the land and the people to whom we wanted to offer our loyalty as good citizens, just as millions of Germans had done before us.

It did not take us long to realize that Huntsville was indeed a wonderful new home for us. With almost every step, we were reminded of the lovely southern way of life about which we had read in books such as *Gone With the Wind*, the spontaneous hospitality and heart-warming friendliness of the southerners. Our neighbors called us by our first names and were eager to help wherever they could; there were no fences or walls between the houses; initial reservations that sometimes could be felt always changed quickly into curiosity and then into genuine interest and sincere friendship. There are some precious anecdotes typical of our early beginnings in the Deep South that will forever stick in our memories. One of Huntsville's prominent citizens, Wilson Smith, tells the story

how, as a young boy in 1950 he one day watched a moving van being unloaded in front of an empty house on his street. He ran back to his father and told him that a bunch of new people are moving into that house. "They look strange," he said, "and they speak a funny language. I believe they are Germans." "Uh, oh," father replied, "here goes our neighborhood to the dogs!" After a while the newcomers came over to say hello. "Hi," the man began, "my name is Wernher von Braun and this is my wife Maria. We are your new neighbors!" From that moment on, they were friends. Young Wilson became the playmate of young Iris von Braun. Years later Wilson married the daughter of another German newcomer, Heide Segewitz--"the best thing I ever did in my life," Wilson always adds when he tells the story.

Shortly after we had settled in Huntsville, some of us were invited to an evening lecture about the history of Huntsville, to be given by a young history professor at the Huntsville Extension of the University of Alabama, Miss Frances Roberts. After her talk, which dealt mainly with the dramatic events of the Civil War, one of the listeners asked: "How do you expect the City of Huntsville will accept and absorb this influx of rocket people from Texas?" After a little pause and a deep sigh, Miss Roberts answered, "Well, ninety years ago our city survived that invasion of Yankees from the north; we may hope that it will also survive the present invasion of rocketeers from the west." About 40 years later, after Huntsville's population had grown from 14,000 to about 170,000; after the little university extension had burgeoned into a fully autonomous university; and after Dr. Roberts, now a highly honored Professor Emerita, had become the most respected person ever connected with this university, the lady was asked how she feels now about that "invasion of rocketeers from the west." "Our city," she replied, "has grown in steps. By far the most decisive step came when von Braun and his crew moved here from Texas in 1950. Just everything began to grow in leaps and bounds! The population, stores, housing projects, schools, churches, streets, the cultural life, the symphony orchestra, the wealth of the city, and of course, our university. It was just marvelous!"

Among the first contacts von Braun made after his arrival in Huntsville were visits with the Mayor, with the Chamber of Commerce, and with industrial leaders. Painting a very positive picture of the fast growth of Huntsville as a consequence of the obvious interest of the Armed Forces and the U.S. government in rocketry, and also in the potential future development of space flight and space exploration, he tried to encourage Huntsville business leaders to make aggressive plans for broad economic growth of their city. In particular, he pleaded for opportunities for advanced education. Dr. Roberts remembered his untiring efforts during an interview in 1988. "Von Braun really understood academic needs," she said. "He knew how important a rounded education is, a proper balance between science, humanistic subjects, and technical courses. He could formulate his thoughts so beautifully, and he talked so that everybody

would follow him and believe what he said." Von Braun's efforts toward the establishment of an autonomous university in Huntsville bore its first tangible fruit after he had given a speech to the state legislature in Montgomery in 1961 where he asked for, and promptly received, the amount of three million dollars for an academic research institute attached to the university extension. Eight years later, Huntsville had its own full-size, autonomous university.

While the city of Huntsville grew and expanded in every sense of the word—in population, industrial productivity, economic strength, cultural activities, educational opportunities, health care facilities, and links to other important centers in the country and in the world, so did the families of the scientists and engineers who had arrived here in 1950. Some of us, including me, had come to the United States as bachelors. On my way from El Paso to Huntsville in the spring of 1950, I took a detour through Stuttgart in southern Germany where I knew of a young lady who was living there. She bravely agreed to take the big step across the Atlantic with me, so Huntsville became the place where our married life began. Our three children were born and raised here. They are now living far away from their home town, but all three come here to visit several times each year.

One of the early personal needs many of us felt after our arrival in Huntsville was the acquisition of a house. Our salaries were modest, and none of us had any assets when we arrived in the United States. The bank in Huntsville, headed by Mr. Spragins, was willing to give us loans so that we could obtain larger FHA loans. However, as a careful and prudent banker, he wanted to be sure that each of us had a bank account of at least \$5,000, a sum that was several times higher than even the richest among us could show. Being used to solving problems that involved the manipulation of large numbers, we quickly thought of a way out of this dilemma. Several of us pooled our possessions together, and as soon as the magic sum of \$5,000 had been reached, one of us put it in his bank account, showed it to Mr. Spragins, received his approval of the FHA loan, and began building his house. Then he took the \$5,000 from his account, gave it to the next colleague in line who was soon able to begin building his house. In this fashion, a considerable number of us newcomers were in the fortunate position of owning a house at a relatively early time. Years later, we began telling Mr. Spragins what we had done. He quickly interrupted and said, "Fellows, do you really think I did not know what you were doing? But I trusted you. During my long banking career, I had no client whom I would have trusted more than I trusted you!" His words made us really proud.

From 1950 until 1960 the von Braun team remained under Army control as part of the U.S. military establishment. During that time, the number of team members grew to more than 4000 men and women, not counting the large

number of contractor employees who worked with us. The Redstone, Jupiter, and Pershing missiles were developed and built; the first satellite of the free world, Explorer I, and the first probe to the close vicinity of the moon, Pioneer 4, were launched in cooperation with the Jet Propulsion Laboratory; the first American astronaut in space, Alan Shepard, was carried through a ballistic trajectory by a modified Redstone rocket. In 1960, President Eisenhower decided that the Army's rocket development group, headed by von Braun, should be transferred to the newly created National Aeronautics and Space Administration. The group would continue to occupy its offices, laboratories, test stands, and workshops in Huntsville, but it would report to the NASA Administrator in Washington under the name of George C. Marshall Space Flight Center in Huntsville. We felt deeply honored and gratified by having our Center named in memory of General Marshall. After a brilliant career as a military leader, he became Secretary of State after the war. He created the Marshall Plan which was so decisive in breaking down the wall of hatred that still existed at that time between nations. No other person had done as much as General Marshall to help the European nations, including Germany, find their way back to normal existence after the terrible ravages of war. President Eisenhower, in his address at the dedication of Huntsville's Marshall Center, said, "He was a man of war, yet a builder of peace." General Marshall was the only professional soldier ever to receive the Nobel Peace Prize.

The first project the von Braun group began developing after its transfer to NASA was the family of Saturn rockets. Saturn V, the largest of the Saturn series, was to launch the 18 American astronauts on their six Apollo missions landing on the moon between 1969 and 1972. Wernher von Braun left Huntsville and joined NASA Headquarters in Washington early in 1970. In 1972, he terminated his work at NASA and joined Fairchild Industries as Vice President for Engineering. His life ended in June 1977. On many occasions, he had said, "The happiest years of my life were spent in Huntsville." Many of his team members would gladly share that statement.

## GROWING UP IN HUNTSVILLE

Mrs. Ruth von Saurma

Of course, most of you can tell by my accent that I really did not grow up in Huntsville in a literal sense. But in a broader sense, I did some growing up after coming here, and so did our fair city during the past decades.

Never did I dream in January 1954 when I arrived here together with my late husband and our 8-year-old daughter after having spent a few months in New York, that I would still be here more than 40 years later. In fact, my husband had to promise me the very first day after our arrival that we would not stay here for good. I was a big city girl--born in Frankfurt, Germany, had spent most of my school and college years in Berlin, and afterwards worked in the French subsidiary of a German company in Paris. For me, Huntsville was awfully small. I remember that the Russel Erskine always served a good lunch and dinner. But what else was there? I was not much impressed by Steadman's Barbecue on Jordan Lane nor the little place called Fox Restaurant on Governors Drive. And even the enticing sounding Hospitality House on Marsheutz Avenue was not a place to spend an evening out with some wine or beer as you often do in the popular restaurants and pubs in Europe.

But Huntsville at that time had one great attraction both for my husband and me, and that was the fascinating and charismatic personality of Wernher von Braun and the low key unassuming demeanor of his charming young wife. Wernher von Braun's enthusiasm about being involved in new fields of technology and his vision of flight beyond the confines of the atmosphere was most intriguing. My husband, a war-time German Air Force officer, had met von Braun once or twice in Germany, but had never worked with him.

While in New York in November 1953, Wernher and Maria von Braun invited us to dinner at the St. Regis Hotel and we spent a delightful evening together. Wernher had just done his first television program about a large space station. His TV talk was based on the series of articles published at that time by *Collier's* magazine. The interview had gone well, and we celebrated his first national TV appearance. The morning after our dinner, a brilliant, sunny, late-fall day, we rode with them along the scenic Hudson River to West Point and toured some of its impressive facilities. After discussing von Braun's suggestion to come to Huntsville, both my husband and I thought if the von Brauns feel comfortable in Huntsville and reasonable chances for ongoing development of rockets and possibly future space activities exist, why should not we be able to live in Huntsville and for my husband to join the von Braun team. Thus, in due time, arrangements were made for my husband to accept employment with the Development Operations Division of the Army at Redstone Arsenal.

We took off from New York in January 1954 on what was for me a trip into the unknown. It is a rather unsettling feeling to be in a new place in a foreign country. Of course, what helped tremendously during the first years of our stay in Huntsville was the presence of the large group of German scientists and specialists and their young families. They willingly shared with us their experiences, and many of them, over the years, became close and dear friends. As most of you know, the von Braun group had already settled in Huntsville in 1950. The initial shock that Huntsvillians undoubtedly had about having move into their fair city a group of foreign rocketeers who had even been on the enemy side during World War II--this initial shock had already subsided. It seemed that in general Huntsvillians were glad to see new life at Redstone Arsenal. And after all, in spite of their funny accent, those newcomers were a well educated, professional group, had a regular government job and a regular income. In fact, not even once did I hear a word of distrust or animosity from any of the Huntsvillians whom I met.

On the contrary, I was absolutely stunned by the kindness and generosity of our American neighbors and my husband's military and civilian colleagues at Redstone. I could not possibly quote all the names of those in our first months in a small rental house on Monte Sano Boulevard or in the State Park cabin who helped us to adjust to our new life. It was a most unexpected, but very reassuring, feeling to discover so many signs of southern friendliness, civility, and hospitality. As a newcomer being invited into a neighbor's home, finding in your mailbox a beautiful bundle of daffodils with a kind note from a neighbor across the street, or having another neighbor let you use his second car while yours was in the shop--these were all unexpected, generous and touching experiences for someone who had grown up in a large city in Germany where you may even avoid contacts with your neighbors.

As refugees from the eastern part of Germany, we had experienced rather dismal housing conditions in war-torn and overcrowded West Germany. Thus it was truly exciting for us to be in a country as vast as the United States, and even to be able to make plans to build our own house. Before we decided on a lot on Panorama Drive near the old summer home of Buster and Carolyn Bell, we made the acquaintance of Sam Thompson. He was a long-time mountain resident and had a good amount of real estate on Monte Sano for sale. We went to see him late one afternoon and he led us first to his back porch where we had a beautiful view of the city with the sun setting. But the inside of the house was not very spectacular. Sam was a widower, and the place looked somewhat dusty and neglected. But it was from Sam Thompson that I got my first job offer. He suggested that we move in with him and that I become the housekeeper in return for free lodging. I guess Sam expected every woman from Germany to be a good "housfrau." I was glad that my husband started to laugh heartily and declined the offer.

I had considerably more luck with my second job offer. It was from a pool company in Florence. They wanted an illustrated German book on swimming pools translated into English. I was glad to work on that project, and happily spent some of my first self-earned money in the United States on a smart cashmere and silk 3-piece outfit from Harold Pizitz at Parkway City.

After buying the property on Panorama Drive, we found out that we had to overcome two hurdles before we could start having a house built. First we had to come up with credit references. Having paid cash in New York for our shiny black Pontiac convertible, and always having paid cash for anything we bought, our only credit reference was our monthly payment of rent. We were advised to open some charge accounts with local stores. On a Saturday morning we went to Dunnivant's Department Store downtown and made our first major purchase in Huntsville--a new light-weight Palm Beach suit for my husband. We paid for it in installments, establishing a good credit reference. The second hurdle was the need for an adequate cash balance in our checking account. Ernst Stuhlinger recounted the story of how several German friends pooled some of their money and deposited it into the account of the person who was in the process of applying for a loan. We took advantage of a similar procedure and in due time obtained an FHA loan at 5-1/2 % for 20 years. It was marvelous to see the foundation laid and the house being built. We moved in two days before Thanksgiving 1954; my parents from Germany came for Christmas and were somewhat relieved to see us settled.

Monte Sano was a sort of refuge at that time for hardy individuals, especially in the winter. Snow chains came in handy; there were no street lights, very few paved roads, a private water co-op with a flimsy water tower, not to mention the water pump that periodically conked out. And, of course, a winding two-lane Highway 431. If you had a truck in front of you while driving up the mountain, you really needed patience. There was hardly a stretch where you could safely pass a slow-moving truck. The late Dr. Burritt occasionally came down from his Roundtop Mountain on his private, narrow and winding dirt road in his roadster. The car had the steering wheel on the right, so that on a foggy day or night he could safely see the steep slope or the ledges of rock on his right side. His groundskeeper, who had a cottage next to the Burritt Mansion, was a jack-of-all-trades. We had to call him whenever our private water system was on the blink. But the summer days and nights were always pleasant on the mountain, in spite of snakes and an overabundance of strange bugs. And there was no need to lock your house. You could leave a message for the milkman on your refrigerator door. And when the laundryman came and you were not at home, he would pick up or leave your laundry on the back porch and you paid him later. Of course, with changing times and the spectacular growth of Huntsville, those easy days are long past, even on Monte Sano. But it is still beautiful to look down from the mountain top on the valley or take a hike on the winding trails of the Huntsville

Land Trust. Dr. Burritt's house which he willed to the city upon his death became Huntsville's first museum. With the addition of a historical park with restored farmsteads from the 19th century, the Burritt Museum and Park have become a popular educational facility and tourist spot.

I have always considered myself most fortunate that I had so many opportunities to get to know a great number of interesting, intellectually stimulating, warmhearted and charming southerners and newcomers from other regions, and to develop lasting friendships which have greatly enriched my life. Of course it took a while before we came to know and understand some of the prevailing customs, traditions, and viewpoints, and also some of the oddities of Alabama politics. I still see before me the huge signs announcing big kissing Jim Folsom, the next governor of the state. It certainly was news to me that those qualities were requisites for political success.

It was also fascinating to notice the remarkable civic engagement of Americans and to be exposed to Huntsville's community spirit. There is much more personal engagement in civic affairs in American cities than I had ever seen in the more rigidly administered German towns. The first major event through which I became aware of this civic engagement was the celebration arranged by the Rotary Club in 1955, when Dr. von Braun and many of his German team members and their families became U.S. citizens. Their oath of citizenship was delivered in the Huntsville High School auditorium before a federal judge from Birmingham. Mayor Searcy, community leaders, and representatives of the Army heartily welcomed the new citizens. In the evening, they were invited to the homes of Rotarians who took them to a festive dinner in the ballroom of the Russel Erskine Hotel.

Also at Huntsville High School auditorium we got our first introduction to Huntsville's musical talents. They had joined forces with members of the German group to form a symphony orchestra. While the performances and venue did not quite measure up to what we had enjoyed earlier in other concert halls, we were impressed by the voluntary efforts, talents, and dedication that produced these concerts. And how marvelously has the Huntsville Symphony progressed from those early beginnings. Today, again through the untiring efforts of civic-minded and far-sighted individuals and civic leaders, we have a wonderful concert hall and can enjoy a highly professional orchestra led by a conductor of international stature. Permit me to mention that the Executive Director of the Alabama State Council of the Arts recently called our orchestra "the jewel in the crown of Alabama." Please forgive me for putting in this plug for our symphony. I am on the board of directors, and we need all the support we can get to continue on the same level of excellence.

One thing that makes integration into a different society easy, other than being engaged in joint professional or business activities, is the sharing of a hobby. My husband was a very enthusiastic private pilot who had taught himself how to fly on the grounds and fields at home. Soon he met several local pilots, and six of them pooled their money and purchased a small Cessna. From that day on, I spent a good many hours on the old Huntsville Airport. With von Braun and other enthusiastic pilots, we occasionally took off for Nashville, the Gulf Coast, or Callaway Gardens. In due time, both Maria von Braun and I learned how to pilot one of those flying machines. When we were ready for our first solo flights, the late Russ Kyle, general aviation manager, alerted us to an old custom. Whenever a man soloed, a piece of his tie would be cut off and put on display in the office with his name and the date of his solo flight. For us, it would have to be a piece of our petticoats. Being thrifty, Maria suggested not to ruin two pretty petticoats. She would simply bring two pieces of her petticoat along, and for a good while those two pieces with eyelet trim and our names hung in the general aviation office.

Talking about the old Huntsville Airport brings back another memory from the early sixties. A very dear young friend of mine and I were to depart for a trip through South America that the late Congressman Armistead Selden had arranged. He was at that time Chairman of the Inter-American Committee of the House of Representatives. One of the many beaux of my young friend came to the airport to see us off, and brought for each of us a beautiful orchid corsage. We were standing on the tarmac for a good while, chatting with him, when eventually the flight steward of Southern Airways approached us politely and said, "When the ladies are ready, we are ready for take-off." Never again in my life did I have such a charming call for boarding. It was great having the old Huntsville Airport nearby, but I am really glad that some far-sighted and capable individuals convinced our city leaders early enough to have a large jetplex built with the most modern facilities for intermodal transport. It certainly has been a boon to the city's economy.

Becoming myself a member of the von Braun team greatly expanded the scope of my daily activities and experiences. Without remuneration I had from time to time done some translations for Dr. von Braun and prepared some foreign language replies. Little by little, I became acquainted with the basic elements of rocketry and its new jargon, and Dr. von Braun's vision of launching man into space. After Explorer I was launched January 31, 1958, an overwhelming number of foreign congratulatory telegrams, inquiries, and interview requests arrived. It was then that I got my third job offer, a civil service position as translator. I gladly accepted an initial temporary assignment and started off with the most enjoyable job of acknowledging stacks of congratulatory messages. With the establishment of the Marshall Space Flight Center in 1960, I was transferred to the new agency as International Relations Specialist, and became a member of

the Public Affairs Office. For a time I also served on the Center's executive staff. It was a grand experience and a great challenge, but also loads of fun to work with von Braun and his staff and the dedicated, efficient, and hard-working Marshall Center team. We had a great group of professionals in our Public Affairs Office. I learned a tremendous amount by working with them and am much indebted to them for their help and support. One of them once gave me a hilarious introduction. He said, "This is Ruth von Saurma, our local Henry Kissinger. She speaks with a German accent and deals in international affairs." And I still have the highest admiration for all the individuals who served at the Center and their truly remarkable achievement that put man into space and on the moon. I think of them with deep gratitude for the marvelous support that I received from them in my rather diverse activities.

Some of these activities also put me in touch with a great group of local citizens. In the early sixties we had a planeload of distinguished French and Belgian visitors arrived. *Paris Match*, the leading French illustrated magazine, wanted its crew of journalists and photographers to get an in-depth view of the preparations for a lunar landing. The magazine had chartered a jet and invited top aviation aces and civic and business representatives to accompany their newsmen. The group came to Huntsville to be briefed by Dr. von Braun and to tour some of our laboratories. None of this was out of the ordinary. We did plenty of visitor programs. But this French group would have to spend the night at the Albert Pick Motel on North Memorial Parkway. Huntsville at that time was still a dry town, no wine or liquor served in any of the restaurants. I simply could not envision letting our visitors sit in the dry Albert Pick for the entire evening. I got on the telephone to several well-known Huntsvillians and they kindly agreed to entertain some of the visitors. We arranged for cocktails in six open houses and had buses take the visitors to their hosts and back to the hotel. Our efforts paid off well. All visitors raved about Southern hospitality and *Paris Match* came up with a glowing report, not only on rocketry and space flight, but also on southern graciousness and hospitality.

The highlights of my NASA activities were undoubtedly during the glory days of Apollo and the launch of the first men to the moon. But even after Dr. von Braun's departure from Huntsville and the end of that era, the Center's activities remained and the ground was prepared for future international cooperative ventures.

Step by step also Huntsville progressed and moved towards being a more diversified and more cosmopolitan city. In fact today more than one hundred different nationalities or ethnic groups are represented in Huntsville as their members live, work, or study here.

While my daughter and her family live comfortably in Munich, I am truly enjoying my life, friends, and activities in Huntsville. It has been a great pleasure being involved in a very minor way in some of the efforts that made Huntsville grow. With the talents and drive of civic-minded individuals, I trust the coming years will see further progress in many areas of our fair city. But I also hope that Huntsville will always maintain a good measure of the charm and friendliness of a true southern town that I had the privilege of discovering when I arrived more than 40 years ago.

THE GERMAN ROCKET TEAM  
A Chronology of Events and Accomplishments

by Ruth G. von Saurma and Walter Wiesman

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The U.S. Space and Rocket Center in Huntsville, Alabama, has been entrusted with the preservation of the archives of Dr. Wernher von Braun, the late rocket and space pioneer. This extensive collection has been enriched in recent years by donations of documents and memorabilia from other prominent professionals in this field. The archives have become one of the prime information sources covering more than 60 years of rocket, missile, and space history.

The Center receives numerous inquiries related to Wernher von Braun and his former colleagues, frequently referred to as the "Peenemuende Team," or the "German Rocket Team," whose dreams of sending rockets and satellites, and eventually men and women into space, came true in the United States. As part of the effort to satisfy such calls and letters, we have compiled a summary of events and accomplishments considered to be significant in the professional and personal life of this group.

This summary is limited to highlights and does not represent a complete listing of all rocket and space "firsts" achieved by the team and its thousands of U.S.-born colleagues whose capabilities and dedication have been a decisive factor. The reader should also note that this is not a history of U.S. Army rockets and missiles or of the NASA Marshall Space Flight Center. Neither does this summary cover the contributions made to missile and space efforts by the U.S. Air Force, Navy, other NASA centers, research institutes, universities, private industry, and outstanding individuals such as the late Dr. Robert H. Goddard.

Wernher von Braun's life was dedicated to expanding man's knowledge through the exploration of space. He became America's Man of the Year in 1958 when his Army missile team adapted a Jupiter-C rocket to orbit Explorer I, the western world's first Earth artificial satellite. Just a decade later, his childhood dream of manned spaceflight was fulfilled when giant Saturn rockets, developed under his direction at NASA's Marshall Space Flight Center, boosted the manned Apollo spacecraft to the Moon. Later, other Saturns were employed to orbit the Skylab space station and to send shuttle crews to service it and conduct dozens of experiments.

The preliminary studies for a reusable launch vehicle in which he and his Huntsville associates took part led to the development of the nation's first space transportation system, the Space Shuttle, which is now providing routine access to space. Wernher von Braun also conceived the idea of a manned space station,

now one of the major “building blocks” in the long-range space exploration plan of the United States.

From 1950 to 1970, Dr. von Braun directed the technical development of the U.S. Army’s ballistic missile program at Redstone Arsenal and served as director of the National Aeronautics and Space Administration’s Marshall Space Flight Center in Huntsville, Alabama. Huntsville was his hometown during those two decades. His creativity, imagination, and influence left a rich legacy for the community. The creation of a research-oriented climate, future planning, and space education ranked high on his list of many interests. The latter resulted in the formation of the U.S. Space and Rocket Center in 1970. In 1975, Huntsville honored its favorite son by naming the new arts, entertainment, convention, and sports complex the “Von Braun Civic Center.”

### **1927-1929**

German rocket and space enthusiasts form the “Verein fuer Raumschiffahrt” (Society for Space Travel). Among the founding members are Hermann Oberth and Willy Ley. Wernher von Braun joins this group after his graduation from high school in 1929.

### **1929-1931**

With limited private funds, members of the group conduct rocket experiments on an abandoned airfield at Reinickendorf near Berlin.

### **1932**

Wernher von Braun, age 20, accepts a research grant from the German Army Weapons Department for scientific investigations and testing of small liquid-fuel rocket engines at the Department’s facility in Kummersdorf near Berlin. In charge of the Army’s rocket development and testing is Captain Walter Dornberger, later to be Commandant of Peenemuende as a Major General during World War II.

### **1934**

Wernher von Braun receives a Ph.D. in physics from the Friedrich Wilhelm University of Berlin. His thesis deals with theoretical and experimental aspects of liquid-propellant rocket motors.

### **1936**

The German Army Weapons Department, in conjunction with the German Air Force, initiates the construction of a large development and test center at Peenemuende at the Baltic Sea. Wernher von Braun becomes technical director of the Army’s rocket development program in Peenemuende.

### **October 3, 1942**

First successful launch of the A-4 rocket, the world's first large liquid-propellant rocket, reaching an altitude of approximately 55 km and a range of 196 km. Field deployment of the A-4, also later called V-2 (Vengeance Weapon 2), begins in 1944. Total strength of civilian and military personnel at Peenemuende reaches nearly 10,000 toward the end of World War II.

### **August 17, 1943**

Major Allied night air raid on Peenemuende. Some 700 casualties in housing area; among them Dr. Walter Thiel, Wernher von Braun's deputy. Materiel damages cause relocation of several laboratories and pilot production facilities.

### **January - March 1945**

Due to advancement of Russian troops into East Germany, von Braun and the majority of his associates decide to abandon Peenemuende and evacuate major organizational elements. Truck convoys and trains are the primary modes of transportation to move personnel, documents, and material to locations in central and southern parts of Germany.

### **June 1945**

Certain elements of team appear to be trapped when Western Allies turn over another zone of Germany to Russian forces. Last minute moves to West Germany are accomplished with the assistance of the U.S. Army Counterintelligence Corps, but most previously salvaged laboratory and production facilities must be left behind.

### **Spring-Summer 1945**

Contacts are made between Peenemuende team members and technical and political intelligence specialists from the United States and other nations. Colonel H.N. "Ludy" Toftoy, U.S. Army Ordnance Corps and later Commander of Redstone Arsenal as Major General, obtains approval from U.S. Defense Department for his proposal to transfer 118 Peenemuende specialists, V-2 documentation and hardware to the United States. Components for approximately 100 V-2s are shipped. Major James P. Hamill and Major Robert Staver are key U.S. Army officers in this project.

### **September 15, 1945**

Members of Peenemuende team selected to work with the Army Ordnance Corps in the United States sign a six-month contract, with a provision for an additional six months at the option of the employer. A supplement also provides for additional options of six months each after completion of the first year of employment.

**Fall 1945**

U. S. Army establishes housing area in Landshut, Germany, for families of team members selected to work in the United States.

**September 20, 1945**

Wernher von Braun and six other team members arrive in the United States via military air transport and begin special assignment at Army Ordnance Aberdeen Proving Ground, Aberdeen, Maryland.

**October 3, 1945**

U.S. Army Ordnance Corps activates "Research and Development Sub-Office Rocket," with 9330th Technical Service Unit as military support organization, in Fort Bliss, Texas, under the command of Major James P. Hamill.

**November 16, 1945**

Fifty-five members of Peenemuende team arrive in New York via military troop transport on U.S.S. Argentina. Entry into the United States is arranged without formal immigration procedures by Presidential Executive Order. Subsequent smaller groups bring the team to a total strength of 118 during the first year. Credit for accomplishments must be given also to other former Peenemuende specialists who accepted Army employment after 1946.

**December 1945**

After completion of additional screening process in Fort Strong (Boston, Massachusetts), the first team arrives in Fort Bliss, Texas.

**June 22, 1946**

First successful launch at White Sands Proving Ground, New Mexico, of a V-2 rocket fully instrumented for upper-air research. Rocket attains a height of 67 miles. During the following 4 years, more than 60 V-2 firings take place from White Sands in support of military and scientific objectives.

**November 22, 1946**

Team members sign five-year contract with Army Ordnance Corps. Key provisions are move of families to the United States at the expense of the U.S. Government, start of formal procedures to allow legal immigration, and gradual normalization of employment conditions toward eventual transfer into civil service of the United States.

**December 1946 - April 1947**

Families of team members move to the United States via military sea transports.

## **February 1949**

Small groups of team members begin to cross the Mexican border in El Paso for formal immigration procedure with the U.S. Consul General in Juarez, Mexico. The date of “formal entry” becomes the basis for the five-year waiting period toward citizenship.

## **February 24, 1949**

Bumper-Wac, a V-2 carrying a Wac Corporal rocket as second stage, is launched from White Sands Proving Ground. The research vehicle reaches an altitude of 244 miles and a speed of 5,510 miles per hour, the greatest velocity and altitude yet reached by a man-made object.

## **October 1949**

Secretary of the Army designates Redstone Arsenal (Huntsville, Alabama) as future home for Army rocket and missile activities. During World War II, this installation consisted of Redstone Arsenal (Ordnance Corps) and Huntsville Arsenal (Chemical Corps).

## **April 1, 1950**

Phased transfer of Fort Bliss activity to Huntsville. Members of team and families, military personnel, civil service employees, and industrial contractors arrive to continue their work in considerably larger surroundings.

## **May 1, 1951**

Secretary of the Army grants formal approval to plan, develop, test, and launch the Army’s first heavy ballistic missile, the “Redstone.”

## **July 1, 1952**

Most members of team attain regular U.S. Civil Service status, provided they have filed a “Declaration of Intention” (commonly known then as “First Papers”) to become U.S. citizens and meet other employment requirements. This action was initiated by Anna M. Rosenberg, Assistant Secretary of Defense (Manpower and Personnel) in a directive dated February 27, 1952, and applied to all “Paperclip” personnel employed by the Department of Defense.

## **August 20, 1953**

First successful launch of Redstone missile from Cape Canaveral, Florida.

## **September 1954**

Following discussions regarding United States’ contributions to the international Geophysical Year--to be observed from July 1957 to December 1958--Wernher von Braun submits to the Chief of Naval Research a proposal to launch a man-made satellite. The secret report is entitled “A Minimum Satellite Vehicle Based on Components Available from Developments of the Army Ordnance Corps.”

**November 11, 1954**

First group of 41 members of team is awarded United State citizenship by the U.S. District Court, Birmingham, Alabama.

**April 15, 1955**

More than 100 members of team and family members are awarded United States citizenship by United States District Court in a special ceremony conducted in the Huntsville High School auditorium.

**February 1, 1956**

Activation of the Army Ballistic Missile Agency (ABMA), with Major General J.B. Medaris as Commander, and Wernher von Braun directing the Development Operations Division. ABMA's work force grows to approximately 5,000 civilian and military personnel in a relatively short time.

**September 20, 1956**

Launch of a modified Redstone missile, named Jupiter-C, from Cape Canaveral. The vehicle attains a range of 3,300 miles and a speed of 16,000 mph. Direct military orders assure that the fourth stage is a dummy. A live, fully-powered stage would have caused the United States to have the world's first satellite in orbit. Political and philosophical considerations influenced this decision, one of them being that President Eisenhower did not want a military missile to be the carrier of the first United States satellite.

**May 31, 1957**

First successful firing of a 1,500-mile Jupiter missile from the Atlantic Missile Range at Cape Canaveral.

**August 8, 1957**

A Jupiter-C attains an altitude of 600 miles and a range of more than 1,300 miles. Recovery of a scaled-down nose cone marks the first such action related to a man-made object having flown in outer space.

**January 31, 1958**

Explore I is placed into space by a modified Jupiter-C and becomes the first U.S. satellite. Its payload discovers the "Van Allen" radiation belt.

**March 31, 1958**

Activation of the Army Ordnance Missile Command with Major General Medaris as Commanding General and headquarters at Redstone Arsenal. Organizational elements are the ABMA, Army Rocket and Guided Missile Agency, White Sands Proving Ground, Jet Propulsion Laboratory, and Redstone Arsenal.

**August 15, 1958**

ABMA receives authorization to begin work on a 1.5 million-pound-thrust booster for a multistage vehicle program, later named Project Saturn.

**January 14, 1960**

President Eisenhower directs the transfer of the ABMA Development Operations Division and its space-related missions to the National Aeronautics and Space Administration (NASA).

**July 1, 1960**

Activation of the George C. Marshall Space Flight Center (MSFC) as the largest field organization of NASA with Wernher von Braun as director. Nearly 4,000 civilian employees and all technical facilities are transferred from the Army to NASA. MSFC is headquartered on Redstone Arsenal. The Army Ordnance Missile Command and its organizational elements continue the growing task of developing and providing military rocket and missile systems.

**January 31, 1961**

Chimpanzee Ham launched on Mercury-Redstone from Kennedy Space Center (KSC).

**May 5, 1961**

Alan B. Shepard becomes the first American astronaut to fly in space. His Project Mercury spacecraft *Freedom 7* is launched into suborbital trajectory by a modified Redstone missile.

**May 25, 1961**

President John F. Kennedy announces Apollo manned lunar landing program as a national commitment.

**October 27, 1961**

First launch of Saturn I rocket with eight H-1 engines as first stage and water ballasted dummies as upper stages and payloads.

**November 9, 1967**

First Saturn V carries unmanned Apollo 4 spacecraft into Earth orbit, testing heat protection against lunar velocity re-entry. All three stages perform perfectly.

**October 11, 1968**

Saturn 1B launches first manned Apollo capsule into Earth orbit with astronauts Walter Schirra, Donn Eisele, and Walter Cunningham.

**December 21, 1968**

Third launch of Saturn V sending astronauts Frank Borman, James A. Lovell, and William A. Anders on man's first orbits of the Moon in Apollo 8.

**July 16, 1969**

The sixth Saturn V launches the Apollo 11 spacecraft with astronauts Neil A. Armstrong, Michael Collins, and Edwin E. Aldrin, Jr. on its trajectory for the historic first manned landing on the Moon, on July 20, 1969.

**February 1970**

Wernher von Braun transfers to Washington, DC, as NASA's Associate Deputy Administrator for Future Planning. Dr. Eberhard F.M. Rees, von Braun's long-time deputy, is named director of the Marshall Space Flight Center.

**July 26, 1971**

Saturn V carries Apollo 15 with astronauts David Scott, James Irvin, and Alfred Worden to the Moon. Lunar Roving Vehicle, developed by MSFC, is used for the first time for extensive surface exploration of the lunar landscape.

**January 5, 1972**

President Richard Nixon announces the development of the Space Shuttle for routine access to space. MSFC is to provide the main engines, solid rocket boosters, and external propellant tank as well as a variety of scientific payloads.

**July 1972**

Wernher von Braun retires from government service and accepts position as Vice President of Engineering and Development for Fairchild Industries at Germantown, Maryland.

**December 7, 1972**

Apollo 17, last manned lunar mission in Project Apollo, is launched.

**January 1973**

Eberhard Rees retires as director of MSFC. Most other team members retire during the remainder of the 1970s.

**May 14, 1973**

Two-stage Saturn V places Skylab, the first U.S. experimental space station, into Earth orbit. Skylab was conceived and designed during Wernher von Braun's tenure at MSFC. Three consecutive crews of American astronauts lived and worked in space for a total of 171 days, collecting a wealth of information about the Sun, the value of Earth observations from space, and the feasibility of manufacturing products in zero-gravity.

**June 16, 1977**

Wernher von Braun dies at age 65.

## Select Bibliography

- Bergaust, Erik. *Reaching for the Stars*. New York: Doubleday, 1960.
- Bergaust, Erik. *Rocket City USA*. New York: National Space Institute, 1976.
- Bergaust, Erik. *Wernher von Braun*. Washington DC: National Space Institute, 1976. Published simultaneously in the German language by Econ Verlag, Dusseldorf, Germany under the title *Wernher von Braun*, 1978.
- Breuer, William B. *Race to the Moon*. Westport, CT: Praeger, 1993.
- Cunz, Dieter. *They Came from Germany--the Story of Famous German-Americans*. New York: Dodd, Mead & Co., 1966.
- David, Heather M. *Wernher von Braun*. New York: G.P. Putnam & Sons, 1967.
- Dornberger, Walter. *V-2*. New York: Viking Press, 1955. (Also published in the German language under the title *Die Geschichte der V-Waffen* by Bechtel Verlag, Esslingen, Germany, in 1981.)
- Freeman, Marsha. *How We Got to the Moon, the Story of the German Space Pioneers*. 21st Century Science Association, 1993.
- Gartmann, Heinz. *Wernher von Braun*. Berlin, Germany: Colloquium-Verlag, Berlin, 1959.
- Goodrum, John C. *Wernher von Braun--Space Pioneer*. Huntsville, Alabama: The Strode Publishers, 1969.
- Huzel, Dieter. *Peenemuende to Canaveral*. Englewood, NJ; Prentice-Hall, 1962.
- Ley, Willy. *Rockets, Missiles and Space Travel*. New York: Viking, 1958.
- McGovern, James. *Crossbow and Overcast*. New York: Morrow & Co., 1964.
- Ordway, Frederick I. and Mitchell R. Sharpe. *The Rocket Team*. New York: Crowell, 1979.
- Ruland, Bernd. *Wernher von Braun--Mein Leben fuer die Raumfahrt*. Offenburg, Germany: Burda Verlag, 1969.
- Shepard, Alan and Deke Slayton. *Moon Shot, the Inside Story of America's Race to the Moon*. Atlanta, Georgia: Turner Publishing, Inc. 1994.

Stuhlinger, Ernst and F.I. Ordway. *Wernher von Braun: Crusader for Space, An Illustrated Memoir*. Malabar, Florida: Krieger, 1994.

von Braun and F.I. Ordway. *History of Rocketry and Space Travel*. New York: Crowell, 1985.

Walters, Helen B. *Wernher von Braun--Rocket Engineer*. New York: The Macmillan Co., 1964.



Mr. Woodrow Dunn and Mr. E. F. DuBose at the Merrimack Marker Dedication



Ranee Pruitt, Alex Luttrell, and Joyce Smith at the Buckhorn Tavern Marker Dedication

## THREE HISTORICAL MARKERS RECENTLY UNVEILED IN MADISON COUNTY

F. Alex Luttrell, III

(Photographs courtesy of Jeanne Smith (Merrimack Mill/Bradley School), John Rison Jones, Jr. (Oakwood College), and Jim Lee (Buckhorn Tavern)

The Huntsville-Madison County Historical Society Marker Committee intensified its efforts during late 1995 and early 1996 with the erection and dedication of three new historical markers. On Sunday, November 19, 1995, a marker noting the existence of the Merrimack Manufacturing Company & Village and the Joseph J. Bradley School was officially unveiled and dedicated at the old textile mill site on Triana Boulevard in west Huntsville. The marker dedication ceremony and reception, hosted by the Merrimack/Joe Bradley Reunion Committee, were well attended by society members and residents of the Huntsville Park community. Mr. Bill Gant, chairman of the reunion committee, emceed the 2:00 p.m. event. Other participants included the Rev. Spurgeon Hendrick who gave the invocation, Mr. Jerry Crabtree, who presented the marker, and the Rev. J. B. Pendergraft who offered the benediction. Mr. Crabtree noted the attendance of Councilman Ken Arnold, representing the City of Huntsville which provided the funding for the marker. Mr. E. F. DuBose, long-time principal of Joe Bradley School, spoke of the school's history and importance to the community. Mrs. Harriet Dunn Giles, daughter of the last mill superintendent, spoke about the mill on her father's behalf. Mr. Alex Luttrell and Mr. Jim Lee accepted the marker for the Huntsville-Madison County Historical Society and the Alabama Historical Association, respectively. The complete text of the two-sided marker is given below.

A second historical marker, commemorating the founding of Oakwood College, was unveiled and dedicated on Easter Sunday, April 7, 1996, the final day of Oakwood's 100th Anniversary Homecoming Celebration. The marker is located at the new entrance to the college on Sparkman Drive. The ceremony commenced with an invocation by the Rev. Leslie N. Pollard, pastor of the Oakwood College Church, and a welcome by Dr. Benjamin F. Reaves, President of Oakwood College. Mrs. Minneola L. Dixon, Oakwood College Archivist, gave an account of Oakwood's history and recognized special guests including Huntsville City Councilmen Richard Showers and Bill Kling; Madison County Commissioner Glen Nunley; and members of the Huntsville-Madison County Historical Society. Mr. Showers presented the marker on behalf of the City of Huntsville to Mr. Alex Luttrell and Mr. Jim Lee. The program closed with remarks from Dr. Roy E. Malcolm, Dean of College Relations and Chairman of Oakwood's Centennial Committee, and a benediction by Dr. Garland J. Millet, President Emeritus of Oakwood College. The text of the Oakwood College marker is also shown below.

The Buckhorn Tavern historical marker was hastily unveiled amid threats of thunderstorms and tornadoes at 9:00 a.m. on Saturday, April 20, 1996, at the intersection of Winchester Road and Maysville Road in New Market. The marker dedication opened a weekend Civil War encampment and re-enactment of the Buckhorn Tavern Skirmish. The program began with the presentation of colors by the Buckhorn High School ROTC and the playing of the national anthem by the Buckhorn High School Band. Mrs. Rane G. Pruitt, a member of the Buckhorn Tavern Event Committee which funded the marker, welcomed the approximately 100 attendees and Mr. Ernest Gurley gave the invocation. Mr. Wayne McFarlen, Jr., then spoke briefly of New Market's history, and Mr. Joe W. Davis, Jr., read the history of Buckhorn Tavern and the Buckhorn Tavern Skirmish. The marker was then unveiled by Mr. McFarlen, Mr. Davis, and Mr. Tillman Hill, Madison County Commissioner. Mr. Alex Luttrell accepted the marker on behalf of the Huntsville-Madison County Historical Society, and Mrs. Wayne L. Smith accepted for the Alabama Historical Association. The program concluded with Civil War era music by the Buckhorn High School Band just prior to the arrival of the predicted storms. The text for the two-sided marker is shown below.

The marker committee actively participated in the installation of each of the three new markers by working with the sponsoring groups until the marker text was finalized and approved by the Alabama Historical Association. In addition to these recently dedicated markers, several others are in various stages of the research and review process. A marker for the New Market Presbyterian Church was recently approved and ordered. This marker was financed by the Vandiver family and the New Market Presbyterian Church congregation, and was dedicated on May 19, 1996, at 1:00 p.m. A marker for Glenwood Cemetery in Huntsville was also recently approved and ordered. This marker was paid for by the City of Huntsville and will be unveiled in the near future. Markers for the Temple B'nai Sholom, Viduta Historic District/Monte Sano Hotel, and Echols Hill are scheduled for erection later in 1996, using the remaining funds appropriated by the City of Huntsville several years ago.

The marker committee encourages members to suggest sites to be added to a list of more than 40 proposed markers. This list is constantly reviewed, and each site is prioritized based on national, statewide, and local historical significance; age; location, accessibility to the public; and funding availability. The newly erected markers, along with each of the more than 50 existing historical markers throughout Madison County, will be featured in a new publication soon to be released. This booklet will include a brief history of the county, maps to locate each marker, current and historical photographs of the sites, references to additional published information on the sites, as well as the complete text that appears on each marker.

MERRIMACK MFG. CO. & VILLAGE  
1900-1992

In 1899, construction started on Merrimack Mill and village. The mill began operation in 1900. A second mill building, added in 1903, made it one of the largest in the South. Under Joseph J. Bradley, Sr., managing agent (1905-1922), the village grew to 279 houses, a hospital, school, company store, and other small businesses. In 1920, the steam-operated mills converted to electricity. Lowenstein Fabrics bought the mill (1946), changed its name to Huntsville Mfg. Co., and the village became Huntsville Park. The mill continued to operate until 1989 and, in 1992, Huntsville's last operating textile mill was torn down.

(Continued on other side)

ALABAMA HISTORICAL ASSOCIATION 1995

JOSEPH J. BRADLEY SCHOOL  
1919-1967

(Continued from other side)

The School, named for Joseph J. Bradley, Sr., was built in 1919 on the site of the first mill-sponsored school. Under the leadership of Edward Foyl DuBose, Principal (1921-1967), and with the mill's financial support, the school grew from 6 grades to 12 and served as a social and recreational center for the entire community. In 1951, the mill owners made a gift of the school to the county school system and, in 1956, it became part of the city school system. The elementary school continued operating until it was closed in 1967.

ALABAMA HISTORICAL ASSOCIATION 1995

OAKWOOD COLLEGE  
Founded in 1896

Oakwood College, which began as an industrial school, was founded by the Seventh-day Adventist Church in 1896 to educate African Americans in the South. The school was erected on 380 acres purchased during the previous year for \$6,700. Additional property secured in 1918 nearly tripled its land holdings. The school underwent several name changes over its history:

1896: Oakwood Industrial School  
1904: Oakwood Manual Training School  
1917: Oakwood Junior College  
1943: Oakwood College

In 1958, Oakwood was granted full accreditation by the Southern Association of Colleges and Schools. Oakwood prepares students from across America and many nations to serve the world in a variety of positions and careers, reflecting its motto, "Today's College for Tomorrow's Leaders!"

On this site, too, stood the Peter Blow Plantation which counted Dred Scott among its slaves in 1819. In 1857, Scott captured national attention by virtue of his appeal to the U.S. Supreme Court for his freedom in Missouri after sojourning in the free state of Illinois.

ALABAMA HISTORICAL ASSOCIATION 1996



Mrs. Minneola L. Dixon, Dr. Benjamin F. Reaves, and Councilman Richard Showers unveil the Oakwood College Marker

## BUCKHORN TAVERN

Located in Section 18, Township 2, Range 2 East, this site was an early wayside stop for pioneer settlers as they traveled the road from Winchester, Tennessee, into Madison County. The tavern pre-dates the creation of the county, Dec. 13, 1808.

During the Creek Indian War (1813-1814), the Deposit Road was created at this point and stretched southeastward through Cherokee lands to Fort Deposit near Gunter's Landing. This became the supply route for General Andrew Jackson's forces. His deputy, Colonel John Coffee, stored supplies opposite the tavern and camped his troops (Nov. 22 - Dec. 8, 1813).

By tradition, the tavern took its name "Buckhorn" in 1858 when William L. Fanning killed a buck near the site and presented its antlers to the innkeeper. The antlers are now displayed at Buckhorn High School.

The original building was demolished in the early 1950s.

(Continued on other side)

ALABAMA HISTORICAL ASSOCIATION 1996

## BUCKHORN TAVERN SKIRMISH

(Continued from other side)

Buckhorn Tavern was the site of a skirmish on Oct. 12, 1863. Confederate General Philip D. Roddey's Alabama Cavalry Brigade was moving south from New Market when it intercepted Union General Robert Mitchell's Cavalry Brigade, advancing northeast from Huntsville. A brisk firefight broke out, the opposing forces so close they could see each others' faces by the muzzle flashes. Both sides hesitated to advance in the approaching darkness and heavy rain. The Union troops camped for the night in the woods; the Confederates retired to New Market. The next morning, Roddey's Brigade rode on to Athens. The Union cavalry did not pursue.

ALABAMA HISTORICAL ASSOCIATION 1996



If you know someone who may be interested in becoming a member of the Huntsville-Madison County Historical Society, please share this application for membership.

HUNTSVILLE-MADISON COUNTY HISTORICAL SOCIETY  
P. O. Box 666  
Huntsville, AL 35804

Membership Application 1996-97

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephones: Home \_\_\_\_\_ Work \_\_\_\_\_

Annual Dues:      Individual: \$10.00      Family: \$18.00

My check for \$ \_\_\_\_\_ payable to Huntsville-Madison County Historical Society includes a subscription to *The Huntsville Historical Review* and all the Society's activities.

\_\_\_\_\_  
Signature



The purpose of this society is to afford an agency for expression among those having a common interest in collecting, preserving and recording the history of Huntsville and Madison County. Communications concerning the organization should be addressed to the President at P. O. Box 666, Huntsville, Alabama 35804.

Manuscripts for possible publication should be directed to the Publications Committee at the same address. Articles should pertain to Huntsville or Madison County. Articles on the history of other sections of the state will be considered when they relate in some way to Madison County. All copy, including footnotes, should be double spaced. The author should submit an original and one copy.

*The Huntsville Historical Review* is sent to all current members of the Huntsville-Madison County Historical Society. Annual membership is \$10.00 for an individual and \$18.00 for a family. Libraries and organizations may receive the *Review* on a subscription basis for \$10.00 per year. Single issues may be obtained for \$5.00 each.

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**Huntsville-Madison County  
Historical Society**

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