

# WERNHER von BRAUN'S Support for the Imaginary Arts



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## **Introduction**

This booklet, prepared by the Marshall Space Flight Center, is illustrative of the Center's support for the von Braun Celebration of the Arts and Sciences (VBCAS). Marshall is honored to be a participant in the celebration of this 50-year cultural and technological legacy of Dr. Wernher von Braun and the members of his famed German rocket team.

The VBCAS features a year-long series of events, performances, exhibits and historical, cultural and educational programs. Special performances by internationally known artists and speakers, and commemorative events featuring an aerospace, German, or nostalgic theme will be held during this year-long celebration. More than 30 arts, technology, educational and community organizations have been working for almost three years to plan this series of events.

In 1950, Dr. von Braun and approximately 100 of his team members came to Huntsville, Alabama, to begin work on what would later become America's historic space program. Dr. von Braun eventually served as the first director of the Marshall Center and led the development of the Saturn V launch vehicle that lofted three American astronauts on their journey to the moon in July 1969.







## **Wernher von Braun** led the

design for the most powerful rocket the world has ever known and used it to launch the first humans to the surface of the moon in 1969. Outside of Huntsville, von Braun is known best for developing the huge Saturn V rocket that made it possible for astronauts Neil Armstrong and Buzz Aldrin to walk on the moon in 1969.

Huntsville, Alabama, however, knows von Braun for much more than that. The rockets he dreamed of were powered by his engineering and scientific intellect, but they were also powered by his imagination. That powerful force went to work in Huntsville almost as soon as von Braun arrived in 1950. As a result, von Braun's rockets climbed higher and higher while the city's appreciation for the imaginative arts did the same.

"At the home of Baron Magnus von Braun in Wirsitz, in the Prussian province of Posen, life was filled with zest for serious reading, classical music and good conversation in any of half a dozen languages," according to Wernher von Braun biographer Erik Bergaust.<sup>1</sup> The baron was Wernher's father and the books that his son liked to read best were science fiction. Stories by 19th century writers like Jules Verne fired von Braun's imagination. In fact, von Braun also tried writing science fiction. One story, "Lunetta" (Little Moon) was published in a distinguished magazine. The story "concerned a rocket flight to a space station during which the crew wore space suits and observed the heavens through special windows," wrote Helen B. Waters, another von Braun biographer.<sup>2</sup>

In addition to literature, von Braun was drawn to other artistic pursuits as a youngster. In 1975, the Huntsville Times quoted von Braun's mother. "As a little boy, Wernher loved the piano and composed his own music. For a time, we even thought he would make music his career. But it was not to be." Von Braun once called himself a "frustrated pianist." But he demonstrated his talent one evening in 1929 at the home of fellow rocket enthusiast Willy Ley where von Braun expertly played Beethoven's "Moonlight Sonata."<sup>3</sup>

Von Braun friend and biographer Ernst Stuhlinger has written about von Braun's early interest in

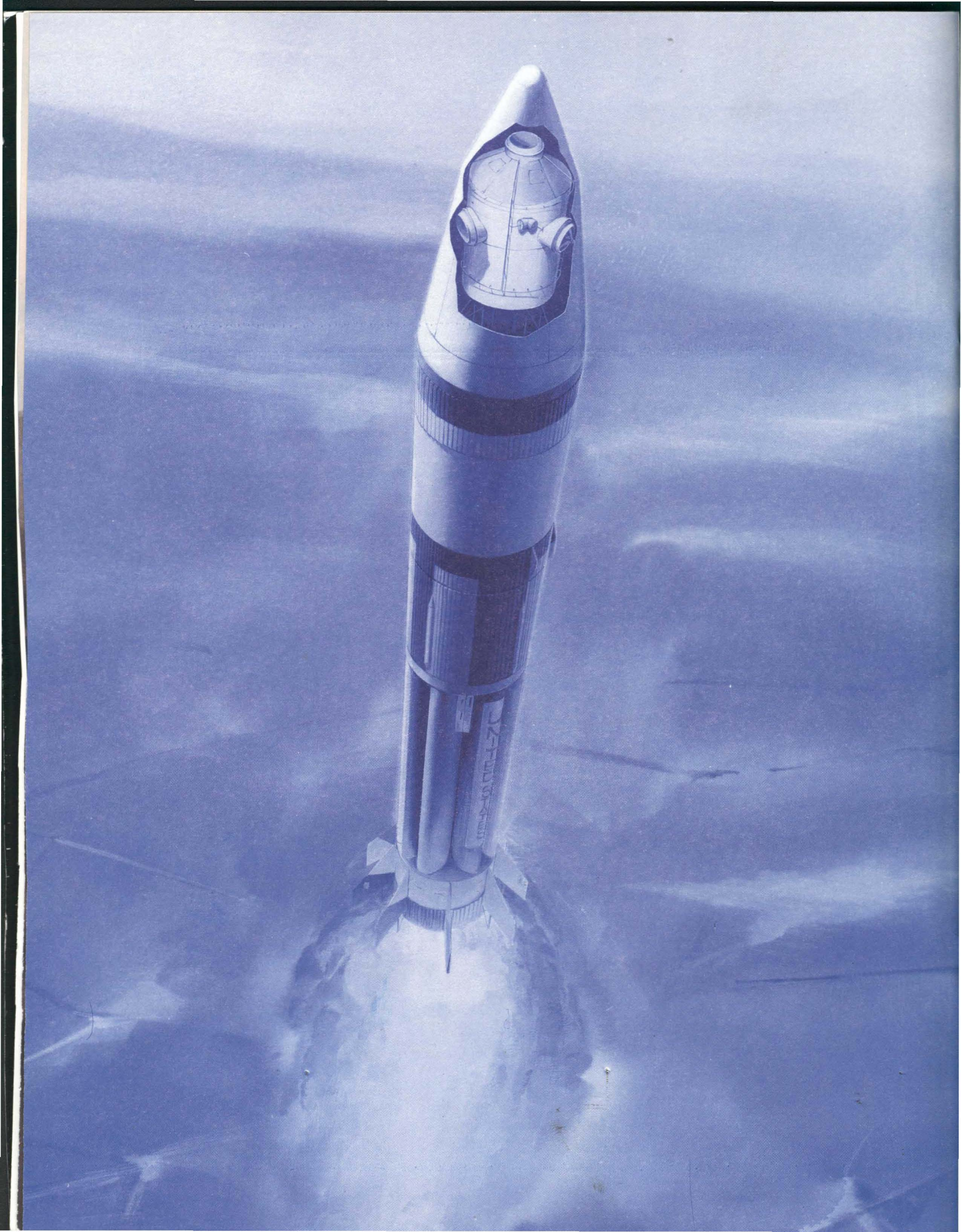
music. In the 1920s, von Braun was accepted for piano lessons by the great composer Paul Hindemith and had even composed some pieces of his own by the age of 15. Von Braun also took cello lessons at the Hermann Lietz boarding school at Ettersburg Castle near Weimar. There he became a member of the school's student orchestra. But Stuhlinger wrote, von Braun's busy schedule left him with very little time for playing a musical instrument. Still, he enjoyed making music so much that he occasionally played in a quartet in the prewar years. "His cello was accompanied by Rudolf Hermann's and Heinrich Ramm's violins, and by Gerhard Reisig's viola when the four of them played works by Mozart, Haydn, and Schubert."<sup>4</sup>

Von Braun built the famous V-2 rocket during World War II. But he also dreamed about developing rockets that would propel artificial satellites and humans into space. Ironically, Gerd de Beek, a member of von Braun's German rocket team at their Peenemünde development center, found at least one way to employ art to help von Braun keep his imagination focused on exploring outer space and still satisfy the demand for the V-2 rocket. De Beek served von Braun as a technical illustrator, and he painted the rocket scientists' heroine, a figure entitled "The Girl in the Moon," on the side of a V-2 rocket.<sup>5</sup>

As World War II ended, von Braun and his fellow German rocket experts surrendered to Allied forces and eventually emigrated from Germany to Fort Bliss, Texas, to work for the U.S. Army. Ernst Stuhlinger has chronicled the von Braun team's technical achievements in rocketry at Fort Bliss and has described the team's efforts to adapt to their new surroundings in the desert. Housed together on the military post, the Germans sometimes gathered on Sunday afternoons to hear Magnus von Braun, Wernher's brother, play the accordion or to listen to classical music on an old phonograph. De Beek was among those who moved to Fort Bliss and decorated a portion of the military post set aside for the Germans with his own paintings.<sup>6</sup>

In 1950, the Army transferred the von Braun team to Redstone Arsenal in Huntsville. On January 31, 1958, the team used a modified Jupiter-C rocket to launch Explorer I, America's first orbiting satellite. Two years later, von Braun became director of NASA's new George C. Marshall Space Flight







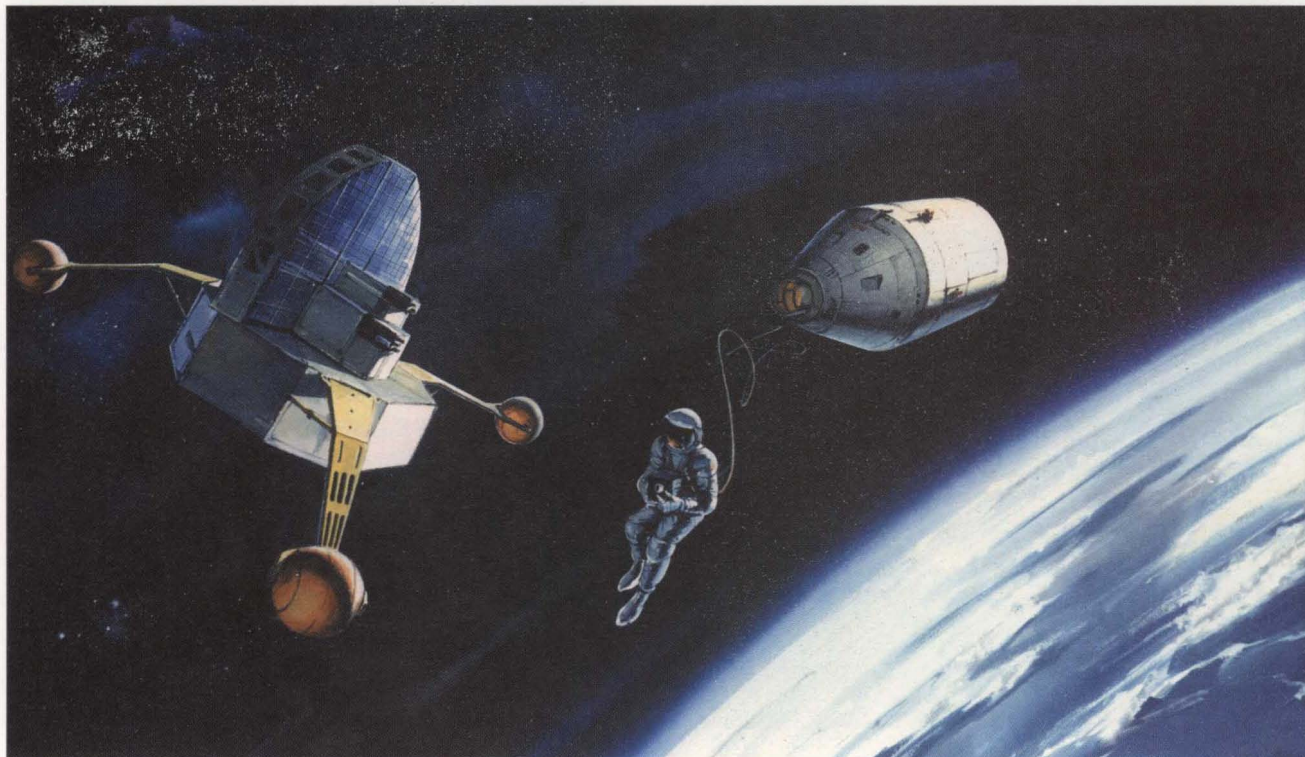
Center in Huntsville where he and an expanded team developed the Saturn V rocket that launched humans to the moon in 1969.

As the 1960s ended, von Braun had realized his dream of exploring outerspace by helping place humans on the moon. His engineering and managerial talent during the Apollo era had contributed to a technological revolution, but his respect for the power of imagination had also changed the way America had initially perceived space exploration. After World War II, most Americans still viewed the possibility of space flight the same way they viewed Buck Rogers and Flash Gordon. In fact, the dawn of the Cold War seemed to assure Americans that the United States needed to build rockets as weapons, and that ideas about flying to the moon belonged in the movies. Von Braun viewed the Soviet threat as a very real one. However, he also believed that the possibility of space flight was much more than fantasy. In the early 1950s, *Collier's* magazine invited von Braun and other leading rocket experts to publish their ideas about the future of space exploration. Elaborately illustrated by leading space artists, the articles included von Braun's concept for a space station, a reusable launch vehicle and other future spacecraft. *Collier's* played to mainstream America

and added validity to von Braun's ideas. The articles seemed to do more than any other seriously respected cultural or artistic medium had done in the early 1950s to suggest that the future of space exploration would emerge indebted to both science fiction and science fact.<sup>7</sup>

In addition to the *Collier's* articles, von Braun found another way to influence the way Americans thought about space exploration. He used television and Walter Ellis Disney. During the 1950s, von Braun served as technical advisor for three Disney television specials. Together, von Braun (the engineer) and Disney (the artist) used the new medium to illustrate how high humans might fly on the strength of technology and the spirit of human imagination.<sup>8</sup>

Sharing his imagination with others about the future of space exploration was important to von Braun. He worked hard doing it at the national level as well as at the local level in Huntsville. In fact, the same force that drove von Braun to imagine a million possibilities in space appeared to drive him to imagine a realm of new possibilities for Huntsville. Sometimes those possibilities were directly related to the space program. Sometimes they were only indirectly connected to it. Often the German team's



Satellite concept illustration prepared by artist Renato Moncini for the NASA Marshall Space Flight Center, circa 1967.

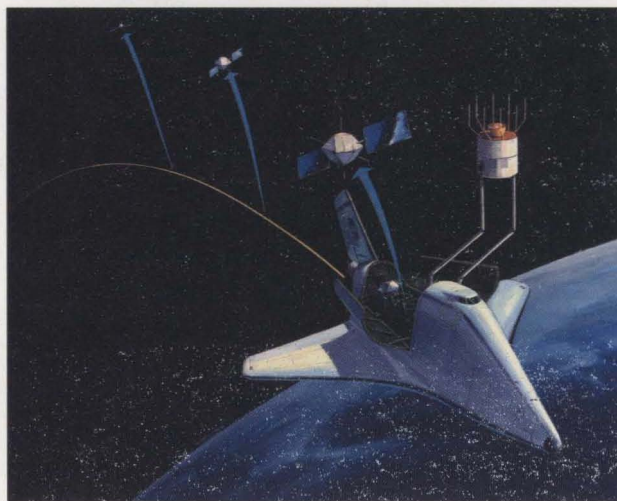


inclination toward art and music elevated the city's cultural climate. Local legend says the Germans who arrived in 1950 sometimes put more emphasis on obtaining a library card than in signing up for city services like water and electricity. "The day he arrived, Werner Kuers, an accomplished violinist, was startled to receive a call to join one of the local music groups in need of a new violin," wrote space historian Roger Bilstein. "I was very astonished... Mr. Dreger soon started to arrange playing sessions for us in homes and churches. We were introduced into quite a number of very friendly families interested in cultural activities and education."<sup>9</sup> A pamphlet from 1950 lists Kuers, Eberhard Rees, and Erich Goerner on the board of the Huntsville Civic Orchestra. Walt Wiesman reported that within months of his arrival in Huntsville he and his wife found themselves licking stamps for a mailout to support the community orchestra. Von Braun enjoyed the opportunity to popularize space flight in Huntsville. Only weeks after his arrival the *Huntsville Times* described him "as the foremost authority in the world today on rockets" and published a front-page story relating his thoughts about a flight to the moon.<sup>10</sup> Always anxious to get his German team involved, von Braun volunteered Wilhem Angele—an expert in mechanical and electrical engineering—to build the Rocket City Observatory on Monte Sano Mountain.<sup>11</sup> Von Braun encouraged involvement in community and cultural activities especially those that related to space and rocketry, but he was never too high-minded to help with the most mundane chores. For example, he helped dig the sewer lines for the new observatory on Monte Sano.<sup>12</sup>



Space station concept illustration prepared by artist Renato Moncini for NASA Marshall Space Flight Center, circa early 1970s.

Portions of the proceeds for the observatory were raised through subscriptions to a local magazine entitled "Space Journal" that included articles by von Braun and other Huntsville space and rocket experts. The magazine lasted only a short while but the articles and artwork in the journal illustrated how art and space were joined together in Huntsville. Some of the artists worked for Gerd de Beek at Redstone Arsenal for the Army during the 1950s, and for the Marshall Space Flight Center during the 1960s. They officially illustrated some of von Braun's and his team's most imaginative concepts regarding space exploration. Space historian Randy Liebermann has noted that scale-models of space stations and launch vehicles were often constructed under de Beek's direction and used by von Braun during interviews on popular shows like *Gary Moore* or NBC's *Today* show.<sup>13</sup>

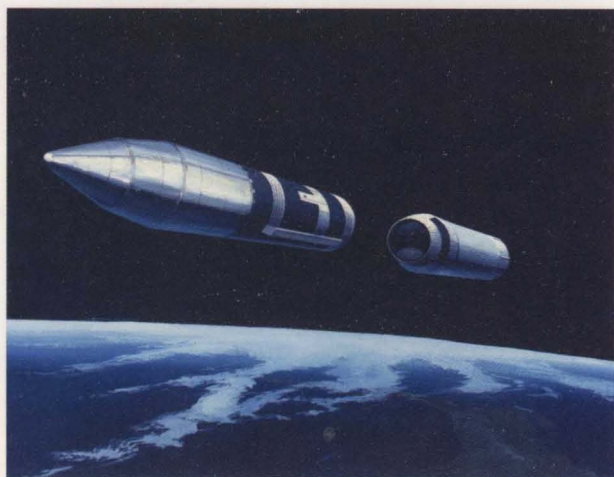


Satellite concept illustration prepared by artist Renato Moncini for NASA Marshall Space Flight Center, circa early 1970s.

Official assignments called for the artists to illustrate the technical aspects of Redstone, Jupiter and Saturn rockets through paintings or scale-models. However, some of the illustrations done for non-government publications like *Space Journal* were extremely exotic. Artist Harry Lange illustrated books for von Braun and painted some of the covers for *Space Journal*. One such cover was entitled, "Harry Lange's Panorama of Earth's First Interstellar Space Ship." The surrealistic cover shows dinosaur-like monsters ready to inspect a newly arrived spaceship. "The Rendering Shows the Destination Planet in its Cretaceous Period of Development, The Monsters Created by Nature and Man Stand in Stark Contrast," the editors wrote.



Both de Beek and Lange were among those who worked for the Marshall Space Flight Center after it was created in 1960. Lange had come to the U.S. in 1953 from Germany and, after a hitch in the U.S. Army, came to the Marshall Center. In addition to his work in graphic engineering, he illustrated several books written by von Braun.<sup>14</sup> He left the Marshall Center in 1963 to do freelance work. An early article in the Center's employee newspaper is entitled, "De Beek Develops Design for Village in Space." Lange painted the illustration for the village showing "apartments, taxis, hospital center, agriculture station, and cargo ship."<sup>15</sup> The idea for a



**Skylab concept illustration prepared by artist Renato Moncini for NASA Marshall Space Flight Center, circa 1971.**

space village and others were not supported by high levels of government funding but their style appealed to others outside the government. For example, Lange later left the Marshall Center and worked for three years as a production designer for the Stanley Kubrick's "2001: A Space Odyssey."<sup>16</sup> He was among dozens of illustrators, like artist Renato Moncini, who made their way through de Beek's shop in the 1950s and 1960s. Moncini studied at the Leonardo da Vinci Institute at Pisa and spent two years studying at the Fine Arts School in the same city. He eventually served as a technical illustrator in the Marshall Center's Graphics Engineering and Models Branch.<sup>17</sup> Other Marshall Center artists, like Bob Moody, drew the Saturn V moon mission sequence from blueprints and oral explanations. Moody graduated from Auburn University in 1953 where he majored in interior and industrial design. During the 1960s he

worked for DeBeek as a supervisory illustrator at Marshall.<sup>18</sup> Debeek's staff also included artist Albert Lane who focused on artwork for brochures, technical drawings, and art for symposium reports and conference displays. One of his projects included painting a full-color foldout of the Saturn V that drew national attention.

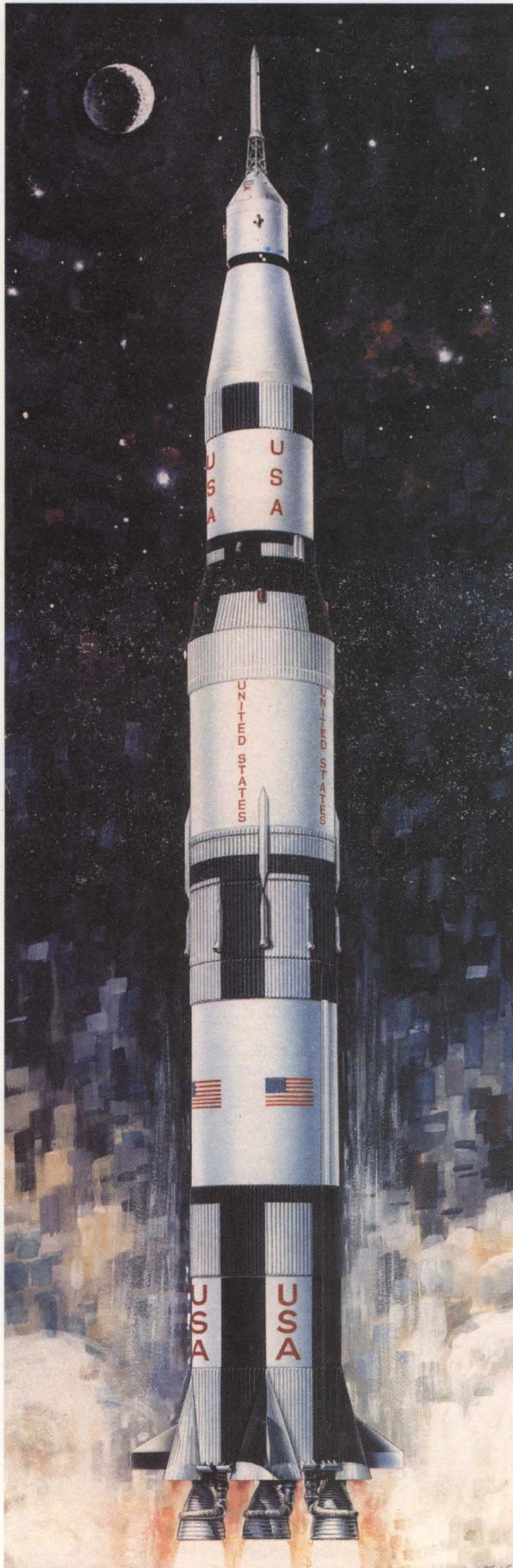
Artist Bill Chandler was also among those who joined the deBeek group in the early 1950s. Chandler, a World War II veteran studied graphics art under the GI bill, prior to coming to Huntsville. "We started very small we had one air brush, one pair of scissors." But the scale of the artistic effort mushroomed, Chandler said. "I think that at our peak we had about 20 civil servants and 80 to 100 contractor personnel." Von Braun had a direct



**Advanced space concepts illustration prepared by artist Albert Lane for NASA Marshall Space Flight Center, circa early 1960s.**

interest in the work de Beek's artists completed and in the early years would visit the graphics shop, Chandler said. Many of the models and paintings the group completed were shown in Washington to help persuade top-level NASA officials to fund new space projects. "We used to have a regular path beaten back and forth to Washington. That was part of their sales pitch to show what we were producing," Chandler said. While much of the work the artists produced related to current projects, their illustrations often looked far into the future. "At times we were working way ahead of what people knew," Chandler said referring to illustrations dedicated to the colonization of the moon and space. "A lot of the things we did were from rough drawings by engineers," Chandler added, noting that many such initial drawings lacked explicit details.<sup>19</sup>





After hours the artists at the Marshall Center, as well as many engineers, scientists, and other employees, participated in and supported community projects related to the arts in Huntsville. And von Braun did the same. Ironically, Lane had studied opera as well as art, and was cast in various productions offered by the Community Chorus.<sup>20</sup> Although engrossed in the Saturn rocket program in the 1960s, von Braun too found time to support art and music. He recorded words of encouragement for students attending a national music camp at the University of Michigan.<sup>21</sup> In 1962, Arthur Fiedler, director of the Boston Pops Symphony Orchestra, visited Huntsville. Fiedler and von Braun exchanged autographs and "talked music instead of rockets," wrote one observer.<sup>22</sup>

According to *Huntsville Times* writer Deborah Roop, von Braun also lent tremendous support to the arts in Huntsville through his wife, Maria. "For several years when interest in a center for the performing arts flagged among the politicians, we developed the practice of calling Maria and saying remind Wernher that we still don't have what we need," one patron of the arts told Roop. Cultural leaders recognized von Braun's influence and made the most of it. As a result, "Huntsville maintains an atmosphere where the arts can flourish and continue to grow as the community grows," the newspaper stated.<sup>23</sup>

Saturn V illustration prepared by Artist Albert Lane at the NASA Marshall Space Flight Center, Circa 1960s.



## Notes

1. National Space Society, *Wernher von Braun*, 1912–1977, p. 3.
2. Helen B. Waters, *Wernher von Braun, Rocket Engineer*, (New York, 1964), p. 18.
3. *Huntsville Times*, March 9, 1975, "Few Knew Dr. Von Braun as Pianist and Composer."
4. Ernst Stuhlinger and Frederick I. Ordway III, *Wernher von Braun, Crusader for Space, A Biographical Memoir*, (Malabar, Florida, 1994), p. 10–11.
5. Marsha Freeman, *How We Got to the Moon*, (Washington, D.C., 1993), p. 140.
6. Stuhlinger and Ordway, p. 76.
7. For more information about the impact of the Collier's article see Frederick I. Ordway III and Randy Liebermann, *Blueprint for Space: Science Fiction to Science Fact*, (Smithsonian Institution, 1992). p. 141.
8. Mike Wright, "The Disney-Von Braun Collaboration and Its Influence on the Space Program," in Inner Space Outer Space, Humanities, Technology, and the Postmodern World, *Selected Papers from the 1993 Southern Humanities Conference*, edited by Daniel Schenker, Craig Hanks, Susan Kray, University of Alabama in Huntsville.
9. Roger Bilstein, *Stages to Saturn, A Technological History of the Apollo/Saturn Launch Vehicles*, NASA SP-4206 (Washington, 1980), p. 392
10. *Huntsville Times*, "Dr. Von Braun Says Rocket Flights to the Moon Possible," May 15, 1950.
11. Ernst Stuhlinger, "German Rocketeers Find a New Home in Huntsville," unpublished manuscript, September 25, 1995.
12. Mike Wright, Interview with Dave Christensen, September 18, 1997.
13. Ordway and Liebermann, p. 141.
14. *Marshall Star*, "Space Odyssey, Former Marshall Artist Tells of Work on Movie," June 5, 1968.
15. *Marshall Star*, "DeBeek Develops Design for 'Village in Space,'" November 2, 1960.
16. *Marshall Star*, June 5, 1968.
17. *Marshall Star*, "Renato Moncini Helps Illustrate Space Program," February 21, 1968.
18. *Marshall Star*, "Versatile Artist Bob Moody Paints Marshall's Trail to the Universe," April 22, 1964.
19. Mike Wright, Interview with Bill Chandler, August 1995.
20. *Marshall Star*, "Star Salute – Albert Lane, Artist Here, Former Operatic Baritone," February 22, 1967.
21. Wernher von Braun, "Five Minute Radio Tape for National Music Camp, University of Michigan, Interlochen, Michigan," August 21, 1961.
22. Photographic Press Release, Marshall Space Flight Center, March 24, 1962.
23. Deborah Roop, *Huntsville Times*, "Von Braun's Other Legacy: Rocket Pioneer's Cultural, Educational, Contributions Recalled," June 14, 1987.





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