HOW THE MEMORIAL WAS COMPLETED

From the initial idea in 1923 to the present, the story of Mount Rushmore is a tale full of high hopes, bitter frustration, battling egos, fascinating characters, hard work and triumphant celebrations. South Dakota historian Doane Robinson's idea of a mountain carving to bring tourists to the Black Hills was met with skepticism and criticism. There was also a good deal of enthusiasm.

Sculptor Gutzon Borglum transformed Robinson's vision into a memorial to the ideals of democracy. It was thought the project could be completed in five years for 500,000 dollars. Fourteen years and one million dollars later, carving ended with the death of a visionary and the onset of world war.

In 1923 no one could have foreseen the struggle that lie ahead. Perhaps it is well they did not, for it is unlikely they would have pursued their dream. Their creation became more than a tourist attraction. It is a national symbol. Today, millions of people come to the Black Hills to see the result of that dream, Mount Rushmore National Memorial.

Originally, Robinson envisioned gigantic carvings in the Black Hills of great western heroes. Robinson believed such a spectacular attraction would bring tourists to the area and boost the state's economy. He invited Borglum, a noted sculptor of monumental statues, to give his opinion as to whether such a thing could be done. Borglum enthusiastically confirmed that it could and that he was precisely the man to do it. Robinson then had to win over the skeptical citizens of South Dakota and other critics. With the help of U.S. Senator Peter Norbeck, Congressman William Williamson and Rapid City businessman John Boland, Robinson was able to mobilize support to realize his dream.

Robinson's idea was to carve the likenesses of heroes such as explorers Lewis and Clark, Indian leader Red Cloud or Wild West celebrity Buffalo Bill Cody. The Lakota, who had roamed the surrounding Great Plains during the last century, consider the Paha Sapa or Black Hills sacred because of their natural beauty, abundance of wildlife and spiritual qualities. The influx of miners in 1874 did little to alter these scenic qualities. Fifty years later Robinson believed that these characteristics would attract tourists. But he felt there needed to be something monumental to draw them there in the first place.

Robinson initially contacted sculptor Loredo Taft, but Taft was unavailable, so the historian wrote to Borglum in August, 1924. Borglum was directing a colossal carving commemorating the Confederacy at Stone Mountain in Georgia. The idea of creating a northern memorial gripped Borglum's imagination immediately. He enthusiastically responded, saying he would come to the Black Hills to evaluate the possibility of mountain carving there. He visited South Dakota in September, 1924, and returned in August, 1925, with his 12-year-old son, Lincoln, to search for a suitable cliff. Upon seeing the Needles area near Harney Peak, Borglum declared, "American history shall march along that skyline." Borglum eventually selected on a granite outcropping named Mount Rushmore, after a New York City attorney, Charles Rushmore, who had visited the Black Hills in 1885.

Robinson's brainstorm brought praise and criticism. An early supporter, Senator Norbeck secured much-needed federal funding. Congressman Williamson was instrumental in passage of federal legislation permitting the mountain sculpture. Businessmen Boland led

local fund raising that enabled the work to begin and later became the project's general manager. Local promoters, businessmen and politicians formed the Mount Harney Memorial Association to raise money and promote the project. Local critics were concerned that they would be required to finance the endeavor. Other critics denounced the project as a desecration of the natural beauty of the Black Hills. They felt no human creation could measure up to that which nature had produced.

Although the construction period stretched more than 14 years, from 1927 to 1941, actual time spent working on the mountain is equal to about six and one-half years. Much time and effort were spent garnering support, both financial and political, through promotion and events. Lack of funds often halted the work. Project delays resulted from political battles over administration of the project. But through the perseverance and commitment of all involved, progress was made. This was marked by the successive unveilings of the figures at elaborate, publicity-generating events, which in turn led to increased funding and support culminating in the monument we see today.

Promotion, the catalyst for the carving, was a primary factor in its completion and Borglum assumed responsibility for that. His strategy included spectacular public ceremonies dedicating each bust. Touring the country, he became a spokesperson in the advertising of several commercial products. The Hearst newspaper chain sponsored a nationwide competition for a brief written history of the United States to be carved on the mountain. The Mount Rushmore National Memorial Society was later established to raise private funds and to promote the project. These efforts were among many to generate public awareness.

As each figure became recognizable, it was formally dedicated with a dramatic unveiling using a huge American flag. The Washington dedication was July 4, 1930. Jefferson was dedicated August 30, 1936, and Lincoln, the following year on September 17, 1937. Roosevelt was dedicated July 2, 1939.

A project of the size and significance of Mount Rushmore required persistence and forthrightness to make it happen. Borglum possessed these qualities. He worked the halls of power in Washington with a sometimes stubborn and abrasive manner that often alienated the very people whose support he sought. He came up against equally formidable men. Confrontations with Senator Norbeck, Boland and President Calvin Coolidge led to project delays, frustration and bitter feelings.

Borglum also came into conflict with the Mount Rushmore National Memorial Commission, which was charged with project management and financial responsibility, two areas over which Borglum fought for control. The first such Commission was formed in 1929 and Borglum was to work alongside it. Because he wanted control of all aspects of the work, Borglum found this arrangement unacceptable and frequently complained loudly about it. A second commission in 1938 replaced the first and effectively gave Borglum complete control and removed Boland from the project altogether.

PHOTO OF FIRST COMMISSION - G-14.02-32

CAPTION IS AS FOLLOWS:

The first Mount Rushmore National Memorial Commission posing in front of Mount Rushmore in 1929. Front left to right: John Boland, Julius Rosenwald, Doane Robinson, Gutzon Borglum, William Williamson, Frank Lowden, Fred Sargent, Royal Johnson, Lorine Spoonts. Rear left to right: Delos Gurney, Joseph Cullinan, Charles Day.

Borglum's reign was short-lived. In 1939 authority was returned to the federal government under the National Park Service.

The Mount Rushmore National Memorial Society, a non-profit organization, was founded in 1930 by an act of Congress to promote the project nationally and to raise private funds to finance the carving. Through the sale of memberships and operation of concessions, the Society amassed funds which, when matched with federal dollars, contributed greatly to early progress on the sculpture. Initially, the organization sold booklets, note cards, photographs, medallions and other souvenirs to raise money and publicize the project. In later years Society revenues have supported interpretive efforts and major building improvements. The Society has provided for the Sculptor's studio, the Avenue of Flags, numerous brochures, films, books, oral histories, celebrative programming, and many other elements to enhance the visitor's educational experience.

Borglum estimated the project would cost under \$500,000 and it would take only a few years to complete. The intent was to fund the carving with private donations, but it became obvious that federal funding would be essential. In 1929 President Coolidge urged Congress to appropriate \$250,000 which was to be matched with private donations. As the work continued over a decade, additional appropriations totaled \$836,000. These were hard-won dollars that Borglum and Senator Norbeck succeeded in persuading the Depression-era Congress to make available. The final bill amounted to almost twice Borglum's estimate and the carving took nearly three times as long to reach its present stage. In the end, the federal government financed almost the entire project. Private donations amounted to only \$153,992 of the \$989,992 total expenditure.

Gutzon Borglum died March 6, 1941, at age 74 in Chicago from complications resulting from minor surgery. The commission immediately transferred responsibility for completing Mount Rushmore to Borglum's son, Lincoln, who had been project superintendent since 1938. The majority of work on the faces had been completed before Borglum's death. Lincoln did some additional work in the hair, collars and lapels of the four figures. With the imminent onset of World War II there would be no more money for the project. Without further funding and the guidance of its creator, drilling on the mountain concluded on October 31, 1941, and silence returned to Mount Rushmore.

Since carving ceased there has been no let-up of activity at Mount Rushmore. Continuous increases in park visitation over the years have prompted many improvements to facilities. Borglum's tradition of spectacular dedication ceremonies was continued in 1991 when Mount Rushmore was officially dedicated by United States President George Bush, 50 years after work ceased. The Memorial has been stage to many prominent visitors over the years. President Eisenhower visited in 1953. But the vast numbers of visitors to the Black Hills and the Memorial, over two million every year, are tourists, thus fulfilling Doane Robinson's dream.

THE WORK INVOLVED TO CREATE THE FIGURES

Gutzon Borglum was thoroughly prepared when the Mount Rushmore commission came his way in 1925. He boasted of many memorials to famous Americans that he had already completed. He based working models on life masks, paintings, photographs, descriptions, and his own interpretations of the presidents he selected. Plaster copies of the figures were created to guide the carving work.

Borglum transferred the measurements from the working model to the mountain. The models were sized at a ratio of 1:12 - one inch on the model would be equal to one foot on the mountain. A metal shaft was placed upright at the center of the model's head. Attached at the base of the shaft was a protractor plate marked in degrees, and a horizontal ruled bar that pivoted to measure the angle from the central axis. A weighted plumb line hung from the bar; workers slid it back and forth to measure the distance from the central head point, and raised and lowered it to measure vertical distance from the top of the head. Numbers obtained from the model were then multiplied by 12 and transferred to the granite mountain. On the mountain a large scale pointing system was anchored to the top of each figure.

Finding the granite difficult to work, Borglum utilized dynamite to carve 90 per cent of the figures. The dynamite removed large portions of weathered rock to reach granite solid enough for carving. Then the points from the models were transferred to the faces. Skilled blasters then dynamited within a few inches of the finished surface as Borglum carefully studied the heads, making changes as necessary.

After blasting, the features were shaped by workers suspended by steel cables attached to winches on top of the mountain. The workers used pneumatic drills to honeycomb the granite with closely spaced holes to nearly the depth of the finished surface. Excess rock was then removed with chisels and smaller air hammers. Later the workmen "bumped" away the drill holes and lines with air hammers to create a smooth, white surface.

PHOTOGRAPH

Mount Rushmore completed

Caption for photo