# From Space to Race

It still somehow seems unreal. Could men really travel all the way to the moon, land safely, walk around on its surface, then safely return to the earth for a near-perfect splash-down in the Pacific?

One of the big American achievements in the 1960s — even while racial strife came to a head in many American cities — was the space program. Even while problems on earth seethed and boiled, America was — for a brief moment — able to transcend itself and bask in the splendid glory of having landed men on the moon.

From beginning to end, the Apollo 11 space shot (including the actual moon landing) was witnessed by literally hundreds of millions of people in nearly every part of the globe.

As the blast-off at Cape Kennedy neared, mankind was united in the hope that the American astronauts would have a successful flight. As the final nerve-wracking countdown got under way, hundreds of millions of keyed-up spectators watched intently, while their pulse rose along with the giant 363-foot-high, 6,484,280-lb. Saturn V launch vehicle as it roared off its launching pad. The titanic rocket made a flawless flight from Pad 39A as hundreds of thousands of spectators cringed from the ear-splitting thunder in the wake of the Saturn launching.

As a roaring blast of orange flame lifted the rocket from its pad, it began climbing slowly into the blue sky, leaving a white trail behind it. The huge Saturn rocket rapidly accelerated and raced toward outer space, quickly became a mere pinpoint — then it was gone.

The three astronauts — Neil A. Armstrong, Edwin E. Aldrin, Jr., and Michael Collins — were enthusiastic, excited and filled with awe as powerful forces seemed to pull them back toward the earth. Commander Armstrong's enthusiasm was evident as he exclaimed: "... this Saturn gave us a magnificent ride. It was beautiful!"

The blast-off occurred on July 16th. By the 20th, the astronauts had arrived at the moon. Bright and early on the morning of July 20, Armstrong and Aldrin crawled from the Command Module through an inter-connecting tunnel into the Lunar Module where they would spend most of the next day. After orbiting the moon twelve times, the

Apollo II spacecraft was separated into two separate craft: the command-service craft (the *Columbia*) piloted by Collins and the Lunar Module (the *Eagle*) occupied by Armstrong and Aldrin.

As the *Eagle* began its powered descent toward the moon, the two astronauts intently scanned the instruments and spaceship controls. About 500 feet above the moon, Armstrong began maneuvering the craft manually to avoid landing in a rock-strewn moon crater.

Commander Armstrong hovered the *Eagle* for about a minute and a half while moving it laterally with the reaction control system until he found a clear area on which to descend. Shortly afterward, the contact light went on inside the cockpit, as the 68-inch probes dangling below *Eagle*'s footpads signalled that contact with the ground had been made.

The jubilant astronauts, Armstrong and Aldrin, cut off the rocket engine then radioed, "Houston, Tranquility Base here. *The Eagle has landed!*" Aldrin described the eerie view of the lunar surface as "magnificent desolation," and the color of the moon as light gray.

## *"One Giant Leap"*

For millennia the earth's inhabitants had gazed in wonderment at the moon — never suspecting that one of them would one day walk on its surface. Now that old dream came true.

About six and a half hours after landing, on July 20, 1969, Neil Armstrong stepped out onto the lunar soil and exclaimed: "That's one small step for a man, one giant leap for mankind." Everyone back at the mission control in Houston cheered and began hugging one another. All over the world, tears of joy ran down the cheeks of fellow humans — who watched in numb amazement at such an accomplishment. It still somehow seemed like a dream.

Only twenty minutes after Armstrong's first step onto the moon, Edwin Aldrin, Jr., joined him. For over two hours the two astronauts cavorted on the moon. They set up a device to measure the composition of solar radiation reaching the moon. They also set up a screen of aluminum foil to capture particles of solar wind. They erected a seismometer to measure future moon quakes; and they set up a reflector for a laser beam so that earth scientists could bounce off the reflector laser beams from the earth. By this means they could accurately measure the distance to the moon. The astronauts also planted "Old Glory" on the moon — symbolizing America's technological achievement in the space race.

After being on the moon for twenty-one hours and thirty-seven minutes, the American astronauts activated the *Eagle*'s ascent stage to launch it back into lunar orbit. Following the successful performance of

several maneuvers, the astronauts were able to dock the *Eagle* with the *Columbia,* and then the three were homeward bound.

### *Five More Moon Landings*

Later U.S. Apollo moon landings were somewhat anticlimactic.

America launched Apollo 12 on November 14, 1969. The three astronauts who participated in the second Apollo flight were Charles Conrad, Jr., A. L. Bean, and R. F. Gordon, Jr. While Conrad and Bean descended to the Sea of Storms in the Lunar Module for their moon-walk, Gordon remained in lunar orbit at the controls of the Command Module. The astronauts had a safe and successful mission.

Apollo 14 blasted off toward the moon on January 31, 1971. On that moon-walk, Alan B. Shephard, Jr., and Edgar D. Mitchell landed their Lunar Module in the Fra Mauro area. Stuart A. Roosa remained in command of the Command Module during the moon-walk.

On July 26, 1971, the U.S. launched Apollo 15. David R. Scott and James B. Irwin descended to the moon and landed in the Hadley Rille area and explored the lunar surface in a Lunar Rover.

Apollo 16 blasted off from its launching pad at Cape Kennedy on April 16, 1972. After landing on the moon, John W. Young and Charles M. Duke, Jr., spent 71 hours and two minutes on the moon's surface. Before blasting off from the moon, they collected 214 pounds of lunar rock and soil.

On December 7, 1972, the last of the Apollos — Apollo 17 — lifted off its launching pad in a spectacular night-time ascent and headed for the moon. On board were Eugene A. Cernan, Ronald E. Evans and Harrison H. Schmitt. After making their successful landing, Cernan and Schmitt spent a record 74 hours and 59 minutes on the moon before returning with 250 pounds of lunar material to the earth.

With Apollo 17's successful splashdown, America's manned flights to the moon ended. During its highly successful Apollo moon-walk program, the U.S. gained valuable information about the moon, erected a number of instruments for future monitoring, collected many hundreds of pounds of lunar material, and achieved a tremendous boost to her national morale. America also received worldwide acclaim for the most amazing scientific feat ever performed by mortal men.

But America's space program proved to be very costly — running into many billions of dollars. American officials realized that future space programs would have to be scaled down before the American taxpayers would be willing to support them.

Many Americans complained about the "lunacy" of the moon program. Why spend over $30 billion on the space program, they asked, when far more serious problems remain at home on the earth?

### *Joint U.S.-Soviet Space Project*

In July, 1975, the U.S. and Russia cooperated in their first joint space project. In a highly symbolic gesture of East-West détente, and with a view to further cooperation in space exploration, a U.S. and Soviet spacecraft linked together in space on July 17. American and Russian astronauts shook hands in space. This joining of the Apollo-Soyuz spacecraft was the climax of a joint space effort between two rivals in the space exploration.

The link-up mission began on July 15, when the Soviet Soyuz manned by Commander Col. Aleksei A. Leonov and Valery N. Kubasov, was launched from the Baikonour Cosmodrome in central Asia. The launch was televised throughout Russia for the first time in the history of Soviet space exploration.

The American Apollo spacecraft was manned by Brig. Gen. Thomas P. Stafford, Vance D. Brand, and Donald K. Slayton. It blasted off from its launching pad at Cape Canaveral, Florida seven and one half hours after the Soyuz spacecraft had lifted off in Russia.

Again, as with the first moon landing, hundreds of millions watched the docking maneuver which occurred on July 16, 1975. After the Soviet and American crews carried out maneuvers to put their crafts in proper position for the docking, they had a very successful hook-up.

The first contact came on July 17 about 140 miles above the Atlantic Ocean while the two spacecraft were about 620 miles west of Portugal. Approximately 3 hours later while passing over Amsterdam, the crews met face to face for the first time. It was at that time that Stafford and Leonov first shook hands through the hatches, and greeted one another in each other's language.

The American and Soviet crews exchanged visits and shared meals on July 18. At their final meeting, Stafford said: "I'm sure we have opened a new era in the history of man." In a televised orbit-to-ground news conference, Leonov said: "This work became possible in the climate of détente."

The two-day joint Soviet-American flight ended on July 19, with the undocking of the two spacecraft. The Russian space ship landed safely on July 21 on the steppes of central Kazakhstan. One of the Soviet cosmonauts described the historic flight as "hard, very hard." The American Apollo spacecraft also returned safely on July 24, landing almost directly on target in the Pacific Ocean.

### *The Future in Space*

What is planned in future space flight projects?

Both America and Russia now fully realize just how expensive it is to develop their space programs. The multiple billions which the U.S.

paid for her moon rock and soil was very costly. Of course, there are other boons from the space program, such as its meteorological and geological benefits.

It is both amazing and sobering to realize that a multiple billion dollar U.S. space program, combined with the united efforts of hundreds of thousands of dedicated staff members could successfully land men on the moon and return them safely to this earth on six successive occasions.

But, many ask: How is it that man can't solve his many deep-seated problems which confront him right here on this earth? When will mankind learn to devote itself in single-minded dedication to the elimination of the long-continuing human-related problems of hunger, poverty, disease, crime, broken homes, pollution — and war?

Will mankind ever succeed in getting a handle on these pressing earth-bound problems? Consider, for example, the deep seated race question.

### *The Race Question*

As the peoples of the United States celebrated their 200th anniversary, the problems of a multi-racial society continued to trouble them. Many Americans don't realize that the problem of racial discrimination has plagued America for over three and a half centuries!

The roots of America's racial tensions are much older than the United States. The first permanent English colony was planted in America in 1607. Only 12 years later, African slavery was also introduced to Jamestown. 1619 witnessed the arrival of the first slaves from Africa. In that year a Dutch ship docked at Jamestown, Virginia, with 20 Negro slaves. Those slaves, and the many others who soon followed them, had a great part in making that first English settlement into a thriving colony. Also, they contributed much toward bringing prosperity to the other southern colonies which were later established in North America.

By the time the American Revolutionary War broke out in 1776, there were approximately two and a half million people in the Thirteen Colonies, and a half million of them were Negro slaves.

The importation and use of Negro slaves continued to thrive from that time until the Civil War, when there were 3,954,000 Negro slaves in the U.S. Most of them lived in the 15 Southern slave states, where they made up nearly one third of the South's total population of about twelve million.

It was, in fact, Negro slavery which sparked the Civil War. The slavery issue was the catalyst which drew together all of the high-pitched emotional sentiments, and culminated in the bloodiest war in America's history.

### *Jim Crow Laws*

After the Civil War, the freed Negro slaves suffered widespread discrimination — especially in the South.

In its modern American form, however, racial segregation didn't really get started until the late 1800s. The now-infamous *Jim Crow laws* were adopted by many Southern states during the latter part of the 19th century. These infamous segregation laws required that whites and Negroes use *separate public facilities*. Even small details of public life were covered by the discriminatory Jim Crow laws. For example, Oklahoma required that whites and Negroes use separate telephone booths; and Arkansas specified that separate gambling tables were to be used. Many courts even provided separate Bibles for swearing in witnesses. A number of Southern states also adopted "grandfather clauses" and other laws that prevented Negroes from voting.

It comes somewhat as a surprise to many younger Americans to learn that the rapid spread of segregation laws through the South was actually supported by a series of decisions of the U.S. Supreme Court.

In the influential *Plessy vs. Ferguson* case of 1896, the Supreme Court supported the constitutionality of a Lousiana law requiring separate but equal facilities for whites and Negroes in railroad cars. The actual era of *de jure* (by law) segregation began with that Supreme Court ruling. During the next 50 years, many Southern states used the "separate but equal" rule to segregate the races in transportation, recreation, sleeping and eating facilities and in the public schools.

### *Crumbling Segregation*

The Supreme Court also held that a state could validly forbid a college, even a private one, to teach blacks and whites at the same time and place. During the period 1900 to 1920, segregation was extended to all public transportation and education facilities as well as to hospitals, churches and jails throughout the Southern states. By the end of the Second World War, blacks and whites were rigidly separated by law throughout most of the South.

When did segregation in the U.S. begin crumbling? During World War I a mass migration of Negroes from the South to the manufacturing centers of the North began. Only about a tenth of all Negro Americans lived outside the South in 1910, whereas today about half of them live outside the southern states.

Beginning in the 1930s, Negroes increasingly gained in national politics, and they also began receiving a fairer hearing in the federal courts.

During World War II, with many Negroes serving in the U.S. military, and with still more migrating to the large metropolitan areas outside the South (i.e. New York City, Chicago, Detroit, Los Angeles), irresistible pressures began building up to break down the segregation barriers in this country. Interestingly, more Negroes now live in the metropolitan area of New York than in any Southern state!

During the 1930s the blacks became much more assertive of their rights. Then, in 1941, President Roosevelt created the Fair Employment Practices Committee (FEPC). Under the aegis of the FEPC, numerous "no discrimination" clauses were included in most government contracts.

In 1948 President Truman issued a directive calling for an end to segregation in the U.S. armed forces. At about that same time, the Supreme Court also started moving away from its earlier position toward *segregation,* and began leaning toward the principle of racial equality.

### *Desegregation of U.S. Schools*

Desegregation really got under way in 1954. The case of *Brown vs. Board of Education of Topeka* came before the Supreme Court, which ruled against *de jure* segregation in public schools. The court held that "in the field of public education the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal."

In 1955, the Supreme Court implemented its 1954 opinion by declaring that the Federal district courts would be given jurisdiction over lawsuits to enforce the 1954 desegregation decision, and it asked that desegregation proceed "with all deliberate speed." In 1969, the Supreme Court, becoming impatient over petty delays, ordered public school districts to desegregate "at once."

But desegregation of the schools ran into a number of road blocks, especially in the South. Governor Orval Faubus of Arkansas called out the Arkansas National Guard to prevent integration of the Little Rock schools. President Eisenhower countered by ordering Federal troops to enforce the court order for integration. Governor Faubus failed in his attempt to prevent the integration of the Little Rock schools, and in 1960 they opened peacefully on an integrated basis.

In 1962 violence erupted in Mississippi over the issue of integration of the schools. Mississippi's governor Ross R. Barnett opposed a black student entering the University of Mississippi. But the black student, James H. Meredith, supported by Federal court orders, registered at the University of Mississippi that same year. Several hundred Federal marshals were assigned to protect Meredith. A large mob gathered and

attacked the Federal marshals and two persons were killed. The following day Federal troops occupied Oxford and restored order. James H. Meredith became the first black to attend a public school in Mississippi with white students.

When two black students attempted to enroll at the University of Alabama in 1963, Governor George C. Wallace stood in a doorway as a symbolic gesture of his attempt to block them.

Numerous other confrontations between Federal and state officials occurred throughout the South, but in the end the Federal laws were upheld, and peace and order was restored.

Numerous moves were then made by the blacks to desegregate public transportation. During 1955-56 Dr. Martin Luther King, Jr. led blacks in Montgomery, Alabama, in a protest boycott against the municipal bus system after Rosa Parks, a black woman, refused to give up her seat to a white man and move to the segregated section of a bus. On November 13, 1956, the Supreme Court nullified the laws of Alabama and the ordinances of Montgomery that required segregation on buses.

Increasing demands of blacks for faster progress in attaining equal rights came in 1964 when President Lyndon B. Johnson asked for the most comprehensive civil rights act to date. The 1964 civil rights act specifically prohibited discrimination in *education, voting,* and the use of *public facilities.* The Federal government at last had a means of enforcing desegregation.

Even though a Voting Rights Act was passed in early 1965, it failed to prevent the rising tide of militance among disenchanted blacks. *Watts,* a black district in Los Angeles, erupted in a paroxysm of violence, leaving much of the community burned out, and thirty-four dead! "Burn, baby, burn" young black dissidents cried as Watts went up in smoke and ashes.

During 1966 there were riots in practically all major U.S. cities as blacks began shifting to their own independent course of action, as expressed in the concept of black power, led by Stokely Carmichael, head of the Student Nonviolent Coordinating Committee. Serious rioting also erupted in Detroit and Newark in 1967.

In spite of all desegregation attempts, varying degrees of segregation continued throughout much of America. During 1968, the National Advisory Commission on Civil Disorders (the Kerner Commission) issued a report which said, "our nation is moving toward *two societies,* one black, one white — *separate and unequal.*"

During the summer of 1968, Dr. Martin Luther King, Jr. was assassinated while in Tennessee. His assassination set off riots in 126 cities all across America.

In the meantime, new forms of *de facto* segregation began raising their ugly head in the North. Now that the northern states were receiv-

ing a flood of southern blacks, they began to feel differently toward them.

But despite all these problems of integration in the U.S., some progress was being made. In 1951, fifty-one percent of all black students were enrolled in predominantly black colleges, but by 1971 only thirty-four percent were in black institutions. And at the primary and secondary levels of education, the South had actually begun to move ahead of the North. By the autumn of 1972, forty-four percent of the black students in the South were in predominantly white schools. But only thirty percent were in predominantly white schools in the North.

### *Controversial Busing Issue*

The early 1970s were plagued by the controversial issue of *busing* which was to be used as a tool to promote integration. Many feel it is more aptly described as a tool of the politicians to be used to get votes. But from the beginning there has been strong opposition to busing. A huge antibusing motorcade of over 3,000 drove from Richmond, Virginia to Washington, D.C. to protest government policies. The higher education bill of 1972 contained three antibusing clauses. But, even so, during the early 1970s, the Supreme Court continued to back busing plans.

As America celebrated her 200th anniversary, the nation was having serious misgivings about the *busing* issue. Boston's busing plan caused widespread disturbances during the 1974-76 school years. The Boston busing disturbances served to renew the national debate over the busing issue during the critical election year of 1976.

In spite of all of America's desegregation difficulties, only about twelve percent of black students in the U.S. still remained in completely segregated schools in 1976.

But even though many laws supporting *de jure* segregation have been declared unconstitutional, *de facto* racial separation has actually increased in the U.S. during recent decades. In actual fact, blacks residing in America's cities were more residentially segregated in the 1960s than in the 1930s! This is hard to understand. But if one is to really grasp this phenomenon, he will have to understand a little about human nature.

Waving a magic governmental legislative wand does not automatically erase discrimination from the minds of people who, all their lives, have been deeply steeped in concepts of discrimination and segregation.

When Federal authorities have tried to force integration on various cities — especially on the schools — the whites have simply fled. This "white fright" followed by "white flight" to the suburbs, or even fleeing out into smaller towns, is something which is beyond governmental legislative control.

## *"A Racial Showdown"*

America has come a long way in helping her citizens overcome much of their prejudice toward minority groups. But the integration laws have not yet succeeded in breaking down all of these barriers. They never will.

As America enters her third century, will she be able to really get a handle on her racial problem? Will it continue to be a thorn in her side, sapping her strength and eroding the unity and happiness of her people?

During the early part of 1976, Roy Wilkins, the executive Director of the National Association for the Advancement of Colored People (NAACP) said: "I have a feeling that we're on our way to *a racial showdown* in this country."

Will the American people be able to rise to the challenge and avert serious racial strife in the coming years? Can the peoples of this great "melting pot" learn to get along — not treating minority groups as second-class citizens? Will the minority groups be able to rise to the occasion — and overlook slights or insult which they may yet endure at the hands of a few?

It is past time for the peoples of America — all ethnic groups — to bury their differences and learn to love and respect all other racial groups — regardless of differences in race, language, religion or social customs.

It is astonishing to realize that even while Americans soared into space, and astronauts cavorted on the moon, back home racial unrest and discrimination were still very much present.