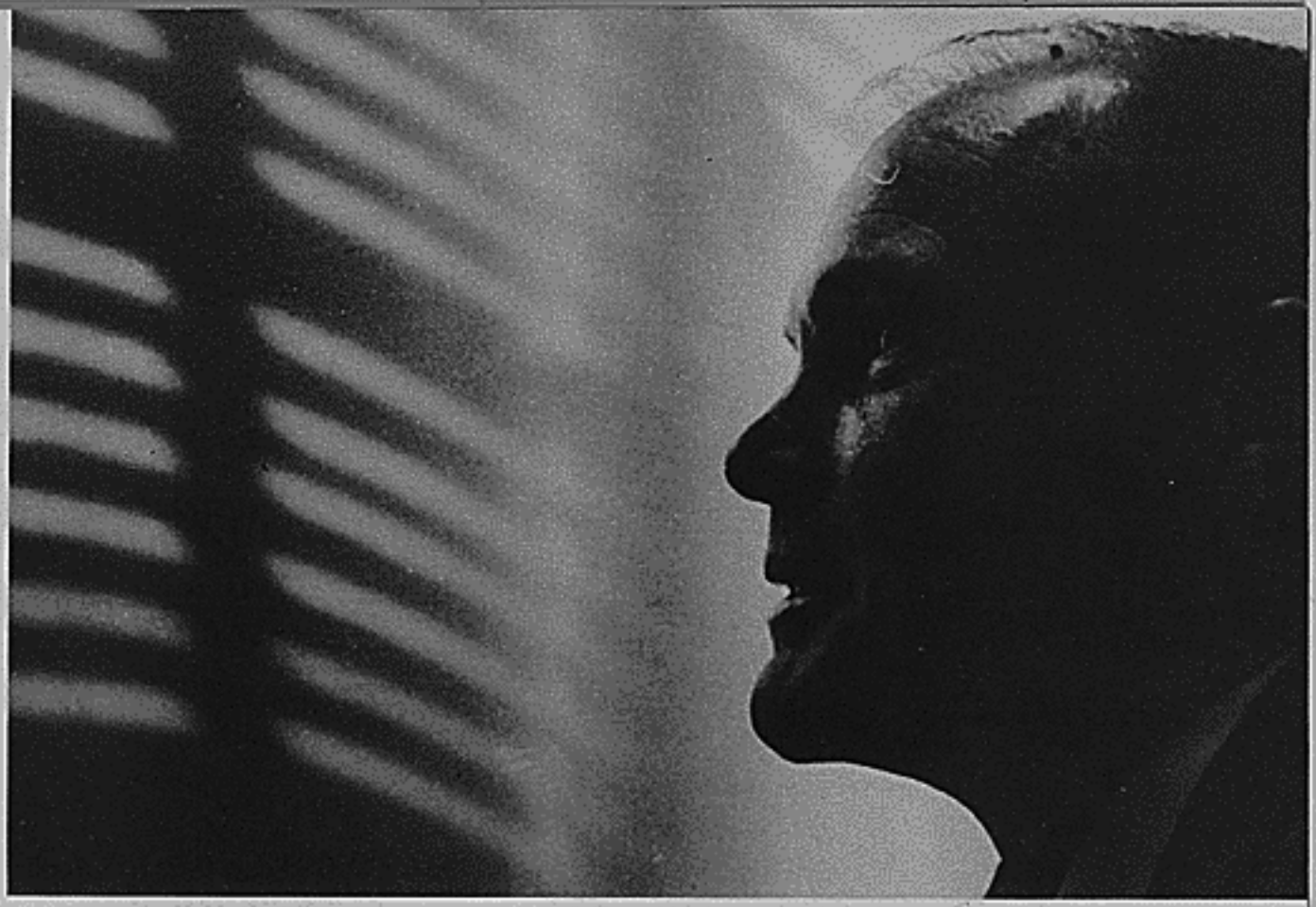
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

MANNED SPACECRAFT CENTER

ASTRONAUT JOHN H. GLENN, JR.

FRIENDSHIP 7

FEBRUARY 20, 1962



John Herschel Glenn, Jr., was born at Cambridge, Ohio, July 18, 1921. Now, 40 years later, he has become the first American to orbit the earth.

During the interim, he has lived an exciting life and dedicated almost 20 years to the service of his country.

He attended primary and secondary schools at New Concord, Ohio, and, in addition, attended Muskingum College there.

The 5-foot 10-1/2 inch tall astronaut has red hair and green eyes and weighs 168 pounds.

Glenn entered the Naval Aviation Cadet Program in March 1942, and was graduated and commissioned in the Marine Corps a year later. Following advanced training, he joined Marine Fighter Squadron 155 and spent a year flying F4U fighters in the Marshall Islands. During his World War II service he flew 59 combat missions.

Following the war, he was a member of Fighter Squadron 218 on North China patrol and had duty in Guam. From June 1948 until December 1950, he was an instructor in advanced flight training at Corpus Christi, Texas. He then attended Amphibious Warfare Training School at Quantico, Virginia.

In Korea he flew 63 missions with Marine Fighter Squadron 311, and 27 while an exchange pilot with the Air Force in F-86 Sabrejets. In the last 9 days of fighting in Korea, he downed three MIGs in combat along the Yalu River.

After the end of the Korean action, Glenn attended Test Pilot School at Patuxent River, Maryland. After his graduation he was project officer on a number of aircraft. He was assigned to the Fighter Design Branch of the Navy Bureau of Aeronautics in Washington from November 1956 until April 1959, during which time he also attended the University of Maryland. In April 1959 he was selected as one of the seven Project Mercury astronauts.

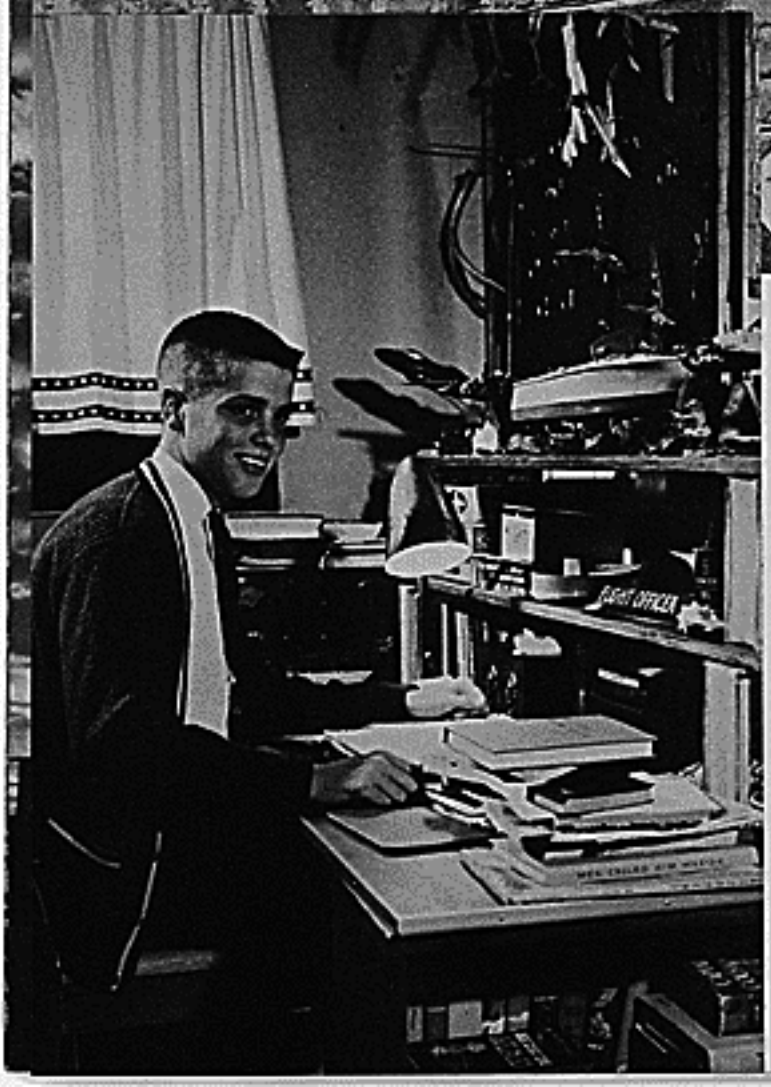
John Glenn has been awarded the Distinguished Flying Cross on five occasions and holds the Air Medal with 18 clusters for his service during World War II and the Korean action.

In July 1957, the Marine lieutenant colonel, while project officer on the F8U, set a transcontinental speed record from Los Angeles to New York, spanning the country in 3 hours and 23 minutes. This was the first transcontinental flight to average supersonic speed. He has more than 5,100 hours of flying time, including 1,600 hours in jet aircraft.

Glenn's selection as one of the Mercury Astronauts was, in itself, an honor. Records of more than 500 Air Force, Navy, Marine, and Army pilots who had graduated from test pilot school were screened by National Aeronautics and Space Administration officials and only 110 met all seven basic requirements which had been set up.

A further screening and processing program was instituted and, eventually, the seven who demonstrated the most outstanding professional background and knowledge in relationship to the anticipated job requirements were chosen.

Since that time, John Glenn, Jr., has twice been named to the role as back-up for teammates Alan B. Shepard, Jr., and Virgil I. "Gus" Grissom, who were pilots on America's two suborbital manned space flights. On November 29, 1961, Manned Spacecraft Center Director Robert R. Gilruth named him as the pilot of the first orbital mission - a mission which was to be eventually flown on February 20, 1962.

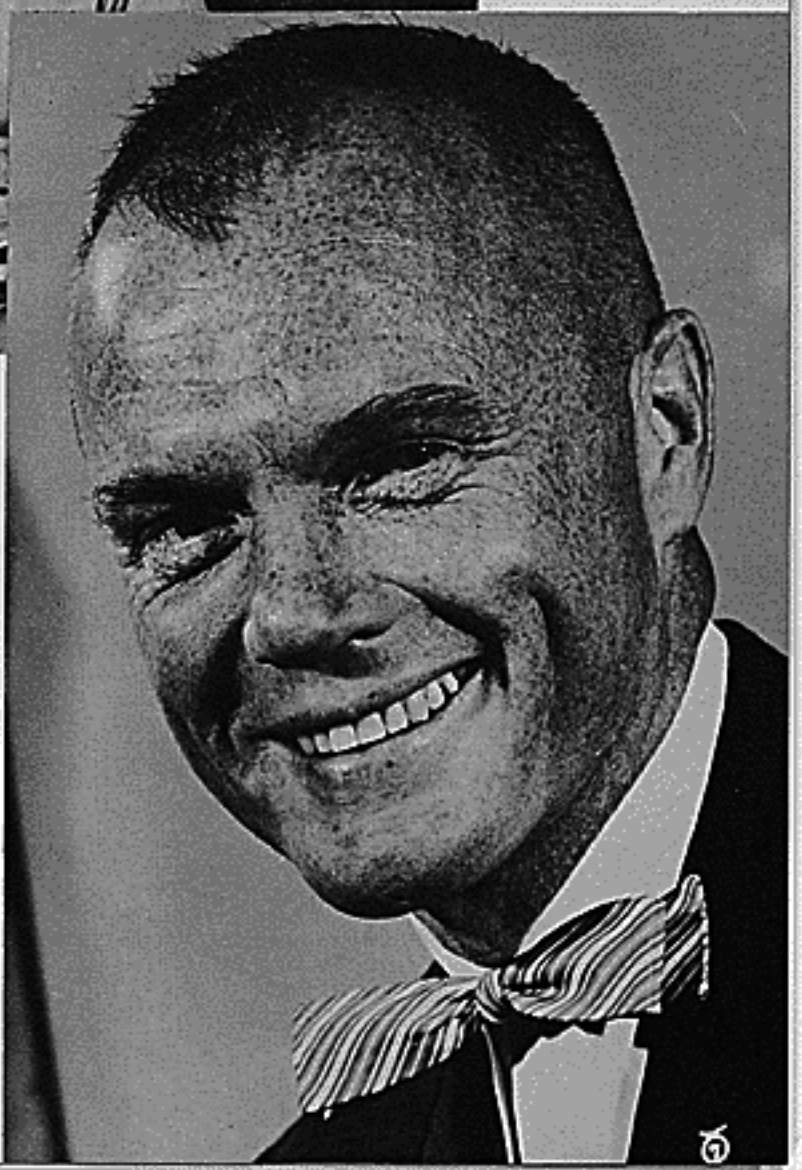


Two of John Glenn's staunchest supporters have been his children - David, 16, and Carolyn, 14.

Lynn is pictured above in front of the fireplace in the Glenn residence in Arlington, Virginia, with a family favorite - Chipper. She is in the ninth grade at Williamsburg Junior High School and her principal hobbies are churchwork and art. During the recent tour of the family with the astronaut, Lynn was notified at the Newark Airport that she had been elected president of her class.

Dave, at the left, is a sophomore at Yorktown Senior High School. He is active in sports and church youth activities, and one of his favorite hobbies is model making.

Both of the younger Glenns, although kept extremely busy on the recent tour, seemed most unaffected by all the attention showered on the party. They were tremendously impressed by the skyline view from their suite high in the Waldorf Astoria Towers, as well as by the giant ticker-tape parade in New York, the throngs lining the streets during the rainy Washington, D.C. parade, and the crowds which gathered in the little community of New Concord, Ohio, to pay tribute to Astronaut John Glenn, his wife, and his family.



The Glenn family is one which is very close with many common interests. Every member of the family is active in church-work and they attend the Little Falls Presbyterian Church in Arlington.

As a family they share many hobbies - water-skiing, boating, and camping, among others.

Lynn, Annie (whom John Glenn has frequently referred to lately as "The Rock of the Family"), and David are shown above in their home; while a favorite portrait of the now famous astronaut is at the right.

An example of the manner in which the family reacts was brought to light recently during a press conference for the astronauts' ladies. In answer to a query, Annie said "Sure," when asked if she'd like John to go again. When asked about the possibility of David becoming an astronaut she said, "He knows a lot about it."

A little later Lynn was asked if she would like to become a female astronaut; she also said, "Sure."

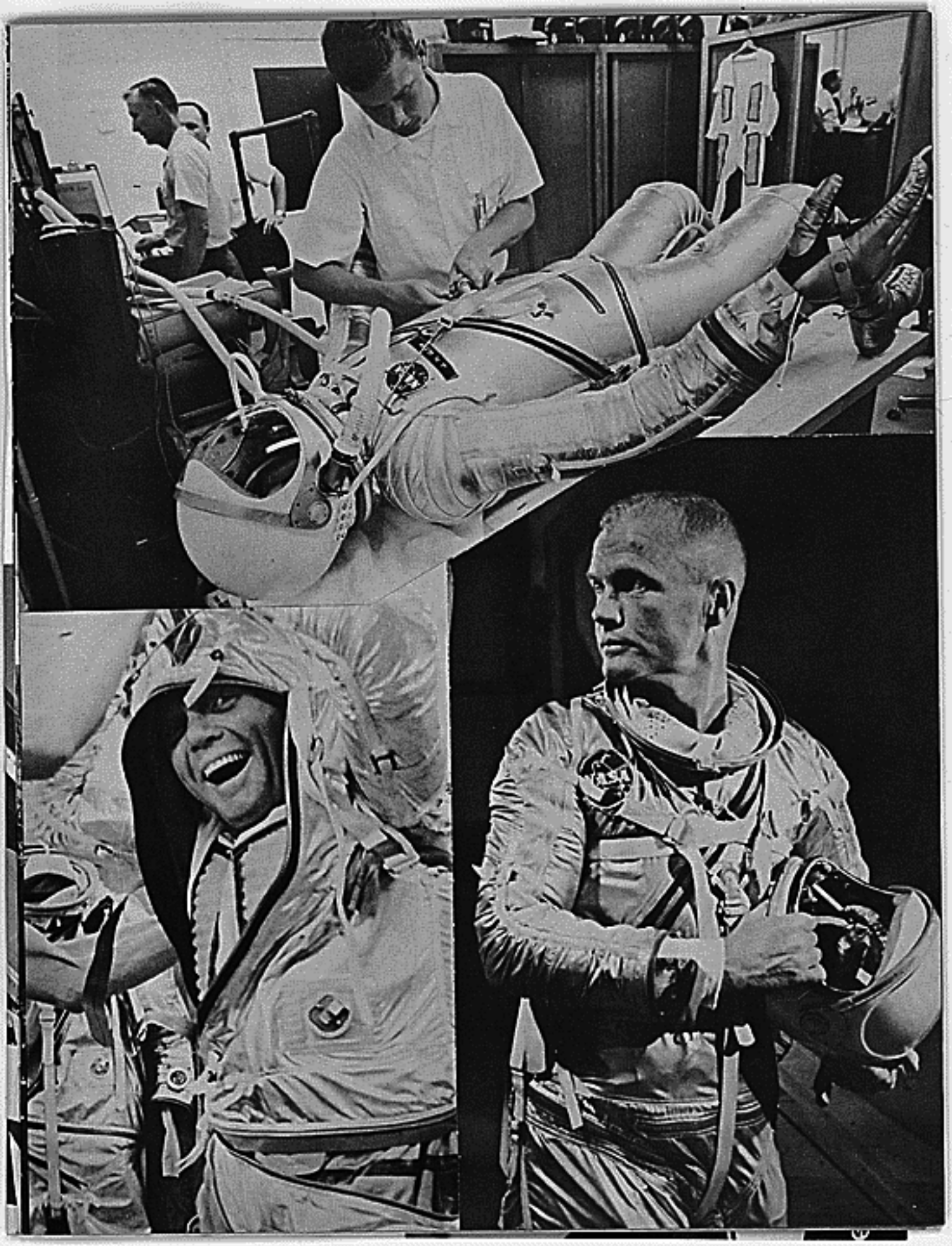
As the tour came to a close in Washington it was typical that such a close family should be close together.

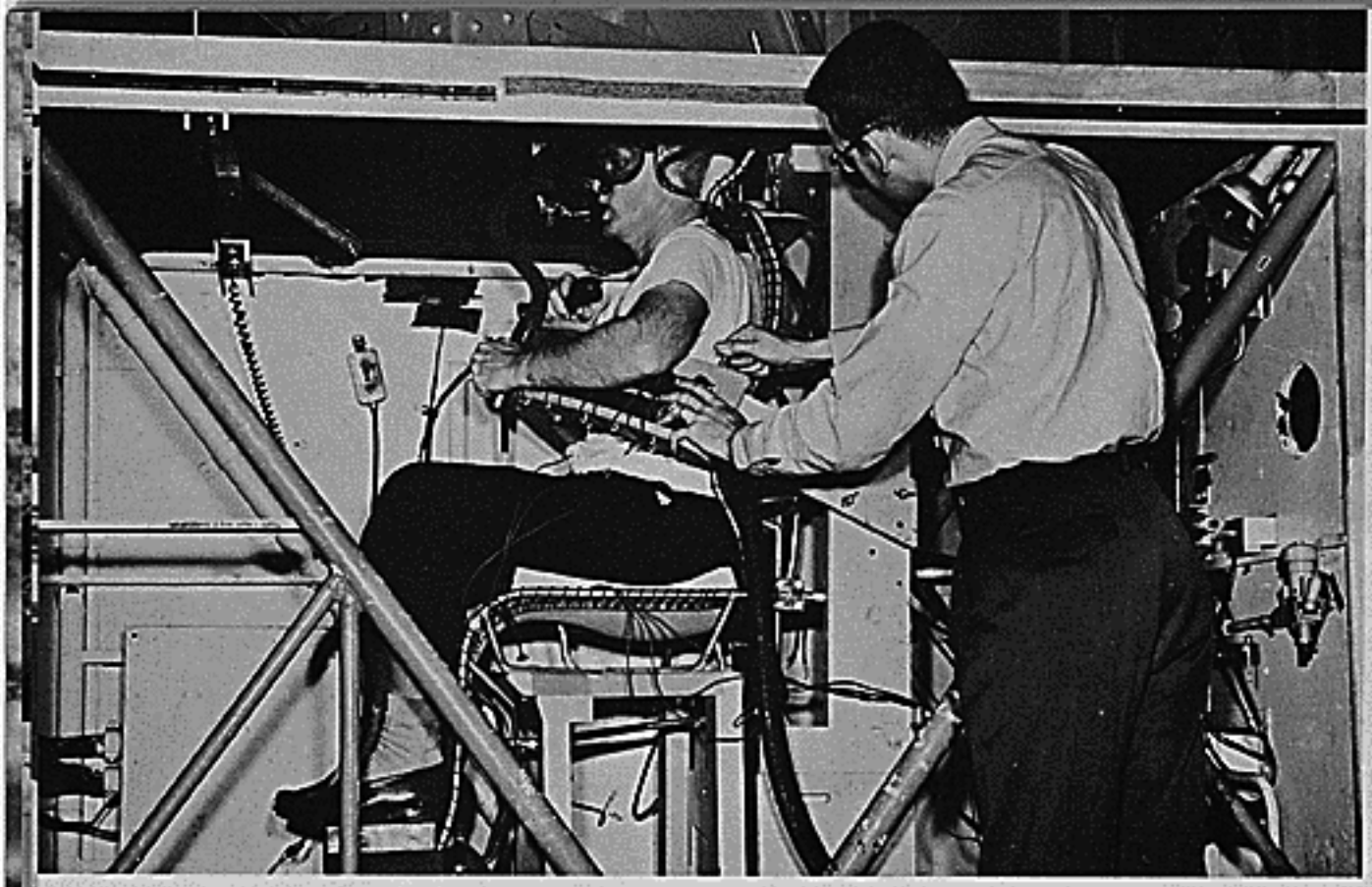
AMERICA'S MOST FAMOUS TEAM - THE PROJECT MERCURY ASTRONAUTS are pictured above in front of one of their favorite training vehicles - the U.S. Air Force's F-106 jet fighter plane. Left to right: M. Scott Carpenter, L. Gordon Cooper, Glenn, Virgil I. "Gus" Grissom, Walter M. Schirra, Jr., Alan B. Shepard, Jr., and Donald K. "Deke" Slayton. Americans have long had their favorite teams in many sports but this team of space pioneers has found a universal following of many millions.

At the right, Astronaut John H. Glenn, Jr., prepares to get into the cockpit of an F-106 at Langley Air Force Base, Virginia.

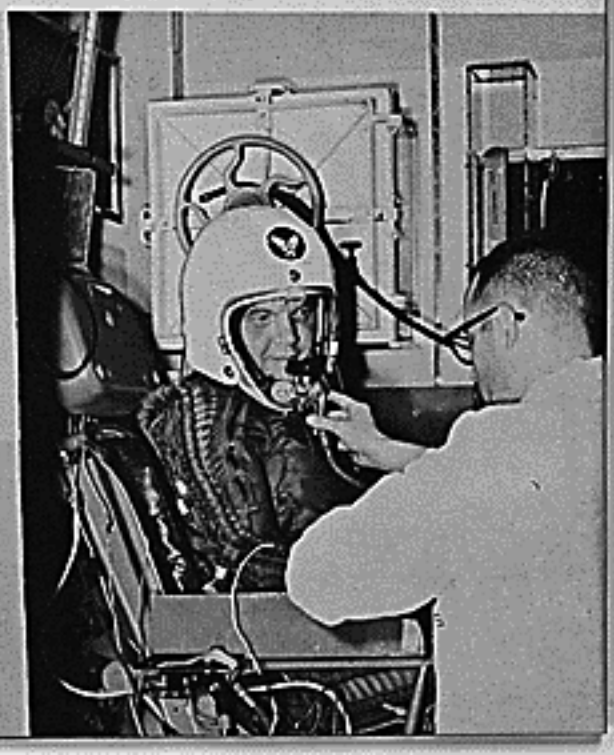
On the page at the right, the picture at the top shows the activities in the crew quarters in Hangar S at Cape Canaveral as Glenn's suit is pressure checked to insure against any possible leaks during flight. Such checks are made at frequent intervals on all the astronaut equipment. At lower left Glenn clowns a bit as he dons the suit with which he has become so familiar. At lower right, in contrast, is America's first orbital pilot — serious, suited up and ready to don his helmet and to go to work.

Glenn's faculty of being able to come up with a ready bit of camaraderie at any time proved its worth during his long wait for the orbital mission to become a reality. While others connected with Project Mercury, news representatives, and the general public fretted and fussed over the delay, Glenn continued in his training with the philosophy that "there'll be another day."

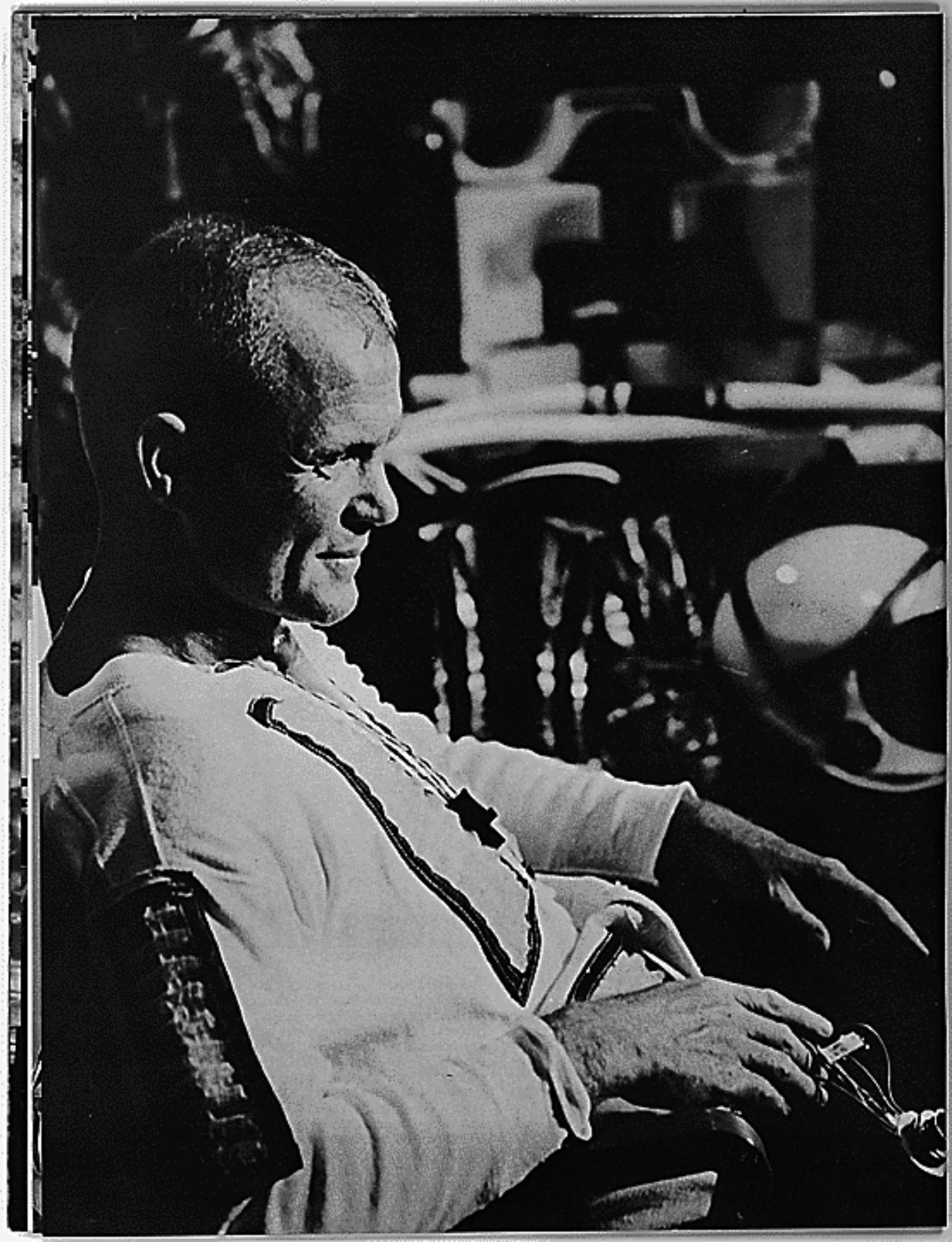


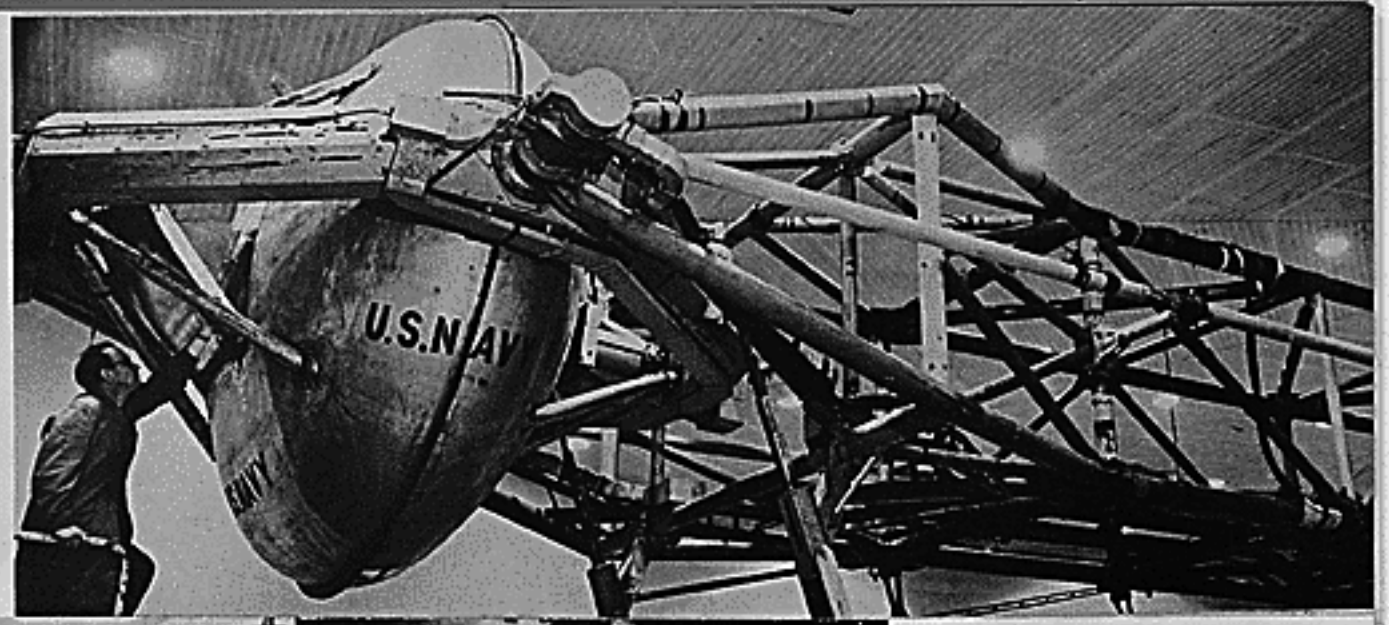


GLENN IS SHOWN ABOVE in a small centrifuge device, at lower left at a reaction measurement device, and at the lower right in a pressure chamber rig undergoing just a few of the many tests which were administered prior to the selection of the seven-man team. These tests were given to 32 men who were considered to be qualified by education and experience. The tests were designed to expose the volunteers for the space program to the stresses which were anticipated during suborbital and orbital flights. The successes registered to date by Astronauts Shepard, Grissom, and Glenn during Project Mercury missions tend to give validity to the tests and the other qualifications prescribed by NASA officials.

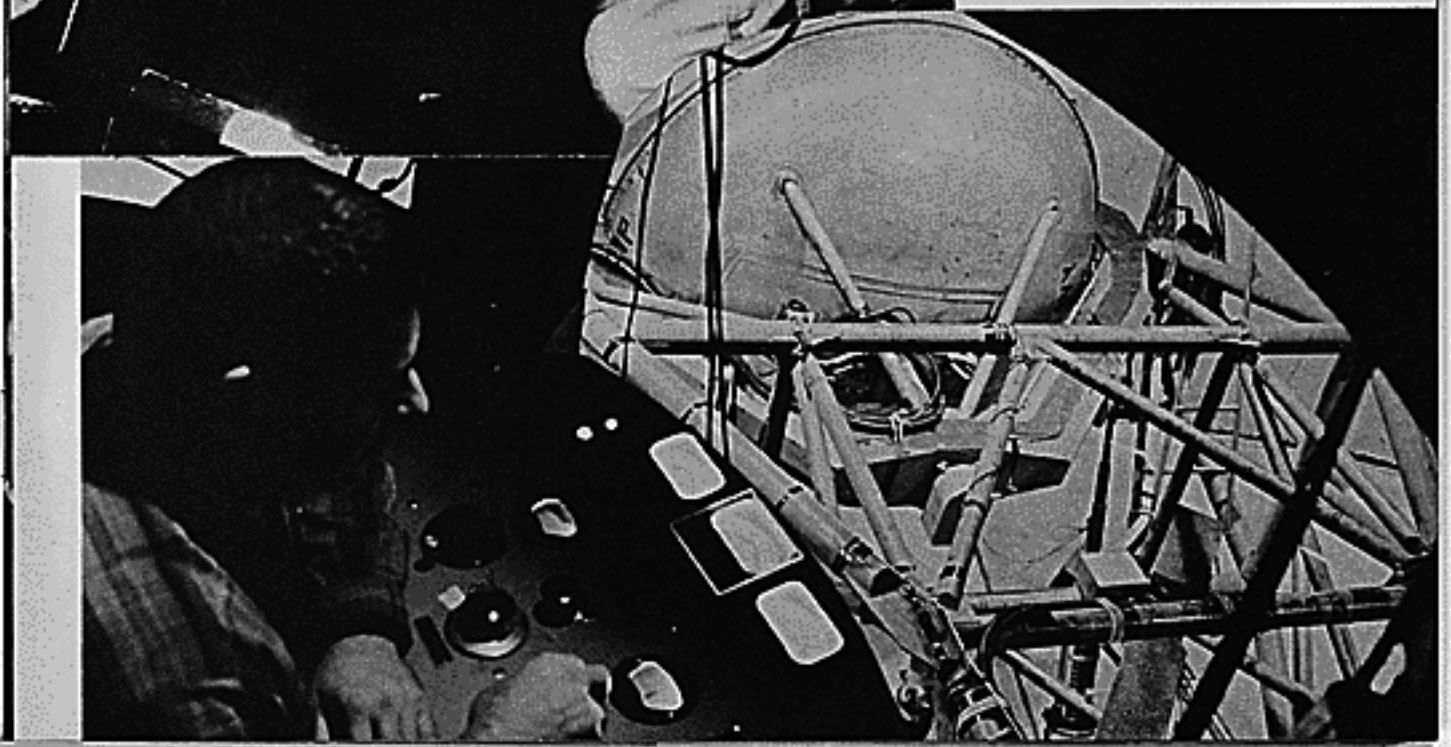


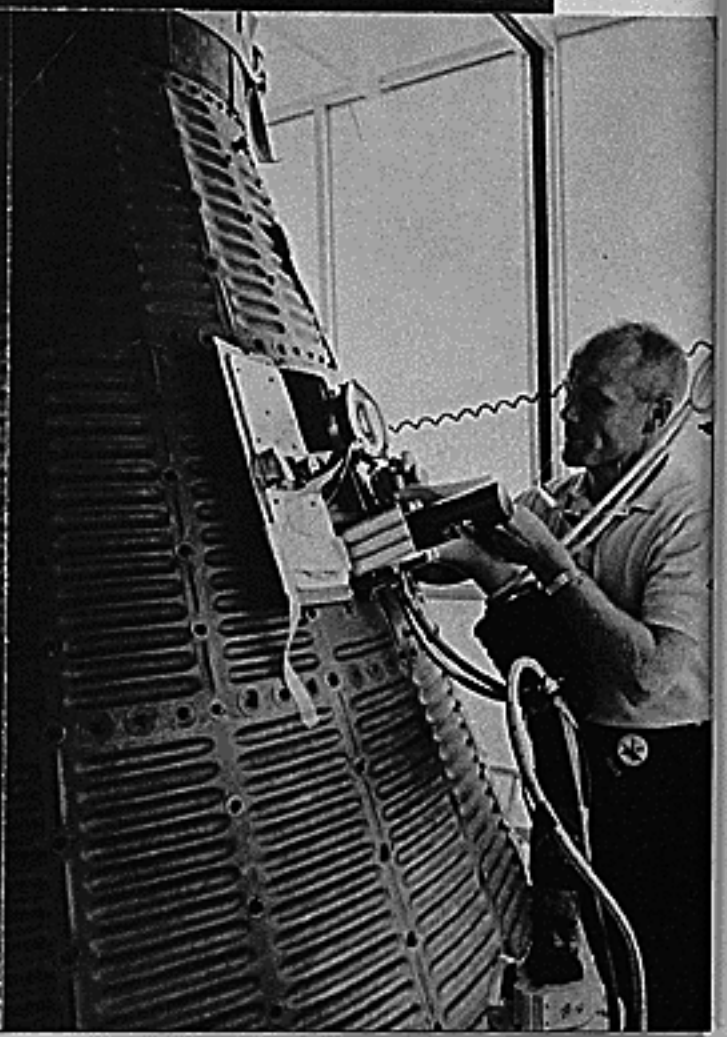
Infinite care is taken with the astronaut's suit - probably the most important part of his equipment and an item which must, of necessity, be perfect in every respect. Glenn is shown above being given an assist by Astronaut Alan B. Shepard, Jr., first Project Mercury suborbital pilot, and Joe Schmitt, crew equipment specialist, as they check all the many straps to insure that all is in order for the test. Similar exercises are held prior to each test, insuring both the reliability of the suit and the procedures involved. At the left, the freckle-faced astronaut's eyes seem to smile as he apparently enjoys a period of relaxation after being declared ready for a simulated flight. The hose attached to his left side leads to the portable air-conditioner.





CENTRIFUGE TRAINING, conducted at the Johnsville, Pennsylvania, Naval Air Station, prepares the astronauts physically and psychologically for the G-forces they encounter at lift-off and reentry. The centrifuge at Johnsville is capable of activity which produces 16 Gs, and can simulate the pressure, noises, and acceleration of space flight in the gondola. In the case of Glenn in the centrifuge, at maximum performance, his normal weight of 168 pounds would be increased to 2,688 pounds. During Project Mercury missions to date maximum G-forces encountered have been about 8 Gs.

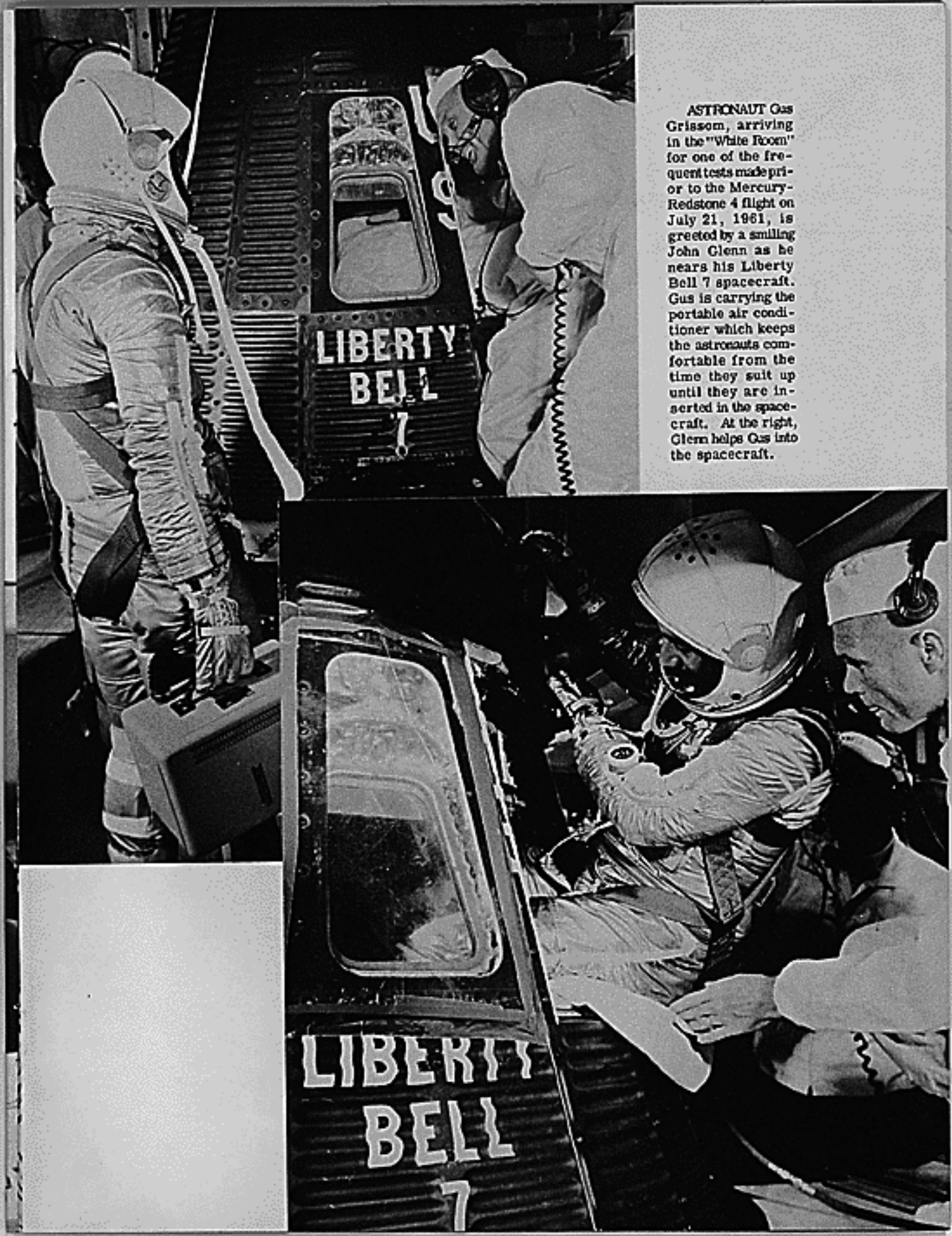




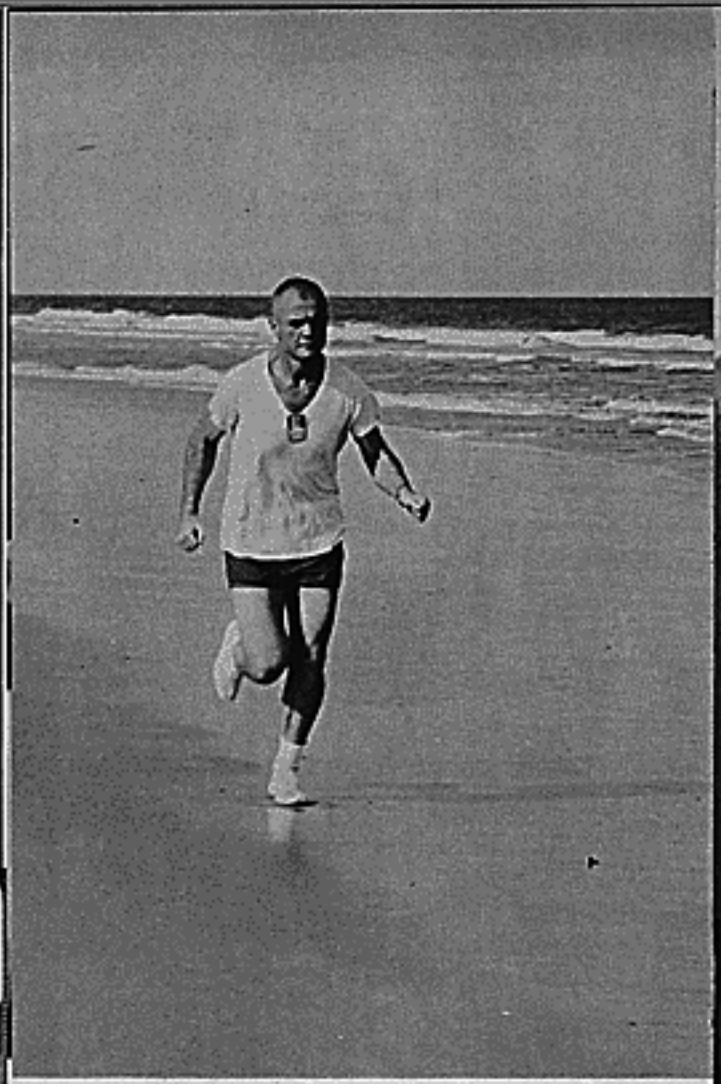
All personnel seem to be pleased as Glenn points out the results of some systems check-outs to Gus Grissom, Al Shepard, and Dr. Bob Voas as they discuss plans for America's first manned suborbital flight in the top picture at the left. Below at the left, Glenn records the results of a procedures trainer test. As back-up pilot for Shepard for the Mercury-Redstone 3 flight, John Glenn played a vital role in making systems checks prior to "okaying" the space-craft as ready for the flight. He is shown above, in the White Room at Hangar S with a McDonnell engineer, as they check the progress of a systems test in Shepard's Freedom 7 spacecraft, keeping in constant voice communication with the astronaut inside. One of the many requirements for the astronauts is that they possess necessary engineering ability to check out all of the many intricate systems in the spacecraft, as well as to make recommendations to NASA and McDonnell engineers as to what systems changes are indicated for improvement. At the right, a stocking-footed Glenn assists Shepard into the spacecraft prior to one of the many tests run in the dust-free "White Room." Every possible precaution is taken to insure that no particles of dust are allowed to reach the highly sensitive equipment of the spacecraft's systems.

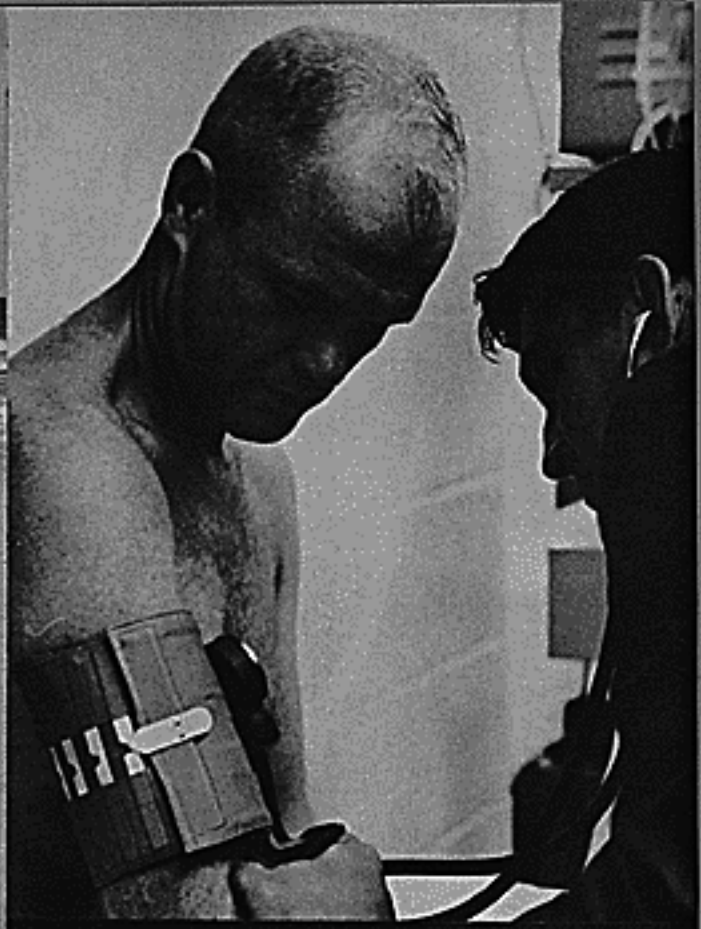
ASTRONAUT PARTICIPATION in the activities at Mercury Control Center is shown with Alan Shepard at the Capsule Communicator's Console during the Grissom flight. As Capsule Communicator, Shepard was in constant voice contact with Gus during most of his suborbital flight. During this period, Glenn, who had been back-up pilot for Grissom, was seated behind Shepard and also served as back-up Capsule Communicator during the flight. Also shown in the photo are other Project Mercury personnel at the many consoles in the Control Center, which serves as the hub of all activities during the flight from lift-off through recovery - the place where the experts in many fields keep in close touch with both the physical condition of the astronaut and the performance of many of the spacecraft's systems. Adjacent to the operations room, shown here, is the recovery room in which the flight is plotted and the landing area predicted.

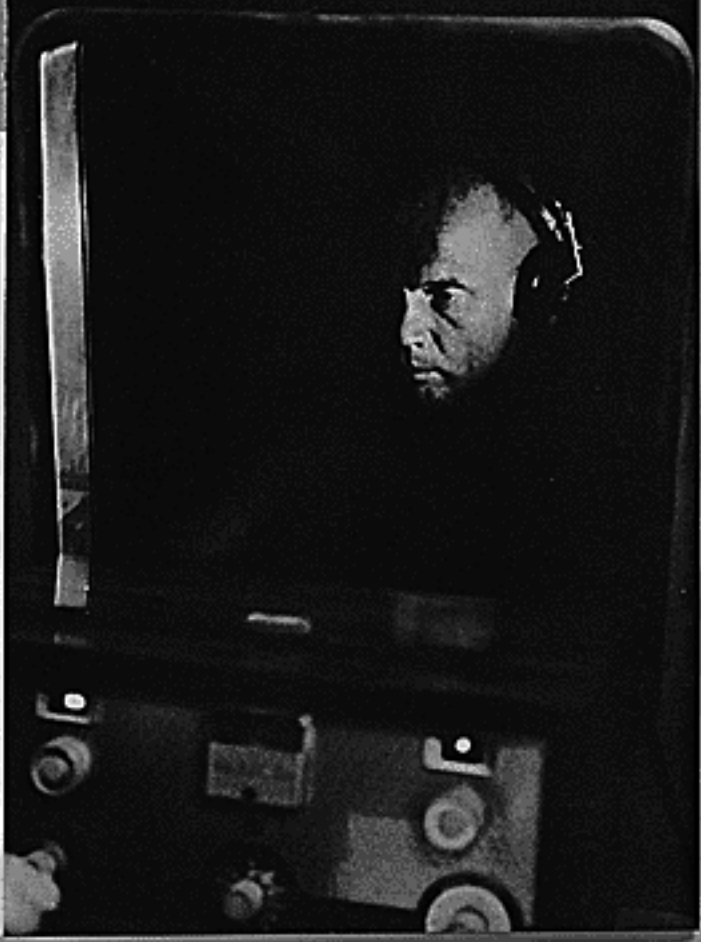
At the right, Glenn is pictured studying the flight plan while listening to the conversation between Grissom and Shepard. The astronauts on each Mercury mission have specific assignments to carry out, such as making exterior observations, eating, making periodic reports on the various systems, manual control of the spacecraft, and many other duties.



ASTRONAUT Gus Grissom, arriving in the "White Room" for one of the frequent tests made prior to the Mercury-Redstone 4 flight on July 21, 1961, is greeted by a smiling John Glenn as he nears his Liberty Bell 7 spacecraft. Gus is carrying the portable air conditioner which keeps the astronauts comfortable from the time they suit up until they are inserted in the spacecraft. At the right, Glenn helps Gus into the spacecraft.

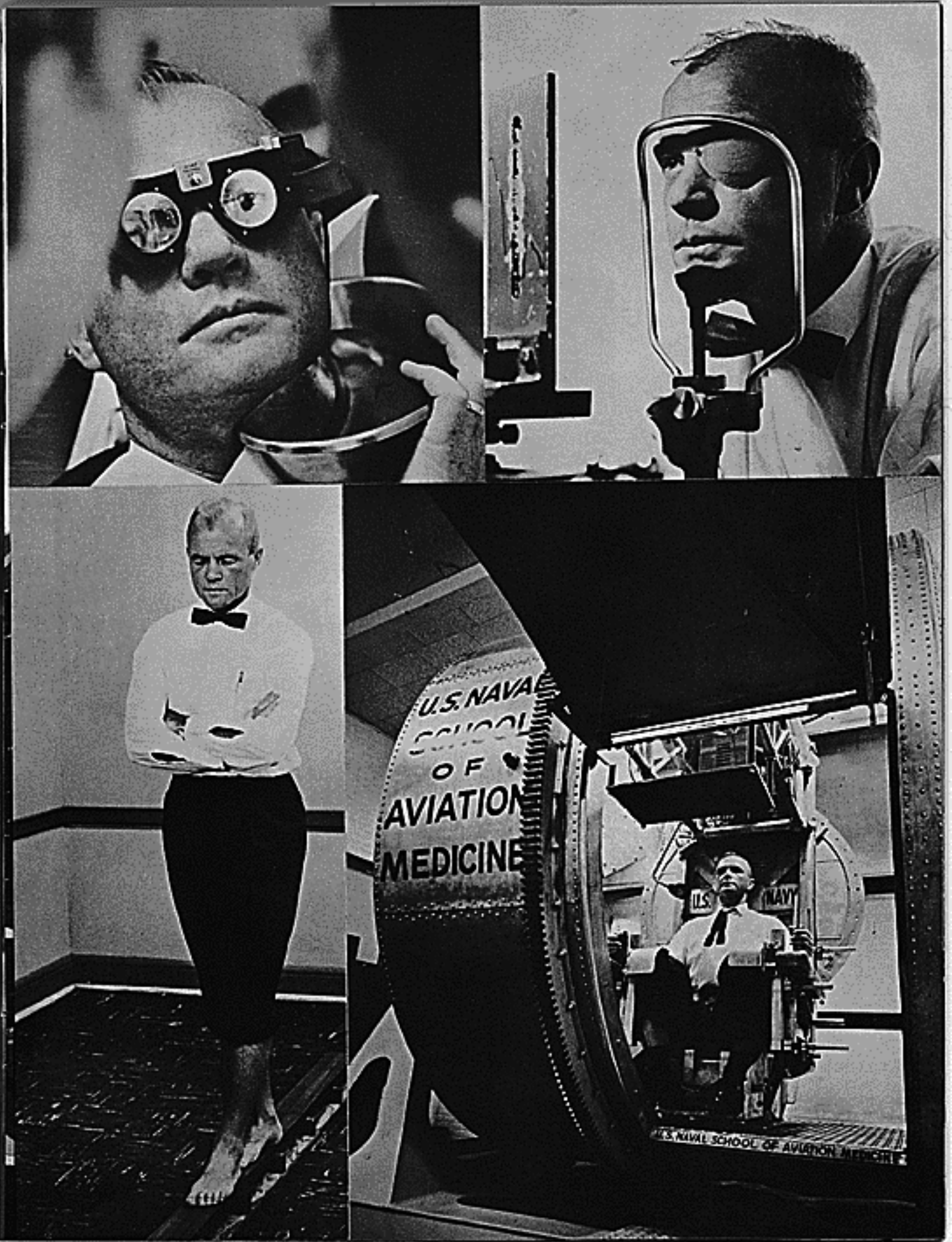






MEDICAL EXAMINATIONS and physical training for the astronauts are not just a means of qualification for the Project Mercury program, but rather a continuing process. Glenn is shown above as he runs several miles each morning and afternoon, when the schedule permits, on the beach at either Cape Canaveral or at Cocoa Beach. At upper and lower right he is pictured going through several of the many medical tests given the astronauts in several phases prior to flight on any of the Mercury missions - these tests are required to make certain that the pilot of the spacecraft is in top physical condition for the flight.

On the page at the right, Glenn is shown as he recently went through a series of demanding medical examinations, along with back-up pilot M. Scott Carpenter, at the U.S. Naval School of Aviation Medicine at Pensacola, Florida. These pictured tests serve to illustrate the thoroughness and variety of physical tests all the astronauts go through periodically to assure they are in top shape and physically capable of continuing in the exacting program. The importance of having excellent eyesight is stressed. The condition of all three astronauts who have completed space flights attest to the effectiveness of this program.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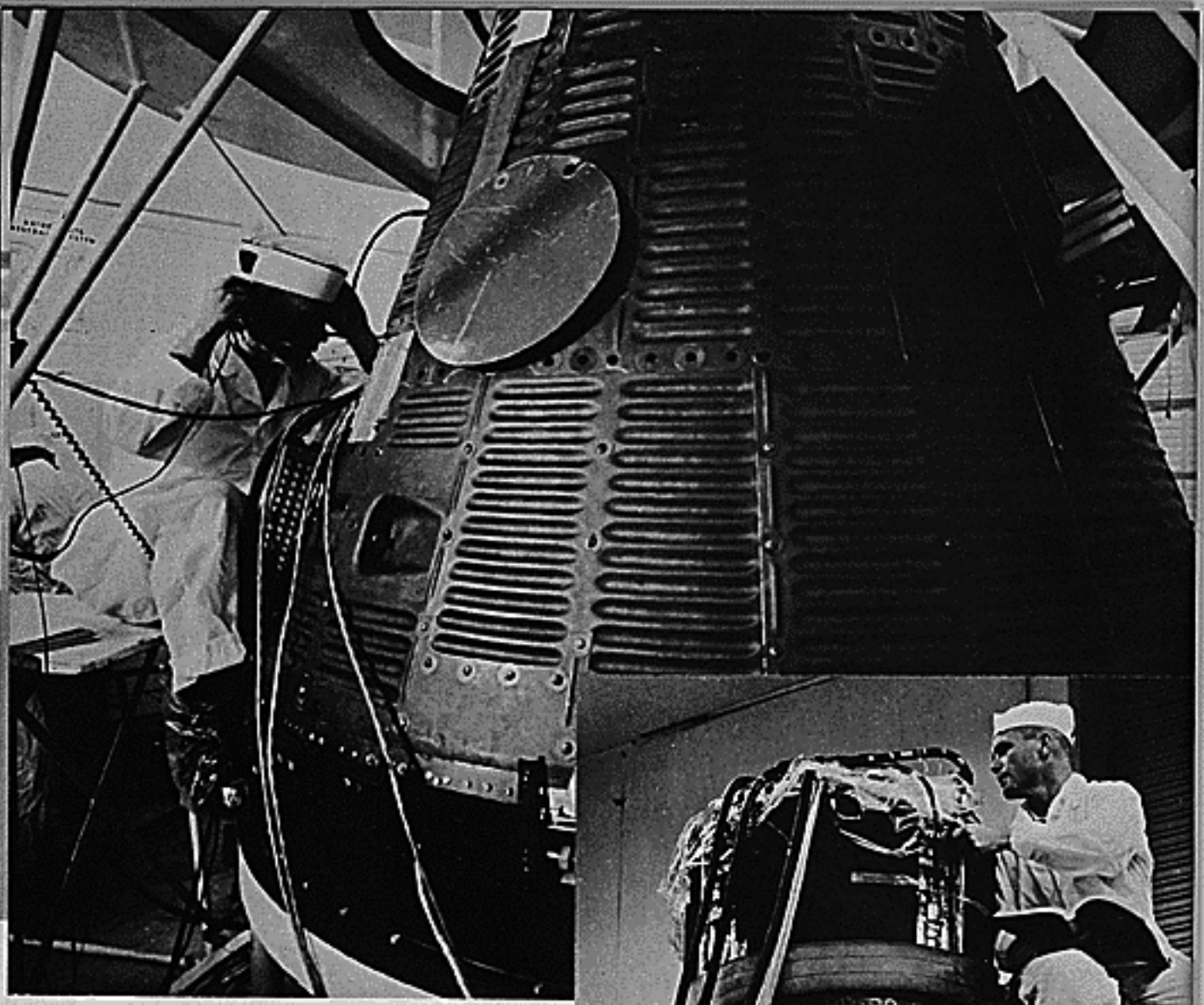
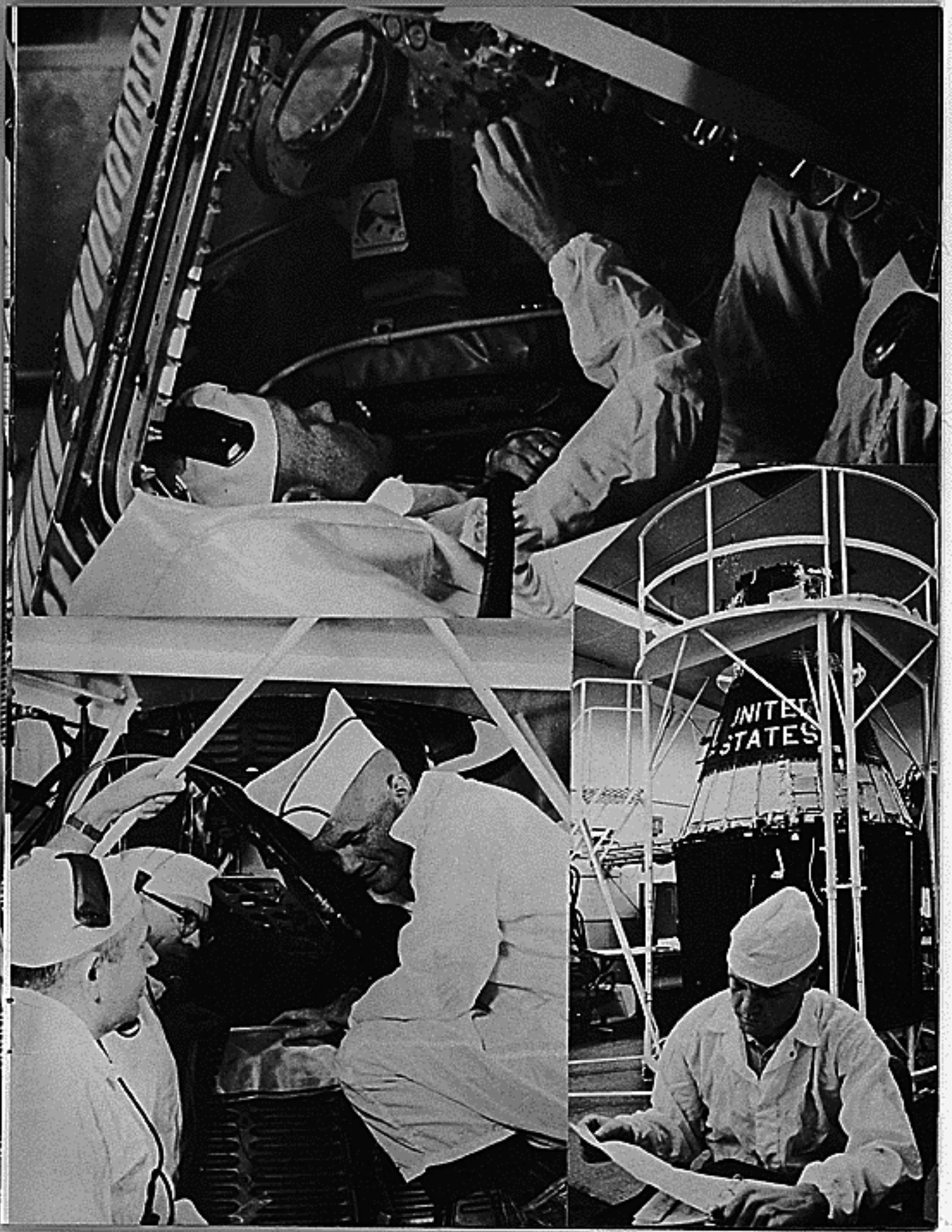


ADDITIONAL "WHITE ROOM" photos indicate the scope of activities there by an astronaut prior to a Mercury mission. Plastic boots or white tennis shoes and white clothing are required in the room which is electronically dust filtered, humidity controlled, and air-conditioned. Glenn is shown above listening to the results of a systems check, and, at the right, he checks the equipment at the top of the spacecraft, which has a protective covering. The spacecraft system checks are conducted in the White Room by McDonnell technicians, NASA engineers, and the astronauts.

On the right-hand page, Glenn is shown at the top inside the Mercury spacecraft as he performs the necessary checks and rechecks on the many complicated systems of the Friendship 7 spacecraft. At bottom left, he discusses the results of the test with McDonnell technicians as he seems pleased with the results. The picture at the lower right depicts him poring over the results of the test to make certain that all systems register "go" and to doublecheck that previous observations of all parties have been correctly coordinated.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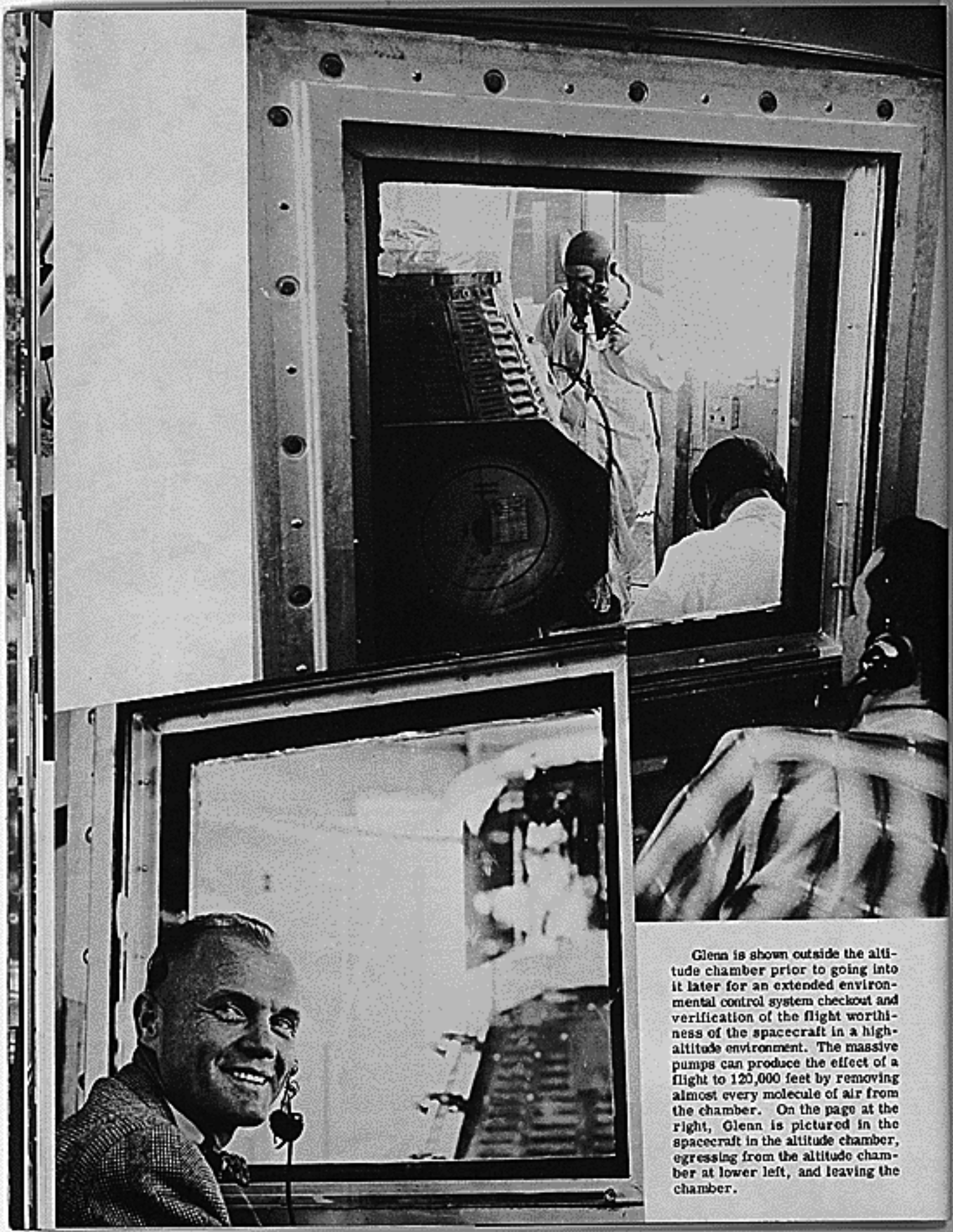
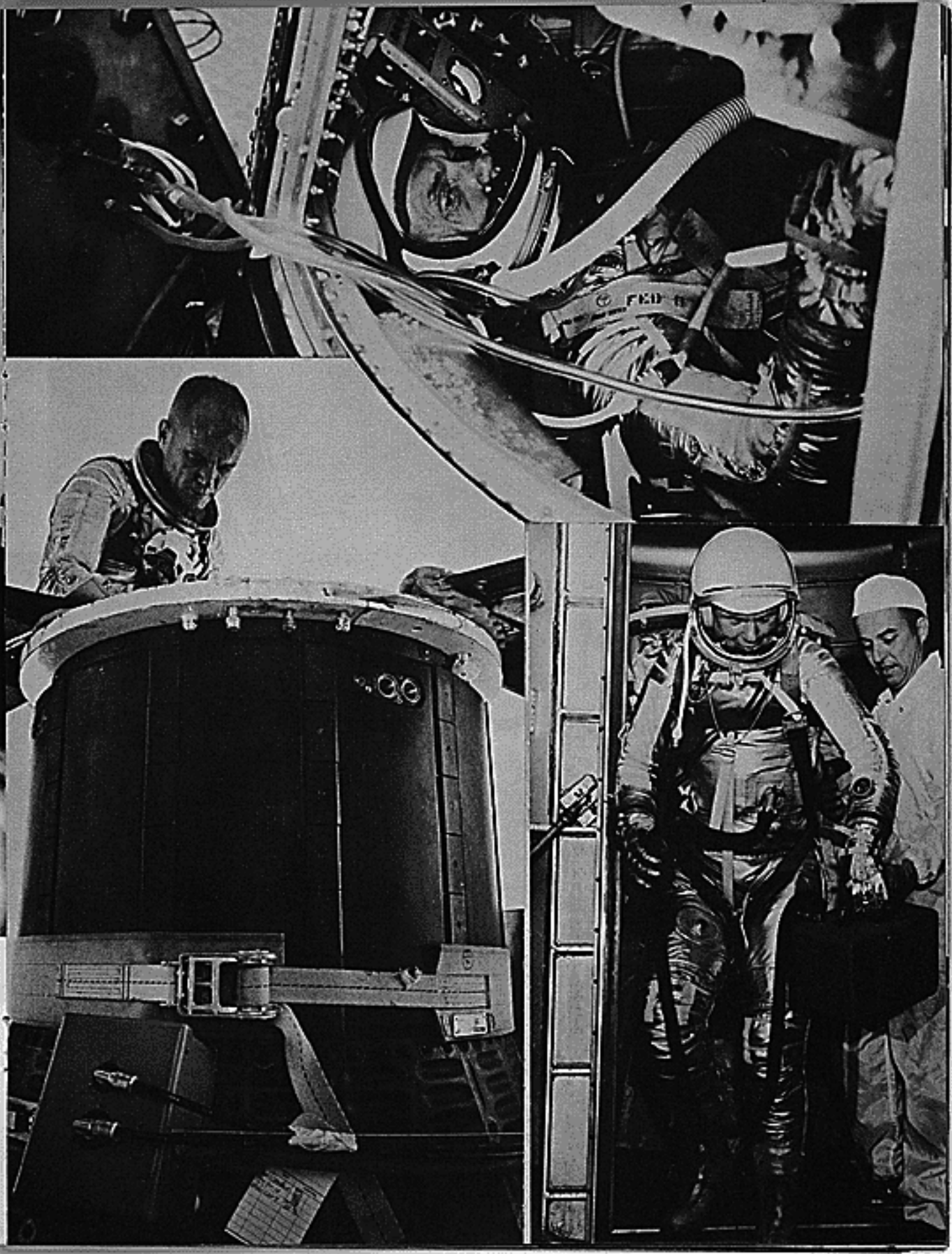
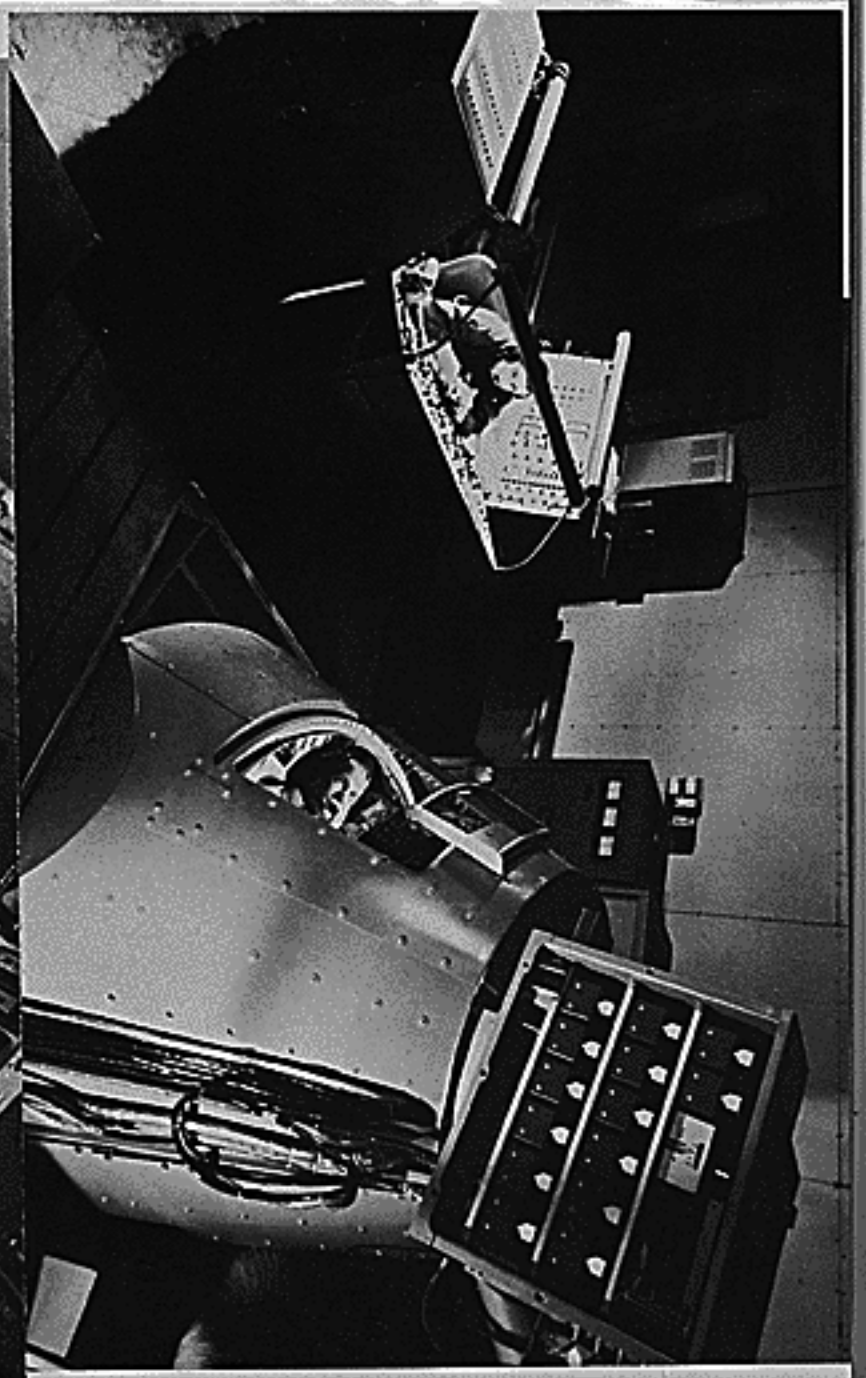


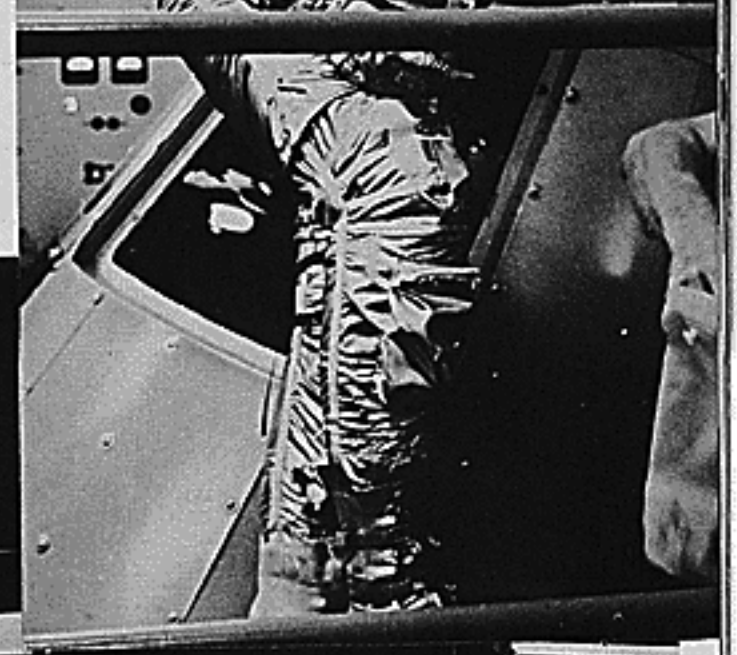
Glenn is shown outside the altitude chamber prior to going into it later for an extended environmental control system checkout and verification of the flight worthiness of the spacecraft in a high-altitude environment. The massive pumps can produce the effect of a flight to 120,000 feet by removing almost every molecule of air from the chamber. On the page at the right, Glenn is pictured in the spacecraft in the altitude chamber, egressing from the altitude chamber at lower left, and leaving the chamber.

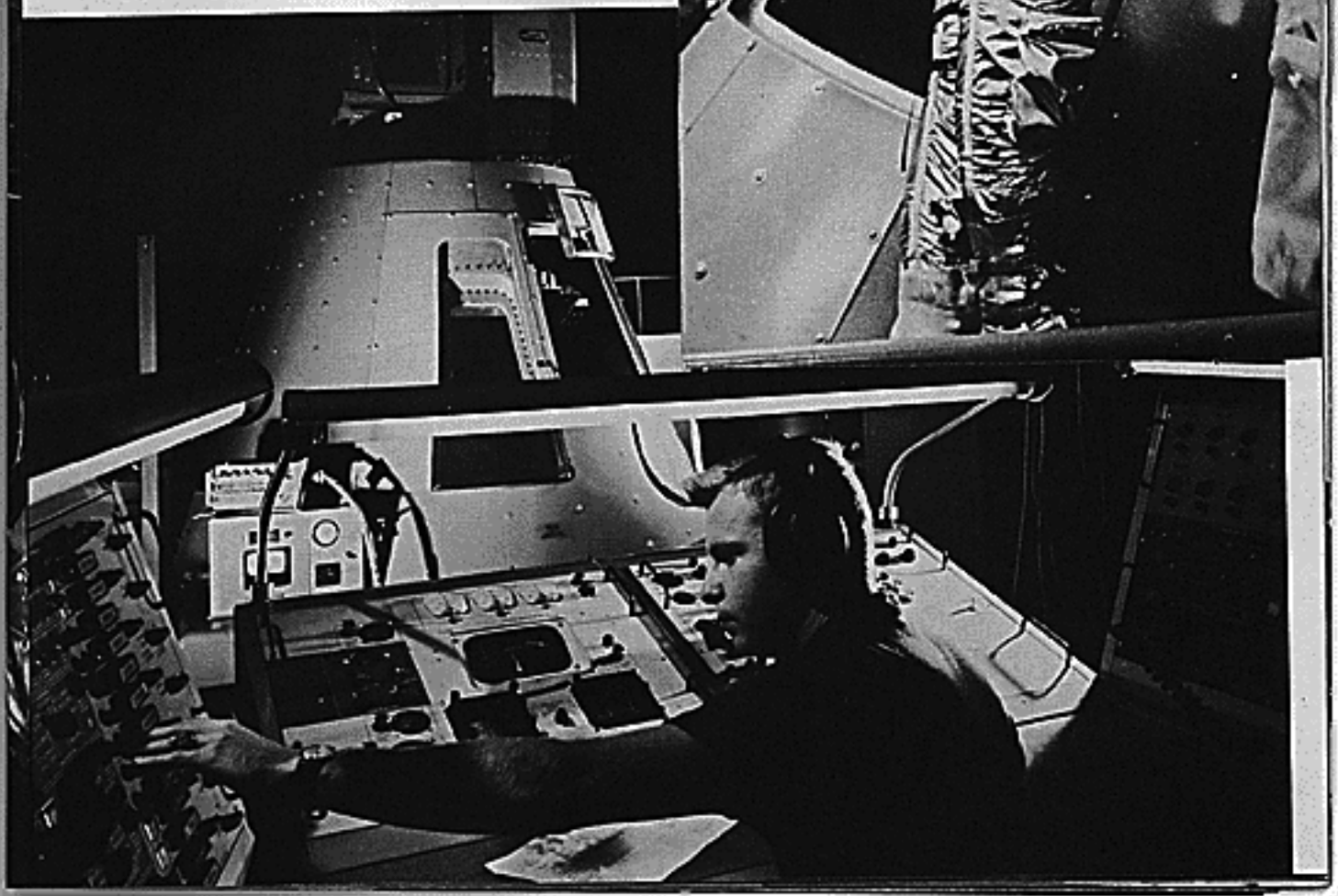


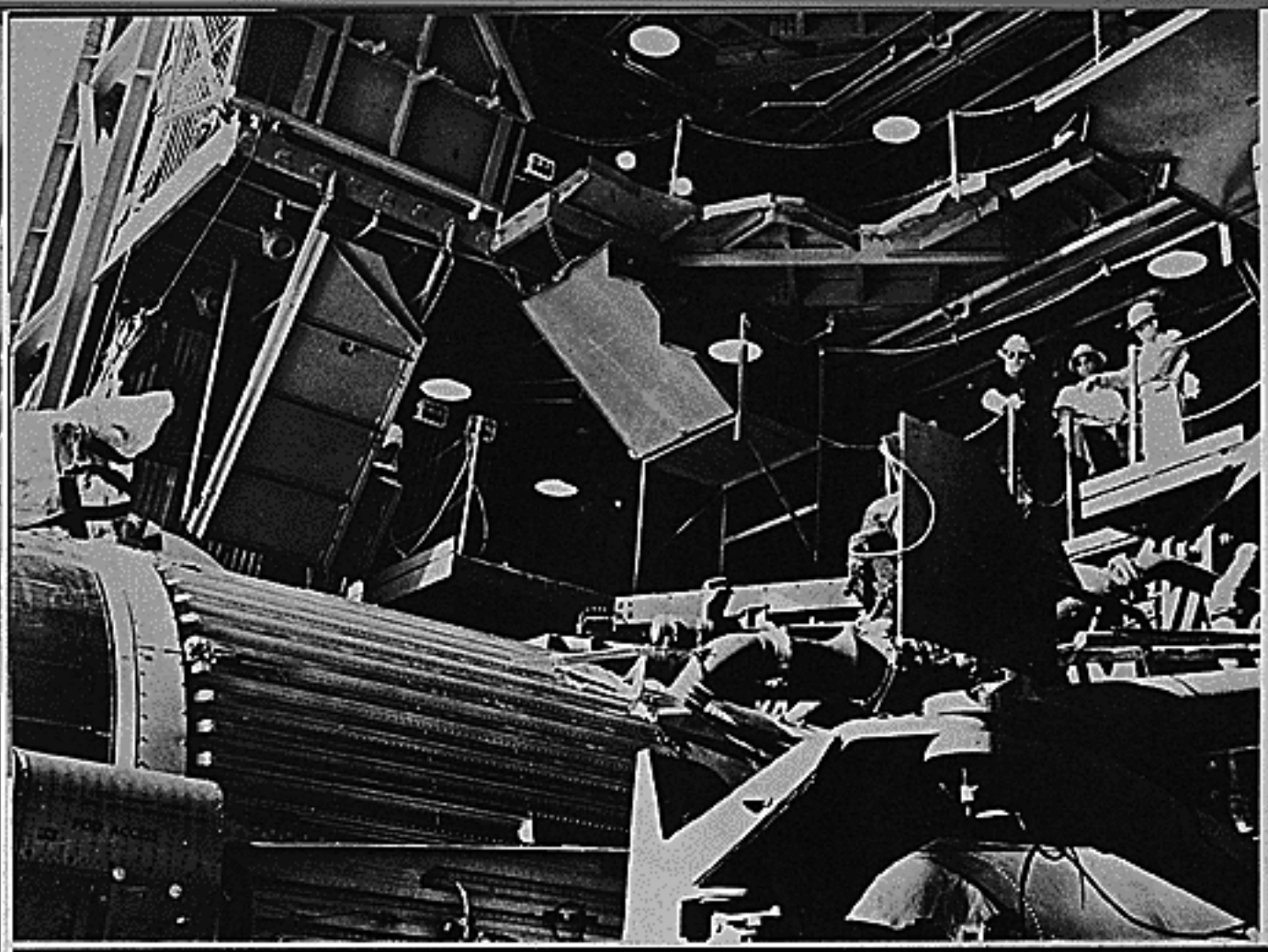


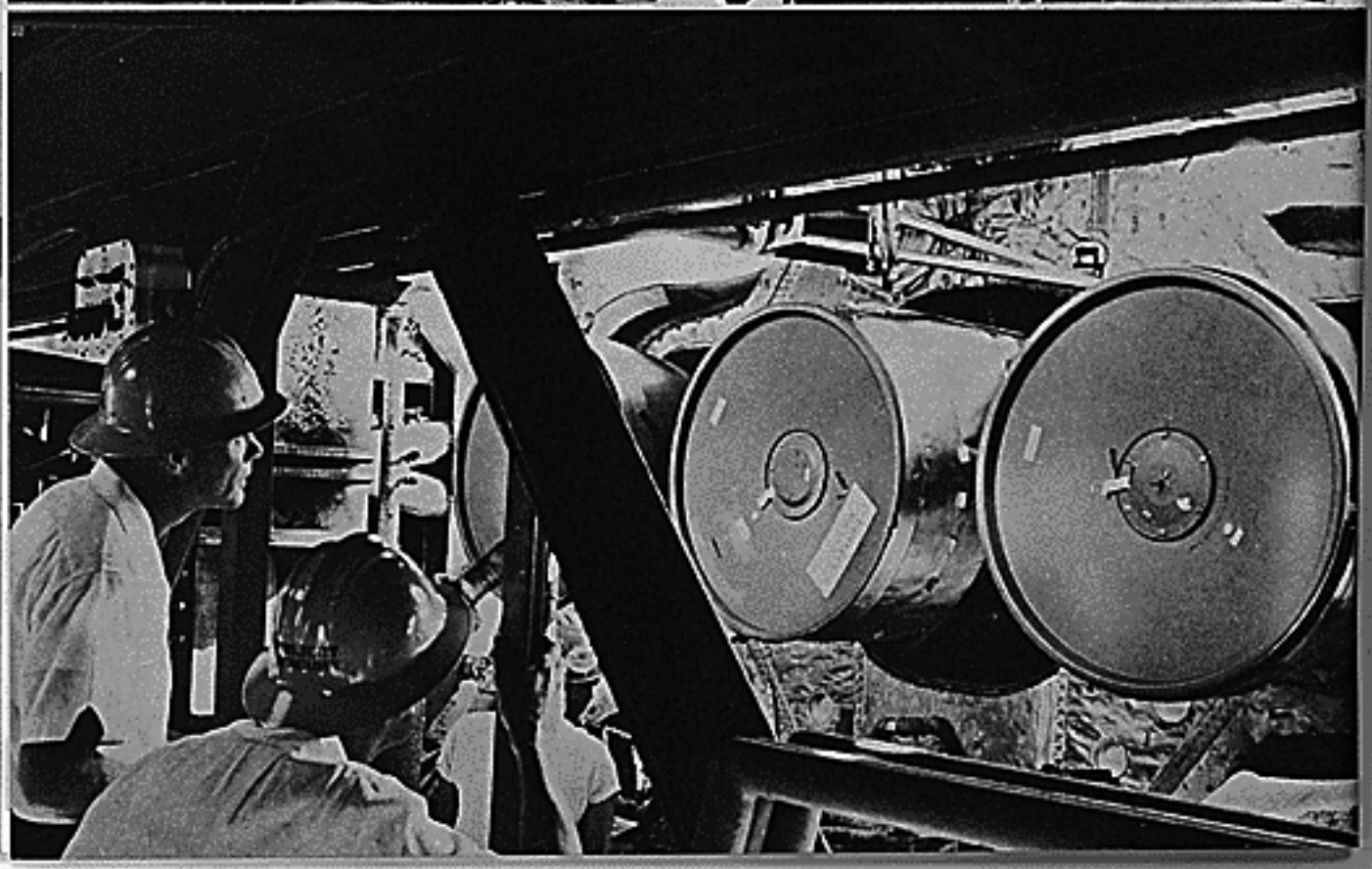
One of the most frequent tests run by Project Mercury astronauts during prelaunch training is in the procedures trainers at Langley AFB and at the Mercury Control Center at Cape Canaveral. At the top of the page at the left, Glenn is shown in the Langley procedures trainer with Jim Prim at the console, monitoring the simulated flight. The lower picture at the left shows Astronaut Glenn, suited up, during a full-flight simulation test in the trainer located in the Mercury Control Center (this close-up shot gives a good view of the interior of the Mercury spacecraft as the astronaut goes about his many assigned tasks during a full-scale simulated flight).

Below is an excellent picture of the procedures trainer at the Cape with Charles Olasky of Flight Simulation Branch, Flight Operations Division, at the console, offering an unusual view of the complexity of the consoles which are used not only in training but also during actual flight operations. At the right, John Glenn is shown leaving the side hatch of the spacecraft after completing the strenuous preflight tests - smiling as usual at the completion of a hard day's work. This test, like all others in the Project Mercury program, has provided the astronauts with a training vehicle which has proved valid during a testing period. As usual, John Glenn flashes his now famous smile indicating that everything is A-O-K.

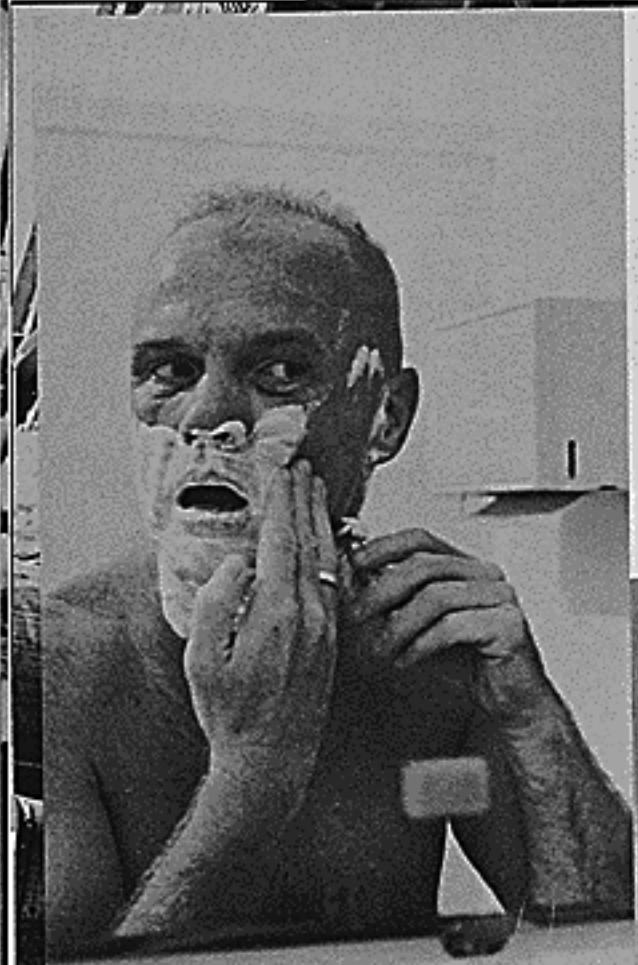




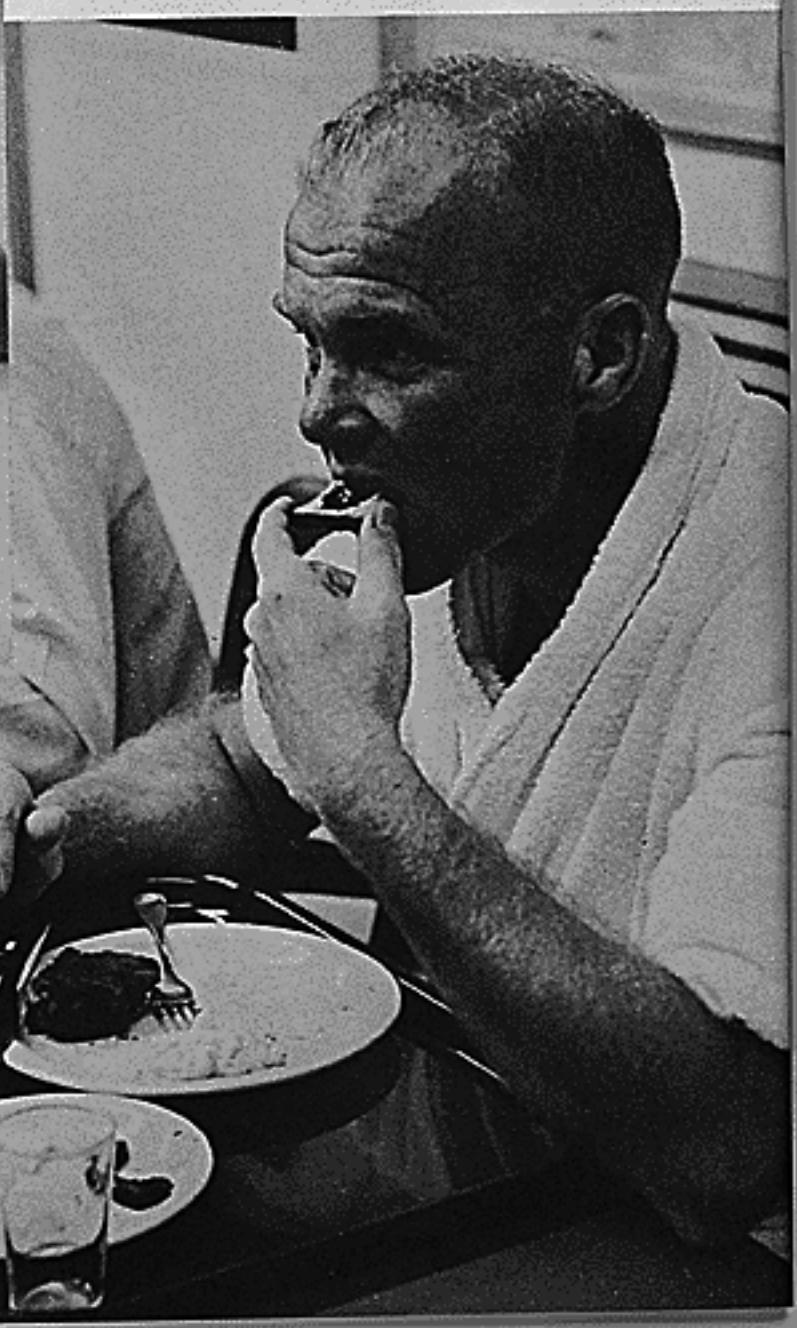


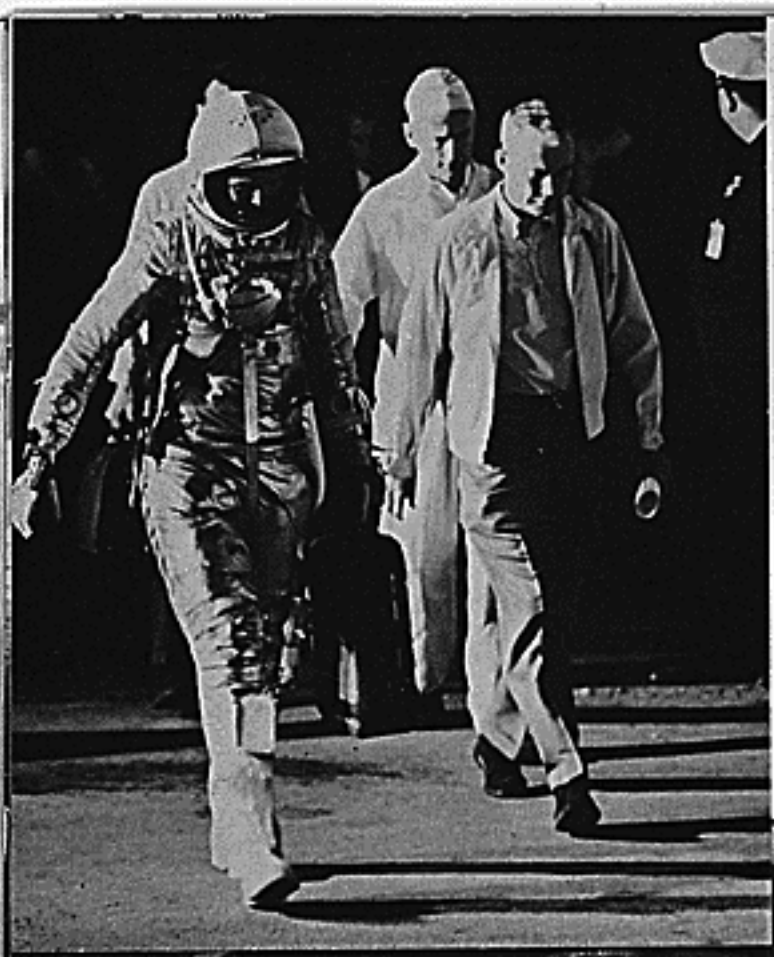


THE LAUNCH VEHICLE ERECTION is a matter of prime importance to the mission pilot and the back-up pilot. At the top, on the page at the left, Glenn and Carpenter stand on the gantry at Complex 14 and observe as the huge booster is wheeled into position. At the bottom the two astronauts get a closer look at the huge rockets which were later to propel Glenn into orbit. At the left, the Atlas 109D is shown as it is being raised into position and, below, Glenn - looking more like a structural engineer than an astronaut - seems to gaze into the future.



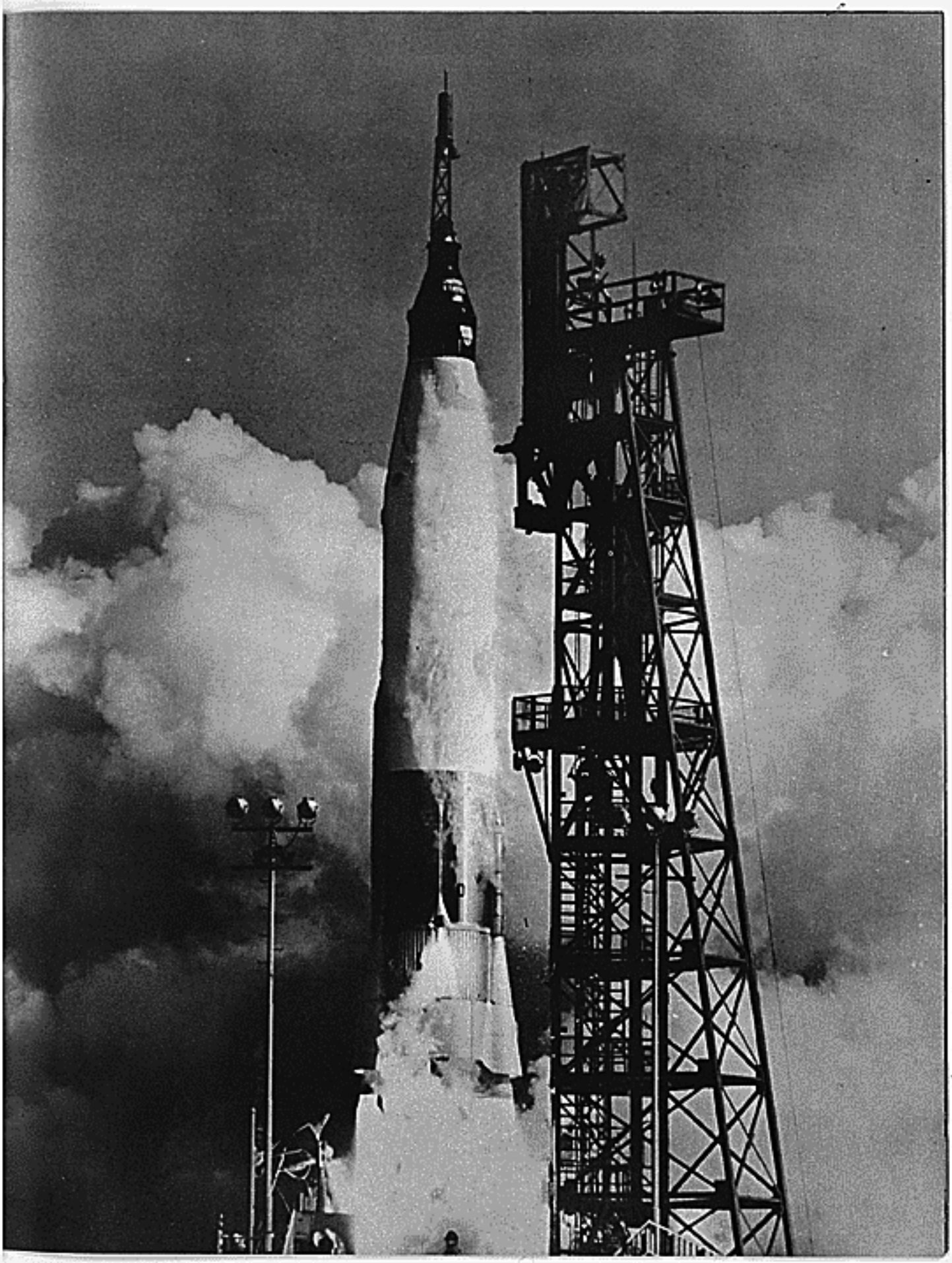
John Glenn shaves prior to "taking a little trip," and follows that daily routine with the low residue breakfast of filet, eggs, toast, jelly, postum, and orange juice. At right, left, he starts to don the togs for his trip as suit technician Joe Schmitt lays out the many components of the astronaut's suit. After being dressed, Glenn was helped into the pressure-testing rig, and his suit was tested a final time to insure that there were no leaks which might lead to difficulties during the flight. At lower right, Glenn is shown after the completion of suiting and the pressure check, waving goodbye to Walter C. Williams, Associate Director of Manned Spacecraft Center and Astronaut Donald K. "Deke" Slayton, who has been named as pilot for the next three-orbit flight on the Mercury-Atlas 7 mission which has been tentatively planned to be made during May or June of this year.



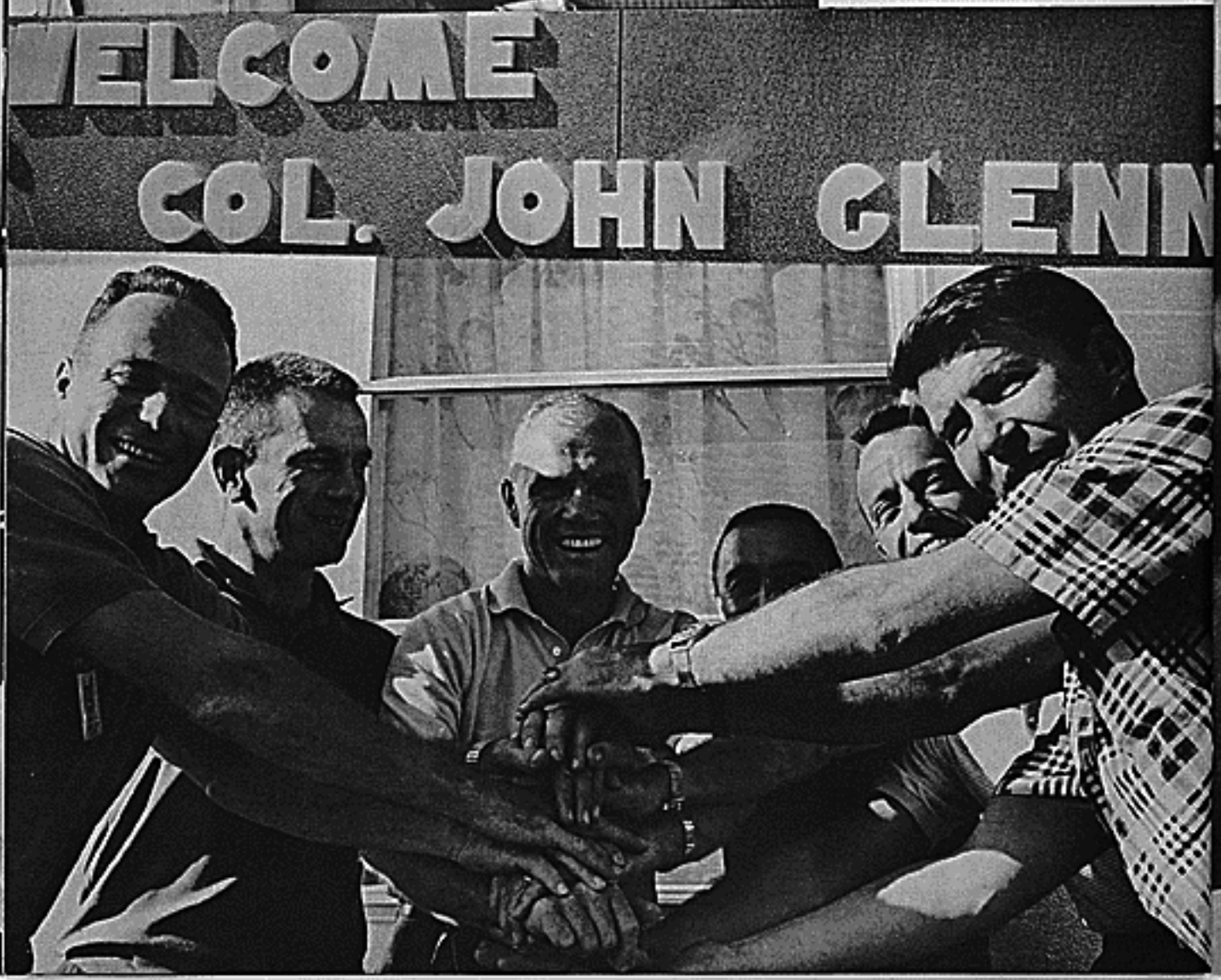


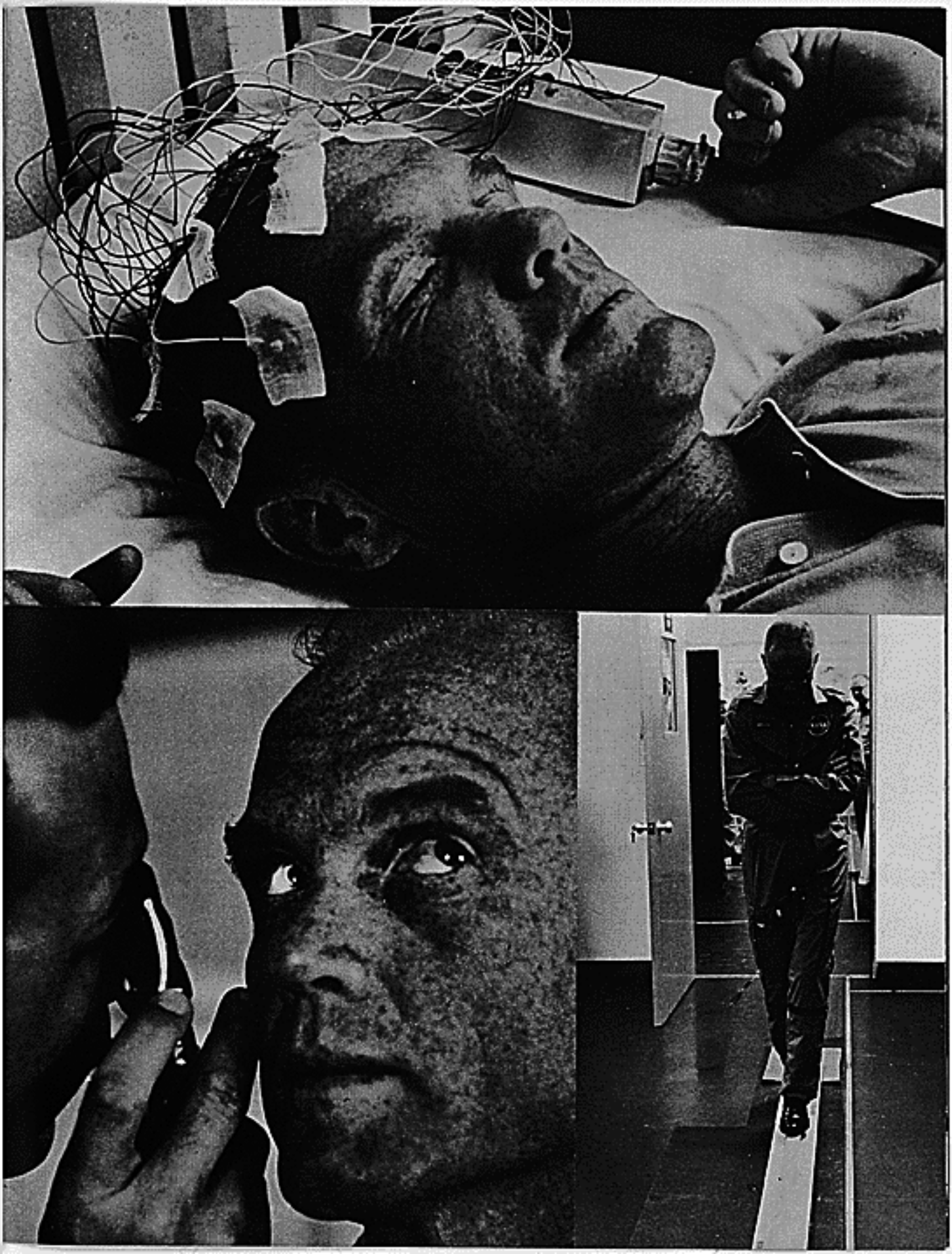
On February 20, 1962, Astronaut John Glenn departed from Hangar S with Joe Schmitt and Dr. William Douglas, entered the transfer van and was transported to Launch Complex 14. It was from that pad, almost 5 hours later, that he was launched into space and subsequently orbited the earth three times. This was a culmination of a long period of intensive preparation for the history-making flight. Below, he is shown entering his now famous Friendship 7 spacecraft and started his prelaunch check-out activities.

At the right is the lift-off of the Mercury-Atlas 6 as it carried Astronaut John Glenn on his journey into space - the first American to orbit the earth - the first known space traveler to pilot his spacecraft through the space beyond the atmosphere. After circling the earth three times in 4 hours and 56 minutes from lift-off to touchdown at speeds averaging 17,500 miles per hour, he returned to earth and subsequently was acknowledged by millions of admirers as he made a limited tour to accept the plaudits of the crowds in a series of celebrations.

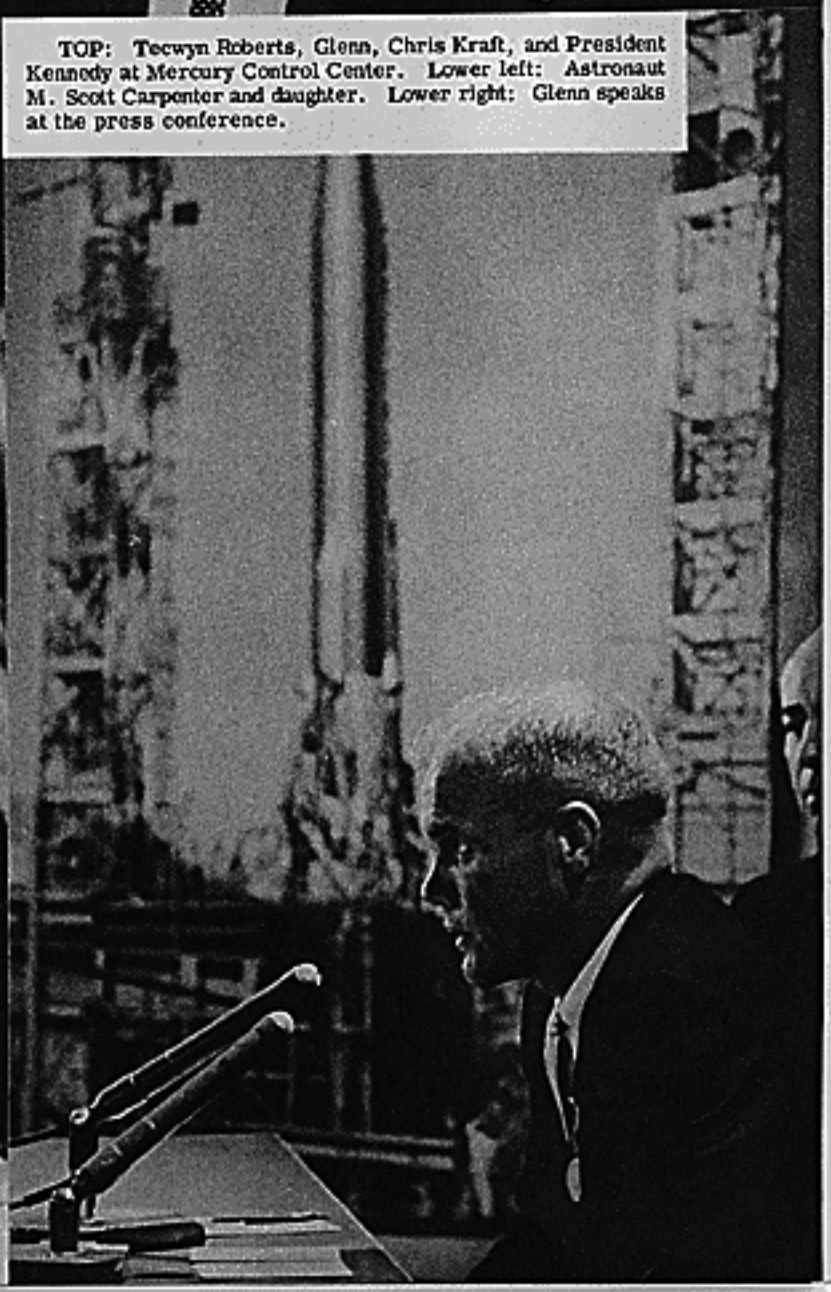


Following his eventful journey and recovered by the USS Noa, he was given a hearty welcome at Grand Turk Island by Astronauts M. Scott Carpenter and Deke Slayton, and Public Affairs Officer John Powers. Below six members of the famous astronaut team get together at Grand Turk. Left to right: Carpenter, Slayton, Glenn, Gus Grissom, Alan Shepard, and Walter Schirra. Gordon Cooper, the seventh astronaut, was in Australia at the time making his report on the mission. The page at the right shows three phases of the debriefing activity at Grand Turk. These were but a few of the tests administered to Glenn following his orbital flight.

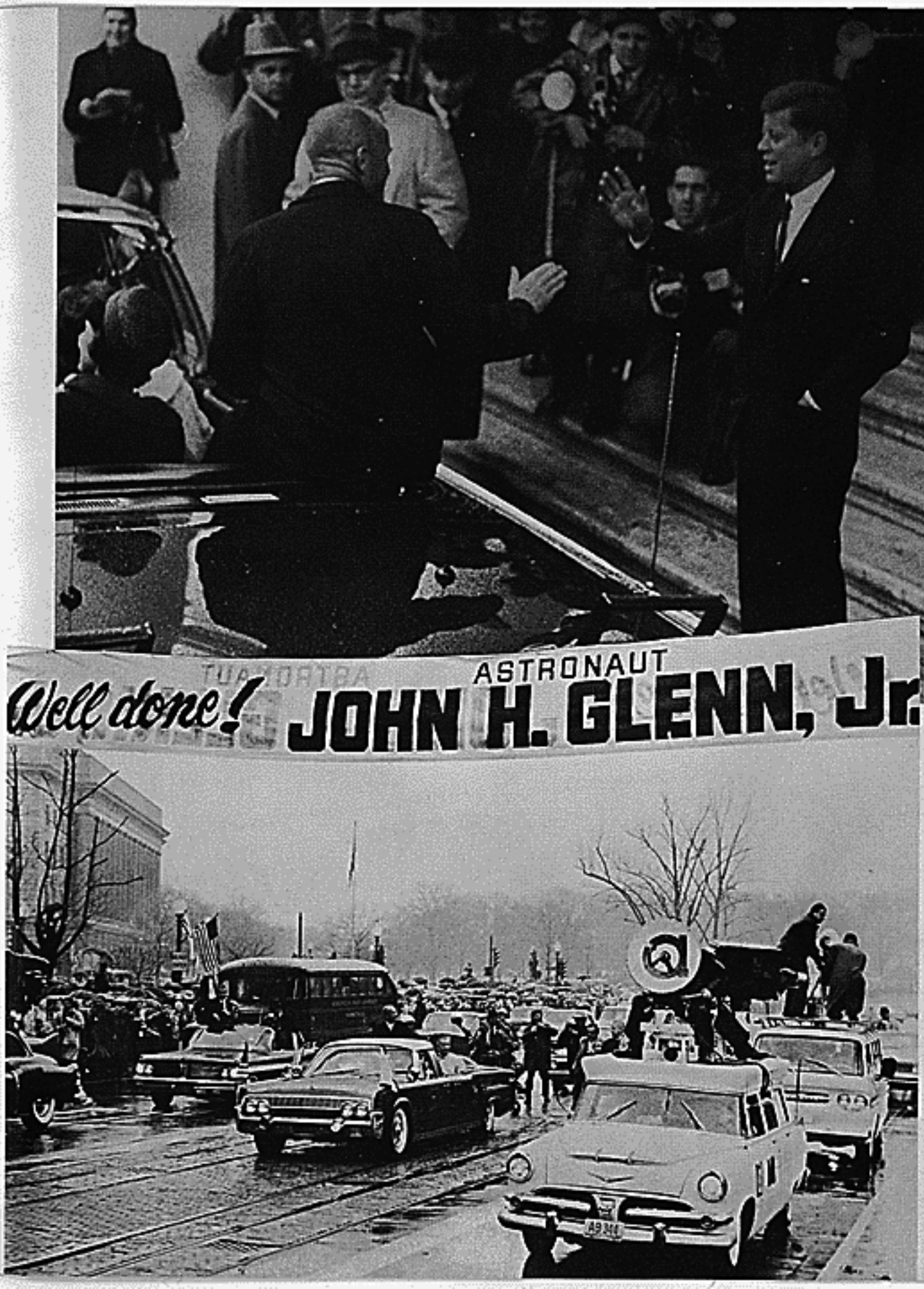




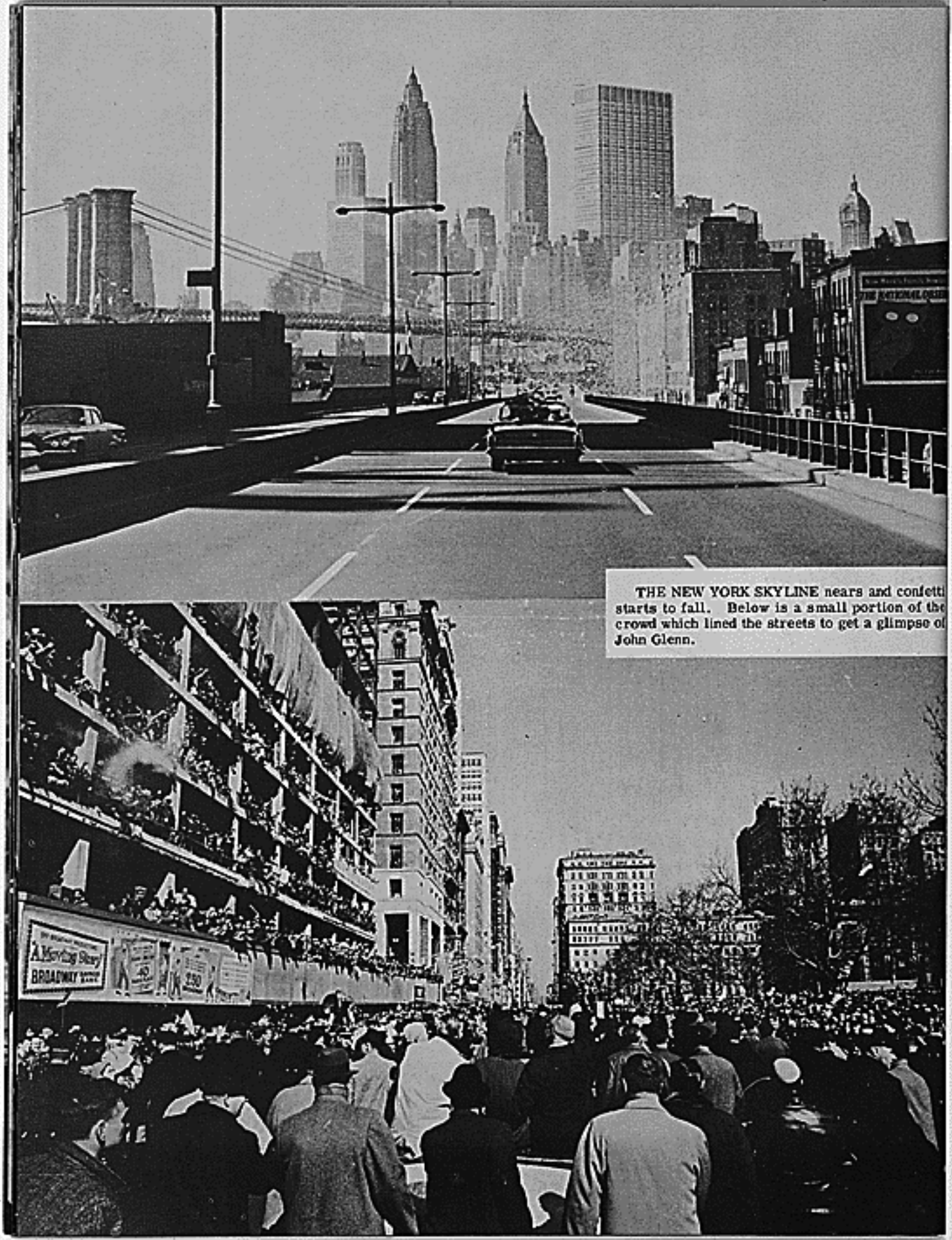
A JOYOUS GROUP at Patrick AFB as Astronaut John Glenn returned to his homeland. Shown on the left-hand page, top, is David, Lynn, John, Jr., Annie, Mrs. John Glenn, Sr., and John Glenn, Sr., with Vice President Lyndon B. Johnson. Below, the parade starts with Glenn riding between the President and Maj. Gen. Leighton Davis. At the top, part of the crowd which gathered outside of Hangar S to hear the President and others speak. Above, President Kennedy addresses the crowd with Astronauts Alan B. Shepard, Jr., and Virgil I. "Gus" Grissom at the left and Manned Spacecraft Center Director Robert R. Gilruth at the right. At the left, Glenn is shown outside Hangar S with Marine Lt. Col. Thomas Miller, his Arlington, Virginia, neighbor and President Kennedy. While at Cape Canaveral, the President toured Mercury Control Center and the Launch Pad 14 area and presented the NASA Distinguished Service Medal to Glenn and to Gilruth.



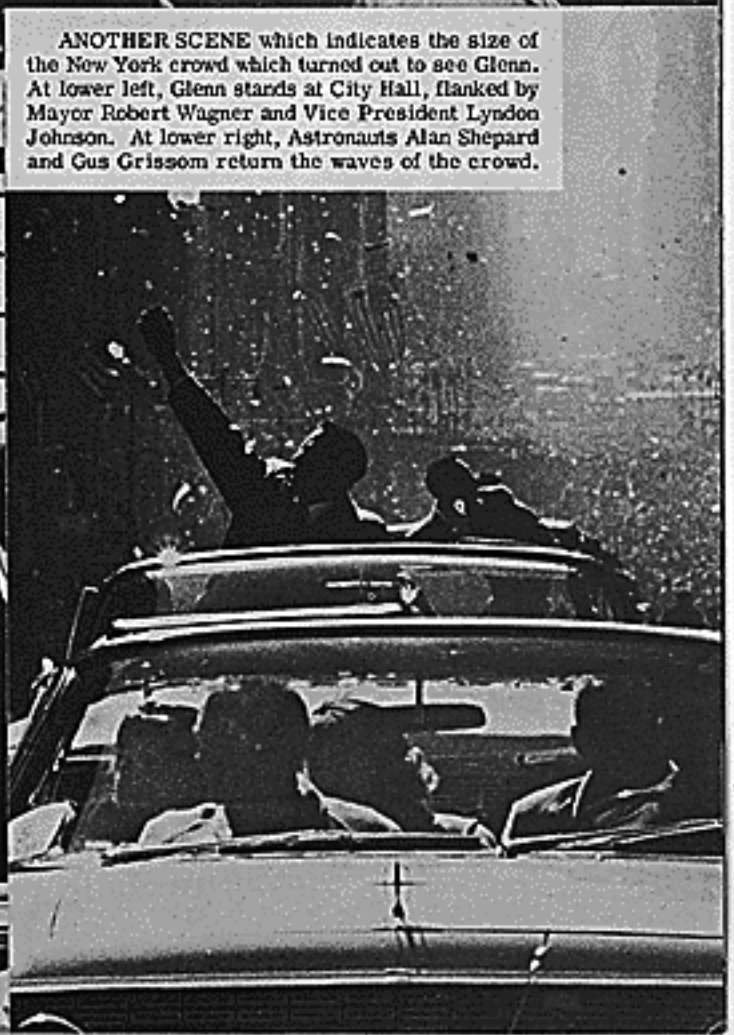
TOP: Tecwyn Roberts, Glenn, Chris Kraft, and President Kennedy at Mercury Control Center. Lower left: Astronaut M. Scott Carpenter and daughter. Lower right: Glenn speaks at the press conference.


Well done!
ASTRONAUT
JOHN H. GLENN, Jr.


YORKTOWN H.S. WELCOMES DAVE'S DAD



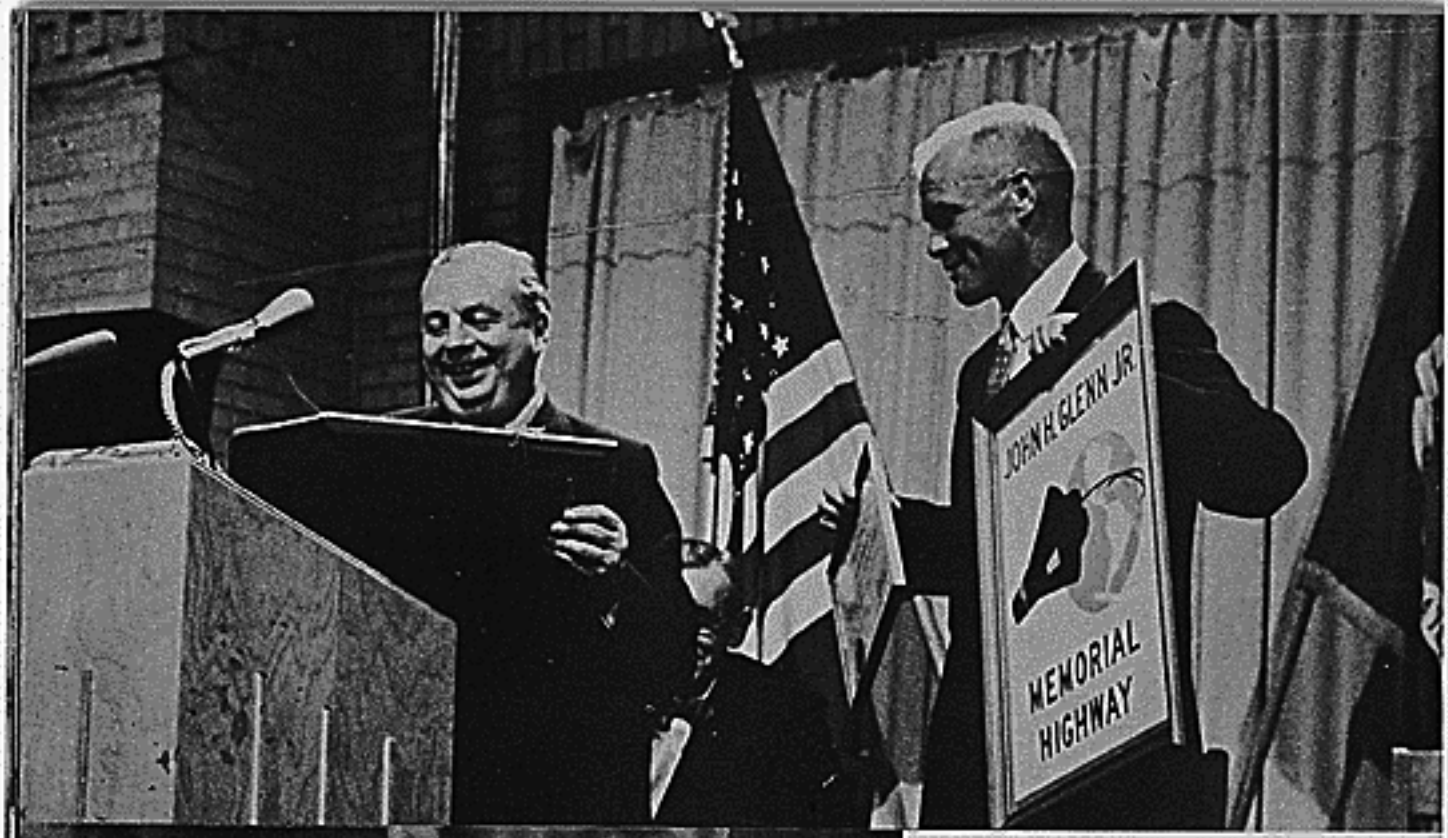
THE NEW YORK SKYLINE nears and confetti starts to fall. Below is a small portion of the crowd which lined the streets to get a glimpse of John Glenn.



ANOTHER SCENE which indicates the size of the New York crowd which turned out to see Glenn. At lower left, Glenn stands at City Hall, flanked by Mayor Robert Wagner and Vice President Lyndon Johnson. At lower right, Astronauts Alan Shepard and Gus Grissom return the waves of the crowd.

Below: AT THE UNITED NATIONS
Upper right: MEETING GENERAL MAC ARTHUR
Lower right: LYNN AND THE SKYLINE

NEW CONCORD, OHIO, MARCH 3, 1962



Above, Governor Michael DiSalle makes a presentation. Below, John quips with the hometown folks. Lower right, sitting at an old familiar desk.