

## 2019-K860

Assembly Resolution No. 860

BY: M. of A. Peoples-Stokes

CELEBRATING the life and accomplishments of of  
Katherine Johnson, renowned mathematician and a true  
pioneer of the space era

WHEREAS, There are certain outstanding members of our community who,  
through their selfless commitment and dedication, have served to better  
the quality of life in our community and have had a measurable positive  
impact on the lives of its residents; Katherine Johnson was one such  
individual; and

WHEREAS, It is with great sorrow and deep regret that this  
Legislative Body records the passing of Katherine Johnson, noting the  
significance of her purposeful life and accomplishments; and

WHEREAS, Katherine Johnson, an American mathematician whose  
calculations of orbital mechanics as a NASA employee were critical to  
the success of the first and subsequent U.S. crewed spaceflights, died  
on Monday, February 24, 2020, at the age of 101; and

WHEREAS, Wielding little more than a pencil, a slide rule and one of  
the finest mathematical minds in the country, Katherine Johnson  
calculated the precise trajectories that would let Apollo 11 land on the  
moon in 1969, and after Neil Armstrong's history-making moonwalk, allow  
its safe return to Earth; and

WHEREAS, Katherine Johnson's impeccable calculations had already helped plot the successful flight of Alan B. Shepard Jr., who became the first American in space when his Mercury spacecraft went aloft in 1961; the very next year, she helped make it possible for John Glenn, in the Mercury vessel Friendship 7, to become the first American to orbit the Earth; and

WHEREAS, A few days before his historic flight, John Glenn made a final check of his planned orbital trajectory which had been generated by a computer which was still a novelty at NASA; and

WHEREAS, Unsettled by the calculations of a computer, John Glenn asked Katherine Johnson to double-check the machine's figures by hand; he then declared, "If she says the numbers are good, I'm ready to go."; and

WHEREAS, Throughout Katherine Johnson's 33 years in NASA's Flight Research Division, the office from which the American space program sprang, and for decades afterward, almost no one knew her name; and

WHEREAS, Katherine Johnson was one of several hundred rigorously educated, supremely capable yet largely unheralded women who worked as a NASA mathematician; in addition to her gender, this extraordinary woman, who began her scientific career in the age of Jim Crow, was also African-American; and

WHEREAS, Katherine Johnson began her illustrious career with NASA in June of 1953, after President Franklin D. Roosevelt signed an Executive

Order barring racial discrimination in the defense industry; she began in Langley's West Area Computing Unit, the segregated office to which the black women were regulated, tabulating sheets of data for the

agency's engineers; and

WHEREAS, Two weeks into her new job, Katherine Johnson was borrowed by the Flight Research Division, where she helped calculate the aerodynamic forces of airplanes, quickly demonstrating herself as an invaluable asset; she remained in the division for the remainder of her career; and

WHEREAS, Katherine Johnson went on to become the most celebrated of the small cadre of black women who served as mathematicians for the space agency and its predecessor, the National Advisory Committee for Aeronautics; and

WHEREAS, In 2015, President Barack Obama awarded her the Presidential Medal of Freedom, and two years later, NASA dedicated a building in her honor, the Katherine G. Johnson Computational Research Facility, at its Langley Research Center in Hampton, Virginia; and

WHEREAS, Through the years, Katherine Johnson published numerous technical papers, and was the first woman at NASA to be named author or co-author on an agency report; and

WHEREAS, Katherine Johnson was truly instrumental in enlarging the frontiers of space while simultaneously making huge strides for women and people of color in the universal human quest to explore space; through her tenacity, she literally opened the doors for women to attend NASA's scientific briefings; and

WHEREAS, After retiring from NASA, Katherine Johnson traveled across the country to promote the importance of a good mathematics education, which can strengthen the power of reasoning, creativity, abstract or spatial thinking, critical thinking, problem-solving ability and even

effective communication skills; and

WHEREAS, Predeceased by her second husband, James, and her daughter, Connie, Katherine Johnson is survived by two daughters, Joylette Hylick and Katherine Moore; six grandchildren, and 11 great-grandchildren, as well as numerous colleagues, friends, and children who dream of changing the world; and

WHEREAS, Katherine Johnson's name is synonymous with character, dignity, intellect, depth and humor, qualities evident to her family and to all those who were fortunate enough to have known her; she will be deeply missed and truly merits the grateful tribute of this Legislative Body; now, therefore, be it

RESOLVED, That this Legislative Body pause in its deliberations to celebrate the life and accomplishments of of Katherine Johnson, renowned mathematician and a true pioneer of the space era; and be it further

RESOLVED, That a copy of this Resolution, suitably engrossed, be transmitted to the family of Katherine Johnson.