

SENATE JOINT RESOLUTION NO. 256

Commending the NASA Langley Research Center.

Agreed to by the Senate, January 12, 2017
 Agreed to by the House of Delegates, January 20, 2017

WHEREAS, in 2017, NASA Langley Research Center celebrates 100 years of leadership in aerospace and a long history of innovative science programs, including the conception and management of the nation's first manned space program, improvements to the performance and safety of aerospace vehicles in all flight regimes, the implementation of vital Earth and space science missions, the successful exploration of Mars, and opening the frontiers of commercial space travel; and

WHEREAS, originally known as the Langley Memorial Aeronautical Laboratory (LMAL), NASA (National Aeronautics and Space Administration) Langley Research Center was established by the National Advisory Committee for Aeronautics (NACA) in Hampton on July 17, 1917, as the nation's first civilian aeronautical research laboratory to scientifically "study the problems of flight with a view to their practical solution"; and

WHEREAS, the research contributions of the LMAL improved the performance of nearly every American aircraft used during World War II; the laboratory was recognized with five prestigious Collier Trophies for engine cowlings to reduce drag, efficient wing deicing, research on the X-1 aircraft that broke the sound barrier, slotted-throat wind tunnel design for high-speed research, and the Whitcomb Area Rule for transonic aircraft design; and

WHEREAS, the LMAL became the NASA Langley Research Center on October 1, 1958, when the NACA was dissolved, and the laboratory was charged with adding the scientific study of spaceflight to its aeronautical portfolio, thereby forming the Space Task Group at NASA Langley Research Center, which managed the United States' spaceflight programs; and

WHEREAS, NASA Langley Research Center helped give birth to the space age by conceiving of and managing Project Mercury, training the original seven astronauts, providing feasibility studies on the lunar orbiter rendezvous, developing the lunar excursion model concept and research facilities for simulating landing on Earth's moon, and successfully sending the first Viking landers and orbiters to Mars; and

WHEREAS, throughout its history, NASA Langley Research Center has been instrumental in the foundation of additional aerospace research centers that are now known as NASA Wallops Flight Facility on the Eastern Shore, Ames Research Center and Armstrong Flight Research Center in California, Glenn Research Center in Ohio, and Johnson Spaceflight Center in Texas; and

WHEREAS, NASA Langley Research Center contributed to the development and operation of the space shuttle and continues its spaceflight research with contributions to the International Space Station and the nation's next generation of space transportation systems, including the Orion Spacecraft, the Space Launch System, and other commercial spaceflight initiatives; and

WHEREAS, NASA Langley Research Center was recognized with two additional Collier Trophies for improvements to aviation safety and is working to make supersonic commercial travel possible, to safely integrate unmanned aerial systems into the national airspace, to solve the challenges that exist in the nation's air transportation system, and to develop technologies for on-demand air transportation, where people and goods can be delivered anytime, anywhere; and

WHEREAS, NASA Langley Research Center has made vital advancements through satellite-based observation in the measurement of Earth's atmosphere, establishing the Atmospheric Science Data Center, now known as a Distributed Active Archive Center, for the use of scientists, educators, and students; the laboratory developed remote sensing systems that continue to pave the way for new atmospheric discoveries that help protect Earth and its people by providing policy makers with better and more timely information; and

WHEREAS, NASA Langley Research Center's innovative research into how Earth's systems interact will continue to provide critical data, contributing to the development of adaptive measures for threats such as climate change, rising sea levels, and land subsidence, all of which could have a significant impact on the Commonwealth; and

WHEREAS, NASA Langley Research Center has undertaken an ambitious revitalization plan to construct new, state-of-the-art facilities, implement comprehensive digital transformation, and create strategic workforce and research paths to ensure that the laboratory continues its important scientific research and technological contributions well into its second century of operation; and

WHEREAS, NASA Langley Research Center's rich history of developing innovative materials for space vehicles and structures, game-changing technological innovations, and unparalleled expertise in

entry, descent, and landing of spacecraft on planetary bodies will help the nation achieve the goal of establishing a human presence on Mars by the 2030s; and

WHEREAS, NASA Langley Research Center has served the nation for 100 years by advancing knowledge in aeronautics, spaceflight, atmospheric science, and manufacturing, while inspiring countless individuals and providing technology spinoffs and economic opportunities for both the Commonwealth and the United States; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the General Assembly hereby commend NASA Langley Research Center for 100 years of scientific and technological excellence which will continue to facilitate the United States' leadership in space exploration for years to come; and, be it

RESOLVED FURTHER, That the Clerk of the Senate prepare a copy of this resolution for presentation to the National Aeronautics and Space Administration as an expression of the General Assembly's admiration for NASA Langley Research Center's important mission and best wishes for continued success in the exploration and development of space, aeronautics, and earth sciences.