

Foreword

NASA is in the midst of ushering in a “new age of exploration” with the fundamental goal “to advance U.S. scientific, educational, and economic interests through a robust space exploration program.” Johnson Space Center is destined to play a vital role in our nation’s human space exploration endeavors.

We are renewing our emphasis on enhancing the nation’s science, technology, engineering, and mathematics education in our schools. We are also establishing partnerships with universities to help develop our technical workforce.

NASA has taken an active role in spurring the commercial aerospace industry to meet the challenges and exploit the opportunities in low-Earth operations. We are also making vigorous efforts to invest in technology development and encouraging innovation at our center.

This Biennial Research and Technology Development Report is a valuable compilation of the many exciting research initiatives accomplished by our remarkably talented and smart minds at Johnson Space Center. It is intended to give you insight into and technical information about important areas of investigations in support of human space exploration. These are exciting times to be in the space exploration business, and to be part of the team that is conducting groundbreaking research to enable us to achieve the next milestone in our pursuit of human space exploration.

I am positive that the information provided in this report will enable us to engage in dialogue with the science and engineering research community in universities, other federal agencies, industries, and nonprofit research institutions. Our goal is to build strong and lasting research partnerships as we continue our journey to the stars!

Michael L. Coats

Center Director

