## The Robotic and Human Exploration of Space: Progress, Plans, and Some Thoughts on the Meaning of It All

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Man has long looked up into the starry night and wondered. For just as long, man has looked to the skies and longed to fly. In recent decades, science and technology have given us the means to explore, discover, and understand our world, our solar system, and the universe beyond. Great observatories, first on the ground and now in space itself, enable us to discern the nature of what we've long seen. The Big Bang and black holes are now part of common parlance. Thousands of worlds have been discovered orbiting other stars. And graceful wings and roaring engines have given us the power of flight. Humans have lived and worked in Earth orbit continually for nearly twenty years. We are closer to human missions to Mars now than we are far from our last mission to the moon. Much of this progress and planning is the result of your tax dollars at work, so you deserve to know about them. And by knowing, participate.

What motivates these great efforts to explore space—to understand the universe around us and to escape the gravity well that holds us here? The motives are myriad. Curiosity. Ambition. Competition. Prosperity. Fear. Manifest destiny. The glory of God. The desire to disprove Him. The need to test ourselves against challenges our forebears thought insurmountable. The desire to make a better future for our children. To achieve a peace among nations that eludes us on Earth. The idea that we might finally answer the question "What is man?" by answering the question "Are we alone?". The resurrection of Christian natural theology.

Consideration of these myriad motives and the discoveries they engender raises questions of the interactions of science and faith with which this series of lectures and discussions is concerned. Our speaker, Mr. Greg Williams, recently completed a 32-year career at NASA. For ten of those years, he led teams of scientists and program managers in the development of science strategies and plans to implement decadal surveys of the National Academy of Sciences. In his last five years at NASA, he helped manage human space exploration programs and chart a course for the journey to Mars.