

IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Governmental Human Spaceflight Programmes (Overview) (1)

Author: Mr. James Free

National Aeronautics and Space Administration (NASA), United States, james.m.free@nasa.gov

Mrs. Kathy Lueders

NASA Headquarters, United States, Kathryn.l.lueders@nasa.gov

KEYNOTE: NASA'S PLANS FOR HUMAN SPACE EXPLORATION

Abstract

NASA will maintain continuity of purpose and direction in our human space exploration programs. Plans for enabling the development of a low-Earth orbit economy and sustainable human lunar exploration are in full motion. Building on momentum from many successful achievements over the last year, including the realization of the commercial crew program, the landing of the Mars Perseverance rover on the Red Planet, production milestone completion of early Artemis systems, and the celebration of 20 years of continuous operations aboard the International Space Station, the agency is prepared for the important work that lies ahead. This paper will examine how NASA will 1) continue commercial Low-Earth Orbit development, 2) prepare for exploration of the Moon using the Space Launch System (SLS) rocket and Orion spacecraft on the upcoming Artemis I mission, with a crewed mission following shortly thereafter, 3) build the Gateway in orbit around the Moon enabling new capabilities in deep space, 4) begin development of our commercial-built human landing system, 5) use the Moon's unique environment to perform science that will advance our understanding of Earth and our solar system, 6) focus on innovation and problem solving to prepare humanity for future exploration while benefitting all of our lives on Earth, and 7) move deeper into the solar system with industry, academic, and international partners who have a shared ambition to explore more of the solar system than ever before.