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

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NASA'S ARTEMIS HUMAN LANDING SYSTEMS: THE BEST OF GOVERNMENT AND INDUSTRY

Abstract

On April 30, 2020, NASA announced the selection of three companies to begin the initial phase of development of human landing systems to take the first woman and next man to the lunar surface through NASA's Artemis lunar exploration program. The selected companies were a Blue Origin-led team with Lockheed Martin, Northrup Grumman, and Draper; Dynetics (a Leidos company); and SpaceX. Contracts were awarded shortly after, kicking off a ten-month base period during which NASA worked closely with each company to finalize functional and performance requirements, confirm lander development standards, and establish baseline designs, schedules, and management plans for contract execution and human spaceflight certification. Concurrent with the base period, NASA ran a single-source federal procurement for the next phase of HLS development, Option A, to determine which design(s) would be selected to continue development to flight. At the end of the base period, in Spring of 2021, NASA will award up to two Option A contracts, providing a seamless transition to the next phase of HLS development

that ultimately culminates in crewed demonstration missions to the lunar surface.

This paper will provide a look at the Option A phase of development for the Human Landing System Program, including publicly available information on the selected company or companies, their HLS designs, as well as near-term and future milestones for HLS and the Artemis program.