## Boeing Selected to Build NASA's Upper Stage for Ares I

## Boeing Selected to Build NASA's Upper Stage for Ares I

The Boeing Company [NYSE: BA] has been awarded a NASA contract valued at approximately \$514.7 million to produce the upper stage of the Ares I crew launch vehicle. This element provides the navigation, guidance, control and propulsion required for the ascent of the second-stage Ares I into low-Earth orbit.

The Ares I launches the Orion crew exploration vehicle, which will be joined with other elements of NASA's Constellation program to help propel astronauts to the moon by 2020.

"Boeing will apply its best practices in program management and Lean manufacturing principles from across the company to ensure that we produce the safest, lowest-cost and most reliable upper stage for NASA," said Roger A. Krone, president of Network and Space Systems, Boeing Integrated Defense Systems. "The Boeing team has an experienced and highly skilled workforce that is ready to get started on this exciting new mission for our customer and our nation."

Boeing will produce from two to six upper stages per year during regular production, depending on NASA requirements. The initial phase of the contract calls for several flight-test production units. If all options of the cost-plus performance contract are exercised through 2017, Boeing could produce as many as 23 upper stages.

"The Boeing team is honored to be selected as NASA's Ares I Upper Stage production partner and to be part of the Constellation team," said Brewster Shaw, vice president and general manager of Boeing Space Exploration. "We have a proven team that is eager to help NASA and the nation write the next chapter in the history of human space exploration."

Under the contract, Boeing will employ up to several hundred technical support personnel at NASA's Marshall Space Flight Center in Huntsville, Ala. The Center has responsibility for the design of the Ares I, with Boeing providing production engineering support. Boeing also expects to employ up to several hundred production support personnel at NASA's Michoud Assembly Facility in New Orleans, where the upper stage will be assembled.

"The Boeing team will be innovative in our production practices, gained from our extensive experience as the largest aerospace manufacturing company in the world," said Jim Chilton, vice president of Boeing Exploration Launch Systems and program manager of Ares I Upper Stage production.

Boeing's team of suppliers includes Hamilton Sundstrand, a subsidiary of United Technologies Corp. [NYSE: UTX]; Moog Inc. [NYSE: MOG.A and MOG.B]; Northrop Grumman Corporation [NYSE: NOC]; Orion Propulsion Inc.; SUMMA Technology Inc.; United Space Alliance; and the United Launch Alliance.

A unit of The Boeing Company, Boeing Integrated Defense Systems is one of the world's largest space and defense businesses specializing in innovative and capabilities-driven customer solutions. Headquartered in St. Louis, Boeing Integrated Defense Systems is a \$32.4 billion business with 72,000 employees worldwide. ###

For further information:

Ed Memi

Space Exploration office: (281) 226-4029

edmund.g.memi@boeing.com

Dean Acosta
Space Exploration
office: (281) 226-6005
dean.p.acosta@boeing.com