NASA, industry leaders discuss new booster development for space launch system

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Artist concept of Space Launch System on launchpad. Credit: NASA/MSFC

(PhysOrg.com) -- On Dec. 15, more than 120 aerospace industry leaders from more than 70 companies attended the Space Launch System's Advanced Booster Industry Day held at Marshall Space Flight Center in Huntsville, Ala. The event focused on a NASA Research Announcement

for the Space Launch System's (SLS) advanced booster.

Marshall is leading the design and development of the SLS on behalf of the agency. The new heavy-lift launch vehicle will expand human presence beyond low-Earth orbit and enable new missions of exploration across the solar system.

For explorations beyond the first two test flights, the SLS vehicle will require an advanced booster with a significant increase in thrust over existing U.S. liquid or solid boosters.

"As we are forging ahead with Space Launch System development, we are pleased to have such a strong response from industry and look forward to their ideas and hardware demonstrations for advance boosters concepts," said Todd May, SLS program manager. "Together, our expertise will enable an entirely new U.S. booster capability -- the largest and highest performing booster system ever produced -- to begin the journey to deep space safely and affordably."

Through this research announcement, NASA is seeking proposals for engineering demonstrations and/or risk reduction strategies for advanced booster concepts. The aim is to reducing risks while enhancing affordability, improving reliability and meeting our performance goals during an initial 30-month phase prior to the full and open Design Development Test and Evaluation (DDTE) competition. The total award value for the research announcement is $200 million with multiple awards anticipated.

NASA anticipates initiating a full and open competition for the advanced booster system in FY2015 with award anticipated in FY2016 and hardware delivery in the FY2019 timeframe. The 130-metric-ton, evolved SLS is slated for completion following the 2021 test flight.

For information about NASA's Space Launch System development effort, visit: www.nasa.gov/sls

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