Game Changing Development Program Office

Advanced Manufacturing Technology Project

NASAfacts

The Advanced Manufacturing Technologies (AMT) project develops and matures innovative, low-cost manufacturing processes and products including: metallic joining, additive manufacturing, composites, and digital manufacturing.

NASA is committed to revitalizing and transforming its already highly advanced manufacturing technologies. This effort will enable development of more capable and lower-cost space missions and launch vehicles, to the benefit of all NASA's science, engineering and spaceflight endeavors. Additionally, many of these advanced manufacturing techniques and tools will be adapted and transferred to benefit American businesses -- bolstering the work of industry and the nation's manufacturing sector as a whole.

The Advanced Manufacturing Technology project, managed by NASA's Marshall Space Flight Center in Huntsville, Ala., is part of the agency's Game Changing Technology Program, managed by NASA's Langley Research Center in Hampton, Va. Both are funded by NASA's Space Technology Mission Directorate.

The Advanced Manufacturing Technology project, including active research and development efforts at five NASA field centers around the nation, encompasses a range of development, testing and implementation activities intended to dramatically advance the state of the art in NASA manufacturing and enabling technologies.

The project seeks to develop innovative materials and improve those already in widespread use; leverages high-tech advances in computing to improve computer-based modeling of hardware, components and systems; and pursues routine improvement in the areas of automation, sensing, networking and more. A critical element of the work is better integration of disciplines including materials, design and manufacturing. In every case, NASA seeks game-changing results that will improve affordability, enhance capability and reduce schedule and cost of programs and missions.

Specifically being addressed by key development and maturation efforts within the project are technology gaps in such critical areas as composites, metals, additive manufacturing, environmental solutions, model-based tools and inspection of delivered parts, elements, components and systems.

For more information about the Game Changing Development (GCD) Program, please visit http://gameon.nasa.gov

National Aeronautics and Space Administration

www.nasa.gov

Doc #....