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PUBLICATION TRENDS AT NASA'S MARSHALL SPACE FLIGHT CENTER AND POTENTIAL
IMPACTS ON KNOWLEDGE MANAGEMENT

Abstract

NASA's Marshall Space Flight Center in Huntsville, Alabama is one of the largest NASA Centers and is responsible for the design, development, and implementation of the Agency's space launch systems. Marshall has a long legacy of leading propulsion systems research and development from the early days of the Apollo program through the 30 year Space Shuttle Program. Currently Marshall is home to NASA's Space Launch System program office and as such is leading the development of the United States' next advanced heavy-lift launch vehicle.

While Marshall remains NASA's lead propulsion center, a review of publications by Marshall employees has shown a downward trend in the number of publications related to propulsion systems in the last several years. Publications provide a unique opportunity to share data, information, lessons learned, and recommendations with the broader scientific community. Preserving this knowledge base and technical expertise is vital to driving innovation and mitigating risk in new missions. Given the decline of the health of the U.S. propulsion industrial base and known challenges facing the industry, this downward trend in propulsion systems publications by Marshall raises numerous questions. This paper will provide a detailed review of recent publication trends at Marshall and explore possible reasons for the change.

This reduction in propulsion systems publications has potential impacts on aspects of knowledge management because much of the knowledge and expertise at Marshall has historically been contained or mentioned in papers. This paper will review what this trend means for the Marshall workforce, the propulsion industry, and the broader space science community.