JSC/EC5 Spacesuit Knowledge Capture (KC) Series Synopsis

All KC events will be approved for public using NASA Form 1676.

This synopsis provides information about the Knowledge Capture event below.

Topic: Mars Robotics and Things I Wished I Had Learned in College

Date: February 25, 2016 **Time:** 1:00 p.m. – 2:00 p.m. **Location:** JSC/B9NW/R2170

DAA 1676 Form #: 35468

This is a link to all lecture material \\js-ea-fs-01\pd01\EC\Knowledge-Capture\FY16 Knowledge Capture\20160225 Baker_Mars Robotics\1676 Review - Charts

Assessment of Export Control Applicability:

This presentation has been reviewed by the EC5 Spacesuit Knowledge Capture Manager in collaboration with the author and is assessed to not contain any technical content that is export controlled. It is requested to be publicly released to the JSC Engineering Academy, as well as to STI for distribution through NTRS or NA&SD (public or non-public) and YouTube viewing.

* This file is also attached to this 1676 and will be used for distribution.

For 1676 review use_Synopsis_Baker_Mars Robotics_2-25-2016.docx

Presenter: John D. Baker

Synopsis: John D. Baker will explore how Mars robotic missions are designed and operated. He will also discuss a few basic concepts that will help future engineers and scientists develop key skills to use in aerospace projects.

Biography: John Baker is currently a program manager with nearly 30 years of experience at the Jet Propulsion Laboratory (JPL) in Pasadena, California, and he is an instructor at the California Institute of Technology's Division of Engineering and Applied Science. At JPL, he leads the development of human exploration studies and the development of low-cost robotic exploration systems. His most recent study has been considering how to send humans to Mars and return them affordably. He is also developing a new product line of small and low-cost planetary spacecraft. Mr. Baker also ran a recent drop-test project to gather data in support of the design of the Orion Crew Module for water landing. Previously, he was a program executive at NASA headquarters for the successful for Lunar Reconnaissance Orbiter (LRO) mission to the Moon. Before that, he managed the Mars Science Laboratory "Curiosity" Rover Project Engineering effort and developed numerous Space Shuttle remote sensing and educational payloads. Mr. Baker led the development of numerous new innovative software applications, hardware technologies and mission concepts.

Over his career, he has held positions in program and line management, systems engineering, avionics design engineering and mission operations for space systems and technologies. He has also received numerous citations and awards including the Exceptional Service Medal from NASA. He earned his degree in electrical engineering from Colorado State University.

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