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John C. Mankins is the President of ARTEMIS Innovation Management Solutions LLC, a research and development management consulting start-up that solves tough innovation challenges for government, industry and not-for-profit clients. He is internationally recognized as a successful leader in space systems and technology innovation, as a highly effective manager of large-scale technology R&D programs, and as an accomplished communicator.

Mr. Mankins has 27 years of experience and knowledge involving NASA, the aerospace industry, academia and the international space community—as well with other U.S. Agencies, including the Department of Defense, (such as DDR&E, DARPA, NRO, NSSO), the National Science Foundation, and others. ARTEMIS Innovation provides consulting services to a range of clients, including the Department of Energy (for DOE’s Energy Efficiency and Renewable Energy office, both the Solar Energy Technology Program and the Wind Program), the Office of Naval Research, the Applied Physics Laboratory, and a range of other organizations.

Mr. Mankins is well known as an innovator in R&D management, and was one of the creators of the widely used “technology readiness level” (TRL) scale for technology assessment. Mr. Mankins is an acknowledged subject matter expert in these fields. He has been consulted on both R&D management and space issues by the General Accounting Office, the Office of the Chief Technologist of the U.S. Navy, the U.S. National Security Space Architect, Japan’s Ministry of Economy, Trade and Industry (METI), and others.

He is also one of the foremost authorities on the subject of space solar power (SSP). Mr. Mankins led NASA’s SSP “Fresh Look Study” in the mid-1990s, managed the SSP Exploratory Research & Technology (SERT) Program, and is the creator of several important SSP systems concepts, including the SunTower, the Solar Clipper, and others. He serves as the President of the Sunsat Energy Council (also known as the “Space Power Association”), a non-profit international group founded in 1978 by Dr. Peter Glaser, that promotes the potential of SSP for future application on Earth and in space. Mr. Mankins has authored numerous papers and articles on the topic of SSP and has testified before the U.S. Congress on the topic on several occasions.

In his most recent position at NASA, Mr. Mankins managed Exploration Systems Research and Technology (ESR&T) within the Exploration Systems Mission Directorate at NASA Headquarters—a key element of the U.S. Vision for Space Exploration. He was responsible for an \$800M per year R&D effort, involving 15 programs, more than 100 individual projects and organizations, and over 3,000 personnel (inside and external to NASA), including an immediate office staff of some 30 professionals and support staff. During 2004, he was responsible for planning, organizing and leading the implementation of two of the largest, most successful technology acquisitions in NASA’s history. He was also responsible for strategy, analyses, planning, organization, budget, acquisition, program management, and reporting in support of space exploration plans. At NASA, Mr. Mankins’ 25-year career ranged from flight projects and mission operations, to systems-level innovation and advanced technology R&D, and the management of major technology programs.

For 10 years Mr. Mankins was also the manager of Advanced Concepts Studies at NASA Headquarters (in several organizations, including the Office of Space Access and Technology and the Office of Space Flight). He conducted studies of space solar power, highly reusable space transportation, affordable human exploration approaches, and other topics. He was the creator or co-creator of various novel systems concepts, including the "MagLifter" electromagnetic launch assist system, the Internet-based NASA "Virtual Research Center" (winner of a Software of the Year Award), the patented "Hybrid Propellant Module" for in-space refueling, the "HabBot" mobile planetary outpost architecture, the Advanced Technology Life cycle Analysis System (ATLAS), and others.

Mr. Mankins also served as Assistant Associate Administrator for Advanced Systems in the NASA Office of Space Flight and as the Chief Technologist for the Human Exploration and Development of Space (HEDS) Enterprise; and in 2000 he was the lead author of the HEDS Strategic Plan. Mr. Mankins served as the technology lead for the NASA Exploration Team (NEXT) where he established a family of strategic roadmaps to develop technology for human and robotic exploration and development of space (a.k.a., "THREADS"). These roadmaps formed one basis for NASA technology budget inputs during 2000-2003. During 1990-1991, he was the chief architect and author of the NASA Integrated Technology Plan, developed in response to the Report of the Committee on the Future of the U.S. Space Program (the so-called "Augustine Committee").

He also served as the manager of various other technology programs, including the HEDS Technology and Commercialization Initiative (HTCI); the Aerospace Industry Technology Program (AITP: an industry-led, industry-NASA technology R&D program); and, NASA's Pathfinder and Exploration Technology Programs (focusing on human and robotic deep space exploration). In summary, Mr. Mankins has an exceptional background in organizing and implementing technology R&D; including strategic planning, advanced studies, program planning, line management, facilities planning, and program implementation (including leadership of more than a half-dozen major R&D procurements).

Before coming to NASA, Mr. Mankins held a variety of positions at the Jet Propulsion Laboratory (JPL); including technologist for the Systems Division, manager for Space Station Requirements Analysis at JPL, manager of the systems analysis program at JPL, and manager for Mars Rover and Sample Return pre-Project technology requirements.

Mr. Mankins holds undergraduate (Harvey Mudd College; B.S., 1978) and graduate (UCLA; M.S., 1983) degrees in PHYSICS and earned an MBA in Public Policy Analysis (The Drucker School at Claremont Graduate University; MBA, 1986). He is a member of the International Academy of Astronautics (IAA), the International Astronautical Federation (IAF), the American Institute of Aeronautics and Astronautics (AIAA), and the Sigma Xi Research Society.

Mr. Mankins has received numerous awards and honors during his career, including the prestigious NASA Exceptional Technology Achievement Medal (of which he was the first recipient). He has been recognized in "Who's Who" on various occasions and was named by *SpaceNews* as one of the "100 People Who Made A Difference In Space" (during 1989-2004)—a distinction he shared with NASA Administrators O'Keefe (former) and Griffin (current), as well as with former Congressman Robert Walker, innovator Burt Rutan, and others. He is a skilled communicator, including political, programmatic, technical and lay audiences, and has authored or co-authored more than 75 published papers, reports and other technical documents.