ABSTRACT AND BIOGRAPHY

Standing up the CSTP office at KSC

The plans to handover the Production, Operations, and Sustaining Engineering of the Low Earth Orbit Block 1 Ares/Orion transportation system to the Space Missions Operation Directorate (SOMD) are well underway. After one year of careful planning and collaboration, significant progress has been made in the Program integration, planning and control, systems engineering and integration, production, and operations planning for safe transportation to the International Space Station (ISS).

The CSTPO successfully faced many challenges in this first year of planning and in doing so, survived the Program Planning Budget and Execution process, established collaborations at multiple levels within Cx Program and Center Institutions, led the operability banner in response to Standing Review Board recommendations, and developed a Business Plan for cost effective transportation to ISS. Response to the CSTP charter has been positive within the human spaceflight community.

The Constellation Space Transportation Planning Office is continuing to move forward with collaborative efforts across the Agency. Come join us for an open conversation about the progress of this transition and pose your questions to our CSTPO panelists, including the Director, Deputy Director/SEI Chief, Launch Vehicle Production, Spacecraft Production, Mission and Ground Operations.

Edward Mango
Director, Constellation Space Transportation Planning Office
NASA Kennedy Space Center

Since the fall of 2008, Mr. Mango has been assigned as Director of the Constellation Space Transportation Planning (CSTP) office at NASA's Kennedy Space Center (KSC). He is responsible for the development of a new program under the Space Operations Mission Directorate (SOMD) to operate and sustain the Constellation systems to the International Space Station. In addition, Mr. Mango was recently assigned the role of Associate Program Manager for Operations and Sustaining for the Constellation Program. The CSTP office is working in conjunction with the Constellation Program office to bring the systems through design, development, and certification. Mr. Mango is also the Launch Director for Ares I-X, the Constellation Program's first test flight.

After serving in the U.S. Air Force, Mr. Mango joined NASA at the Kennedy Space Center in 1986 and has held positions including Shuttle Project Engineer; Deputy Director for Shuttle Process Engineering; and, Shuttle Launch Manager. He served as the Recovery Director for the Columbia debris recovery effort in East Texas.

During the Return-To-Flight period, Mr. Mango was assigned to the Johnson Space Center in Houston, Texas, as Deputy Manager of the Orbiter Project Office. Mr. Mango was responsible

for directing the development, production, test, and supportability of the Space Shuttle Orbiter fleet, in a $750 million per year effort.

In 2007, Mr. Mango was assigned to the Kennedy Space Center as Deputy Director of the Launch Processing Directorate. He was responsible for processing and launching the Shuttle fleet as well as the first Constellation test mission.

During his career with NASA, Mr. Mango has earned numerous awards including the Exceptional Service Medal, Outstanding Leadership Medal, Certificate of Achievement, Directors Award, and most recently the Rotary National Award for Space Achievement Stellar Award.

Mr. Mango earned his Bachelor of Science in Aerospace Engineering in 1981 from Parks College of Saint Louis University and Masters of Science in Engineering from the University of Central Florida.

Josephine Burnett
Deputy Director of the Space Transportation Planning Office
NASA Kennedy Space Center

Ms. Josephine Burnett is the Deputy Director of the Space Transportation Planning office, providing strategic guidance and leadership for the Program Management and Systems Engineering and Integration of the Constellation Block 1 Orion/Ares configuration to Low Earth Orbit.

Ms. Burnett began her career with NASA in 1987 at Kennedy Space Center as an Aerospace/Mechanical Engineer integrating experiments onto Spacelab racks and pallets. In 1991, she became an Experiment Project Engineer and led a team of engineers in the test and checkout of the United States Microgravity Laboratory –1 Spacelab Module. Ms. Burnett moved to an operations position in 1993 as a Payload Test Director. In this position, she was responsible for overseeing Shuttle Payload testing for assigned payloads, including Payload support for launch countdown.

In 1995, Ms. Burnett served as the Center Director Management Intern and performed in this capacity until 1996 when she joined the Space Station Hardware Integration Office. For three years, she supported the test and checkout of the Canadian Space Station Remote Manipulator System (SSRMS) in Brampton, Ontario and the Canadian portion of the Multi Element Integrated Test, after which time she was selected to lead the Element 6A Office as the Acting Chief.

In 2000, Ms. Burnett joined the International Space Station (ISS)/Payload Processing Project as the Chief of the Future Missions and International Partner Division. In this position, she led the office responsible for the advanced planning of ISS International Elements, Shuttle Payloads, and concepts for improved ways to test payloads in the future.

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In May 2002, Ms. Burnett was selected for a leadership rotational assignment as the Acting Director of Human Resources. She supported the HR Director in the centralized development, administration and integration of the Center's NASA Human Resource Programs. She served in this capacity until September 2003.

She then accepted a position as Deputy for Program Management for the International Space Station/Payload Processing Directorate and the Kennedy Space Center. In this capacity she supported the Director in the development of organizational roles and responsibilities as well the development of long-range organizational direction for KSC and ISS Program needs.

Ms. Burnett was selected as a member of the Senior Executive Services Career Development Program (SESCDP) class of 2004. While in this program, she served as Special Assistant to the Cape Canaveral Spaceport Management Office (CCSMO), staff to the 45th Space Wing Commander, and supported the NASA HQ Institutional Management Office/Office of the Chief Financial Officer. She completed the SESCDP in March 2006.

She returned to KSC as the Chief of the Systems Engineering and Integration Division for the Kennedy Space Center's Design Engineering Directorate. In this capacity, she led a team of highly experienced systems engineers in support of the Constellation Ground Operations Project.

In 2006, she joined the Senior Executive Service as the Director of Mechanical Engineering, a matrix organization that provides engineering products and services to all four of the Kennedy Space Center supported programs and projects; Space Shuttle, International Space Station, Launch Services, and Constellation.

Ms. Burnett graduated from the University of Florida in 1987 with a B.S. in Aerospace Engineering and in 1991 earned a Masters of Science from the Florida Institute of Technology in Space System Operations. She is a native of Florida and lives in Merritt Island with her family.

Philip Engelauf
Lead for the Constellation Space Transportation Planning
NASA Kennedy Space Center

Philip Engelauf is Lead for the Constellation Space Transportation Planning (CSTP) Operations and Integration office at NASA's Johnson Space Center (JSC) in Houston, TX. In this role, he is the principle representative of the CSTP office to the JSC operations and support organizations and is leading the formulation of operations processes for mission integration and operations.

Mr. Engelauf was on rotational assignment to the Exploration Systems Mission Directorate (ESMD) at NASA's headquarters in Washington, DC from April 2008 to April 2009. As Program Executive for both the KSC Ground Operations Project and JSC Mission Operations Project, he provided an executive liaison between the Constellation projects and the ESMD leadership.

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From April 2006 to April 2008, Mr. Engelauf was the Chief of the Flight Director Office for the Mission Operations Directorate at JSC. In this capacity, he managed the men and women who led the Mission Control Center teams in execution of the Space Shuttle and Space Station mission operations. He has served as a Shuttle Mission Flight Director on 29 Space Shuttle Missions. Mr. Engelauf has been the Lead Flight Director for eleven missions, more than any other Flight Director in the American human spaceflight program. Most notably, he was the Lead Flight Director for Shuttle-Mir operations from 1996 – 1998. He also served a temporary assignment to the Space Shuttle Program as Mission Director for the Hubble Space Telescope Servicing Mission in March 2002.

Mr. Engelauf began his career with NASA in 1978 as a Wind Tunnel Facility engineer at Ames Research Center in California. In 1982, he accepted a position at JSC as a Flight Activities Officer. From 1988 – 1989, he served as the chairman of a panel to develop concepts and operations techniques to utilize the Space Shuttle for assembly of the Space Station.

Throughout his career at NASA, Mr. Engelauf has earned numerous awards including the NASA Distinguished Service Medal, Aviation Week and Space Technology Laurel Award, NASA Exceptional Service Medal along with several team and group awards.

Mr. Engelauf earned his Master of Science in Aeronautics and Astronautics at Stanford University and his Bachelor of Science degree in Engineering and Applied Science from California Institute of Technology. He lives with his family in Houston, TX.

Cheryl McPhillips
Technical Manager, Constellation Space Transportation Planning Office
NASA, Kennedy Space Center

Ms. Cheryl McPhillips is a Technical Manager of the Space Transportation Planning (CSTP) office, providing strategic guidance and leadership for the Spacecraft Project Management of the Constellation Block 1 Orion/Ares configuration to Low Earth Orbit.

Ms. McPhillips began her career with NASA in 1984 as an Electrical Engineer where she worked Spacelab Experiments and Ground Support Equipment. In 1991, Ms McPhillips became Chief of the Experiment Electrical Branch and led a team of Electrical engineers responsible for ground checkout systems as well as, flight experiments. In this position Ms McPhillips served as part of the Payloads Management team for Payload and Flight Readiness Reviews and launch countdown.

In 1996 Ms. McPhillips joined the Space Station Hardware Integration Office where she served as the Avionics lead and led the Multi Element Integrated Test (MEIT) of the first five Space Station Elements. In 1998, Ms. McPhillips became the Deputy Manager of the Systems Integration Office and was responsible for leading the development of all integrated test requirements for Space Station and assuring the requirements were properly implemented.

Ms. McPhillips became Deputy of the Space Station Engineering Division in 2000. Only one year later, in 2001 she was promoted to chief of that office where she led 100 engineers in five branches and chaired the Materials Engineering Review Board.

In 2003, Ms. McPhillips became Utilization Division Chief of the project office for integrating International Space Station Research hardware unto the Shuttle. Four years later, in 2007, she became the Orion Ground Operations planning manager for ISS and Spacecraft Directorate.

Ms. McPhillips graduated from the University of South Florida in 1984 with a B.S.E.E. and M.S.E.E. and in 1987 earned an M.S. from Florida Institute of Technology in Space Technology. Ms. McPhillips was born and raised in Ohio and lives in Merritt Island with her family.

David Martin
Lead, Constellation Space Transportation Planning Office, Launch Vehicle Production
NASA, Kennedy Space Center

David Martin is the Launch Vehicle Production Lead for the Constellation Space Transportation Planning (CSTP) office, providing strategic guidance and leadership for the project management, hardware production, sustaining engineering, launch and operations planning for the Constellation Block 1 Ares I Launch Vehicle.

Mr. Martin began his career at NASA's Kennedy Space Center (KSC) in 1981 as an engineering trainee in the Design Engineering Directorate through NASA's co-operative education program. He subsequently moved from Kennedy Space Center to Marshall Space Flight Center (MSFC), and continued his Co-op education and work in the MSFC Science and Engineering Directorate. In 1983, upon completing his undergraduate degree, Mr. Martin accepted a full-time engineering position at MSFC and began supporting as a flight data systems design engineer within the Science and Engineering Directorate.

In 1986, Mr. Martin began serving as a Microgravity Experiment Chief Engineer under Marshall's Associate Director for Space Systems, where he was technically responsible for the design, development, and certification of several microgravity payloads which flew on the Space Shuttle. In 1987, during the return-to-flight effort which followed the Space Shuttle Challenger accident, Mr. Martin joined the Space Shuttle External Tank Project Office as a Project Engineer. In that capacity, Mr. Martin was co-located at Kennedy Space Center and provided on-site MSFC project management representation and technical support for activities related to the transfer, stacking, and launch of Space Shuttle External Tanks and related hardware.

In 1988, Mr. Martin was assigned to the Space Shuttle Solid Rocket Booster Project Office to serve as the Project Office representative on-site at the Solid Rocket Booster Assembly and Refurbishment Facility (ARF) located at KSC. He was responsible for providing project management representation, technical support and contractor oversight for the Space Shuttle Solid Rocket Booster (SRB) production and sustaining engineering activities performed by the SRB prime Contractor at the ARF. Mr. Martin continued to serve in this capacity, with steadily

increasing responsibilities, until 1996 when he accepted a position as the Technical Assistant to the Space Shuttle SRB Project Manager and returned to MSFC.

In 1999, Mr. Martin was selected as the Deputy Project Manager for the Space Shuttle SRB Project. In this capacity, he led a highly qualified project team in the performance of all tasks related to maintaining the design, development, production, testing, certification, launch, recovery, and refurbishment of Space Shuttle SRB hardware. His responsibilities included serving as Technical Management Representative (TMR) for the SRB element of the Space Flight Operations Contract (SFOC). Mr. Martin accepted full day-to-day management responsibility for the SRB Project in 2002, when the Project Manager was detailed on special assignment to NASA Headquarters.

In 2003, Mr. Martin joined the Senior Executive Service as the Project Manager for the Space Shuttle SRB Project, and assumed full management responsibility and leadership for the SRB project. He continued to lead an exceptional SRB Project team thru the challenging Shuttle return-to-flight period following the Columbia accident. In 2007, Mr. Martin accepted a position serving as the MSFC Management Liaison for Exploration, and was once again co-located to Kennedy Space Center. Serving in that position, he was instrumental in promoting early collaboration between the Constellation Program and the Shuttle Program, as it related to Ares I development. Mr. Martin went on to support MSFC and the Constellation Program on a number of additional Ares I development related special field assignments, including serving as the Ares I Operability Manager, before accepting his current assignment in 2009 to support KSC in the newly established Constellation Space Transportation Planning Office.

Mr. Martin graduated from the University of Alabama in Huntsville, in 1983 with a B.S. in Electrical Engineering. He has received numerous NASA awards including the Astronaut Silver Snoopy Award, the NASA Manned Flight Awareness Award, and the NASA Outstanding Leadership Medal.