

### ABSTRACT AND BIOGRAPHY

#### **NASA's Next Generation Facilities**

NASA Centers' aging infrastructure, changing funding and mission requirements, and future workforce needs have unique facility challenges that have been addressed at the NASA Ames Research Center (ARC) using innovative and cost effective solutions.

For example, the ARC Facilities Engineering Branch and AECOM Design teamed together to create an environmentally conscious and technologically advanced facility to support critical mission work, one that addresses the future vision of NASA. Building N232, also called the "NASA Sustainability Base," will be "the first lunar outpost on earth," combining NASA technologies with sustainable design. The building will approach net zero energy consumption, fitting for the goal of a self-sufficient lunar base and mirroring the mission critical activities. Using environmentally friendly materials and real time intelligent control systems it will exceed current expectations for a high performance building. NASA sensor technologies developed for space missions will be incorporated into building systems creating a dynamic web that continually monitors all subsystems. This building is the symbol of NASA's dedication to solving the earth's environmental challenges while pursuing its mission to explore space. It will showcase today's technologies and will be an experimental platform for new technologies as they evolve.

NASA's commitment to incorporating new technologies not only into its missions but into its infrastructure will be the necessary magnet for the next generation of technologists, scientists and engineers.

The presentation will present the N232 design life-cycle process and present the unique challenges the team faced and how the design team solved them.

**William Tippin, IV DM, CMC**  
*Vice President, Federal Programs*  
AECOM

Dr. Tippin is a Vice-President with AECOM Technology Inc., a 45,000 person global architectural/ engineering professional services firm.

**Education:** Doctor of Management (DM), University of Maryland University College; Master of Public Administration, University of Arkansas; and Bachelor of Science Public Administration, University of Arkansas.

**Professional Registrations:** Certified Management Consultant (CMC)

**Professional Qualifications:** William has over 30 years in program/project management of major government aerospace, construction, and environmental construction projects. He has designed and implemented program, project and financial management systems for the NASA, FAA, GSA and the DoD plan, execute, and control critical strategic technology initiatives.

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William completed his doctoral dissertation, "Program Management Implementation: The Role of Critical Success Factors," in April 2007. This dissertation investigated the premise that critical success factors (CSFs) must be utilized for successful management and implementation of a strategic technology program. The successful NASA Viking Mars Mission was one his Dissertation case studies. Dr. Edward Hoffman, Director Academy Program/ Project & Engineering Leadership (APPEL) were one of his Dissertation advisors.

#### **Edward D. Weaver, AIA, LEED AP**

*Vice President*  
AECOM

Ed Weaver is an AECOM Vice President and an Architecture Studio Leader at the Washington DC National Capital Office. After earning a Bachelor of Architecture degree from Virginia Tech, he has practiced in the Washington, DC area for nearly 25 years. He currently serves as Secretary on the AIA Northern Virginia Board of Directors. As a LEED AP with a dedication to integrated design principles, his work stretches from government agencies, corporate office and higher education, to justice and defense projects. He is currently AECOM's Project Manager for the NASA New Town Program, Langley Research design and engineering.

#### **June Grant**

*Architect Designer, Project Manager and Construction Administrator*  
AECOM

Ms. Grant is an Architect, Designer, Project Manager and Construction Administrator. Her experience includes educational facilities, offices, retail, historic renovation projects, seismic upgrades, interiors and one-of-a-kind projects ranging in size from 2,000 SF to over 500,000 SF. Also, she was the Project Manager for the NASA Ames Research Center Building N232 design.

Ms. Grant has a multi-faceted background as an architect and investment analyst. Her background across the full spectrum of art, architecture and economics provides her the unique opportunity to push forward a vision that aligns her interests and ideals with those of the client's and project stakeholders.

Her experience on numerous projects ranging from multi-million dollar renovation projects to ten-story buildings. These projects fully exploited her ability to visualize, coordinate, implement and synthesize all aspects of the planning, site selection, design, and construction process to meet project goals. Her understanding of the numerous requirements involved on both sides of the table is instrumental to keeping all interested parties working towards the stated project goals and objectives.

Beyond architectural expertise, Ms. Grant is a front runner in locating new building technologies and practices for implementation in projects undertaken by the San Francisco office. In this

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capacity she is the liaison with the Center for the Built Environment and a representing member of the newly formed professional practices group, BALSAs – (San Francisco) Bay Area Leaders in Sustainable Architecture.