

**Selection Statement
for the
Manufacturing Support & Facility Operations Contract
(MSFOC)
Request for Proposal
(Solicitation Number NNM0838773R)**

On April 27, 2009, I along with other senior officials of the National Aeronautics and Space Administration met with the source evaluation board (SEB) appointed to evaluate proposals in connection with the Manufacturing Support & Facility Operations Contract (MSFOC) Request for Proposal (RFP) (Solicitation Number NNM07181505R).

The purpose of the Michoud Assembly Facility (MAF) MSFOC is to provide mission-focused, integrated production and facility operational support to National Aeronautics and Space Administration (NASA) projects and other on-site user(s)/tenant(s) during a period of time when MAF is transforming from a single-project, single-prime contractor facility to a multi-project, multi-prime contractor facility. This support includes (1) program management, (2) safety, health and emergency management, (3) manufacturing support, (4) maintenance, (5) site services, (6) site operations, (7) logistics operations services, (8) sustaining engineering, (9) environmental services, (10) construction management, and (11) indefinite-delivery indefinite-quantity (IDIQ) services. As both a manufacturing facility for human space flight hardware and an operational installation for user(s)/tenant(s), MAF manufacturing support and facility operations are required 24 hours/day and seven days/week.

The successful contractor will be responsible for providing/achieving (1) safe, healthy, and reliable operational support for current and future projects, (2) efficient, effective, and equitable use of facilities and resources, (3) flexible responses for changing programmatic requirements, (4) innovative approaches to contract requirements, and (5) positive working relationships with all of the user(s)/tenant(s) as an independent operator.

The proposed contract has a base period of performance from May 1, 2009, through April 30, 2012; a first option period from May 1, 2012 to April 30, 2013; and a second option period from May 1, 2013 through April 30, 2014. The proposed contract will be performed under a cost-plus-award-fee (CPAF) contract with performance being evaluated under NASA FAR Supplement (NFS) 1852.216-76, Award Fee for Service Contracts (Jun 2000).

RFP

The RFP for MSFOC was released on June 6, 2008, and proposals were submitted on July 29, 2008. NASA received proposals from the following offerors: Jacobs Technology, Inc. (Jacobs); Babcock & Wilcox Michoud Operations, LLC (B&W); Fluor-CDM Space Services, LLC (Fluor-CDM); Gulfcoast Aerospace Alliance, LLC (GCAA); and CH2M Hill – Tessada Manufacturing Support Operations (CTMSO). The offerors

supplemented their proposals with oral presentations. Three offerors presented on July 31, 2008, and two offerors presented on August 1, 2008.

NASA evaluated the proposals in accordance with the procedures prescribed by FAR Part 15 and NASA FAR Supplement (NFS) Part 1815 with an objective of achieving the best value. The RFP stated

In accordance with FAR Part 15.101-1, this acquisition selection will be made using a best value tradeoff analysis. All evaluation factors, Mission Suitability, Past Performance, and Cost, are essentially equal to each other. Per FAR 15.304(e) the following information is provided: Mission Suitability and Past Performance Factors, when combined, are significantly more important than the Cost Factor.

Under the Mission Suitability factor, NASA evaluated the proposals to ensure the offeror (1) understood the requirements of the performance work statement (PWS), (2) effectively supported the transformation of MAF from a single-user facility to an environment that will support many users and multiple NASA projects, and (3) recognized, tracked, and mitigated the risks inherent in its proposed approach. Each proposal received a mission suitability score based on the following subfactors and associated numerical weights.

Management and Technical Approach	600 points
Staffing and Total Compensation	300 points
<u>Small Business (including SDB) Participation</u>	<u>100 points</u>
Total	1000 points

Under the Past Performance factor, NASA evaluated proposals to assess the past performance of each offeror (including past performance of team members and major subcontractors) since this can be a significant indicator of performance under the proposed contract. This evaluation assessed corporate past performance on other programs comparable in size, content, and complexity to the proposed MSFOC effort (with an emphasis on experience related to program management; safety, health and emergency management; manufacturing support; and environmental services) and was based on information provided by the offerors, past performance questionnaires, and other information available to the SEB. In accordance with the RFP, level of confidence ratings (i.e., "Very High," "High," "Moderate," "Low," "Very Low," and "Neutral") were utilized to assess past performance.

Under the Cost factor, a cost analysis and a cost realism analysis were performed on each proposal to determine the realism and reasonableness of the proposed costs. The evaluation under the cost factor also included whether, over the life of the contract, the proposed cost elements were realistic for the work to be performed and were consistent with the various elements of the offeror's technical proposal. The RFP defined proposed cost for MSFOC as:

[T]he sum of the costs for the contract phase-in period, Mission Services for the period of performance including all options, pre-priced task orders for the first contract year, and a calculated IDIQ value for subsequent years using Offeror provided fully burdened rates applied to a government formula of labor hours required.

The SEB made adjustments to the offeror's proposed costs when necessary and the SEB also assigned a level of confidence (i.e., "High," "Medium," and "Low") to the most probable cost of each offeror.

The SEB evaluated each proposal on the basis of Mission Suitability, Past Performance, and Cost in accordance with the criteria in the RFP. On November 6, 2008, the contracting officer made a competitive range determination of two, a decision which was protested to the General Accountability Office (GAO) on December 5, 2008. NASA elected to take corrective action and, on January 30, 2009, the agency invited all offerors to participate in discussions and all but one chose to participate. Since one offeror (the protesting offeror) had already received a pre-award debriefing, each of the offerors remaining in the competition were provided this same level of information concerning the SEB's assessment of their initial proposal. This, in effect, provided each offeror with information equivalent to a pre-award debriefing prior to the initiation of discussions and thereby ensured an equitable competition. It also resulted in the SEB conducting written and oral discussions that were even broader in scope than required by section 15.306(d) of the FAR.

Discussions were held with four offerors beginning on February 23, 2009, and ending on or about March 20, 2009. Letters requesting Final Proposal Revisions (FPRs) were sent on March 23, 2009, with FPRs being received on March 30, 2009. After careful review and consideration of the FPR submittals, the SEB concluded its final evaluation of the proposals.

SEB Findings

The SEB gave the Jacobs proposal an overall Mission Suitability score of 952 points out of a maximum 1000 points. Under the Mission Suitability Factor, the SEB identified fifteen significant strengths, twenty-one strengths, no weaknesses, and no significant weaknesses. At the subfactor level, Jacobs' proposal was determined to be "Excellent" in Management and Technical Approach, Staffing and Total Compensation, and Small Business Participation.

The SEB gave the B&W proposal an overall Mission Suitability score of 915 points out of a maximum 1000 points. Under the Mission Suitability Factor, the SEB identified fifteen significant strengths, seventeen strengths, no weaknesses, and no significant weaknesses. At the subfactor level, B&W's proposal was determined to be "Excellent" in

Management and Technical Approach and in Staffing and Total Compensation, and "Very Good" in Small Business Participation.

The SEB gave the Fluor-CDM proposal an overall Mission Suitability score of 810 points out of a maximum 1000 points. Under the Mission Suitability Factor, the SEB identified five significant strengths, twenty-four strengths, one weakness, and no significant weaknesses. At the subfactor level, Fluor-CDM's proposal was determined to be "Very Good" in Management and Technical Approach and Staffing and Total Compensation and "Excellent" in Small Business Participation.

The SEB gave the CTMSO proposal an overall Mission Suitability score of 871 points out of a maximum 1000 points. Under the Mission Suitability Factor, the SEB identified twelve significant strengths, fifteen strengths, one weakness, and no significant weaknesses. At the subfactor level, CTMSO's proposal was determined to be "Excellent" in Management and Technical Approach and "Very Good" in Staffing and Total Compensation and Small Business Participation.

A summary of the specific significant findings the SEB made for each proposal are as follows:

a. Mission Suitability Evaluation

Jacobs

Jacobs had eight significant strengths, nine strengths, no weaknesses, and no significant weaknesses for the subfactor Management and Technical Approach for a rating of "Excellent." Jacobs' significant strengths in this subfactor included: Jacobs' approach to contract phase-in; the approach to program management; Jacobs' approach to organization; Jacobs' approach to implementation and management of the computerized maintenance management system (CMMS); having a comprehensive and thorough safety, health, and environmental (SHE) plan; Jacobs' approach to MAF site development that included enhanced use lease (EUL) authority; and Jacobs' approach to customer service. The eighth significant strength for this subfactor involved Jacobs' innovative approaches to ensure improved performance as demonstrated by its model contract containing a Section H Clause to reflect the offeror's voluntary commitment to invest approximately \$1 million of company resources to implement 17 proposed innovations and linked 20% of the contract potential award fee pool to successful implementation of seven of the 17 innovations.

Jacobs had five significant strengths, nine strengths, no weaknesses, and no significant weaknesses for the subfactor Staffing and Total Compensation receiving a rating of "Excellent." The significant strengths for this subfactor were: the references and credentials of the key person designated for Deputy General Manager and Director, Production Support & Integration Department; the references and credentials of the key person designated for Director of Facilities Maintenance and Operations Department; the references and credentials of the person designated for General Manager; Jacobs'

approach to workload fluctuations; and Jacobs' approach to train, efficiently utilize, and certify the represented workforce.

Jacobs received two significant strengths, three strengths, no weaknesses, and no significant weaknesses for the subfactor Small Business Participation receiving a rating of "Excellent." The two significant strengths for this subfactor involved: Jacobs' commitment to establish a 35.50% Small Business (SB) subcontracting goal which exceeds the 28% RFP goal and Jacobs' commitment to exceed the recommended subcontracting goals in the categories of Small Disadvantaged Businesses (SDB), Women Owned Small Businesses (WOSB), Veteran Owned Small Businesses (VOSB), HUBZones, and Historically Black Colleges and Universities (HBCU) and meet the goal for Small Disadvantaged Veteran Owned Small Business (SDVOSB).

B&W

B&W received seven significant strengths, seven strengths, no weaknesses, and no significant weaknesses under the subfactor Management and Technical Approach for a rating of "Excellent." The significant strengths the SEB found included: B&W's approach to program management; B&W's innovative approaches to ensure improved performance (as reflected in a proposed special contract Section H clause); B&W's approach to MAF site development which included the EUL authority; B&W's approach to contract phase-in; B&W's approach to manufacturing support and impact avoidance; B&W's comprehensive and thorough safety, health and environmental SHE plan; and B&W's organizational approach.

B&W received six significant strengths, eight strengths, no weaknesses, and no significant weaknesses for the subfactor Staffing and Total Compensation receiving a rating of "Excellent." The significant strengths for this subfactor included: B&W's approach to total compensation; the references and credentials of the key person designated for General Manager; the references and credentials of the key person designated for Manager of Human Capital Management; the references and credentials of the key person designated for Manager, Economic Development and Partnerships; the references and credentials of the key person designated for Manager, Operational Excellence and Quality Assurance (QA); and the references and credentials of the person designated for Business Manager.

B&W received two significant strengths, two strengths, no weaknesses, and no significant weaknesses for the subfactor Small Business Participation receiving a rating of "Very Good." The significant strengths for this subfactor were: B&W's commitment to establish a 31.00% Small Business which exceeds the 28% RFP goal and the offeror's commitment to exceed the recommended subcontracting goals in the categories of SDB, WOSB, VSOB, SDVOSB, HUBZones, and HBCU.

Fluor-CDM

Flour-CDM received two significant strengths, eleven strengths, no weaknesses, and no significant weakness under the subfactor Management and Technical Approach for a rating of "Very Good." The two significant strengths were: Flour-CDM's comprehensive and thorough safety, health, and environmental SHE plan and Flour-CDM's approach to MAF site development which included the EUL authority.

Flour-CDM received one significant strength, eight strengths, one weakness, and no significant weaknesses under the subfactor Staffing and Total Compensation receiving a rating of "Very Good." The significant strength Flour-CDM received was for the references and credentials of the key person designated for Business Office Manager.

Flour-CDM received two significant strengths, five strengths, no weaknesses, and no significant weaknesses for the subfactor Small Business Participation receiving a rating of "Excellent." The significant strengths Flour-CDM received were for its excellent commitment to establish a 38.71% Small Business (SB) subcontracting goal which substantially exceeds the 28% RFP goal and for its commitment to exceed the recommended subcontracting goals in the categories of SDB, WOSB, VOSB, SDVOSB, HUBZones, and meet the goal for HBCU.

CTMSO

CTMSO received eight significant strengths, seven strengths, one weakness, and no significant weaknesses under the subfactor Management and Technical Approach for a rating of "Excellent." The significant strengths the SEB found included: CTMSO's approach to program management; CTMSO's approach to contract phase-in; CTMSO's approach to organization; CTMSO's approach to manufacturing support and impact avoidance; CTMSO's innovative approaches to ensure improved performance as demonstrated by its use of "problem codes" capability in Maximo; CTMSO's approach to MAF site development which included the EUL authority; CTMSO's comprehensive and thorough safety, health, and environmental SHE plan; and CTMSO's integrated approach to communications.

CTMSO received two significant strengths, seven strengths, no weaknesses, and no significant weaknesses under the subfactor Staffing and Total Compensation receiving a rating of "Very Good." The two significant strengths were for CTMSO's approach to staffing recruitment and retention and the references and credentials of the key person designated for the position of Manager of Facilities and Manufacturing Support Division.

CTMSO received two significant strengths, one strength, no weaknesses, and no significant weaknesses for the subfactor Small Business Participation receiving a rating of "Very Good." The two significant strengths CTMSO received were for its commitment to establish a 30.00% Small Business (SB) subcontracting goal which exceeds the 28% RFP goal and for its commitment to exceed the recommended subcontracting goals in the categories of SDB, WOSB, VOSB, and HUBZones and meet the goals for SDVOSB and HBCU.

b. Past Performance

In evaluating Past Performance, the SEB rated Jacobs as "Very High." The SEB found four significant strengths, three strengths, no weaknesses, and no significant weaknesses associated with Jacobs' past performance as it related to MSFOC. The results of the SEB's assessment of past performance revealed the following significant strengths with regard to Jacobs: Jacobs' knowledge and experience with CMMS systems based on Maximo as demonstrated by Jacobs' successful implementation, use, and conversion of Maximo at Ames Research Center, Johnson Space Center, and Kennedy Space Center; Jacobs' record of achieving successful contract phase-in activities involving other contracts of similar size and complexity to the MSFOC previously performed by long-term incumbents; Jacobs' demonstrated ability to implement safety, health, and environmental programs evidenced by the receipt of 5 awards from NASA for safety; and Jacobs' positive past performance ratings for its innovative and proactive approach relative to the implementation of the EUL authority to re-open the National Full-scale Aerodynamics Complex at NASA's Ames Research Center as well as having extensive and successful experience in the commercial sector.

The SEB also rated B&W as "Very High" for its past performance. The SEB found five significant strengths, three strengths, no weaknesses, and no significant weaknesses associated with B&W's past performance as it related to the MSFOC requirement. The five significant strengths the SEB identified were: B&W's demonstrated ability to implement safety and health programs as evidenced by eight safety awards from the National Safety Council (NSC); B & W's demonstrated managerial experience with large, complex, multi-customer manufacturing sites as demonstrated by positive customer responses and a consistent pattern of "outstanding" overall ratings; and B&W's relevant experience with successfully transforming large, complex, multi-customer manufacturing operations in nuclear environments, which have more stringent regulatory requirements than MAF. B&W's successful implementation of the first phase of an extensive site development project at the National Nuclear Security Agency (NNSA) Y-12 National Security Complex involving substantial upgrades to facilities and capabilities utilizing private contractor financing and B&W's positive experience with contract phase-in as demonstrated by 19 successful contracts at 12 different government and commercial sites over the past 16 years, which involved approximately 29,000 people.

The SEB rated Flour-CDM's past performance as "High" identifying one significant strength, five strengths, no weaknesses, and no significant weaknesses in Flour-CDM's past performance that related to MSFOC. The one significant strength the SEB found involved the offeror's environmental management credentials as demonstrated by sixty one years of successful environmental management and compliance activities, five years conducting environment compliance audits at MSFC and environmental sampling at Stennis Space Center, and proven environmental proficiencies at various federal facilities including MAF, the Department of Defense, and the Department of Energy.

CTMSO also received a rating of "High" based on the SEB identifying two significant strengths, five strengths, no weaknesses, and no significant weaknesses with regard to CTMSO's past performance as it related to the MSFOC requirement. The first significant strength involved CTMSO's extensive experience with environmental remediation and compliance activities at MAF, which indicated the offeror had first-hand knowledge of MAF's environmental history and had established a strong working relationship with the State of Louisiana on environmental issues. The second significant strength was based upon the successful pioneering and implementation of process strategies and techniques using Six Sigma and Lean concepts to streamline/transform complex manufacturing operations. For example, CTMSO created "Visioneering" at Hill Air Force Base which increased productivity and reduced refurbishment time for landing gear by 50%.

c. Cost

Flour-CDM's proposal contained the lowest proposed cost with CTMSO's proposed costs being just slightly higher than the costs proposed by Flour-CDM. Flour-CDM's had the lowest probable cost with the probable cost from CTMSO again being just slightly higher than the most probable cost for Flour-CDM.

The SEB made probable cost adjustments to proposed costs of both Flour-CDM and CTMSO. The probable cost adjustments for Flour-CDM involved labor WYEs that were not reflected in the FPR after reaching a specific understanding of such WYEs during discussions. However, the probable cost adjustment for WYEs was somewhat offset by a notable clerical error that double counted the labor cost associated with a subcontractor. The probable cost adjustments for CTMSO involved an upward adjustment for materials/ODCs (i.e., materials/other direct costs) that were not reflected in the FPR after reaching a specific understanding on materials/ODCs during discussions.

B&W's proposal had the highest proposed cost and Jacobs' proposal had the second highest proposed cost with Jacobs' proposed cost being considerably lower than B&W's cost. The SEB did not make any probable cost adjustments to the proposed costs of either B&W or Jacobs.

The SEB had a "High" level of confidence in the proposed costs from both Jacobs and B&W that was based in part on the fact that the resources identified in the respective FPRs reflected the specific understandings reached during discussions. Jacob's high confidence level was also supported by a voluntary 20% allocation of award fee for proposed innovations, an integrated compensation plan for achieving a seamless workforce, and a unique capability to handle workload fluctuations by sharing resources with the Stennis Space Center. B&W's high level of confidence was also supported by the provision of ample resources to accomplish the requirements of the SOW and a \$4.4 million corporate investment dedicated to the local area and to contract innovations.

The SEB assigned a "Medium" level of confidence to the proposed costs submitted by Fluor-CDM and CTMSO. While both Fluor-CDM and CTMSO had a favorable approach for avoiding/reducing employee turnover by allowing employees to transfer existing seniority and time-off accruals, other factors contributed to the lower level of confidence. In both cases, the lower level of confidence was based in part on the fact that the resources identified in the respective FPRs did not reflect the specific understandings reached during discussions. With respect to Fluor-CDM, the discrepancy related to WYEs needed for craft labor. With respect to CTMSO, the discrepancy related to materials/ODCs. As a result, probable cost adjustments were necessary for both Fluor-CDM and CTMSO. In addition, Fluor-CDM's failure to comply with the cost spreadsheet requirements set forth in the RFP prevented the Government from assessing compliance with the Service Contract Act (in the areas of health and welfare rates and vacation costs) and making appropriate adjustments for inadequate rate escalation.

Selection Decision

During the presentation, I questioned the SEB on its findings and carefully considered the detailed findings of the SEB. I solicited and considered the views of key senior personnel at NASA Headquarters and Center representatives. These key senior personnel have responsibility related to this procurement and understood the application of the evaluation factors set forth in the RFP.

In determining which proposal offered the best value to NASA, I referred to the following evaluation criteria:

All evaluation factors, Mission Suitability, Past Performance, and Cost, are essentially equal to each other. Per FAR 15.304(e) the following information is provided: Mission Suitability and Past Performance Factors, when combined, are significantly more important than the Cost Factor.

I believed the SEB did a thorough job of reviewing the proposals, identifying significant findings, explaining how it believed the findings would affect performance, and evaluating the proposals without comparing proposals. Although I agreed with findings the SEB made, I also recognized it was my responsibility as the Source Selection Authority (SSA) to compare the proposals and use my independent judgment to determine which SEB findings were appropriate discriminators for purposes of selection.

a. Mission Suitability

Jacobs

I was aware the SEB gave the Jacob's proposal a rating of "Excellent" for all of the subfactors in Mission Suitability: Management and Technical Approach, Staffing and

Total Compensation, and Small Business (including SDB) Participation. The SEB identified eight significant strengths under the Management and Technical Approach subfactor, which was the most heavily weighed subfactor under Mission Suitability. The first of the significant strengths for Jacobs involved the offeror's comprehensive approach for contract phase-in utilizing an ISO certified process that included a defined interaction with NASA and External Tank (ET) contractor and that reflected detailed knowledge of the incumbent contractor's transition policies and procedures Jacobs gained from transitioning similar work on another NASA contract. (Ref. 6423) I believed the plan Jacobs provided for contract transition provided a low risk approach to assumption of full contract responsibility. The SEB identified Jacobs' approach to implementation and management of Maximo 6.2 as a significant strength. The MSFOC RFP required the selected contractor to complete the transition from Maximo 4.1.1 to Maximo 6.2 within the 62-day contract phase-in period for outstanding work orders. The selected contractor would be required to convert the remaining historical data to Maximo 6.2 no later than eight months into contract performance. Jacobs' proposal included a clear and concise milestone path managed by a tiger team staffed with personnel having recent and extensive experience with relevant Maximo conversions. (Ref. 6425)

The offeror's approach to program management which incorporated continuous improvement and formal corrective action processes was a new significant strength the SEB defined after the submission of FPR's. When asked, the SEB assured me this would be a significant strength even if MAF did not transition as quick to a multi-tenant facility due to program delays. (Ref. 6203) Another significant strength identified in the Jacobs' proposal was the offeror's organizational approach which entailed a fully-integrated organization that would combine Jacobs and its major subcontractors into a single functional element where every worker regardless of company affiliation would be accountable to a common line management and which provides for achieving efficiencies and improvements in cost control, communication, and commitment to performance. (Ref. 6424) I questioned the SEB whether approach to organization should be a separate finding from program management since the two areas seemed closely related. The SEB referred me to section M in the RFP which contained separate requirements (i.e., MTA 1-1 and MTA 1-2) for the approach to program management and the approach to organization.

The proposal from Jacobs also contained a significant strength for the offeror's approach to MAF site development including how the offeror recommended using the enhanced use lease (EUL) authority. The proposal for site development was thorough, consistent, and could easily be implemented using a proven marketing methodology previously established by Jacobs. Moreover, 4% of the Jacobs' award fee was tied to submitting one no-cost EUL proposal to NASA every six months to support MAF development. Although NASA is not required to accept the EUL proposal, the SEB told me that the formal EUL proposal had to contain a cost benefit analysis that could be submitted to management. (Ref. 6428) I believed this was an aggressive approach to providing potential business development opportunities that would lower MAF operating costs without adding risk. Another significant strength for Jacobs was innovations where Jacobs included a Section H Clause in its model contract that commits the company to

invest approximately \$1M in corporate funds in pursuit of key productivity enhancements and cost reduction innovations and to allocate 20% of the contract potential award fee as follows: 5% to reduce utilities usage annually, 6% to increase user/tenants fees by \$5 Million annually, and 5% for various types of education and training in addition to reserving 4% of award fee for use of the EUL authority. (Ref. 6431) This award fee provision evidenced a commitment to invest corporate funds to develop innovations that would allow NASA objectively to measure performance, lower cost, and reduce risks at MAF.

The final significant strengths the SEB identified for Jacobs involved a comprehensive and thorough SHE plan, addressing each core program requirement and containing safety initiatives above and beyond applicable NASA requirements (Ref. 6427) and its approach to customer service which among other things involved a multi-pronged approach to feedback (Ref. 6430)

Staffing and Total Compensation was the second most significant subfactor under Mission Suitability and the SEB rated Jacobs' proposal as "Excellent." The SEB identified two strengths I thought were potential discriminators: the offeror's approach to workload fluctuations (Ref. 6448) and the offeror's approach to train, efficiently utilize, and certify the represented workforce. (Ref. 6447) Jacobs' ability to share resources between a NASA contract at Stennis and MAF due to geographic proximity was significant because it would maximize workforce utilization and would decrease risk associated in the program workload at MAF. The offeror augmented its ability to address workforce fluctuations by plans that included the use software to forecast, cross-training the workforce, allocating skills across departments, judicious scheduling of personnel leave during workload valleys, and reprioritizing deliverables with delays not to exceed 30 days. Jacobs' approach for training and certifying the workforce, features reflected in Jacobs' award fee provision, should assist NASA in obtaining the most beneficial use of available skills. Other significant strengths the SEB identified included the individuals designated for the key positions of Deputy General Manager and Director, Production Support & Integration Department (Ref. 6444), Director of Facilities Maintenance and Operations Department (Ref. 6445), and General Manager (Ref. 6446). The SEB indicated Jacobs provided letters of commitment for each individual it designated as being key personnel.

Small Business (including SDB) Participation was the last subfactor under Mission Suitability which the SEB rated as "Excellent" for Jacobs. The first significant strength the SEB found involved Jacobs' commitment to exceed the Small Business (SB) subcontracting RFP goal of 28%. The offeror proposed to exceed the goal set in the RFP at time of contract award. (Ref. 6457) The second strength involved the offeror's commitment to categories of small disadvantaged businesses which exceeded the recommended goals in the RFP in 5 of the 6 categories and met the recommended goal in the remaining category and which seemed reasonable and achievable to the SEB. (Ref. 6645)

B&W

I was aware that the SEB gave B&W's proposal an "Excellent" for the subfactors Management and Technical Approach and Staffing and Total Compensation and "Very Good" for the subfactor on Small Business (including SDB) Participation. The SEB found seven significant strengths associated with B&W's Management and Technical Approach the first of which involved B&W's comprehensive and flexible approach to program management. (Ref. 6375) B&W had translated its knowledge of the synergistic relationship between critical path management and systems engineering in a high-risk, high-reliability production environment in a manufacturing facility with more stringent requirements than MAF. This significant strength gave me confidence that while this offeror did not have recent NASA experience, it understood NASA processes. I also thought the capability B&W gained through its work with the Department of Defense and the Department of Energy would be relevant to supporting NASA's human-rated systems.

Like Jacobs, B&W also proposed a provision in its model contract regarding a corporate investment of \$4.4 Million for twelve innovations during the term of the contract. These innovations included creating a Michoud Manufacturing Skills Center of Excellence (MSC'E); implementing a proven continuous improvement program using Six Sigma, Lean manufacturing and performance metrics; reflecting the real-time critical manufacturing area status using a graphical display system, establishing "Assess Improve Modernize" teams; and creating a pollution prevention committee to establish an aggressive waste management and pollution prevention program. (Ref. 6377) This proposed contract clause would leverage corporate investments for proven innovations to lower performance risk to include developing a workforce that increased productivity.

Other significant strengths B&W had in common with Jacobs were: the approach to MAF site development using EUL authority, approach to contract phase-in, SHE plan, and the approach to organization. The SEB considered B&W's plan for MAF site development a significant strength since the plan involved a proven approach for low risk development using the EUL authority and using collaborative partnerships with the City of New Orleans, State of Louisiana, private industry, academia, and other federal agencies. (Ref. 6376) B&W had a comprehensive approach to contract phase-in which included an experienced phase-in management team, use of detailed waterfall task schedules, a logical phased hiring approach, and a risk mitigation process to apply meaningful lessons learned. I believed the B&W plan was a low risk approach to successful completion of phase-in. (Ref. 6381) B&W also proposed a comprehensive and thorough SHE plan, addressing each core program requirement and containing safety initiatives above and beyond applicable NASA requirements. The SHE plan involved a "Target Zero Program." (Ref. 6378)

The offeror's organizational approach entailed a fully-integrated organization that would combine B&W and its major subcontractors into a single functional element where every worker regardless of company affiliation would be accountable to a common line management. I thought B&W's approach to organization was important since it should allow the offeror to lower contract performance risks by utilizing a proven organizational

structure. (Ref. 6382) B&W's approach to manufacturing support and impact avoidance includes a defined foreign object debris (FOD) program. (Ref. 6380) B&W's manufacturing experience, provided techniques to improve human-rated manufacturing support that would reduce risk to facilities, systems, equipment and utilities availability.

With regard to B&W's approach for Staffing and Total Compensation, I gave more weight to the significant strength involving B&W's approach to total compensation than I did to the five significant strengths associated with key personnel. B&W's approach to total compensation involved an integrated plan for both the offeror and major subcontractors and had the highest average labor rate for the craft labor group that is the majority of the workforce. (Ref. 6400) I believed the offeror's approach to compensation was integral to achieving a seamless workforce, improving employee morale and lowering risks associated with implementing the offeror's staffing plan. The other significant strengths B&W received for this subfactor were for the key personnel designated for the following: General Manager (Ref. 6396), Manager of Human Capital Management (Ref. 6398), Manager, Economic Development and Partnerships (Ref. 6399), Manager, Operational Excellence and Quality Assurance (QA) (Ref. 6629), and Business Manager (Ref. 6628). The SEB indicated that many of these key personnel individuals were currently working at the corporate level and had personal ties to the New Orleans area in addition to having submitted a letter of commitment.

The approach for Small Business (including SDB) Participation in B&W's proposal contained two significant strengths. The first identified significant strength involved B&W's commitment to exceed the Small Business (SB) subcontracting RFP goal of 28%. The offeror proposed to exceed the goal set in the RFP at time of contract award. (Ref. 6407) The second significant strength involved B&W's commitment to categories of small disadvantaged businesses which exceeded the recommendations in the RFP and which seemed reasonable and achievable to the SEB. (Ref. 6646)

Fluor-CDM

The SEB gave the Fluor-CDM proposal a "Very Good" rating in Management and Technical Approach and in Staffing and Total Compensation and an "Excellent" rating in Small Business (including SDB) Participation. The SEB identified two significant strengths and eleven strengths in Fluor-CDM's Management and Technical Approach. A significant strength involved Fluor-CDM's comprehensive and thorough safety, health and environmental (SHE) plan addressing each core program requirement and containing safety initiatives above and beyond applicable NASA requirements. (Ref. 6473) OSHA has established Fluor-CDM as the standard for safety in its industry and Fluor-CDM intended to bring this standard to MAF with a goal of achieving Star status under OSHA's voluntary protection program. Fluor-CDM's other significant strength, new from its FPR submit, was for its approach to MAF site development as demonstrated by the Offeror's use of an in-house real estate group and engagement of a qualified EUL developer which would develop a site plan proposal leading to the establishment of EUL opportunities, leveraging existing relationships, and a demonstrated ability to beneficially leverage other projects and programs at government sites. (Ref. 6204) I found that this

demonstrated Flour-CDM's ability to leverage collaborative partnerships resulting in a low risk site development approach.

I examined the strengths the SEB assigned to Flour-CDM probing whether some of those strengths should have been characterized as significant. The SEB explained that Flour-CDM's proposal had strengths in many of the same categories as other offerors who had received significant strengths. For example, the SEB pointed out Flour-CDM's program management involved the use of a standardized methodology while offerors receiving a significant strength for program management proposed more flexible approaches which the SEB believed were more suitable for the one-off manufacturing environment at MAF. (Ref. 6206) Additionally, specific elements of the phase-in plan Flour-CDM proposed were identified as strengths. (Ref. 6477) On the other hand, the offerors receiving a significant strength for contract phase-in submitted comprehensive plans to transition the work at MAF.

With regard to Flour-CDM's approach for Staffing and Total Compensation, Flour-CDM received one significant strength for the references and credentials of the key person Flour-CDM proposed for Business Office Manager. (Ref. 6490) I was aware Flour-CDM's proposal contained specific elements regarding workforce fluctuations which included the use of a needs assessment, use of maintenance planner, local area corporate reach-back capabilities and the utilization of other corporate entities to assist with the placement of workers during workload valleys. (Ref. 6492) The SEB did not consider this plan as significant because it did not contain elements such as approaches to forecast fluctuations or a system to judiciously reschedule personnel.

I noted the SEB found a weakness under this subfactor regarding insufficient craft labor resources in a particular PWS area and consequently made a probable cost adjustment to correct for the insufficient labor. (Ref. 6210) The SEB related that during discussions Flour-CDM had acknowledged this insufficiency of resources and had stated their intention to add such labor in the FPR. The FPR did not reflect the required level of resources. I concurred this inconsistency in estimating from the time of discussions to FPR submittal conveyed, at best, a limited or unclear understanding of the requirements in this particular PWS area and that an adjustment for probable cost was appropriate. , Flour-CDM's proposal contained the strongest approach regarding Small Business (including SDB) Participation with its commitment to exceed the Small Business (SB) subcontracting RFP goal of 28%. The offeror would have made significant strides towards meeting the achievable goals with an early commitment to subcontract out 27.00% of initial contract value to its SB and small disadvantaged business (SDB) subcontractors. Additionally, the offeror received five strengths one of which is its plan to pursue a mentor protégé with one of its subcontractors. (Ref. 6509) Additionally, Flour-CDM revealed a commitment to its subcontracting goals in all of the other categories of small disadvantaged businesses which exceeded the recommended RFP goals in 5 out of 6 categories and met the goal in the remaining category and which seemed reasonable and achievable to the SEB. (Ref. 6647)

CTMSO

I recognized that the SEB rated this proposal "Excellent" for the subfactor Management and Technical Approach and "Very Good" for the subfactors Staffing and Total Compensation and Small Business (including SDB) Participation. I was aware the SEB identified eight significant strengths for CTMSO under the subfactor Management and Technical Approach. A significant strength was CTMSO's approach to program management which involved a customer-focused project delivery system that was engrained in the corporate culture with a proven methodology of making decisions that recognizes and proactively avoids real/potential problems. (Ref. 6577) This approach to program management used a corporate process based delivery system and techniques which should result in reduced risk to contract performance. CTMSO's comprehensive approach to contract phase-in involved utilizing established procedures to define interaction with the incumbent contractor and providing a phase-in manual to guide all personnel during the phase-in period. (Ref. 6578)

Additionally, CTMSO had a significant strength regarding its approach to organization based upon proposing a fully-integrated organization that would combine CTMSO and its major subcontractors into a single functional element where every worker regardless of company affiliation would be accountable to a common line management and proposing an organization that was responsive, flexible, and performance based while eliminating management redundancy. (Ref. 6624) I recognized that CTMSO's approach to manufacturing support and impact avoidance was important due to the use of an integrated manufacturing support schedule, which incorporates Lean manufacturing principles; the use of a web-based system to coordinate/communicate with manufacturing support personnel; and the use of real-time indicators to status production and/or repair activities in the critical production areas. (Ref. 6579)

I was aware CTMSO received a significant strength for its innovative approaches to ensure improved performance which involved its use of Maximo; its proven transformation methodology to identify critical processes; and its use of a mobile material expeditor to deliver material, parts, and equipment to provide just in time delivery. The SEB explained that Maximo was the corporate standard for CTMSO and that this offeror proposed to utilize the Maximo problem codes in such a way as to provide a secondary use of the work order historical performance data to monitor productivity. (Ref. 6581) The SEB gave the offeror a significant strength for its approach to MAF site development which included forming an EUL advisory committee comprised of personnel with EUL experience at other federal facilities to identify and implement EUL opportunities into a MAF multi-year master plan. (Ref. 6582) I concurred with the SEB's assessment that this plan would help provide NASA with more expertise in the use of EUL authorities as well as enhancing the ability for MAF site development based upon existing partnerships.

The SEB also recognized CTMSO's comprehensive and thorough safety, health, and environmental SHE plan which contained safety initiatives above and beyond NASA requirements. (Ref. 6580) CTMSO's integrated approach to communications represents a low risk plan regarding use of Associate Contractor Agreements (ACA's) with the emphasis on open and timely communications with all parties all a daily basis. (Ref.

6583) Additionally, I noted that the SEB found one weaknesses because CTMSO's approach did not appear to provide adequate material/ODC resources, a shortcoming that could indicate a lack of clear understanding of the PWS requirement to provide all resources necessary to perform the contract. (Ref. 6207)

With regard to the approach for Staffing and Total Compensation, the SEB found two significant strengths in CTMSO's proposal. A significant strength was for CTMSO's proposed staffing recruitment and retention policy to hire from the existing workforce on a first right basis before using alternative approaches and having higher salaries than national surveys for critical position personnel. The SEB also was impressed that CTMSO's staffing and retention plan named 23 critical positions in addition to identifying key personnel. (Ref. 6595) I agreed with the SEB assessment that CTMSO's proposed staffing approach and personnel policies would enhance the ability to recruit and retain critical skills thereby lowering overall contract performance risk. CTMSO also received a significant strength for the references and credentials of the key person designated for Manager of Facilities and Manufacturing Support Division. (Ref. 6594)

The approach for Small Business (including SDB) Participation in CTMSO's proposal contained two significant strengths. The first strength involved CTMSO's commitment to exceed the Small Business (SB) subcontracting RFP goal of 28%. The offeror would have made strides towards meeting the achievable goal with early commitments at time of contract award. (Ref. 6205) The second strength involved B&W's commitment to other categories of small disadvantaged businesses which exceeded the recommended goals in the RFP in 4 of the 6 categories and met the goal in the remaining 2 categories, and which seemed reasonable and achievable to the SEB. (Ref. 6648)

b. Past Performance

Jacobs

The SEB rated Jacob's "Very High" based upon four significant strengths it believed were relevant indicators of this offeror's performance at MAF. I agreed with the SEB that Jacobs' knowledge and experience with successful conversion of Maximo 4.1.1 to Maximo 6.2 on the Research Operations, Maintenance, and Engineering (ROME) contract at the Langley Research Center, and on the Facilities Operations and Support Contract (FOSC) at the Stennis Space Center. I was highly confident of Jacobs' potential for successfully converting Maximo 4.1.1 to Maximo 6.2 at MAF. (Ref. 6461) Jacobs' successful record of achieving successful contract phase-in activities was an equally relevant indicator of the likelihood Jacobs could successfully perform MSFOC. Jacobs' relevant past performance with regard to phase-in included successful transitions on three contracts of similar size and complexity to the MSFOC that were previously performed by long-term incumbents: the Engineering and Science Contract (ESC) at the Johnson Space Center (JSC); FOSC at Stennis Space Center; and Engineering and Technology Acquisition Support Services (ETASS) at Hanscom Air Force Base. The transition of ESC at JSC was performed in a difficult and challenging transition environment and also involved the current MAF contractor. (Ref. 6462)

Jacobs also demonstrated an ability to implement safety, health, and environmental programs as evidenced by the receipt of 5 awards from NASA for safety, the fact its total recordable case rates and lost time case rates for its subcontractors were less than the national average, and not having any violations from the Environmental Protection Agency or any citations from the Occupational Safety and Health Association for three years. (Ref. 6463) This record of excellent safety strongly suggested that the Jacobs' team would perform similarly on MSFOC. Finally, Jacobs received excellent past performance in the area of EUL authority as demonstrated by Jacobs' work to re-open the National Full-scale Aerodynamics Complex at NASA's Ames Research Center and its extensive and successful experience in the commercial sector utilizing a brokerage concept to lease excess capacity at the Ford Motor Company in its Drivability Test Facility. (Ref. 6464) Again, this level of experience gave me confidence Jacobs' should enjoy the same success with EUL during its performance at MSFOC.

B&W

B&W also had an impressive record of past performance and was rated "Very High" by the SEB based upon five significant strengths identified for this factor. This offeror had an excellent safety and health program as evidenced by eight safety awards from the National Safety Council (NSC); having a total recordable case rate that was significantly less than the national average; a major subcontractor and five other subcontractors having lost time case rates less than the national average; receiving "outstanding" ratings from the National Nuclear Security Administration (NNSA) for emergency preparedness; and implementing a "Target Zero" safety program. (Ref. 6408) I believed B&W would be able to replicate its record of safety gleaned from its work in the nuclear world to MSFOC. The past performance of B&W also demonstrated the offeror's managerial experience working on large, complex, multi-customer manufacturing sites such as Idaho National Laboratory, B&W-Lynchburg, and National Nuclear Security Agency (NNSA) Y-12 National Security Complex. B&W received positive customer responses which was consistent with the pattern of "outstanding" overall ratings given to this offeror. (Ref. 6411) B&W's record of successful management of manufacturing operations increases the likelihood the offeror could successfully perform at MAF.

Additionally, B&W had relevant experience successfully transforming large, complex, multi-customer manufacturing operations in nuclear environments, which have more stringent regulatory requirements than MAF. This past performance is evidenced by B&W's operation of five manufacturing sites dedicated to the support of the Department of Defense and the Department of Energy; its integration of production operations with customer priorities; and its utilization of Six Sigma and Lean practices to increase productivity. (Ref. 6409) This history of work with large, complex, multi-customer operations is extremely germane to MAF which is a large, complex, multi-tenant manufacturing facility. B&W also received a significant strength in past performance for successfully completing the first phase at the National Nuclear Security Agency (NNSA) Y-12 National Security Complex which involved substantial upgrades to facilities and capabilities utilizing private contractor financing. (Ref. 6412) The offeror's work for the

National Nuclear Security Agency demonstrated B&W's experience with EUL leasing and is an excellent indicator that B&W could perform similarly at MAF. The last significant strength in past performance involved B&W's experience with contract phase-in by successfully phasing in 19 contracts at 12 different government and commercial sites over the past 16 years. These transition efforts involved approximately 29,000 people and revealed that B&W possessed the capability with regard to the phase-in effort, something that was extremely relevant to the requirements of MSFOC. (Ref. 6413)

Fluor-CDM

The SEB rated Fluor-CDM "High" in Past Performance identifying one significant strength with regard to Fluor-CDM's past performance relative to the offeror's team member which had excellent environmental credentials. This team member had 61 years of successful environmental management and compliance activities; five years of conducting environment compliance audits at MSFC; performed environmental sampling at Stennis Space Center; and had proven environmental proficiencies through its work at various federal facilities including MAF, the Department of Defense and the Department of Energy. (Ref. 6515) This relevant experience in environmental matters lowered performance risk for similar efforts that would be performed at MAF. In addition, I was aware the SEB identified five strengths with regard to Fluor-CDM's past performance; however, I relied on significant findings for this factor since significant findings by definition are designed to be discriminators for purposes of selection.

CTMSO

The SEB rated CTMSO as "High" in Past Performance. The SEB identified two significant strengths related to CTMSO's past performance the first of which involved the offeror's extensive experience with environmental remediation and compliance activities at MAF. CTMSO's first-hand knowledge of MAF's environmental history and its strong working relationship with the State of Louisiana on environmental issues was very relevant to the performance of current environmental projects at MAF. (Ref. 6610) The offeror also had successfully implemented process strategies and techniques using Six Sigma and Lean concepts to streamline/transform complex manufacturing operations. A good example of this involved the offeror's creation of "Vioneering" at Hill Air Force Base which was used to incorporate proposed changes related to manufacturing/facility layouts or maintenance processes. The implementation of "Vioneering" at Hill Air Force Base increased productivity and reduced refurbishment time for landing gear by 50%. (Ref. 6611) I noted the SEB found five other regular strengths relative to CTMSO's past performance; however, I relied on significant findings for this factor since significant findings by definition are designed to be discriminators for purposes of selection.

c. Comparative Assessment of Non-Cost Factors

I recognized there were a number of common significant strengths among the offerors under the subfactor for Management and Technical Approach. These common strengths

were: contract phase-in, program management, approach to organization, capability with CMMS (Maximo), having a strong SHE plan, approach to customer service, and approach to manufacturing support. I believed certain common strengths were more relevant for purposes of selection. For example, it was my opinion that phase-in was a discriminator for MAF. The ability to execute a smooth transition is extremely important because there are only nine shuttle flights remaining. Two of the primary challenges for the transition at MAF require handling labor relations and the ability to migrate from Maximo 4.1.1 to Maximo 6.2.

MAF site development was another key discriminator for selection since part of the effort involved the ability to bring additional tenants to the facility in order to lower operational costs. The ability to work in a multi-tenant, complex, high consequence manufacturing environment also was an important feature to selecting an offeror for MAF since the MSFOC involved working with human-rated equipment and having multiple users at the facility. On the other hand, I did not believe a strength associated with a strong SHIE plan should be a discriminator for selection in part because all of the offerors had strong plans in this area.

With regard to the subfactor Staffing and Total Compensation, I did not place as much emphasis on strengths regarding key personnel as I did to more general findings regarding this subfactor. Although the RFP gave lesser weight to the subfactor on Staffing and Total Compensation, I viewed this subfactor as being essential to achieving the plans set forth under the Management and Technical subfactor. Although I was aware that Flour-CDM had submitted the strongest proposal for Small Business (including SDB) Participation, I did not use this subfactor as a discriminator for purposes of selection.

The RFP provided that the factor Past Performance had about the same weight as the factor for Mission Suitability. I believed the findings in Past Performance provided very good indicators of future performance noting that many of the strengths in Past Performance correlated with strengths offerors received under the factor for Mission Suitability.

Jacobs had the following common significant strengths under the subfactor Management and Technical Approach: contract phase-in, program management, approach to organization, capability with the CMMS (Maximo), approach to site development, and having a strong SHE plan. In addition, Jacobs received significant strengths for its approach to customer service and the innovations regarding its Award Fee plan included in its model contract.

Jacobs' plan for phase-in was bolstered by its past performance where the offeror was responsible for the transition of a contract at JSC with the same incumbent contractor currently at MAF. The contract effort at JSC was similar in size and complexity and, like MAF, this contract had been performed by another contractor for an extended period. Although I was aware that the contract at JSC did not involve a complex manufacturing environment such as MAF, I knew Jacobs experience at MSFC allowed it to gain phase-

in experience in a complex manufacturing environment. Jacobs' expertise and past performance with Maximo dovetailed with its strengths in contract phase-in since migration from Maximo 4.1.1 to Maximo 6.2 would be one of the more daunting tasks the new MAF contractor would be required to complete during the transition period. The capability Jacobs had with regard to site development involved a thorough, consistent and easily implemented methodology that provided the potential for future business development opportunities to lower MAF operating costs without adding risk. Jacobs' strength in site development was enhanced by its past performance record in this area where the offeror demonstrated excellent performance re-opening the National Full-scale Aerodynamics Complex at NASA's Ames Research Center and leasing excess capacity at the Ford Motor Company in its Drivability Test Facility. The fact Jacobs included submitting EUL proposals in its award fee plan gave me further confidence that this offeror would aggressively seek to develop MAF.

Jacobs' approach to innovations was reflected in an award fee clause in the model contract. This was a very important feature of the offeror's proposal because of Jacobs' commitment to allocating potential contract award fee for developing the site at MAF, increasing revenue from tenants, and training and certifying the workforce. I believed the award fee plan increased the likelihood of successful contract performance in those areas and could result in a stream of revenue to NASA which had the potential to be as high as \$22 Million over the life of the contract assuming Jacobs received all of its award fee. In addition, the strength Jacobs had in program management would enable the offeror to incorporate continuous improvement in daily performance and its strength in organization should result in productivity enhancement that would increase the likelihood of overall contract success.

Under the subfactor the Staffing and Total Compensation, I found that Jacobs' ability to forecast workload fluctuations and then share resources between a NASA contract at Stennis and MAF was significant because it would maximize workforce utilization and would decrease risk associated in the program workload at MAF in the initial base period of the contract. I also believed Jacobs' approach for training and certifying the workforce would assist NASA in obtaining the most beneficial use of available skills.

B&W had a similarly strong proposal which contained the following common significant strengths under Management and Technical Approach: approach for program management, approach for site development, contract phase-in, having a strong SHF plan, its approach to manufacturing support, and its approach to organization. In addition, B&W submitted a plan for innovation.

B&W received a significant strength for its logical, comprehensive and well-defined approach to contract transition involving an experienced phase-in management team. B&W's past performance indicated it had been extremely successful in affecting transitions as evidenced by successfully phasing in 19 contracts at 12 different government and commercial sites over the past 16 years. I decided both offerors had similar strengths with regard to contract phase-in. The primary difference between Jacobs and B&W with regard to phase-in was that Jacobs had specific experience with

NASA contracts while B&W had experience in the manufacturing world with Government contracts. I asked about B&W's experience with Maximo since this was an important element of contract transition and was told that although B&W had strengths in this area, its primary system was SAP rather than Maximo.

Both B&W and Jacobs received significant strengths for their plan for site development and also had excellent past performance in this area. I found both programs to be equally strong; however, noted the difference was B&W's approach to site development involved a key person possessing a wealth of experience in successfully financing projects. Additionally, I recognized both B&W and Jacobs offered innovations that were reflected in their model contracts. B&W's contract provision involved investing \$4.4 Million of corporate resources for twelve innovations during the term of the contract. When I asked the SEB to compare the two approaches, they responded that both approaches were very strong and should provide benefits to NASA over the life of the contract. I did not believe I could use the differences in the approaches to innovations to discriminate between B&W and Jacobs although this was a very important feature to me.

B&W's approach to program management indicated it was capable of successfully performing in a high-risk, high-reliability production environment in a manufacturing facility. B&W translated those more stringent requirements to MAF giving me confidence the offeror understood the NASA processes even though it did not have any recent NASA experience. Moreover, B&W's past performance demonstrated this offeror's excellent managerial experience working on large, complex, multi-customer manufacturing sites. Additionally, B&W approach to organization having a badgeless workforce was similar to the one proposed by Jacobs and should lower contract performance risks by utilizing a proven organizational structure.

One of the differences between Jacobs and B&W was B&W's strength in manufacturing support which included an impact avoidance plan, defined foreign object debris (FOD) program, and utilized the offeror's extensive integrated manufacturing experience. B&W had excellent past performance in this area successfully transforming large, complex, multi-customer manufacturing operations in nuclear environments. B&W's manufacturing experience distinguished it from the other offerors and would enable this contractor to provide manufacturing techniques to improve human-rated systems.

With regard to the subfactor for Staffing and Total Compensation, I found that B&W proposed an integrated compensation plan for both the offeror and major subcontractors which had the highest average labor rate for the craft labor group, a strength I believed would help achieve a seamless workforce, improve employee morale and lower the risk associated with implementing the offeror's staffing plan. Additionally, I was aware that B&W designated outstanding individuals for a number of key MAF positions.

Flour-CDM's two common strengths were having a strong SHE plan and its plan for site development. This offeror's approach to site development involved having an in-house real estate group develop a site plan proposal leading to the establishment of EUL opportunities; leveraging existing relationships; and its demonstrated ability to

beneficially leverage other projects and programs at government sites. Flour-CDM's approach to site development was similar to the ones proposed by Jacobs and B&W; however, B&W's approach included a key person with extensive experience in site development and Jacobs' approach included incentivizing the effort in its award fee clause. Moreover, both B&W and Jacobs had outstanding past performance with regard to site development whereas Flour-CDM's significant strength in past performance involved the excellent environmental credentials of its team member. Another example involved approaches to workforce fluctuation which both Jacobs and Flour-CDM included in their proposals. Although both approaches leveraged geographic proximity of other projects to address variations in workforce, Jacobs proposed a more complete approach that included the use software to forecast, judicious scheduling of personnel leave, and reprioritizing deliverables. While I agreed with the SEB that Flour-CDM had submitted a very good proposal, I did not believe this proposal was competitive with other proposals when I compared the non-cost factors.

With regard to CTMSO, I was aware this offeror also had a very strong Management and Technical Approach with significant common strengths in its approach to program management, contract phase-in, organization, manufacturing support, site development, and SHE plan. In addition, CTMSO received strengths for its approach to communications and for work process innovations..

CTMSO proposed a comprehensive approach to contract phase-in utilizing established procedures with the current contractor which was to be implemented by a well-organized, experienced team. I recognized both Jacobs and B&W also had strengths with regard to contract phase-in and could not find a discriminator among the offerors except to note that CTMSO did not receive a significant strength in past performance for contract phase-in while both Jacobs and B&W had excellent relevant past performance in this area.

Experience with migrating to Maximo 6.2 was an important requirement regarding phase-in at MAF and I noted CTMSO proposed unique uses of Maximo as part of the innovations it proposed. (The innovations CTMSO proposed involved the use of Maximo; implementing its proven transformation methodology to identify critical processes; and the use of a mobile material expeditor to deliver material, parts, and equipment to provide just in time delivery.) Unlike the other offerors, Maximo was the standard for CTMSO and it proposed to use additional features of Maximo to populate problem codes to gather historical performance data and monitor productivity. I compared this proposed use of Maximo with similar findings for Jacobs and B&W, concluding that Jacobs probably could transition better from Maximo 4.1.1 to Maximo 6.2 because of their familiarity with the older system while CTMSO could better utilize more of Maximo 6.2 since the most recent version of the system was the standard for CTMSO. The use of Maximo, therefore, was a discriminator in that Jacobs had the specific experience in upgrading Maximo from version 4.1.1 to version 6.2 in a NASA environment.

Additionally, I noted that CTMSO, Jacobs, and B&W each received a strength for site development and asked the SEB to compare the various approaches. The SEB explained

that while the approaches were different, each had merit. CTMSO's approach involved forming a EUL advisory committee comprised of personnel with EUL experience. While this approach may not have been as aggressive as others, it would provide NASA with EUL expertise as well as increasing usage of MAF. The only discriminator I found with regard to site development was that Jacobs and B&W also had significant strengths in past performance with regard to site development while CTMSO's significant strength in past performance dealt with its extensive experience with environmental remediation and compliance activities at MAF.

CTMSO's other common significant strengths with regard to its approach to program management, its approach to organization, and its approach to manufacturing support indicated its proposal for Management and Technical was of an equivalent caliber to those submitted by B&W and Jacobs in these areas. The only difference between these offerors again was past performance where both Jacobs and B&W had Very High relevant past performance supporting this subfactor while CTMSO's had High relevant past performance. I did note, however, that CTMSO had a significant strength in past performance related to manufacturing/facility layouts or maintenance processes that indicated this offeror possesses very good manufacturing experience, however, I found B&W to be the stronger of the two offerors in this area.

The subfactor regarding Staffing and Total Compensation separated CTMSO from B&W and Jacobs. I agreed with the SEB that both B&W and Jacobs submitted stronger approaches for this subfactor. CTMSO did receive a significant strength for its approach to staffing recruitment and retention and its identification of critical positions beyond key personnel. On the other hand, B&W received a significant strength for its Staffing and Compensation Plan which included the highest labor rate for craft labor. Likewise, Jacobs' ability to forecast workforce fluctuations and then share resources between a NASA contract at Stennis and MAF and its approach for training and certifying the workforce also seemed to be a stronger approach than that of CTMSO. Finally, the individuals designated by both B&W and Jacobs as key personnel received many more significant strengths than the individuals designated by CTMSO.

Overall, I found the offerors fell into two categories when I compared the non-cost factors. B&W and Jacobs were in the higher tier of offerors with little difference between the merits of these offerors' non-price proposals. B&W had more manufacturing experience than Jacobs while Jacobs had much more experience working with NASA. The second tier of contractors included CTMSO and Fluor-CDM with CTMSO being the stronger of the two. I felt that B&W and Jacobs had a much higher likelihood of successful contract performance than CTMSO based upon B&W and Jacobs more impressive past performance and on their superior approaches to staffing which were necessary to implement the Management and Technical Approach for MAF.

d. Cost

As indicated above, the Fluor-CDM proposal had the lowest most probable cost with a medium level of confidence; the CTMSO proposal had the second lowest most probable

cost with a medium level of confidence; the Jacobs proposal had the second highest most probable cost with a high level of confidence; and the B&W proposal had the highest most probable cost with a high level of confidence.

The SEB presented some other cost-related factors that could reduce overall incurred cost to the Government. First, Jacobs committed approximately \$1 million of company resources to implement 17 proposed innovations and linked 20% of its award fee pool to successful implementation of seven of the 17 innovations. Although all innovations have the potential to reduce cost, achieve efficiencies, or generate revenue for the benefit of the Government, neither the SEB nor I could quantify these reductions, efficiencies, and revenues with any certainty. Similarly, B&W planned to invest \$4.4 million of corporate resources in the local area related to 12 innovations. Again, neither the SEB nor I could quantify the financial benefit from such an investment over the life of the contract with any certainty. Nevertheless, there would be intangible benefits from these corporate investments. Second, while B&W proposed burden rate of 0% for the non-fee bearing task orders associated with Attachment J-2 of the SOW, the maximum benefit associated with the 0% rate is less than the difference in cost between B&W and Jacobs. Thus, even if B&W received full credit for its 0% burden vis-à-vis the maximum IDIQ expenditures over the life of the contract, Jacobs would still maintain its cost advantage. Over the life of the contract, the burden rates for Fluor-CDM and CTMSO were essentially equal and more than twice the rate proposed by Jacobs. Fluor-CDM and CTMSO advantage in cost was somewhat reduced by the lower burden rates proposed by Jacobs or B&W.

e. Trade-off Analysis

I began my trade-off analysis contrasting the conclusions of my non-cost comparison against the cost each offeror proposed as adjusted to determine the most probable cost to the Government. My assessment of non-cost factors placed Jacobs and B&W in a higher tier than CTMSO and Fluor-CDM. This assessment had to be contrasted with the fact Fluor-CDM had the lowest proposed/probable cost; CTMSO had the second lowest proposed/probable cost; Jacobs had the second highest proposed/probable cost; and B&W had the highest proposed/probable cost. It should be noted that probable cost adjustments did not influence this analysis since the probable cost adjustments did not affect the cost rankings and since the SEB did not make any probable cost adjustments for either B&W or Jacobs. My trade-off analysis considered the different levels of cost confidence the SEB gave each of the offerors and the impact of the other cost-related factors that could reduce cost that the SEB gleaned from the proposals and brought to my attention.

First, I compared the proposal from Jacobs against the proposal from B&W. From a non-cost comparison, these proposals seemed equivalent with the offerors having many of the same strengths. Jacobs had extensive experience with NASA and B&W had extensive manufacturing experience. I did not need to probe further between the two proposals to determine which was superior on the basis of non-cost factors. B&W had a higher cost and I could not identify any benefit to NASA which would justify the additional costs associated with B&W's proposal when compared to the proposal received from Jacobs. I, therefore, eliminated B&W from further consideration.

Then, I compared the proposal from Jacobs against the proposal submitted by Flour-CDM which had the lowest proposed/probable cost. I concluded Flour-CDM was not competitive against the other three offerors in my non-cost comparison. Having the lowest proposed/probable cost, however, required me to conduct a best value tradeoff between Flour-CDM and Jacobs, which was the one remaining proposal in the higher tier of technically rated offerors.

My comparison between these proposals revealed the Jacobs' proposal contained a number of significant strengths not found to be significant in the proposal from Flour-CDM: strong contract phase-in, experience with Maximo, strong program management, a solid approach to organization, an excellent plan for site development, and a well-thought out plan for customer service. Jacobs' significant strengths with regard to contract phase-in and experience with Maximo were key discriminators for selection since transition from the incumbent contractor was one of the more challenging requirements in MSFOC.

In addition, the Jacobs' proposal contained two significant strengths in staffing and compensation regarding the offeror's approach to workload fluctuations and the offeror's approach to train, efficiently utilize, and certify the represented workforce. Although I recognized Flour-CDM also had the ability to share resources I believed Jacobs' strengths were discriminators for selection since it also proposed the ability to forecast workforce fluctuations before sharing resources better maximizing workforce utilization at MAF. Additionally, Jacobs' approach for training and certifying the workforce should assist NASA in obtaining the most beneficial use of available skills.

A review of past performance also revealed meaningful differences between the proposals. Jacobs had significant strengths in its past performance in the areas of contract phase-in, transition to Maximo 6.2, site-development, and its safety program. This past performance history provided me with a very high level of confidence that Jacobs could successfully perform MSFOC. Jacobs' stronger record in site development suggested it had the higher likelihood of success in this area even though both offerors received significant strengths for this under Mission Suitability. I viewed site development as a key discriminator since success with EUL authority should lower the operational costs of MAF. Additionally, I found it telling that three of the significant strengths were mirrored by key strengths Jacobs received under Mission Suitability: site development, contract phase-in, and experience transitioning to Maximo 6.2.

Although I was aware I could make this tradeoff based upon the differences in proposed/probable costs, I did not believe the differences in costs would necessarily be as high as reflected between the costs proposed by the offerors. I was aware that Jacobs had incorporated an award fee plan in its model contract to incentivize innovations that would allow NASA objectively to measure performance, lower cost, and reduce risks at MAF. Although I could not quantify the exact cost savings NASA would receive from this award fee clause, I was aware that the SEB did not factor this provision into Jacobs' most probable cost and that this clause had the potential of greatly reducing the cost

differences between the proposals. Additionally, I was aware that the SEB assigned Flour-CDM's proposal a lower level of cost confidence and that Jacobs' lower burden rates meant that cost differences between the offerors would be reduced as the Government placed Attachment J-2 IDIQ orders.

I determined Jacobs' strengths in the areas of Management and Technical Approach, Staffing and Compensation Approach, and in Past Performance more than justified Jacobs' higher cost and, therefore, eliminated Flour-CDM from consideration for award.

My final trade-off analysis was between Jacobs and CTMSO recognizing that CTMSO had a slightly higher proposed cost than Flour-CDM. Although I believed Jacobs and CTMSO submitted almost equivalent proposals under the subfactor for Management and Technical Approach, I believed Jacobs' approach to innovation was superior to the one proposed by CTMSO, something which help me distinguish the two proposals. Unlike the innovations proposed by CTMSO, the Section II Clause in Jacobs' model contract was a more aggressive approach to innovations and would allow NASA objectively to measure Jacobs' performance.

The more meaningful discriminators between the proposals were found in the areas of Staffing and Compensation and Past Performance. As described above, I believed Jacobs' approaches to workload fluctuations and to train/certify the workforce were meaningful to NASA. Jacobs' plan for workload fluctuations would decrease risk associated in the program workload at MAF while Jacobs' approach for training and certifying the workforce should assist NASA in obtaining the most beneficial use of available skills. Additionally, the SEB rated Jacobs' key personnel higher than those designated by CTMSO. Although I recognized CTMSO proposed a strong approach to Technical and Management at MAF, I believed that having a superior staffing approach would better help the selected offeror achieve its management goals.

Under the factor for Past Performance, Jacobs had significant strengths in its past performance in the areas of contract phase-in, transition of Maximo, site-development, and its safety program. On the other hand, CTMSO strengths in past performance involved its first hand knowledge of MAF's environmental history and having successfully implemented process strategies and techniques to streamline/transform complex manufacturing operations. I found that Jacobs' past performance history was more impressive and more meaningful than the past performance history of CTMSO. I noted that Jacobs' past performance revealed successful performance in three areas I determined were discriminators for selection: site-development, contract phase-in, and transition to Maximo 6.2. As a result, Jacobs' past performance history provided me with a higher level of confidence that Jacobs could successful perform MSFOC.

Finally for Jacobs and CTMSO, I contrasted the non-price factors against the differences in cost. I determined advantages Jacobs had in the areas of innovations, staffing and compensation, and past performance warranted the higher cost of the Jacobs' proposal. I was able to make this trade-off with only giving minimal consideration to the potential that Jacobs' award fee clause could reduce the ultimate cost to NASA; that Jacobs

proposed a lower burden rate which would lower the Jacobs' cost differential to NASA as the agency placed Attachment J-2 ID/IQ orders; and the difference in the level of cost confidence between the offerors which in part was based upon a perceived shortfall in material resources by CTMSO. Given this analysis, I concluded that the proposal submitted by Jacobs represented the best value to the Government for the operation of MAF.

Accordingly, I select Jacobs Technology Inc for award of the Manufacturing Support & Facility Operations contract.

William H Gerstenmaier

William Gerstenmaier

1 MAY 2009

Date

