

**Source Selection Statement for the
Mission and Program Integration (MAPI) Contract
Lyndon B. Johnson Space Center
National Aeronautics and Space Administration**

On July 20, 2012, I, the Source Selection Authority, met with the members of the Source Evaluation Board (SEB) appointed to evaluate proposals for MAPI Solicitation, NNJ11401744R. We re-convened for further discussions on August 3, 2012. The presentation charts for those two meetings represent the final source selection evaluation report and are herein incorporated by reference.

I. Procurement History

This contract provides for the mission and program integration services for the International Space Station Program (ISS Program or ISSP). The services provided include the following: Program and Mission Planning and Integration; Strategic and Tactical Planning Support; Engineering Analysis, Integration and Tracking; Manifesting Support, Hardware Certification Requirements and Validation Support; Real-Time Requirements Tracking and Issue Resolution; Safety and Mission Assurance; Engineering Analysis and Requirements Validation; Risk Management Support; Program-Specific IT Support; Payload Integration, Program Science and Research; Configuration Management and Data Management; Business Management; and Resources, Scheduling and Assessments.

MAPI is a Cost-Plus-Award-Fee/Incentive-Fee contract with a Baseline requirement and with Indefinite-Delivery/Indefinite-Quantity (IDIQ) task orders. The basic period of performance for this acquisition is 2 years from October 1, 2012, through September 30, 2014. There are three, 2-year options. For the IDIQ task orders, the Not-to-Exceed limit for the basic IDIQ effort is \$50 million. The options do not increase the Not-to-Exceed limit.

In accordance with Federal Acquisition Regulation (FAR) 5.2, Synopses of Proposed Contract Actions, this proposed contract action was synopsisized on July 28, 2011, on the NASA Acquisition Internet Service business opportunities website.

On December 12, 2011, a Future Requirements Day was held with industry. At this event, the MAPI contract type, Statement of Work (SOW) requirements, and weighting of the evaluation factors, among other information related to the procurement, were presented. As the ISS Program Manager, I spoke at the event and expressed the shift in contract type from fixed-rate IDIQ to a completion form contract with IDIQ for only unplanned requirements. I emphasized the shift in focus in the completion form environment reflected a new approach, with the contractor controlling the processes and procedures used to perform the services. I also highlighted the need for innovations and efficiencies in these processes and procedures to be developed throughout the entire length of the contract in order to meet the ISS Program budget challenges.

On February 8, 2012, the Contracting Officer issued Request for Proposal (RFP) NNJ11401774R. Amendment number 1 was posted on February 10, 2012, to provide revisions and replacement pages to the RFP; amendment number 2 was posted on February 21, 2012, to

notify industry that additional information had been placed in the MAPI Technical Library; amendment number 3 was posted on March 13, 2012, to provide numerous revisions and replacement pages to the RFP, and additional questions and answers; amendment number 4 was posted on March 21, 2012, to provide revisions and replacement pages to the RFP, and additional questions and answers; amendment number 5 was posted on March 23, 2012, to provide revisions and replacement pages to the RFP; and amendment number 6 was issued to offerors after the receipt of proposals on June 13, 2012, to provide revisions and replacement pages to the RFP.

The procurement was conducted as a small business set-aside under North American Industry Classification System (code 541712, with a size standard of 1000 employees, in accordance with FAR Subpart 19.5 – Set-Asides for Small Business; FAR Part 15, Contracting by Negotiation; and NFS Part 1815, Contracting by Negotiation. The RFP divided the proposal into eight volumes with separate due dates. Volume VI, related to past performance, was due on March 26, 2012. Volume I, related to technical approach; Volume II, related to management approach; Volume III, related to safety and health approach; Volume IV, related to Specific Technical Understanding and Resources; Volume V, related to Plans and Other Data; Volume VII, related to cost/price; and Volume VIII, related to the model contract, were all due on April 9, 2012.

Offers were received from three companies. Complete proposals were received from the following companies: ERC, Inc. (ERC), Bastion Technologies, Inc. (Bastion), and Barrios Technology, Ltd (Barrios).

II. Evaluation Procedures

Evaluation of the proposals were conducted in accordance with the approved evaluation plan and procedures prescribed by FAR Subpart 19.5 – Set-Asides for Small Business, in conjunction with FAR Part 15, Contracting by Negotiation, and NFS Part 1815, Contracting by Negotiation, with an objective of achieving the best value. The solicitation delineated three evaluation factors – Mission Suitability, Past Performance, and Cost. As provided in the solicitation, of the three evaluation factors, Mission Suitability and Past Performance, when combined, are significantly more important than Cost. Mission Suitability is more important than Past Performance.

At the Future Requirements Day, the Technical Approach sub-factor under Mission Suitability was weighted higher than Management Approach by 100 points. During one-on-one meetings held with industry on December 14 – 16, 2011, many companies stated that this distribution of points would discourage competition since non-incumbents were at a disadvantage in knowing the intimate details of the technical work. Based on this feedback, the distribution of weighting was revised to make Technical Approach and Management Approach equal in weight. Each proposal received a Mission Suitability score based on the following sub-factors and associated numerical weights:

Sub-factor A – Management Approach	450
Sub-factor B – Technical Approach	450
Sub-factor C – Safety & Health Approach	<u>100</u>
Total	1000

Mission Suitability was evaluated and rated using the following adjectival ratings for the sub-factors: Excellent, Very Good, Good, Fair, and Poor.

Because past performance can be a significant predictor of performance under the proposed contract, the past performance of each offeror (including past performance of team members, major subcontractors, and key personnel) was evaluated. Past Performance was evaluated as it related to the MAPI contract, including relevant experience based on information submitted by the offeror and independently obtained by the Government, including the narrative in the offeror's proposal, Past Performance Questionnaires, communications with listed references, Past Performance Information Retrieval System reports, as well as any other information obtained independently by the Government. In accordance with the RFP, the following adjective level of confidence ratings were utilized to assign a Past Performance rating: Very High Level of Confidence, High Level of Confidence, Moderate Level of Confidence, Low Level of Confidence, Very Low Level of Confidence, and Neutral.

A cost/price analysis, including cost realism, of each offeror's proposed cost was conducted, and a probable cost was developed for evaluation that included the basic period, all options, and the Best Estimated Quantity for IDIQ.

III. Evaluation of Initial Proposals and Final Proposal Revisions

All three proposals were determined to be acceptable and were evaluated in accordance with FAR Subpart 19.5 – Set-Asides for Small Business in conjunction with FAR Part 15, Contracting by Negotiation, and NFS Part 1815, Contracting by Negotiation, as well as the solicitation. On June 6, 2012, the Contracting Officer recommended that on the basis of the initial evaluation, all three offerors' proposals should fall within the competitive range. I concurred with the Contracting Officer's recommendation. Accordingly, the Board invited all three offerors to participate in written and oral discussions, and each was given the opportunity to correct, clarify, substantiate, or confirm the contents of its respective proposal and to submit a final proposal revision (FPR), as well as a signed model contract reflecting the offeror's intent to be bound contractually. The FPR was received on June 22, 2012. The results of the final evaluation were presented to me on July 20, 2012. I held a follow-up presentation and discussion on August 3, 2012, which I discuss more fully in the 'Decision' section below. After considering the results of the FPR, the Board concluded its final evaluation and determined the Mission Suitability scores for the proposals.

Mission Suitability Factor

ERC, Inc (ERC)

ERC's proposal received a total point score of 893 points out of a maximum 1000 points. Five of the weaknesses the SEB noted in its initial evaluation were adequately addressed in the FPR. However, one weakness was not adequately addressed in full. ERC's proposal received six significant strengths, five strengths, and one weakness in its final evaluation.

Under the Technical Approach, ERC's proposal was determined to be "Very Good." ERC received one significant strength and one weakness. The Board assessed a significant strength for the proposal's approach to using 3D Computer Aided Design (CAD) models to validate stowage plans through significant enhancement of the existing model capabilities, demonstrating a comprehensive understanding of the on-orbit stowage and waste management function. This approach increases ground team cognizance of the current on-board stowage configuration and greatly improves the ability to ensure stowage plans are consistent with ISSP volumetric requirements.

The Board also assessed a weakness under the Technical Approach. ERC's Basis of Estimate (BOE) lacked sufficient and complete rationale at the task level to justify the proposed Work Year Equivalent (WYEs) and skill mix to execute some of the tasks, resulting in a risk to the ISSP that contract requirements will not be feasibly and effectively completed.

Under the Management Approach, ERC's proposal was determined to be "Excellent." ERC received four significant strengths and five strengths. The Board assessed a significant strength for the proposal's thorough and effective management personnel training program for ERC's completion from contract management process during the transition phase. It also included follow-up training utilizing corporate funds which will greatly improve their ability to provide efficient and effective contract services. A second significant strength was assessed for the proposal's highly effective management approach, which provides an exceptionally efficient and feasible strategy for reducing contract performance risks, acquiring the incumbent workforce, driving efficient contractor accountability, and avoiding inherent subcontracting costs to the Government. A third significant strength was assessed for the proposal's enhanced fee sharing incentive that recognizes employee performance, which will greatly increase the offeror's capability to acquire new employees, reduce turnover, and maintain a highly motivated and productive workforce for the contract. A fourth significant strength was assessed for the proposal's extremely thorough and comprehensive ISO-certified phase-in strategy, led by the company president who has experience in supporting multiple contract phase-ins, which greatly enhances its ability to provide an exceptionally effective phase-in that will not disrupt the ISSP operations.

Under the Safety and Health Approach, ERC's proposal was determined to be "Excellent." ERC received one significant strength. A significant strength was assessed for the proposal's firm commitment to ensure a proactive and visible role in safety and health through Safety Awareness and Leadership Initiatives and by proposing a Safety & Quality Officer, a direct report to the Program Manager. ERC also proposes a comprehensive and highly effective Emergency Preparedness and Response plan. All of these demonstrate a highly effective program for ensuring safety and health performance.

Bastion Technologies, Inc (Bastion)

Bastion's proposal received a total point score of 679 points out of a maximum 1000 points. Four of the weaknesses the SEB found in its initial evaluation were adequately addressed. However, one significant weakness and five weaknesses from the initial evaluation were not adequately addressed, and the Board assessed a new weakness from the FPR response. Bastion's proposal received two significant strengths, six strengths, one significant weakness, and six weaknesses in its final evaluation.

Under the Technical Approach, Bastion's proposal was determined to be "Good." Bastion received one significant strength, two strengths, and three weaknesses. The Board assessed a significant strength for the proposal's approach to develop and utilize the ISS Vehicle, Cargo, and Mission Analysis dashboards that link to analysis tools significantly increases integration and coordination capabilities and knowledge dissemination across the ISSP, which creates efficiencies and reduces integration time.

Under the Management Approach, Bastion's proposal was determined to be "Good." Bastion received four strengths, one significant weakness, and three weaknesses. The Board assessed a significant weakness for the proposal's approach to utilize tools (commercial off-the-shelf, custom, and proprietary) as the basis for their management approach, which introduces significant technical risks, and the proposal did not provide a business case and governance model for tool selection, implementation, costs, and risks associated with integration of these tools into the current Information Technology architecture.

Under the Safety and Health Approach, Bastion's proposal was determined to be "Very Good." Bastion received one significant strength. The Board assessed a significant strength for the proposal's commitment to ensure a proactive safety and health culture through safety committees and incentive programs and by proposing a Safety & Mission Assurance Program Risk Manager, with direct report to the Program Manager, to serve as a focal point for safety and quality. These demonstrate a highly effective program for ensuring a safe and healthy performance environment.

Barrios Technology, Ltd (Barrios)

Barrios' proposal received a total point score of 873 points out of a maximum 1000 points. Eight of the weaknesses the SEB noted in the initial evaluation were adequately addressed. However, two weaknesses were not adequately addressed in full, and the Board assessed two new weaknesses from the FPR response. Barrios received three significant strengths, ten strengths, and four weaknesses in its final evaluation.

Under the Technical Approach, Barrios' proposal was determined to be "Very Good." Barrios received one significant strength, five strengths, and three weaknesses. The Board assessed a significant strength for the proposal's approach to integrate multiple SOW System Engineering and Integration (SE&I) functions into an integrated technical organization, combining technical skills that focus on balancing resources needed to ensure ISS performance, while simultaneously ensuring science goals are met, thus demonstrating a highly effective approach for performing the SE&I function, which allows for a more efficient organization utilizing less labor resources.

Under the Management Approach, Barrios' proposal was determined to be "Very Good." Barrios received one significant strength, five strengths, and one weakness. The Board assessed a significant strength for the proposal's approach to include a governance structure that demonstrates a comprehensive understanding of which products require only contractor control and those that require Government control and also aligns their organization around technical functions rather than the ISSP structure which provides a complete, feasible, and highly efficient approach to the delivery of products with a substantially lower risk to the ISS Program.

Under the Safety and Health Approach, Barrios' proposal was determined to be "Very Good." Barrios received one significant strength. The Board assessed a significant strength for the proposal's approach to encourage employees to work safely and to report safety and health concerns by establishing several safety incentive programs which are highly effective safety performance tools.

Past Performance Factor

The adjective level of confidence rating for ERC's past performance was "Very High." The SEB found that ERC had very highly pertinent experience in all areas of the contract requirements. Additionally, the proposed Program Manager and Deputy Program Manager has very highly pertinent experience. Overall, ERC and its two proposed key personnel have performed exceptionally well as evidenced by the questionnaires, PPIRS database reports, and phone interviews. Additionally, ERC has performed exceptionally well in regard to safety.

The adjective level of confidence rating for Bastion's past performance was "Very High." Bastion and its major subcontractor have very highly pertinent experience in the areas of the SOW they each will be performing. Additionally, both the proposed Program Manager and Deputy Program Manager have very highly pertinent experience managing large programs. Overall, Bastion, its major subcontractor, and its two proposed key personnel have performed exceptionally well as evidenced by the questionnaires, PPIRS database reports, and phone interviews. Additionally the team has performed exceptionally well in regard to safety.

The adjective level of confidence rating for Barrios' past performance was "Very High." Barrios and its major subcontractors have very highly pertinent experience in the areas of the SOW they each will be performing. Additionally, both the proposed Program Manager and Deputy Program Manager have very highly pertinent experience managing large programs. Overall, Barrios, its major subcontractor, and its two proposed key personnel have performed exceptionally well as evidenced by the questionnaires, PPIRS database reports, and phone interviews. Additionally the team has performed exceptionally well in regard to safety.

Cost/Price

The cost proposals were evaluated consistent with the evaluation criteria in Section M of the RFP. ERC's proposed cost was slightly higher than the proposed cost of Bastion and slightly lower than the proposed cost of Barrios. A cost realism analysis, resulting in a probable cost, was performed for each proposal.

A minor upward adjustment in ERC's proposed cost was made to align labor rates with the proposal to hire incumbent staff at current rates. The incentive fee was adjusted in line with the offeror's proposal to share a percentage of an underrun or overrun.

A minor upward adjustment in Bastion's proposed cost was made to align labor rates with the proposal to hire incumbent staff at current rates. The incentive fee was adjusted in line with the offeror's proposal to share a percentage of an underrun or overrun.

A minor upward adjustment in Barrios' proposed cost was made to correct for technical weaknesses and resulted in an increase to direct labor hours. The incentive fee was adjusted in line with the offeror's proposal to share a percentage of an underrun or overrun.

Decision

At the conclusion of the SEB's presentation on July 20, 2012, I remarked on the quality of each technical proposal, the excellence of each offeror's past performance, the closeness of the proposed and probable costs, and the thoroughness of the SEB's analysis. I have no doubt that any one of the three offerors adequately understands the work and could do a credible job. However, my task was to determine which one of the three could provide the greatest value to the ISSP as measured by the criteria and standards set forth in the RFP. My principal touchstone, to which I have returned frequently over the last 3 weeks of further discussion and extended deliberations, was the RFP's statement of the relative weights of the three evaluation factors: **"Of the three evaluation factors, mission suitability and past performance, when combined, are significantly more important than cost. Mission suitability is more important than past performance"** (with the emphasis appearing in the RFP, Section M, Paragraph M.3, Evaluation Factors and Criteria).

I began my analysis by focusing on the Mission Suitability factor, the more important non-cost factor cited in the RFP. I noted a significant point difference between Bastion's proposal and the other two proposals. The SEB had assigned Bastion a "Good" adjectival rating in both equally-weighted major sub-factors, Technical Approach and Management Approach. In contrast, the other two proposals were each assessed as at least "Very Good" in each major sub-factor. The point and adjective differences between the Bastion proposal on one hand and the other two proposals on the other hand indicated to me that there might be significant qualitative differences between the Bastion proposal and the other two. In fact, I did find that the Bastion Mission Suitability proposal, while demonstrating an overall acceptable approach, did not rise to the high level of the other two technical proposals (which I discuss in more detail below). The proposal lacked a creditable approach of implementing the Bastion IT solutions. It also lacked BOE data to substantiate Bastion's proposed efficiencies using their IT solutions. Combined, these shortcomings indicated significant risk that Bastion might not achieve all the benefits expected to flow from its proposed management approach. In addition, the proposal's lack of detailed BOE data at the task level did not provide the confidence to justify Bastion's proposed WYE and skill levels. In light of the essentially equal Past Performance ratings among the three offerors and Bastion's only slight advantage over the other two in Cost (which was significantly less important than the non-cost factors), I decided, considering the factors and their respective weights as stated in the RFP, that the Bastion proposal did not offer nearly as much value as either of the other two proposals.

I thus moved on to a side-by-side comparison of the remaining two proposals, those of ERC and Barrios.

During the presentation on July 20, 2012, I engaged the SEB and the ISSP management attendees in extensive and vigorous discussions about their collective and individual perspectives on the two Mission Suitability proposals. The SEB had given a modest point advantage to ERC in the Mission Suitability factor, based on their overall view reflected in the strengths and significant strengths the SEB assigned the ERC proposal. I focused first on the source of this apparent difference. That difference stemmed from ERC's better Management Approach (an "Excellent" adjectival rating to Barrios' "Very Good"). The SEB based their modestly higher rating of ERC in Management Approach primarily on its concept for managing the MAPI work on a completion form basis. The RFP did reflect a change in NASA's management philosophy for the work, shifting more management responsibility to the contractor than under the predecessor contracts. I agreed with the SEB in their ratings of the two proposals in the Management Approach sub-factor and the qualitative assessments behind the ratings.

In addition, the SEB had rated the two proposals as essentially equal in the Technical Approach with a slight point advantage to Barrios. I expressed some skepticism about the weight the SEB assigned to several of the Technical Approach strengths it had found for the two proposals. I gave somewhat less weight than the SEB had given to the benefits the ISSP would derive from ERC's 3D CAD concept for stowage and waste management. While the strength clearly demonstrated an understanding of the integrated processes between system engineering and operations, the resulting product will not improve the current issues of on-orbit stowage and waste management that challenge the ISSP today. I thought the SEB had also slightly undervalued Barrios proposal strengths such as crew time management and improvements to the ISS Certification of Flight Readiness (CoFR) processes. The proposed focus on crew time management demonstrated that Barrios understands the criticality of managing crew time to increase the research capability of the ISS. In addition, the Barrios proposal will provide simplified CoFR processes on both the contractor and the Government side, resulting in more efficient processes enabling reductions in efforts for both contractor and Government workforces. These were the sorts of innovations I was hoping to see in the proposal process.

I found that the two proposals were essentially equal in the Safety and Health Approach sub-factor. This sub-factor did not play a further role in my selection decision.

In my overall qualitative judgment in Mission Suitability, in light of my different valuation of some of the two proposals' Technical Approach strengths (which effectively offset the modest point advantage the SEB had given to ERC's proposal in Management Approach), I tentatively determined at the July 20 meeting that the two Mission Suitability proposals were essentially equal. My assessment of the closeness of the two proposals in the Mission Suitability factor was reflected by the close split in opinion subsequently expressed by the ISS managers present, who had all heard exactly the same information I had. By the conclusion of the presentation, I felt that the SEB might be able to provide me more detailed qualitative information, especially in the Technical Approach sub-factor, to help me differentiate between the proposals and either firm up or modify my initial assessment.

The presentation discussion then moved on to Past Performance. Again, I found that the SEB had done an excellent job in obtaining and thoroughly evaluating comprehensive past performance information. As with Mission Suitability, I initially determined that the past performance of the two offerors was essentially equal. As the discussion among the SEB, my managers, and me drilled down into the details of relevancy, complexity, and size for each

contract considered for each offeror, the conversation turned to risk, especially in the area of logistics. I came to recognize, and I stated during the discussion that 'ISS logistics,' which represents about 30 percent of the MAPI work, should not be weighed and rated as just 'logistics' generically. I consider ISS logistics to consist of transportation of up-mass to the ISS, an expensive and infrequent occurrence; expenditure of extremely limited crew time for receiving, accounting for, replacing or repairing elements, components and systems; and the optimal management of very limited stowage on-orbit. Space is an unforgiving environment for humans and the systems their lives depend on. ISS logistics are subject to much more severe constraints than typical logistics requirements and systems, and adverse consequences can be severe. Despite my initial determination, I again realized that I needed more detailed qualitative information and further discussion to help me try to differentiate between two very close sets of data in light of this deeper perspective on the 'relevance' of past performance.

Finally, I considered the two proposals' probable cost. Barrios had the higher probable cost by a very slight amount, so slight as to render the proposals in the Cost factor, as in the other two factors, essentially equal in my opinion.

In my 19 years in ISSP management, I have never confronted such a close decision between such essentially equal proposals. I decided that I needed to have the SEB delve even more deeply into the available data it had collected and processed. Accordingly, I directed the SEB to provide me more detailed qualitative information on the Mission Suitability sub-factor and to consider how constraints such as the ones I raised during the discussion of logistics past performance might affect the weighting of the relevance of the offerors' prior contracts. I did not want the SEB to give undue weight to incumbency, so I cautioned them to consider constraints of all kinds that might have arisen during the offerors' prior performance of logistics functions. For instance, setting and fulfilling logistics requirements for Antarctic research campaigns might face similar types and intensity of constraints as human spaceflight. The logistics systems supporting Antarctic research have to take into consideration the limited staff at the research station, their technical skills (or lack thereof) in repairing equipment, and the total lack of transport opportunities during the South Pole winter. There might be other environments that posed equal challenges, so I urged the SEB to find comparisons beyond the spaceflight environment, but did not provide this example I had in mind to the SEB.

I re-convened essentially the same group of participants on August 3, 2012, to go over the more detailed information the SEB had put together at my direction. The additional information the SEB provided for the Mission Suitability factor simply solidified my initial determination that the two proposals were essentially equal. ERC maintained its modest advantage in the Management Approach sub-factor. With respect to the Technical Approach sub-factor, the SEB reported that it noticed that it had not assessed points on the Barrios proposal's Basis of Estimate (BOE) finding (a weakness) consistently with how it had assessed points on the same subject for the other proposals, and so added points to the Barrios proposal's point score. The revised information on consistency in BOE evaluation across proposals and my prior qualitative weighting of the proposals' Technical Approach strengths and weaknesses both confirmed my initial thought that Barrios had an offsetting advantage in Technical Approach equivalent to ERC's advantage in Management Approach.

With no discernable means to discriminate between the two proposals on the basis of Mission Suitability, I then turned to the Past Performance factor for any distinguishing non-cost

difference upon which I could make my best value trade-off decision. The SEB provided more detail on the particulars of ERC's prior contracts, especially in the area of logistics. I determined that ERC's performance of those contracts was not subject to the sort of challenging environments and constraints as are present in human spaceflight or equivalents (such as the South Pole research campaigns -- or any others). ERC's experience included working for the Missile and Sensors Test Directorate, which did involve supporting work at a remote Pacific island, but the cost, delays, and other impacts in getting something wrong supporting that work paled in comparison to the challenges here. I found that the experience of the Barrios team in a tightly constrained, high-risk environment was a meaningful advantage. Moreover, a closer parsing of the experiences of both offerors disclosed to me that ERC's experience in another key area, integrated system performance analysis, did not measure up to that of Barrios' team members responsible for that function, ARES and Booz-Allen Hamilton. While the ERC past performance did demonstrate strong performance in SE&I functions, none of the examples described approached the SE&I function of the ISSP in complexity and challenges. (In fact, there are five Visiting Vehicles of several different types currently scheduled to dock to the ISS within the first 90 days of the contract.) I also found this to be a meaningful advantage in Barrios' favor.

Finally, over the course of the several days since the August 3, 2012, follow-up discussion, I continued to consider and weigh the advantages of the limited, but real, differences I discerned in the non-cost evaluation factors against the countervailing slight difference in the Cost factor. I returned to the solicitation's touchstone statement of the factors' relative weight, that "mission suitability and past performance, when combined, are significantly more important than cost." I judged that the non-cost differences between the two proposals really came down to risk versus risk:

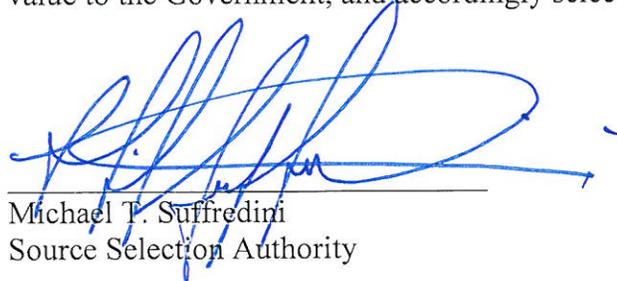
- With Barrios and its modest advantage I had found in Technical Approach, the risk was that, while I could be sure the work (especially logistics and integrated system performance analysis) would be done well and not miss anything critical, it may not be accomplished with maximum management efficiency.
- With ERC and its modest advantage I had found in Management Approach, the risk was that, while I could be sure the work (especially logistics and integrated system performance analysis) would be done very efficiently, it may not be accomplished (at least initially) with the degree of completeness or effectiveness demanded by the tightly constrained and high-risk environment of the operating ISS.

I looked to the rest of the proposals and to the evaluation material to validate my judgment. To some degree, ERC's slightly lower probable cost validated that their approach had a small edge in efficiency, giving me some confidence that my analysis was correct.

As I have already noted, space is a very unforgiving environment for humans and the systems their lives depend on. The risks involved affect the lives and safety of up to six people who are cut off from all other help besides each other and what they have immediately at hand. The risks also affect the optimal functioning of a \$100 billion dollar asset that represents the contributions of a significant portion of all humankind. There is a low likelihood of making a 'quick fix' to a critical anomaly if the right solution is not already in place or materials are not already at hand on orbit. The effectiveness of the work that supports the ISS and its crew is significantly more

important than how efficiently or at what cost that work is carried out (not that cost is unimportant). While I have no doubt that ERC could, after a reasonable period of time, learn to discern, then assess and then address all the risks posed by limited and near-priceless crew time, up-mass, and on-orbit stowage, that learning curve period is likely to be longer than if they'd had at least some experience managing equivalent risks and challenges in some very challenging and high-risk environment. In addition, the Barrios team with ARES and Booz-Allen Hamilton provides a demonstrated experience base in performing integrated system performance analysis in a complex and changing environment, more so than ERC has demonstrated. The increased risks posed by the ERC proposal, while moderate and perhaps even of only limited duration, are real nonetheless and could affect the ISS.

Weighing the ERC proposal's slightly lower cost against its disadvantage of moderately higher non-cost risks than the Barrios proposal, I decide that the Barrios proposal provides the best value to the Government, and accordingly select Barrios for contract award.



Michael T. Suffredini
Source Selection Authority

8/15/2012

Date

**Source Selection Statement Addendum for the
Mission and Program Integration (MAPI) Contract
Lyndon B. Johnson Space Center
National Aeronautics and Space Administration**

On August 15, 2012, I signed the Source Selection Statement (SSS) for the Mission and Program Integration (MAPI) procurement, selecting Barrios Technology (Barrios) for award. Subsequently, during the course of post-award debriefings, it came to light that some of the remaining weaknesses had not been included in the SSS when others had been incorporated into the document. Once this oversight was brought to my attention, I agreed that an addendum addressing all weaknesses should be issued. As a result, below is a document which addends my SSS dated August 15, 2012.

Evaluation of Initial Proposals and Final Proposal Revisions

Mission Suitability Factor

ERC, Inc (ERC)

All of ERC's weaknesses are described in the Source Selection Statement.

Bastion Technologies, Inc (Bastion)

Under the Technical Approach, Bastion's proposal received three weaknesses. The Board assessed a weakness for the proposal to interface tools with the existing Mission Integration Database Application System database and Requirements Traceability Manager, introducing new complexities and increasing the risk of corrupting Government data, which was not outweighed by the technical benefits and efficiencies. The Board also assessed a weakness for Bastion's Basis of Estimate which lacked sufficient and complete rationale at the task level to justify the proposed Work Year Equivalents (WYEs) and skill mix to execute some of the tasks, increasing the risk to the Government of successful completion of the contract requirements. The Board also assessed a weakness for the inconsistency between the descriptions of the qualifications for some Standard Labor Categories (SLCs) provided in the Total Compensation Plan and those provided as part of the SLC mapping in the Technical Resources volume. These inconsistencies resulted in not giving the Government a clear understanding to Bastion's approach to determining the qualifications for the position. Positions staffed with personnel with possibly inadequate qualifications increases the risk to successful contract performance.

Under the Management Approach, Bastion's proposal received three weaknesses. The Board assessed a weakness for the proposed implementation of the Work Breakdown Structure that would not provide the Government a clear understanding and insight into the planned and actual costs during the performance of the contract, increasing the risk to successful contract performance. The Board also assessed a weakness for not providing the summary of required resources at the total work plan level as part of the Work Plans, which fails to demonstrate comprehensive understanding of the requirement and hinders the Government's ability to analyze, negotiate, and approve the plans. The Board also assessed a weakness for not clearly defining in the Basis of Estimates the required resources for a specific proposed position, creating an inconsistency in the proposal and not allowing the Government to evaluate the

feasibility of the proposed approach of a critical role.

Under the Safety and Health Approach, Bastion's proposal received no weaknesses.

Barrios

Under the Technical Approach, Barrios' proposal received three weaknesses. The Board assessed a weakness for the proposal to reduce meetings which lacked feasibility and did not provide rationale that demonstrated a comprehensive understanding of some of the meeting requirements, resulting in a risk to the Government that International Space Station Program requirements may not be met. The Board also assessed a weakness for Barrios' Basis of Estimate which lacked sufficient narrative discussion at the task level to justify the proposed WYEs and skill mix to execute some of the tasks identified in the Statement of Work, increasing the risk to the Government of successful completion of the contract requirements. The Board also assessed a weakness for the proposal's unsubstantiated assumptions regarding reduced flight rate and the incorporation of IT tools into JSC or NASA architectures, resulting in an understatement of the resources required and increased risk to the successful performance of the requirements of this contract.

Under the Management Approach, Barrios' proposal received one weakness. The Board assessed a weakness for the lack of description for the role of a senior manager, which was introduced in the Final Proposal Revision, and the inconsistency between the position title and the SLC used for the position without providing an explanation, which resulted in not giving the Government a comprehensive understanding of Barrios' management approach.

Under the Safety and Health Approach, Barrios' proposal received no weaknesses.



Michael T. Suffredini
Source Selection Authority

9/28/12
Date