Source Selection Statement
Radiation Budget Instrument (RBI)
Request for Proposal (RFP) NNL13ZB1001R

Background

The purpose of the Radiation Budget Instrument (RBI) contract is to procure a scanning radiometer capable of measuring Earth's reflected solar and emitted thermal radiance in three spectral bands. RBI will continue the unique global climate measurements of the Earth's radiation budget provided by the Clouds and the Earth's Radiant Energy System (CERES) instruments since 1998. The contract will consist of two Contract Line Item Numbers (CLIN's). CLIN 001 is for design, fabrication and delivery of a RBI and all associated hardware, software, and data deliverables in accordance with the requirements specified in the contract. CLIN 002 is Indefinite Delivery/Indefinite Quantity and allows the Government to issue task orders for pre-delivery and post-delivery directed studies and consultation support and for up to two additional RBI flight units and/or associated parts and spares.

CLIN 001 will be Cost-Plus-Award-Fee with a performance incentive and the contract type for any tasks issued under CLIN 002 will be decided at the time of issuance. The potential period of performance is 12 years.

Market research commenced by posting a Sources Sought Notice/Request for Information on the Federal Business Opportunities website and the NASA Acquisition Internet Service website on July 8, 2011. Market research continued until the release of the final Request for Proposal (RFP), with Government representatives meeting with interested offerors upon request to discuss the requirements, to solicit their input, and to obtain information regarding their capabilities. A draft RFP was issued on April 10, 2013 for comments from industry. A pre-solicitation conference was held on April 30, 2013 at NASA Langley Research Center (LaRC) after release of the draft RFP in order to allow the offerors to have input into the final RFP. The pre-solicitation conference was attended by 5 companies. Upon completion of the conference, the attending companies were invited to have one-on-one discussions with members of the Government Source Evaluation Board (SEB); all 5 companies participated in the one-on-one discussions. The procurement was conducted as a full and open competition under the North American Industry Classification System code 541712, "Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)". The small business size standard is 1000 employees.

The final RFP was released on June 14, 2013. The final RFP had a proposal response date of September 4, 2013 and a request for Past Performance Proposals (Volume III) to be submitted by August 15, 2013. Three RFP amendments were issued.

The following companies (listed in alphabetical order) responded to the RFP by the due date of September 4, 2013:

- Ball Aerospace and Technologies Corporation (Ball)
- ITT Space Systems, LLC, a subsidiary of Exelis, Inc. (ITT)
- Northrop Grumman Systems Corporation, Aerospace Systems (NGAS)

Evaluation Factors

The appointed SEB conducted an evaluation of proposals received in response to the RFP. The evaluation was conducted in accordance with the evaluation factors contained in Section M of the RFP. The RFP set forth the following three evaluation factors:

Factor 1: Mission Suitability
Factor 2: Cost/Price
Factor 3: Past Performance

The RFP stated a best value trade-off process would be used in making the source selection and that the contract would be awarded to the offeror that can perform the contract in a manner most advantageous to the Government, all factors considered. The RFP also stated that it was anticipated that award would be made without discussions. In addition, the RFP stated that the Source Selection Authority (SSA) would make an integrated assessment of each offer and comparatively evaluate competing offers, considering input from the SEB. The SSA would consider adjectival ratings and point scores assigned by the SEB; however, the SSA would base selection on substantive proposal differences that are reflected by the adjectival ratings and point scores as opposed to basing selection on mere differences in ratings or scores. The RFP stated that each evaluation factor is approximately equal in importance, and Mission Suitability and Past Performance, when combined, are significantly more important than Cost/Price.

Factor 1 – Mission Suitability

The Mission Suitability Factor was evaluated based on a 1000 point scale. The Mission Suitability Subfactors and their weights are shown below. The numerical weights assigned are indicative of the relative importance of the Subfactors. The areas under each Subfactor were evaluated but not separately rated or scored.

Subfactor 1 – Understanding the Requirements and Technical Approach (URTA) 500 points
URTA 1.1 - Instrument Architecture
URTA 1.2 - Earth Radiation Budget Measurement Continuity
URTA 1.3 - Calibration Approach
URTA 1.4 - Reliability
URTA 1.5 - Space Flight Heritage Hardware and Software
URTA 1.6 - Technology Maturation

Subfactor 2 - Subfactor 2 – Facilities and Equipment (FE) 150 points
FE 2.1 - Facility Adequacy and Availability
FE 2.2 - Special Equipment Adequacy and Availability

Subfactor 3 - Management, Systems Engineering, and Program Assurance (MSEPA) 250 points
MSEPA 3.1 - Compliance with Program Assurance Standards
MSEPA 3.2 - Adequacy of Integration & Test Plan
MSEPA 3.3 - Proposed Schedule

Subfactor 4 - Small Business Utilization 100 points

The RFP stated that the SEB would use the adjectival and numerical ratings from NASA Federal Acquisition Regulation (FAR) Supplement (NFS) 1815.307-70 in its evaluation of the Mission Suitability Factor. The RFP also listed the definitions for Deficiency, Weakness, Significant Weakness, Strength, and Significant Strength (RFP Provision M.1).

Factor 2 – CLIN 001 Cost/Price

The RFP does not provide for adjectival ratings or numerical scores under the Cost/Price Factor. RFP Provision M.2, Factor 2 stated the following regarding the Cost/Price evaluation: "In accordance with FAR 15.404-1(b), the Government will conduct a price analysis by evaluating the prices proposed for CLIN 001 in response to this solicitation." Additionally, the RFP stated: "Furthermore, in accordance with FAR 15.404-1(d), the Government will conduct a cost realism analysis by independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the unique methods of performance and materials described in the offeror's technical proposal. The Government will derive a probable cost, which is determined by adjusting each offeror's proposed cost, and fee when appropriate, to reflect any additions or reductions in cost elements to realistic levels based on the results of the cost realism analyses performed. The probable cost may differ from the proposed cost and will reflect the Government's best estimate of each offeror's proposal. The probable cost will be used for the purposes of evaluation to determine the best value." Per the RFP the offerors did not price CLIN 002. The reasonableness of the cost for individual task orders issued under CLIN 002 will be determined at the time of task issuance.

Factor 3 – Past Performance

RFP Provision M.2, Factor 3 stated the following regarding the Past Performance evaluation. The Government will evaluate each offeror's record of performing services or delivering products that are similar in size, content, and complexity to the requirements of the solicitation (this evaluation would include the record of any significant subcontractors and any subcontractor proposed to provide detectors and subcontracted instrument level calibration services, considering the amount and type of work each firm is proposed to perform). The Government will consider information in the offerors' proposals, past performance evaluation input provided through customer questionnaires and data obtained by the Government from other sources. The

Government will assign a confidence rating from NFS 1815.305 to each offeror. These ratings would each have a "performance" component and a "pertinence" component; and each offeror must meet the requirements of both components to achieve a particular rating. In assessing pertinence, the Government will consider the degree of similarity in size, content, and complexity to the requirements in this solicitation, as well as the recency and duration of the past performance.

Evaluation Procedures

Prior to issuance of the RFP, an SEB was appointed to conduct an evaluation of proposals received in response to the RFP. Subsequently, a Past Performance Consultation Team (PPCT) was formed to assist the SEB in evaluating each offeror's past performance. The SEB and PPCT conducted the evaluation of proposals in accordance with Section M of the RFP. The SEB and PPCT began their evaluation upon receipt of the Past Performance Volumes (Volume III), which were received from the offerors prior to the proposal due date. The PPCT reviewed each offeror's Past Performance Proposal, all of the past performance questionnaires (PPQ's), communications with references, and information obtained from other sources including Contractor Performance Assessment Reporting System (CPARS) and award fee reports. To determine work content pertinence, the PPCT and the SEB reviewed each contract identified in each offeror's proposal by comparing the description of the contract to the work in the RBI past performance questionnaire technical content areas. The PPCT also reviewed the past performance information to determine size and complexity pertinence for each offeror. The PPCT then assigned a recommended overall pertinence rating for each offeror based on an integrated assessment of the size, content, and complexity for each offeror. The SEB considered the PPCT's integrated pertinence assessments, the PPCT's assessments of the offeror's performance ratings, and its own review of Past Performance Proposals in assigning an overall past performance confidence level based on the definitions in the NFS.

Upon receipt of the Technical Proposals (Volume I) and the Business Proposals (Volume II), the SEB conducted an initial review of each Volume, with the Cost/Price Analyst providing a review of the Factor 2, Cost/Price proposal information, to determine if any were unacceptable proposals as defined in NFS 1815.305-70. The Contract Specialist reviewed each model contract, applicable terms and conditions, and Representations and Certifications for each offeror. All proposals warranted a full evaluation.

The SEB members performed a detailed individual review of each offeror's Technical Proposal and documented strengths and weaknesses for each Mission Suitability Subfactor. The SEB consultants also independently reviewed specific areas of each proposal relevant to the Factor for which they possess subject matter expertise and provided input to the SEB voting members for consideration. After completion of the individual evaluations for each Subfactor, the SEB convened to discuss individual findings and to develop consensus on strengths and weaknesses for each of the offerors. The SEB then reviewed the findings for each offeror to ensure that all proposals were evaluated consistently and objectively. Upon completion of the evaluation of all Subfactors for all offerors, the SEB assigned adjectival ratings and percentage scores to each Subfactor based on the consensus findings, calculating a point score for each Subfactor by

multiplying the assigned percentage score and the available points, then summing the Subfactor point scores to derive the overall Mission Suitability point score.

The SEB reviewed each offeror's Business Proposal to determine whether the costs proposed were reasonable, realistic and consistent with the technical approach. The cost proposals were assessed in accordance with the Cost/Price evaluation factor. The SEB provided the results of its review to the Cost/Price Analyst who incorporated the results into the detailed analysis of the offerors' cost proposals.

As appropriate, the SEB revised its previous Mission Suitability findings based on information from the cost proposal, and revised ratings and scores in accordance with RFP Provision M.2, Factor 1.

The Contracting Officer carefully reviewed the facts presented in the initial findings and discussed the findings with the SEB. The RFP states the Government anticipates award will be made without discussions, [ref. RFP Provision FAR 52.215-1(f)(4) and RFP Provision L.16] and based on the initial findings of the SEB, it was evident that the potential for an award without discussions existed. Therefore, no Competitive Range was determined and the SEB met with me, the SSA, on February 28 and March 11, 2014 to present its findings.

Evaluation Findings

Factor 1 – Mission Suitability

Set forth below is a summary of the Mission Suitability Findings for the offerors.

Ball

Ball received a Mission Suitability score of 527.5. Ball's proposal included Strengths, Weaknesses, and Significant Weaknesses. There were no Significant Strengths. A summary of Ball's Mission Suitability findings are summarized below.

Subfactor 1, Understanding the Requirements and Technical Approach (URTA)

Ball received an adjectival rating of Good for Subfactor 1.

Instrument Architecture

Ball received two Strengths for its viable and effective instrument architecture to meet the instrument performance requirements. The first Strength relates to the architecture being predominantly based upon a relevant instrument currently in development, which reduces risk through re-use of elements of flight qualified designs. Ball proposes innovative improvements to the design intended to meet or exceed the requirements for RBI. Some notable features of the architecture are: an instrument design that meets basic interface requirements and resource allocations for mass, power, and volume with positive narrow margins; a comprehensive suite of in-flight calibration devices for on-orbit calibration and spectral response degradation

monitoring; flight qualified detector design; a measurement footprint comparable to the equivalent heritage CERES instrument sample; fully redundant electronics with substantial re-use of flight qualified design and high reliability electronic components; key mechanical design attributes providing redundancy and the ability to perform intercomparisons between channels; and a flight qualified processor for instrument control, with a "medium" level of flight software re-use from prior programs. The second Strength assigned to Ball relating to instrument architecture pertains to detector/sensor assembly characteristics which add capabilities to measure radiance and to monitor and update instrument parameters on orbit.

Earth Radiation Budget Measurement Continuity

Ball received a Weakness because its proposal does not adequately demonstrate that the proposed design meets radiometric performance requirements over the mission life. Ball identifies requirements that are not presently met by the proposed design and proposes methods to reduce non-compliances; however Ball does not adequately demonstrate that these approaches will eliminate the non-compliances in the design.

Ball received two Strengths relating to its approach for a comprehensive end-to-end instrument performance analysis. The first Strength relates to the proposed use of a toolset that provides an effective method for exchanging data and model output. Ball was assigned a second Strength for detailed identification and evaluation of sources of radiometric uncertainty which demonstrates Ball's comprehensive understanding of sources of radiometric uncertainty and the potential impacts to the science.

Ball received a Strength for its comprehensive understanding and effective approach for compatibility of the proposed radiance sample aggregate for recreating an equivalent heritage CERES instrument sample.

Calibration Approach

Ball received four Strengths relating to its approach to calibrating, validating, and verifying the spatial, spectral, and radiometric performance of the instrument. The first Strength was assigned to features of Ball's approach which provide an effective means to cross calibrate and validate instrument performance on orbit and provides an additional degree of redundancy and risk reduction. Ball also received a Strength for its comprehensive suite of in-flight calibration devices that provide multiple independent means to verify and maintain instrument calibration to international standards throughout the mission life. Ball received a third Strength for its comprehensive and rigorous ground calibration approach with metrological traceability to international standards of measure. The fourth Strength pertains to Ball's effective approach for maintaining metrological traceability of the instrument performance to a measurement unit of the International System of Units from ground calibration through mission life.

Reliability

Ball received a Strength for its comprehensive and effective approach for achieving the required instrument operational reliability over the mission lifetime. The approach includes electronics and hardware redundancy, processes for ensuring parts quality and mechanism life testing, which reduces the likelihood of an unrecoverable on-orbit failure.

Space Flight Heritage Hardware and Software
The SEB had no findings in this area.

Technology Maturation
Ball received a Weakness because its proposal does not adequately demonstrate the specific aspects of each technology that requires maturation, how each technology will be matured, and the schedule by which the maturation will occur.

Subfactor 2, Facilities and Equipment

Ball received an adjectival rating of Fair for Subfactor 2.

Facility Adequacy and Availability
Ball received a Significant Weakness because its proposal does not adequately demonstrate the adequacy and availability of the proposed facility for RBI calibration and does not provide an adequate plan, schedule or cost proposal associated with the facility. Furthermore, the proposed costs for this facility and associated equipment appear significantly inadequate and are not fully supported. Additionally, Ball does not adequately assess the risks associated with the calibration facility and operating procedures necessary to perform a comprehensive, rigorous RBI ground calibration campaign to the required levels.

Special Equipment Adequacy and Availability
Ball received a Weakness because the proposal did not demonstrate adequacy and availability of the proposed radiometric sources needed for tests and calibration and did not adequately address sources for performing spectral characterization as required by the RBI Performance Requirements Document (PRD). Ball received another Weakness because the proposal did not adequately describe electrical and mechanical ground support equipment required for critical test activities.

Subfactor 3, Management, Systems Engineering, and Program Assurance

Ball received an adjectival rating of Fair for Subfactor 3.

Compliance with Program Assurance Standards
Ball received a Strength for its proposed full compliance with standards as specified in the Mission Assurance Requirements for fabrication, assembly, and test of spaceflight hardware.

Adequacy of Integration & Test Plan
Ball received a Weakness because its proposal does not demonstrate an effective instrument integration and test approach. For example, a critical test is not adequately described; another test is not in accordance with the test sequence in the RBI PRD; and the proposal does not adequately describe plans for use of the Radiometric Test Model and Engineering Development Unit to reduce technical risk.

Proposed Schedule
Ball received a Significant Weakness because its proposed schedule does not effectively identify tasks and logic supporting instrument subsystem development, test, and integration and does not adequately assess the risk associated with serious concerns expressed by its significant subcontractor about the feasibility of the schedule. Ball's proposed schedule does not clearly identify some critical activities and does not effectively identify the critical path or linkages between key development tasks.

Subfactor 4, Small Business Utilization

Ball received an adjectival rating of Good for Subfactor 4.

The SEB had no findings for this Subfactor.

ITT

ITT received a Mission Suitability score of 812.5. ITT's proposal included Significant Strengths, Strengths, and Weaknesses. There were no Significant Weaknesses. A summary of Mission Suitability findings are set forth below.

Subfactor 1, Understanding the Requirement and Technical Approach (URTA)

ITT received an adjectival rating of Excellent for Subfactor 1.

Instrument Architecture
ITT received a Significant Strength for its viable, highly effective, and comprehensive instrument architecture. The architecture includes a large number of flight proven hardware components and subsystems and a highly innovative instrument design intended to meet or exceed RBI requirements, and approaches for ensuring high reliability. Some notable features of the architecture include: an innovative approach for measuring all three radiometric channels; a comprehensive and effective suite of in-flight calibration devices which lead to a high degree of confidence in the long-term stability of the measurements; an instrument design that meets basic interface requirements and resource allocations with large positive margins; an innovative approach to obtain a measurement footprint comparable to the equivalent heritage CERES instrument sample; flight proven key mechanical design attributes and protective covers which minimize contamination of the instrument during launch and safe mode; fully redundant and flight proven electronics; and a proven instrument flight computer and software, with a high degree of reusable executable code. ITT also received a Strength pertaining to its innovative instrument architecture with detector/sensor assembly characteristics that provide enhanced capabilities such as cross-calibration between channels, redundancy, detector diagnostic capability, and the ability to obtain radiance measurements at finer spatial resolution if desired.

Earth Radiation Budget Measurement Continuity
ITT received a Strength for an effective approach to assessing risk and demonstrating viability of the proposed instrument to meet radiometric performance requirements over the mission life. ITT's proposal demonstrated reduced development risk and cost for key RBI system

technologies through Internal Research and Development (IRAD). ITT received a Strength for its simple yet effective method for recreating an equivalent heritage CERES instrument sample for each measurement channel. ITT received a Weakness because its proposal does not adequately address the radiometric uncertainty attributable to a key element of its design in the proposed instrument end-to-end performance analysis.

Calibration Approach

ITT received a Significant Strength for its highly effective on-orbit shortwave calibration approach, which enables comprehensive on-orbit spectral degradation monitoring and Shortwave and Total Wave channel radiometric calibration. The proposal demonstrated that prototype hardware has been developed and evaluated in laboratory bench top tests on ITT IRAD, reducing development risk and cost. ITT's approach to shortwave calibration enables accurate characterization and minimization of on-orbit changes to instrument response within the short wave portion of the visible spectrum, and minimizes the impact of one of the most significant error sources in earth radiation budget measurements.

ITT received a Significant Strength for its innovative flight-qualified solar calibration design. This approach provides a highly effective means to monitor instrument stability over the mission life.

ITT received a Significant Strength for an innovative and highly effective on-orbit long wave calibration approach. The ITT Infrared Calibration Targets offer a highly accurate thermal/IR target for on-orbit calibration of Total Wave and Longwave radiometric channels. The innovative and highly effective instrument design eliminates spatial and temporal uncertainty within the calibration approach while also providing a cross-calibration capability. The proposed Infrared Calibration Targets provide very high fidelity radiometric sources for infrared calibration and stability monitoring of Total Wave and Longwave channels, while minimizing RBI development cost and risk by leveraging flight validated design.

ITT received a Significant Strength for its highly effective use of additional calibration devices for on-orbit validation. ITT proposes an innovative approach to maintain traceability of in-flight calibration to international standards. The calibration hardware devices, in conjunction with ITT's innovative on-orbit calibration approach, provides multiple independent on-board methods of calibration and verification, which significantly increases the ability of the proposed instrument to meet radiometric performance requirements with traceability to metrological standards over the mission.

ITT received a Strength for its viable and comprehensive ground calibration approach. ITT's proposed approach to verifying the spatial, spectral, temporal, and radiometric performance of the instrument demonstrates a comprehensive understanding of the ground calibration requirements and clearly identifies the test methods that will be used to fully characterize and calibrate RBI with metrological traceability to National Institute of Standards and Technology (NIST) standards.

Reliability
ITT received a Significant Strength for its comprehensive and highly effective approach to achieving the required operational reliability over the mission lifetime. ITT's proposed design leads to a predicted reliability that meets the requirement with significant margin. These design features include fully redundant electronics designed to NASA standards, most of which are flight proven. ITT's highly effective manufacturing quality assurance processes for parts and materials selection provide additional confidence that high quality parts and materials will be used. Together, the proposed design and manufacturing processes provide a highly effective approach to operational reliability, greatly reducing the likelihood of an unrecoverable on-orbit failure over the mission life.

Space Flight Heritage Hardware and Software
ITT received a Strength for its viable and effective approach for use of hardware designs and software having prior space flight validated performance in a similar application to RBI, most of which require minor to no modification for use with RBI. ITT demonstrates an understanding of the scope and technical risks of the modifications and proposes an effective plan and schedule for completing the modifications and flight qualifying the hardware/software.

Technology Maturation
ITT received a Strength for its viable and comprehensive approach and schedule for technical maturation of technologies below TRL-6. ITT's realistic TRL assessments provide confidence in its assessment of development risk and its plans to mature the hardware items identified at readiness levels below TRL-6. The comprehensive plans include tasks and schedules for fabrication, test, integration and system level tests.

Subfactor 2, Facilities and Equipment

ITT received an adjectival rating of Good for Subfactor 2.

Facility Adequacy and Availability
ITT received a Strength for its effective approach to calibration facility adequacy and availability. ITT proposes to use an existing, functional facility that has been successfully used for multiple prior programs with testing needs similar to RBI. The facility requires no modifications for use with RBI and is available for use during the scheduled RBI calibration period. ITT also received a Strength for the proposed comprehensive suite of state-of-the-art facilities needed to successfully fabricate, assemble, integrate, and test RBI. ITT demonstrates the maturity and availability of proposed facilities and processes.

Special Equipment Adequacy and Availability
ITT received a Strength for its proposed use of multiple existing high quality radiometric sources which are available for RBI test and calibration. These sources exist, are well characterized, require minimal modifications for use with RBI, and have been used for many prior calibrations in roles similar to those for RBI. The capabilities of these radiometric sources exceed what is required for RBI. ITT received a Strength for its effective approach to providing special equipment for RBI tests and calibration. ITT proposes to maximize use of existing expensive

equipment, duplicate necessary but inexpensive items to eliminate availability risk, and adapt the design of other items for RBI use.

Subfactor 3, Management, Systems Engineering, and Program Assurance

ITT received an adjectival rating of Good for Subfactor 3.

Compliance with Program Assurance Standards
ITT received a Strength for its high degree of compliance with standards as specified in the Mission Assurance Requirements including suitable rationale supporting a small number of anticipated exception/waivers to required standards. ITT's effective approach to compliance with Mission Assurance standards includes use of personnel who are certified to NASA standards to ensure the quality of assembled hardware meets or exceeds NASA standards.

Adequacy of Integration & Test Plan
ITT received a Strength for its viable and comprehensive instrument integration and test approach for demonstrating instrument end-to-end performance from photons to data product. For example, ITT proposes: integration and test plans based on extensive use of a recent proven test sequence; effective use of subsystem prototypes for reducing technical risk; and effective contamination control practices to minimize molecular contamination.

Proposed Schedule
ITT received a Weakness for proposing to combine two reviews into a single review. The lack of separate reviews minimizes the ability of the Government and Independent Review Panel to verify health, status and readiness of the instrument, plans, procedures, and personnel for transporting the instrument and associated equipment to the satellite integration facility.

Subfactor 4, Small Business Utilization

ITT received an adjectival rating of Good for Subfactor 4.

The SEB had no findings for this Subfactor.

NGAS

NGAS received a Mission Suitability score of 592. NGAS's proposal included Significant Strengths, Strengths, Significant Weaknesses and Weaknesses. A summary of Mission Suitability findings are summarized below.

Subfactor 1, Understanding the Requirements and Technical Approach (URTA)

NGAS received an adjectival rating of Fair for Subfactor 1.

Instrument Architecture
NGAS received a Strength for proposing elements of a viable overall instrument architecture to meet the performance requirements while reducing risk through substantial re-use of flight

proven design elements. Some notable features of the architecture include: flight proven in-flight calibration sources; an instrument design that meets basic interface requirements and resource allocations with positive margins; flight proven telescope designs; a detector that provides maximum data continuity and seamless integration with existing flight proven read-out electronics designs; and flight proven key mechanical design attributes.

NGAS received a Significant Weakness because its instrument electrical/electronic architecture is based upon the use of obsolete critical parts with highly limited availability. The use of these parts does not meet the EEE parts requirements specified in the RBI Statement of Work (SOW-3.7-01) and the RBI Project parts selection requirements document EEE-INST-002, specifically 6.7.3-Part Obsolescence. NGAS does not adequately assess the risk and the probability and impact of technical, programmatic and/or cost risk to mission success that may result from the proposed approach of using these obsolete parts. The proposal does not demonstrate the viability of these parts as the proposal does not adequately describe the present condition of the parts, part traceability, storage history, or the recertification plan. There is a significant risk that the minimal number of parts available will not be sufficient to perform the recertification activities necessary throughout the contract period of performance. The small number of available parts, combined with the difficulty of obtaining additional flight qualified parts, results in a significant risk that a major redesign of the electrical/electronics subsystems architecture might be required to deliver all potential units as specified in the RFP with potentially severe cost and schedule impacts.

NGAS received a Weakness because its instrument electrical/electronic subsystems architecture is based on the use of parts that are subject to EEE parts upscreening, which has inherent cost and technical risks associated with the part testing, the potential inability of the tested part to meet EEE-INST-002 requirements, and the resultant need to upscreen additional part lots until parts that meet performance requirements are identified. NGAS does not adequately assess the probability and impact of technical, programmatic and/or cost risk to mission success that may result from its proposed approach of using upscreened parts.

NGAS received a Strength for the effectiveness and viability of its proposed detector/sensor architecture, with the viability of the detector technology demonstrated through IRAD tests in RBI-like mechanical and electrical configurations at representative flight temperatures and in vacuum. The NGAS approach provides an effective equivalent CERES heritage instrument sample and maximum data continuity with the heritage CERES data.

<u>Earth Radiation Budget Measurement Continuity</u>
NGAS received a Strength for its assessment of polarization effects, and inherent polarization insensitivity of the proposed telescope design, which demonstrates a comprehensive understanding of the potential impacts to the science. NGAS's proposed design features to minimize polarization sensitivity ensure that the instrument provides the same high accuracy radiometric measurement irrespective of the polarization of the measured scene.

NGAS received a Significant Strength for its viable and highly effective proposed approach to ensure near seamless Earth Radiation Budget measurement continuity. The proposal demonstrates complete compatibility of the proposed radiance sample with the heritage CERES

radiance sample; continuity of proven CERES data handling and post processing methodologies necessary to achieve and validate radiometric performance requirements; and an end-to-end performance analysis that has been developed and refined through extensive prior CERES instrument experience.

NGAS received a Strength for making effective use of CERES flight data in its proposed end-to-end performance analysis and assumptions. NGAS utilizes measured performance of heritage CERES instruments to characterize the performance of the RBI instrument, including stability estimates based on flight experience, which validates elements of the RBI performance analysis, reducing unknowns and risk.

NGAS received a Weakness because the proposal does not adequately account for spectral degradation in the end-to-end performance analyses, increasing the risk that the instrument will not meet radiometric performance requirements over the mission life. The performance analysis does not adequately indicate the effects of uncertainties associated with on-orbit spectral degradation, which is known to be a significant error source.

NGAS received a Strength for its use of IRAD to reduce the development risk for key components of the proposed RBI design. This effective approach reduces technical risk and cost associated with development of these key components.

Calibration Approach

NGAS received a Strength for its viable approach that includes in-flight calibration devices for detection and measurement of on-orbit spectral response degradation. These devices, which provide a means to assess instrument on-orbit spectral response degradation and reduce its impact to RBI data products, increase the likelihood that the instrument will meet radiometric performance requirements throughout the mission life. However, NGAS also received a Weakness because its proposal does not adequately address how these devices will be used to characterize and correct for on-orbit spectral response changes.

NGAS received a Significant Strength for its highly effective and comprehensive ground calibration approach, including metrological traceability of the instrument performance to NIST standards. NGAS's approach of using flight-proven ground calibration techniques, detailed procedures, and well-characterized radiometric sources provides an effective means to achieve RBI ground calibration within required uncertainties and reduces risks and costs that would otherwise be incurred if development of new calibration techniques and procedures were required.

NGAS received a Strength for its proposed approach for effective interval and duration of system calibration that maintains a high level of operational availability over the mission life. All routine on-orbit calibration procedures are well defined and can be performed while maintaining significant margin for meeting the on-orbit availability requirement. This provides confidence that the on-orbit availability requirement can be met and offers availability margin that could be used for additional calibration/validation activities.

Reliability
The SEB assigned a Weakness for NGAS's approach to achieving the required instrument operational reliability over the mission lifetime. NGAS utilizes a reliability analysis approach based on an invalid assumption that is in conflict with RBI requirements regarding measurements of Shortwave, Longwave and Total Wave channels. NGAS's reliability analysis does not adequately demonstrate that the operational reliability requirement will be met in accordance with RBI requirements.

Space Flight Heritage Hardware and Software
NGAS received a Weakness for not sufficiently assessing the risks of manufacturing a proposed heritage design for a particular hardware item to satisfy RBI requirements given the known historical challenges of manufacturing this item, and the long period of time that has passed since the item has been successfully manufactured.

NGAS received a Significant Strength for its viable and highly effective plan to reutilize select heritage hardware components with prior flight validated performance in an application and environment nearly identical to that of RBI. With the exception of the proposed electronics design, NGAS effectively utilizes flight-proven instrument design elements, with minor modifications. The scope and technical risk of proposed design modifications to certain hardware are low-to-moderate, and NGAS proposes an effective plan and schedule to achieve these modifications.

Technology Maturation
The SEB had no findings in this area.

Subfactor 2, Facilities and Equipment

NGAS received an adjectival rating of Excellent for Subfactor 2.

Facility Adequacy and Availability
NGAS received two Significant Strengths for its highly effective approach to facility adequacy and availability. First, NGAS received a Significant Strength for its proposal to use established dedicated assembly, test and calibration facilities that provide exclusive access so that scheduling conflicts with other programs will not impact RBI. NGAS's proposed facilities require no modifications. NGAS proposes that significant subcontractors will also use the same facilities used for previous fabrication, assembly, and testing. Second, NGAS received a Significant Strength for its highly effective approach to provide exclusive availability to RBI of an existing calibration chamber that was used for CERES instruments, is already configured to support RBI, and requires only minor modifications and upgrades. NGAS demonstrates the highly effective performance of the proposed facility and its operating procedures and demonstrates its commitment to maintaining the calibration chamber as a state-of-the-art, world class facility.

Special Equipment Adequacy and Availability
NGAS received a Significant Strength for proposing fully dedicated radiometric sources and special test equipment required for RBI calibration. NGAS proposes to use the existing, high quality, proven, well characterized radiometric sources and special test equipment for calibrating

RBI. Operating procedures for all radiometric sources have been developed and refined. NGAS proposes viable refurbishment activities for one item of equipment to achieve the required level of performance.

NGAS received a Strength for its effective approach to providing special equipment for RBI tests and calibration. NGAS proposes extensive reuse of heritage designs for Electrical and Mechanical Ground Support Equipment and Electrical Test Sets needed for RBI development, test, and calibration activities.

Subfactor 3, Management, Systems Engineering, and Program Assurance

NGAS received an adjectival rating of Good for Subfactor 3.

Compliance with Program Assurance Standards
NGAS received a Weakness because it does not demonstrate the extent of compliance with standards as specified in the Mission Assurance Requirements and does not provide adequate rationale supporting anticipated exceptions/waivers to required standards.

Adequacy of Integration & Test Plan
NGAS received a Strength for elements of an effective and proven instrument integration and test approach for demonstrating instrument end-to-end performance from photons to data product. NGAS proposes a detailed instrument integration and test sequence based on successful related prior work, with proven assembly procedures and work instructions, and highly effective and refined test and calibration procedures, which reduces technical risk.

NGAS received a Weakness because the proposal does not adequately address how the Radiometric Test Model and the Engineering Development Unit reduce technical risk prior to implementation of design concepts at higher levels of assembly. The NGAS approach does not meet RFP requirements.

Proposed Schedule
NGAS received a Strength for its comprehensive schedule which meets the delivery requirement with sufficient margin increasing confidence that schedule adjustments can be accommodated. The proposed schedule is based on a well-defined work flow with a clearly identified critical path, leading to a high fidelity, high confidence schedule. However, NGAS also received a Weakness for proposing to combine two reviews into a single review. The lack of separate reviews minimizes the ability of the Government and Independent Review Panel to verify health, status and readiness of the instrument, plans, procedures, and personnel for transporting the instrument and associated equipment to the satellite integration facility.

Subfactor 4, Small Business Utilization

NGAS received an adjectival rating of Excellent for Subfactor 4.

NGAS received a Significant Strength for its challenging yet realistic goals for involvement of small businesses in RBI development and demonstrated commitment to enlist high technology

small business subcontractors. NGAS uses established procedures for small business outreach, assistance, and participation to meet proposed goals. The small business goals are challenging since the small business opportunities for RBI are constrained by the technical complexity of the instrument. NGAS demonstrates its commitment to small business by specifically naming several small business suppliers for RBI, some of which are identified as high technology small businesses.

Factor 2, Cost/Price

The SEB and Cost/Price Analyst performed an analysis of the proposed prices to assess price reasonableness and cost realism; and to determine whether the proposed cost elements are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the unique methods of performance and material described in the offerors' technical proposals. Based on the analysis conducted by the SEB and Cost/Price Analyst, the Contracting Officer has determined that: the reasonableness of the Ball proposed price cannot be determined because of serious concerns with the inadequacy of the data provided; the proposed price for ITT is fair and reasonable for its proposed approach; the NGAS proposed price is fair and reasonable for its proposed approach, however, the NGAS approach requires changes with associated cost increases to meet RFP requirements. In addition to probable cost adjustments, the FAR mandates that two adjustments be made to the evaluated prices, one to Ball to account for a foreign end item and one to ITT to eliminate a competitive advantage resulting from proposed use of Government Property. The terms "probable/evaluated cost" and "probable/evaluated price" account for both probable cost adjustments and these FAR mandated adjustments. When the terms "probable cost" and "probable price" are used in this document, they are intended to include both of these types of adjustments.

A summary of the proposed and probable/evaluated price for each offeror is shown in the table below:

Offeror	Proposed Price Ranking (Lowest to Highest)	Probable/Evaluated Price Ranking (Lowest to Highest)	% Above Lowest Probable/Evaluated Price
Ball	2	2	10.80%
ITT	3	3	22.00%
NGAS	1	1	0%
Gov't Est.	$123M		

The difference between the lowest and highest proposed price was approximately 31% prior to the probable/evaluated cost adjustments.

Ball

Based on the cost realism analysis of Ball's cost proposal, a cost realism adjustment was made to increase the proposed costs for the calibration facility and equipment. This cost realism adjustment is consistent with a Mission Suitability Significant Weakness which found that the

costs for this facility and equipment appear significantly inadequate and not fully supported. In addition, a FAR mandated adjustment of 6% was applied to the Ball probable price pursuant to the Buy American Act to account for a foreign end item. However, the reasonableness of the Ball price could not be determined because the Ball cost proposal exhibits an overall lack of clarity, notable discrepancies, and a significant lack of information. In addition, serious concerns regarding the schedule expressed by a significant subcontractor could result in several additional months of schedule, with possible increased costs. No probable cost adjustment was made for the significant subcontractor schedule concerns due to the uncertainties and lack of information related to this issue in Ball's cost proposal.

ITT

Cost realism adjustments were made to the ITT costs as follows: decreased costs to reflect total material costs supported by a Basis of Estimate; and decreased costs to adjust labor escalation and correct a service rate for a subcontractor. In addition, a FAR mandated increase in the probable/evaluated cost was made to add a "rental equivalent" cost adjustment as required by FAR 45.202 to remove the competitive advantage for proposed use of Government Property. There are no concerns with the quality of the ITT cost proposal.

NGAS

Cost Realism adjustments were made to the NGAS costs as follows: decreased costs for labor and overhead rate adjustments based on DCMA Forward Pricing Rate Recommendations; increased hours and costs in certain technical areas to account for overly optimistic estimates; and increased costs associated with adjusting the schedule for fabricating the Engineering Development Unit to meet RFP requirements. There are no concerns with the quality of the NGAS cost proposal. However, the Significant Weaknesses found in the NGAS technical proposal result in significant cost risk since correcting them would require a significant redesign to meet RFP requirements. No probable cost adjustment was made for this significant redesign, as this would represent a fundamental change to the NGAS design which is beyond the scope of a cost realism analysis.

Factor 3, Past Performance

The SEB evaluated the offerors' past performance records in accordance with RFP Provision M.2 of the RFP. The following confidence ratings were assigned in accordance with NFS 1815.305.

Offeror	Pertinence Rating (size/content/complexity)	Performance Rating	Level of Confidence
Ball	Pertinent (P/HP/P)	Very Effective	Moderate
ITT	Very Highly Pertinent (VHP/VHP/VHP)	Exceptional	Very High
NGAS	Very Highly Pertinent (VHP/VHP/VHP)	Very Effective	High

VHP = Very Highly Pertinent	P = Pertinent	NP = Not Pertinent
HP = Highly Pertinent	SP = Somewhat Pertinent	

Ball

The SEB assigned a Moderate Level of Confidence rating to Factor 3, Past Performance, for the Ball team.

Ball was found to have Highly Pertinent to Very Highly Pertinent experience in contracts of similar content as related to RBI, in the technical areas specified in the Past Performance Questionnaire (PPQ). However, a significant subcontractor was found to have only Pertinent experience in two critical content areas which the subcontractor was proposed to perform. Ball was found to have Very Highly Pertinent experience in complexity and size as related to RBI. However, a significant subcontractor proposed to perform a substantial amount of the RBI effort was found to have Pertinent experience in complexity and Somewhat Pertinent experience in size, as RBI is both more complex in several important areas and much larger in dollar value than the subcontractor's references. Given the Ball and significant subcontractor assessments, and the substantial proposed role of the significant subcontractor, the Ball team was found to have Pertinent experience.

The Ball team was found to have Very Effective past performance. Considering the PPQ's, communications with references, CPARS, and award fee reports, Ball's technical performance ranged from Very Good to Excellent, with the great majority of ratings being Excellent. Using the same sources, Ball's general performance ranged from Very Good to Excellent, with most of the ratings being Excellent. The performance record showed some significant overruns in the area of cost. The significant subcontractor's PPQ technical performance ratings ranged from Satisfactory to Very Good, with most of the ratings being Very Good. The significant subcontractor's PPQ general performance ratings ranged from Satisfactory to Excellent, with the preponderance of the ratings being Very Good. Given the Ball and significant subcontractor assessments, and the substantial proposed role of the subcontractor, the Ball team was found to have Very Effective past performance.

According to NFS 1815.305 and the SEB's Pertinent and Very Effective past performance assessments, Ball was assigned a Moderate Level of Confidence rating for Factor 3.

ITT

The SEB assigned a Very High Level of Confidence rating to Factor 3, Past Performance, for the ITT team.

The ITT team was found to have Very Highly Pertinent experience in contracts of similar content as related to RBI, in all but one technical area specified in the PPQ, and Highly Pertinent experience in the remaining area. The ITT team was also found to have Very Highly Pertinent experience in complexity and size as related to RBI.

The ITT team was found to have Exceptional past performance. Considering the PPQ's, communications with references, CPARS, and award fee reports, ITT's technical and general performance ranged from Very Good to Excellent, with the preponderance of ratings being Excellent. For cost performance, no significant overruns were found. The significant subcontractor's technical and general performance ratings on the PPQ's ranged from Satisfactory to Excellent, with most of the ratings being Very Good. Given the ITT and significant subcontractor assessments, and the proposed distribution of work, the ITT team was found to have Exceptional past performance.

According to NFS 1815.305 and the SEB's Very Highly Pertinent and Exceptional past performance assessments, ITT was assigned a Very High Level of Confidence rating for Factor 3.

NGAS

The SEB assigned a High Level of Confidence rating to Factor 3, Past Performance, for the NGAS team.

The NGAS team was found to have Very Highly Pertinent experience in contracts of similar content as related to RBI, in all but one technical area specified in the PPQ, and Highly Pertinent experience in the remaining area. The NGAS team was also found to have Very Highly Pertinent experience in complexity and size as related to RBI.

The NGAS team was found to have Very Effective past performance. Considering the PPQ's, communications with references, CPARS, and award fee reports, NGAS technical performance ranged from Satisfactory to Excellent, with the preponderance of ratings being Excellent. Using the same sources, NGAS's general performance ranged from Marginal to Excellent, with the preponderance of ratings being Very Good. For cost performance, no significant overruns were found. The significant subcontractor's technical performance ranged from Satisfactory to Excellent on the PPQ's, with an approximately equal number of Excellent and Very Good ratings. The significant subcontractor's PPQ general performance ratings ranged from Satisfactory to Excellent. Given the NGAS and significant subcontractor assessments, and the proposed distribution of work, the NGAS team was found to have Very Effective past performance.

According to NFS 1815.305 and the SEB's Very Highly Pertinent and Very Effective past performance assessments, NGAS was assigned a High Level of Confidence rating for Factor 3.

Basis for Selection

I am convinced that the SEB conducted a thorough, fair, and objective evaluation of all proposals in accordance with the established evaluation criteria in the RFP.

For Mission Suitability Subfactor 1, Understanding the Requirements and Technical Approach, I note that:

Ball's proposal received no Significant Strengths or Significant Weaknesses but received numerous Strengths outweighing its Weaknesses and was rated as Good by the SEB. I concur with the SEB's findings.

ITT's proposal received six Significant Strengths and no Significant Weaknesses and was rated as Excellent by the SEB. The Significant Strengths were for a viable, highly effective, and comprehensive instrument architecture that included several highly innovative features; the highly effective approaches for on-orbit shortwave, solar, and longwave calibrations; the innovative approach to maintain traceability of in-flight calibration to NIST standards; and the comprehensive and highly effective approach to achieving the required operational reliability over the mission lifetime. I concur with the SEB's findings.

NGAS's proposal received three Significant Strengths and one Significant Weakness and was rated as Fair by the SEB. The Significant Strengths were for a viable and highly effective approach to ensure near seamless Earth Radiation Budget measurement continuity; a highly effective and comprehensive ground calibration approach; and the use of select heritage hardware components with prior flight validated performance. The Significant Weakness is NGAS's proposed use of obsolete critical parts in its instrument electrical/electronic architecture, which does not meet RBI requirements. Additionally, the highly limited availability of those parts and the failure to demonstrate viability of the parts increases the risk of this approach. I concur with these SEB findings with one exception. While I agree with the Weakness assigned by the SEB to NGAS in Subfactor 1 regarding NGAS's approach to achieving the required instrument operational reliability over the mission lifetime, it is my judgment that this is a Significant Weakness. NGAS's reliability analysis depended on an invalid assumption to meet the RFP reliability design requirements. Consequently, NGAS does not adequately demonstrate that the proposed design will meet the operational reliability requirements of the RFP. In my judgment, these two Significant Weaknesses significantly detract from NGAS's proposal and are not offset by the Significant Strengths. These two Significant Weaknesses appreciably increase the risk of unsuccessful contract performance and in my judgment would require a major proposal revision to correct, with potentially severe cost and schedule impacts.

It is my judgment that ITT has an appreciably superior proposal for Subfactor 1, which is weighted at 50% of the available points for the Mission Suitability Factor.

For Mission Suitability Subfactor 2, Facilities and Equipment, I note that:

Ball's proposal received one Significant Weakness and was rated as Fair by the SEB. This Significant Weakness was related to the adequacy and availability of the calibration facility. I concur with the SEB's findings.

ITT's proposal received no Significant Strengths or Significant Weaknesses. ITT received several Strengths and no Weaknesses and was rated as Good by the SEB. I concur with the SEB's findings.

NGAS's proposal received three Significant Strengths and was rated as Excellent by the SEB. These Significant Strengths were for use of established, dedicated assembly, test and calibration facilities; an existing, already configured calibration facility; and fully dedicated, high quality radiometric sources and special test equipment. I concur with the SEB's findings.

It is my judgment that NGAS has an appreciably superior proposal for Subfactor 2, which is weighted at 15% of the available points for the Mission Suitability Factor.

For Subfactor 3, Management, Systems Engineering, and Program Assurance, I note:

Ball's proposal received one Significant Weakness and was rated as Fair by the SEB. The Significant Weakness was associated with the inadequacy of Ball's proposed schedule. I concur with the SEB's findings.

The proposals of both ITT and NGAS received no Significant Strengths or Significant Weaknesses and both were rated as Good by the SEB. In order to determine which company offered the superior proposal, I considered the Strengths and Weaknesses assigned to both ITT and NGAS for Subfactor 3. Both proposals received a Strength for features of their instrument integration and test approach and both received a Weakness for combining two reviews into a single review. ITT's proposal received a Strength for a high degree of compliance with standards as specified in the Mission Assurance requirements and NGAS's proposal received a Weakness in this area. Finally, NGAS's proposal received a Strength for a comprehensive schedule covering the period from award to Bench Acceptance Testing and it received a Weakness relative to reducing technical risk prior to implementation of design concepts at higher levels of assembly. I concur with the SEB's findings.

It is my judgment that ITT has the superior proposal for Subfactor 3, which is weighted at 25% of the available points for the Mission Suitability Factor.

For Subfactor 4, Small Business Utilization, I note that:

The proposals for Ball and ITT received no findings and were both rated as Good by the SEB because the SEB found their plans to be acceptable. I concur with the SEB's findings.

NGAS's proposal received a Significant Strength and was rated as Excellent by the SEB. The Significant Strength was for NGAS's challenging yet realistic Small Business Utilization Plan. I concur with the SEB's findings.

It is my judgment that NGAS has the appreciably superior proposal for Subfactor 4, which is weighted at 10% of the available points for the Mission Suitability Factor.

Overall, for Mission Suitability, I conclude that ITT provides an appreciably superior proposal compared to NGAS and Ball. The superior value of the ITT proposal is demonstrated by (1) ITT's numerous Significant Strengths throughout Subfactor 1, the most highly weighted Subfactor, (2) ITT's lack of any Significant Weaknesses and very few Weaknesses, (3) NGAS's Significant Weaknesses under Subfactor 1, which outbalance its Significant Strengths, arise from approaches that do not fully meet contract requirements, and present a significant risk to contract performance and (4) Ball's Significant Weaknesses and lack of Significant Strengths. Additionally, ITT has the superior proposal in Subfactors 1 and 3, the two highest weighted Subfactors, representing 75% of the total Mission Suitability points; as compared to NGAS which has the superior proposal in Subfactors 2 and 4, the two lowest weighted Subfactors, representing only 25% of the Mission Suitability points; and Ball which does not have the superior proposal for any of the Subfactors.

Regarding Factor 2, Cost/Price, all three offerors' proposed and probable prices are below the Government estimate. I note that the ITT probable price is approximately 22% higher, and the Ball probable price is 10.8% higher, than the NGAS probable price. As noted above, the Ball cost proposal has discrepancies, a lack of clarity, and a serious lack of information which, together with its Significant Weakness regarding schedule, prevents an assessment of price reasonableness and therefore makes the cost difference uncertain. Further, it is my judgment that the correction of the NGAS Significant Weaknesses would significantly increase its costs and reduce the cost difference between the NGAS and the ITT probable prices to significantly less than 22%.

Regarding Factor 3, Past Performance, I note that ITT and NGAS received the highest Pertinence rating of Very Highly Pertinent, compared to Ball with a Pertinent rating. I also note that ITT received an Exceptional rating for performance as compared to Very Effective for both NGAS and Ball. In summary, ITT received the highest Level of Confidence rating of Very High, compared to NGAS's High rating and Ball's Moderate rating.

SOURCE SELECTION DECISION

In making the selection decision, I conducted an integrated assessment of each proposal against all Evaluation Factors and Subfactors in the RFP and considered the relative weights of the Evaluation Factors. The RFP stated: "Overall, in the selection of a Contractor for contract award, Mission Suitability, Cost/Price, and Past Performance, will be of approximately equal importance. Mission Suitability and Past Performance, when combined, are significantly more important than Cost/Price."

The SEB assessed Ball's Mission Suitability evaluation as substantially lower than ITT's and slightly lower than NGAS's Mission Suitability evaluation. Ball also received a Moderate Level of Confidence rating for Past Performance which was the lowest Past Performance rating assigned among the offerors. I concur with the SEB's evaluation of Ball's proposal. Ball's probable price is the second lowest of the three offerors. I have serious concerns with the probable price because the cost proposals of Ball and its significant subcontractor lack clarity, lack supporting data, and contain discrepancies. Therefore, I conclude Ball's proposal does not offer the best value to the Government.

The SEB assessed NGAS's Mission Suitability evaluation as substantially lower than ITT's. NGAS received a Level of Confidence rating of High for Past Performance, one level below ITT's rating. With the exception of the one NGAS Weakness that I deem a Significant Weakness, I concur with the SEB's evaluation of NGAS's proposal. Given that NGAS has the lowest probable price, the second highest Past Performance rating, and the second highest Mission Suitability evaluation, I considered whether the lower probable price is worth the lower Past Performance and Mission Suitability ratings. In this case, I find that the lower probable price is not worth the trade-off because NGAS's Significant Weaknesses pose too much risk for the possible cost savings. In addition, the correction of these Significant Weaknesses would require a substantial revision of the instrument architecture, and potentially severe cost and schedule impacts. Consequently, the lower probable price does not justify accepting the lower Mission Suitability and Past Performance ratings. Therefore, I conclude NGAS's proposal does not offer the best value to the Government.

The SEB assessed ITT's Mission Suitability evaluation as appreciably superior compared to the Mission Suitability evaluations of both Ball and NGAS. ITT received a Very High Level of Confidence rating for Past Performance which was the highest Past Performance rating assigned and the highest possible rating. I concur with the SEB's evaluation of ITT's proposal. While ITT's probable price is 22% higher than the lowest probable price, I have high confidence the work can be performed for the proposed price because the ITT proposal has no Significant Weaknesses that need to be corrected and the cost proposal is complete and accurate, providing traceability consistent with the technical proposal. Further, for the reasons noted above, I do not have confidence that either Ball or NGAS can provide an acceptable instrument for the prices they have proposed. ITT offers a Radiation Budget Instrument that meets or exceeds all Government requirements and offers a highly innovative instrument architecture with many flight proven design features. It is my judgment that the significant value offered by ITT through its appreciably superior Mission Suitability proposal and the highest Level of Confidence rating for Past Performance merits ITT's higher probable price. Consequently, I conclude that ITT's proposal provides the best value to the Government.

Accordingly, I hereby select ITT Space Systems, LLC, a subsidiary of Exelis, Inc. for award of the RBI contract.

Stephen G. Jurczyk
Source Selection Authority