

**BEFORE THE GOVERNMENT ACCOUNTABILITY OFFICE**

	)	
	)	GAO Protest Nos. B-311344
	)	B-311344.3
	)	B-311344.4
	)	B-311344.6
	)	B-311344.7
Protests of:	)	B-311344.8
The Boeing Company	)	B-311344.10
RFP No. FA8625-07-R-6470	)	B-311344.11

**AGENCY POST HEARING BRIEF**  
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[REDACTED]

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## AIR FORCE POST HEARING BRIEF

### I. INTRODUCTION

The Air Force respectfully submits its Post Hearing Brief. The brief specifically responds to Boeing's Comments to the Agency Report and the hearing conducted in Washington, DC, from May 5, 2008 to May 9, 2008. The brief responds where necessary for completeness to the initial and seven supplemental protests filed by Boeing.

The Air Force carefully planned the KC-X competition as a capabilities-based acquisition. The Air Force solicited industry comments on the acquisition strategy via a request for information and rigorous development of draft requests for proposals. The extensive administrative record for this procurement clearly documents that the Air Force conducted a transparent and unbiased procurement, carefully followed the evaluation criteria stated in the solicitation and made a reasoned integrated source selection decision. The testimony provided by Air Force witnesses on issues of particular interest to the GAO confirms this. Boeing proffered no witnesses at the hearing.

### II. STATEMENT OF CASE (PROCEDURAL SUMMARY)

On January 30, 2007, the Air Force issued the KC-X Request for Proposals (RFP). On February 29, 2008, the Air Force awarded the KC-45 contract to NG.

On March 7, 2008, the Air Force debriefed Boeing.

On March 11, 2008, Boeing filed its initial protest (B-311344).

[REDACTED]

Boeing supplemented its initial protest on March 17, 2008 (First (B-311344.3)), March 24, 2008 (Second (B-311344.4)), March 31, 2008 (Third (B-311344.6)), April 3, 2008 (Fourth (B-311344.7)), April 7, 2008 (Fifth (B-311344.8)), April 14, 2008 (Sixth (B-311344.10)), and April 16, 2008 (Seventh (B-311344.11)).

On April 16, 2008, the Air Force submitted its Agency Report consisting of the Agency Memorandum of Law and Contracting Officer's Statements of Fact responding to the initial protest and first five supplemental protests.

On April 17, 2008, via electronic mail, the GAO authorized the Air Force to file a Supplemental Memorandum of Law and corresponding Contracting Officer's Statements of Fact responding to Boeing's Sixth and Seventh Supplemental Protests.

On April 23, 2008, the Air Force submitted its Supplemental Memorandum of Law and Contracting Officer's Statements of Fact responding to Boeing's Sixth and Seventh Supplemental Protests.

On April 25, 2008, Boeing and NG submitted their comments on the Agency Report, as supplemented.

On April 29, 2008, the GAO conducted a pre-hearing teleconference and issued a "CONFIRMATION OF HEARING" outlining the issues on which the GAO wished testimony.

From May 5, 2008, to May 9, 2008, the GAO conducted a hearing in Washington, DC, addressing the issues raised in the April 29, 2008, "CONFIRMATION OF HEARING" and other matters as deemed appropriate. The Air Force called 11 witnesses. Those witnesses were cross-examined by counsel for Boeing. Counsel for NG asked questions of witnesses as did the GAO hearing officer.

### **III. ARGUMENT**

The Air Force performed this source selection in strict compliance with the request for proposals (RFP) and the applicable statutory prescriptions and regulatory guidance. The KC-X RFP contemplated a capabilities-based best value award. Section M, paragraph 2.1 established the evaluation factors and subfactors used to evaluate each proposal received. The



GAO will not substitute its evaluation for that of the agency, so long as that evaluation is reasonable. As explained below, in the agency report as supplemented, and through testimony presented to the GAO, Boeing failed to meet its burden in this regard.<sup>1</sup>

**A. Air Force Properly Evaluated Mission Capability (Factor 1)**

After performing an integrated assessment of both offers, the SSA determined NG's proposal better met the requirements evaluated by the Mission Capability Factor based not simply on a comparison of the color ratings or on a totaling of strengths and weaknesses, but on a qualitative evaluation of the strengths and weaknesses assigned to both proposals. Based on this reasonable discussion and assessment of relative advantages and disadvantages associated with the specific content of Boeing's and NG's proposals, GAO should find that mere disagreements with the actual color ratings and use of reasoned discriminators were inconsequential, given that they do not affect the reasonableness of the judgments made in the source selection decision. The record clearly demonstrates that the SSET, the SSAC, and the SSA considered all of the information available, and issued a well-reasoned and rational SSET report, SSAC Proposal Analysis Report, and source selection decision.<sup>2</sup>

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<sup>1</sup> GAO has consistently held that a "contracting agency has the discretion to determine its needs and the best method to accommodate them." General Electrodynamics Corp., B-298698; B-298698.2, Nov. 27, 2006, 2006 CPD ¶ 180 at 3. Disagreements with the Air Force's requirements, its statements of those requirements, or its evaluations of each proposal in response to these requirements does not make the Air Force's source selection unreasonable. GAO has consistently required that the Agency, the Air Force, clearly advise the offerors, Boeing and Northrop Grumman, of the bases upon which their proposals would be evaluated in all respects. Omniplex World Servs. Corp., B-290996.2, Jan. 27, 2003, 2003 CPD ¶ 7 at 5 (citing H.J. Group Ventures, Inc., B-246139, Feb. 19, 1992, 92-1 CPD ¶ 203 at 4 "It is fundamental that offerors must be advised of the bases upon which their proposals will be evaluated."). GAO's review is limited to determining whether the evaluation was reasonable and consistent with the terms of the solicitation and applicable statutes and regulations. United Def., LP, B-286925.3 et al., Apr. 9, 2001, 2001 CPD ¶ 75 at 10-11.

<sup>2</sup> GAO has held:

[W]henver equal factors are considered, the fact that one is chosen as more valuable does not mean that the relative weights of the evaluation factors have been changed or that one has been abandoned. It simply means that one has become the discriminator between competing proposals. Calspan Corp., B-258441, Jan. 19, 1995, 95-1 CPD ¶ 28 at 14.



# **1. The Air Force Properly Evaluated Key System Requirements (Subfactor 1.1)**

Subfactor 1.1, Key System Requirements, within the Mission Capability Factor addressed SRD requirements. RFP, Section M stated: “the Government will evaluate the proposal to determine that the offeror understands and has substantiated the ability to meet the requirements delineated in the SRD . . . All commitments to address at some level, meet, or exceed SRD requirements must be specifically reflected in the offeror’s proposed system and aircraft specifications.” AR Tab 278, Conformed RFP, § M.2.2.1; App. 278(d), p. 3. In the RFP, SRD, Paragraph 1.1 stated:

Minimum performance/capability requirements are identified as key performance parameters (KPP) thresholds. All other threshold/requirements (in the following descending priority order: key system attributes (KSA) thresholds, thresholds, other requirements) and objectives are part of the trade space the bidder can use to define the best value system in the proposed Systems Specification. For the purposes of this SRD the term “shall” is only mandatory for the KPP thresholds.

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Keane Fed. Sys., Inc., B-280595, Oct. 23, 1998, 98-2 CPD ¶ 132 at 16. The GAO reached a similar conclusion in the context of point-scored evaluation criteria:

When technical proposals are point-scored, the closeness of the scores does not necessarily indicate that the proposals are essentially equal. Deborah Bass Assocs., B-257958, Nov. 9, 1994, 94-2 CPD ¶ 180 at 4; Moorman's Travel Serv., Inc.—Recon., B-219728.2, Dec. 10, 1985, 85-2 CPD ¶ 643 at 7 (proposals were not considered equal despite difference of only .5 points on a 100-point scale). In other words, we do not rely on a mechanistic view of the numbers themselves. Deborah Bass Assocs., *supra*. Rather, point scores are only guides to intelligent decision-making by source selection officials. Beyond the mere point scores, the real issue is whether the competing proposals offer differing levels of technical merit, a question that is essentially a matter for the judgment of the agency evaluators. *Id.* The rationale for this judgment must be documented in sufficient detail to show that it is not arbitrary and that there was a reasonable basis for the selection decision. Management Tech., Inc., B-257269.2, Nov. 8, 1994, 95-1 CPD ¶ 248 at 6-7.

R&D Dynamics Corporation, B-285979.3, Dec. 11, 2000, 2000 CPD ¶ 201 at 4-5; *see also* Smiths Detection, Inc., B-298838, B-298838.2, Dec. 22, 2006, 2007 CPD ¶ 5 at 5-6 (Evaluators reasonably based ratings on the “totality of the approach” of each offeror rather than the number of strengths, deficiencies, or weaknesses; also, ratings “are not binding on the SSA, who has discretion to determine the weight to accord them in making an award decision”).



AR Tab 278, Conformed RFP, SRD ¶ 1.1; App. 278(a), p. 1.

Therefore, SRD requirements maintained the following descending order of relative importance: Key Performance Parameters (KPPs), Key System Attributes (KSAs), and all other non-KPP/KSA requirements. AR Tab 37, Pre-Final Proposal Revision (Pre-FPR) Briefing to the SSA; App. 37, pp. 16, 18. Offerors were required to meet all KPP Thresholds. All SRD requirements that were not KPP Thresholds were desired, but were considered part of the offeror's design trade space.

Each offeror's proposed capabilities and approaches were then evaluated against the SRD requirements, again in the following descending order of relative importance: KPPs, KSAs, and all other non-KPP/KSA requirements. Consistent with Section M of the RFP, the SSET gave additional consideration if the offeror proposed to meet (or exceed if the requirement had an objective) the SRD threshold or requirement, depending on substantiating rationale.<sup>3</sup> AR Tab 55; App. 55(a), p. 4. Section M permitted the assignment of a strength whenever an SRD requirement was exceeded, as more specifically defined in Section M, paragraphs 2.2.1.1 a-d, and explicitly for paragraph 2.2.1.1.a, whenever a KPP Threshold was exceeded up to the KPP Objective level. AR Tab 278, Conformed RFP; App. 278(d), pp. 3-4. Thus in the RFP, the Air Force advised Boeing and NG of the bases upon which their proposals would be evaluated in all respects and specifically as to fuel offload.<sup>4</sup>

**a. The Air Force Properly Evaluated Aerial Refueling**

**(1) The Air Force Properly Evaluated Proposals As To Fuel Offload At Range**

In its Comments to the Agency Report, Boeing adds two twists to the arguments previously raised in its original protest as supplemented. In response to the Air Force's position, as supported by the record, that the fuel offload at range requirement was unbounded, Boeing

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<sup>3</sup> However, in the area of Other Systems Requirements a collective assessment of the potential benefit was made.

<sup>4</sup> Omniplex World Servs. Corp., B-290996.2, Jan. 27, 2003, 2003 CPD ¶ 7 at 5 (citing H.J. Group Ventures, Inc., B-246139, Feb. 19, 1992, 92-1 CPD ¶ 203 at 4 "It is fundamental that offerors must be advised of the bases upon which their proposals will be evaluated.")).



now contends that this KPP threshold should not have a corresponding objective. Boeing Comments, pp. 15-16. This is merely another quibble with the solicitation and should have been raised prior to the receipt of proposals. In any case, Boeing's argument logically fails.

Boeing's most recent attempt fails because the solicitation was designed to capture capability and innovation by the offerors. The fuel offload at range threshold required the proposed aircraft to at least "be capable" of fuel offload at range. The fuel offload at range objective challenged offerors to propose an aircraft "capable of exceeding" a baseline of fuel offload at range established by the KC-135. If the Air Force did not attach the objective that it did to fuel offload at range, such that the proposed aircraft should be capable of exceeding the minimum, then the Air Force would have been incapable of drawing any meaningful distinction between any of the capabilities proposed over and above the KC-135, a ludicrous result.

The RFP was specifically designed in this regard to challenge the offerors to exceed the threshold. The objective was deliberately designed to exceed the minimum requirement, thus when an offeror exceeded the threshold, it met the objective; it did not exceed the objective. Consideration was given for exceeding the threshold, not exceeding the objective as this was disallowed by Section M.

The second twist is that Boeing contends it is "conceivable" that an aircraft could reach the threshold at all ranges but not necessarily exceed it at all ranges. Thus, trade space exists on the line depicted in Figure 3-1 of the System Requirements Document. Boeing's proposal makes this argument irrelevant. As discussed in the Agency Memorandum of Law at pp. 75-77, Boeing touts its capability to exceed the threshold at all ranges.

The Air Force established a reasonable methodology for assessing fuel offload at range and executed this methodology without deviation. Because of the transparency of this source selection, Boeing was aware of the Air Force's use of this methodology. As to this essential component of an aerial refueling tanker aircraft competition, NG proposed a more capable aircraft. Thus, NG prevailed as to this aspect of this fair and transparent competition.

[REDACTED]

**(2) Northrop Grumman's Superior Fuel Offload Rate Provides Significant Operational Benefit**

In its Comments on the Agency Report, Boeing continues to argue that NG earned a Major Discriminator for a non-KPP/KSA requirement for fuel offload rate, which provides limited operational benefits to the Air Force. Boeing insists that the KC-30's additional [REDACTED] gallons per minute (GPM) offload rate (which is [REDACTED] greater than the KC-767) will only be a benefit for a fraction of aerial refueling missions. If nothing else, Boeing is consistent in knowing what is best in determining the Air Force's needs and requirements. Unfortunately for Boeing, that responsibility belongs solely to the Air Force.

System Requirements Document paragraph 3.2.10.1.3.1, Fuel Offload Rate, detailed how the offerors' proposals would be evaluated in this area, "All usable aircraft fuel shall be available for offload with no degradation to offload rate throughout the range of tanker fuel loads (**THRESHOLD**)", while paragraph 3.2.10.1.3.2 indicated, "The KC-X shall provide the capability to manually control the fuel offload rate (**THRESHOLD**)."  
AR Tab 278, SRD p. 30; App. 278(a), p. 30. Also, paragraph 3.2.10.1.3.3 stated, "The KC-X shall have the capability to automatically set fuel offload rates based on receiver type (**THRESHOLD**)."  
Id. SRD paragraph 3.2.10.1.1.7 stated, "The KC-X shall be capable of delivering fuel to all receptacle equipped receivers at rates and standard refueling pressure such that the KC-X is not the limiting factor," and SRD paragraph 3.2.10.2.6 stated, "The KC-X shall be capable of receiving fuel at the maximum rate that the KC-X can deliver fuel."  
Id. With these paragraphs, the RFP demonstrated an interest in fuel offload rates.

The SSET evaluated both offerors' proposals. In its evaluation, Boeing's [REDACTED] gallons per minute fuel rate added time for some Air Force aircraft [REDACTED]. Therefore, Boeing's proposal did not fully meet this non-KPP/KSA requirement, as with these listed aircraft, the fuel offload rate of its aircraft was "the limiting factor." In this regard, the SSET evaluated Boeing's fuel offload rate with Boeing-provided data. Now, Boeing is complaining about the longer refuel time based on the data it submitted as part of its proposal and suggesting the SSET should have given Boeing credit for a higher fuel offload rate than claimed in its proposal.

[REDACTED]



In its evaluation, the SSET determined NG offered a capability of [REDACTED] fuel rate that would not add any refueling time over what the current fleet required. In sum, the SSET evaluated NG as fully meeting this non-KPP/KSA requirement, as its proposed fuel offload rate made the “KC-X ... not the limiting factor.”

The SSAC accomplished its comparative analysis and determined that this capability offered by NG, namely the ability to offload fuel at a rate so as to not be the limiting factor, was a benefit to the Air Force. In the SSA’s integrated assessment, the magnitude of this difference was evaluated and determined to be a discriminator between the offerors. In this case, mere disagreement with the Air Force’s conclusion that the offeror’s fuel offload rate provided a substantial difference in the magnitude of benefit justifying designation as a major discriminator does not make the Air Force’s evaluation unreasonable.

**(3) Air Force Properly Evaluated Northrop Grumman’s Proposal**

**(a) KC-30 Boom Weakness**

In its protest submissions, Boeing continues to challenge the reasonableness of the Air Force evaluation of the weakness for the KC-30 boom. Based on nothing more than its own analysis (for which Boeing offered no witnesses at the hearing), Boeing asserts the Air Force understated the risk associated with the KC-30 boom [REDACTED] by failing to include a cost and schedule risk assessment. Boeing Comments on Agency Report, pp. 70-75. Boeing was wrong when it first raised this allegation, and remains wrong after the presentation of testimony at the GAO hearing.

Pursuant to the RFP, the SSET reasonably evaluated NG’s proposed boom. NG proposed a boom which has been installed and has flown on both an A310 and A330 aircraft.<sup>5</sup> On the test aircraft (A310), it has deployed, made contact with a receiver aircraft, and has passed fuel. AR Tab 318, Business Week, “NG Speaks Out,” March 10, 2008, p. 2; see also

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<sup>5</sup> It should be noted that the RFP did not require an existing boom, and that Boeing did not propose one. The Boeing’s proposed Gen6 boom has yet to be built, has never been installed on the KC-767AT (as that aircraft has not been built), and has never flown.

[REDACTED]

██████████ Witness Binder, Tab 318 (hard copy of article). In footnote 18 of its Comments on the Agency Report, Boeing asserts since the A310 demonstrator aircraft passed fuel after the source selection evaluation, it is unavailing for the Air Force to point to it now because the information was not used in the evaluation. While Air Force evaluators did not rely on this test flight during the KC-X evaluation, the success of the flight test validates the professional judgment and conclusion of the SSET in not assessing a cost and schedule risk. Moreover, any risks associated with the KC-30 boom ██████████ are significantly mitigated by EADS successful development testing that is currently ongoing. Boeing ignores this fact and instead characterizes EADS' pre-existing test program as irrelevant while objecting to any inquiry of Boeing's new and untested boom.

In the SSET's evaluation, the boom had three factors that led to one weakness, which were previously discussed at length. See MOL, pp. 90-93; COS, Supp. 2. pp. 26-36.<sup>6</sup> The three technical risks associated with the KC-30 boom design were: ██████████

██████████ See generally Tr. 906-08, 916-18, and 924-26 ██████████ Chief of the KC-X SSET, provided a succinct description of the three features of the KC-30 boom ██████████ During discussions, these concerns were communicated extensively with NG through Evaluation Notices (ENs) and briefings. AR Tab 184, NPG-MC1-022; App. 184(a); NPG-MC1-022a; App. 184(s), and NPG-MC1-067; App. 184(m); AR Tab 207, Pre-FPR Briefing to NG, slides #43 & #44; AR Tab 207, December 21, 2007 Transmittal Letter of Pre-FPR Minutes with attachments, p. 2 (slide 44) and p. 7 (item 5); App. 207; see also Tr. 909-12, 918-21, and 926-29 ██████████ At its Pre-FPR Briefing, NG was advised ██████████

██████████ AR Tab 205, Pre-FPR Briefing; App. 205, p. 44; AR Tab 257, NG Spreadsheet, Aerial Refueling, Reference lines # 34, 38, 64, and 71; App. 257. At that time, it should be noted that the SSET was concerned about ██████████

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<sup>6</sup> At the bottom of footnote number 19, p. 71, in Boeing's Comments on the Agency Record, Boeing withdrew its allegation regarding the ██████████ which was satisfactorily resolved by Northrop Grumman's response to EN NPG-MC1-067r2.

██████████  
██████████  
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[REDACTED] In its FPR, NG resolved that concern [REDACTED]  
[REDACTED] Tr. 935 [REDACTED]

After further discussions with NG, which provided clarifications concerning technical aspects of the boom [REDACTED] the SSET concluded that the three technical risks remained. Tr. 913, 921, and 929 [REDACTED] Therefore, the SSET assessed NG's approach as having a technical weakness. Tr. 933-34 [REDACTED] The SSET further found that this weakness represented added features within NG's proposal, which, if successfully deployed, might provide benefit to the Air Force. Tr. 937-38 [REDACTED]. Significantly, none of the individual technical risks by themselves would have driven a weakness in the KC-30 boom design. Tr. 933-34 [REDACTED]. In the SSET's evaluation, the normal systems engineering process during System Development and Demonstration (SDD) would fully define the required characteristics of this feature and would modify or revise it, if necessary, to meet allocated requirements.<sup>7</sup>

In its evaluation, the SSET also reviewed NG's boom development plan and risk mitigation strategy. In its judgment, the SSET found the approaches sufficient and not meriting a separate weakness. AR Tab 167, Vol. II, Bk 2, p. II – SF4-51 and 53; AR Tab 49 (Witness Common Binder Tab 49, Slides 200, 202, and 310). After analyzing [REDACTED] [REDACTED] determining sufficient time was available in the schedule, the SSET assigned no cost or schedule risk for the boom [REDACTED] approach weakness. Tr. 935-36, 1016-19, and 1205-06 [REDACTED] In the SSET's judgment, the potential to cause any disruption of schedule, increased cost, or degradation of performance was negligible for this weakness. Tr. 935-36 [REDACTED] Additionally, the SSET concluded normal contractor effort and normal government monitoring would likely be able to overcome any difficulties during the typical or normal SDD process, which includes, among other activities, [REDACTED]  
[REDACTED]  
[REDACTED] In its analysis, the SSAC concurred with this assessment and noted the boom [REDACTED] weakness may not even occur. AR Tab 55; App. 55(b), p. 20.

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<sup>7</sup> AR Tab 215, Subfactor 1.1 – Key Systems Requirements – NGC 20 Feb.doc

[REDACTED]

Contrary to Boeing's claim, the evaluation concluded that the KC-30's boom weakness did not present any cost and schedule risk, and the KC-X source selection record adequately documents that conclusion. Boeing, through its lengthy cross-examination, attempts to suggest the Air Force's evaluation was deficient for failing to provide a level of detailed documentation that is simply not required. In this regard, the FAR requires agencies to "evaluate competitive proposals and then assess their relative qualities solely on the factors and subfactors specified in the solicitation . . . . The relative strengths, deficiencies, significant weaknesses, and risks supporting proposal evaluation shall be documented in the contract file." FAR 15.305(a). The GAO seeks sufficient documentation to permit examination of whether an agency has followed the evaluation scheme in the RFP as follows:

In reviewing an agency's evaluation of proposals and source selection decision, we examine the record to determine whether the agency acted reasonably and consistent with the stated evaluation factors as well as applicable statutes and regulations. PRC, Inc., B-274698.2, B-274698.3, Jan. 23, 1997, 97-1 CPD ¶ 115 at 4. Implicit in the foregoing is that the evaluation must be documented in sufficient detail to show that it was reasonable and bears a rational relationship to the announced evaluation factors. FAR §§ 15.305(a), FAR 15.308.

Satellite Servs., Inc., B-286508, Jan. 18, 2001, 2001 CPD ¶ 30. Neither applicable case law nor common sense requires more. Moreover, GAO has consistently held that it will not re-accomplish a technical evaluation, upgrading a weakness based on a protester's own technical evaluation. Here, Boeing's disagreement with the Air Force's conclusion that the weakness, if realized, could be corrected during the normal course of SDD did not make the Air Force's evaluation unreasonable.

**(b) KC-30's Boom Envelope**

Boeing claims the SSA improperly considered the KC-30's superior boom envelope in making the award decision. Boeing complains the SSA noted that the KC-30's boom envelope is "[REDACTED] that of the KC-135R, [which] provides receiver pilots and air refueling operators a large margin of error," more than the KC-767 with a boom envelope that "is [REDACTED] that of the KC-135R." Second Supplemental Protest at 24, citing AR Tab 55, SSAC briefing at 7. Boeing argues the Air Force's analysis is flawed, as the operational limits of

[REDACTED]

receiver aircraft will effectively limit the usefulness of the KC-30's substantially larger envelope. Boeing's argument is simply without merit.

In the RFP, the SRD established as an objective the capability of providing as large a boom envelope as possible, stating specifically in paragraph 3.2.10.1.5.2.2, "The boom envelope should exceed the ATP-56 envelope as much as possible (**OBJECTIVE**). Azimuth/roll and elevation envelope expansion are more desirable than extension increases." AR Tab 278, SRD ¶ 3.2.10.1.5.2.2; App. 278(a), p. 31. Additionally, Section L of the RFP stated the need for the offerors to detail capacity and size of the boom envelope, as follows:

The offeror shall provide an analysis that defines the characteristic of the boom envelope for the proposed KC-X aircraft. The analysis shall include parametric data developed from flight and flight simulation with the specific boom flown on the specific aircraft proposed by the offeror. The offeror shall identify those cases where the boom envelope exceeds the threshold requirements identified in the SRD and discuss the operational and technical benefits of the proposed design and implementation. The offeror shall describe the simulation used to evaluate and identify boom operational capabilities needed (which models, weather conditions, etc.). The offeror shall describe both the theoretical maximum size of the boom envelope and the actual operationally-effective size of the boom envelope, if different.

AR Tab 278, ¶ 4.2.2.3.5; App. 278(c), p. 16 (emphasis added). The RFP, therefore, was clear that the boom envelope requirement was unbounded, allowing for open-ended expansion.<sup>8</sup>

The SSET—notably including both highly experienced boom operators and receiver pilots—evaluated both offerors' boom envelopes based on the same amount of information. In this regard, the SSET evaluated the theoretical maximum and operationally-effective size of the boom envelope. Both are clearly documented in the record. AR Tab 166; PHB App. 166 (d), NGC Pre-FPR Proposal with Change Pages, Vol-II. \_Mission Capability-

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<sup>8</sup> To the extent, Boeing challenges the RFP's terms of evaluation for proposed boom envelopes, its protest is untimely, as a protest should have been filed prior to April 12, 2007, the due date for the receipt of proposals. 4 C.F.R. § 21.2(a)(1). Further, the GAO frowns on offerors sitting on their protest rights until they see the outcome of the competition. Southern Research, B-266360, Feb. 12, 1996, 96-1 CPD ¶ 65 at 3 ("We do not think a vendor can learn of what it clearly views an improper agency action, and continue to compete on that basis without objection, and then complain when it is not selected for award").



Proposal Risk\_Book 1 II-SF1-34; AR Tab 52, Witness Common Binder Tab 52 (b), p. 9, Reference lines 67 and 68. In the evaluation, the amount of that envelope available to current receivers was also considered. For example, [REDACTED] AR Tab 278, ¶ L.4.2.2.3.5; App. 278(c), p. 16; see generally AR Tab 289, T.O. 1-1C-1-33 and T.O. 1-1C-1-3. The SSET's evaluation did not assume that a large boom envelope was a benefit for all receivers in all dimensions. Current aerial refueling procedures allow for boom envelope limitations associated with certain receiver and tanker combinations. Id. In this regard, the KC-30's boom envelope was considered similar to that currently used on the KC-10. The KC-10's boom envelope rolls [REDACTED] as would the proposed KC-30 boom. AR Tab 289, TO1-1C-1-33; App. 289(b), p. 7-6. Several current Air Force receiver aircraft, including the [REDACTED] have utilized the KC-10 boom envelope during refueling. Id. Consistent with TO1-1C-1-33, most receiver aircraft types would immediately benefit from the proposed boom envelope on the KC-30 once it was developed and deployed. Id. Tr. 969-72.

After its evaluation, the SSET concluded that the NG boom provided an envelope with significant potential that provides a meaningful benefit and value to the Air Force considering the longevity of the useful life of the KC-X, even though there are no current receiver aircraft capable of using the entire envelope available. The SSAC and SSA agreed, noting that the KC-30's boom envelope is "[REDACTED] that of the KC-135R, [which] provides receiver pilots and air refueling operators a large margin of error," more than the KC-767 with a boom envelope that "is [REDACTED] that of the KC-135R." AR Tab 55, SSAC Briefing; App. 55(b), p. 7.

Boeing's protest filings presented technical arguments that the Air Force's calculation of the KC-30's boom envelope was allegedly flawed because it ignored the actual operational limits of the envelopes imposed by the receptacles of individual receiver aircraft; because the true size of the KC-30's boom envelope could not be determined until flight tests were conducted; and because of the limitation of [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Additionally, during the GAO Hearing, a concern was raised by Boeing regarding the “boom contact envelope,” a term never stated in the solicitation. [REDACTED] Defined simply, the contact envelope is the “sweet spot” of the envelope where the receiver and tanker are optimized to make initial contact during rendezvous. [REDACTED] Boeing alleges the KC-30 has a limited contact boom envelope, further evidencing an operational limitation. Boeing Comments on Agency Report, Exhibit 14, ¶ 14. During its evaluation the SSET never compared the offerors’ proposals against each other, however a review conducted directly in response to this issue revealed that similar to the [REDACTED] NG’s contact envelope was [REDACTED] the size of Boeing’s [REDACTED] receiver pilots to affect a coupling with tanker aircraft.<sup>10</sup> Tr. 946 [REDACTED] Thus, contrary to Boeing’s claim, the SSAC and SSA in conducting its comparative analysis correctly determined the KC-30’s boom envelope reduced receiver pilot and air refueling operator’s workload and increased overall efficiency of air refueling operations. AR Tab 55, SSAC Briefing; App. 55(b), p. 7; AR Tab 55, SSDD; App 54, p. 6.

In its attempts to minimize the operational benefits presented by the KC-30’s expansive boom envelope, Boeing argues the KC-30 achieves its greater boom envelope by establishing a [REDACTED] Boeing Comments on Agency Report, Exhibit 14, ¶ 15. According to Boeing, [REDACTED] constitutes roughly [REDACTED] of the total volume of the KC-30 boom envelope. *Id.* at p. 42. This area, Boeing further alleges, is unusable due to operational limitations of receiver aircraft. *Id.* at Exhibit 14, ¶ 15. Once again, the facts do not support Boeing’s claim.

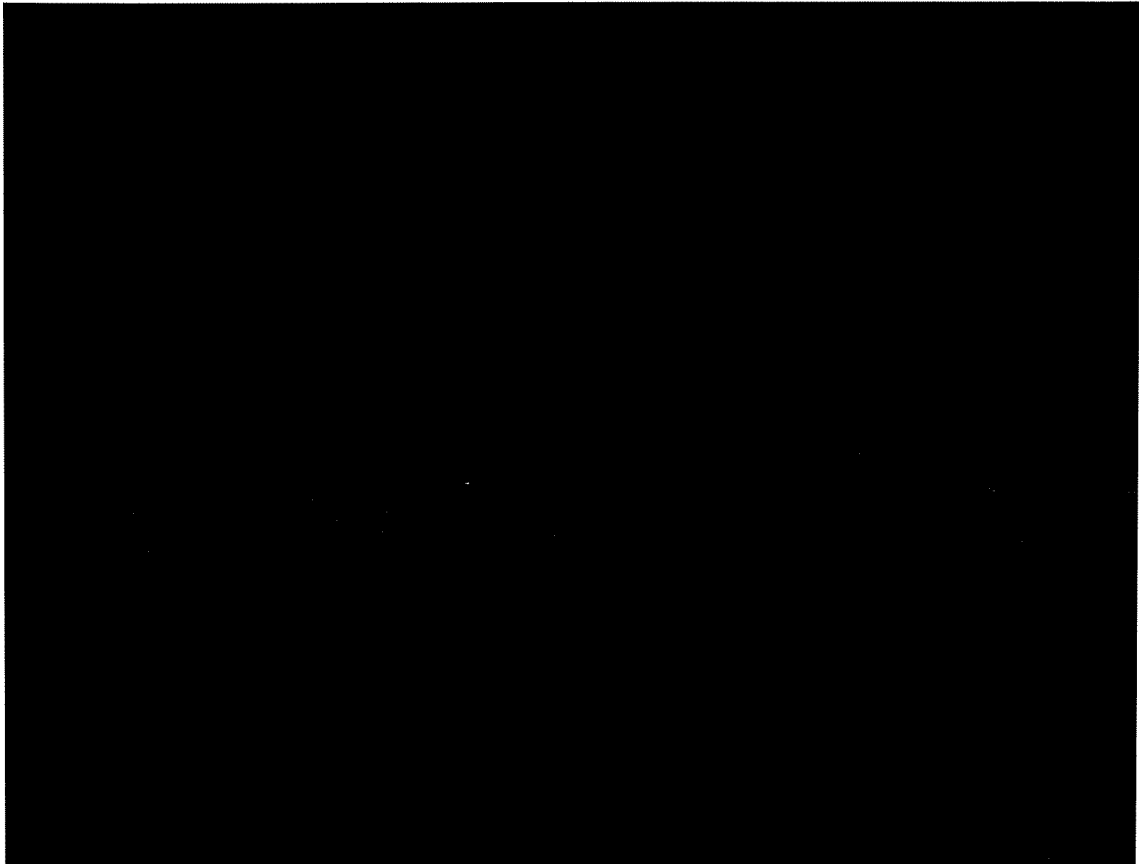
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<sup>9</sup> A review of [REDACTED] indicated the Northrop Grumman boom envelope was still [REDACTED] larger than the ATP 56 envelope, the Threshold requirement, even without the volume [REDACTED]

<sup>10</sup> Both offerors indicated capability to [REDACTED]

[REDACTED]

The KC-30's substantially larger expansions in the azimuth and elevation directions increased its envelope to over four-times that of the KC-135R and [REDACTED] that of the proposed KC-767. A two dimensional depiction of azimuth and elevation of the boom envelopes are shown below.



The KC-30's boom envelope expands in all directions over that of the KC-135R, compared to the slight increase [REDACTED] offered by Boeing. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] Furthermore, the increased envelope area between [REDACTED] provides operational benefit, as Air Force evaluators (consisting of engineers, boom operators, and pilots) concluded the [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]



[REDACTED] is caused by the boom limitations of the KC-135 and KC-10 and not current receiver aircraft. Tr. 969-70 [REDACTED] The SSET expected many of the current Air Force receiver aircraft, and virtually all new receiver aircraft, will be capable of taking advantage of the increased boom elevation [REDACTED] *Id.* 969-972. In addition, the SSET concluded this area will provide added technical margin for boom flight control. *Id.* at 971-972.

In raising this allegation, Boeing has once again attempted to substitute its judgment for that of the Air Force. Mere disagreement with the Air Force's conclusion that the offeror's boom envelope provided a substantial difference in the magnitude of benefit justifying designation as a major discriminator does not make the Air Force's evaluation unreasonable. The foregoing demonstrates the reasonableness of the Air Force's approach.

**(c) The KC-30's [REDACTED] Permits  
Aerial Refueling Using Current Air Force  
Procedures**

Boeing continues to allege the KC-30 can not [REDACTED]  
[REDACTED] conduct its aerial refueling missions using current Air Force procedures. Boeing asserts two reasons for this allegation. First, it recycles its claim that the KC-30 cannot fly [REDACTED] Second, raising yet another new and untimely allegation, Boeing argues that because [REDACTED]  
[REDACTED]  
[REDACTED] The [REDACTED]  
[REDACTED] Boeing further alleges, can only be used by [REDACTED]  
violating existing USAF aerial refueling procedures which require [REDACTED]  
during refueling under normal conditions. Boeing claims this alleged limitation becomes problematic when [REDACTED] which may require execution of aerial refueling operations  
[REDACTED]

Once again, Boeing is simply wrong. The KC-30 has more than sufficient [REDACTED] capability to conduct all aerial refueling procedures in accordance with current Air Force procedures. Furthermore, contrary to Boeing's allegation, there are no current Air Force procedures mandating [REDACTED] during aerial refueling.

[REDACTED]  
[REDACTED]  
[REDACTED]

The SRD established a KPP Threshold that required the tanker aircraft to be capable of refueling aircraft using current Air Force procedures:

3.2.10.1.1.9 The aircraft shall be capable of aerial refueling all current USAF tanker compatible fixed wing receiver aircraft using current USAF procedures with no modification to existing receiver aerial refueling equipment and no degradation to the receiver aircraft refueling capability, including after-body effects for wide-body aircraft and fuel temperature, and in accordance with international standards (e.g., Standard Agreement (STANAG) 3971 and STANAG 3447), and taking into account established technical guidance (e.g., MIL-A-87166, JSSG 2009) (**THRESHOLD, KPP #1**).

AR Tab 278, SRD, ¶ 3.2.10.1.1.9; App. 278(a), p. 29.

In its evaluation of NG's initial proposal, the SSET determined that it had included a certification of the KC-30's [REDACTED] in current Air Force procedures [REDACTED] AR Tab 184, EN NPG-MC1-003; App. 184(p) and EN NPG-MC1-003a; App. 184(l); and EN NPG-MC1-70; App. 184(k). Current Air Force overrun procedures require [REDACTED] AR Tab 278, RFP, Reference Library, T.O. 1-1C-1-3, pp. A2-45 to A2-47 and T.O. 1-1C-1-33, p. 7-7; see also [REDACTED] Tabs 2 and 3. During discussions, the SSET clearly informed NG that failure to comply with the [REDACTED] procedures would render its proposal deficient in failing to comply with a KPP threshold (SRD ¶ 3.2.10.1.1.9). Id.; see also Tr. 624-625 [REDACTED] [REDACTED] [REDACTED] [REDACTED]

In a series of EN exchanges between NG and the Air Force, along with telephone discussions that were part of the normal discussions with offerors, NG submitted a [REDACTED] [REDACTED] which restated its [REDACTED] to the [REDACTED] [REDACTED] required by current Air Force procedures. AR Tab 184, NPG-MC1-003a; App. 184(l), [REDACTED] AR Tab 184, NG EN Responses, 6 Jun 29 07 NG (conformed), NPG-MC1-003a; AR Tab 227, NG/KC-X Numbered letters, 653 AECS KC-X-2007 166; App. 227(a); Tr. 624-28 [REDACTED] NG clarified the KC-30 had the inherent capability of [REDACTED] [REDACTED] [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] NG further indicated the [REDACTED]  
[REDACTED] that fully comply with current Air Force overrun procedures. Id.

The SSET reviewed the revised NG solution and determined the technical proposal met the requirements of the KPP #1 Threshold (SRD ¶ 3.2.10.1.1.9). NG also submitted the [REDACTED]  
[REDACTED] Tr. 627-28 [REDACTED] In evaluating the revised solution, the SSET examined the proposed impacts to cost, schedule, [REDACTED] and determined it fully and completely resolved the [REDACTED] associated with its [REDACTED]  
Tr. 628. NG provided proposal slip pages with its response to EN NPG-MC1-003a. Tab 184, NG EN Responses, 6-Jun 29 07 NG (conformed), NPG-MC1-003a; App. 184(l). These proposal slip pages [REDACTED]  
description of mission capability and proposal risk, [REDACTED]  
[REDACTED] In subsequent discussions, [REDACTED]  
[REDACTED]  
[REDACTED] These revisions also fully addressed any remaining minor uncertainties to the satisfaction of the SSET. Id. at 632-633. In short, NG submitted an extensive and comprehensive response to this issue, which in the SSET's evaluation provided sufficient information to completely resolve the issue. AR Tab 184, EN NPG-MC1-003a; App. 184(l); EN NPG-MC1-070, NG EN Responses\10-Oct 05 07 NG (conformed)\NPG-MC1-070; App. 184(k); NG EN Responses\8-Aug 20 07 (conformed)\NPG-MC2-005a, EN NPG-MC2-005a; App. 184(j); Tr. 633.

Boeing's [REDACTED] allegation fails for two reasons. First, it is untimely. Boeing received the evaluation notices and corresponding NG responses and aerial refueling technical orders that it uses to support its [REDACTED] argument on March 13, 2008 and April 2, 2008. Offerors must file their protests "not later than 10 days after the basis of protest is known or should have been known (whichever is earlier)." 4 C.F.R. § 21.2 (a)(2). To the extent these documents provide a basis for Boeing's protest ground, and the Air Force maintains they do not,

[REDACTED]  
[REDACTED]  
[REDACTED]

Boeing had 10 days from the date of receipt to file this protest ground with the GAO. Boeing raises this issue for the first time in its Comments on the Agency Record, which it filed on April 25, 2008. Therefore, this protest ground is untimely and should be summarily dismissed.

Boeing's [REDACTED] allegation also fails for lacking any basis in fact. In its evaluation of NG's proposal relative to [REDACTED] the SSET determined that the KC-30 could fly [REDACTED] Additionally, the SSET found that the KC-30 could fly [REDACTED] [REDACTED] Under current Air Force procedures, moreover, [REDACTED] is not required to be used during aerial refueling operations, including [REDACTED] Id. at 638-39. Thus, the RFP for the KC-X did not require [REDACTED] throughout aerial refueling operations. Tr. 639. Additionally, Air Force procedures do not require tankers to conduct [REDACTED] Id. at 633. The SSET also determined that the KC-30 had [REDACTED] [REDACTED] Therefore, not only is the KC-30 capable of achieving [REDACTED] [REDACTED] refuel all current receiver aircraft, there are no Air Force procedures requiring use of [REDACTED] during refueling operations.

Boeing's suggestion that the SSET did not conduct a meaningful evaluation of the KC-30's capability to [REDACTED] to conduct [REDACTED] procedures is baseless. Boeing attempts to challenge the Air Force evaluation because the Air Force did not ask for further proof of the KC-30's [REDACTED] capability and did not accomplish a detailed written analysis. The record clearly demonstrates Air Force evaluators thoroughly analyzed the [REDACTED] capability of the KC-30, concluding it met the requirements of the KPP #1 Threshold (SRD ¶ 3.2.10.1.1.9). Boeing disagrees with the Air Force's evaluation of NG's capability to meet the Threshold requirement (KPP#1) for achieving [REDACTED] As the record — bolstered by live testimony — demonstrates, the Air Force's treatment of this issue was completely reasonable, Boeing's disagreement does not render the Air Force's evaluation unreasonable.

[REDACTED]

**b. The Air Force Properly Evaluated Airlift**

**(1) The Air Force Properly Evaluated Airlift In Accordance With The RFP**

The RFP specifically states how the airlift capability would be evaluated and describes this requirement as a KPP threshold, making clear the importance the Air Force assigned to airlift capability. Section M, paragraph 2.2.1.1a specifically stated, “All KPP thresholds ... must be met.” *Id.* at § M, p. M-3 of 15. The SRD, paragraph 3.2.1.6.1.1, Airlift Capability (KPP #4) stated: “The KC-X shall be capable of efficiently transporting equipment and personnel (**THRESHOLD, KPP #4**).” AR Tab 278 SRD, ¶ 3.2.1.6.1.1; App. 278(a), p. 13. Additionally, the SRD specifically stated:

3.2.1.6.1.1.1. The entire main cargo deck shall be capable of an all cargo configuration that accommodates 463L pallets (**THRESHOLD, KPP #4**).

3.2.1.6.1.1.2. The entire main cargo deck shall be capable of accommodating an all passenger configuration (plus baggage) (**THRESHOLD, KPP #4**).

3.2.1.6.1.1.3. The entire main cargo deck shall be capable of accommodating an all AE configuration, to include ambulatory and/or patient support pallets (**THRESHOLD, KPP #4**).

3.2.1.6.1.1.4. The aircraft shall optimize a full range of palletized cargo, passengers, and/or AE configurations that fully and efficiently utilize all available main deck space (**THRESHOLD, KPP #4**). Note: Maximum flexibility is desired for the number of cargo/passenger/AE combinations on the convertible main cargo deck.

AR Tab 278, SRD; App. 278(a), pp. 13-14. In sum, the RFP identifies airlift as a KPP, and the SRD clearly identifies that areas of this SRD, such as airlift, passenger carriage and aeromedical evacuation capabilities are KPP Thresholds (Reference SRD ¶ 3.2.1.6.1.1, SRD ¶ 3.2.1.6.1.1.1, SRD ¶ 3.2.1.6.1.1.2, SRD ¶ 3.2.1.6.1.1.3 and SRD ¶ 3.2.1.6.1.1.4). AR Tab 278; App. 278(a), pp. 13-14. As noted, Section M of the RFP indicates that all KPP thresholds must be met and are, therefore, of the highest importance compared to the other requirements. AR Tab 278, § M.2.2.1.1; App. 278(d), p.3. No distinction is made between KPPs. *Id.* Therefore, the airlift KPPs were just as important as other KPPs in the solicitation (e.g., aerial refueling, survivability) and were evaluated in strict accordance with the RFP criteria. The Air Force set forth its criteria for measuring airlift and then evaluated all aspects of airlift in accordance with the criteria set



forth in Section M of the RFP. Assertions as to what the evaluation results should have been or with the assigned strengths (or in this case with the assigned Major Discriminators during the SSAC comparative analysis) do not make the Air Force's decision unreasonable.

**(2) The KC-30 Fits Seamlessly Into The Defense Transportation System**

In its Comments on the Agency Report, Boeing continues to insist that the KC-30 will not fit seamlessly in the Defense Transportation System (DTS). Boeing presents a variation claiming the Air Force ignored [REDACTED] [REDACTED] made it incapable of fitting seamlessly into the DTS. Once again, Boeing relies on preliminary evaluation assessments as the basis of making such an astonishing allegation.

Boeing attempts to recycle evaluators' early evaluations as the final evaluation on the KC-30's airlift capacity. Tr. 874-76 [REDACTED] In so doing, Boeing ignores the mid-term, Pre-FPR and Final Evaluation because they do not support Boeing's case regarding the DTS minimum requirements. Tr. 877-879, 889-891 and 903-904 [REDACTED] Binder, Tab 199, Airlift, p. 3, Reference line #14 (AR Tab 199); AR Tab 257, Pre-FPR Briefing, Summary Worksheet, p. 17, Reference line #14 (App. 257, p. 17); and [REDACTED] Tab 52 (b), Final Evaluation Briefing, NG Summary Worksheet, p. 20, Reference line #14 (App. 52 (b)). Moreover, the alleged dissent among the airlift evaluators is a fiction. Tr. 891 [REDACTED] [REDACTED] (the SSET Chair knows of no dissenting opinion; furthermore, he encouraged people to speak up during the source selection, which evaluators routinely did during the source selection process.) Boeing's protest allegation also fails to appreciate the interactive process of a source selection evaluation. Evaluators make initial assessments of the proposals and then collaborate with other evaluators in obtaining an understanding of the offerors' technical solutions. Evaluators also communicate with the offerors to obtain additional information when necessary. It is the end result of the evaluation process, and not initial comments, that constitute the agency's decision which is subject to GAO review.

To summarize, SRD Paragraph 3.2.1.6.1.2 of the RFP required seamless integration for transportation of cargo, "The KC-X shall fit seamlessly into the Defense Transportation System (THRESHOLD, KPP #4)." AR Tab 278, Conformed RFP, SRD ¶ [REDACTED]

3.2.1.6.1.2; App. 278(a), p. 14. Initially, the SSET considered including [REDACTED] as a method for evaluating this requirement.<sup>11</sup> *Id.* 874-76 [REDACTED] After further review, the SSET concluded [REDACTED] occurred normally and regularly in the movement of cargo within the DTS. Tr. 879-80 [REDACTED] Moreover, the SRD contained no requirements specifying [REDACTED] AR Tab 278, Conformed RFP, SRD ¶ 3.2.1.6.1.2; App. 278(a), p. 14. The SSET, therefore, determined that [REDACTED] [REDACTED] should not be part of the methodology in evaluating SRD paragraph 3.2.1.6.1.2. AR Tab 59, NGC Initial Advisor Worksheets, [REDACTED] [REDACTED] p. 26; App. 59(r); NGC Final Evaluator Worksheets, [REDACTED] pp. 2-3, 14; App. 59(p); and NGC Subfactor Summaries, [REDACTED] pp. 32-33; App. 59(q); Tr. 877-79, 889-91, and 903-04 [REDACTED]

In its evaluation of both proposals for this KPP, the SSET concluded that both offerors met the KPP threshold requirement for seamless integration. The SSET noted that [REDACTED] [REDACTED] used to determine the magnitude of benefit offered by each offeror in meeting the requirement for airlift efficiency, as part of the evaluation of each proposal for compliance with SRD paragraph 3.2.1.6.1.1, “The KC-X shall be capable of efficiently transporting equipment and personnel (**THRESHOLD, KPP #4**).” AR Tab 278, SRD ¶ 3.2.1.6.1.1; App. 278(a), p. 13. In evaluating that requirement, both offerors were evaluated as having exceeded the airlift efficiency threshold. The [REDACTED] [REDACTED] was applied in defining the magnitude of benefit provided by the offered strength. *Id.* at 903-904; AR Tab 49, Final Evaluation Briefing to SSA, Slides 74, 203; App. 49, p. 74, 203; AR Tab 37, Pre-FPR Briefing to SSA, Slides 76, 222; App. 37, p. 76, 222.

The SSET evaluated this capability for each offeror pursuant to the RFP criteria and separately from the evaluation of other airlift capabilities. Neither the RFP nor the SRD linked these two requirements or any other requirements to this capability. Boeing’s mere

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<sup>11</sup> Boeing’s Protest filings have numerous citations concerning [REDACTED] associated with the KC-30. See page 39, Boeing 2d supplemental protest [REDACTED]

[REDACTED] However, it should be noted that Boeing’s Proposal also would [REDACTED] for it to fit 100% seamlessly into the DTS. Thus, Boeing is not prejudiced.

[REDACTED]

disagreement with how the SSET evaluated each offeror's proposal to determine if it met the seamless integration in the DTS requirement or with the SSET's evaluation of an offeror's airlift capability and with its conclusion that both offerors met the minimum threshold requirement (KPP#4) for seamless integration in the DTS does not render the Air Force's evaluation unreasonable. The record, including sworn testimony, demonstrates the reasonableness of the Air Force's evaluation.

### (3) Airlift Efficiency

Section M, paragraph 2.2.1.2.b described how each offeror's airlift efficiency would be evaluated.<sup>12</sup> Additionally, the SSET evaluated each offeror's airlift efficiency in its evaluation of the offeror's approach to meeting SRD ¶ 3.2.1.6.1.1, "The KC-X shall be capable of efficiently transporting equipment and personnel (**THRESHOLD, KPP #4**)." AR Tab 278, Conformed RFP, SRD ¶ 3.2.1.6.1.1 (emphasis in original), App. 278(a), p. 13. Section L, paragraph 4.2.2.4.1, "Airlift Efficiency," also provided detailed instructions to the offerors on how the airlift efficiency number would be calculated.<sup>13</sup> In short, airlift efficiency measures the

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<sup>12</sup> "The Government will evaluate the offeror's approach to meeting requirements related to airlift capability. This evaluation will include: airlift efficiency, cargo, passengers, aero-medical evacuation, ground turn time, and cargo bay re-configuration. The offeror's airlift efficiency will be normalized against the KC-135R airlift efficiency calculated with the same ground rules. An offeror's airlift efficiency value **greater than 1.0 will be viewed as advantageous to the Government.**" AR Tab 278, RFP, Section M, ¶ 2.2.1.2.b (emphasis added), App. 278(d), p. 4.

<sup>13</sup> Section L ¶ 4.2.2.4.1:

The offeror shall provide aircraft payload versus unrefueled range charts and tabulated data for standard day conditions, maximum range cruise airspeed/mach number at optimum maximum range cruise altitude(s), takeoff weights that allow for normal taxi fuel usage (i.e., takeoff brake release at a weight not to exceed maximum takeoff gross weight), and that reflect the maximum load that the aircraft can accommodate using 463L pallets. No runway restriction is to be used and reserve fuel sufficient for 2 hours at maximum range at maximum altitude(s) shall be included (fuel used to climb during this reserve condition need not be considered). Each point on the payload versus range and fuel used versus range charts/data represents a complete individual mission, with each to include takeoff, climb, cruise, descent, and landing with reserves. The offeror shall document and provide the basis of the data used for computations (e.g., estimated, flight test) and all ground rules and assumptions used in the calculations. The data presented must be

[REDACTED]



inherent aero-mechanical efficiency of the proposed aircraft to move bulk cargo over a given range of distances. Tr. 894-895.

The SSET evaluated this capability for each offeror pursuant to the RFP criteria noted above and separately from the evaluation of other airlift capabilities, such as whether the offeror had the capability to seamlessly integrate into the DTS. Neither the RFP nor the SRD linked these two requirements together. The RFP was very clear on how the airlift efficiency number was to be calculated (Section L, paragraph 4.2.2.4.1 Airlift efficiency) and evaluated (Section M, ¶ 2.2.1.2.b.). In Section M, an offeror's airlift efficiency value greater than 1.0 would be viewed as advantageous to the Government. Both offerors were evaluated for their "airlift efficiency value," and Boeing was aware from its briefings in August, September, and November 2007 of the value the Air Force had determined for its proposed solution. AR Tab 129, Mid-term II Status Briefing, Slide # 43; App. 129(a), p. 43; AR Tab 134, SRA-MPLCC, Spreadsheet (Boeing), Reference line #8; App. 134, p. 11; AR Tab 135, Pre-FPR Briefing, Slide

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consistent with the proposed type-certified design and intended operational procedures in the cargo role. The offeror shall, for the same ground rules, assumptions, and conditions, provide fuel burned versus unrefueled range charts and tabulated data which correspond to the payload versus unrefueled range charts (except that the portion of the chart below 500 NM range is not requested for fuel burned versus unrefueled range). Airlift efficiency calculation procedure is as follows:

a. Starting at a range of 500 NM divide the cargo carried from the payload-unrefueled range chart (or table) by the fuel used at the same unrefueled range from the fuel used versus unrefueled range chart (or table). Ground rules and assumptions for the two curves must be identical. This will result in a plot and table having units of pounds of payload carried per pound of fuel used versus nautical mile range. The number of range points used to construct the two curves must be sufficient to adequately define this plot. Provide both the plot and the associated tabulated data.

b. For the curve described in paragraph a. above, integrate from 500 nautical miles to maximum unrefueled range. This will result in a single value with the units, payload pounds-nautical mile per pound fuel used. This number is defined as the airlift efficiency."

AR Tab 278, RFP, Section L, ¶ 4.2.2.4.1.; App. 278(c), p. 17.



45; App. 135, p. 45. The KC-767 airlift efficiency was [REDACTED] compared to the KC-30 airlift efficiency of [REDACTED]

In its evaluations, the SSET also conducted the scenario analysis to compliment the airlift efficiency proposed by both offerors and describe the magnitude of benefit provided by the airlift efficiency strengths proposed by both offerors. Tr. 897-98 [REDACTED] The SSET's methodology complied with the evaluation criteria in paragraph 2.2.1.1.a of Section M, which stated, in part, "Depending on substantiating rationale, positive consideration will be provided for performance above the stated KPP thresholds up to the KPP objective level." AR Tab 278, Conformed RFP, Section M, ¶ 2.2.1.1.a; App. 278(d), pp. 3-4. The example scenario results for both offerors were then reported in the final evaluation briefing as follows:

[REDACTED]  
 Required [REDACTED] KC-767s; enabled use of [REDACTED] fewer C-17s  
 Required [REDACTED] KC-30s; enabled use of [REDACTED] fewer C-17s  
 [REDACTED]  
 Required [REDACTED] KC-767s; enabled use of [REDACTED] fewer C-17s  
 Required [REDACTED] KC-30s; enabled use of [REDACTED] fewer C-17s  
 [REDACTED]  
 (weighted average of all configurations):  
 KC-767: [REDACTED] compatible by weight; [REDACTED] compatible by height  
 KC-30: [REDACTED] compatible by weight; [REDACTED] compatible by height  
 [REDACTED]  
 configurations):  
 KC-767: [REDACTED] compatible by weight; [REDACTED] compatible by height  
 KC-30: [REDACTED] compatible by weight; [REDACTED] compatible by height  
 [REDACTED] (weighted average of all  
 configurations):  
 KC-767 light day: [REDACTED] compatible with [REDACTED] KC-767 per CRAF aircraft  
 KC-767 heavy day: [REDACTED] compatible with [REDACTED] KC-767 per CRAF aircraft  
 KC-30 light day: [REDACTED] compatible with [REDACTED] KC-30 per CRAF aircraft  
 KC-30 heavy day: [REDACTED] compatible with [REDACTED] KC-30 per CRAF aircraft  
 CRAF Transload Pallet Compatibility:  
 KC-767 weight only: [REDACTED] compatible with [REDACTED] KC-767 per CRAF aircraft  
 KC-767 weight & height: [REDACTED] compatible with [REDACTED] KC-767 per CRAF aircraft  
 KC-767 weight & height: [REDACTED] compatible with [REDACTED] KC-767 per CRAF aircraft  
 KC-30 weight only: [REDACTED] compatible with [REDACTED] KC-30 per CRAF aircraft  
 KC-30 weight & height: [REDACTED]  
 KC-30 weight & height: [REDACTED] compatible with [REDACTED] KC-30 per CRAF aircraft

AR Tab 55, PAR; App. 55, p. 18; AR Tab 49, Final Evaluation Briefing, Slide #s 74, 203; App 49, p. 74, 203.

[REDACTED]

Boeing is simply wrong that the airlift scenarios used by the Air Force disprove the KC-30's practical and real world cargo advantage. Boeing claims that the scenarios show both that the KC-30 cannot meet the KPP threshold requirement to fit seamlessly in the DTS and that the KC-767 is actually more efficient in carrying cargo than the KC-30. Boeing misconstrues the purpose of the scenarios and misinterprets their results. The scenarios were not separate evaluation factors. Instead, as documented in the PAR, the SSET used the scenarios, which represent real world mission requirements, to describe the benefit or capabilities derived from the airlift efficiency provided by both proposals. AR Tab 55, PAR; App. 55(a), pp. 17-18.

The SSET determined that [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] For example, in the first two scenarios, which involves the deployment of [REDACTED]  
[REDACTED] the KC-30 accomplished the airlift task with [REDACTED]  
[REDACTED] the use of [REDACTED] KC-30s to move [REDACTED] meant [REDACTED] fewer C-17s were needed, while the same number of KC-767s reduced the number of needed C-17s by [REDACTED] Tr. 902; AR Tab 49, Final Evaluation Briefing, Slides 74, 208; App. 49, pp. 74, 208. In the [REDACTED]  
[REDACTED] scenarios, the KC-767 had [REDACTED]  
[REDACTED] AR Tab 49, Final Evaluation Briefing, Slide #s 74, 208; App. 49, pp. 74, 208; see also Tr. 1180-83 [REDACTED] direct testimony elicited by NG counsel).

Furthermore, the [REDACTED] was very conservative, and in real world cargo operations, the [REDACTED] between the KC-30 and KC-767 would be much closer than the scenario results indicated. Tr. 1173-1174. The scenarios did not fully exploit the capability of [REDACTED] Tr. 1174-1175. Therefore, the actual capability of real world [REDACTED] for the KC-30 in the [REDACTED] scenario, ranged between [REDACTED] Tr. 1174-1175. See also, NG Comments on Agency Report, pp. 54-64. Moreover, [REDACTED] scenarios assumed that [REDACTED]  
[REDACTED] Tr. 1180-1181. In reality,

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED] Tr. 1181. In fact, a comparison of the two aircraft for weight only in the [REDACTED] scenario “indicates, just comparing the two, that the KC-30 is [REDACTED] Tr. 1181-1182 [REDACTED]

In short, the airlift scenarios disprove Boeing’s claim that the KC-30 provides no practical cargo advantage. To the contrary, the scenarios demonstrated the KC-30 has significant airlift capability. Tr. 898-900, 1172-83 [REDACTED] The scenarios also demonstrated a [REDACTED] for the KC-30 to accomplish the airlift missions. Tr. 901 and 904 [REDACTED] Finally, the scenarios reinforced the KC-30’s [REDACTED] aero-mechanical efficiency value by showing the aircraft’s utility in efficiently transporting real world cargo requirements [REDACTED] Tr. 903 [REDACTED]

The SSAC, in turn, reviewed the scenario analysis data compiled by the SSET. In conducting its comparative analysis of the proposals, the SSAC concluded that:

[The] KC-30 offers greater airlift efficiency than the KC-767. KC-30 can lift both fuel and cargo further than [the] KC-767, potentially negating the need for in-flight refueling and/or time consuming en route stops. While KC-767 offers somewhat better capability to carry full height and weight 436L pallets, KC-30 demonstrates significant capability to lift cargo despite some height and weight limitations. KC-30 provides greater capability to carry cargo in a larger number of pallet positions [REDACTED] versus [REDACTED] pallets) allowing greater delivery of bulk cargo, consistent with individual pallet height and weight limits. KC-30 dual deck also offers more flexibility for cargo carriage, allowing concurrent lower compartment cargo loading/unloading operations with passenger or patient loading/unloading on the main deck.

AR Tab 55, PAR; App. 55(a), p. 18. In the integrated assessment, the SSA also fully considered the scenario analysis data, as evidenced by [REDACTED] recognition that, “the KC-767 has advantages for pallets of certain height and weight combinations.” *Id.* The SSAC and SSA noted that NG’s greater airlift efficiency was more beneficial to the Air Force in their comparative analysis and integrated assessments of the offerors.

**(4) The Air Force Properly Evaluated Boeing’s Proposal**

**(a) Passenger Carriage Capability**

[REDACTED]  
[REDACTED]  
[REDACTED]

The RFP designated airlift as a KPP. Specifically, the SRD clearly identified that passenger carriage was a threshold KPP.

3.2.1.6.1.1.2 The entire main cargo deck shall be capable of accommodating an all passenger configuration (plus baggage) **(THRESHOLD, KPP #4)**.

3.2.1.6.1.1.4 The aircraft shall optimize a full range of palletized cargo, passengers, and/or AE configurations that fully and efficiently utilize all available main deck space **(THRESHOLD, KPP #4)**. Note: Maximum flexibility is desired for the number of cargo/passenger/AE combinations on the convertible main deck.

AR, Tab 278, RFP, SRD, ¶ 3.2.1.6.1.1.2 and ¶ 3.2.1.6.1.1.4; App. 278(a), pp. 13-14. Section M further indicated that all KPP thresholds must be met, and, therefore, the KPP thresholds were more important than the other requirements. AR Tab 278, clause M002, ¶ 2.2.1.1 (“All KPP thresholds in 2.2.1.2a through 2.2.1.2d below must be met.”); App. 278(d), p. 3. The solicitation made no distinction between KPPs, thus making all KPPs of equal importance.

In evaluating airlift, Section M, Paragraph 2.2.1.2 b. stated in part: “The Government will evaluate the offeror’s approach to meeting requirements related to airlift capability. This evaluation will include: airlift efficiency, cargo, passengers, aeromedical evacuation, ground turn time, and cargo bay configuration.” *Id.* at § M, ¶ 2.2.1.2 b. The passenger carriage Threshold KPP was evaluated, as were the other KPP Thresholds, in accordance with the RFP criteria, and both offerors were assessed as having met this KPP.

As in other areas, this KPP threshold was evaluated to determine the offerors’ capability to meet the passenger carriage requirement. This evaluation was separate from evaluations of the offerors capabilities to meet other requirements or assessments of costs, such as the costs and logistics footprints of the aircraft, along with other requirements including sufficient lavatories, potable water, and waste water storage capacity. Neither the RFP nor the SRD linked any of these requirements to this capability.

In its evaluation, the SSET did evaluate the passenger carriage capability of the KC-30. While the SSET initially questioned certain aspects of the KC-30’s passenger carriage capability, it later determined that these aspects were separately and individually evaluated. The SSET accomplished its evaluation of both offerors’ capability to meet this requirement. The

[REDACTED]

SSAC, in conducting its comparative analysis, recognized the significant passenger carriage capability of the NG KC-30, noting the “KC-30 requires fewer sorties to transport a large number of passengers or can transport more passengers on a single sortie.” AR Tab 55, PAR; App. 55(a), p. 19. The SSA concurred with this comparative assessment and made the same determination in the SSDD. “The KC-30 can carry [REDACTED] passengers in its FAA certified configuration while the KC-767 can carry [REDACTED] passengers in its FAA certified configuration. This means that the KC-30 needs fewer sorties to transport a given number of passengers or can transport more passengers on a given sortie.” AR Tab 54, SSDD; App. 54, p. 7.

**(b) Aeromedical Evacuation**

In paragraph 3.2.1.6.1.1.3 of the SRD, the KPP threshold stated: “The entire main cargo deck shall be capable of accommodating an all AE configuration, to include ambulatory and/or patient support pallets (THRESHOLD, KPP #4).” There was no KPP objective for this KPP (SRD ¶ 3.2.1.6.1.1.3). Additionally in this airlift component, there was a requirement identified as KSA #2. This KSA was included in SRD, paragraph 3.2.1.6.7 Aeromedical Evacuation (KSA #2), which was defined in paragraph 3.2.1.6.7.1, as stated: “The KC-X shall provide air transport and care in the air, using existing patient support pallets (PSP), for 50 patients total, 16 litter/34 ambulatory patients, for up to 14 hours (THRESHOLD, KSA #2).” Paragraph 3.2.1.6.7.2 then provided a corresponding KSA Objective, namely “The KC-X should provide air transport and care in the air, using existing PSP, for 50 patients total, 24 litter/26 ambulatory patients, for up to 16 hours (OBJECTIVE).” These two KSA requirements have a time and number of patient aspect to them (i.e., 50 patients for up to 14 hrs (THRESHOLD) or 50 Patients for up to 16 hrs (OBJECTIVE)).

The KPP threshold listed as part of KPP #4 was a separate and distinct requirement from the KSA threshold and objective. These requirements were further differentiated by the different labels attached to them. The RFP was clear that KPPs and KSAs were different categories. While KPP thresholds must be met in order for the contract to be awardable, the KSAs could be traded away. The KPP could have been met without meeting the KSA. Neither the RFP nor the SRD linked these requirements to each other. While in contract interpretation, there is a deference to specific language versus general language, in this case, the

[REDACTED]

cited language actually came from the requirements set forth by the RFP, not the resulting contract. Additionally, for the specific to be given priority of the general, it must be a further definition of the general. In this case, as noted, the specific requirement was not a further definition of the general requirement. Rather, the KSA requirement could well be met with only half of the cargo floor configured for aeromedical. The KPP requirement required the entire cargo floor to be an all aeromedical configuration regardless of the KSA requirements.

Therefore, as noted, there were actually three SRD paragraphs (1 KPP and 2 KSAs) involved. Both offerors proposed to meet, and were evaluated as having met, the SRD KSA threshold and objective paragraphs. The SSET did not give any additional consideration for exceeding the KSA objective requirement of 24 litter/26 ambulatory patients for up to 16 hours. Therefore, it was noted by the SSAC and SSA as a “Noted Attribute with No Airlift Advantage to Either Offeror.”

In the separate evaluation of the KPP (i.e., “the entire main cargo deck”), the SSET determined that in its proposal, [REDACTED] [REDACTED] In its evaluation of NG’s proposal, the SSET assessed that it had offered the capability of accommodating [REDACTED] litter-bound patients and [REDACTED] ambulatory patients on its entire main cargo deck. The SSET evaluated that NG offered additional capability to meet this KPP. It was advantages of this capability that the SSET evaluated as offering a potential strength. It was this capabilities advantage that the SSAC noted in its comparative analysis as being a “Major Discriminator” between the two offerors. It was this capability and the way it was provided that the SSA noted as a discriminator in the SSA’s integrated assessment.

**c. The Air Force Properly Evaluated Operational Utility**

Section M, paragraph 2.2.1.2 specifically addressed how operational utility would be evaluated:

[W]ill consist of an assessment of the contractor’s approach to meeting the requirements relating to operational utility, including the following: aircraft maneuverability, worldwide airspace operations, communication/information systems (including Net-Ready capability), treaty compliance support, formation flight, intercontinental range, 7,000

[REDACTED]

foot runway operations, bare base airfield operations, and growth provisions for upgrades.

AR Tab 278, RFP, SRD ¶ 2.2.1.2.c; App. 278(a), p. 4.

As with other areas within the Mission Capability Factor, the SSET evaluation followed the requirements set forth in paragraph 2.2.1.1 of Section M, with each offeror being separately evaluated against the requirements set forth in the RFP. This evaluation was briefed to the SSAC and the SSA at the Final Evaluation Briefing. The SSAC then performed a comparative analysis of both offers and determined the strengths of the capabilities offered by each. The SSAC reviewed each of the offered capabilities, and gave consideration to each in terms of system value and benefit as part of this comparative analysis. The SSAC then made its recommendation to the SSA. In turn, the SSA made the Source Selection decision in accordance with Section M, paragraph 1.1, which stated that award would be made to the “best overall offer, based upon an integrated assessment of Mission Capability, Proposal Risk, Past Performance, Cost/Price and the Integrated Fleet Aerial Refueling Assessment (IFARA) ... (which was) judged, based on the evaluation factors and subfactors, to represent the best value to the Government.” AR Tab 278; App. 278(d). The SSA based the award decision on an integrated assessment of proposals against all source selection criteria in the solicitation, determining which offer provided the greatest benefits to the Government.

**(1) The Air Force Properly Evaluated Boeing’s Proposal**

In Operational Utility, the SSET determined that both offerors met the KPP thresholds. If, during the source selection process, either had failed to meet the KPP threshold requirement, the SSET would then have issued an Evaluation Notice, notifying that offeror of a deficiency. In accordance with the RFP, a failure to meet a KPP threshold would result in a deficiency, failure to meet any other “requirement,” or partially meeting any other requirement, such as a KPP objective, would not result in a deficiency. In these latter circumstances, the SSET was not required to notify offerors of such a failure, as it was not a deficiency.

For example, the Net Ready Appendix (Table 1, Column 2) to the RFP was listed as a KPP objective under the SRD (and was included in what the RFP termed as design trade space). Under the RFP, therefore, the lack of such capability would have never resulted in a

[REDACTED]



deficiency mandating discussion. AR Tab 278, RFP, SRD ¶ 3.2.4.1.1 and Appendix A, KC-X Net Ready Key Performance Parameters, ¶ 2.1, Table 1; App. 278(a), p. 19. In its final evaluation of Boeing's proposal, the SSET determined that Boeing's offer to meet the Net Ready KPP objective, KPP #7, was assessed as only "partially" meeting the requirement.

While Boeing's proposal indicated that the KPP threshold requirements were fully met, it did not give an indication on the status of the KPP objectives. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

However, since [REDACTED] were not included as part of the contractually binding System Specification, the SSET in its final evaluation determined that Boeing had only "partially" met the KPP Objective. Since this determination was not made until the SSET's final evaluation of Boeing's proposal, the change in evaluation rating was not communicated to the offeror, as discussions had been closed. AR Tab 242; PHB App. 242.

Because there was no deficiency, the SSET was not required to discuss every area where the proposal could be improved. GAO has held that although an agency is required to have meaningful discussions with offerors and must address significant weaknesses and deficiencies identified in the proposal, "an offeror is not entitled to all encompassing discussions with the agency." American V-Ships Marine, Ltd., B-27876.25, Sept. 25, 2000, 2000 CPD ¶ 164 at 16-17; Northrop Grumman Info. Tech., Inc., B-290080, Jun. 10, 2002, 2002 CPD ¶ 136 at 6; SEAIR Trans. Svs., Inc., B-274436, Dec. 12, 1996, 96-2 CPD ¶ 224 at 3-4. (emphasis added).

GAO has held that "[w]here a proposal is considered to be acceptable and in the competitive range, an agency is not required to discuss every aspect of the proposal receiving less than the maximum rating." SEAIR, 96-2 CPD ¶ 224 at 4. An agency is not "required to advise an offeror of a minor weakness that is not considered significant ...." Northrop Grumman, 2002 CPD ¶ 136 at 6. GAO noted in its General Injectables & Vaccines, Inc., B-298590, Nov. 15, 2006, 2006 CPD ¶ 173 "[a]gencies are not required to "spoon-feed" an offeror during discussions." (citing LeBarge Elecs., B-266210, Feb. 9, 1996, 96-1 CPD ¶ 58 at 6). Rather, discussions must be meaningful; that is, discussions may not mislead offerors and

[REDACTED]  
[REDACTED]  
[REDACTED]

must identify deficiencies and significant weaknesses in each offeror's proposal that could reasonably be addressed in a manner to materially enhance the offeror's potential for receiving award. PAI Corp., B-298349, Aug. 18, 2006, 2006 CPD ¶ 123 at 8 (emphasis added).

**(2) Air Force Properly Evaluated Northrop Grumman's Proposal**

**(a) 7,000 Foot Runway**

As part of its technical evaluation, the SSET assessed the ability of each proposed aircraft to takeoff and land on a 7,000 foot runway against the criteria set forth in the SRD:

3.2.1.1.4.1: The KC-X shall be capable of operating from a 7,000 ft dry, hard-surface runway at sea level (**THRESHOLD**) using FAA ground rules.

3.2.1.1.4.2: "The KC-X should be capable of operating from a 7,000 ft dry, hard-surface runway at sea level at maximum weight for takeoff (**OBJECTIVE**) using FAA ground rules.

AR Tab 278, RFP, SRD, ¶ 3.2.1.1.4.1 and ¶ 3.2.1.1.4.2; App. 278(a), p. 11. In its evaluation, the SSET found that NG had committed to two System Specification requirements (3.2.3.4.3.4.1 and 3.2.3.4.3.4.2), involving 7,000 ft runway performance. The KC-30's takeoff gross weight was [REDACTED] of which [REDACTED] lbs would be fuel. Additionally, "(t)he KC-30 shall be capable of landing on a 7000 foot dry hard-surface runway at sea level ... up to a maximum landing weight of [REDACTED] lbs." AR Tab 187, NG FPR, Feb 15, 2008, at Atch. 1, System Specification ¶ 3.2.3.4.3.4.2 at 621; App. 187(d). This was a significantly better capability than the KC-767 could provide.<sup>14</sup>

In its April 25, 2008, Comments on the Agency Report, Boeing continues to insist on the substitution of its own judgment for that of the agency. Boeing apparently has accepted the Air Force's position that the SSET was not required to link the evaluation of short runway operations with extraneous considerations such as bare base airfield operations (ramp space,

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<sup>14</sup> Boeing proposed that its KC-767 would be capable of operating (i.e., taking off and landing) from a 7,000 ft dry, hard-surface runway at sea level, using Federal Aviation Regulations, at [REDACTED] lbs gross weight of which [REDACTED] lbs would be fuel, or about [REDACTED] lbs less of off-loadable fuel than the KC-30 provides. AR Tab 119, Boeing FPR, 15 Feb 08, FPR Model Contract System Specification, ¶ 3.2.3.1; App. 119(g), p. 58; AR Tab 55, PAR; App. 55(a), p. 21.

[REDACTED]

runway strength, etc.). Nevertheless, Boeing takes issue with the SSAC's conclusion that the KC-30's capability to operate from a 7,000 ft. runway carrying approximately [REDACTED] more fuel than the KC-767 gave it the inherent ability to get more fuel airborne from a larger number of airfields and thus would increase warfighter basing options. Boeing believes that, even if the KC-30 can take off with more fuel, it cannot do so from a larger number of airfields or that it increases basing options.

Boeing claims that the [REDACTED] show that the KC-30 limits [REDACTED] the number of airfields which that aircraft can access. In making this argument, Boeing is again attempting to introduce unrelated evaluation considerations into the evaluation of short runway operation capability. As pointed out in the Air Force's Memorandum of Law, this conflation of separate evaluation criteria is improper. MOL at 125. Furthermore, Boeing's argument is inapt on the merits. [REDACTED]

[REDACTED] To the contrary, considering individual aircraft capability only (as was proper in the short runway analysis), the KC-30 was found to have significantly more capability in getting fuel airborne.

Boeing argues that [REDACTED] of additional fuel may well not be the benefit the SSAC believes it to be, pointing out that the KC-30 has a higher burn rate than the KC-767, and that not all the additional fuel can be offloaded to receiver aircraft. However, it is evident that [REDACTED] is a significant amount of fuel, and is substantially more than the KC-767 is capable of carrying. This additional fuel simply provides the Air Force additional options to accomplish the mission. The SSAC's judgment that the KC-30's capability in this regard was a Major Discriminator is therefore entirely justified.

In its evaluation of the NG proposal, the SSET's independent analysis confirmed that its proposed capabilities in regard to 7,000 ft runway operations are reasonable. AR Tab 287, Analysis Files Folder, NGC-TOAERO, Chart CFL and BFL Chart and Boeing-TOAERO,

[REDACTED]

BFL Worksheet; App. 287. After its evaluation, the SSET briefed these findings, among others, to the SSA and the SSAC. AR Tab 24, Slides 78 & 128; AR Tab 29, slides 130 & 274; and AR Tab 46 Slides 98 & 230; see generally App. 24.

GAO has ruled that there is no requirement that award discriminators be the most heavily weighted factors. So long as the less heavily weighted criteria have been disclosed to the offerors in the RFP, as they were here, there is nothing improper in their becoming the discriminator where competing proposals are evaluated as equal in the more heavily weighted ones. Keane Fed. Sys., Inc., B-280595, Oct. 23, 1998, 98-2 CPD ¶ 132 at 16. The NG offered capabilities were determined comparatively to offer greater benefit and thus were appropriately construed as a strength.

**(b) Ferry Range**

Much to the same effect, Boeing presses its complaint that the KC-30's ferry range capability does not provide a substantial benefit to the Air Force and should not have received a Major Discriminator. Boeing restates its original argument, asserting that ferry range is a non-descript, non-KPP/KSA requirement and that "the KC-30 might be able to reach certain bases that are farther away, but it cannot 'deploy to more locations' because of its limited ramp space capability and other base operational limitations." Comments on the Agency Report at 47.

The SSET evaluated each offeror's proposal to determine its "Ferry Range" capability. The SRD, paragraph 3.2.1.1.1.4, in relevant part, stated: "The aircraft shall have a minimum unrefueled ferry range of 9500 nm starting at maximum takeoff gross weight at brake release, and utilizing a maximum range flight profile. No runway length restriction is imposed for this requirement . . . ." AR Tab 278, RFP, SRD, ¶ 3.2.1.1.1.4; App. 278(a), p. 10. This was a non-KPP requirement, making it part of the offeror's trade space. Both offerors proposed to provide capability against this SRD paragraph, with Boeing offering a range of [REDACTED] nm and with NG offering range of [REDACTED] nm.

The SSET's evaluation of each offeror's proposed capability in regard to SRD paragraph 3.2.1.1.1.4, was to assess whether the aircraft could fly 9,500 nm without having to be refueled. The evaluation was entirely separate from the evaluations regarding the proposed

[REDACTED]

[REDACTED]

[REDACTED]

aircraft's capability to receive fuel from another tanker in order to reach 100% of usable airfields; to operate in forward-deployed bare bases (SRD paragraph 3.2.10.1.1.3); to operate on short or soft runways; or to meet other factors such as those relating to size and weight. Boeing accepts that a fusing of evaluations by the SSET was not intended, but apparently believes this fusing should have been done by the SSAC during its comparative analysis.

Boeing takes issue with the SSAC's conclusion that the KC-30 had the ability to deploy to more locations from a given starting point unrefueled than the KC-767. Boeing introduces considerations such as MOG limitations and the number of airfields the KC-30 can access, concluding that such concerns point to the KC-30's inability to "deploy" to more locations.

As it has done throughout, Boeing supplants the Air Force's discretionary decisions with its own unsupported allegations. The fact is that both offerors were found to have met trade space requirements with respect to Operational Utility, SRD 3.2.10.1.1.3, regarding aerial refueling operations from bare base airfields with confined ramp space. AR Tab 049, KC-X Feb Final—As Presented 21 Feb 08. The number of KC-30 aircraft that may be stationed at some airfields has nothing to do with the aircraft's ferry range. Moreover, an individual KC-767 can "access" no airfields that an individual KC-30 will not also be able to access. Finally, due to the KC-30's superior short field capability, it can operate from a 7,000 ft runway with significantly more fuel, thereby supporting all mission types. It appears self-evident that an aircraft with a ferry range of [REDACTED] will be able to deploy to more locations than an aircraft that has a range of [REDACTED]. The SSAC, in its discretion, clearly believed this additional range was a significant enough advantage to warrant a Major Discriminator.

**2. The Air Force Properly Evaluated System Integration and Software (Subfactor 1.2)**

**a. The Air Force Evaluated System Integration In Accordance With the RFP**

Section M, Paragraph 2.2.2 stated that each offeror's proposal would be independently evaluated against the criteria set forth, stating:

[REDACTED]

The Government will evaluate the proposal to determine the offeror's ability to implement a disciplined and institutionalized systems engineering approach necessary to successfully design, develop, integrate, validate and verify requirements, manufacture, and sustain the KC-X system as defined by the performance capability requirements set forth in the KC-X SRD. The software development capability (SDC) will be evaluated to determine the offeror's capability to manage and integrate the software elements required to satisfy the performance requirements. This Subfactor is intended to evaluate proposed processes/approaches to the attributes specified below; the associated evaluation of system performance as reflected in the SRD is accomplished under Subfactors 1 and 3.

AR Tab 278; App. 278(d), p. 5. System integration and software assessed the offerors approach to the following:

Modular open Systems approach, Systems engineering, System safety, Systems integration, Software development and integration, Airworthiness certification, Environmental safety and occupational health, System integrity programs, System Interoperability, Technical data and software deliverables and license rights.

Ten areas (measures of merit) were assessed in this subfactor. For each of these listed measures of merit the Air Force independently evaluated each offeror in accordance with criteria in RFP Section M 2.2.2. AR Tab 278; App. 278(d), p. 5. Color ratings were assigned to each offeror's proposed approach in accordance with RFP Section M, Paragraph 2.2 Table 2-1 Mission Capability Ratings. Also, Proposal Risk Ratings for each offeror were assessed independently in accordance with RFP Section M, Paragraph 2.3, Factor 2: Proposal Risk. Both offerors' overall risk ratings were based on weaknesses and associated risks, documented in EZ Source (see generally AR Tab 59) and the FPR briefing (see generally AR Tab 37). Of these ten measures of merit, both offerors had weaknesses. Independently each offeror's weaknesses resulted in a color rating of green and moderate risks. Both offerors had a weakness related to software, Boeing had [REDACTED] areas within software identified, while NG [REDACTED] AR Tab 49, pp. 317, 325. With respect to NG's additional weakness in Systems Integration, the SSET concluded that it was not of the magnitude to compel a higher risk rating. The Final Subfactor Summary – NG – System Integration and Software states:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

AR Tab 59, App. 59(w), p. 21. Given the differing nature of the software weaknesses and the minor weakness of NG in system integration, the risk assigned to each offeror is eminently reasonable.

The offeror proposed two widely different software approaches. Boeing's proposed approach was a highly integrated and complex approach consisting of fully integrated displays and controls for [REDACTED] [REDACTED] NG's proposed software approach consisted of utilizing a [REDACTED] [REDACTED] This approach was a [REDACTED] [REDACTED] The differing design philosophies of the two offerors drove the evaluations of software reuse.

In evaluating each proposal, the SSET independently analyzed each offeror's software approach. Based on the each proposal, an evaluation of each Computer Software Configuration Items (CSCIs) within the proposal was developed. Subject Matter Experts (SMEs) then assessed the level of effort and risk for each CSCI. This was initially performed for each proposal with its respective limited information. For each CSCI, a judgment was made on the degree of complexity for new, modified and reused code. This was recorded in a spreadsheet. If it was determined that the data provided in the proposals was less than complete, an EN was written for both offerors requesting the same data. The updated information was again reviewed by the Subject Matter Experts (SMEs), and an assessment was made on complexity and reuse. The spreadsheet was then updated.

With the data provided in the proposals and ENs, the SSET categorized the efforts at the CSCI [REDACTED] Each offeror was evaluated and was assessed technical risk for each update to the proposals. Each offeror's evaluation, due to differing design philosophies, had varied capability outcomes. While both were considered compliant with the RFP, each had weaknesses and technical risks. Both offerors were assessed as having moderate risk, with both having software reuse as a contributor to the rating. However, software reuse was [REDACTED]

not the main reasons for these moderate risk ratings. Rather, each offeror's re-use contributed to the risk ratings, but for different reasons.

Boeing's Moderate risk was assessed due to a [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] NG was assigned its proposal risk rating because of [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] AR Tab 59, App 59 (w),  
p. 13 (Measure of Merit B); NG Comments Ex III-63.

GAO has consistently held that its review of evaluations of technical proposals "is primarily the responsibility of the contracting agency; the agency is responsible for defining its needs and the best method of accommodating them and must bear the burden of any difficulties arising out of a defective evaluation." Microcosm, Inc., B-277326 et al., Sept. 30, 1997, 97-2 CPD ¶ 133 at 4. In reviewing an agency's evaluation and source selection decision, the GAO "will not reevaluate the proposals; we will only review the evaluation to determine whether the evaluation was reasonable and consistent with the stated evaluation criteria, and with applicable procurement laws and regulations." *Id.*; Gemmo Impianti SpA, B-290427, Aug. 9, 2002, 2002 CPD ¶ 146 at 3. A protester's disagreement with the agency's judgment is not sufficient to establish that the agency acted unreasonably. Microcosm, Inc., *supra*. See also, Raytheon Co., B-291449, Jan. 7, 2003, 2003 CPD ¶ 54 at 7.

**b. The Air Force Did Not Engage In Improper Normalization and Boeing's Improper Normalization Argument Is Untimely**

While Boeing now adds an allegation of technical leveling/improper normalization to its laundry list of alleged problems with system integration and software (Boeing comments pp. 97-98), the evaluations described directly below in c. and d. demonstrate an independent evaluation of differing approaches that found different degrees of risk for the area of software reuse. AF MOL, pp. 148-150. While different degrees of risk within software were found, when considered with the other areas of subfactor 1.2, the overall assessment was

[REDACTED]  
[REDACTED]  
[REDACTED]



that both offerors' proposals had moderate risk in this area. Far from just docking both offerors based on past experience, the record clearly shows a detailed evaluation of both offerors' proposed software reuse. The fact that each offeror was found to have weaknesses within software attributable to different areas, and the offerors had a different number of areas in which weaknesses were found conclusively dispels any notion that improper normalization/technical leveling occurred. AR Tab 49; App. 49, pp. 317, 325.

Boeing's improper normalization argument based on an SSAC e-mail from Tab 313 of the Administrative Record is not only unfounded, but is untimely as the EZSource e-mails were received by Boeing on April 9, 2008. As the GAO has stated, when an offeror learns of an error in the agency's evaluation of its proposal under the solicitation, the offeror is required to protest within ten days of its learning of the basis of the protest. PM Servs. Co., B-310762, Feb. 4, 2008, 2008 CPD at 3; Sikorsky Aircraft Co.; Lockheed Martin Sys. Integration-Owego, B-299145; B-299145.2; B-299145.3, Feb. 26, 2007, 2007 CPD ¶ 45 at 7 n.2.

**c. Air Force Properly Evaluated Boeing's Proposed Software Approach**

In its technical evaluation of Boeing's proposed software approach, the SSET's overall software assessment acknowledged software reuse from its other programs. AR Tab 59; App. 59(y), p. 12-13. The assessment evaluated not only this reuse, but also new and modified code for each CSCI. Based on these technical assessments, adjustments were made to the projected lines of code for each CSCI. On completion of this micro-level (CSCI by CSCI) assessment of Boeing's proposal, the SSET then made a macro-level assessment of the proposed approach. This macro-level assessment considered the micro-level adjustments, along with any adjustments by Boeing, as an aggregate and evaluated this against the Government's experience with software reuse. The SSET's judgment of the reuse determined the overall amount of reuse claimed by Boeing was [REDACTED]

[REDACTED]

Based on the Air Force's evaluation, as noted, the weakness assigned to Boeing, in part, was reflective of the Air Force's overall experience with reuse and the program risk it

[REDACTED]

presents. Software size and associated reuse were areas of interest for the SSET in evaluating both offerors. For Boeing, [REDACTED]

[REDACTED]<sup>5</sup>

Specifically, Boeing's proposed approach to software involved approximately [REDACTED]

[REDACTED] Out of this, there were approximately [REDACTED]

[REDACTED] The software development effort was evaluated as being considerable based upon the [REDACTED]

[REDACTED] As noted, Boeing's approach was a highly integrated and complex approach consisting of [REDACTED]

[REDACTED] This approach required Boeing to [REDACTED]

[REDACTED] Compare AR Tab 215, PHB App 215(a), p. 3. and AR Tab 215, PHB App 215(b), p. 3. See also, NG Comments, Figure III-20, p. 109.

On November 29, 2007, the Air Force provided Boeing a briefing based on the Pre-FPR SSA briefing. Within that briefing, Boeing was informed of its weaknesses in this Subfactor, weaknesses associated with [REDACTED] software development areas— areas that contained reused software. AR Tab 135; App. 135(a), p. 125. In its final proposal, Boeing then proposed

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

---

<sup>15</sup> In its Protest, Boeing referenced [REDACTED]  
[REDACTED] However, Boeing's proposal referred to reusing software from [REDACTED]  
[REDACTED] Boeing apparently [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

**d. Air Force Properly Evaluated Northrop Grumman's Proposed Software Approach**

In its evaluation of NG's software approach, the SSET determined the proposed approach to software involved approximately [REDACTED] Out of this, there were approximately [REDACTED]

[REDACTED] The software development effort was moderate based on [REDACTED]

[REDACTED] This approach was assessed as a non-complex [REDACTED]

<sup>6</sup>

Finally, Boeing asserts that the reuse for [REDACTED] software cannot be accurate. Boeing's argument is based on factually erroneous assertions. While it is true that NG originally did not include [REDACTED] in its proposal, the inclusion did not require [REDACTED] as asserted by Boeing. The addition of [REDACTED] was examined by the Air Force evaluators. Prior to incorporating [REDACTED] in its proposal, NG planned to [REDACTED] The [REDACTED] did not have SLOC for [REDACTED] However, the Air Force evaluators in accounting for the fact that the aircraft would have [REDACTED] In its evaluation of this approach, the SSET estimated that, [REDACTED] <sup>7</sup>. This reasonable evaluation is documented in an EZSource e-mail which states in part: "[REDACTED] suggests, and I concur, with

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<sup>16</sup> In its protest, Boeing argued that NG received too low of a risk rating. However, Boeing actually did admit that [REDACTED]

[REDACTED] Therefore, Boeing's own statement contradicted its argument regarding Northrop Grumman's assigned moderate proposal risk rating.

<sup>17</sup> [REDACTED]

breaking the identified [REDACTED] AR Tab 313, App 313. Boeings basis of its assertion is factually incorrect, [REDACTED] was not added for [REDACTED] rather the existing [REDACTED] count was reviewed by the SSET and appropriately adjusted.

In its evaluation, the SSET did determine that there was some risk in re-use, particularly in re-use from [REDACTED] which was then reflected in NG's moderate risk rating, as summarized in the Final Subfactor Summary for NG supporting the Air Force's reasonable determination of risk. See generally AR Tab 59; App. 59(w).

As shown above, the Air Force's evaluation of the software area was thorough and reasonable and was accomplished according to the RFP. GAO has held that in reviewing such technical evaluations, it "will not reevaluate the proposals; we will only review the evaluation to determine whether the evaluation was reasonable and consistent with the stated evaluation criteria, and with applicable procurement laws and regulations." *Id.*; Gemmo Impianti SpA, B-290427, Aug. 9, 2002, 2002 CPD ¶ 146 at 3. A protester's disagreement with the agency's judgment is not sufficient to establish that the agency acted unreasonably. Microcosm, Inc., *supra*. See also, Raytheon Co., B-291449, Jan. 7, 2003, 2003 CPD ¶ 54 at 7.

### **3. The Air Force Properly Evaluated Product Support (Subfactor 1.3)**

#### **a. Background**

In its initial protest and its second supplemental protest, Boeing asserted the omission of a timeline in NG's proposal for organic depot support created a material failure on the part of NG to satisfy purported strict contract requirements. Boeing Protest, p. 119-20; Boeing 2d Supplemental Protest, p.82. However, the omission in question was in fact an "administrative oversight"—that is, an error in form rather than substance—since the evaluators determined NG's proposal sufficiently obligated it in a variety of ways to comply with the Air Force timeline even though its SDD SOW did not explicitly mention it.

This issue stems from the SSET's determination that NG's approach met the threshold for KSA #3 and met the objective for KSA #4, and it merited ratings of "Blue" and "Low" regarding Proposal Risk in spite of a weakness for an "administrative oversight"

[REDACTED]

pertaining the transition to initial organic depot-level maintenance. Specifically, NG failed to explicitly [REDACTED]

This failure was identified a weakness because the RFP SDD Statement of Objectives (SOO) expressly required the successful offeror's Statement of Work (SOW) to state it would:

Plan for and support the Government to achieve an initial organic D-level [depot-level] maintenance capability in accordance with the SORAP [source of repair assignment process] for core-designated workloads, at a minimum, within two years after delivery of the first full-rate production aircraft.

AR Tab 278, SOO, Atch 2; App. 278(b), p. 14. In addition, Section L of the RFP provided instructions to offerors (ITO). The ITO, in relevant parts, stated: "The offeror's SOW shall conform to the Government's SOO. Non-conformance with the instructions provided in the ITO may result in an unfavorable proposal evaluation." AR Tab 278, clause L047, ¶ 2.1; App. 287(c), p. 5. Notably, the next paragraph of the ITO cautioned offerors their proposals "should not simply rephrase or restate the Government's requirements, but rather shall provide convincing rationale to address how the offeror intends to meet these requirements." Emphasis added. *Id.*, ¶ 2.1. While this latter paragraph did not patently preclude the duplication of SOO language in the SOW, it can be read as establishing the relative importance to the Air Force of substance over form in crafting the contents of the proposals.

In its proposal, NG stated: [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] After reviewing the NG proposal prior to final proposal revisions (FPR), the SSET found NG reasonably manifested its intent to meet the SOO requirement to support the Air Force in standing up initial organic depot level maintenance within two years following delivery of the first full-rate production aircraft even though it had [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

As a result of NG's [REDACTED] the SSET concluded NG's proposed SOW had an administrative weakness on organic depot capability caused by an administrative oversight. They assessed an administrative weakness for this discrepancy because based on their reading of the requirements and NG's proposal they reasonably determined the proposal complied with the requirement (i.e., it obligated NG to provide the desired planning and support within the desired time frame) but the SOW did not conform to the SOO because [REDACTED]  
[REDACTED]  
[REDACTED]

The SSET members drew this distinction between compliance and conformance based on their conclusion the omission of the language in question had no negative impact on cost, schedule, or any other aspect of NG's obligation or ability to provide the required planning and support within the required period, and as such it was immaterial to the actual performance of the contract. The SSET members labeled the weakness an "oversight" because of this lack of impact on actual performance and because "normal contractor effort and normal Government monitoring will [sic] likely be able to overcome any difficulties." *Id.* at 366.

Conversely, Boeing argues the omission could not reasonably be considered an "oversight" as the Air Force evaluators concluded because the Air Force informed NG [REDACTED]  
[REDACTED]  
[REDACTED] NG even asked the Government during the briefing what it needed to do to rectify the weakness it was assessed for [REDACTED]  
The evaluators responded they could not advise NG on what to do, but they did note [REDACTED]  
[REDACTED]  
[REDACTED]  
Minutes from Pre-FPR Briefing, Dec. 21, 2007, AR Tab 207 at 2; [REDACTED] Witness Notebook, Tab 207, p. 2.

Following this exchange, instead of correcting the problem, however, NG instead informed the Air Force, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED] Because NG expressly addressed the weakness without correcting it, Boeing contends at that point NG willfully failed to [REDACTED] and thus the resulting weakness could no longer be characterized as an oversight. Boeing Comments, p. 101.

Boeing's focus on NG's state of mind when it decided to explain rather than simply provide the missing language is misplaced, however, because the oversight label never intended to suggest the omission from NG's final proposal was inadvertent or unintentional. Rather, it is obvious from the context of that term in the Final Subfactor Summary, Boeing Product Support Hearing Exhibits, Tab 17, p. 28, ¶¶ 1 and 2, that instead refers to the administrative character, de minimus impact, and readily correctable nature of the omission.

As the SSAC briefing noted, NG's proposal addressed the tasks in the SOO, but it omitted the timeframe in its SOW. However, the SSAC concurred with the SSET when reading the proposal as a whole it "clearly indicated NG intent to meet this requirement...well in advance of need date." AR Tab 55, SSAC Recommendation Briefing, p. 23; App 55(a), p. 23. The SSA in turn found "the weakness is merely an administrative oversight and clearly does not increase the risk of unsuccessful contract performance." SSDD at 10, AR Tab 54; App. 54, p. 10.

Boeing protested NG's omission of a reference to the time frame for the transition, claiming it was "clearly not an oversight" because NG "recognized the problem and addressed it, but did not do so in the manner required by the RFP." Boeing Comments, p. 101.

The GAO conducted its hearing in this case in part to elicit the Air Force's explanation of its evaluation of NG's product support approach in light of NG's omission of an express reference to the Air Force timeline for its transition to organic depot maintenance [REDACTED] [REDACTED] Specifically, the focus at the hearing was on the Air Force's refutation of Boeing's protest theory that discussions between the Air Force and NG precluded the Air Force's ultimate conclusion that NG's omission was a mere administrative oversight with no impact on schedule, cost, or other aspects of NG's performance of the KC-X contract.

[REDACTED]  
[REDACTED]  
[REDACTED]

### b. Evidence And Argument

The respective product support approaches of the two offerors in this procurement were similar in many respects. They differed, however, in their methods of complying with the portion of the SOO in question. Boeing's proposal did so explicitly by echoing the [REDACTED] language in the SOO. NG's proposal, on the other hand, did so implicitly by: (1)

agreeing unequivocally [REDACTED]

[REDACTED] (2) agreeing to establish [REDACTED]

[REDACTED]

[REDACTED] (3)

agreeing to [REDACTED]

[REDACTED]

[REDACTED]

In its SDD SOW, NG expressly obligated itself to [REDACTED]

[REDACTED]

[REDACTED] testified

he "expected" to see an explicit reference to [REDACTED] following that statement, but there was

none. Tr. 1252-53. However, based on the plain language of the SOO, the pre-FPR briefing,

and discussions between NG and the Air Force, NG was on actual notice of the Air Force's

[REDACTED] for the transition. AR Tab 205, p. 141; AR Tab 207, p. 2; Tr. 1253. As a result,

NG's agreement to support the transition evidences a "meeting of the minds" between NG and

the Air Force as to [REDACTED] and NG's specific intent to be bound [REDACTED]

More importantly, though the SOO was intentionally vague as to what the contractor would have to do pertaining to the transition of depot maintenance capability, it clearly stated the contractor would be obligated only to "[p]lan for and support the Government" in the transition, and thus not to effectuate or oversee the transition. AR Tab 278, SOO, Atch 2; App. 278(b), p. 14. Therefore, by definition the Government, not the contractor, would dictate [REDACTED] Once [REDACTED] has been established, if the actions of the contractor do not assist the Government in meeting it, those actions cannot reasonably be characterized as supporting the transition. As such, when NG obligated itself to support the transition, by

[REDACTED]



necessity it also obligated itself to do so [REDACTED] even in the absence of an explicit statement to that effect.

Several documents reviewed by [REDACTED] in which he found persuasive evidence of NG's legal obligation and specific intent to comply with the [REDACTED] were provided to the GAO in a witness binder. As [REDACTED] indicated in his testimony, he selected the documents because they demonstrated in a variety of ways how NG bound itself [REDACTED] Tr. 1284-85. The documents are listed below along with a brief summary of the contents of each and an explanation of how each contributed to [REDACTED] ultimate conclusion that the NG proposal [REDACTED]  
[REDACTED] Tr. 1280.

- [REDACTED]
- [REDACTED]

\_\_\_\_\_

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

The KC-X procurement schedule is capability-based rather than date-based. That is, events are to take place when certain milestones are reached. Tr. 1216. Thus, no realistic, definite timeline could be established prior to contract award for production of the aircraft or events sequentially depending on the production timeline, including the establishment of initial organic depot maintenance capability in question here. Tr. 1285-86. NG's resolution of the weakness by agreeing to establish [REDACTED] was therefore adequate to satisfy the compliance requirements of the RFP.

As [REDACTED] summarized:

[REDACTED]

[REDACTED]

[REDACTED]

Tr. 1287-88. In addition, he concluded his testimony by again drawing a sharp distinction between the failure to [REDACTED] versus the failure to [REDACTED] [REDACTED] Tr. 1289.

Though Boeing's explicit method may well be preferable for a variety of reasons, the Air Force's evaluators ultimately determined the implicit method was also sufficient. It was within their discretion to make that determination. Here, because on the whole its proposal bound NG to the appropriate time frame, the failure to include the precise, explicit reference thereto was reasonably and properly characterized by the Air Force as an administrative weakness, which did not preclude award to NG. Abacus Enterprises, B-248969, Oct 13 1992, 92-2 CPD ¶ 242 (protest denied when awardee failed to provide a time breakdown required by the solicitation because evaluators noted weakness and penalized awardee accordingly in evaluation).

The SOO put both offerors on notice of the requirement to plan for and support the Government transition to organic depot maintenance within two years of delivery of the first full rate production aircraft. The testimony of [REDACTED] and the supporting documentary evidence amply demonstrate the Air Force's evaluators acted reasonably in determining NG's proposal, when read as a whole, complied with that requirement. The evaluators based their conclusions on NG's express obligations to support the Air Force's transition, which appear throughout the proposal and related documents. Many of those obligations [REDACTED] [REDACTED] Others make no reference [REDACTED] [REDACTED] However, because the requirement was to provide planning and support to help the Air Force complete the transition rather than to complete the transition for the Air Force, an offer to provide such support included by necessity an obligation to do so on the Air Force's schedule, particularly when NG had actual knowledge of that schedule before making the offer. Thus, NG was contractually bound to the Air Force's timeline. In fact, NG's agreement to support the

[REDACTED]

transition without any specific reference to [REDACTED] coupled with its agreement to [REDACTED] arguably gave the Air Force far more flexibility to dictate the timing of NG's performance than it would have enjoyed had NG's proposal conformed to the SOO.

Conformance with the SOO was required by the ITO, though the ITO's "should not simply rephrase or restate" language may have led NG to reasonably believe conformance did not require rote references to [REDACTED]. The ITO established not only the requirement to conform proposals to the SOO, but also the potential consequences for failing to do so. In this instance, the SSET members did not waive the requirement to conform the SOW to the SOO, nor did they ignore NG's failure to fully meet the terms of that requirement. Rather, they penalized NG's lack of specificity with an unfavorable evaluation, just as the ITO warned, even though the omission had no impact on cost, schedule, or other aspects of contract performance. Following a detailed briefing, the SSAC and SSA concurred in the SSET's unfavorable evaluation. [REDACTED] Witness Binder Tab 46, p. 360; Tab 4, p. 364; and, Tab 50, p 1. Had the evaluators done as Boeing suggests and instead ignored NG's well-documented commitment to support the transition and rejected its proposal outright based on its omission of an explicit reference to what was, in the end, an indefinite and purely notional time frame, their decision would have constituted an unreasonable exaltation of form over substance.

The evidence also renders moot the question of whether NG's omission constituted an "oversight" per se since that word was not used by the evaluators as a term of art to reflect a conclusion that the omission was inadvertent or unintentional, as opposed to a conscious decision by NG to omit the reference based on an erroneous understanding of the Air Force's expectations for the precise wording of its proposal. Contrary to Boeing's apparent focus on NG's state of mind when submitting its final proposal, the evaluators characterized the weakness as an oversight based on their conclusions regarding the administrative character, de minimus impact, and readily correctable nature of the omission.

For all of the above reasons, this protest ground should be denied.

[REDACTED]

**4. The Air Force Evaluated Program Management In Accordance With The RFP (Subfactor 1.4)**

**a. Air Force Evaluated Program Management In Accordance With The RFP**

The Air Force followed the criteria in the RFP for the evaluation of program management. Section M, Paragraph 2.2.4, specifically detailed how the Program Management Subfactor was to be met “when the offeror’s proposal demonstrates a capability to effectively and efficiently implement and manage the KC-X program.” AR Tab 278, RFP Section M, ¶ 2.2.4; App. 278(d). This same section of the RFP stated that an offeror’s program management capability would be demonstrated by, among other things:

B. An [Integrated Master Schedule, IMS] that is both realistic and reasonable as determined by the Government’s schedule risk assessment (SRA). The IMS must be consistent with the performance described in the offeror’s technical volume, reflect a clear understanding of program requirements, and durations must be compatible with the scope of the work contained in the schedule. The results of the SRA will be the Government’s risk adjusted schedule. The Government’s risk adjusted schedule may be used to quantify the impacts of schedule risk and that risk may be reflected as part of the Government’s Most Probable Life Cycle Cost (MPLCC).

C. A comprehensive and fully [Integrated Master Plan, IMP] that correlates with the IMS, [statement of work and contract work breakdown structure]; includes key [Federal Aviation Administration, FAA] certification, manufacturing, test and evaluation, and program management events, accomplishments, and criteria, that enables the Offeror’s proposed [initial operational capability, IOC]. A sound approach to achieving FAA Certification/Validation appropriate to the offered airframe/engine that complies with FAA or equivalent requirements.

AR Tab 278, RFP, section M002, paragraph 2.2.4, pgs. M-7-8 of 15; App. 278(d).

RFP Section M, paragraph 2.2.4, further provided the Air Force would consider an offeror to have satisfied the production management requirements if its proposal demonstrated, among other things:

A feasible, effective, low risk manufacturing and quality assurance approach to integrating military capability into the commercial baseline aircraft and transition to full rate production.

[REDACTED]

AR Tab 278, RFP Section M ¶ 2.2.4; App. 278(d). RFP Section L then detailed the manufacturing requirements and stated that each offeror's proposal should provide a description of its production approach:

Describe their overall approach to produce the KC-X, including offeror's facilities and capability to transition from SDD to LRIP and into full rate production.


AR Tab 278, RFP Section L ¶ 4.2.5.9.1; App. 278(c).

The solicitation at sections L and J incorporated by reference Department of Defense Instruction (DoDI) 5000.2, Operation of the Defense Acquisition System. AR Tab 278, RFP Section J, Exhibit A, ¶ 10a; Section L, Atch 16; App. 278(f). DoDI 5000.2 describes the general DOD acquisition process for major systems that consists of several acquisition phases; e.g., concept refinement, technology development, system development and demonstration (SDD), and production and deployment (PD). DoDI 5000.2, May 12, 2003; AR Tab 315, DoDI 5000.2; App. 315.

DoDI 5000.2 prescribes the decision making process by which the DOD and the military services, including the Air Force, determine whether an acquisition program has satisfactorily demonstrated criteria justifying a decision to continue into the next stage of development or production. The regulation states that an affirmative Milestone C decision acknowledged the successful conclusion of SDD and authorized the commencement of PD, either low-rate or full-rate PD. AR Tab 315, App. 315, p. 12. The KC-X program was structured with an SDD phase followed by a low rate initial production (LRIP) phase preceding a later decision to transition to full-rate production.

DoDI 5000.2 describes LRIP as follows:

[LRIP] is intended to result in completion of manufacturing development in order to ensure adequate and efficient manufacturing capability and to produce the minimum quantity necessary to provide production or production-representative articles for IOT&E, establish an initial production base for the system; and permit an orderly increase in the production rate for the system, sufficient to lead to full-rate production upon successful completion of operational (and live-fire, where applicable) testing.





AR Tab 315, DoDI 5000.2, May 12, 2003, App. 315 at 13. LRIP, then, is designed to demonstrate that manufacturing processes were sufficiently developed to justify continuation into full-rate PD. See id. at 14.

Before a major system such as the KC-X can proceed from SDD through LRIP to full-rate production, the Milestone Decision Authority (MDA) must decide to commit DOD to production at Milestone C. Id. at 12. At Milestone C, the MDA must determine whether certain criteria have been met to authorize production:

Entrance into [the production and deployment] phase depends on the following criteria: acceptable performance in development, test and evaluation and operational assessment; mature software capability; no significant manufacturing risks; manufacturing processes under control (if Milestone C is full rate production); an approved [Initial Capabilities Document] (if Milestone C is program initiation); an approved Capability Production Document (CPD); acceptable interoperability; acceptable operational supportability; compliance with the DoD Strategic Plan; and demonstration that the system is affordable throughout the life cycle, optimally funded, and properly phased for rapid acquisition. The CPD reflects the operational requirements resulting from SDD and details the performance expected of the production system. If Milestone C approves [low rate initial production, LRIP], a subsequent review and decision shall authorize full rate production.

Id. Although LRIP allows the completion of manufacturing processes, a key criterion for entry into LRIP is that there are no significant manufacturing risks. As stated by [REDACTED] at the hearing, “[T]he whole purpose of LRIP is to finalize your manufacturing development processes.” Tr. 1394 (emphasis added).

**b. The Air Force Properly Evaluated Boeing’s Program Management Approach**

At the hearing, [REDACTED] described Boeing’s production plan. Tr. 1360-70. Boeing proposed to provide as the commercial baseline aircraft an, as yet to be built, derivative of its 767 model aircraft incorporating components of other existing Boeing aircraft. Tr. 1361-63; [REDACTED] Witness Binder Tab 7, Chart 7. He also reviewed the work that Boeing proposed to do [REDACTED]  
[REDACTED] Witness

[REDACTED]

Binder Tabs 8, Chart 86 and Tab 9, Chart 87. He also contrasted Boeing's production approach to that proposed by NG:

[T]he essential difference ... is the A330-200 [proposed by NG] exists and is flying, and the 767-200 long range freighter has to go through the process of getting changes approved and certified by the FAA. ... [I]t's starting from a basic aircraft that exists that we can put into test to put into modification, and one that has to first be certified before we can continue down the path to militarizing it.

Tr. 1370-71. Boeing's ability to [REDACTED]  
[REDACTED] before a Milestone C decision was a concern to the Air Force.

In its review of Boeing's initial proposal, the SSET determined that its KC-X program schedule reflected a Milestone C commitment to LRIP before [REDACTED] [REDACTED] on its proposed aircraft configuration, a configuration that had never previously been built or FAA certified. Boeing had proposed a derivative of its 767 aircraft that was still in an early design phase, required significant engineering effort to complete and would not be available for military modifications and demonstration [REDACTED]

In its Evaluation Notices (EN), the SSET questioned Boeing's ability to meet Milestone C criteria, stating:

[REDACTED]

(b) (7)(C), (b) (7)(D)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

\_\_\_\_\_

AR Tab 116, EN BOE-MC4-009; App. 116(h).

In its EN response, Boeing stated:

\_\_\_\_\_ The Air Force subsequently sought further clarification in an amended EN stating:

AR Tab 116, EN BOE-MC4-009a; App. 116(h).

In sum, the SSET assessed Boeing's initial proposal as not adequately describing events that demonstrated acceptable performance in development test and evaluation and operational assessment, mature software capability, and no significant manufacturing risk. All such events are key to DoDI 5000.2's criteria for a meaningful Milestone C decision that would authorize entry into LRIP. *Id.*

The SSET further discussed this proposed schedule with Boeing representatives at the Mid-Term Briefing conducted August 1, 2007. Although Boeing advised a FY 2013 IOC

date drove its schedule, the SSET stated the FY 2013 IOC was only a planning date. AR Tab 132, Mid-Term Briefing Minutes, August 1, 2007; App. 132. The SSET also advised Boeing its proposed “buy before you fly” schedule was considered a high risk; however, the Air Force did not ask that Boeing change its proposal, nor was the SSET required to do so. *Id.* In regard to discussions with offerors, GAO noted in its General Injectables & Vaccines, Inc., B-298590 *et al.*, Nov. 15, 2006, 2006 CPD ¶ 173 “[a]gencies are not required to ‘spoon-feed’ an offeror during discussions.” LeBarge Elecs., B-266210, Feb. 9, 1996, 96-1 CPD ¶ 58 at 6. Rather, “[D]iscussions, when conducted, must be meaningful; that is, discussions may not mislead offerors and must identify deficiencies and significant weaknesses in each offeror’s proposal that could reasonably be addressed in a manner to materially enhance the offeror’s potential for receiving award.” PAI Corp., B-298349, Aug. 18, 2006, 2006 CPD ¶ 123 at 8 (citing Lockheed Martin, B-293679, May 27, 2004, 2004 CPD ¶ 115 at 7 (emphasis added)).

In response to the Mid-Term briefing, Boeing asked questions to better aid it in exploring alternatives to demonstrate compliance with the Milestone C criteria. AR Tab 132, BOE-MC-012, -013. After these discussions and questions, as well as the amended EN, Boeing revised its IMP to capture Milestone C criteria and stated, “Changes to the IMS associated with the IMP changes herein will be captured in a later IMS submittal that accumulates all IMS changes to date.” AR Tab 116, EN BOE-MC4-009a, dated August 27, 2007; App. 116(i). Subsequently, Boeing elected to make several schedule revisions and submitted a revised IMS (version 9), advising that it had extended the time for SDD [REDACTED] and that, “[t]anker deliveries in the production lots are [REDACTED] than originally proposed.” AR Tab 116, EN BOE-MC4-038, dated September 27, 2007; App. 116(j).

After reviewing Boeing’s revised IMS, the SSET questioned Boeing concerning a [REDACTED] SDD and the start of production:

[REDACTED]

[REDACTED]

AR Tab 116, EN BOE-MC4-038a; App. 116(j). In response, Boeing justified [REDACTED] between SDD and LRIP [REDACTED]

[REDACTED]

AR Tab 116, EN BOE-MC4-038a; App. 116(k).

In a meeting prior to the submission of its FPR, Boeing asked if its revised proposed schedule reflecting IOC in FY 2015 would be viewed as a strength. AR Tab 137, Pre-FPR Briefing Minutes, Nov. 29-30, 2007; App. 137. The SSET replied the IOC date was considered neutral and was not a factor for source selection other than risk assessment with cost/schedule. Id.

In its FPR submission, Boeing proposed an IOC date in FY 2015. The SSET's evaluation noted Boeing's initial schedule proposal prevented an assessment of production readiness to enable a DoDI 5000.2 Milestone C decision, but also noted that Boeing resolved the weakness with its IMP/IMS Version 9, submitted as part of its proposal. AR Tab 59, Boeing Final Subfactor Summary, Mission Capability: Program Management, Feb. 22, 2008, at 27; App. 59(t)

**c. The Air Force Properly Evaluated NG's Program Management Approach**

**(1) NG Proposed Facility Changes During SDD And LRIP.**

NG's production approach planned military modifications and demonstration on four commercial Airbus 330-200 model aircraft using different European and US facilities during SDD and completion of a replica of the commercial baseline aircraft final assembly line

[REDACTED]

(FAL) at a new facility in Mobile, Alabama during the first LRIP aircraft (LRIP 1). [REDACTED]  
Witness Binder Tab 4, p. II-SF4-61/62, and Tab 5, p. II-F1-11/12.

At the hearing, [REDACTED] described NG's production plan. Tr. 1342-60. Initially, [REDACTED] a cargo door installation (based on the Airbus [REDACTED] will be retrofit into the SDD aircraft in Dresden, Germany, after assembly of each of the four commercial baseline aircraft in Toulouse, France. Tr. 1346-48, 1356; [REDACTED] Witness Binder Tab 3, p. II-J-14. The aerial refueling modifications on the commercial baseline Airbus 330-200 will be accomplished in Madrid, Spain on the first SDD aircraft (SDD 1) followed by a transition of that work to Melbourne, Florida, for SDD 2 and finally to the Mobile Production Center (MPC), a new NG facility, starting with SDD 4. Tr. 1348-50, 1357-59; [REDACTED] Witness Binder Tab 4, p. II-SF4-61/62, and Tab 5, p. II-F1-11/12. On SDD 1-3, the remaining military capabilities will be completed at NG's Melbourne facility and then transitioned to its MPC on SDD 4. *Id.* The MPC is the first of two facilities that will be at Mobile. [REDACTED] The second is the EADS North American Tanker (ENAT) FAL that replicates the Toulouse FAL for the commercial baseline aircraft. Tr. 1352, 1359-60; [REDACTED] Witness Binder Tab 4, p. II-SF4-61/62, and Tab 5, p. II-F1-11/12.

With LRIP 1, the previously approved cargo door modifications and several tanker provisioning tasks from the aerial refueling modifications will be incorporated on the Toulouse FAL. Tr. 1350-51, 1358-59; [REDACTED] Witness Binder Tab 4, p. II-SF4-61/62, and Tab 5, p. II-F1-11/12. The remaining military modifications on LRIP 1 will then be performed at the MPC. [REDACTED] Beginning with LRIP 2, assembly of the commercial baseline aircraft will begin on a new FAL in Mobile, which replicates the Toulouse FAL, and will complete NG's transition of production and manufacturing processes. Tr. 1352-53, 1359-60; [REDACTED] Witness Binder Tab 4, p. II-SF4-61/62, and Tab 5, p. II-F1-11/12.

While there are facility changes involved in NG's proposal for SDD and LRIP, each of the facilities are required to be certified by the European Aviation Safety Administration (EASA) or the Federal Aviation Administration (FAA) as appropriate. See AR Tab 278, RFP Section M, ¶ 2.2.4; App. 278(d). These facility approvals would be based on [REDACTED] previously approved and demonstrated capabilities and processes [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

...

\_\_\_\_\_

\_\_\_\_\_ and \_\_\_\_\_  
are, in fact, low risk.

[REDACTED] also testified at the hearing concerning how readiness for entry into LRIP would be demonstrated. On cross-examination, [REDACTED] was referred to a February 28, 2008, memorandum concerning the KC-X Program (Milestone B Acquisition Decision Memorandum [ADM]). Tr. 1470 [REDACTED] Boeing Schedule Risk Hearing Exhibits, Tab 43. The ADM was approved after source selection activity. Tr. 1471. In that ADM, the MDA established [REDACTED] exit criteria from SDD for Milestone C.<sup>20</sup> Boeing Schedule Risk Hearing Exhibits, Tab 43. The ADM approved approach for compliance is that [REDACTED] [REDACTED] Id., Tab A. As described [REDACTED] guide, [REDACTED]

184, App. 184, EN-NPG-MC4-016r1, p.5. In response to the Hearing Officer's request, Tr. 1493, the Air Force produced a copy its assessment of that explanation. That assessment was as follows:

5 Jan 08 – Supplementary submittal to aa version has resolved the issue and the SRA input is no longer needed.

AR Tab 364, p. 000008.

20 [REDACTED]

[REDACTED]

**Id.**

[REDACTED]



Boeing Schedule Risk Hearing Exhibits, Tab 44, p. 2-21. As [REDACTED] further testified, [REDACTED] not yet embodied in DoDI 5000.2 and, hence, were not specifically used as evaluation criteria. Tr. 1472. Nevertheless, the above described [REDACTED] establishes that approved processes from the Toulouse FAL clearly meet [REDACTED] criteria and the EASA approval of the Mobile FAL would, in turn, establish continued meeting of [REDACTED] criteria. Tr. 1470-73. While there is a change in production locations during SDD and initially in LRIP, there is no significant change to demonstrated manufacturing and production processes.<sup>21</sup>

**(2) Boeing's Allegation That NG's Plan Fundamentally Changed At LRIP 1 Is Unfounded**

Boeing contends that NG makes fundamental changes in its production plan at LRIP 1 whereby NG adopts an "in-line" production process similar to what Boeing proposed. Boeing Comments, p. 81. At the hearing, [REDACTED] testified that Boeing's use in its Comments on the Agency Report of a chart comparing the two processes was inaccurate and not true. Tr. 1376-83; [REDACTED] Witness Binder Tab 12, Marx Ex. 1. Boeing specifically identified [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] The cargo modification, [REDACTED]  
[REDACTED] is retrofitted into the four SDD aircraft and is thereafter produced "in-line" for the assembly of the first LRIP aircraft in Toulouse and subsequent aircraft in Mobile. Tr. 1379; see [REDACTED] Witness Binder Tab 5, p. II-F1-11/12. It is true that the tanker provisions, [REDACTED]  
[REDACTED] will be performed "in-line" with the beginning of LRIP 1 as

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<sup>21</sup> At the hearing, [REDACTED] was questioned concerning his knowledge of a February 25, 2008 memorandum, subject: [REDACTED]  
[REDACTED]

[REDACTED] He replied that he was aware of the existence of the memorandum but that the individuals who prepared it were not involved in the KC-X source selection process. [REDACTED] Consequently, the individuals who prepared the memorandum were not aware of the information that the SSET considered, the discussions that took place with NG, or the mitigation actions adopted to alleviate risks or weaknesses initially identified by the Air Force in NG's proposal.

[REDACTED]  
[REDACTED]  
[REDACTED]

opposed to being installed as a retrofit. [REDACTED]

[REDACTED] This change, along with the inclusion of the cargo door installation [REDACTED] however, are the only alterations of the previous production flow for SDD 1-4. *Id.* By contrast, the installations that Boeing depicted on the chart of its in-line process was incomplete, listing [REDACTED]

[REDACTED] Boeing's characterization of NG manufacturing changes at LRIP 1 as "fundamental" grossly mischaracterizes the actual minimal adjustment to production flows.

**(3) Boeing's Allegation That There Were Significant Non-recurring Engineering Efforts Is Unfounded**

Similarly, Boeing's allegation that NG's transition to LRIP will include significant non-recurring engineering (NRE) costs that the Air Force did not evaluate is unfounded. Boeing Comments, p. 136. At the hearing, [REDACTED] testified that the program management evaluation team looked at the scope of effort for transitioning the tanker provisions in-line at LRIP 1. Tr. 1385. The proposed non-recurring engineering effort for moving the tanker provisions in-line was described [REDACTED] [REDACTED] testified that it presented a reasonable level of effort. Tr. 1357-58, 1385-87; [REDACTED] Witness Binder Tab 6, pp. IV-433-34. He also testified that members of the program management team conferred with members of the cost evaluation team and that [REDACTED] NG proposed did not raise any issues or concerns, and no further details were required [REDACTED] Tr. 1386-88. Thus, Air Force evaluators extensively reviewed all aspects of NG's production plan and changes at LRIP 1 and reasonably determined that they were not significant.

**(4) The Air Force Reasonably Relied On NG and EADS Experience And Mitigation Plans To Alleviate Production Risks**

Because NG's proposed manufacturing plans for SDD and LRIP involved transitions to different facilities, the SSET sought further explanation, as follows:

[REDACTED]

[REDACTED]

[REDACTED]

AR Tab 184, EN NPG-MC4-016; App. 184(i).

In its response, NG then described relevant experiences in establishing other facilities, [REDACTED] and identified how it intended to manage and staff during facility transitions, and the role of its management team to ensure the development of [REDACTED] AR Tab 184, EN NPG-MC4-016; App. 184(i).

To mitigate the risks involved with facility transitions, NG proposed to conduct [REDACTED] stating:

[REDACTED]

Id. [REDACTED] topics to be addressed included [REDACTED]

[REDACTED] Also, in its responses, NG proposed that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

● [REDACTED]

\_\_\_\_\_

\_\_\_\_\_

[REDACTED]

\_\_\_\_\_

[REDACTED]

[REDACTED] will be utilized.

[REDACTED]

\_\_\_\_\_

[REDACTED]

\_\_\_\_\_

[REDACTED]

[REDACTED]

[REDACTED]

\_\_\_\_\_

[REDACTED]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In assessing NG's ability to transition to the different facilities, the program evaluation team also considered the experience that NG and its teaming partner, EADS, had in standing up similar facilities. Tr. 1430-31. The program management team considered EADS' experience in setting up [REDACTED] as well as NG's experience in establishing a [REDACTED] Tr. 1431-32.

In discussions, the SSET also sought additional information from NG concerning its plans for ensuring that [REDACTED]  
[REDACTED] In its response, NG provided extensively detailed steps that it was taking in the areas of [REDACTED]  
[REDACTED]

The Air Force also reviewed schedule margins that NG initially proposed to mitigate risk. These included [REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]  
[REDACTED] In its final proposal revision, NG also  
[REDACTED]  
[REDACTED]  
[REDACTED] NG also provided [REDACTED]  
[REDACTED]

In its evaluations, the SSET thoroughly addressed the schedule and performance risks, presented by this proposed approach. The SSET concluded that there were no configuration changes associated with these changes, only a movement of work to a more efficient location.

The SSET also recognized in its experience that aerospace companies historically move work in and out of facilities and change the location of installations routinely in an effort to achieve optimal cost and schedule performance. The SSET considered the perceived weaknesses and the mitigation plans associated with the weaknesses. In the SSET's evaluation, the weaknesses were mitigated by NG's experiences in standing up new facilities, its approach for ensuring configuration control, and its overall transition plan. [REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED] In the SSET's evaluation, it determined that NG's proposed production plan presented low risk and concluded:

NG's proposal meets the manufacturing and quality assurance RFP requirements ... Proposal Risk is Low based on potential disruptions due to changing manufacturing locations during SDD.

AR Tab 215, Evaluation Summary Report, Mission Capability, Program Management; see MOL App. 215, p. 10-12.

**(5) The Air Force Reasonably Determined That NG Could Obtain Required FAA Certifications**

As part of its evaluation, the SSET assessed NG's proposal for obtaining an Amended Type Certificate (ATC) for the Airbus A330-200 with cargo door modifications. Specifically, NG's original IMS allowed for [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED] NG's [REDACTED]  
actually proposed a [REDACTED] period for obtaining [REDACTED] validation of  
that ATC, and did not in any way suggest that [REDACTED]

The offerors were required to submit an FAA coordinated draft certification plan  
with their proposals. The FAA found NG's plan to be [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

The ATC validation date proposed in NG's final IMS, submitted with its Final  
Proposal Revision in January 2008, was also reasonable. The final IMS had a [REDACTED]  
contract award date and a [REDACTED] completion date for FAA validation of EASA's ATC  
approval. AR Tab 267, FPR IMS; App. 267(b), pp. II-K-65, II-K-113. The SSET subjected that  
schedule to a detailed Schedule Risk Assessment and determined that the schedule was realistic.  
AR Tab 267, NG Final Proposal: Integrated Master Schedule (IMS)/Schedule Risk Assessment  
(SRA); App. 267(a).

In its evaluation, the SSET found that there was no evidence that obtaining an  
ATC for the A330-200 with cargo door modification was likely to create any delays. The A330  
[REDACTED]  
[REDACTED] Specifically, NG proposed:

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

AR Tab 170, NG Pre-FPR Proposal, Mission Capability/Proposal Risk, Volume II, Appendix J,  
FAA Certification Plan; App. 170, p. II-J-14. Thus, the path to certification for the A330-200  
with cargo door modification was considered by the SSET [REDACTED] presented few  
certification risks.

[REDACTED]  
[REDACTED]  
[REDACTED]

Also, in the SSET's evaluation, the proposed schedule for obtaining an ATC was unlikely to raise any certification controversies, as the FAA and EASA have longstanding procedures in place to permit the FAA to validate EASA certifications in a timely manner. FAA and EASA have established a series of agreements and orders facilitating FAA validation of EASA approvals. See FAA Order 8100.14A, Interim Procedures for Working with the European Community on Airworthiness Certification and Continued Airworthiness (Change 1 revision dated: January 29, 2007), AR Tab 316 (App. 316), has been the guiding certification policy between the FAA and EASA since EASA and was formed on July 15, 2002. FAA Order 8110.52, Type Validation and Post-Type Validation Procedures, dated April 29, 2005, AR Tab 317 (App. 317), presents specific principles and procedures guiding the FAA Aircraft Certification Office and Transport Airplane Directorate staff validating and certifying imported aircraft and engines. Specific validation procedures are identified within FAA Order 8110.52, supra, to address differences between FAA and EASA airworthiness standards and interpretations.

In sum, the SSET determined that the proposed certification process was a low-risk strategy, since it used [REDACTED] and the established procedures supporting cooperation and collaboration between EASA and the FAA. The SSET evaluated NG's ATC schedule as providing an acceptable approach: "Offeror's FAA cert plan defined an acceptable approach for FAA and EASA type, manufacturing, and civil airworthiness approvals.... In summary . . . The FAA certification plan is complex, but executable...." AR Tab 215, Final Mission Capability, Subfactor 4, Program Management, Attachment 12 – Evaluation Summary Report, NG; App. 215, p. 7. Further, with respect to FAA certification, the SSET concluded: "Proposal meets FAA Production Certification requirements; proposal risk is low based on the planned approach of following FAA procedures to achieve Production Certification." AR Tab 215, Final Mission Capability, Subfactor 4, Program Management, Attachment 12 – Evaluation Summary Report, NG; App. 215, p. 12.

[REDACTED]



(6) The Air Force Reasonably Assessed The [REDACTED]

In association with its evaluation of NG's proposed approach to obtaining FAA certification, the SSET also reviewed NG's plans to rely on the [REDACTED]

[REDACTED] for certification data. The [REDACTED]  
[REDACTED] The reliance on the [REDACTED] had four separate issues identified that needed resolution: [REDACTED]

With respect to achieving FAA approval of STC [REDACTED] the SSET determined that [REDACTED] and the need for that data to obtain the certificate. Boeing contends that the Air Force did not appropriately account for the risk associated with NG's use of [REDACTED]  
[REDACTED] While the Air Force did believe that [REDACTED] the Air Force found [REDACTED]

[REDACTED] Although the [REDACTED] conversion work in Madrid on SDD [REDACTED]  
[REDACTED] Hence, the Air Force reasonably concluded there was [REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

With respect to the Air Force specification, EN NPG-MC1-060a resulted in the removal of [REDACTED] for compliance with Air Force system specification requirements. AR Tab 184, EN NPG-MC1-060a.

[REDACTED]

Tr. 1337 [REDACTED] The realization of the benefits of the use of [REDACTED] would be reserved to post-contract award activity and would not [REDACTED]  
[REDACTED] Tr. 1335-37.

With respect to [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

With respect to [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

Finally, the SSA determined that both offerors were “approximately equal” with respect to the Program Management Subfactor, and that Subfactor was not a discriminator in the award decision. Merely disagreeing with the SSET’s evaluation and with the SSA’s integrated assessment and decision does not make that determination unreasonable. In fact, the foregoing discussion, as supported by sworn testimony, demonstrates the reasonableness of the Air Force’s actions.

**B. The Air Force Evaluation Of Past Performance Was Reasonable And Not The Result Of Disparate Treatment (Factor 3)**

Both the Air Force and NG have already fully addressed the allegations in Boeing’s Comments concerning the Air Force’s evaluation of the offerors’ past performance. See MOL, pp. 172-197; SMOL, pp. 12-16; NG Comments, pp. 316-51. However, to assist the GAO hearing officer in reaching a decision on the protest grounds related to past performance, the Air Force’s responses to Boeing’s allegations are briefly described below with references to the Air Force’s Memoranda of Law. The facts demonstrate that the Air Force fairly, consistently, and reasonably evaluated past performance as part of this source selection. This evaluation was adequately documented and supports the Air Force’s conclusions concerning the offerors’ past performance.

**1. The Air Force Properly Exercised Its Discretion In Evaluating The Offerors’ Past Performance**

As discussed in the Air Force’s Memorandum of Law, agencies have a great deal of discretion with respect to the evaluation of past performance. MOL, p. 174; ITT Indus. Space Sys., LLC, B-309964, B-309964.2, Nov. 9, 2007, 2007 CPD ¶ 217 at 10 (the evaluation of past performance is “primarily a matter within the contracting agency’s discretion”). RFP, Section M, Paragraph 2.4, described how the Air Force would evaluate each offeror’s Past Performance. AR Tab 278, RFP § M.2.4. Specifically, that paragraph stated: “The Government evaluation team, known as the Performance Confidence Assessment Group (PCAG), will conduct an in-depth review and evaluation of all performance data obtained to determine how closely the work performed under those efforts, to include scope and risk, relates to the proposed effort.” Id. Paragraph 2.4.1 of the RFP further explained that “[t]he performance confidence assessment will be assessed at the overall factor level after evaluating aspects of the offeror’s recent past

performance, focusing on performance that is relevant to the mission capability subfactors 1-4 only and cost or price.” *Id.* at § M.2.4.1. This same paragraph also stated: “The Government will evaluate the offeror’s demonstrated record of contract compliance in supplying products and services that meet the user’s needs . . . .” *Id.* Here, the Air Force PCAG performed the evaluation of the offerors’ past performance in accordance with the terms of the solicitation. MOL, pp. 175-78.

## **2. The PCAG Properly Assessed The Relevancy Of The Offerors’ Past Performance**

The PCAG properly determined the relevancy of the contracts it reviewed for both offerors and their proposed subcontractors. Boeing’s challenges to the Air Force’s relevancy determinations are without merit. Boeing Comments, pp. 148-55. The PCAG assigned relevancy ratings to each of the contracts the offerors submitted in the areas of Key System Requirements, System Integration and Software, Product Support, Program Management, and Cost/Price, in accordance with the RFP. MOL, p. 176; AR Tab 278, RFP § M.2.4.2. The PCAG reviewed a total of more than 200 contracts performed by the two offerors and their various proposed subcontractors in conducting its past performance evaluation, and determined that seven additional contracts to the ones the offerors identified in their proposals were relevant to some or all of the subfactor evaluations. MOL, p. 176; AR Tab 46, SSA’s Final Evaluation Briefing; App. 46, pp. 420, 430; AR Tab 247, PPIRS r2Data.pdf.

With respect to the [REDACTED] contract, the PCAG properly determined that it was not relevant to its past performance evaluation for the KC-X. SMOL, p. 15. This was not an attempt by the Air Force to ignore adverse performance information about NG, as Boeing would have the GAO believe. Boeing Comments, p. 151 n. 43.<sup>22</sup> Further, it was a reasoned decision to exclude a contract that would have applied to both NG and Boeing, as [REDACTED]

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<sup>22</sup> The Air Force issued an adverse performance EN on this contract, but subsequently determined it was not relevant because the [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] SMOL, p. 15. In other words, the consideration of this contract in both offerors' past performance evaluations would not have helped the Air Force to discriminate between the two offerors. This was a rational and appropriate decision by the Air Force that posed absolutely no prejudice to Boeing.

In its May 5, 2008, letter to the GAO, Boeing alleges the fact that the [REDACTED] discusses the [REDACTED] supports its prior protest that the Air Force should have considered this program in performing its past performance evaluation. This argument is without merit. The fact that [REDACTED] considered the [REDACTED] in its preparation of the [REDACTED] [REDACTED] is a distinct issue from the PCAG's determination of relevancy for the past performance evaluation of the offerors. See MOL, pp. 183-85. The [REDACTED] was also considered as part of the [REDACTED] but it is highly unlikely that Boeing would want the PCAG to consider Boeing's widely reported dismal performance on that program in the past performance evaluation. See AR Tab 347; COSF Supp. 2, p. 152. The decision of which programs the PCAG considered in its past performance evaluation was a completely separate process from the consideration of aircraft for inclusion in the [REDACTED] MOL, pp. 175-76; AR Tab 347. Boeing's other arguments concerning the Air Force's decision not to consider the [REDACTED] constitute mere disagreements with the Air Force's past performance evaluation and are similarly without merit. Birdwell Bros. Painting & Refinishing, B-285035, Jul. 5, 2000, 2000 CPD ¶ 129 at 5; Boeing Comments, pp. 151-55. The PCAG rationally determined that because [REDACTED] [REDACTED] was not sufficiently relevant for consideration and evaluation of NG's past performance evaluation. MOL, p. 185; SMOL, p. 14.

### **3. The PCAG Properly Evaluated Boeing's Past Performance**

#### **a. The Air Force Properly Considered And Evaluated Boeing's Performance On The [REDACTED] Contract**

As part of its evaluation, the PCAG identified Boeing's past performance on the [REDACTED] contract as relevant. MOL, pp. 185-86. The PCAG then reasonably evaluated Boeing's performance on this program from 2004 through 2007, including consideration of Boeing's 2007 CPAR. MOL, pp. 186-87. Boeing gives a number of reasons why it disagrees with the Air Force's evaluation of this contract, but fails to

[REDACTED]

support its arguments that the Air Force acted improperly in its evaluation of this program. Boeing Comments, pp. 155-69. After evaluating all of the information available concerning Boeing's [REDACTED] contract performance, the PCAG determined that while Boeing had made recent improvements in the areas of program management and cost/price, the results of these improvements did not yet demonstrate the effectiveness necessary for PCAG to improve Boeing's performance confidence assessment. MOL, p. 187; AR Tab 59, Boeing Consensus Performance Worksheet on [REDACTED] App. 59(d), p. 2. This determination was reasonable and appropriate.

**b. The Air Force Properly Exercised Its Discretion In  
Determining The Relevancy Of Boeing's Commercial Sales**

The PCAG reasonably considered the information Boeing supplied regarding BCA's sales of commercial [REDACTED] aircraft and assigned these contracts appropriate relevancy ratings. MOL, pp. 189-90. In fact, the PCAG concurred with the majority of Boeing's proposed relevancy ratings on these contracts, and actually assigned a greater relevance rating than Boeing proposed on Key System Requirements. MOL, p. 190. The PCAG was not bound by Boeing's proposed relevance ratings, and it rationally determined and adequately documented its determinations regarding the subfactors for which it assigned a different rating than Boeing. MOL, p. 190. The PCAG then reasonably evaluated Boeing's performance on these contracts. SMOL, p. 15. Boeing's contentions that the Air Force treated Boeing differently with respect to these commercial sales than it treated EADS with respect to its [REDACTED] are simply not supported by the record. Boeing Comments, pp. 175-81. Boeing's contention that its commercial item determination should have rendered these commercial aircraft sales more relevant to the Air Force's evaluation of Boeing's past performance is without merit. Boeing Comments, p. 177. The issue of whether Boeing offered a commercial aircraft to fulfill the KC-X requirements is distinct from the determination of the relevance of other BCA commercial sales to Boeing's past performance evaluation. The PCAG complied with the RFP in making its relevancy determinations. AR Tab 278, RFP § M.2.4. The Air Force rationally considered the roles of BCA and EADS with respect to the KC-X proposals and properly evaluated the relevancy and performance of these companies with respect to these commercial aircraft sales. MOL, pp. 189-90.

[REDACTED]

**c. The Air Force Properly Evaluated Boeing's Performance On The [REDACTED]**

The PCAG reasonably and fairly considered Boeing's performance on its [REDACTED]  
[REDACTED]  
[REDACTED] MOL, pp. 191-94. Contrary to Boeing's allegation that a "satisfactory" rating for the [REDACTED] was unreasonable considering Boeing's [REDACTED]  
[REDACTED] it was the impending delivery of these aircraft that allowed the PCAG to raise Boeing's program management past performance rating to [REDACTED] MOL, p. 191; AR Tab 59, Boeing Consensus Performance Worksheet for [REDACTED] App. 59(a), p. 2; Boeing Comments, p. 183.

The PCAG also properly evaluated Boeing's past performance on its contract for the [REDACTED] MOL, pp. 192-94. Boeing merely disagrees with the Air Force's evaluation of its performance on this program. Boeing Comments, pp. 184-85. Boeing's [REDACTED] contract performance was clearly substantiated by the customer's comments. MOL, p. 193; AR Tab 125, [REDACTED] Questionnaire [REDACTED] Scanned.pdf; App. 125(d), p. 5. In the evaluations of the [REDACTED] the PCAG reasonably evaluated the available information and assigned appropriate confidence ratings.

**d. The Air Force Properly Evaluated Boeing's Performance On The [REDACTED] Program**

Likewise, the PCAG reviewed and evaluated Boeing's performance on the [REDACTED]  
[REDACTED] which the most recent available information indicated has had significant cost overruns. MOL, pp. 191-92; AR Tab 116, EN BOE-PP-023, and EN BOE-PP-023 S1; App. 116(b) & 116(c). Boeing's allegations that the Air Force's evaluation of its performance on this program reflects disparate treatment ignore the facts in the record the PCAG considered. Boeing Comments, pp. 181-83. The record reflects that the program deteriorated markedly since April 2006, and the CPAR dated December 31, 2006, reported significant performance problems. MOL, p. 191; AR Tab 125, [REDACTED] App. 125(f). The PCAG reasonably concluded Boeing's management actions had not yet demonstrated their [REDACTED] and  
[REDACTED]  
[REDACTED]  
[REDACTED]

properly evaluated Boeing past performance as '[REDACTED]' on the program management and cost/price subfactors for the [REDACTED] MOL, p. 192; AR Tab 49, Final Evaluation Briefing (updated); App. 49, p. 430.

**4. The PCAG Properly Evaluated Northrop Grumman's Past Performance**

**a. The Air Force Properly Considered And Evaluated Past Performance On The [REDACTED]**

The PCAG properly evaluated EADS' performance on the [REDACTED] program based on two questionnaires from the program office, four interviews, and a documented performance update. MOL, p. 185; AR Tab 194, 26b Airbus [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Contrary to Boeing's allegations, the PCAG received no information from the [REDACTED] indicating the [REDACTED]  
[REDACTED] MOL, p. 185; Boeing Comments, pp. 170-74. The Air Force properly considered all of the information it received concerning this program and reasonably determined the performance confidence ratings. MOL, p. 185.

**b. The Air Force Properly Evaluated NG's Performance On [REDACTED]**

In its evaluation, the PCAG reviewed and evaluated NG's performance on the [REDACTED]  
[REDACTED]  
[REDACTED] MOL, pp. 195-97. Boeing raised numerous allegations that the evaluation of these programs was flawed and disparate with the evaluation of Boeing's past performance; however, the record demonstrates that the Air Force reviewed the appropriate information concerning these programs and reasonably assigned performance confidence ratings in accordance with the RFP. MOL, pp. 195-97; Boeing Comments, pp. 162-69. Therefore, Boeing's protests concerning the evaluation of these programs are without merit.

[REDACTED]  
[REDACTED]  
[REDACTED]



**5. The Air Force Evaluation The Offerors' Past Performance Was Fair, Consistent, And Adequately Documented**

The Air Force evaluated each offeror's past performance against the criteria set forth in the RFP. MOL, pp. 175-78. Boeing's allegations that the Air Force treated the offerors disparately and failed to adequately document its past performance evaluations are not supported by the record. Boeing Comments, pp. 148-49, 185. The Air Force reasonably and appropriately considered all of the information it collected concerning the offerors' performance on other relevant programs and evaluated that performance in a fair and evenhanded manner. MOL, p.181-83. Further, as is clear from the voluminous record in this area, the PCAG reasonably and adequately documented its evaluation of the offerors' past performance. MOL, p. 178. Therefore, Boeing's allegations of disparate treatment in the past performance evaluation are without merit.

**6. The SSA Properly Exercised Discretion In Weighing Discriminators Within The Integrated Assessment And In Making [REDACTED] Decision**

Finally, Boeing challenged the SSA's determination that NG's better performance confidence assessment in the program management area constituted a discriminator between the offerors. Boeing Comments, pp. 186-88. The SSAC and SSA findings concerning the offerors' past performance are reasonable and are fully and adequately documented in the record. MOL, pp. 178-80. RFP, Section M, Paragraph 2.4 specifically stated: "After evaluating aspects of the offeror's recent past performance, focusing on performance that is relevant to the mission capability subfactors 1-4 only and cost/price, the Government will assess performance confidence at an overall factor level." AR Tab 278, RFP § M.2.4. Accordingly, the PCAG assigned "Satisfactory Confidence" for both NG and Boeing at the overall past performance evaluation factor level. MOL, pp. 177-78. However, nothing in the terms of the solicitation or in the factor-level rating itself prohibited or prevented the SSA from considering as a "discriminator" in the integrated assessment that one offeror had a better past performance evaluation for one particular subfactor level. MOL, pp. 179-80. In fact, in a best value source selection such as this, the SSA "should consider" the "particular strengths and weaknesses of proposals . . . in addition to ratings and point scores" precisely because it "enable[s] them to determine whether and to what extent meaningful differences exist between proposals." Pemco

[REDACTED]

Aeroplex, Inc., B-310372, Dec. 27, 2007, 2007 CPD ¶ 238 at \*10 (emphasis added). The SSA appropriately and reasonably considered the underlying facts that resulted in a discriminator between the offerors for the Program Management Subfactor and determined that while both offerors had Satisfactory overall confidence assessments, NG afforded greater confidence in its ability to execute the KC-X program. MOL, p. 180.

The GAO has held that where a solicitation requires the evaluation of offerors' past performance, it will examine the agency's evaluation to ensure that it was both reasonable and consistent with the solicitation's evaluation criteria, as it was in this case, since determining the relative merits of offerors' past performance information is primarily a matter within the contracting agency's discretion. Hanley Indus., Inc., B-295318, Feb. 2, 2005, 2005 CPD ¶ 20 at 4. A protester's mere disagreement with an agency's judgment is not sufficient to establish that the agency acted unreasonably. Birdwell Bros. Painting & Refinishing, B-285035, Jul. 5, 2000, 2000 CPD ¶ 129 at 5. All of Boeing's protest grounds related to the past performance evaluation discussed herein or otherwise raised in Boeing's protests are without merit as they amount to mere disagreements with the Air Force's judgment. As demonstrated by the documentation in the record, the Air Force evaluated the offerors' past performance reasonably and consistent with the RFP. Therefore, the entirety of Boeing's protest of the past performance evaluations should be denied.

#### **C. The Air Force Evaluation Of Proposed Cost Was Proper (Factor 4)**

##### **1. The [REDACTED] Adjustment To Boeing's SDD Proposal Was Due To Cost Risk Foreseen By Evaluators When Insufficient Information Was Provided By Boeing As To Its Basis Of Estimates Despite Numerous Air Force Requests**

Throughout its Comments to the Air Force MOL as well as the hearing, Boeing attempted to excuse its failure to live up to its responsibilities under Section L, paragraph 6.1.2 of the RFP, Cost Information Requirements and Cost Credibility, to provide sufficient information for government evaluators to understand the basis of its cost estimates. Boeing did so by using its commercial item determination (CID), which was accepted in accordance with DFAR 244.402 by the Air Force, as a tool to justify its position that basis of estimate (BOE) information was not required. Specifically, Boeing insists "the Air Force fundamentally refused

[REDACTED]

to accept—or simply did not comprehend—the commercial pricing paradigm established by the FAR, even after the Air Force acknowledged . . . the commercial item status of the baseline aircraft to be procured from BCA.” Boeing Comments, p. 105. But as the testimony demonstrated, the sole party that lacked an understanding of FAR and RFP requirements was Boeing.

**a. Despite The Air Force’s Clear Requests, Boeing Never Provided The Adequate BOEs The Air Force Was Seeking To Understand Its SDD NRE As Required Under The RFP**

The Air Force was consistent and clear throughout the KC-X acquisition process that the CID and BOE issues were not related. As NG notes in its Comments on the Agency Report, as early as September 2007, [REDACTED] informed Boeing that “while the [REDACTED] of NRE and CID were interrelated, they were separate issues. . . . He clarified that the resolution of one issue would not necessarily fix the other.” NG Comments p. 269 (citing AR Tab 134). Further, as [REDACTED] SSAC member and Director of Contracting for the Air Force Material Command (AFMC) at the time of the KC-X acquisition, explained during his testimony,

Q: . . . did the determination and the government’s acceptance of the [CID], that BCA was offering a commercial item, did that affect the government’s need for the kinds of data that we’ve seen in Section 6.4.7 of Section L of the RFP?

A: Given the type of effort that was involved, really major systems integration and development and testing effort, there was a greater need for insight into the cost basis or at least the basis of estimate, whatever that basis was to understand the reasonableness, realism, and risk as we evaluated the proposal. So in my mind there was no doubt that regardless of whether it was commercial, we still needed this kind of information.

Tr. 401. [REDACTED] the Air Force KC-X Cost Price Panel Chief, expressed the same understanding on cross examination,

Q: So, whether or not the 767-200LRF is a commercial item doesn’t have any impact at all on the type of cost buildup that you expect you would receive?

A: No.

Tr. 76. Further, despite Boeing’s attempts to paint a different picture, no AF evaluator believed Boeing was required to provide CAS compliant data or certified cost and pricing data. Tr. 24;

[REDACTED]

██████████ Witness Binder Tab 6, p. 3. As ██████████ explained, “[T]he federal acquisition regulation provide[s] for asking for this type of information other than cost and pricing data and the solicitation Section L made it clear we intended to get this information and evaluate the information.” Tr. 403; see also Tr. 406 (exhibiting definitive “no” from ██████████ following the question, “was the government asking BCA for [certified] cost or pricing data?”)

The most important point Boeing is missing during this entire dispute is marketplace data from Boeing would have been accepted had it been available on its proposed aircraft. Tr. 187. But, as [REDACTED] KC-X Capabilities and Systems Integration IPT Team Lead, described,

Tr. 1362-1363. This effort involved ‘[REDACTED]’ of nonrecurring engineering, Tr. 17, and the aircraft had never flown before. Tr. 1363. As such, marketplace data was simply not available. “The particular configuration of aircraft they were offering had never been built. . . . [I]t’s not like Tinkertoys, to put an airplane together you snap it together. There is a significant amount of integration work that’s required so it didn’t have, there weren’t comparable sales data is the bottom line.” Tr. 403. [REDACTED] confirmed that Boeing never offered such sales information.

Q: . . . did Boeing ever tell you that the tanker configuration it was proposing to the Air Force had been sold to anyone else?

A: No, sir.

Q: Did it ever tell you that there was a price for that configuration?

A: No, sir.

Q: Did it give you a price analysis that you could say customer A paid \$100 and customer B paid \$103, anything like that?

A: No, sir. . . .

Q: Would you have been satisfied with pricing information if you could have obtained it?

A: Yes, sir.

Tr. 184-87 (emphasis added). This pricing information is precisely what was accepted in the case of NG. "The Northrop Grumman aircraft . . . was the same configuration that they were currently selling in large volumes commercially and so there was a significant amount of sales information for that configuration of aircraft." Tr. 402. In the end then, the Air Force was not being unreasonable or overly demanding; it was simply looking for information to which it was entitled under the RFP when marketplace data was not available.

Contrary to Boeing's contentions on page 106 of its Comments and counsel's contentions on cross-examination, comparing the offerors' aircraft was not an acceptable means of discerning the appropriateness of any portion of Boeing's SDD price in this case. As [REDACTED] explained,

A: We compared each aircraft to its aircraft in the commercial marketplace. We don't compare each aircraft against each other because they are totally different aircraft.

Q: You don't compare them for purposes of price evaluation to determine whether you know that tells you anything as to relative differences in prices?

A: I'm concerned in the case of a commercial item of how it compares to its item in the marketplace.

Q: And you're not concerned about comparing it with the other offeror's?

A: I evaluate each offeror's proposal.

Tr. 116. In other words, perhaps comparison between the offerors would have been appropriate if the Air Force was buying a television with particular screen and picture specifications. However, in this case it was purchasing aircraft for which the offerors had considerable trade space enabling them to offer or forego different features. As the FPRs were structured, NG

[REDACTED]

offered an existing aircraft whereas Boeing offered a yet to be developed aircraft. As such, the aircraft were incomparable. A comparison of their respective prices, therefore, would have offered no validation of Boeing's approach to the Air Force cost team.

Examples of the type of information sought by the Air Force Cost Team were described by [REDACTED] Page 1083 of Boeing's supplement to its response to EN BOE-CP-001 contained the following BOE for [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

Tr. 189. This is certainly information Boeing had as part of its operations as envisioned by FAR 15.403-3(c)(2); [REDACTED] common sense analysis says it best: "that was their basis of estimate so they must have had it." *Id.* Further, as [REDACTED] pointed out, "Frankly, I'd be stunned if BCA built airplanes not knowing what they cost and just kind of wait[ed] until the end of the year to see if they make money or not." Tr. 408.

Nonetheless, Boeing never provided that information. Boeing undeniably "continued to submit information that was other types of comparison for purposes of evaluating the price, but it was not the basis of estimate that BCA used to establish their price." Tr. 407-08 (emphasis added). Then, after months of discussions and briefings, two ENs, and an updated EN response, see generally [REDACTED] Witness Binder Tabs 3-10, Boeing's FPR submission provided some new data along with the statement, [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] further pointed out the new parametric data provided by Boeing was inadequate:

[REDACTED]  
[REDACTED]  
[REDACTED]

from a basis of estimate standpoint [this] was of little value [because] if you look on there the Y axis has no value . . . . And then also there is a limited amount of data point so the statistical significance of any of that would have been in question anyway and none of the information building the chart was provided.

Id. So, after months of hard work and discussions, [REDACTED]

[REDACTED] In the opinion of the Air Force Cost/Price Panel Chief, [REDACTED] “I had told Boeing before that the basis of estimate detail wasn’t adequate and they hadn’t changed it so it still wasn’t adequate.” Tr. 38.

**b. Because Of The Lack Of Insight Into Boeing’s NRE BOEs, The Air Force Reasonably Assessed Cost Risk Against Boeing’s SDD NRE Proposal**

It is understandable at this point that the Air Force determined cost risk had to be assessed against Boeing’s SDD proposal, because it was simply impossible to gauge the true cost of the NRE. Indeed, the Air Force:

saw more information from BCA than we ever have in lots of other procurements that we’ve . . . done but we never really got the basis of estimate that BCA used to set their price for this acquisition. . . . [S]o we were left with the uncertainty about what would the ultimate performance be on this contract because we didn’t know what went into establishing the price.

Tr. 410. As [REDACTED] indicated above, this determination was not new to Boeing; it had been briefed to them several times prior to FPR. [REDACTED] Witness Binder Tabs 5, 7, 9, pages 172, 60-61 & 65, and 181, respectively.

Notwithstanding, Boeing still contends that the Air Force should have accepted the [REDACTED] without question and without assessment of cost risk because “the prime contract ‘cost’ at issue is a firm fixed price [FFP] subcontract cost” between IDS and BCA. Comments, p. 122 (emphasis in original). This contention lacks merit for three reasons. First, it is based upon a serious misreading of the GAO’s decision in IBM Corporation, B-299504, 2007 U.S. Comp. Gen. LEXIS 251, June 4, 2007. In IBM, the GAO sustained a protest by a prime contractor against the Environmental Protection Agency’s (EPA) assessment of additional price to its FFP contract following a price realism analysis. Id. at \*26. Despite sustaining the protest,

[REDACTED]

IBM validated an agency's right to "account for concerns regarding an offerors' understanding of a requirement in the form of a performance risk evaluation," but stated the agency "may not adjust a fixed-price for purposes of evaluation." Id. at \*26 (internal citations omitted).

Boeing's misunderstanding of this case resides in several major distinctions between the facts of the two cases. KC-X RFP Section M, paragraph 2.5.2.5 directed the Air Force to quantify pure cost risks and to dollarize it in the MPLCC. Tr. 184; [REDACTED] Witness Binder Tab 2, p. 3. [REDACTED] understood this. Id.; Tr. 15. Nothing in IBM indicates a similar provision existed there. Of equal importance, the FAR does not prohibit dollarization of cost risk in an MPLCC either. See FAR 15.404-1(d)(3). Likewise, the prohibition in FAR 15.404-1(d)(3) applies only to FFP prime contracts. While it might be interpreted to apply to subcontracts in some competitive settings, such is not the situation here. Boeing identified BCA as a sole source, and the relationship's inter-divisional company nature makes it hardly an arms length agreement. Finally, Boeing's prime contract with the Air Force is a cost plus incentive fee (CPIF) contract. In such cases, FAR 15.404-1(d)(3) does not apply at all.

This grave misunderstanding dovetails into the second reason Boeing's contention regarding BCA's firm fixed price contract lacks merit. Put simply, Boeing's claim that BCA's firm fixed price should have been blindly accepted by the Air Force demonstrates an elementary misunderstanding of the interrelationship of FFP subcontracts between commercial entities and their parent CPIF prime contracts between the government and its prime contractor. The government can still experience cost growth on CPIF prime contracts built on FFP subcontracts. As the former AFMC Director of Contracting, [REDACTED] explained,

Q: . . . in your experience, even if a subcontract is in fact firm fixed price with a fixed baseline of effort, can it constitute a cost risk?

A: Absolutely.

Q: How is that?

A: Particularly when the specification baseline is maintained between the prime and the sub and is subject to change through engineering change proposals. You have to consider is it a design specification, is it a performance specification, what will the contractor be held accountable to deliver for that fixed price . . .

[REDACTED]



Tr. 414-15. In the case of IDS and BCA, the Cost/Price Panel Chief recognized this risk as well: “[M]ilitary contracts are layered with contracts that were described . . . as FFP where we the government ended up paying for cost risk. [REDACTED] so there [are] a number of them.” Tr. 221-22. As an additional example, for the [REDACTED] effort was originally a fixed price contract which was later converted by [REDACTED] into a cost type contract. [REDACTED]

[REDACTED] This risk of cost growth is precisely the reason the Air Force adjusted the cost of Boeing’s CPIF prime contract. Tr. 220. See also Tr. 35; Tr. 217; [REDACTED] Witness Binder Tab 7, p. 65; Tab 9, p. 181; Tab 12, p. 460.

Third, unlike the contract in IBM, the structure of the subject IDS/BCA subcontract left serious questions in the minds of [REDACTED] and [REDACTED] as to whether it really was FFP. In the words of [REDACTED]

Q: And so you got a fixed price. What’s the concern?

A: There [are] a couple concerns. . . . I noticed in one of the EN responses that Boeing gave to a Contracts EN, [REDACTED]

Tr. 103-04. In the words of [REDACTED]

Tr. 415. Truly, the IDS/BCA subcontract is so capacious [REDACTED]

[REDACTED] Given these voluminous, fluid, and uncertain terms, it is understandable that the Air Force considered the IDS/BCA subcontract anything but “firm” and likewise reasonable that it assessed risk to its likely change in cost.

\_\_\_\_\_  
\_\_\_\_\_  
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## The Methodology Used To Assess Cost Risk To Boeing's SDD Proposal Was Reasonable

Tr. 29. Boeing was aware as early as August 2007 that the Air Force was using the Monte Carlo methodology to assess risk against their SDD proposal and never once criticized it.

\_\_\_\_\_

A: They did not.

Q: Did Boeing ever state during the briefing they thought you should use different data?

A: They did not.

Tr. 30-31. The same silence occurred following the November 29, 2007, pre-FPR briefing at which the Monte Carlo simulation and resulting risk adjustment to Boeing's SDD proposal was briefed by [REDACTED] Tr. 36. See also [REDACTED] Witness Binder Tab 9, slide 181. Now however, Boeing finds fault with it everywhere, and even resorts to the desperate tactic of using its software title, Crystal Ball, Tr. 29, as a means of suggesting it is somehow random or invalid. Comments, p. 125. Such pettiness aside, the truth is that the Air Force chose the RAND and GAO studies as Monte Carlo data points because they looked at historical growth of different military systems. Tr. 29-30. This is decidedly reasonable. Furthermore, [REDACTED] debunked Boeing's contention that the use of [REDACTED] cost growth in the RAND study was inappropriate because aircraft programs showed a mean growth of [REDACTED]

Q: . . . And in fact, if you look at the chart on the bottom table, 4.7, it lists the mean for aircrafts of [REDACTED] Isn't that a more useful number to look at for purposes of what you were doing, sir?

A: I did look at that.

Q: But you didn't use it?

A: Can I explain how I used it?

Q: Please.

A: If you remember in the Monte Carlo, we used a study as the worst case. If you take that aircraft value and you add the standard deviation there, you get [REDACTED] or [REDACTED] percent growth at the worst case. For us when we looked at that, that validated using that [REDACTED] percent for the worst case . . . Worst case for the aircraft is [REDACTED] percent growth when you look at the standard—or [REDACTED] actually, when you look at the standard deviation.

Tr. 109-10. Most importantly however, Boeing's arguments against the Monte Carlo methodology miss the point entirely: Monte Carlo was used to assess the risk of one contract phase, not the "cost realism and price reasonableness analyses contemplated in the Solicitation." Comments, p. 124. [REDACTED] explained this during cross-examination.

[REDACTED]

Q. . . . You're supposed to look at whether what—what Boeing proposed for the NRE, for the fixed price NRE was realistic for the work to be performed. You've gone to a study--

A. No.

Q. --of--

A. No. Those definitions apply to the [MPLCC] in total.

...

Q. . . . Whether or not what Boeing did is reflective of a clear understanding of requirements. Does looking at an overall chart of what the Bradley fighting vehicle and the TITON program and other programs like that, does that help you understand whether Boeing had a clear understanding of requirements?

A. That was being done to add risk to that particular item due to the lack of insight in the basis of estimate that was provided by the offeror.

Tr. 111-12. Clearly, Boeing is referencing the definition of realism in the RFP—"clear understanding of requirements"—when the true point of the Monte Carlo was to assess risk to SDD because of the lack of insight. For that sole purpose, use of the industry standard Monte Carlo simulation and the data points therein was a reasonable means of assessing risk to Boeing's SDD proposal.

## **2. Air Force Adjustments To Boeing's Budgetary Proposal Were Reasonable And Appropriate**

Boeing's Comments to the Air Force MOL regarding the Budgetary adjustments focuses upon the price drop between [REDACTED] Comments, p. 127. Though much time is spent explaining this drop, it is not the issue. The Air Force evaluators' concern in the Budgetary Phase—and thus their basis for adjustment—was the inexplicable [REDACTED] from Boeing's sensible pre-FPR pricing to its FPR pricing for Lots 6-13. As of the date of this Post-Hearing Brief, Boeing has yet to offer a coherent, let alone valid, explanation for this price drop [REDACTED]

### **a. Testimony Shows There Was No Explanation For The [REDACTED] In Price Between Pre-FPR And FPR Prices**

The issue relating to Boeing's Budgetary Phase adjustment is a simple one. As explained by [REDACTED] problems first arose with the Budgetary Phase as a result of missing [REDACTED]

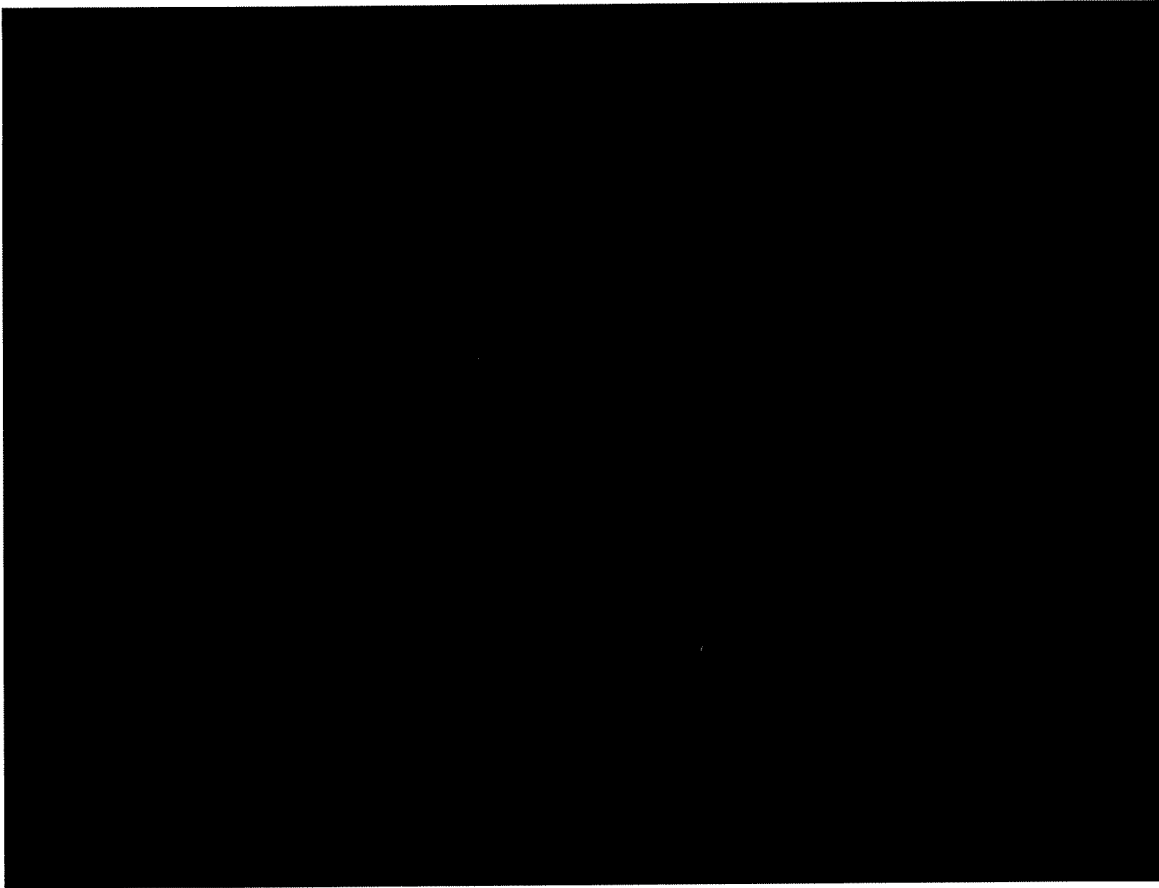
content in Boeing's early proposal and an [REDACTED] Tr. 47. Though Boeing initially resisted making any changes, claiming that it was a "best value proposal and . . . adding the missing content wasn't necessary," Tr. 48; [REDACTED] Witness Binder Tab 14, Boeing eventually corrected the problem. Indeed, "with the period of time between the prior briefing and this briefing, we had a lot of face-to-face discussions and Boeing had added the missing content. They had removed that [REDACTED] adjustment . . . so all of the issues we had had for the most part were done, had gone away at that point . . . ." Tr. 53. Unfortunately though, this situation would not remain.

When its FPR proposal arrived, problems with the Budgetary phase reappeared. Specifically,

[REDACTED]

Tr. 54. The below chart plots this phenomenon of a [REDACTED] in price for each budgetary lot [REDACTED] when comparing FPR to Pre-FPR for the BCA only effort (WBS 1.1.19):

[REDACTED]



The sole explanation for this drop was that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Absent a better BOE than the one paragraph description, “[o]ur assessment was that . . . didn’t support what they had there . . . .” Tr. 59. As such, the Air Force adjusted Boeing’s Budgetary FPR proposal to reflect its pre-FPR proposal. Put simply,

We had worked really hard through pre-FPR time making sure everything made sense, they understood that the relationships between the contract lots and the budgetary lots needed to make sense. We had worked through a number of months to get it all to make sense . . . . [T]he relationship there from going to the contract value into the budgetaries made sense and that’s why we went back to [Boeing’s pre-FPR proposal].

Tr. 59-60. As discussed in the Air Force MOL, this was an entirely reasonable decision based upon GAO precedent. MOL p. 221 (citing Cessna Aircraft Co., B-261953.5, Feb. 5, 1996, 96-1 CPD ¶ 132).

[REDACTED]

**b. Provision Of Data In Future Years Has No Bearing On Estimation Of An MPLCC For Purposes Of A Present Acquisition**

During his cross-examination of [REDACTED] Boeing's counsel hinted that Boeing's latest twist on its Budgetaries argument would be that the [REDACTED] should have alleviated Air Force concerns here. The following exchange is the best example:

[REDACTED]

10/10/2010

(b) (7)(C), (b) (7)(D)

[REDACTED]



[REDACTED]

\_\_\_\_\_

Tr. 432-36. But questions as to information availability in later years was not the point of the adjustment to Boeing's MPLCC for the Budgetary Phase. The point was the cost team did not have enough information to reasonably support Boeing's estimated cost for the Budgetary Phase at the time the estimate was done. As ██████████ explained, "the relationships between the contract lots and the budgetary lots needed to make sense." Tr. 59-60. Certainly the proposed clauses might "give comfort" that the Air Force can negotiate a fair and reasonable price in the future. But such clauses are of little use in estimating an aircraft's life cycle cost in a present

\_\_\_\_\_

acquisition. The burden of proof was on Boeing to prove its cost credibility for all phases of the contract—now, not later. Tr. 13; [REDACTED] Witness Binder, Tab 1, p. 1. Boeing did not do so, and as such, the Air Force reasonably adjusted its proposal for cost risk accordingly.

**3. The Air Force Reasonably Adjusted Boeing's O&S Repair Cost Estimate Upward By [REDACTED]**

As part of its MPLCC estimate, the Air Force estimated the cost to perform organic repairs to the KC-X aircraft from the end of the Interim Contractor Support (ICS) period through the end of the useful life of the last delivered aircraft per each offeror's proposed delivery schedule. Tr. 313. Specifically, the repairs at issue are known as depot level reparable (DLRs), which involve Air Force personnel at a base removing broken parts from an aircraft and then sending those parts to a depot for repair or replacement.<sup>23</sup> Tr. 278-79. The RFP informed the offerors that these types of repairs would transition to 100 percent organic support, which is "a measure of the cost to repair component parts of the tanker aircraft at an organic, or government-run, facility, meaning using government labor, government material in a government facility." Tr. 278, 313. It was thus very important that each offeror provide appropriate information from which the Air Force could estimate how much it will cost the Air Force to do these repairs over a period that lasts until the middle of this century. Tr. 310. Boeing failed to provide the Air Force information with its FPR from which the Air Force could estimate these costs, so the Air Force reasonably adjusted Boeing's life cycle repair cost estimate using a rational methodology stemming from Boeing's own initial proposal. Tr. 322.

**a. Boeing's Initial Repair Cost Proposal Was Based Upon The Erroneous Assumption That [REDACTED] Were An Accurate Predictor Of Depot Level Repairable (DLR) Costs Per Flying Hour**

In its initial proposal, Boeing chose to estimate its life cycle repair costs based on an expected [REDACTED] for repairs. AR Tab 77, Cost Volume – Book 1, p. V4-Bk1-552; PHB App. 77, p. 3. As a starting point, Boeing [REDACTED]

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<sup>23</sup> DLRs are distinct from scheduled depot maintenance. Tr. Day One, [REDACTED] at 278/10-14. Scheduled depot maintenance costs are not at issue in Boeing's protests. See Tr. Day One, [REDACTED] at 1-6.

[REDACTED]



82; AR Tab 77, Cost Volume – Book 1, p. V4-Bk1-551; PHB App. 77, p. 2. The Air Force accepted this step in Boeing’s methodology as valid. Tr. 282.

Boeing's second step in arriving at estimated [REDACTED] for repairs was based upon the assumption that [REDACTED] are an accurate predictor of DLR costs. According to KC-X Cost Team Advisor [REDACTED] this assumption is inappropriate.

Q. Did the Air Force accept step number two of Boeing's methodology?

A. No.

Q. And why not?

A. Basically because the [REDACTED] is a base level maintenance metric. It determines [REDACTED] at the base level.

What we are trying to estimate here is the cost to do repair work as a depot facility for the items that have to be shipped back for repair.

Tr. 283. Though Boeing tried to justify this methodology in EN BOE-CP-043 [REDACTED] [REDACTED] the Air Force “deemed that we could not rationalize that that backup data provided a good description of, and backup documentation for, how Boeing had derived and used [REDACTED] as a predictor for depot level reparable costs.” Tr. 288. [REDACTED] Witness Notebook Tab 135(b), p. 2. Ultimately, Boeing agreed this methodology was flawed. [REDACTED] Witness Notebook Tab 137, p. 4 (labeled as p. 3).

**b. The Air Force Reasonably Used A Modified Version Of Boeing's Methodology For Estimating Repair Costs To Calculate Its Adjustment To Boeing's O&S Proposal, And Reasonably Adhered To It When Serious Problems Were Uncovered With The Delta TechOps Proposal**

During the pre-FPR sidebar meeting, the Air Force showed Boeing its repair cost methodology, which was a modified version of Boeing's originally proposed methodology. Tr. 289. It was simply adjusted for the new KC-767AT's projected reliability improvement over the KC-135R using Mean Time Between Failure (MTBF) historical data rather than for predicted improvements in [REDACTED]. Id. As [REDACTED] explained, "By using the [MTBF], or how long

the aircraft can fly before there is a failure, we thought that was a better representation of the reliability improvement that we would expect to see for the new aircraft versus the current legacy 135 aircraft.” *Id.* The Air Force found the best improvement in MTBF over the KC-135R for similar type aircraft (i.e., refueling and transport aircraft) that it could find and applied that reliability improvement to the [REDACTED] calculation. Tr. 291. Boeing’s own lead cost estimator for O&S praised the methodology:

Q. And what was [REDACTED] response to the presentation that you gave at that meeting?

A. He stated that the Boeing methodology in the proposal was flawed.

Q. And did he say anything else?

A. . . . he agreed that the methodology and the approach that we used in the government estimate was a good way to do it, but he didn’t like the number.

Q. What number are you referring to?

A. That would be [REDACTED]

Q. Did he say why he didn’t like that number?

A. He said it was too large.

Tr. 294-95. In other words, the final number made Boeing’s repair cost estimate higher than Boeing wanted it to be.

At Boeing’s request, the Air Force gave it a few days to come back with some other proposed repair cost calculations. Tr. 297. However, the Air Force informed Boeing that if Boeing used commercial repair cost data as a BOE, that data “must reflect an actual cost of repair.” [REDACTED] Witness Notebook Tab 137, p. 5 (labeled as p. 4); Tr. 296. The Air Force also explained to Boeing that commercial repair agreements that reflect “agreed to” repair costs may not be acceptable for purposes of estimating the Air Force’s organic repair costs over the life cycle of the aircraft because the “agreed to” repair cost “may have no relationship to the actual cost to repair.” [REDACTED] Witness Notebook Tab 137, p. 5 (labeled as p. 4); Tr. 296. Further, the Air Force informed Boeing it would have to provide backup for “all assumptions, factors and estimating methodologies” for Boeing to meet its burden of proof with respect to its repair cost estimates. [REDACTED] Witness Notebook Tab 227, Minutes from December 11, 2007 Telecon with Boeing, p. 3. Finally, the Air Force reiterated to Boeing that if Boeing failed to provide all of the

[REDACTED]

required substantiation for its calculations, the Air Force had the right to make adjustments to Boeing's proposed cost/price. [REDACTED] Witness Notebook Tab 227, Minutes from December 11, 2007 Telecon with Boeing, p. 3.

When FPR arrived, Boeing relied upon the Delta TechOps proposal to estimate its life cycle repair costs, though the actual proposal was not included with the FPR. Tr. 298-99; [REDACTED] Witness Notebook Tab 119(h). See also [REDACTED] Witness Notebook Tab 217(a), p. 25. When [REDACTED] finally saw the Delta TechOps proposal during post-FPR discussions, he discovered [REDACTED] Tr. 362.

As explained by [REDACTED] there were a number of problems with the Delta TechOps proposal that prevented the Air Force from accepting it as a valid BOE for organic repair costs over the life cycle of the proposed KC-767 program. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]



However, Boeing's Delta TechOps proposal did not comport with this schedule.

[REDACTED]

[REDACTED]

[REDACTED] Third, although Boeing contends on page 131 of its Comments that the proposal was "firm fixed price," [REDACTED]

[REDACTED] Other problems with the Delta TechOps proposal included:

- No substantiation of the spreadsheet data provided. Tr. 303.

[REDACTED]

[REDACTED]

[REDACTED]

- It reflected a [REDACTED]<sup>24</sup> price to a customer rather than an actual cost of repair. Tr. 296; 301-02.

- [REDACTED]

Although the Delta TechOps proposal [REDACTED]

[REDACTED] the Air Force accepted Boeing's use of this proposal to estimate the cost for the ICS period. Tr. 312. However, Boeing's repair cost estimate for the organic repair period was a wholly different matter. For this period, the Air Force needed to estimate "[t]he cost of repair for the component parts to be repaired at a depot facility using government manpower and government material and labor in a government facility." Tr. 313. In other words, the Air Force "needed to get a cost to do a repair at an organic facility." Tr. 281. The Delta TechOps proposal was not a satisfactory basis of estimate for organic life cycle repair costs "because it was provided under the assumption of [REDACTED] [REDACTED] and there was no justification or documentation provided that [the Air Force] could relate back to an actual cost of repair for the maintenance." Tr. 313.

Given these problems, the Air Force issued EN BOE-CP-069 to request "further justification and rationale from Boeing for its [DLR] repair costs." Tr. 314. In its response to EN BOE-CP-069, Boeing used [REDACTED] "as a crosscheck for its FPR proposal." Tr. 316; [REDACTED] Witness Notebook Tab 119(b), EN BOE-CP-069, p. 5.

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<sup>24</sup> M. [REDACTED] testified that a [REDACTED] price did not allow the Air Force to estimate organic repair costs because "the price that an offeror is offering to do the maintenance on an aircraft may not be directly tied to a cost to do a repair." Tr. 302.

[REDACTED]

[REDACTED]

It must be noted here that, interestingly, the KC-135 analysis described above is similar to that used by the Air Force to ultimately estimate Boeing's O&S repair costs. Indeed, "the KC-135R was the system that was in the Boeing original proposal for which the repair cost was provided in step one of the three step process." Tr. 374-75. Such is why the Air Force used it in its estimating methodology. *Id.* The KC-135R now appears again in Boeing's cross-check of its FPR proposal. Tr. 317-18. One must ponder then, how this data can be the "irrelevant data relating to a different plane based on a much older design" Boeing deems it to be when the Air Force used it if Boeing used it as a takeoff point for a cross-check of the validity of its own proposal. Comments, p. 130.

This paradox aside, there were a number of concerns that prevented the Air Force from considering this so-called "verification" as a valid crosscheck of Boeing's FPR repair cost estimate. The problems specifically related to the projected reliability improvement calculation. Tr. 320-21; [REDACTED] Witness Notebook Tab 119(b), p. 5. First, Boeing did not actually provide any of the data concerning the 10 million commercial 767 flying hours upon which it claims to have based its calculation of the KC-767AT's projected reliability number.

Q. [The proposal] mentions 767 historical data from 10 million flight hours supplied by airlines to Boeing. Did Boeing provide this data to the Air Force?

A. No.

Q. In that same cell it states that, "This data was adjusted for [REDACTED] A [REDACTED] configuration." Did Boeing explain how it adjusted the commercial 767 aircraft data for the [REDACTED] configuration?

A. No.

Q. . . . How does the data on [page 11 of EN BOE-CP-069, [REDACTED] Witness Notebook 119b] relate to Boeing's commercial 767 data?

A. I don't know.

[REDACTED]

Q. Did Boeing provide any support for the numbers in the column under the heading [REDACTED]?

A. No.

Q. Did Boeing provide any support for the numbers in the column under KC-767AT?

A. No.

Tr. 318-19. The same could be said for the “lower level of detail” in the attachments to the proposal. *Id.* In short, Boeing’s proposed [REDACTED] reliability improvement from the KC-135E/R/T to the KC-767AT was neither reasonable nor substantiated. After all, there is not any reliability data for the KC-767AT because, as [REDACTED] explained,

A. [It’s] not flying.

Q. Not even built?

A. . . . Correct.

Tr. 372. Ultimately then, “[t]here just wasn’t the justification behind the numbers where we could track how the adjustments were made and why they were made, so we could not be sure that they were reasonable, and that we could use them.” Tr. 320-21. Therefore, it did not provide a valid crosscheck of Boeing’s FPR repair cost estimate. Tr. 321.

**c. The Air Force Used Reasonable Measurements To Estimate Boeing’s O&S MPLCC**

Because the Air Force “had no rationale or documentation for the Delta TechOps proposal in the Boeing FPR proposal, . . . we went back and continued to use the government estimate that we had derived at pre-FPR.” Tr. 322. The Air Force calculated this estimate using a more accurate version of the repair cost estimating methodology Boeing proposed initially. Tr. 288; [REDACTED] Witness Notebook Tab 135(b), p. 2. This methodology estimated the repair cost of the KC-767 by adjusting the repair costs of the KC-135R for various factors. See 281-284; [REDACTED] Witness Notebook Tab 135(b), p. 2.

[REDACTED] explained why the Air Force used [REDACTED] as a measure of expected reliability improvement from the KC-135R to the KC-767 as follows:

Because we are trying to determine a depot level reparable cost which, again, is the cost of the unscheduled failures that occur on an aircraft as you fly it. So by using the mean time between failure, or how long the

[REDACTED]

aircraft can fly before there is a failure, we thought that was a better representation of the reliability improvement that we would expect to see for the new aircraft versus the current legacy 135 aircraft.

Tr. 289. After looking for the best MTBF improvement it could find based on the available data for similar type aircraft, the Air Force determined that the KC-135T had the largest, and applied that best estimate of [REDACTED] projected reliability improvement to the KC-767. Tr. 375. This was the largest percentage improvement the Air Force could justify based on historical reliability data. Tr. 375.

The Air Force had shown its adjustment calculation to Boeing in November 2007.

Tr. 293. Contrary to its assertions now, Boeing's O&S cost estimator "agreed that the methodology and the approach [the Air Force] used . . . was a good way to do it." Tr. 295.

**d. The Air Force Did Not Make Similar Adjustments To Northrop Grumman's Estimated Repair Costs Because Northrop Grumman's Conservative Repair Cost Estimate Was Based On A Valid Methodology**

As noted in the Air Force MOL, disparate treatment in an evaluation does not occur when an agency recognizes differences in proposals that cause the agency to treat the proposals differently. See, e.g., Recon Optical, Inc., B-310436, B-310436.2, 2007 U.S. Comp. Gen. LEXIS 239, Dec. 27, 2007. In the case of O&S repair costs, NG used a completely different methodology than Boeing in order to estimate its KC-30 life cycle repair costs. AR Tab 217, Factor 4 Evaluation Summary for NG, p. 15; PHB App. 217, p. 15. As such, the Air Force's acceptance of this methodology was neither disparate as applied to Boeing, nor unreasonable.

NG did not propose a repair cost estimating methodology based upon [REDACTED] [REDACTED] between its KC-30 and an existing Air Force aircraft [REDACTED] [REDACTED] Tr. 391. Instead, NG estimated its repair costs [REDACTED] [REDACTED] which is an acceptable methodology for estimating repair costs. AR Tab 217, Factor 4 Evaluation Summary for NG, p. 15; PHB App. 217, p. 15 ("The Government wrote Evaluation Notices . . . to gain insight into Northrop's methodology and deemed the methodology to be reasonable"). The Air Force determined that [REDACTED] was a conservative figure, as it was higher than the Government's experience. Repair costs are typically [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED] Tr. 346-47, 374; AR Tab 217, Factor 4 Evaluation Summary for NG, p. 15; PHB App. 217, p. 15.

While NG did not provide [REDACTED] in its proposal, it provided [REDACTED]  
[REDACTED] AR Tab 184, Cost ENS, 6-Jun 07 NG (conformed), NPG-CP-029, NPG-CP-029.doc, p. 2; PHB App. 184, p. 2. Therefore, the Government rationally accepted NG's conservative estimate of O&S repair costs.

**4. The Air Force Evaluation of Fuel Costs for Purposes of the MPLCC Was Reasonable**

The RFP informed offerors that the Air Force would evaluate fuel costs as part of the MPLCC. Tr. 272. In furtherance of that evaluation, the RFP instructed offerors to provide average fuel consumption rates for their proposed aircraft and explained how the Air Force would use those rates to calculate the fuel cost portion of the MPLCC. Tr. 274. Both offerors provided fuel consumption rates as instructed and the Air Force evaluated the offerors' fuel costs as part of the MPLCC in accordance with the RFP. Tr. 274. However, before the offerors' proposed consumption rates were utilized for cost evaluation purposes, the Air Force made reasonable cross checks to verify their accuracy. See generally: Tr. 235, 239-41, 254, 259, 274-75, 276-77, 378, AR Tabs 310 and 354. These cross checks involved calculations of offeror fuel consumption rates based upon mission scenarios, as these calculations, unlike [REDACTED]  
[REDACTED] best mirrored fuel consumption—and thus fuel cost—expected for the KC-X over its 25-year lifespan. As such, the GAO should deny Boeing's protest challenging the Air Force's evaluation of NG's fuel costs because the Air Force reasonably evaluated those costs consistent with the terms of the RFP.

**a. The RFP Instructed The Offerors To Provide Average Fuel Consumption Rates For An Average Mission-Ready KC-X**

Section L of the RFP required both offerors to submit "average fuel consumption" rates for "an average mission-ready KC-X, including fuel, crew, and mission equipment on board." AR Tab 21, SectionLAttachment15O\_SDataForm20Mar2007.XLS, "BOE\_Fuel" tab, #3; PHB App. 21, p. 1. The offerors were to input the fuel consumption rates in the O&S Data Form spreadsheet at Attachment 15 to Section L. The "BOE\_Fuel" tab of this spreadsheet

[REDACTED]

provided the specific instructions, the cells with the fuel consumption rates the offerors were to enter (with a sample entry for demonstrative purposes), and cells with the appropriate cost calculations, which incorporated fuel prices and inflation indices. A portion of this tab is reproduced below:

**HOME**  
Cost Element: Fuel

1. This element includes the cost of Fuel required to fly the KC-X
2. Sample Fuel calculation for Aviation Fuel takes the fuel consumption in Gal/Hour/PAA times the number of flying hours in a given FY.
3. The consumption figures are for an average mission-ready KC-X, including fuel, crew, and mission equipment on board.
4. Be sure to document the source of the input data and rationale for its use in the BOE Documentation.

Required Data Inputs:  
Input Format:

Type of Fuel	Average Fuel Consumption	Reserved
Name	Gal/ Fly Hour	Gal/ Fly Hour
JPB	100	0
Other	50	

Cost Calculation:

	FY08	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Fuel												
Total TYS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
JPB	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other												

Id. The Air Force did not specify additional information about the type of mission the offerors were to use to calculate their average fuel consumption rates. Tr. 274. In fact, “[t]here was no direction to NG or Boeing. We said, ‘Provide an average burn rate for operating and support cost estimating purposes.’” Tr. 388. Neither offeror objected to these RFP terms, and neither offeror objected to the Air Force’s evaluation of its own fuel consumption rate.

Boeing proposed a fuel consumption rate of [REDACTED] gallons per hour for the KC-767AT. AR Tab 119, Boeing FPR, 4Jan08 BOE – FPR Revision Change Pages, 05.Volume\_IV\_Book3, Book 3\_Excel\_Files, 001 Attachment 5 – Operating & Support Data Forms.XLS, BOE\_Fuel. As its BOE, Boeing stated:

[REDACTED]

[REDACTED]

AR Tab 119 (PHB App. 119(a)), Boeing FPR, 4Jan08 BOE – FPR Revision Change Pages, 03.Volume\_IV\_Book1, 02\_Volume 4 Book 1 Chapter 2.pdf, p. V4-Bk1-555. Boeing did not state what mission or missions it used to calculate its fuel consumption rate.

NG proposed a KC-30 fuel consumption rate of [REDACTED] gallons per hour. AR Tab 174 (PHB App. 174, p. 2), NG FPR, Volume IV – Cost/Price, Book 3, p. IV-Att. F-4. NG provided the following as its BOE:

[REDACTED]

Id. Thus, both offerors indicated that their proposed fuel consumption rate was the result of computer simulation or modeling and that was the Government's understanding.

**b. Any Protest As To How Fuel Costs Were Calculated In The MPLCC Is Untimely**

As noted above, neither offeror objected to the RFP requirements related to fuel consumption and cost calculation. In fact, both provided information in accordance with those requirements. Nonetheless, Boeing protested this calculation based upon the fact that the Air Force did not use [REDACTED] fuel burn data in its evaluation. Second Supplemental Protest, p. 93. Then, in its Comments, Boeing complained that the Air Force should have used [REDACTED] data. Comments, p. 138-139. Not only do these protests starkly contravene RFP dictates, but they are also untimely.

Lockheed Martin Sys. Integration-Oswego; Sikorsky Aircraft Co., B-299145.5, B-299145.6, August 30, 2007, 2007 CPD ¶ 155, is particularly instructive in this situation. The Lockheed protesters attacked the MPLCC methodology for calculating fuel costs for helicopters because it did not take into account wartime scenarios or the fully burdened cost of fuel. Id. at \*17, n3. In deeming this protest basis untimely, the GAO pointed out that, among other things, the fuel cost measurement methodology was specified in the RFP's ground rules long prior. Id. Given Boeing's fuel protests are identical to the Lockheed complaints, the GAO should dismiss Boeing's protest on those grounds as untimely.

[REDACTED]

**c. The Air Force Took Reasonable Steps To Ensure That The Offerors' Proposed Fuel Consumption Rates Were Accurate**

To ensure the accuracy of MPLCC calculations for fuel, [REDACTED] “spoke with the performance engineer, [REDACTED] and provided him [the offerors’ fuel consumption] numbers out of the . . . proposals and asked him if he felt that that was within the ballpark for [the SSET cost team] to use in the [O&S] cost estimate.” Tr. 274. [REDACTED] told [REDACTED] “that those were numbers he had seen before, and he could validate they were in the ballpark.” Tr. 275. As a follow up to that initial conversation, on or about January 29, 2008, [REDACTED] performed calculations of the expected fuel consumption rates of the KC-30 and the KC-767 “as a crosscheck for the as proposed [rates] . . .” Tr. 378.

The calculations were based upon a hypothetical aircraft mission, [REDACTED] [REDACTED] AR Tab 310, p. 3. The [REDACTED] [REDACTED] [REDACTED] Tr. 229-30. [REDACTED] chose this flight profile because, in his field of aircraft performance engineering (Tr. 228), “the [REDACTED] is one that is often used to gauge aircraft performance in this area in the design stage for a particular aircraft.” Tr. 231; see also: Tr. 243 (on cross-examination). While the [REDACTED] is not the most common mission for a tanker, it is nonetheless a sound cross-check because:

the [REDACTED] involves a [REDACTED] as part of the flight profile. And the [REDACTED] presents the—probably the widest range of typically-encountered operational conditions by this type of aircraft all in one mission. So, again, it is—it is a good indicator of average aircraft performance.

Tr. 231. Additionally, [REDACTED] methodology of selecting the points for his three calculations [REDACTED] [REDACTED] secured “snapshot” (Tr. 230) measurements representing operations [REDACTED] [REDACTED] Tr. 233-34. As a result, fuel burn rates produced from a [REDACTED] will typically be high compared to other missions due to its incorporation of [REDACTED] [REDACTED] Tr. 231. They are thus more “conservative” for cost estimating purposes. Tr. 231. In effect, this profile allows assessment of average aircraft fuel burn rates over “a wide range of operating conditions for each aircraft” (Tr. 852) and without having to allow for the effect on [REDACTED]

burn rate due to

Tr. 231.

For the [REDACTED] [REDACTED] calculated the fuel consumption rate for the KC-30 as [REDACTED] gallons per hour and for the KC-767 as [REDACTED] gallons per hour. AR Tab 310, p. 3. The results for the KC-767 were within [REDACTED] Boeing's proposed rate, and the results for the KC-30 were within [REDACTED] of NG's proposed rate. Compare AR Tab 310, p. 3 with AR Tab 174 (PHB App. 174, p. 2), NG FPR, Volume IV – Cost/Price, Book 3, p. IV-Att. F-4 and AR Tab 119 (PHB App. 119(a)), Boeing FPR, 4Jan08 BOE – FPR Revision Change Pages, 05.Volume\_IV\_Book3, Book 3\_Excel\_Files, 001 Attachment 5 – Operating & Support Data Forms.XLS, BOE\_Fuel. [REDACTED] explained how he performed his reasonableness check with [REDACTED] Tr. 239 (“how the numbers were obtained, what they meant physically, and...the similarity of the... [REDACTED] case to the numbers that were in each proposal.”) and Tr. 276 (“[REDACTED] explained, at a pretty high level, a lot of the factors that went into the calculation”). Accordingly, since [REDACTED] differences between [REDACTED] [REDACTED] calculations and the offerors' proposed rates were well within a standard 10 to 15% threshold, [REDACTED] considered [REDACTED] calculations a valid cross-check of the proposed numbers. Tr. 276-77.

At the KC-X Chief Engineer's request, [REDACTED] also calculated fuel burn rates for the MPLCC for a [REDACTED] mission, specifically, the one specified [REDACTED]. This involved:

The [REDACTED] profile was the same for all, for five different ranges [REDACTED] involves [REDACTED]

Tr. 236-37. Again, [REDACTED] three points for checking fuel burn during this mission sampled operations at a [REDACTED] AR, Tab 310, page 3 and Tr. 237-38. The



had already been assessed by the SSET at the time the MPLCC crosscheck was conducted, and the SSET's conclusions support the fuel burn crosscheck.

In its evaluation, the SSET determined that the KC-30 was based on the currently available Airbus A330-200 and although the SSET did not compare the offerors, [REDACTED]

[REDACTED] Thus, even though the KC-30 was approximately [REDACTED] than the KC-767, it was expected to burn

Finally, unlike the KC-767, the KC-30 had a [REDACTED]

For these reasons (and others), the SSET concluded that

██████████<sup>26</sup> Thus, the ██████████ delta in the proposed average fuel burn rates was never considered to be

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surprising, nor were any of the results of [REDACTED] reasonableness checks. Tr. 791, 794, 797, 800-04, 806, 808 (further examination of additional studies halted here by Mr. Pietrovito).

**d. Boeing's Argument That The MPLCC Should Have Been Based Upon Northrop Grumman's [REDACTED] Per Gallon Fuel Burn Rate Is Not Supported By The Record**

Boeing argues that NG's fuel costs should have been approximately [REDACTED] because the Air Force should have adopted one of [REDACTED] reasonableness check fuel calculations as its basis for the MPLCC. Comments, p. 139. However, as was shown by the overall testimony of [REDACTED] and as suggested by the wide range of gallon per hour results in his various fuel checks (AR Tabs 310 and 354), nothing provides a sufficient basis for the Air Force to reject the offeror-proposed fuel burn rates.

Q. Now, did this study cause you to question the appropriateness of the [REDACTED] that was proposed by Northrop Grumman?

A. No, not really.

Q. Why not?

HEARING OFFICER PIETROVITO: . . . I take it that this is going to show some consistency as we go through these studies?

MR. HART: It does, Sir.

HEARING OFFICER PIETROVITO: These are all various cargo studies he performed using different parameters comparing the two aircraft. . . . I take from the testimony I've heard so far that the numbers he's getting are consistent with the proposals.

MR. HART: They are. We can move on. . . . [REDACTED] in all the studies you did, did any of these results cause you to question the appropriateness of the [REDACTED] gallons per hour proposed by Northrop Grumman?

A. No.

Tr. 808-09.

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[REDACTED]

[REDACTED]



Put in proper context, Boeing's argument that NG's fuel costs should have been [REDACTED] based upon [REDACTED] calculations is simply an attempt to achieve the highest delta possible between the two KC-X aircraft's fuel burn rates—[REDACTED]

[REDACTED]  
Boeing conveniently ignores the [REDACTED] also done for purposes of the MPLCC crosscheck that showed a [REDACTED]

[REDACTED] Indeed, the [REDACTED] between the offerors' proposed burn rates [REDACTED]

is approximately midway between the [REDACTED] and [REDACTED] obtained in the two fuel reasonableness checks [REDACTED] conducted specifically for [REDACTED] and used in cross-checking the MPLCC. AR Tab 310, p. 3. This fact, in and of itself, provides more than sufficient support for the Government's decision to adopt the offeror-proposed rates in its MPLCC.

But there is yet additional very persuasive support. The four sets of companion fuel calculations—calculations where fuel consumption is estimated for each aircraft while performing the same mission—that [REDACTED] conducted from January 31, 2008 through February 21, 2008, provide further corroboration of the [REDACTED] delta between the offeror's proposed fuel burn rates. Indeed, these studies result in deltas of [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
With four additional companion studies this closely bracketing the [REDACTED] in offeror-proposed fuel burn rates, the Air Force's decision to accept the offeror-proposed burn rates was proper and should be given significant weight.

[REDACTED]  
[REDACTED]  
[REDACTED]

**e. The Government's Analysis Of The Expected Fuel Consumption Rates Of The KC-30 And The KC-767 Was Accomplished With The Rigor And Diligence Appropriate For Its MPLCC Analysis**

The Air Force is fully cognizant of the expected fuel cost for peacetime operation of the KC-X in the MPLCC. AR Tab 13, SectionLAttachment16\_O&SCost Estimating.doc, p. 1-3 (“A complete estimate of O&S costs will typically include the costs of personnel, consumables, goods and services, and sustaining support and investments associated with the peacetime operation of a weapon system”), p. 3-21 (“O&S cost estimates are based on projected peacetime operations”). Likewise, the Air Force understands Mr. Pietrovito's concern stated at the hearing that an appropriate amount of rigor be involved in the assessment of the fuel element of the KC-X's MPLCC so as to “do an accurate assessment of what the life cycle costs would be of the aircraft.” Tr. 847. The Air Force believes its MPLCC was conducted consistent with the terms of the RFP and involved an appropriate amount of rigor in the analysis and that the resulting estimated fuel costs portrayed the life cycle fuel costs accurately. As recognized by Mr. Pietrovito at the hearing as [REDACTED] was reviewing the results of all his fuel calculations, “the numbers [REDACTED] was getting are consistent with what he saw in the proposals.” Tr. 809. Indeed, [REDACTED] testified that none of his calculations caused him to question the appropriateness of either the [REDACTED] gallons per hour proposed by NG or the [REDACTED] gallon per hour proposed by Boeing. Tr. 809. In addition, the Air Force believes that the MPLCC accurately established the appropriate delta in life cycle fuel costs between the KC-30 and KC-767 for the purposes of the SSA's consideration of the MPLCC as an evaluation factor.

As previously stated, [REDACTED] additional calculations show that the delta between the offerors' burn rates are remarkably close and consistent with one another. This is so despite the fact that both of [REDACTED] hand-calculated three-point reasonableness checks required some assumptions due to the lack of information for a more thorough analysis. This is also true even though [REDACTED] calculations did not evaluate the fuel burn continuously throughout the entire flight profile as would have been possible in a computer-run analysis. This result not only supports the Air Force's decision to use the offeror-proposed burn rates, but it also persuasively supports the reasonableness of the degree of rigor the Air Force applied to cross-checking those offeror-provided fuel burn rates.

[REDACTED]

As testified to by [REDACTED] he lacked the information required, especially [REDACTED]<sup>27</sup> to conduct a more thorough calculation. Tr. 235, 811 and 841. This data was not included with the other aircraft performance data [REDACTED] used for his calculations. Tr. 235. [REDACTED] further testified that it would be difficult to obtain the necessary data from warfighters establishing the probable usage of the KC-X across its various mission roles to precisely model the expected fuel burn rates. Tr. 852-53. Finally, when asked to estimate the time involved to conduct this modeling assuming he could obtain all the needed data, [REDACTED] stated, "I imagine this would be close to a year or two problem to do this properly." Tr. 853-54. Consequently, it would have been unreasonable for the Air Force to have devoted more time and effort to conduct a more thorough investigation to support its MPLCC. To have done so would have resulted in diminishing returns in aiding the SSA in [REDACTED] assessment of cost. More thoroughly modeled burn rates would have provided a false sense of precision as they would have been based solely on design data, and they must necessarily be applied to an estimated annual level of use that is difficult to predict. Tr. 852-53. For these reasons, it was entirely reasonable for the Air Force to use offeror-proposed fuel burn rates and cross-check them for accuracy rather than undertake the gigantic expense and time of a very lengthy but questionably worthwhile study. See ViON Corporation, B-256363, Jun. 15, 1994, 94-1 CPD ¶ 373 \*22-23.

Finally, [REDACTED] testified that he believed the result of an additional one or two year effort to thoroughly model burn rates would not yield a different result than the reasonableness check he accomplished for the MPLCC. Tr. 855. Therefore, any added precision in estimating the power hour burn rate by expensive and time consuming computer modeling would likely not have provided any further benefit to the Government.

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<sup>27</sup> [REDACTED]

**f. The Record Clearly Shows That Even If The Air Force Used The Higher Burn Rate Boeing Would Not Have Been Prejudiced**

The Air Force has shown that adopting a [REDACTED] is less sound than adopting the [REDACTED] in the offer-provided fuel burn rates [REDACTED] or using any single result or combination of the deltas of [REDACTED] found in [REDACTED] companion studies. But, assuming arguendo that the Air Force should have used [REDACTED] crosscheck calculation rather than NG's proposed fuel consumption rate, Boeing would still not have been prejudiced by the Air Force's use of [REDACTED]. The GAO "will not sustain a protest unless the protester demonstrates a reasonable possibility of prejudice that is, unless the protester demonstrates that, but for the agency's actions, it would have had a substantial chance of receiving the award." Alpha Marine Servs., LLC, B-291721, B-291721.3, Mar. 5, 2003, 2003 CPD ¶ 61 \*20.

While an increase of [REDACTED] in NG's MPLCC fuel cost based on [REDACTED] gallon per hour higher fuel consumption rate is a lot of money in isolation, viewed in context this sum would have amounted to only about a [REDACTED] total increase in NG's fuel costs over the life cycle of the aircraft.<sup>28</sup> Further, it would have amounted to only about a [REDACTED] total increase in NG's total O&S cost portion of the MPLCC.<sup>29</sup> So, even if the Air Force used [REDACTED] rate calculation rather than NG's proposed fuel burn rate in contravention of [REDACTED] expert opinion, see Tr. 24, it would not have significantly changed NG's total cost/price. In [REDACTED] SSDD, the SSA made clear that a small difference in the MPLCC would not impact [REDACTED] award decision given NG's higher mission capability, past performance, and IFARA ratings. AR Tab 54 at 19-20. Therefore, Boeing was not prejudiced by the Air Force using the [REDACTED] fuel consumption rate even if the Air Force should have used the [REDACTED].

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<sup>28</sup> [REDACTED]

<sup>29</sup> [REDACTED]

What is clearly not supported by the record is any fuel burn delta between the proposed KC-X aircraft in excess of [REDACTED]. Apparently cognizant of the SSA's statement that an error in the MPLCC of the magnitude associated with a [REDACTED] would not impact [REDACTED] award decision, AR Tab 54, Boeing has tossed out three different bases for a comparison in an unsuccessful attempt to support a delta higher than [REDACTED]. Boeing has offered the deltas of [REDACTED]

\_\_\_\_\_ <sup>90</sup> Boeing Comment, p. 93. However, the record clearly does not support the use of any of these as a basis for comparing the two aircraft.

[REDACTED] concluded, “that there is a fundamental difference between these two aircraft mentioned in [REDACTED] study and the two aircraft proposed for the KC-X.” Tr. 819. [REDACTED] also indicated that he would need to know much more about how the study was conducted to understand why the two burn rates were [REDACTED] (Tr. 819)—a result he found to be somewhat surprising given the [REDACTED]. Similarly, [REDACTED] effectively showed the flaws in the [REDACTED], pointing out that [REDACTED] struggled getting consistent high-confidence data from various manufacturers because each was incentivized to make their product line appear attractive (Tr. 1197-98) and the analysis, like the [REDACTED] study, was based on different aircraft at different weights than those proposed. Tr. 1191-92.

30

[REDACTED]  
[REDACTED]  
[REDACTED] AR Tab  
328. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] Tr. 1201 [REDACTED]  
Certainly, contrary to Boeing's implication at the hearing (Tr. 840), it is distinguishable from demands [REDACTED] especially in terms of aerial refueling demand. Although the Air Force equips to meet this demand, we do so in part to deter the development of such a scenario. In short, it is not probable that this peak demand day will occur in the next 25 years.

Second, the MPLCC is intended to address the expected costs for a 25-year [REDACTED] life-cycle use of the KC-X, [REDACTED] AR Tab 18, Section L, Attachment 14. So, even if this scenario had occurred in the previous 25 years, or if it begins to develop tomorrow, it would still not be appropriate to consider it in developing the MPLCC fuel cost estimate. After all, as noted above, the MPLCC estimate according to the RFP, was to be based upon "average fuel consumption" for one KC-X.

Third, the fleet fuel use statistical reporting in [REDACTED] is in no way comparable to the estimation of fuel burn rates for each KC-X aircraft operating under typical condition. Tr. 824. The formula specified in the MPLCC for its fuel consumption calculation requires an average fuel burn rate for a single average mission-ready KC-X aircraft. AR Tab 21, SectionLAttachment 15O\_SDataForm20Mar2007.XLS, "BOE\_Fuel" tab. The [REDACTED] difference in the KC-767 fleet's fuel use versus the KC-30 fleet's fuel use [REDACTED] [REDACTED] does not offer a relevant basis even for a secondary confirmation of individual KC-X aircraft fuel burn rates. Tr. 825. Put simply, one cannot take the [REDACTED] difference [REDACTED] and assume that the same delta is applicable to a single aircraft. There are two main reasons why. Importantly, [REDACTED]  
[REDACTED] each KC-X fleet meets the

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] 823-25, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] In  
short, there is no common basis for comparison.

Of equal importance, in seeking to determine the optimal effectiveness of [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Tr. 829. [REDACTED] gave several concrete examples to support this concept  
describing non-optimal manners in which aircraft may be required to fly out to an aerial  
refueling track [REDACTED] (Tr. 828) and describing a different utilization of the tanker while  
[REDACTED] Tr. 828. [REDACTED] also gave an example involving the  
use of a B-52 refueling mission where a [REDACTED] mission would not involve fuel loads  
[REDACTED] typically done [REDACTED] Tr. 830.

**g. The GAO Should Defer To The Reasonable Fuel Consumption Rates Used In The MPLCC As Cross-Checked By [REDACTED]**

The Air Force is in the best position to determine what steps it should take to analyze the life cycle costs of the proposals. The GAO has explained the deference it gives to agency judgments in this matter as follows:

In conducting a life-cycle cost analysis, procurement officials must make informed judgments as to the extent of which proposed prices represent a reasonable estimation of future costs. Such informed judgments are properly within the administrative discretion of the procuring agency, and its judgment is entitled to great weight since it is in the best position to assess the impact of various factors on future costs and must bear the repercussions of any difficulties or expenses that may result from a defective analysis. Our review of the agency's cost analysis is, therefore,

[REDACTED]  
[REDACTED]  
[REDACTED]

limited to a determination of whether the evaluation was reasonable and consistent with the terms of the RFP.

Dynamic Energy Corp., B-235761, Oct. 6, 1989, 89-2 CPD ¶ 325. The GAO has also stated that “[t]here is no general requirement that agencies verify the information presented in proposals,” especially in cases such as here where “the RFP did not provide that information would be verified.” Strategic Analysis, Inc., B-270075, B-270075.4, Feb. 5, 1996, 96-1 CPD ¶ 41.

The RFP did not state that the Air Force would attempt to verify the offerors’ proposed fuel consumption rates. AR Tab 278, RFP §§ L and M. Nonetheless, [REDACTED] testified that he did take steps to ensure that the offerors’ fuel consumption rates were generally accurate. Tr. 274-76. [REDACTED] obtained two separate crosschecks that the Air Force considered as part of the cost evaluation for the source selection. Id. The first crosscheck involved [REDACTED] asking [REDACTED] if the as-proposed fuel consumption rates appeared to be “in the ballpark” for what [REDACTED] would expect to see for these aircraft. Tr. 274-75. The second crosscheck involved [REDACTED] performing crosscheck calculations using aircraft performance data the offerors had provided to the Air Force. Tr. 230. [REDACTED] received the data from these crosscheck calculations on January 29, 2008, very near to the end of the cost evaluation. Tr. 275. These crosschecks confirmed that the offerors’ proposed fuel consumption rates were reasonable as Boeing’s rate was [REDACTED] calculation and NG’s rate was [REDACTED] calculation. Tr. 276; [REDACTED] Witness Notebook Tab 310, p. 3. As a crosscheck that is “within 10 to 15 percent of an estimate . . . [is] considered to be a valid crosscheck,” the Air Force reasonably used the offerors’ as-proposed fuel burn rates to calculate the life cycle fuel costs as envisioned by the RFP. Tr. 276-77. The GAO should therefore give the appropriate deference to the Air Force’s judgment and deny Boeing’s protest concerning the evaluation of the offerors’ life cycle fuel costs.

##### **5. The Air Force Did Not “Normalize” MILCON Costs**

As discussed in the Air Force MOL, the RFP directed that the MILCON portion of the MPLCC would be estimated entirely by the Air Force, with inputs from both Air Mobility Command (AMC) and Air Force Materiel Command (AFMC). MOL, p. 229.

[REDACTED]



Despite its litany of protests, Boeing has failed to demonstrate that any of the site surveys used to develop the MILCON MPLCC, or the MILCON estimates themselves, were unreasonable. Rather, Boeing has merely resorted to a litany of speculative costs to suggest the survey estimates were somehow inaccurate. Comments, p. 116. “While the particular method to be used by an agency to evaluate prices should, to the extent possible, accurately measure the costs to be incurred under competing proposals . . . the evaluation of the most advantageous offer in any procurement should be confined to matters that are reasonably quantifiable.” Sun Co., Inc., B-275193, Jan. 29, 1997, 97-1 CPD ¶ 56, (citing Comdisco, Inc., 64 Comp. Gen. 11 (1984) 84-2 CPD P 416).

The estimating methodology used by the Air Force to evaluate MILCON MPLCC was entirely reasonable, particularly in light of the fact that the SSET had only a notional list of bases from which to work. The surveys addressed costs that were quantifiable, and omitted those that were uncertain. In the end, the four site surveys provided the SSET a reasonably clear window into the potential costs of bedding down the KC-X at those particular bases.

**a. The Air Force Method Of Estimating MILCON Was Reasonable And Extensive**

In furtherance of the KC-X acquisition, from the fall of 2006 through the spring of 2007, AMC performed site surveys at [REDACTED] (Sep 2006), [REDACTED] (Oct 2006), [REDACTED] (Dec 2006) and [REDACTED] (March 2007). AR Tab 297. [REDACTED]  
[REDACTED]  
[REDACTED]

According to [REDACTED]  
[REDACTED] the goal of each site survey was “to assess costs and benefits of a particular action, in this case, to beddown a new mission. The site survey team . . . assess[ed] the impacts on the current mission to housing the current infrastructure to manpower and multiple other service agencies on that base.” Tr. 474. Working in cooperation with various base specialties, the site survey team evaluated the impact of KC-X beddown on the base, including impact to communications systems, logistics, maintenance, and general community planning. Tr. 476-78. Then,  
[REDACTED]  
[REDACTED]  
[REDACTED]

[o]nce we get those inputs from working group members . . . the project programmers . . . get down into the details of either modifying a building, creating a new building, doing nothing with the building. They get into their -- we use historical cost guides that we have. We use similar projects at that base that we have used at previous locations. The project programmers themselves actually use the RS Means and the OSD pricing guide to come up with an initial estimate that we use, and that can get adjusted several times during our three or four days of doing work at the base.

Tr. 479-80. In the case of KC-X, the final estimates were provided to the KC-X cost team for use in building the MILCON MPLCC. Tr. 63.

Because [REDACTED] at the time the MILCON estimate was developed and [REDACTED] the Air Force cost team asked [REDACTED] for more definitive guidance to ensure accuracy of the estimate.

A. The reason for the letter [at AR Tab 309] was that the cost team . . . approached me with the request to provide more information regarding AMC's plan for basing the KC-X. In other words, he wanted to know how many aircraft, how many bases, so that he could do the MILCON estimate.

Q. And so what did you do after he made that request?

A. I informed him that there was -- that AMC did not have [REDACTED] that I could give him. Although there was the notional plan, [REDACTED] And, like I said, [REDACTED] and I told him that. And there was a series of discussions regarding what we could provide him in order so that he could do his job of the MILCON estimate, and ultimately that led to the development of the letter. [REDACTED] was specifically asked for that at the midterm prebrief on 15 June, and he agreed that he would provide something similar to this, so I drafted the letter. I checked with the [REDACTED] [REDACTED] and this was as much information or fidelity that AMC could provide back to the cost team of the source selection.

Tr. 1296-97. The letter reflected tentative basing at ten locations: [REDACTED]

[REDACTED] Tr. 1297; AR Tab 309. Primary Assigned Aircraft (PAAs) were designated for each base as follows: [REDACTED]

[REDACTED]

[REDACTED]

The Air Force cost team used the notional plan and the site surveys to calculate MILCON estimates. Tr. 63. Site survey estimates were reviewed for reasonableness. Tr. 64. Given that there were more bases in the notional plan than had been surveyed, [REDACTED] was chosen as an analogy for the unsurveyed bases because, [REDACTED] it was most similar to the projected PAAs for unsurveyed bases listed on the notional plan.<sup>31</sup> Tr. 63, 1299-1300. With respect to the two [REDACTED] the SSET cost team [REDACTED] to the extrapolated costs. Tr. 64. Finally, the cost team phased the MILCON estimates in accordance with the offerors' respective delivery schedules. Id.

**b. MPLCC MILCON Costs Were Reasonably Evaluated And Applied To Both Offerors' Proposals**

**(1) Hangars**

Boeing insists in its Comments that the Air Force improperly normalized MILCON costs for hangars. It complains the agency violated the dictates of AFH 32-1084, paragraph 7.2, when it derived [REDACTED] MILCON costs for the two competing aircraft for the construction of [REDACTED] Citing itself as an authority, Boeing states:

In its Sixth Supplemental Protest Boeing explained that the Site Survey's premise for deviating from Air Force guidance that calls for more covered maintenance spaces for the KC-30 than for the KC-767 was a 2003 AMC policy that envisioned a "generic aircraft" hangar [REDACTED] Boeing argued that "[e]xplicitly abandoning an 'airframe specific' analysis and applying 'generic sized' criteria for purposes of determining MILCON costs is the epitome of improper normalization."

Comments on the Agency Report at 113. Not only does the above-quoted language misstate the facts, but it shows that Boeing has confused two separate issues: the number of hangars needed,

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<sup>31</sup> Boeing was briefed twice that the Air Force intended to extrapolate costs from [REDACTED] and the company never raised the slightest objection. Tr. at 65-66; [REDACTED] Witness Binder Tab 21, p. 191. So any protest as to this methodology is clearly untimely.

[REDACTED]

and the size of the hangars. The Air Force neither deviated from its own guidance, nor did it use a generic hangar in calculating the number or size of required hangar space.

In calculating the number of hangars needed at [REDACTED] as well as at the other bases at which site surveys were conducted, the Air Force applied a “hangar factor” of .15 to each of the aircraft. Tr. 506. This factor, derived by the Air Force maintenance and logistics community (A4), reflects the amount of time the Air Force anticipates an aircraft will have to spend in a maintenance hangar; “[i]t has nothing to do with the size of the aircraft.” Tr. 481-83. Once the factor is established, it is then multiplied by the number of PAA at the base and the product is rounded to the nearest whole number to arrive at the number of needed hangar spaces. Tr. 481. Since both the KC-30 and the KC-767 are new aircraft and will probably need little maintenance, the same relatively low factor was applied to both. Tr. 507. More importantly, [REDACTED]

[illegible]

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AR TAB 46, Pages 332, 334 – 336; AR TAB 46, Pages 350, 352 – 354.

The hangar factor, being a function of aircraft maintenance, involves considerations such as climate, mission, type and number of aircraft, programmed flying hours. Tr. 481-82; AR Tab 261 at 102; PHB App. 261, p. 2. The formula for calculating the number of hangars, using this factor, is specifically set out in AFH 32-1084, and said formula was used in each of the site surveys performed. Thus, contrary to Boeing's assertions, there was no deviation from Air Force guidance with respect to calculation of hangar numbers.

Boeing's allegation that the Air Force applied a generic hangar size during the four site surveys is also flatly wrong. While [REDACTED]

[REDACTED]<sup>32</sup> Thus, the site survey teams had no authority to use a generic hangar to determine proper hangar size for the KC-X aircraft, and did not do so. To the contrary, the teams sized the hangars on an aircraft-specific basis. Tr. 484. For example, at [REDACTED]

[REDACTED] The team separately evaluated the extent of the building renovations necessary for both the KC-30 and the KC-767, and calculated the costs for each. Id. Because the selection of the KC-30 would require more extensive renovation than the KC-767 for this building, the renovation cost for the KC-30 was determined to total [REDACTED] while the renovation cost for the KC-767 would be [REDACTED] Id. These costs were reflected in the cost table of the [REDACTED]

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<sup>32</sup> In September 2003, the A4 and A7 communities within the Air Force [REDACTED] changes to AFH 32-1084. The first related to a reduction in the number of required parking apron spots from 100% to 75%; the second was to build a generic apron parking spot for AMC aircraft; [REDACTED] In January 2004, AFCESA approved [REDACTED] the first two, both relating to parking slots. [REDACTED] 488-492; AR Tabs 309, 356.

[REDACTED]

In short, in none of the four site surveys performed was there any deviation from Air Force guidance with respect to the calculation of either the number or size of hangars needed. The survey teams followed the dictates of AFH 32-1082 precisely, including approved changes. There was no use of generic hangars in the determination of size and thus no “normalization” of costs. Tr. 487-88.

Boeing furthers its theory of improper normalization of costs when it complains that the Air Force erred in assigning the .15 hangar factor to both aircraft. Boeing’s Comments on the Agency Report, pp. 114-115. Boeing argues that because the Air Force found a benefit [REDACTED] in favor of the KC-767 with respect to depot level maintenance, it was wrong to apply the same hangar factor to both aircraft. Boeing asserts that because the KC-30 was inferior from a depot maintenance perspective, the Air Force unjustly normalized the evaluation.<sup>33</sup>

It is apparent that Boeing has misconstrued the meaning of the hangar factor. The factor applies to base level maintenance, not depot level maintenance, and is used to compute the number of covered maintenance spaces needed for that type work. AFH 32-1084, Ch. 7, Section A, is entitled “Covered Space for Aircraft Maintenance.” AR Tab 261, at 102; PHB App. 261, p. 2. Paragraph 7.1.1 of the section refers to hangars and docks needed for scheduled inspections, landing gear retraction tests, aircraft weighing, major maintenance on fuel systems, airframe repairs, etc. Paragraph 7.1.2 notes that space requirements for hangars and docks vary with climate, mission, type and number of aircraft, programmed flying hours and maintenance concept. It is the hangar factor that addresses these variables for each type of aircraft for this kind of maintenance, and it was this type of maintenance that the A4 maintenance personnel had in mind when they determined the factor for the KC-X aircraft. Tr. 481-82.

The distinction between base level, operational maintenance and other types of maintenance is set out more fully in AFI 21-101, Aircraft and Equipment Maintenance Management, Chapter 1:

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<sup>33</sup> It is sometimes difficult to follow the thread of the Boeing argument. In its Third Supplemental Protest (at 8-9) and in its Sixth Supplemental Protest (at 3-4) the company asserts that a [REDACTED] hangar factor should have been applied to the KC-30. But in making this argument Boeing is clearly laboring under the misconception that the factor is based on the size of the respective aircraft. The factor, of course, is entirely unrelated to aircraft size.

[REDACTED]

**1.4 Maintenance Concept.** The AF requires varying degrees of maintenance capability at different locations. Maintenance capability depends upon mission requirements, force protection, economics of repair, transportation limitations, component reliability, workload agreements, facility requirements, frequency of tasks, and special training required. This capability is described (in order of increasing capability) as either organizational, intermediate, or depot.

1.4.1. Organizational – First level of maintenance performed on-equipment (directly on aircraft or support equipment) at flightline level. This level generally includes repair, inspection, testing, servicing and/or calibration.

...

1.4.3 Depot – Third level of maintenance performed on- or off-equipment at a major repair facility. Highest level of maintenance for more complex repairs.

AR Tab 370, PHB App. 370. The fact that the Air Force determined a benefit for Boeing with respect to depot maintenance [REDACTED]

[REDACTED] is entirely irrelevant to the assignment of the hangar factor.

## **(2) Aircraft Parking Spots**

In its Sixth Supplemental Protest, Boeing cites an Air Force document, found in AR Tab 309, entitled “Point Paper on Apron Parking Requirements for AMC Tanker Aircraft.” Here, Boeing complains that the Air Force has changed its guidance regarding parking spots, allowing bases to accommodate only 75% of assigned refueling aircraft and directing that parking spots be sized for a generic aircraft smaller than the KC-30. Protest of the Boeing Company, Sixth Supp., at 5-6. Boeing says that this guidance has the effect of “unreasonably diminishing the significant differences in costs actually entailed” by the respective KC-X aircraft. *Id.* at 6. While Boeing might disagree with Air Force policy, Air Force guidance is what it is, and agency personnel cannot be faulted for following it.

When it came to determining the number of required aircraft parking spaces, the Air Force site survey teams did indeed apply the 75% calculation that had been approved by the Air Force Civil Engineering Support Agency (AFCEA) as a change to AFH 32-1084 in January 2004 (see n.1). Tr. 493. Specifically, the change computed the number of apron parking spaces for large AMC aircraft by multiplying .75 times the difference between PAA and the number of covered maintenance spaces. AR Tab 309; Tr. 493.

[REDACTED]

As to the size of the CONUS parking spaces on the other hand, the survey teams used an aircraft-specific calculation. The base project programmers or pavement engineers laid out parking plans for both the KC-30 and the KC-76 and the cost for each was identified in the respective survey reports. Tr. 493-94. See, e.g., [REDACTED]

[REDACTED]

[REDACTED]

It is clear Boeing suffered no adverse effects during the calculation of either the number or size of the apron parking spots. The four site survey teams followed the guidance of AFH 32-1084, as revised; even where the agency might have used generic aircraft in the sizing calculation, it chose to apply an aircraft-specific methodology, which, of course, benefited Boeing. The company's complaint that it was somehow prejudiced by the parking spot determinations, or that the Air Force improperly normalized, is entirely unsubstantiated.

### **(3) Seat Storage**

Boeing urges that the Air Force failed completely to consider the potential costs of seat storage. Protest of the Boeing Company, Second Supp., at 98; Third Supp., at 14-15; Sixth Supp. at 10; Comments on the Agency Report at 116-117. Boeing's theory, of course, is that because the KC-30 carries more seats than the KC-767, there will inevitably be more storage space necessary to accommodate them, resulting in more storage costs.

While the site survey teams clearly recognized the need for seat storage, at the time the surveys were conducted the extent of the requirement was unknown. That is, the number of seats to be stored was unclear. Tr. 497. Consequently, for the [REDACTED] site survey, the maintenance and logistics community used a storage requirement for seat kits to equip [REDACTED] AR Tab 297, [REDACTED] Using this measure, it was determined that sufficient storage space was available [REDACTED] to accommodate either aircraft, and so for this survey, no additional costs were deemed appropriate. Tr. 497-99.

The [REDACTED] on the other hand, determined that there was insufficient storage space and that [REDACTED]

[REDACTED]

The same cost

[REDACTED]

[REDACTED]

[REDACTED]



was estimated for each of the competing aircraft simply because, as noted above, the number of seat pallets needing to be stored was unknown. Tr. 499-500.

The [REDACTED] site survey team included no costs for seat storage simply because [REDACTED] Finally, the [REDACTED] site survey team concluded there was sufficient storage space at that location, thereby obviating the need for any cost estimates. Id.

The Air Force considered the need for seat storage at each of the site survey locations, and calculated costs accordingly. Boeing's allegation that the Air Force failed to take these costs into consideration is simply untrue.

#### **(4) Pavement**

In its Comments, Boeing alleges that the Air Force improperly "assum[ed] that runway repair/rebuild costs would not vary depending on the aircraft." Boeing Comments at 103. Boeing repeats its allegation that the KC-30 aircraft can [REDACTED] [REDACTED] citing its Third Supplemental Protest, and states that the government will have to spend a substantial amount of money to repair or rebuild the [REDACTED] runway in the event KC-30 aircraft are assigned to it. Id. at 103-04.

Boeing also mischaracterizes the AF response to its arguments in the MOL: "The Air Force asserts, however, with no cite to the record, that because the funding for repair or rebuild of runways will not come from the KC-X program, it did not include such costs in its assessment of MILCON costs." Id. at 110. In fact, the key point made by the Air Force previously is that runway repair and build costs are not aircraft-specific, and cannot be determined solely by the decision to base one aircraft or another at a specific base or bases. MOL at 224. Moreover, the need to repair and/or replace a runway at any base is not determined by application of a simple ACN/PCN ratio for one aircraft, as Boeing would have it, but instead is driven by a number of factors—as [REDACTED] testimony made amply clear.

As noted above in Section III.C.5 "the evaluation of the most advantageous offer in any procurement should be confined to matters that are reasonably quantifiable." The record demonstrates that the result of any effort to calculate a difference in runway repair costs due

[REDACTED]

solely to the choice of the KC-30 over the KC-767, given the many variables that would have to factor into the calculation, would be unreasonably complex, probably not very reliable, and most likely inconsequential. And that is before one factors in the uncertainty resulting from the fact that the Air Force had to conduct this procurement not knowing where the tanker aircraft would ultimately be based. The record also demonstrates that there would be no difference in the cost of runway replacement regardless of which aircraft was chosen in this procurement.

Boeing based its assertion that the KC-30 could take off or land safely at [REDACTED] [REDACTED] on a slight difference in the ACN/PCN (aircraft classification number/pavement classification number) ratios of the two aircraft. The calculated ratios were [REDACTED] for the KC-767 vs. [REDACTED] for the KC-30. Third Supplemental Protest, p. 7. Based on this difference, Boeing drew the conclusion that the KC-30 [REDACTED] [REDACTED] while the KC-767 [REDACTED] Boeing Comments at 111.

Neither of these statements is true. As [REDACTED] the Air Force pavement subject matter expert testified, the guidance in Engineering Technical Letter 02-19 (AR Tab 357) on which Boeing bases its argument is, as a preliminary matter, not applicable to bases where these aircraft would conduct continuing operations. Tr. 566. Rather, it is

intended to be used in a theater of operations location, so . . . [i]t would be used for if we went to someplace in, say, [REDACTED] for an earthquake, we would use this to make sure we can land properly at an airfield, or you know, if we are in a time of war, or in a contingency environment as we are in Iraq, we would use this guidance in places like [REDACTED]

Id. In other words, it is only a simplistic guide for pilots and airfield managers performing contingency evaluations of whether an aircraft can land and take off and if so, how many times, at a base at which the aircraft does not normally operate. Tr. 567-69. Even so, it is only, as [REDACTED] characterized it, a “first cut” designed to buy time until a more accurate evaluation can be done [REDACTED]—the “second cut”. Tr. 567-8. A yet more detailed evaluation, or “third cut,” can be conducted by AFCESA to determine precisely how many operations of a specific aircraft an airfield can support before pavement failure can be expected to occur. Tr. 569. [REDACTED] testified that the “third cut” for each aircraft with

[REDACTED]

[REDACTED]

[REDACTED]

respect to, for example, [REDACTED] might conclude that the KC-767, even with an ACN/PCN ratio of [REDACTED] would not necessarily lead to pavement failure, and the same could be true for the KC-30 with its slightly higher ratio. Tr. 601.

ACN/PCN ratios are not to be used for evaluation or design of airfields. This fact is confirmed by the Aerodrome Design Manual published by the International Civil Aviation Organization (ICAO) in 1983 (AR Tab 358), which [REDACTED] described as the “genesis” of the ACN/PCN system. Tr. 569-70. Similarly, as [REDACTED] explained, a 2006 Federal Aviation Administration (FAA) Circular (AR Tab 359) expressly states that ACN/PCN is not intended for pavement design or as a pavement evaluation procedure:

Q. And the single paragraph under paragraph 1.1.2.1, could you summarize what that paragraph says about the ACN/PCN method?

A. In a nutshell, it says that it's not to be used for design or evaluation of the airfield.

Q. Of airfield pavements?

A. Airfield pavements.

Q. Could you turn to Tab 3, which is AR Tab 359. Could you generally describe this document for the record, sir?

A. This is an FAA circular that discusses the standard method for reporting airfield pavement strength, and specifically reporting the PCN numbers for civil airports within the United States.

Q. And if you would turn to paragraph 1.3 entitled limitations of the ACN/PCN system. Could you summarize that paragraph for us, please?

A. In a nutshell, it says that ACN/PCN system is not intended for pavement design or as a pavement evaluation procedure.

Tr. 571.

Boeing argues without citation that a new runway would be needed at [REDACTED] to accommodate the KC-30, and states that a new runway would be needed at [REDACTED] regardless of the aircraft chosen, but that it would be cheaper to construct a new runway for the KC-767 than for the KC-30 at [REDACTED] Boeing Comments at 113. The facts are otherwise. First, assuming for the sake of argument that a new runway is needed for either aircraft at [REDACTED] there would be no difference in the cost of construction. As [REDACTED] testified, the Air Force designs and builds six types of airfields for continuing operations—light, medium, heavy,

[REDACTED]

modified heavy, auxiliary, and assault landing zones. Tr. 573-4; AR Tab 360 (Unified Facilities Criteria 3-260-02, Pavement Design for Airfields). Most airfields are designed and built as medium airfields. Tr. 574. Both of the proposed aircraft are not only classified as Medium Aircraft, but they also both fall within Group 9 of the eight possible Medium Aircraft groups. Tr. 575-6. If a new runway needed to be constructed, the exact same runway would be designed and built regardless of whether the KC-767 or the KC-30 would be operating out of the base. Tr. 577. Consequently, contrary to Boeing's contentions, there would be no difference in MILCON cost for runways at [REDACTED]

[REDACTED]

#### (5) Other MILCON Costs

Boeing's canvass of the four site survey reports led to allegations that the Air Force had failed to consider a number of other MILCON costs. Each of these will be discussed in turn; each is baseless.

- Boeing complains that the [REDACTED] site survey team recognized there may be a need to construct additional [REDACTED] but failed to include costs for this possibility. Protest of the Boeing Company, Sixth Supp., at 10-11; Comments on the Agency Record, at 116. The reason no costs were included in the survey report was simply that the [REDACTED] was, both at the time of the survey and even now, undetermined. Tr. 501. The need for additional [REDACTED] and the associated costs were, and are, entirely conjectural, as there has been no determination that [REDACTED] will be necessary for either aircraft. For one thing, no [REDACTED] can be ascertained [REDACTED] Tr. 501-02. It would have been entirely inappropriate for the Air Force to have attempted to calculate a cost for a requirement that may never develop, particularly in view of the fact that there was at the time of the survey an ample [REDACTED] Id.
- Boeing points to the [REDACTED] survey team's finding that the selection of the KC-30 would [REDACTED] AR Tab 297, [REDACTED]

[REDACTED]

Survey Report at 22; Comments on the Agency Record at 116. Boeing asserts the survey team failed to consider the costs of replacement [REDACTED] necessitated by [REDACTED] Comments on the Agency Record at 116. The Air Force included no costs for the replacement of [REDACTED] because such costs would not be dependent upon which aircraft is chosen. While [REDACTED] would be more extensive for the KC-30 than for the KC-767, [REDACTED]

[REDACTED] Hence, the cost of construction would be incurred irrespective of which aircraft won the competition.

- Boeing next turns its attention to the [REDACTED] site survey, and cites the survey team's concern that a [REDACTED] would have to be [REDACTED] [REDACTED] Boeing says that the [REDACTED] but that the team neither assessed MILCON costs nor otherwise accounted for this as a risk. Comments on the Agency Report at 116. The concern expressed by the survey team simply related to site location, and applied to [REDACTED] irrespective of which aircraft was chosen. Air Force planners needed to be mindful of the [REDACTED] Tr. 505. No costs were involved, or needed to be reflected in the report.
- Again at [REDACTED] Boeing cites the survey report to the effect that selection of the KC-30 might require [REDACTED] but notes that no costs were added for this possibility. Comments on the Agency Report at 116. Boeing's use of the word "possibility" is telling. This was a conjectural concern, and no costs were therefore included. In any case, such a cost would have applied to either aircraft. Tr. 505.
- Boeing's final concern with the [REDACTED] survey relates to the possibility that the [REDACTED] might not have the capability to service [REDACTED] [REDACTED] Boeing alleges that this cost, [REDACTED] was not quantified. Comments on the Agency Record at 116. The survey team included no costs for the [REDACTED] because, once again, it was speculative in nature. The team did not know the nature of [REDACTED] [REDACTED] The team had insufficient information to determine whether any costs would be necessary at all. Tr. 506. Because of the uncertain nature of the requirement or any resultant cost, the team properly declined to try to calculate an estimate.

#### (6) MILCON Does Not Include Certain Costs

The estimation of MILCON costs would not, and should not, have considered construction at bare bases. These bare bases are unplanned, temporary facilities normally established during contingency operations. AFPAM 10-219V6, Planning and Design of Expeditionary Airbases, Chapter 2, paragraph 2.4 states:

[REDACTED]

**2.4 Bare Base Terminology, Definitions and Types.** A bare base is defined as a location with a functional runway, taxiway, parking areas and a source of water that can be made potable. The location was chosen to make the base capable of supporting all assigned and supporting aircraft and provide mission essential resources in a timely and combat effective manner. These resources would include logistical support and services to the infrastructure composed of people, facilities, equipment and supplies. This bare base concept requires prepackaged mobile facilities, utilities and support equipment that can be rapidly deployed and installed. Expeditionary airbases are defined by the level of infrastructure, development, operational duration and missions that are present or will be deployed to the area. By combining the type of airbase with the outlined facilities standards listed later in this chapter, CE planners can greatly reduce the time required to identify, validate and source requirements for various locations. The various types of expeditionary airfields include forward operating location, forward operating base, main operating base, intermediate staging area and warm base.

PHB App. 371, p. 2-3. The prepackaged, mobile nature of the bare base takes it out of the realm of MILCON. Such is why they are “bare.”

Further support for this position is found in AFI 32-1032, Planning and Programming Appropriated Funded Maintenance, Repair, and Construction Projects, Chapter 7, paragraph 7.1:

**7.1. Authority and Limitations.** During wartime, occasional needs arise for facilities, required temporarily, that do not fit within other authorities discussed in this Instruction. This chapter addresses those types of requirements. Use of authority provided by this chapter must be exercised with the greatest care and discretion.

7.1.1. The fund source for facilities provided under this chapter will be O&M.

This chapter only applies to a contingency operation as defined in 10 U.S.C. § 101(a)(13)(A) occurring outside the United States.

7.1.5. This chapter only applies to an operational requirement the need for which is not expected to exceed two years.

7.1.7. This chapter does not apply to construction to be carried out at a military installation, as defined under 10 U.S.C. § 2801(c)(2), or at a location where the U.S. is reasonably expected to have a long-term interest or presence.

[REDACTED]

PHB App. 372, p. 3. The above-quoted provisions make it clear the Air Force acted appropriately in excluding bare base operations from MILCON considerations. Boeing's suggestions to the contrary are ill-advised.

**(7) There Were No Additional Errors In The MILCON Estimate**

Finally, Boeing claims that a [REDACTED] calculation error in the [REDACTED] estimate was carried over into the other base estimates. Comments, p. 107. As [REDACTED] explained, this is an incorrect assumption: "If you look at the spreadsheet, there is a separate tab for the out years and then in there with—those dollar values were input in there, and it was input correctly there, so it was correct there and it was [REDACTED] Tr. 67. The Agency Record bears out this testimony. [REDACTED]

[REDACTED] one can see the [REDACTED] costs for bases other than [REDACTED] included in the MILCON estimates. PHB App. 223(a), pp. 1 and 3.

On page 115 of its Comments, Boeing makes a similarly erroneous contention that "because the SSET did not include the [REDACTED] at [REDACTED] in its MILCON calculations, it did not extrapolate any [REDACTED] to any of the other six unidentified bases where [REDACTED] was used as an analogy." As [REDACTED] explained again, this is simply untrue. Tr. 68. The costs are included in [REDACTED]

**6. No Adjustments To Northrop Grumman's MPLCC Were Necessary For The [REDACTED]**

Despite Boeing's insistence to the contrary, [REDACTED] were not features anticipated to be included on the KC-30 at any point in the life cycle of the aircraft, and as such were reasonably omitted from NG's MPLCC.

[REDACTED]

Q. Let me ask you to flip to page 169. Here we have a discussion of [REDACTED] It says, [REDACTED] Do you see that?

A. Yes, sir. . . .

Q. Okay. After all the bullets, let me ask you to read a little further. It says, [REDACTED]

A. Yes.

Q. Doesn't that suggest that [REDACTED] we are going to give you [REDACTED]

A. No. It says it's available. It's not an Air Force requirement, and, therefore, it means nothing.

Q. And do you know what [REDACTED] does?

A. I do not.

Q. [REDACTED]

A. No, sir.

Q. That's probably something the Air Force is interested in having, isn't it?

A. Then it would be a requirement on this program.

Tr. 165-66. Indeed, the key words in the language quoted by Boeing's counsel was "[REDACTED] These alone validate [REDACTED] interpretation. [REDACTED] but since it was omitted from the actual bid as part of the trade space, the Air Force reasonably "priced [only] what they bid." Tr. 165. The same is true for [REDACTED] Id.; Tr. 168. Furthermore, [REDACTED] explained why pricing a capability that was not proposed would be unreasonable: "The government, especially the military, has very tight budgets. . . . And, again, there would be no budget, probably, to pay for that." Tr. 167.

Boeing's claims that the Air Force should have adjusted NG's MPLCC for [REDACTED] [REDACTED] NRE are equally baseless. Comments, p. 140. NRE [REDACTED] will take place at LRIP bird #1. See Tr. 61. Specifically, as explained by [REDACTED] it will involve:

[REDACTED]



[REDACTED]

Tr. 1358-59. This work is accounted for in [REDACTED] Tr. 61. The cost team evaluated the amount offered and considered it adequate for the minimal work to be done. Tr. 61-62.

Finally, with regard to the boom, [REDACTED] testified that the technical experts identified no cost or schedule impacts related to it. Tr. 170, 172. As such, the cost team reasonably did not assess cost risk to NG's MPLCC related to the boom.

7. [REDACTED]  
[REDACTED] **Are Based Upon Different Data And Different Assumptions, And As Such Offer No Support To Boeing's Cost/Price Protests**

a. **The [REDACTED] Was Accomplished Prior To The Source Selection Based On A Different 767 Variant Than Was Proposed By Boeing And With No Insight Into The Unique KC-X Proposals**

Put simply, much changed between the time the [REDACTED] was developed and the time the KC-X RFP was finalized. As such,

when you look at the top level estimates that they did [in the [REDACTED]] it wasn't relevant because they did that [REDACTED] prior to knowing what anybody was going to offer. There was a huge amount of trade space in [the RFP], and even when you look at the [REDACTED] it's not clear what they included. Did they include all of the trade space, some of the trade space. And as you've looked at what each of the offerors have proposed, they proposed very different answers to the government's proposal there, so the relevancy of what's there, it is -- at the time they did the [REDACTED] they had no idea what each offer was going to be.

Tr. 199. The [REDACTED] thus is simply not a valid comparative analysis.

[REDACTED]

b. [REDACTED] **Are Prepared For Budgeting Objectives That Are Completely Separate And Distinct From Proposal Evaluation Objectives**

[REDACTED] are accomplished for the Milestone B budgeting process, which is “a totally different, separate estimate from the source selection.” Tr. 379. The [REDACTED] produced by order of the GAO for this protest contain the following considerations that make it inapplicable and irrelevant:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Furthermore, [REDACTED] are peacetime estimates; therefore, it is inappropriate to associate their findings with KC-X IFARA results.

8. **Though Boeing Is Now The Lowest Priced Offeror, The SSA’s Decision Is Not Affected Given That Cost/Price Risk Was The Discriminator In [REDACTED] Decision, Not Actual Dollars**

As noted in the Air Force MOL, the SSA identified a discriminator between NG’s LOW SDD Cost/Price risk rating and Boeing’s MODERATE SDD Cost/Price risk rating. MOL, p. 208; AR Tab 54, SSDD at 18. Surprisingly, Boeing has done nothing in all of its protestations to challenge that rating. Indeed, errors in calculations have lowered its cost/price overall, but the risk ratings remain the same and the risk adjustments to Boeing’s proposal, as the Air Force has demonstrated, were decidedly reasonable. Moreover, while much is made of the minor flip-flop in offeror cost/price ranking, the bottom line is that the SSA, in accordance with the RFP, placed priority upon capability and other more important factors in deciding from whom to purchase this crucial Air Force asset:

[REDACTED]

even if Boeing's proposed cost/price had not been adjusted upward by the Government and Boeing's cost/price risk rating for SDD had been rated as **LOW**, I still would have decided to award to [NG] given their higher mission capability (especially the superior aerial refueling and airlift capabilities), past performance, and IFARA evaluation.

AF MOL, p. 210; AR Tab 54, SSDD at 19-20.

Despite the changes to Boeing's ultimate cost/price then, the SSA's decision in this case must stand.

**D. The Air Force Properly And Reasonably Evaluated IFARA (Factor 5)**

**1. The Air Force Properly Evaluated IFARA In Accordance With The RFP**

The RFP listed as an evaluation factor, Factor 5, Integrated Fleet Aerial Refueling Assessment ("IFARA"). Section M of the RFP stated that the IFARA evaluation factor was "equal in importance to Cost/Price" but less important than the Mission Capability Factor, the Proposal Risk Factor, and the Past Performance Factor. AR Tab 278; App. 278(d), pp. 1-2. The IFARA Factor differed from the other non-cost/price evaluation criteria in that its focus was not on a single aircraft. Rather, it was designed to model and evaluate the effectiveness of an entire fleet of each offeror's KC-X aircraft. AR Tab 278; App. 278(d), pp. M14-M15. Section M advised offerors that the SSET would use modeling and simulation to conduct an integrated assessment of the utility and flexibility of the proposed KC-X aircraft, "primarily using" the CMARPS program. The modeling would tell the Air Force the required number of each KC-X aircraft required to satisfy the evaluation scenario's peak demand for aerial refueling. This number, compared with the number of KC-135R tankers needed to satisfy the same demand, yielded the stand-alone Fleet Effectiveness Value (FEV), which would be reported to the SSA, essentially providing an objective, numerical measure of the effectiveness with which a KC-X tanker fleet could satisfy the scenario's demand. The RFP specifically advised that an offeror's FEV would be calculated by a formula that divided the total number of KC-135Rs required to

[REDACTED]

meet peak demand by the total number of KC-Xs required to meet peak demand, a mathematical formula from two numerical values.<sup>34</sup>

As part of its evaluation, the SSET then calculated the FEVs for each competitor using CMARPS and reported its evaluation to the SSA on three separate occasions: at the Mid-term Briefing in August 2007, at the Pre-FPR briefing in November 2007, and the Final Evaluation Briefing (“FEB”) in February 2008. Additionally, each offeror was briefed on the same information as it related to its respective offer, after the first of these two briefings and prior to the last briefing in January 2008. The purpose of the two briefings was to provide each offeror what had been provided to the SSA. In each briefing, the Air Force included the FEV along with “major insights and observations.” In each of these classified briefings the results of the Air Force’s interim Factor 5 evaluation was provided. AR Tabs 130, 131, and 136.

In addition to the two interim briefings, offerors were also placed on notice of the insights and observations that the SSET drew from its evaluations and that would be provided to the SSA once final proposals were submitted in late January 2008, when the SSET provided draft slides—virtually complete—for the FEB to both offerors. COSF, 2d Supp., p. 173. These slides contained the SSET’s final IFARA evaluation. In other words, the SSET took advantage of the reopening of discussions in early 2008 to provide both offerors full previews of its final IFARA evaluation. If, after receiving these two briefings or this final documentation, Boeing believed that a different FEV or different reporting of insights and observations was required by the RFP, then it was firmly placed on notice at that time. The GAO has ruled that if “an agency puts an offeror on notice of the method it will be using to evaluate the proposals, the offeror must protest

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<sup>34</sup> Allegations that fleet effectiveness was subjective or should represent other aspects of “effectiveness” are clearly an untimely challenge to the terms and provisions of the RFP. GAO has held that if an offeror learns of an agency’s interpretation of an RFP provision during the discussion process after submitting a proposal and believes that interpretation is subject to protest, the offeror must bring its protest within 10 days of learning that interpretation. 4 C.F.R. § 21.2 (a)(2); PM Services Co., B-310762, Feb. 4, 2008, 2008 CPD ¶ 42 at 3 (“To the extent the protester may have thought that the RFP as originally issued did not contemplate offerors providing--and the agency evaluating--proposed escalation for DOL-covered employees, it knew at the point it received this discussion question what the agency was expecting from the offerors, and what it intended to evaluate. It follows that, even if the protester were not required to protest on this ground prior to the deadline for submitting proposals, it was required to protest within 10 days of receiving the agency’s discussion question quoted above.”).

any alleged impropriety in this approach... within 10 days of the notice for any other basis of protest.” Sikorsky Aircraft Co.; Lockheed Martin Sys. Integration-Owego, B-299145; B-299145.2; B-299145.3, Feb. 26, 2007, 2007 CPD ¶ 45 at 7 n.2.

At the FEB, CMARPS modeling showed that the KC-30 fleet satisfied the peak demand reflected in the scenario with [REDACTED] fewer aircraft than the KC-767 fleet. The KC-30’s final FEV was [REDACTED] and the KC-767’s was [REDACTED] AR Tab 47; Classified App. 47, p. 45. Similarly, in accordance with RFP, Section M, major insights and observations gleaned from the CMARPS evaluation were reported directly to the SSA during the same three briefings (Mid-term, Pre-FPR, and FEB). See generally AR Tabs 30, 38 and 47. The SSET reported its evaluation directly to the SSA through a 45-page classified PowerPoint presentation. Specifically, in the FEB, the SSA was told that, [REDACTED]

[REDACTED]

Other insights and observations applicable to both offerors versus the KC-135R related to [REDACTED]

[REDACTED]

[REDACTED]

In summary slides, the SSA was reminded of all these major insights and observations again—that as compared with the KC-135 in the peak demand scenario, [REDACTED]

[REDACTED]

The solicitation required the Air Force to “report the fleet effectiveness value (FEV) as determined by the [government’s] evaluation as a standalone ‘value’ to the SSA, along with any major insights and observations gleaned from the [government’s] evaluation.” The RFP also stated “[T]his value [the FEV] will be determined by Government analysis taking into account the offeror’s input data [Attachment 18 data on KC-X aircraft performance characteristics] and considering any analysis performed by the offeror of the same evaluation scenario.” AR Tab 278, Clause M-002, § 2.6, p. M-15. Thus, the RFP allowed each offeror an opportunity to provide to the Government any analysis the offeror performed in arriving at an FEV for its KC-X aircraft through its own analysis, so that the Government could consider that analysis or approach in checking the Government’s FEV methodology and calculations.

## **2. The Air Force Properly Considered The Contemporaneous Evaluation Documentation**

As part of its Factor 5 evaluation, the SSET assessed detailed information on all major insights and observations and reported it to the SSA, in strict accordance with Section M. For this Factor, it should be again noted the actual protest grounds have varied from insufficient record to “not protesting the insights and observations that the Air Force gleaned from its evaluation of the KC-767; [but] rather ... protesting the Air Force’s failure to account for them

[REDACTED]

meaningfully in its evaluation,” which, it should be noted would be questioning the SSA’s integrated assessment.<sup>35</sup>

Following the RFP, each offeror provided very detailed aircraft performance characteristics relating to the expected performance of its KC-X aircraft. This information, after being verified by the SSET, was incorporated into CMARPS via standard CMARPS input files. This comprehensive performance data addressed each KC-X’s takeoff, climb and descent performance, flight and cruise speed, fuel burn, refueling, and landing (to include reserve fuel requirements), and other performance characteristics. COSF, 4th Supp, p. 10. The SSET inputted additional very detailed data into CMARPS, relating to the scenarios and aerial refueling demand such as numbers and types of receiver aircraft, sortie timing and flight routing, fuel offloads required, air refueling track locations and altitudes, and a host of other operational data sets. COSF, 4th Supp., p. 11. A “Base File” inputted into CMARPS contained information in regard to the receiver aircraft and tanker aircraft takeoff and landing bases, including the initial number of tankers located at the base at the start of each scenario, takeoff fuel loads, and tanker ground turn times. The maximum number of tankers at each tanker base was determined through offline analysis of ramp geometries and aircraft dimensions. AR Tab 328; App. 328, p. 18-20. The maximum fuel loads for the tankers were determined through offline analysis of maximum fuel loads for each KC-X, pavement strengths of ramps and runways, and takeoff performance for each KC-X aircraft. AR Tab 328; App. 328, pp. 8-10, and 15-18. The IFARA

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<sup>35</sup> Boeing has withdrawn or abandoned those untimely aspects of its protest related to the following IFARA-related solicitation provisions, evaluation criteria, and evaluation results: the Air Force’s use of modeling as an evaluation tool, the validity of CMARPS as an approved analytical modeling tool, the validity of any of the data inserted into CMARPS (including those relating to basing, ramp selection and dimensions, ramp and runway PCNs, aircraft parking, and tanker ground turn times), the validity of the two fleet effectiveness values (FEV), and the validity and sufficiency of the insights and observations gleaned by Air Force evaluators. GAO has held a protest allegation to be abandoned, where, as is also the case here, the protester did not further pursue it after the agency addressed it in a motion to dismiss Omega Sys., Inc., B-298767, Nov. 6, 2006, 2006 CPD ¶ 170 at pg 3, n. 1 (“Omega initially asserted that the agency erred in determining that its proposal was late. However, the agency addressed this argument in its motion to dismiss, and Omega has not responded to the agency’s position in its subsequent submissions; we therefore consider this argument abandoned.”) Thus, Boeing has abandoned all but the issue it reserved in its response to the Air Force Motion for Partial Summary Dismissal, *i.e.*, the alleged failure to meaningfully account for the insights and observations in the Air Force’s evaluation.

simulation used the air refueling [REDACTED]  
[REDACTED]  
[REDACTED]

AR Tab 328; App. 328, p. 1-2.

The actual IFARA evaluation was well-documented with CMARPS input and output files, spreadsheets used to compile results and produce graphs, and PowerPoint presentations provided to the SSAC, the SSA, and the offerors. See generally, AR Tabs 14-18, 25, 30, 38, 47, 53, 57, 73, 81, 86, 102, 117-118, 120-122, 130, 131, 136, 147, 153, 154, 161, 185, 186, 188, 189, 191-193, 200, 201, 206, and 230 through 241. There were also files corresponding to each presentation given, including the Mid-Term briefing, Pre-FPR briefing, and the FEB--a complete record of documentation used to produce the IFARA results presented to the SSA and the SSAC. CMARPS files demonstrated the evolution of the FEV scores, including spreadsheets that show ramp space calculations and total ramp space used. The entire IFARA briefing and all results could be researched and traced back to their sources. Additionally, there were model runs and the spreadsheets used to compile data. As the scenario data was classified, the IFARA team worked closely together within dedicated Sensitive Compartmented Information Facilities (SCIFs), often referred to as “vaults,” at Wright-Patterson and Scott Air Force Bases, and primarily communicated verbally, either face to face or over the classified telephone.

Sufficient documentation existed within the SSET to “adequately document its evaluation or source selection decision, where the record otherwise shows the evaluation or source selection to be reasonable.” Del-Jen International Corp., B-297960, May 5, 2006. While GAO has held that an agency’s core best value overall integrated assessment must be documented (Keeton Corrs., Inc., B-293348, Mar. 4, 2004, 2005 CPD ¶ 440, in this case, IFARA was only one of the evaluation criteria considered as part of the integrated assessment.

### **3. The SSA Properly Exercised Discretion In Considering The FEV And The Observations And Insights Within The Integrated Assessment**

In accordance with the RFP, the SSET reported both the FEV and the insights and observations to the SSA. Specifically, the SSET’s final insights and observations were captured in its classified briefings on Factor 5, in the Factor 5 Summary, and in the PAR. See AR Tabs, 30, 38, 47, 55, and 218. In framing the protest, the issue of the “Air Force failed to account for  
[REDACTED]  
[REDACTED]  
[REDACTED]



(the insights and observations) meaningfully in its evaluation” must be referring to the SSA’s integrated assessment; namely, whether the SSA properly determined that after meaningfully considering the FEVs and the insights and observations, NG’s proposal was more advantageous in the Factor 5, IFARA evaluation.

If this were in fact the protest issue, it would be an attempt to deny the SSA’s broad discretion in determining the best value and would, therefore, be at odds with GAO precedent. GAO has consistently held that the evaluation of technical proposals is a matter within the agency’s discretion since the agency is responsible for defining its needs and the best methods for accommodating them. U.S. Textiles, Inc., B-289685.3, Dec. 19, 2002, 2002 CPD ¶ 218 at 2. The GAO will review a challenge to an agency’s evaluation of a proposal only to determine whether the agency acted reasonably and in accord with the solicitation’s evaluation criteria and applicable procurement statutes and regulations. Manassas Travel, Inc., B-294867.3, May 3, 2005, 2005 CPD ¶ 113 at 2-3. A protester’s mere disagreement with the agency’s judgment in its determination of the relative merits of competing proposals would not establish that the evaluation was unreasonable. SDS Int’l. Inc., B-291183.4, B-291183.5, Apr. 28, 2003, 2003 CPD ¶ 127 at 6.

In this case, the Air Force complied with the evaluation criteria set forth in Section M of the RFP. The SSET, in fact, reported all IFARA-related information required to be reported to the SSA, and the SSA in turn appropriately considered that data in the proper and fair exercise of [REDACTED] discretion, as [REDACTED] was required to do. The SSA’s decision was both reasonable and consistent with the evaluation criteria.

The SSA’s decision is also fully documented. Specifically, on the first page of the SSDD, the SSA determined the NG’s proposal to have the best overall value, and that in making this determination considered the evaluation made by the SSET, the recommendations made by the SSAC, and the advice received from [REDACTED] SSA advisors. AR Tab 54, App. 54, p. 1. This integrated assessment included IFARA: the evaluation of Factor 5, which was not made in a vacuum, but was which was part of the broader evaluation of other factors in the determination of best overall value. When the SSA considered the SSET’s evaluation, this included the insights

[REDACTED]

and observations gleaned from the IFARA evaluation and provided to the SSA on three different occasions. The SSDD's full discussion on IFARA stated:

The fleet effectiveness value (FEV) supported an integrated assessment of the utility and flexibility of a fleet of the offeror's proposed KC-X to conduct peak demand scenarios as described in the 2005 Mobility Capability Study and as compared to a fleet of KC-135Rs to conduct the same scenarios. In accordance with the RFP, a fleet effectiveness value of greater than 1.0 (normalized KC-135R fleet equivalent FEV) was viewed as advantageous to the Government. Boeing's evaluated FEV was [REDACTED] and Northrop Grumman's evaluated FEV was [REDACTED] which means that Northrop Grumman's proposed aircraft can accomplish the designated scenario from the RFP with [REDACTED] fewer aircraft than Boeing's proposed aircraft—an efficiency of significant value to the Government. I noted the insights and observations that were included in the evaluation. In my judgment, and in accordance with the RFP, Northrop Grumman's higher FEV was a discriminator.

AR Tab 54, (emphasis added); App. 54, pp. 18-19.

This language clearly reflected the SSA's determination of best value, which involved a balancing of risk. The results of the Factor 1 evaluation resulted in a determination that the KC-30 had significant refueling advantages over the KC-767, and the IFARA modeling confirmed that the KC-30 could meet the peak demand more effectively. While the insights and observations reflected several cautionary concerns inherent in the selection of a larger tanker, the SSA decided advantages offered by the more capable plane outweighed these cautionary concerns. The quoted language shows the SSA was aware of the insights and observations and had considered them, but nevertheless, found NG's superior FEV to be a qualitative discriminator. When read in conjunction with the SSA's comments on the aerial refueling aspects of Factor 1, there is no question that the SSA properly exercised broad evaluative discretion that the KC-30 is the better tanker. This was all part of the integrated assessment of best value.

From the SSDD, it is clear that the SSA gave the insights and observations due consideration. There is no requirement in the solicitation that the SSA describe every element of reasoning as to the specific interplay between the Factor 5 evaluation and the other Factor evaluations or between the FEV and the insights and observations. GAO has previously determined that an SSA is not required to document every detail of the relative merits of the


[REDACTED]

proposals in the source selection document. EER Sys., Inc., B-290971, Oct. 23, 2002, 2002 CPD ¶ 186 at 36. Additionally, GAO has held that mere disagreements with the conclusions reached by the SSA, insisting that there is more operational utility and flexibility in “real world” situations is insufficient to establish the agency’s evaluation was unreasonable. SDS Int’l. Inc., B-291183.4, B-291183.5, Apr. 28, 2003, 2003 CPD ¶ 127.

Finally, it should be noted that Section M, Paragraph 2.6 provided that insights and observations would be reported, with no specific detail regarding how much weight, or whether any weight, was required to be given to the insights/observations by the SSA. Nowhere in the RFP did it suggest that they would be equal to or, as has been suggested, more important than the stand-alone value. In fact, the language of this paragraph clearly indicated that the FEV number is the essence of the model, as constraints such as basing locations, ramp space, ramp strengths and critical KC-X characteristics like refueling capability, pavement loading capability, and parking footprint (items that were the subjects of the insights and observations) were already factored into the model. The plain language provisions of the RFP gave primacy to the FEV score as compared to the “major insights and observations gleaned from the evaluation.” AR Tab 278; App. 278(d), pp. M14-M15. Accordingly, the SSA had the discretion to give primacy to the FEV, vis-à-vis the insights/observations.

To belittle the relevancy of the Factor 5 modeling in assessing fleet aerial refueling effectiveness with its resulting FEV would be inconsistent with the GAO’s past role and would be substituting its judgment on matters uniquely within the agency’s expertise. Intertribal Bison Coop., B-288658, Nov. 30, 2001, 2001 CPD ¶ 195 (“the weight to be accorded an agency’s judgment will depend on its relative expertise”). The IFARA evaluation closely modeled the precise classified scenario at the heart of our national military strategy and represented, based on our nation’s best intelligence, planning, and analysis, the worst-case scenario that the President and Congress have approved and funded the DoD to equip for, train for, and win decisively. AR Tab 326, Pgs 16 and 17.

Factor 5 with its IFARA modeling was conducted properly, and the insights and observation were reported to the SSA in exact accordance with requirement the RFP. The SSA’s consideration of this Factor, including the insights and observations, was reasonable and proper.



The SSA properly determined that NG's proposal was more advantageous on Factor 5 given the results of the IFARA evaluation, specifically its significant and objective results reliably predicting that a KC-30 fleet best meets the aerial refueling demand our nation requires. Factor 5's IFARA was a reasonable and effective component of the SSA's best value determination and confirmed Factor 1's evaluation of aerial refueling. In the SSA's integrated assessment, the KC-30 offers superior value in aerial refueling.

#### IV. SUMMARY

"The great end of life is not knowledge but action."<sup>36</sup> Now that the protests have ceased, the briefs have been submitted, the witnesses have been heard, and the Air Force has produced all information required of it, knowledge has been gained. The end of this long road brings us at last to the precipice of action.


Over the course of this process, Boeing challenged the Air Force's choice in many forums, but the only challenges that should matter to the GAO are those presented to it. Boeing did so using a panoply of methods: eight protests, 190 pages of Comments, another five-page letter, and five days of hearings. In spite of it all, the Air Force remained constant.

Procuring the KC-45A was by all accounts a massive undertaking. Multi-billion dollar acquisitions do not come around often—rarer still are ones where the Government partners so much with industry to get it right, shares so much information and spends so much time tapping into the genius of the private sector to explore the art of the possible, and to ensure it optimizes both capability and practicality.

In addition, the Air Force officials charged with choosing the new tanker were keenly aware of the impact that choice could have on national security and global operations for generations of Americans—the KC-135 has been in the Air Force inventory for half a century, and will approach or perhaps even surpass the full century mark before it is completely and finally retired.

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<sup>36</sup> Thomas Henry Huxley, "Technical Education," 1877.



The copious evidence presented by the Air Force demonstrated time and again the impressive degree of care, competence, and commitment the individual officials applied to choosing between two very capable aircraft. But choose they did, and they did so by considering all of the facts before them, then exercising their best individual and collective judgment in a manner consistent with the law, regulation, and the terms of the solicitation.

The credibility and candor of the government's witnesses cannot be denied. Each was earnest in grueling explanation of the "why's" and "how's" of what the Air Force had done. While clearly knowledgeable experts in their fields, none tried to reach beyond their own specialty. Such is the reason "[g]overnment officials are presumed to act in good faith and . . . our Office will not attribute unfair or prejudicial motives to procurement officials on the basis of inference or suppositions." *Int'l Marine Prods., Inc.*, B-296127, Jun. 13, 2005, 2005 CPD ¶ 119 at \*16. Despite sometimes harsh confrontation, the witnesses' testimony never deviated from the truth told all along: that in an effort to do it right, we most assuredly did it reasonably.

The genius of the bid protest process resides in the very name of the Office deciding its end: government accountability.

Government accountability—that is, the duty of public officials to report their actions to the citizens, and the right of the citizens to take action against those officials whose conduct the citizens consider unsatisfactory—is an essential element, perhaps the essential element of democracy.<sup>37</sup>

This is one example of the freedoms the Air Force does not denigrate or merely tolerate, but celebrates. We embrace and encourage, promote and protect it every single day, whether Active Duty, Reserve, Guard, civilian, or contractor. It is one of the very reasons we exist as an institution, and why individuals remain part of that institution.

The Air Force has reported accordingly. And in doing so we have upheld the Jeffersonian ideal of silencing the complaints of our citizens, whether just or unjust, solely by the force of reason. As this case has shown, a bid protest may provide fodder for public discussion on various military, political, and economic subjects. It might provide a reminder of the

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<sup>37</sup> Barker, Robert S., "Government Accountability and Its Limits," available at <http://usinfo.state.gov/journals/itdhr/0800/ijde/barker.htm> (last accessed 15 May 2008).



brilliance of our governmental system. But, in the end, it is an avenue to a concrete resolution of the concerns of the citizens.

The time has at last come for GAO to resolve Boeing's protest. "Let us have faith that right makes might; and in that faith let us to the end, dare to do our duty."<sup>38</sup> Based on the record, the answer is clear: deny Boeing's protest in its entirety.

## V. CONCLUSION

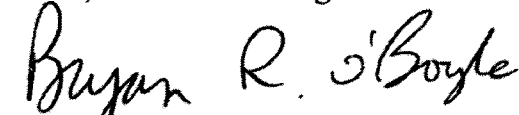
For all of the reasons above, as supported by the Air Force Memoranda of Law, the Contracting Officer's Statements of Fact, the Agency Record, and the testimony presented at the hearing, the award of the KC-45A contract to Northrop Grumman Corporation was reasonable, lawful, and valid.

Boeing's protests should be denied.

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Respectfully submitted,

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<sup>38</sup> Lincoln, Abraham. Address, Cooper Union, New York City, Feb. 27, 1860.

