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A QUEST FOR EFFICIENCIES:
TOTAL SYSTEM PERFORMANCE RESPONSIBILITY

by

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Preface

The process of weapon systems acquisition in the Air Force will never be an artless or simple process. Just as a commander and his staff would be developing a method of attack prior to battle, a program manager with his contracting officer and staff needs to perform acquisition planning prior to release of the contract's Request For Proposal (RFP). Acquiring a weapon system is somewhat methodical due to federal and service guidelines. In addition to the methodical process dictated by regulatory guidance there is the acquisition reform climate a team must operate in. Innovation, creativity, and assessing risk must take place in order to meet the demands of budget constraints, manpower reductions and most of all product/service delivery. As an Air Force contracting officer, I've been involved with the early stages of acquisition planning necessary to determine strategy and the path to success. While assigned to the Electronic Systems Center (ESC), Hanscom AFB, MA, I got my first exposure to Total System Performance Responsibility or TSPR. I oversaw contracts associated with Missile Warning and Space Surveillance Systems that contained a TSPR clause. This acquisition approach intrigued me because its implications are beneficial to both the government and contractor. My motivation for conducting this research is to assist other acquisition professionals who have wondered what TSPR is and considered using it in acquisitions.

I would like to thank my wife Charisse for her patience and understanding during this research process. I would also like to thank my research advisor Lt Col Jerry Quenneville for being my mentor throughout the research process. Lastly, I would like to thank the contracting

professionals, program managers and industry counterparts who took the time out of their hectic schedules to think about TSPR and then write it down on paper--their assistance was truly significant and very much appreciated.

Abstract

The role of the contracting officer (CO) in the acquisition process is significant because it is solely this individual who has the ability to enter into, administer, or terminate contracts. Key in the CO's mind is safeguarding the interests of the United States as referenced in the Federal Acquisition Regulation (FAR) Part 1.602-2. One way of safeguarding those interests is ensuring a sound business strategy is reached prior to release of the program's RFP. One business strategy a CO may pursue is Total System Performance Responsibility (TSPR). Essentially, TSPR fosters an environment for the government and contractor team to gain efficiencies by identifying redundant and/or unnecessary practices, eliminating those practices, and using commercial practices to replace or enhance the acquisition process. TSPR dictates the government take a step back and give the contractor greater freedom to be innovative in its management practices without the traditional level of government oversight. This paper provides an answer to the following question: "Is the TSPR approach responding to the Air Force's expectations as dictated by the acquisition reform climate?" Upon reviewing four Air Force weapon system programs, TSPR clearly responded to those expectations, but it does not guarantee a problem free acquisition by virtue of a shift in responsibility. In the case of one program, TSPR did not guarantee on schedule delivery of a weapon system. What is common among the four programs profiled is the recognition that TSPR provided a fresh environment suitable to gain efficiencies and an attitude geared for nothing short of success.

This paper will address the TSPR topic in four chapters. Chapter 1 is an introduction, Chapter 2 defines TSPR and determines its intent, Chapter 3 takes a look at TSPR in specific weapon system programs and provides legal comments, and Chapter 4 provides a conclusion/recommendation on TSPR and provides an answer to the question posed.

Chapter 1

Introduction

We expect to achieve greater successes from every person, dollar, and hour we expend to acquire and sustain our current and new weapon systems.

-Darleen Druyun, Principal Deputy Assistant Secretary of the
Air Force for Acquisition and Management

The quest for the perfect acquisition is synonymous with a field commander's quest for the decisive plan prior to battle. The field commander develops his plan after the military objective is clearly defined and communicated. Likewise, the program manager (PM) leads the development of the acquisition plan once approval to begin a new acquisition program is granted as a result of concept exploration. In support of the PM, the contracting officer (CO) should be thinking about the business strategy to be used in support of the program's vision and goal. The PM and CO have no shortage of guidance to adhere to from system program office (SPO) leadership, the Program Executive Officer (PEO) office and legal. Moreover, today the environment is influenced by the Air Force's Lightning Bolt initiatives that emphasize commercial practices to capture savings, and the Year 2000 DoD Acquisition Goals that place an emphasis on process improvement and realizing efficiencies. Ultimately the team must ensure a sound acquisition strategy is in place that is tailored to the unique needs of the weapon system.

This paper will look at one acquisition approach being used in weapons systems contracts known as Total System Performance Responsibility or TSPR. The TSPR approach is commonly known and utilized by the acquisition community supporting the Air Force Materiel Command (AFMC) because of their emphasis on weapon system development. One major portion of AFMC's mission is to manage the integrated research, development, test, acquisition, and sustainment of weapon systems.¹ All four programs being profiled in this paper belong to SPOs that reside within AFMC and support customers outside of AFMC. The AF focus of this paper does not imply that the TSPR approach is not used in other Department of Defense departments/agencies.

Acquisition professionals consistently receive messages to make the next acquisition better than the last acquisition and to apply lessons learned. Why is this? The bottom line answer is because we owe it to the taxpayers to spend wisely and we owe it to the warfighter to deliver a mission-ready and capable product on time. "Faster", "smarter", "stay within budget and on-schedule"...these words often resound in a PM's and CO's ears as they prepare to embark on a new acquisition or take over an existing weapon system program. Since the 1990s, acquisition reform has resulted not only in written guidance to acquisition professionals, but also in creating a mindset and attitude to avoid the "business as usual" approach. We cannot afford to go back to the early days of acquisition as described in this harsh but realistic view of then AF Chief of Staff General Merrill A. McPeak, "The acquisition system is much closer to failure...the fact that military procurement provides steady work for more than 25,000 auditors is compelling evidence of a widespread skepticism about the defense acquisition process."² The TSPR

approach addresses Gen McPeak's assessment of acquisition and seeks to help turn "failures" into successes.

After reviewing the C-17, F-117, ICBM and SBIRS programs, I will provide an answer to the question: "Is the TSPR approach responding to the Air Force's expectations as dictated by the acquisition reform climate?"

In Chapter 2, I will focus on the definition of TSPR and determine its intent. Chapter 3 will look at TSPR's role in different weapon systems and include legal opinions on its use. Finally, in Chapter 4 I will provide a conclusion and recommendation, answering the question posed in this paper.

The sources for this paper included refereed journals, professional magazines/periodicals, the Internet, and surveys. I developed the surveys and then sent them to SPOs associated with the above-mentioned programs which are using the TSPR approach. The surveys were sent to each SPO's contracting office to allow for the CO to be the focal point and link to the respective government PM and contractor. Additionally, surveys were sent to contracting staff and legal offices. The responses from the contractors were candid, but there is always the possibility that some of the contractor responses did not capture the most accurate portrayal of TSPR. If there was any hesitation for complete honesty it can be construed that the respondent may have felt there could be ramifications if criticism was voiced in the survey. I do not believe this scenario occurred based on the candid responses to the surveys, but the possibility does exist.

Notes

- ¹ “Air Force Materiel Command”, Air Force Magazine 83, no.5 (May 2000):87
- ² Julie Bird, “McPeak Blasts Acquisition” Air Force Times, 27 Sept 93.

Chapter 2

TSPR Defined And Its Reason For Being

I am trying to find a definition of TSPR...I have searched the SAF/AQ website and I am unable to find a definition that fully explains TSPR...”¹

--Comment Posted on the Defense Acquisition Deskbook

Total System Performance Responsibility (TSPR) is more than a passing acquisition “fad” or catchy acronym. It is an approach that is contractually and legally binding between the government and contractor when a TSPR clause is imbedded in the contract. After reviewing various views and expectations of TSPR from the field, common themes surface that lead to one definition. Essentially, TSPR is the transfer of government tasks in order to gain efficiencies by taking advantage of a contractor’s overall management approach and commercial practices with minimal government oversight. Gaining efficiencies can best be described as identifying redundant and/or unnecessary practices, eliminating those practices, and in its place using commercial practices to improve the acquisition process. Additionally, “TSPR is a very complex relationship to put on a contract that requires a champion at the highest agency levels to be successful. This overarching goal however, is to reduce costs while maintaining or improving the quality or service levels.”² The decision to contractually implement TSPR is accomplished by placing a tailored clause (contractual term or condition) in Part I, Section H under the Uniform Contract Format.³ It is located in Section H because it is a special contract

requirement and must be tailored to the needs of each specific program. Conversely, if the TSPR clause is not in the contract, TSPR can still be construed as “philosophically” binding between the government and contractor because a firm commitment was established prior to contract award. Of the four programs reviewed two did have the TSPR clause in the contract and two did not have TSPR documented in Section H of the contract, but are still advertised as TSPR contracts.

Identifying a universal definition of TSPR is a challenge because TSPR means different things to different people. “The TSPR concept is one element of an acquisition strategy that must be tailored to fit each program”⁴--a possible explanation for why a TSPR clause is not found in the Federal Acquisition Regulation’s (FAR) Part 52—Solicitation Provisions and Contract Clauses. Although each SPO will define TSPR differently based on the unique needs of the program, common themes such as eliminating redundant tasks, reducing costs, improving the quality of product or service, and gaining efficiencies remain constant.

The CO of the HAVE STARE contract at Hanscom AFB, MA provides a definition by stating TSPR is “requiring a contractor to propose, within existing constraints, a solution to fill a government requirement. Then, allowing the contractor, with minimal oversight and adequate funding to cover proposed costs, to implement the proposed solution. The contractor is held responsible for program success.”⁵ A program manager at Raytheon for the Clear Radar Upgrade Program at Hanscom AFB sees TSPR as “...a way for the government to minimize contract price increases as a result of contractor initiated claims or ECPs (Engineering Change Proposals) by transferring responsibility...”⁶ The PM for the Integrated Logistics System (Supply) at Gunter AFB, AL indicates the purpose of

TSPR "...would seem to be to simplify the management structure for the acquisition of an information weapon system for the total performance of the system to a single management entity, thus simplifying the management structure and accountability for cost, schedule, and technical performance of the system." He further states, "The net result of this simplification would seem to be a reduction in acquisition oversight that might otherwise be required to manage the integration of multiple entities..."⁷ The Chief of the Contract Policy Division at HQ AFMC views TSPR as "an acquisition strategy to have a single contractor manage the integration of all sub elements of a system to ensure that the entire system meets performance requirements" and "how the contractor meets the broad performance requirement is at their general discretion."⁸ After reviewing a few of the TSPR definitions in the field, common denominators mentioned earlier again become apparent—improve the quality of product or service, reduce costs, gain efficiencies, and minimize government oversight.

TSPR's Place in Acquisition Reform

TSPR is an acquisition approach that responds to the government and industry's recognition of change needed in government procurement. In 1997, the president and CEO of McDonnell Douglas said, "Both sides [government and industry] now realize that, to ensure we get the most bang for our buck during this great competition for dollars...we have to act as a team."⁹ Additionally that same year, the AF's Principal Deputy Assistant Secretary for Acquisition and Management, Darleen A. Druyun, stated the direction acquisition was headed after the Lightning Bolts were released to jump start acquisition reform. The direction "...is basically toward creating a partnership with our contractors. They are not our enemy. If we erect a wall between us, then chances are we

are going to walk away with a failure.”¹⁰ The expected outcomes of TSPR respond to not only Ms Druyun’s message of partnership, but also to industry’s desire for the government to give contractors more responsibility for the overall management of weapon system development. A number of defense contractors have voiced a desire for less oversight and more management latitude in developing the contract’s deliverable.

The DoD announced two initiatives related to acquisition reform and the principles of TSPR respond to both initiatives. First, in June 1994, the Secretary of Defense issued a memorandum requiring the use of performance specifications rather than military specifications. Military specifications can only be used if the appropriate milestone decision authority approves a waiver.¹¹ This memorandum paved the way for more performance-based acquisitions with the hopes of giving the contractor the flexibility to use commercial practices and possibly reduce costs in the process. Stringent military specifications are discouraged and contractors are given ample flexibility in determining the most cost effective means through which to supply a service or product.¹² The memorandum made it easier to justify and use outcome-based work documents such as a Statement of Objectives versus the traditionally lengthy Statement of Work which tends to be a step-by-step or “how to” document. Second, Pentagon Acquisition Chief Jacques Gansler sent out a 5 April 2000 memo on Performance-Based Services Acquisitions (PBSA). The policy guidance on performance-based requirements “...allows offerors maximum flexibility to attain the greatest degree of innovation and creativity” and “Studies have documented that service requirements converted to a performance-based approach have generated both significant savings and performance gains.”¹³ The military specifications memorandum and the PBSA memorandum created opportunities for the

government to obtain efficiencies through contractor innovation—TSPR responds to both DoD initiatives.

Industry has reacted to the two DoD initiatives and there is strong indication they like what they see. In 1997, an industry survey was conducted by Coopers & Lybrand for DoD Service Acquisition Executives to assess the implementation of acquisition reform initiatives in DoD contracts. Ten major contractors participated in the study resulting in 430 structured interviews. One of the survey recommendations was that government requirements be performance-based. Requirements they stress, should be outcome oriented, not input oriented.¹⁴ The survey further stated, “Acquisition reform is open communications, trust, teaming, partnering, and giving the managers at these contractor sites the opportunity to do what they were hired to do--manage.” The 1997 survey emphasized industry’s desire for the government to give contractors more of an opportunity to manage and for the government to continue to stay with performance-based requirements. TSPR responds to both desires because it provides for an increased opportunity to manage with less oversight and the motivation to utilize commercial practices to meet an outcome-based requirement.

It is evident that industry wants more freedom to manage the delivery of a product or service and welcomes performance-based requirements. Likewise, DoD has set guidance for agencies to create more performance-based requirements wherever possible in order to gain innovation, savings and overall efficiencies. Unquestionably, TSPR shifts a specified amount of responsibility traditionally held by the government to the contractor—for some SPOs this shift is a huge change in process and culture. Therefore, it is imperative prior to the inclusion of a TSPR approach in an acquisition plan that the

government includes this transfer of responsibility in the program's risk assessment. This risk assessment is the process of subjectively determining the probability that a specific interplay of performance, schedule, and cost as an objective will or will not be attained along the planned course of action.¹⁵ Assessing the risk starts with the formation of a risk assessment group consisting of the PM, CO, engineers, acquisition development staff and customer. If after careful review the group's assessment concludes the benefits of implementing TSPR outweigh the traditional methods of government oversight, then and only then should a PM give the "green light" to proceed with this approach. If the decision is to implement TSPR then one of two scenarios will likely be the outcome of the contract. It may play out like this on the "Who Takes the Blame/Credit" spectrum. On one end is scenario one: After receiving a phone call from the Terminating Contracting Officer for "XX" weapon system, the contractor grudgingly says, "We may have overlooked the complexities and that explains why the government reverted back to the oversight mode...not to mention we never got the resources we were promised." However, if all the necessary factors are in place then the TSPR approach is intended to play out as in scenario two: Upon successful delivery of "XX" weapon system, the contractor assuredly says, "We delivered on schedule and within budget because we had the latitude to manage development, the government gave us the resources, and we had a solid requirement."

Notes

¹ "Question and Answer Detail," Deskbook Ask a Professor, Question posted on 6/14/00, on-line, Internet available from <https://web2.deskbook.osd.mil>.

² "Question and Answer Detail". Deskbook Ask a Professor, Question posted on 10/19/99, on-line, Internet available from <https://web2.deskbook.osd.mil>.

Notes

³ Federal Acquisition Regulation (FAR) Part 14.201-1, 1 January 2000, 242.

⁴ SMC/AX & HQ AFSPC/LG, Joint TSPR Working Group Final Report, Space Day Action Item 99-01 (February 2000), 5

⁵ Steve M. Meehan, ESC/NDK, Hanscom AFB, MA, TSPR Survey Response

⁶ Murray Welch, Raytheon, Sudbury, MA., TSPR Survey Response

⁷ Lt Col Jon C. Dittmer, HQ SSG/ILSA, Maxwell AFB—Gunter Annex, TSPR Survey Response

⁸ Col Avery P. Sledge, HQ AFMC/PKP, Wright-Patterson AFB, OH, TSPR Survey Response

⁹ Quoted in James Kitfield, Lightning Bolts, Air Force Magazine 80, no.4 (April 1997): 61

¹⁰ Quoted in James Kitfield, Lightning Bolts, Air Force Magazine 80, no.4 (April 1997): 61

¹¹ Maj Daniel Brink, “Acquisition Reform Why? What? Is it Working?”. ACSC Research Paper--March 1997:15.

¹² “Air Force On Track to Meet New Performance-Based Contracting Goal”, Inside the Air Force 11, no. 16, (21 April 2000): 18

¹³ Ibid. p. 17

¹⁴ Coopers & Lyband, Acquisition Reform Implementation—An Industry Survey, 1997; on line, Internet, available on <http://www.acq.osd.mil/ar/clreport.htm>

¹⁵ Regina Mickells Bova, Desktop Guide to Basic Contracting Terms, Fifth Edition, 1999: 209.

Chapter 3

TSPR Is Put To The Test In The Field

All business proceeds on beliefs, or judgments of probabilities, and not certainties.

—Charles Williams Eliot

The TSPR approach, with its common theme of delivering the required product or service to the customer in a more efficient and cost-saving manner, is alive and well in the AF. In order to determine how TSPR is doing in the field, four SPOs will be profiled to see how TSPR has affected each respective program. When TSPR is placed in a contract clause it normally will state specifically what the contractor is being held responsible for (i.e. research, development, integration, or sustainment of systems/sub-systems). The government takes the lead when determining the responsibilities to be transferred to the contractor.

As mentioned earlier, a TSPR survey was used because it was the best method to obtain the most meaningful and current feedback. Surveys provided the best means of capturing each PM's, CO's and contractor's interpretation of TSPR. TSPR's application is so unique to each SPO that it takes an experienced CO or PM time to contemplate what TSPR's impact has had on his respective program. The survey was also the best means of giving each respondent time to contemplate TSPR and then provide feedback. The system program offices selected were the C-17 SPO and F-117 SPO at Wright-Patterson

AFB, OH, the SBIRS SPO at Los Angeles AFB, CA, and the ICBM SPO at Hill AFB, UT.

C-17 System Program Office



Figure 1 The C-17 Globemaster III

The C-17 SPO (ASC/YC) is located at the Aeronautical Systems Center (ASC), Wright-Patterson AFB, OH. A press release from Warner-Robins Air Logistics Center (ALC), Robins AFB, GA, stated the SPO is moving C-17 parts management from Defense Logistics Agency centers and other ALCs to the aircraft contractor, Boeing. This move is what the SPO referred to as flexible sustainment. The C-17 system Support Management Office at Robins stated, “We’re the lead-the-fleet operation in flexible sustainment and we’re giving Boeing a trial period of about two years to let the contractor do all the support for the weapon system.”¹ The implementation of flexible sustainment and the subsequent transfer of responsibilities from the government to the contractor led to the application of TSPR. The ultimate goal is to support the C-17 weapon system more efficiently—a key tenet of TSPR. The C-17 Aircraft Flexible Sustainment contract is a performance-based contract and does not have a TSPR clause,

but the flexible sustainment “...concept is in itself a TSPR approach.”² The flexible sustainment concept proposes that the government will transfer specific responsibilities normally held by the government—another tenet of TSPR. “The concept proposes the contractor will be held responsible for configuration control, materiel management, depot level maintenance, support engineering, modifications and just-in-time spares management.”³ The CO’s view of using the TSPR approach is to achieve cost savings, increased quality, and flexibility. The SPO has given Boeing the freedom and flexibility to manage the spares because the contract is performance-based, and it is the contractor’s responsibility to determine the “how to” activities to arrive at the end-state. The PM’s desired effect in giving Boeing TSPR responsibility is accountability. “Supplying the highest level of availability at the lowest total cost is the desired end-state. As a System Integrator the company [Boeing] must determine the best resource mix for support, i.e. if competencies reside in a public source, the contractor must enter into partnering arrangements that provide best value while maintaining levels of support.”⁴ TSPR allows Boeing to determine the best resources to get the job done and use their own creativity to deliver the product. According to Boeing, the expected goals of TSPR in this contract are that it “...optimizes performance and cost parameters and results in minimum organizations being accountable for a weapons system over its life cycle.”⁵ Boeing has some key expectations with the TSPR approach, such as reducing system integration concerns by having a single person manage the integration tasks, reducing costs by eliminating redundant management systems, and finally, enhancing weapon system capability by ensuring accountability for key performance parameters.⁶ The common link in the government’s and Boeing’s approach to TSPR is accountability and

efficiency. Establishing this type of common understanding is critical prior to contract award and program execution.

So how is the contract doing thus far? The C-17 PM states, “So far so good! There have been some scope versus out-of-scope issues, but not enough to endanger performance.”⁷ Boeing states the “...flexible sustainment contracts have and continue to be huge success stories” and “It is providing excellent customer support overall and showing the cost of support per aircraft is steadily decreasing.”⁸ When asked if both the PM and Boeing liked the TSPR approach in government contracts, both agreed. The PM states it is the “best means that I have found to provide the carrot and stick in government contracting.” Additionally, Boeing stated, TSPR “allows for a more efficient way of managing weapon systems. It is designed to provide timely support in a cost efficient manner.”⁹

F-117 System Program Office



Figure 2 The F-117A Nighthawk

One of the SPOs that stood out from the others in terms of using TSPR as a core philosophy in managing its weapons system is the F-117 SPO (ASC/YN), located at the Aeronautical Systems Center (ASC), Wright-Patterson AFB, OH. The SPO has a

performance-based contract with Lockheed Martin to provide coverage for all aspects of acquisition and management for the F-117 aircraft, the weapon system trainer and the mission planning system. Interestingly, similar to the C-17 contract, the F-117 contract does not have a TSPR clause in it. The mutually agreed upon approach was established early on and the TSPR philosophy approach permeates the contract's requirements document. Essentially, both the government and Lockheed Martin operate with the TSPR principles without a clause in the contract. The TSPR support approach for the contract came into being after the Base Realignment and Closure decision to close McClellan AFB, CA, thus necessitating the need to relocate the SPO to Wright-Patterson AFB. Afterwards, the Secretary of the Air Force, Acquisition office, directed the SPO to increase efficiencies in support via the TSPR concept. Throughout the relocation process the transitioning had to be transparent to the users at Holloman AFB, NM who belong to Air Force's Air Combat Command (ACC). As a result of the TSPR approach, the SPO reduced their staff from 242 to 20 and realized a savings of \$90M as a result of the downsizing.

Under the F-117 contract, Lockheed Martin took responsibility for tasks historically performed by the Air Force (e.g. item management).¹⁰ According to the F-117 CO, "Our goal in pursuing this TSPR philosophy was to continue sustainment and support of the F-117 weapon system at a lower total cost to the Air Force (including SPO manpower), while providing the same or better level of support to the user (ACC)."¹¹ Inclusion of the TSPR philosophy allowed for significant changes from the way weapon systems support is usually conducted at Air Logistics Centers. Under the TSPR concept, management of the F-117 repair-cycle assets transferred to Lockheed Martin in order to improve asset

availability. “We believe Lockheed Martin’s market focus will help gain control of the repair cycle and drastically reduce cycle time.”¹² The mandatory relocation of the SPO and the directive to implement Reduction in Total Ownership Cost set the stage for the TSPR approach to flourish and take the F-117 out of the “business as usual” approach. The PM states, “The TSPR contract will provide depot-level acquisition and sustainment requirements necessary to support the mission, operation and continued combat capabilities of the F-117 weapon system into the next decade.”¹³

Lockheed Martin sees the performance-based contract as a key to success. The Business Development Integrator for Lockheed Martin-Aero states, “Let the results of what the user needs and requires be the foundation for the performance metrics, drive out no-value-added work, and eliminate any duplication of work, whether it’s in the contractor or in the SPO.”¹⁴ When implementing TSPR a transfer of management responsibilities does in fact occur, but so does the sharing of risk. Lockheed Martin’s perspective on assuming risk is a realistic one in that although more freedom now exists to manage with less government oversight, there is now an opportunity to experience the impact of not only good results, but bad ones as well. “Risk isn’t bad as long as you have a plan to deal with each element that offers you risk in the execution of the contract.”¹⁵

Lockheed and the SPO were both up-front in letting the fact be known that there are lessons to be learned since the TSPR concept was conceived. For instance there was the need for multiple Acquisition Strategy Panels (ASPs) to convince senior leadership the TSPR business approach was sound, to address job-security of government employees affected by the reorganization, and to ensure contract incentives were sufficient to

properly motivate the contractor. Without the approval of the acquisition plan by senior contracting officials at the ASP, the acquisition does not move forward.

So how is the contract doing thus far? According to the PM, “The contractor has met the performance level in the first two years, under run cost the first two years by about \$18M, and the government has not had to revert back to any government oversight...the only drawback I see is we lost experienced government folks and our ability to interpret the contract in a few vague areas has caused us some additional workload.”¹⁶ When asked if both the government and Lockheed Martin favored TSPR in government contracts, both had similar comments. The PM stated TSPR “...is a great way for the government to reduce costs while providing the warfighter with as good or better support.”¹⁷ Lockheed added a tone of caution. As a result of TSPR, “the aircraft has higher performance ratings and the customer is happier than it has ever been” and “...the figures speak for themselves: \$82M in personnel cost savings, \$80M in stabilized funding and almost \$20M in shared cost under run for the first two years.”¹⁸ The caution Lockheed states is that the “F-117 TSPR is not a contract that should be used as a template for the next TSPR contract.”¹⁹ Each acquisition team will have to determine what expected benefits they want from TSPR and then tailor it accordingly to meet their particular needs.

ICBM System Program Office



Figure 3 The LGM-30 Minuteman



Figure 4 The LGM-118 Peacekeeper

The Inter-Continental Ballistic Missile (ICBM) SPO (OO-ALC/LM) is located at the Ogden Air Logistics Center, Hill AFB, UT. The SPO has a contract with TRW for the maintenance and sustainment of the Minuteman and Peacekeeper ICBM weapons systems. Known as the ICBM Prime Integration Contract (IPIC), this contract is performance-based and has the potential for a long-term period of performance. According to the CO of the IPIC the efforts under the scope of TSPR include “...sustaining engineering, systems engineering, research and development, modifications and repair programs.”²⁰ Unlike the C-17 and F-117 contracts the IPIC does have a TSPR clause in Section H of the contract. A key point to emphasize in the clause is the mention of TRW’s history with the weapon system. The mutually agreed upon TSPR clause states, “...TRW has been instrumental in developing and implementing ICBM systems that sustain or improve the TSPR parameters: accuracy, availability, reliability and survivability” and “...we [TRW] are dedicated to achieving the results the Air Force expects—no degradation in the current demonstrated performance.”²¹ From

the start, both parties had a solid commitment to the TSPR approach prior to contract award. The PM for the IPIC has clear expectations of TRW being the sole integrator of this entire weapon system to include the enumerated subsystems and systems. His expectations of this contract are to “allow the contractor and their team the freedom and authority to deliver a best value product that meets the customer’s performance requirements.”²² Expectedly, TRW’s vision of TSPR is in line with the SPO’s expectations. The Contract Administrator for TRW sees TSPR as “a weapon system management approach that empowers a contractor and holds him accountable to deliver war fighting capability to the end user with the contractor incentivized and measured against key operational parameters.”²³ TRW must meet these parameters, officially called Key Performance Parameters (KPP), during weapon system integration. Previously mentioned themes are reinforced by TRW when describing TSPR and how it differs from previous contracts, such as performance/outcome-based requirements and transfer of risk management. TRW states, “TSPR depends directly on performance-based contracting principles. The focus is on performance with the government telling us what to do, but not how to do the job. We’ve been given flexibility to manage risk and streamline processes to achieve the desired outcome without unnecessary constraints.”²⁴

So how is the contract doing thus far? Both the PM and TRW were quite candid on their views of TSPR in this contract. With TSPR formally placed in the contract, the government is obligated to deliver the resources necessary for the contractor to execute the contract. Issues the government recognizes it must address are faulty or late delivery of government furnished equipment (GFE), sustainment guidelines that address old ways of doing business, and the uncertainties associated with year-to-year funding. According

to the PM, these issues have to be dealt with because "...we have made it a point to make meeting the customers needs our #1 goal regardless of where the problem lies."²⁵ Associated with the funding issue referred to by the PM, TRW sees as constraining the Air Force's approach of funding operation and maintenance (O&M) efforts at approximately 80 percent of the requirement. TRW states, "Once a contractor has been competitively selected and given TSPR responsibility, to be held accountable, they should be funded at the proposed level."²⁶ The availability of proper funding and the complexities associated with "colors of money" often negate the flexibility envisioned with TSPR and performance-based requirements. Further, the government recognizes the contractor may not want to fully accept all the risks inherent in the program. Consequently, the program office must work closely with TRW in identifying, addressing, and negating risks because ignoring risks is unacceptable to the customer. TSPR does put the "monkey" on the contractor's back to manage delivery of the system, but the government still has to be there to oversee the program. The PM states, "The contractor may be responsible for delivering a system that meets the performance, but it is the government program office that is ultimately responsible for meeting warfighter requirements. Thus, both the contractor and government teams have to work together to resolve any risks that could impact the warfighter's requirements."²⁷ The teaming effort noted by the PM is benefiting TRW. TRW stated they are doing an excellent job of fulfilling their responsibility "...as demonstrated by a 100% award fee score for our sustainment effort in the last award fee period."²⁸ When asked if the PM favored TSPR in government contracts, the PM basically stated it depends on what the effort is and what is required. "If it is a new development to deliver a new system, I would say yes" and

“TSPR is good when the requirements are well understood and firm. It is not a good strategy if the performance requirements are not firm and are evolving or changing.”²⁹

Space-Based Infrared System (SBIRS) System Program Office



Figure 5 SBIRS—A Transition From DSP Satellites

The SBIRS SPO (SMC/MT) is located at the Space and Missile Systems Center (SMC), Los Angeles AFB, CA. This SPO is handling what Air Force Space Command (AFSPC) has stated is their “top program”, according to BGen Michael A. Hamel, AFSPC’s Director of Requirements.³⁰ SBIRS is a consolidated, cost-effective, flexible space-based system that in time will meet the United States’ infrared global surveillance needs through the next several decades.³¹ The SBIRS program will replace the 30-year old Defense Support Program (DSP) satellites that watch the earth for the telltale heat signatures of ICBM launches.³² The focus here will be on the SBIRS High contract with Lockheed Martin Space Systems Company. The contract is a performance-based contract that has the TSPR clause in Section H of the contract. The SBIRS contract responds to the 1994 DoD military specifications memorandum since SBIRS has “no military standards or specifications used to define supportability engineering requirements...”³³ Furthermore, the contract is in step with the April 2000 Performance-

Based Services Acquisition memorandum since “all documented supportability engineering requirements are performance-based statements reflecting a need rather than a solution.”³⁴ The transfer of responsibility is clearly defined in the TSPR clause; “...the contractor agrees to assume TSPR in accordance with the terms and performance requirements of this contract, and to furnish all necessary effort, skills, and expertise within the estimated cost and award fee pool of this contract.”³⁵ The TSPR clause for this contract goes on to state the responsibilities that fall under the TSPR “umbrella.” A point to be made is how the clause carefully limits Lockheed Martin’s TSPR liability by virtue of the availability of funds to execute the program. The clause sets the standard that Lockheed Martin will carry out their TSPR responsibilities only “...within the estimated cost and award fee pool of this contract.” These few words in the TSPR clause illustrate the fact that the government’s expectation of giving TSPR is directly related in its ability to secure proper funding from year-to-year. This contract’s TSPR clause possibly would have worked well in the IPIC at Hill AFB, UT, where the contractor noted the difficulty of having TSPR-like flexibility and responsibilities with the auspices of unpredictable O&M dollars and different “colors of money.” Budgeting for funds to properly execute a program is a significant task in itself for the PM and financial staff. Hence, a CO actually receiving an approved funding document to keep the contract moving is a significant event. The SBIRS TSPR clause language lets both parties know that TSPR performance is dictated by available funding the government has to provide. Today’s limited dollars for DoD acquisition will continue to be a challenge for the foreseeable future.

The expectations of TSPR by the SBIRS High PM and the Lockheed Martin Contract Administrator are very similar to the previously addressed programs. The PM stated “...the desired outcome should be allowing the contractor flexibility...” and the “...government taking the insight and facilitator roles more strongly and the removal of direct government oversight and inter-agency coordination.”³⁶ As the party that has been given TSPR, the contractor has translated the government’s expectations into their own vision for SBIRS High development. A few of the benefits being sought by Lockheed Martin as a result of putting TSPR in the contract are: achieving system performance rather than unintegrated or difficult to integrate elements, reducing costs from more efficient contractor processes, less duplication of and more collaboration on functions between government and contractor, and greater sharing of risk passed to the contractor in the areas of design and integration.³⁷ Throughout Lockheed Martin’s survey, key points such as relative freedom, opportunity and efficiency were mentioned—all common denominators of TSPR.

So how is the contract doing thus far? According to the PM “...TSPR has been successful in allowing the contractor to determine approaches for interfacing...” however, it has “...not shown to be successful in meeting acquisition program baseline parameters for delivery of the first increment consisting of a DSP compatible, consolidated ground system...”³⁸ Lockheed Martin recognizes the shortcomings mentioned by the SBIRS High PM and did not shy away from this fact. Lockheed Martin states, “The contractor team was unsuccessful in bringing the first ground increment on line on schedule.” The contractor recognizes the ramifications of this delay by stating as a result there has been a cost overrun, unplanned O&M expenditures by the user and

schedule delays with other elements in the program.³⁹ The impact of this delay was significant—no award fee was given during this time period according to the CO. This program has shown that the road to success is not an easy one despite the inclusion of TSPR in the contract. Complex weapon systems such as SBIRS High will challenge the best and brightest minds from both the government and contractors. Although not addressed in the TSPR clause it is conceivable that as a last resort the government reassumes aspects of SBIRS High management if the delivery of the system is behind schedule and/or over budget.

The prospect for placing TSPR in future government contracts is cautiously optimistic after reading the response from the SBIRS High PM. He states, “TSPR can be favorably used in the right context for the right product set” and the “...constraints [budget and schedule] placed on the contractor with TSPR tended to incentivize greater emphasis on meeting cost and schedule versus system performance.”⁴⁰ The PM continues his cautious tone when he states TSPR is not a “universal solvent.” Lockheed Martin looks favorably on taking on TSPR responsibility in government contracts. According to Lockheed Martin, TSPR is “...a continuation of its long standing role as an integrating contractor designing, developing, integrating, testing and deploying large complex space and related systems.”⁴¹ If the government continues with TSPR then Lockheed Martin sees itself as being able to produce systems cheaper and better integrated for the user as a result of an incentive to expand the company’s program management and engineering services with other resources and suppliers.

Contract Law Comments

An integral member of any acquisition team is the legal expert(s) from the Staff Judge Advocate's Office. A legal review of the contract document and its file is a mandatory requirement that takes place prior to executing a large-dollar contract. Furthermore, most experienced acquisition teams will always invite the legal office when forming their acquisition strategy. Legal offices at Eglin AFB and Hanscom AFB were sent surveys in order to determine what cautions and concerns exist based on their contract law experiences.

Getting the language right in a TSPR clause is paramount because of the transferring of specific responsibilities from the government to the contractor. Establishing agreeable language is critical because the language sets the standards and guidelines for the contractor's acceptance of development, integration, or sustainment responsibility. Conversely, the language defines the parameters for which the government will provide the oversight and resources necessary for the contractor to meet the performance based requirement. An attorney at Hanscom AFB states, "...the biggest problem is getting the language right. The government wants the contractor to assume all the risk for everything, while the contractor wants to avoid as much of the risk as possible. In the end, the language is a compromise between these two extremes."⁴² "Defining requirements is the highest risk, so that both parties have a clear understanding of expectations and likely costs to meet those expectations."⁴³ Changes such as Engineering Change Proposals will no doubt occur in most acquisitions, but constant changes due to uncertainty in what the user wants should be avoided. Besides getting the language right, it's a prudent move to review an interested offeror's past history with the weapon system.

The Director of Acquisition Law at Eglin AFB emphasizes the need to review the history the contractor being asked to take on TSPR has with the specific weapon system. Specifically, what role did the contractor previously have developing the system and what opportunity did the contractor have assessing the design of the weapon system they were not previously responsible for.⁴⁴ Both responding legal experts agree that both parties must sincerely understand where the TSPR boundaries or parameters lie prior to contract award. Establishing a mutual understanding of TSPR is even more important for those contracts that do not have the clause in the contract, but rather rely solely on the spirit or “buy-in” of the TSPR concept.

An issue a CO may encounter when implementing TSPR is determining the right type of contract. Since COs may have wondered if a single contract type is preferred over another, the question, “Is there a certain type of contract that makes more sense to use when implementing TSPR?” was asked of legal offices in the TSPR survey. When deciding on a contractual approach a CO considers many factors. Selecting a type of fixed-price contract may be chosen after the CO determines “...performance uncertainties can be identified and reasonable estimates of their cost impact can be made, and the contractor is willing to accept a firm fixed price representing assumption of the risks involved.”⁴⁵ Conversely, the CO may choose a cost-reimbursement type contract after determining the “...uncertainties involved in contract performance do not permit costs to be estimated with sufficient accuracy...”⁴⁶ With the help of the PM, a CO can make the decision with relative ease as to what type of contract to use. However, including TSPR in the contract necessitates some further thought before a decision is made. On the surface using a cost-type contract may appear to be the wrong type to use because it

essentially results in the payment of all allowable and allocable costs. Consequently, one may conclude any competent contractor can take on TSPR as long as there is funds availability. Attaining cost efficiency in this scenario is then questionable. So what is the answer from legal to the question posed? The consensus from the legal responses is that there is no single contract type that works best with the TSPR approach. The key when selecting either a fixed-price or cost-reimbursement type contract is to "...create a balance of risks and benefits between the parties which contributes to and motivates a cooperative relationship."⁴⁷ After determining the true risk in the program, the "art" for the CO is finding the right type and mix of incentives to place on either a fixed price or cost reimbursement contract that motivates the contractor. Once the incentives are identified then both parties must clearly understand what areas will be evaluated for program success. For example, if using an award fee plan, both parties must understand how the Fee Determining Official will equate ratings of excellent, good, or unsatisfactory to dollars for the contractor and what performance evaluation areas will be evaluated to achieve program success. Either a fixed-price or cost-reimbursement type contract type can be used with TSPR. The key task for the CO is to find the proper balance of incentives to ensure the contractor is duly compensated, the government's interests are protected, and the TSPR clause has the "teeth" the government intended it to have.

Notes

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³ SA-ALC Public Affairs, "Using Flexible Sustainment to Accomplish C-17's Mission." AFMC Leading Edge, no.4 April 2001:17

⁴ Dan A. Bowman, PM, C-17 Flexible Sustainment Program, ASC/YCL, WPAFB, OH, TSPR Survey Response

⁵ Tim Tessmer, Manager, Contracts and Pricing, Boeing, TSPR Survey Response

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¹⁰ Chris Telepak, CO for F-117, ASC/YNK, WPAFB, OH, TSPR Survey Response

¹¹ Ibid.

¹² Capt Robert L. Mason, "Stealth Fighter Avionics: 2LM Versus 3LM." Air Force Journal of Logistics XXII, no.3 Fall 1998: 31

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¹⁴ Scott Ogden, Business Development Integrator, Lockheed Martin-Aero, Palmdale, CA, Response to TSPR Survey Response

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¹⁶ Lt Col Thomas Skowronek [shortened form]

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²⁰ Lori Kashanipour, PCO for IPIC, OO-ALC/LMKF, Hill AFB, UT, TSPR Survey Response

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²² Col(s) Rocky Dewan, PM for the IPIC, OO-ALC/LM3, Hill AFB, UT, TSPR Survey Response

²³ Brian John, Special Projects Manager, TRW-ICBM Systems, Clearfield, UT, TSPR Survey Response

²⁴ Brian John [shortened form]

²⁵ Col(s) Rocky Dewan [shortened form]

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²⁸ Brian John [shortened form]

²⁹ Ibid.

³⁰ John Tirpak, "The Fight for Space," Air Force Magazine 83, no.8 (August 2000): 63

³¹ Terrence D. O'Byrne, SBIRs High Contract Administrator, Lockheed Martin Space Systems Company, Sunnyvale, CA.

³² Tirpak [shortened form]

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³³ Richard J. Fickes and Kenneth A. Good, PhD. “Space-Based Infrared System—Supportability Engineering and Acquisition Reform in an Existing Acquisition Environment,” *Air Force Journal of Logistics* XXIII, no.1 (Spring 99): 23

³⁴ Ibid.

³⁵ Contract no. F04701-95-C-0017, P00035, SBIRS High Contract, SMC/MTK

³⁶ Lt Col Michael J. Wallace, SBIRS High PM, SMC/MTI, Los Angeles AFB, CA, TSPR Survey Response

³⁷ Terrence D. O’Byrne, SBIRS High Contract Administrator, Lockheed Martin Space Systems Company, TSPR Survey Response

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⁴² Edward L. Fitzmaurice, Jr., Attorney-Adviser, ESC/JA, Hanscom AFB, MA, TSPR Survey Response

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⁴⁴ William Landsberg, Direction of Acquisition Law, AAC/JAQ, Eglin AFB, FL, TSPR Survey Response

⁴⁵ Federal Acquisition Regulation, Jan 2000, Part 16.202-2, (327)

⁴⁶ Federal Acquisition Regulation, Jan 2000, Part 16.301-2, (331)

⁴⁷ Landsberg [shortened form]

Chapter 4

Conclusion and Recommendation

The entire planning process is only useful if leaders at all levels know the end-state.

—Lt Col Larry A. Weaver and Major Robert D. Pollock

Is the TSPR approach responding to the Air Force’s expectations as dictated by the acquisition reform climate? After reviewing four programs the answer is yes, but with the caveat that TSPR is not the “panacea” for all programs and does not make a program immune to difficulties or delays as noted in the case of the SBIRS High contract. In the current environment of acquisition reform, greater industry and government communication, and budgetary constraints which the Under Secretary of Defense for Acquisition and Technology describes as having “...unlimited demands for very limited resources,”¹ TSPR is an acquisition approach that should not be ignored. Further, TSPR fits right in line with the Air Force policy of clear accountability in design--“laying out what we want and not telling the contractor how to do it”--an outgrowth of the Defense Department’s move towards performance-based contracting.² TSPR has worked for the F-117 and ICBM program offices and the future looks bright for the C-17 Flexible Sustainment contract because of the commitment the government has in transferring specific responsibilities. The SBIRS program office has a similarly high commitment to TSPR. However, the commitment does not factor out complexities that still must be met

when developing a complex space system such as SBIRS—in this case a shift in responsibilities does not guarantee a program’s success.

The decision to use the TSPR approach in government contracts sets a tone characterized by avoiding a “business as usual” approach. Furthermore, TSPR fosters a fresh environment that is ready for innovation and creative thinking. It is very important that both parties agree on TSPR language to put in the contract, as demonstrated in the IPIC and SBIRS High contracts. Agreeing on the right language to fit the needs of the program establishes in writing the type of working relationship each level of the program will adhere to. The TSPR clause by no means has to remain stagnant throughout the period of performance. If conditions within a program dictate a change to any of the characteristics or desired outcomes of TSPR then the CO can issue a change to the TSPR clause through a contract modification.

In contrast to IPIC and SBIRS, the C-17 Flexible Sustainment and F-117 contracts operate with the TSPR label, but without a TSPR clause in the contract. In these programs, both the government and contractor rely on the TSPR “spirit” or “buy in” to define their working relationship and determine how the program will be executed. Despite the lack of a TSPR clause, both programs are doing quite well thus far. However, not having a TSPR clause leaves the possibility of future disagreements on responsibility-related issues. The CO needs to have language in the contract he can refer to if he is going to properly administer the contract, especially if scope-of-work issues arise between both parties. Personnel turnover and resulting loss of corporate history is a common source of conflict. Furthermore, changes in the needs of the user and the subsequent changes in design, production or sustainment needs can lead to time-

consuming conflict without a TSPR clause. The safest means to avoid conflict with TSPR is to put it in writing and avoid relying on the TSPR “spirit” living on past personnel changes or forgetful minds.

Acquiring the freedom and flexibility to manage a program is something most contractors have longed for. Once it gives a contractor TSPR, the government should proceed on the assumption that the contractor has the managerial ingenuity and technical expertise to deliver the product/service with minimal government oversight. The government’s expectations become explicit once TSPR is included in the program since “In theory, the more responsibility the government can turn over to a contractor under a TSPR strategy the greater the potential benefits.”³

The TSPR approach is here to stay for the foreseeable future. The General Accounting Office (GAO) “...identifies 44 programs currently managed with a TSPR agreement” and “...lists 31 programs planned for TSPR.”⁴ The Air Force reported to Congress that three of the four programs (F-117, C-17 and ICBM) profiled in this paper are being managed with TSPR. When appropriate, COs in future programs should tailor a TSPR clause to meet the program’s needs and place it in the contract to minimize the possibility of disagreements later in the program. As the program matures, the clause acts as a baseline and important placeholder that does more than set the tone for the execution of the program. If it makes sense to transfer responsibilities from the government to the contractor then TSPR can and has proven to work. Given the right requirement, it is one acquisition approach that will help the SPO team get the very best product or service to the warfighter.

Notes

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² Statement of Clark G. Feister, Assistant Air Force Secretary for Acquisition, “Acquisition Executive Calls for Industry Empowerment”, National Defense 79, no.506 (March 1995): 20

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⁴ Amy Butler, GAO Concludes Air Force Did Not Full Disclose Outsourcing Activities, Inside the Air Force, Vol 11, (17), 28 April 00

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