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**MAXIMIZING THE USE
OF PAST PERFORMANCE IN
SOURCE SELECTION**

by

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Michael D. Wills

June 1994

Principal Advisor:

David V. Lamm

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**Maximizing the Use of Past Performance
in
Source Selection**

by

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Submitted in partial fulfillment
of the requirements for the degree of

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from the

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ABSTRACT

The Army is currently developing the Performance Risk Assessment Group (PRAG) program as a measure to maximize the use of past performance in the source selection process. The use of past performance is becoming increasingly important as the defense budget gets smaller and the use of commercially accepted business practices becomes more emphasized. A program to evaluate past performance can better ensure the Army gets a quality product at a fair price. The Army Material Command developed the "Past Performance in Source Selection; An Evaluation Guide" to assist buying commands in implementing the PRAG effort. This thesis analyses that guide, identifies its strengths and weaknesses, and makes recommendations to maximize its use.

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I. INTRODUCTION

A. BACKGROUND

As the situation in Eastern Bloc Nations continues to change and the cold war draws to an end, we are experiencing extraordinary changes in the Department of Defense. Not only are the Services downsizing, but their procurement budgets are getting smaller as well. This makes the challenge of equipping our forces with the best possible hardware, tough and demanding. The only way we will meet this requirement, in the environment we face, is to implement measures that ensure every procurement dollar spent maximizes our buying effort.

One way of ensuring procurement dollars are well spent is to prevent award of contracts to contractors whose performance is risky. This is the responsibility of the contracting officer who now has the Performance Risk Assessment Group (PRAG) to assist him/her with the task. The PRAG's job is to assess the quality of a contractor's past performance and how that may contribute to performance on a future contract for which they have submitted a proposal.

The PRAG is a requirement developed by the Army Material Command (AMC) for all subordinate buying activities. Recently, AMC Pamphlet 715-3, Volume 4; "Past Performance in Source Selection; An Evaluation Guide", was published to

assist buying commands in implementing this effort. This document is the most comprehensive tool available for maximizing the use of past performance in the source selection process. Performance measures to be evaluated, procurement procedures to be used and questions regarding recency and relevancy are all important in implementing a successful PRAG program.

B. OBJECTIVES

As a result of increased emphasis on best value procurements, awards based on criteria other than price, increased congressional oversight and the push for using commercially accepted business practices, the Army has emphasized the importance of past performance. In order to establish guidelines for the use of past performance, the Army Material Command published "Past Performance in Source Selection; an Evaluation Guide", hereafter referred to as the PPG.

This thesis is an independent analysis of the Army's PPG. To maximize efforts in using past performance in the source selection process, a viable guide must exist to ensure a degree of consistency among the practices used by all subordinate buying activities in AMC. The guide must represent alternatives available for maximizing the use of past performance. Additionally, the guide must discuss the appropriate criteria that measure the quality of contractor's

past performance. It must also provide guidance on the use of past performance data and whether they are relevant to a current contract or recent enough to provide a fair assessment of a contractor's expected performance. After a thorough analysis of the PPG, appropriate recommendations are made to maximize its effectiveness without being so specific that it does not allow flexibility within the buying commands to accommodate their unique requirements.

C. THE RESEARCH QUESTIONS

The primary research question is: How can the Army maximize its use of past performance in the source selection process? The subsidiary research questions are:

1. What performance measures should be evaluated for source selection?
2. What problems have been encountered with the previous use of past performance for source selection?
3. What information is available for use by the Performance Risk Assessment Group?
4. What special conditions exist in the source selection process when past performance is used as an evaluation criterion?
5. How can past performance be used under sealed bidding procedures?
6. What modifications are necessary in order to maximize the use of the "Army's Past Performance in Source Selection Evaluation Guide"?

D. SCOPE, LIMITATIONS AND ASSUMPTIONS

The scope of this thesis is to evaluate performance measures and procedures that are important to the source selection process in sealed bidding and as an evaluation criterion in competitive proposals. This thesis includes both Government and industry procedures. Emphasis is placed on the issues associated with the procurement of aviation components in the Army, Navy, and Air Force; contracting for services is not addressed. Findings were compared to the Army's PPG to determine the strengths and weaknesses of that document. Recommendations have been developed to modify the PPG, making it a more useful tool for maximizing the use of past performance.

E. METHODOLOGY

Two methods were used to collect data and answer the research questions. Data were collected from secondary sources to gain an understanding of PRAG and the initiatives used in the other Services. Telephone interviews were used to gain an understanding of the initiatives used in the Services; including their strengths and weaknesses. Interviews involved personnel from the Army's Aviation and Troop Command (ATCOM), the Air Force's Aeronautical Systems Division (ASD), and the Navy's Aviation Supply Office (ASO). Additionally, telephone interviews were conducted with several companies to get an

idea of the initiatives currently being used by industry in using past performance in the selection of suppliers.

F. ORGANIZATION OF THE STUDY

The remainder of the thesis is organized into four additional chapters. Chapter II describes why past performance has become a procurement issue. A summary of the Army's PRAG concept and initiatives developed by the other Services are also presented. Additional information includes: a discussion of the source selection process in sealed bidding and competitive negotiations and the determination of contractor responsibility. Chapter III focuses on the presentation and analysis of data received during telephone interviews with industry. The information from Chapters II and III, feedback from interviews with military organizations, and additional second source data were used to evaluate the effectiveness of the Army's PPG. This analysis is presented in Chapter IV. Chapter V, conclusions and recommendations, develops findings concerning the study and makes recommendations for improving the use of PRAG and the PPG. Additionally, answers to the research questions and suggestions for future research are presented.

II. BACKGROUND LITERATURE

A. IMPORTANCE OF PAST PERFORMANCE

The President's Blue Ribbon Commission on Defense Management, June 1986, better known as the Packard Commission, provided recommendations to improve the acquisition organization and procedures used by the Department of Defense (DoD). The commission recognized the importance of using commercially accepted business practices as a method of streamlining DoD procurement [Ref. 18:p. 62]:

Federal law and DoD regulations should provide for substantially increased use of commercial style competition, emphasizing quality and established performance as well as price.

Defense procurements have typically concentrated on price as a primary determinate for source selection; generally ignoring other attributes that may prove important. However, price should not be the only determinate for source selection, especially for the procurement of complex systems. [Ref. 18:p. 62]

The consideration of past performance as an evaluation criterion is a subset of a "best value" procurement. An underlying principle of best value is that the Government should use sound business practices when procuring goods and services; allowing contract award based on criteria other than price [Ref. 14:p. 3].

The Federal Acquisition Regulation (FAR) states [Ref. 10:Subpart 15.605]:

...while the lowest total cost to the Government is properly the deciding factor in many source selections, in certain acquisitions the Government may select the source whose proposal offers the greatest value to the Government in terms of performance and other factors.

The following position by an expert on DoD procurement policy is representative of those advocating the use of commercial practices to achieve the best overall value in source selection [Ref. 14:p. 3]:

The overwhelming majority of items could be purchased in a commercial fashion....This would entail allowing "best value" judgment by the government buyer and no protest by the losers (except in cases of illegality). It also means that as long the prices being bid were established by the commercial market, the supplier would not be required to provide a detailed price breakdown...(again as in the commercial world). Finally, and perhaps the most important, the prior performance of a supplier should play a major role in the evaluation. A supplier that has done a good job should be given favorable treatment, and one that has done a poor job should not be considered for the next procurement.

Current regulations contain little guidance on best value procurements and the use of past performance as a criterion for source selection. Although recent litigation and agency documents have resolved some past performance issues, information regarding recent developments is not readily available in a single source. [Ref. 14:p. 4] Additionally, legislation has led to some confusion as to the intent of such statutes. The Competition in Contracting Act (CICA) requires full and open competition, but many procurement officials have

interpreted this to mean that the Government is required to buy from the lowest offeror. However, CICA does recognize the importance of competition and award based on an overall assessment of a contractor's proposal, not just the price. [Ref. 18:p. 63]

Established performance is an important attribute for the selection of suppliers in commercial industries. Typically, a list of qualified suppliers, those with a record of delivering quality products and maintaining high standards of performance, is maintained. [Ref. 18:p. 62] The same practice could benefit Government as well. The Department of Defense directed similar action through DoD Directive 5000.2 which states [Ref. 24:p. 6-P-2]:

Contractor past history of providing quality products and services shall be considered during the evaluation of proposals from potential contractual sources. Objective contractor quality data shall be collected and maintained for this purpose.

B. ARMY'S PERFORMANCE RISK ASSESSMENT GROUP

1. Background

The Army is currently implementing efforts to evaluate past performance through the Performance Risk Assessment Group (PRAG) program. The acquisition community has always recognized the importance of past performance in the selection of quality contractors. [Ref. 2:p. i]

The PRAG program has two unique characteristics. First, it relies on information outside the offeror's proposal

to evaluate past performance. Second, it relies on the independent evaluation of past performance by the PRAG which is separate from the proposal evaluation team. [Ref. 2:p. 2]

The procedures outlined in the PPG apply to competitively negotiated contracts where award is based on criteria other than price; known as "best value" procurements. The Office of Federal Procurement Policy (OFPP), Policy Letter 92-5, requires the evaluation of past performance on all competitively negotiated contracts that exceed \$100,000. [Ref. 26:p. 2] However, the procedures outlined in the PPG are only required for procurements greater than \$10,000,000 [Ref. 2:p. 2].

The PRAG approach differs somewhat from pre-award surveys. While a pre-award survey provides a "yes/no", "pass/fail" input to the responsibility determination, the PRAG offers a comparative approach identifying the degree of risk associated with an offeror's proposal. It provides the likelihood of success of a contractor. The pre-award survey and past performance evaluation are designed to complement each other. [Ref. 2:p. 3]

2. PRAG Structure, Composition and Evaluation

The PRAG is responsible for determining the performance risk of a contractor. The PRAG prepares a report describing the strengths and weaknesses of an offeror's past performance [Ref. 2:p. 3].

Each subordinate buying activity determines the composition and size of the PRAG based on the size, nature and complexity of a procurement. Membership should include individuals with technical, cost and procurement expertise. The primary information used by the PRAG is gathered through questionnaires and telephone interviews. The importance of this information is critical; it is the basis upon which an overall assessment of past performance is made. [Ref. 2:p. 4]

The amount of weight given to past performance should be substantial enough that it acts as a valid discriminator. The Government can evaluate both experience and past performance. It is important, though, not to evaluate this factor twice. If past performance is evaluated separately, it should not be evaluated again as an aspect of experience. It would, however, be proper to evaluate personnel experience and past performance or personnel experience and company experience. [Ref. 2:p. 5]

The PRAG is designed to operate independently. It may operate separately from the Source Selection Evaluation Board (SSEB), reporting directly to the Source Selection Advisory Council (SSAC), or can operate as a subgroup of the SSEB and report to the SSEB chairperson. A PRAG assessment plan should be included as part of the source selection plan. [Ref. 2:p. 4]

3. Sub-factors

The sub-factors to be used by the PRAG do not have to mirror those used by the proposal evaluation team. Ideally, the PRAG will evaluate an offeror's record for on time delivery, technical quality and cost control. OFPP Policy Letter 92-5 suggests several other areas to evaluate: record of conforming to specifications, standards of good workmanship, record of containing forecasted costs on other cost-reimbursement type contracts, adherence to schedules, administrative aspects of performance, cooperative behavior history, commitment to customer satisfaction and a concern for the interest of the customer. Only those contracts relevant to the contract for which the offeror has submitted a proposal should be addressed. [Ref. 26:p. 1]

4. Rating Categories

The following definitions of performance risks are used to describe the results of the PRAG assessment [Ref. 2:p. 6]:

1. High Performance Risk - Based on the offeror's performance record, significant doubt exists that the offeror will successfully perform the required effort.
2. Moderate Performance Risk - Based on the offeror's performance record, some doubt exists that the offeror will successfully perform the required effort.
3. Low Performance Risk - Based on the offeror's performance record, little doubt exists that the offeror will successfully perform the required effort.

4. Unknown Performance Risk - No performance record identifiable.

Contractors can be rank ordered in each category to give a better comparative analysis. Contractors with an unknown performance risk are treated as neutral and no weight is given to past performance. However, in circumstances where a proven performance record is required, a high or moderate performance risk may be assigned. The solicitation must clearly state that the PRAG will evaluate experience as well as past performance and that the lack of experience could result in a high or moderate risk rating. [Ref. 2:p. 6]

5. Solicitation

When an assessment of past performance will be used as an evaluation criterion , the PPG requires the solicitation to state [Ref. 2:p. 6]:

1. The government will conduct a performance risk assessment based on the past performance of the offerors and their proposed subcontractors as it relates to the probability of successful accomplishment of the work required by the solicitation;
2. In conducting the performance risk assessment, the government may use data provided by the offeror and data obtained from other sources;
3. While the Government may elect to consider data obtained from other sources, the burden of providing complete past performance information rests with the offeror.

When past performance is to be assessed, it may be necessary to explain the methodology to the offerors during

the pre-solicitation and pre-proposal conferences. Additionally, Section L of the solicitation should instruct offerors to disclose information concerning contracts or subcontracts for which similar work has been performed. It is important for prime contractors to describe their subcontracting plan and the expected work to be performed so an assessment of potential subcontractors can also be made. [Ref. 2:p. 6]

6. Sources of Data

The Army Material Command established the Contractor Information System (CIS) to provide sources of past performance information. The CIS does not contain contractor report cards. It contains only factual information pertaining to a contractor. It is an electronic telephone book. [Ref. 2:p. 7]

The PRAG can obtain data from AMC or the Defense Logistics Agency (DLA). However, the major sources of information are the references cited in the contractor's proposal. The PRAG determines past efforts that may be relevant to the current contract. Previous contracts can be relevant in whole or relevant in only a few specific areas. An evaluation of past performance is more viable if a previous contract has just recently been completed or is still in progress. Three years is a normal time-frame that has been a successful cutoff for most activities. [Ref. 2:pp. 6, 7]

OFPP Policy Letter 92-5 requires activities not only to evaluate past performance during the source selection process, but also requires a contractor performance evaluation at the completion of all contracts in excess of \$100,000. The evaluations are placed in the contract file and can be used by the PRAG at a later date for future assessments. [Ref. 2:p. 8]

Commercial references can also be used by the PRAG, however Government sources are preferred when they are available. Information from commercial and foreign government sources should be verified prior to being used for an evaluation. It is not necessary to require similar references from the other offerors as long as sufficient data are available. [Ref. 2:p. 8]

7. Gathering Data

The PRAG primarily gathers information through questionnaires and telephone interviews. Experience has shown that the best method is to initially send out questionnaires and to follow up promising sources with a telephone interview. [Ref. 2:p. 8]

Efforts for gathering information are often done on an individual basis. However, it was recommended that the PRAG assemble a group to conduct interviews. This offers the ability of getting instant feedback from one another. For each previous contract reviewed, the PRAG should interview at least two references. [Ref. 2:p. 9]

Prior to an interview or sending out a questionnaire several questions should be prepared. The interviewer should inform the reference that their conversation will be followed up with a memorandum to verify the accuracy of the information discussed. Care must be taken to ensure the accuracy, clarity, and legibility of the summaries which may be the only back-up supporting the PRAG's recommendation. [Ref. 2:p. 9]

8. Assigning Performance Risk Ratings

When assigning a performance risk rating, the PRAG must consider the number and severity of problems, corrective actions taken, and the contractor's overall work record. If past performance problems exist, the PRAG must determine the role the Government may have played in their occurrences. [Ref. 2:p. 11]

The PRAG assessment is often subjective in nature. It is difficult to develop a mathematical model from which a score is determined. The assessment should include a description supporting the assigned performance category. PRAG members must concern themselves with promises made by offerors to correct past failures. A promise does not improve performance, however demonstrated corrective actions can lower the risk of future performance failures. [Ref. 2:p. 11]

9. The Assessment Report

The report developed by the PRAG should include the information required by the source selection authority to make

an informed judgment. Factual data giving specific examples of performance failures should be included to support the conclusions. The PRAG should review the report to ensure it is accurate. When a unanimous risk assessment cannot be reached, the PRAG should include a dissenting opinion as part of the report. [Ref. 2: p.11]

C. NAVY'S RED, YELLOW, GREEN PROGRAM

1. Background

The Red, Yellow, Green (RYG) Program was developed from the Product Deficiency Reporting and Evaluation Program (PDREP). It is a tool that allows the use of a contractor's product quality history to help reduce the risk of receiving non-conforming goods. [Ref. 16:p. 1]

The evaluation part of the PDREP is the Contractor Evaluation System (CES). Contractor history is available on-line over dial-up telephone lines from the Naval Material Quality Assessment Office. [Ref. 16:p. 1] An interview conducted with Mr. Kaul, ASO, revealed that problems currently exist in retrieving data from the CES. With one hard line going to the system, it is difficult to access the data base. [Ref. 27]

RYG uses the historical performance of a contractor to determine the degree of risk of receiving a non-conforming product. RYG procedures can be used in two ways: the Technical Evaluation Adjustment (TEA) method and the Greatest

Value/Best Buy (GV/BB) method. A color (Red/Yellow/or Green) is assigned to a contractor for each Federal Supply Classification (FSC). [Ref. 16:p. 1]

A TEA is the anticipated costs required by the Government for quality actions to reduce the risk of receiving a non-conforming product from a red or yellow offeror. TEAs are added to an offeror's evaluation to determine the best overall value to the Government. [Ref. 16:p. 1-2] Additional quality assurance actions include: Pre-Award Surveys, Post-Award Orientation Conferences, Government Source Inspections, Receipt Inspections at the Source, Receipt Inspections at the Destination and Quality Assurance Letters of Instruction. Additional actions may be required depending on the contractor's expected performance. [Ref. 16:Appendix G]

Under the RYG GV/BB method, an activity will include both price and the RYG classification as evaluation factors in the source selection plan. Consideration can be given to technical factors depending on the requirements of the procurement. This method is useful for large procurements where the adjustment of TEAs would not displace offerors. [Ref. 16:p. 2]

Monthly, a CES program produces color classifications for each FSC that a contractor has product quality history (deficiency reports, surveys, etc.). The predefined criteria listed in Appendix A of this thesis are used in determining the color classification. [Ref. 16:p. 2]

The RYG program consists of three procurement procedures: Simplified Small Purchase, Major Purchase and Greatest Value/Best Buy Source Selection and Evaluation. Activities select the commodities for which they desire to use RYG procedures. Once these commodities are selected, all subsequent purchases must be made under RYG procedures unless a waiver is received from the Chief of the Contracting Office. RYG does not eliminate the requirement for a contracting officer to make a responsibility determination. The FSC classification alone is not sufficient for determining responsibility, nor does it prevent a contractor from competing on a contract. [Ref. 16:p. 3]

2. Red/Yellow/Green Procedures

a. *Simplified Small Purchase Procedures*

RYG Simplified Small Purchase Procedures apply to solicitations when simplified small purchases are used. During evaluation, the applicable TEA is added to a supplier's quoted price. After consideration of other price-related factors, this becomes the basis for determining award of the purchase order. [Ref. 16:p. 5]

When synopsisizing the requirement in the Commerce Business Daily, the synopsis must state that the award will be based on factors other than price, including historical quality performance data. Additionally, the written quotation request shall include the required clauses to advise the

contractor of RYG procedures. For oral requests, the clauses shall be discussed with the supplier. [Ref. 16:p. 5]

Color classifications under simplified small purchase procedures are defined in the following manner [Ref 16:p. 6]:

Green - a green classification means the contractor has demonstrated satisfactory performance in delivering a quality product or has demonstrated satisfactory capability to deliver a quality product, for a specific FSC. Evaluation of quotations for award may continue in accordance with established acquisition regulations without consideration of unusual quality actions. Factors other than quality determine the offeror's eligibility for award.

Yellow - A yellow classification means that the contractor has sufficient negative quality history for a specific FSC to require additional quality assurance actions aimed at reducing the risk of poor quality products being delivered to the Navy. A TEA, representing the cost to the Government of doing additional quality assurance actions to reduce the risk of receiving poor quality products, is added to the quoted price of the offeror.

Red - a red classification means that the contractor's negative quality history for a specific FSC is serious enough to require additional quality assurance actions aimed at reducing the risk of poor quality products being delivered to the Navy. A TEA, representing the costs to the Government of doing additional quality assurance actions to reduce the risk of receiving poor quality products, is added to the quoted price of the offeror. In addition, the head of the contracting office must approve the award.

Insufficient Data - First time offerors or offerors for whom current, up-to-date quality performance history is unavailable are labeled "insufficient data" contractors. Additional quality assurance actions may be needed, but TEAs will not be assessed for "insufficient data" contractors.

b. Major Purchase Procedures

The RYG Major Purchase Procedures are used for negotiated procurements when Simplified Small Purchase Procedures or RYG Greatest Value/Best Buy Procedures are not used [Ref 16:p. 7].

While evaluating proposals, the cognizant quality staff will review the RYG classification database and recommend to the Contracting Officer the necessary quality assurance actions so a TEA amount can be determined. FSCs with the same color classification are evaluated individually. Based on historical performance of the contractor, different quality assurance actions may be required even if they have the same color classification. After evaluating other cost related factors and adding in the TEAs, this becomes the basis for awarding the contract. [Ref. 16:p. 7]

When synopsisizing the requirement in the Commerce Business Daily, the synopsis must state that the award will be based on factors other than price, including historical quality performance data. Additionally, the written proposal request shall include the required clauses to advise the contractor of RYG procedures. For oral requests, the clauses shall be discussed with the supplier. [Ref. 16:p. 5]

The solicitation shall state [Ref. 16:p. 10]:

This procurement is part of the Navy's Contractor Evaluation System, Red/Yellow/Green Program. Award will be based on the Contracting Officer's decision as to which offer provides the best value to the Navy - price, past quality performance, and other factors considered.

Details are provided in provisions entitled 'NOTICE TO PROSPECTIVE OFFERORS' (Section L) and 'ADDITIONAL FACTORS - CONTRACTOR EVALUATION SYSTEM, RED/YELLOW/GREEN PROGRAM' (Section M).

Color classifications under Major Purchase

Procedures are defined in the following manner [Ref 16.p. 8]:

Green - a green classification means the contractor has demonstrated satisfactory performance in delivering a quality product or has demonstrated satisfactory capability to deliver a quality product, for a specific FSC. Evaluation of quotations for award may continue in accordance with established acquisition regulations without consideration of unusual quality actions. Factors other than quality determine the offeror's eligibility for award.

Yellow - A yellow classification means that the contractor has sufficient negative quality history for a specific FSC to require additional quality assurance actions aimed at reducing the risk of poor quality products being delivered to the Navy. Cognizant quality personnel shall review both the procurement package and the offeror's performance history in the RYG database to determine the proper quality control measures. The applicable TEA is added to the quoted price to determine the actual cost to the Government of performing additional quality assurance actions to reduce the risk of receiving poor quality products.

Red - a red classification means that the contractor's negative quality history for a specific FSC is serious enough to require additional quality assurance actions aimed at reducing the risk of poor quality products being delivered to the Navy. In addition to forwarding the procurement package to the cognizant Quality staff for review and determination of quality assurance actions, the award must be approved by the head of the contracting office.

Insufficient Data - First time offerors or offerors for whom current, up-to-date quality performance history is unavailable are labeled "insufficient data" contractors. Additional quality assurance actions may be needed, but TEAs will not be assessed for "insufficient data" contractors.

c. Greatest Value/Best Buy Procedures

RYG Greatest Value/Best Buy Procedures shall be considered when "sealed bidding" procedures would otherwise be appropriate. It applies to negotiated, competitive solicitations when other than simplified small purchase procedures or major purchase with TEAs are used. [Ref. 16:p. 9]

Under the RYG GV/BB Procedures, source selection criteria shall include price and RYG classifications as the evaluation factors unless prior approval is given from the Chief of the Contracting Office. Activities may select the source selection/evaluation methodology best suited to meet the needs of the requirement. The quality staff shall prepare the source selection plan including the criteria for evaluating red, yellow and green FSCs. [Ref. 16:p. 9]

When RYG GV/BB Procedures are used, the synopsis in the CBD must state that award will be based on price and historical quality performance. For purchases less than \$25,000, that do not require synopsis, offerors will be advised of the RYG procedures. The solicitation shall state [Ref. 16:p. 10]:

This procurement is part of the Navy's Contractor Evaluation System, Red/Yellow/Green Program. Award will be based on the Contracting Officer's decision as to which offer provides the best value to the Navy - price, past quality performance, and other factors considered. Details are provided in provisions entitled 'NOTICE TO PROSPECTIVE OFFERORS' (Section L) and 'ADDITIONAL FACTORS - CONTRACTOR EVALUATION SYSTEM, RED/YELLOW/GREEN PROGRAM' (Section M).

The Contracting Officer, after receiving proposals, shall forward the names of offerors to the Quality staff. The Quality staff forwards an evaluation that includes the color classification of an offeror's commodity. A narrative explaining the relative differences between offerors shall be provided when commodities of different offerors have the same color classification. Prior to contract award, the Quality staff shall determine the need for quality assurance actions to include as part of the contract. [Ref. 16:p. 9]

The following are provided as a guide for establishing source selection criteria and establishing appropriate evaluation measurements for source selection [Ref. 16:pp. 10-11]:

Green - a green classification means the contractor has demonstrated satisfactory performance in delivering a quality product or has demonstrated satisfactory capability to deliver a quality product, for a specific FSC. Commodities with this classification would normally receive an adjectival rating of "good" to "excellent," based on the criteria in Appendix A.

Yellow - a yellow classification means that the contractor has sufficient negative quality history for a specific FSC to require additional quality assurance actions aimed at reducing the risk of poor quality products being delivered to the Navy. Commodities with this classification could receive an adjectival rating of "average," "good," or even "marginal" -- depending on the number of quality problems and the severity of each.

Red - a red classification means that the contractor's negative quality history for a specific FSC is serious enough to require approval by the head of the contracting activity to award. Previous experience with the contractor's commodity has yielded products that were less than satisfactory or totally unacceptable. The normal adjectival rating would be "marginal" or "unacceptable."

Insufficient Data - First time offerors or offerors for whom current, up-to-date quality performance history is unavailable are labeled "insufficient data" contractors. An "insufficient data" commodity shall be evaluated solely on the basis of "lowest price, technically acceptable." Activities are encouraged to request past quality performance data in the solicitation for consideration in the responsibility determination process.

D. AIR FORCE PROCEDURES

The Air Force utilizes two initiatives for maximizing its use of past performance as an evaluation for source selection: the Contractor Performance Assessment Reporting System (CPARS) and the Performance Risk Assessment Group (PRAG). The CPARS is used to both record and disseminate information concerning the performance of a contractor. The PRAG is a panel of acquisition professionals that evaluate the degree of performance risk of a contractor's proposal for each source selection. [Ref. 23:pp. 1-2]

1. Contractor Performance Assessment Reporting System

The CPARS is an initiative used by the Air Force. Each program manager in the Air Force Material Command is required to prepare an annual assessment of a contractor's performance. This evaluation is based on the following ten criteria: product/system performance, software development, engineering design support, schedule, cost performance, product assurance, test and evaluation, management responsiveness, integrated logistics support, and subcontract management. The program manager uses a four level scale

ranging from unsatisfactory to exceptional. His determination must be based on objective results that are included in the narrative of the assessment report. [Ref 23:p. 1-3]

The reporting system begins with the program manager soliciting functional experts for objective results in their areas. A preliminary report is developed and forwarded to the contractor for review. The contractor has 30 days in which to submit a response. The response is optional and should concentrate on the objective data in the report. [Ref. 23:p. 1-3]

Once the program manager receives the report from the contractor, he can revise the report on a new form, (attaching the old report), or make no changes. Once completed, he signs the report and sends it to the next higher level in the command. The reviewing official ensures the report is consistent with other evaluations of the contractor for which the evaluation is based. Copies of the report are then sent to each product division. [Ref. 23: pp. 1-3, 1-4] These reports then become available for use by the PRAG when developing an assessment of a contractor's performance [Ref. 23:p. 1-6]. According to Air Force regulation [Ref 23:pp. 1-4, 1-5]:

The sole purpose of the CPARS is to provide program management input for a command-wide performance data base used in source selection. Performance assessment will be used as an aid in awarding contracts to contractors that consistently produce quality products that conform to requirements within contract schedule and costs.

The CPARS does have some limited use. For contractors that have not been awarded a contract since it began, no performance data will exist [Ref. 23:p. 1-5]. In these instances, the PRAG can rely on questionnaires to program managers for data specific to a given contractor. In the long run however, the CPARS will be the primary source of data available for use by the PRAG. [Ref. 23:pp. 1-6]

2. Performance Risk Assessment Group

The information from the CPARS becomes very valuable to the Performance Risk Assessment Group responsible for providing a performance evaluation and risk assessment of a contractor. Their goal is to determine a contractor's ability to perform on a proposed contract given their previous performance record. The assessment considers previous problems encountered by the contractor, the steps taken to correct deficiencies, and the contractor's trends of performance. The results of the PRAG are not intended to equate to a numerical score by which the contractor is either a "go" or a "no-go", but rather is an examination of the available performance data that are relevant to the source selection. [Ref. 23:p. 1-5]

The PRAG not only relies on data from the CPARS, which are categorized as contract specific, but also utilizes contractor-plant information and a contractor's self-assessment. Contractor plant information is provided by the

Defense Contract Management Command (DCMC). Information compiled by these sources are assessments of the internal operations and management functions of an organization. The contractor's self-assessment is provided in the response to the request for proposal. The proposal indicates the level of experience that the contractor has with the type of work required for the successful completion of the contract. [Ref. 23:pp. 1-6, 1-7]

E. SEALED BIDDING

Sealed bidding is one of the two basic procurement methods used by the Government. The Competition in Contracting Act requires procuring agencies to use competition in the selection of contractors to supply goods or services [Ref. 3:p. 2-17]. Under sealed bidding, competition is achieved by evaluating price. Offerors submit bids in response to a solicitation, the bids are publicly opened at a designated time and location, and the contract is awarded to the responsive and responsible offeror who submitted the lowest bid.

Several circumstances must exist for sealed bidding to be used. First, there must be enough time available for the solicitation, submission, and evaluation of sealed bids. Second, award must be based on price and price-related factors. Third, discussions cannot be held with contractors concerning their bids and last, there is an expectation that

more than one bid will be received. If an acquisition cannot meet these criteria, then sealed bidding cannot be used. [Ref. 3:p. 3-2]

Under sealed bidding procedures, two areas must be addressed: the responsiveness of bids and the responsibility of bidders. A responsive bid is an unqualified offer that meets the requirements as specified in the Invitation for Bid (IFB). However, to be eligible for award, the bidder must also be responsible. Determination of whether a bid is responsive is made immediately after the opening of bids. A determination of responsibility is made as soon as possible, before contract award. [Ref. 3:p. 3-23]

F. COMPETITIVE NEGOTIATIONS

Competitive negotiations is the other basic procurement method which allows the Government to award contracts on criteria other than price and price related factors. This method of contracting permits the greatest use of past performance in the source selection process. Under competitive negotiations, the contracting officer is free to consider: (1) the offeror's experience, (2) technical and management capability, (3) cost information, and (4) a contract type which the offeror is willing to accept. [Ref. 3: p. 4-2]

The request for proposal (RFP) is used under competitive negotiations procedures. The RFP and RFQ (Request for

Quotation) are used "to communicate Government requirements to prospective contractors and to solicit proposals or quotations from them." The distinction between RFPs and RFQs has become somewhat blurred over the last several years; the terms are sometimes used interchangeably, especially at the subcontract level. [Ref. 3:pp. 4-3, 4-4]

Multiple evaluation factors are permitted in competitive negotiations. To achieve optimal competition it is necessary for the Government to disclose to the offerors the factors that will be evaluated and the relative order of importance of these factors. There is generally no grounds for questioning these factors as long as they are set forth in the RFP and relate to the purpose of the procurement. The factors used will depend on the circumstances of the procurement. [Ref. 3:p. 4-5] Past performance can be evaluated as an evaluation criterion and has the same disclosure requirements as the other factors.

The evaluation factors and their relative weights as disclosed in the RFP must be used in the evaluation. All offerors must be informed of any changes in the evaluation factors or changes in their relative weights. It is not necessary to disclose the actual numerical weights of the evaluation criteria. [Ref. 3:p. 4-6]

After proposals are submitted, oral or written discussions are normally held with offerors that are in the competitive range. At the conclusion of discussions, offerors submit

their best and final offers (BAFOs). Once the final round of BAFOs are submitted, a winner is determined. [Ref. 3:pp. 4-8, 4-9]

G. RESPONSIBILITY

The responsibility determination of a contractor is important since price alone does not necessarily guarantee the delivery of conforming goods. Default, late deliveries, or other measures of non-conformance can result in increased contractual and administrative costs not originally anticipated. No contract award can be made unless the contracting officer has made a positive assessment of a contractor's responsibility. If enough information is not available to clearly make a responsibility determination, the contractor will be deemed non-responsible. [Ref. 10:Subpart 9.103] Additional requirements exist for small businesses as described in the FAR [Ref. 10:Subpart 19.6].

The FAR describes several standards that must be evaluated to determine the overall responsibility of a prospective contractor. The contractor must [Ref. 10:Subpart 9.104-1]:

- (1) Have adequate financial resources to perform the contract or the ability to obtain them;
- (2) Be able to comply with the required or proposed delivery or performance schedule, taking into consideration all existing commercial and Government business commitments;
- (3) Have a satisfactory performance record;

(4) Have a satisfactory record of integrity and business ethics;

(5) Have the necessary organization, experience, accounting and operational controls and technical skills, or the ability to obtain them (including, as appropriate, such elements as production control procedures, property control systems, quality assurance measures, and safety programs applicable to materials to be produced or services to be performed by the prospective contractor and subcontractors.)

(6) Have the necessary production, construction and technical equipment and facilities, or the ability to obtain them; and

(7) Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

Special standards of responsibility may also be required for an acquisition that in previous experience has demonstrated specialized experience or facilities to perform contractual requirements. In these circumstances, the solicitation will define all special standards that must be met. [Ref. 10:Subpart 9.104-2]

As stated in (3) above, a contractor's past performance record must be evaluated to make a responsibility determination. A contractor that has recently exhibited serious deficiencies in contract performance shall be considered non-responsible, unless the contracting officer makes a determination that the performance was beyond the contractor's control and that corrective action has been taken to prevent similar occurrences in the future. The failure of a contractor to apply all his efforts to complete a contract is evidence of non-responsibility. The inability of a

contractor to meet quality requirements is also a factor to consider. In making a responsibility determination, the contracting officer must consider the number of contracts for which the contractor is involved and the extent of non-conformance in each contract. If the pending contract requires a subcontractor plan, the contracting officer must evaluate the contractor's ability in developing and complying with such a plan. [Ref. 10:Subpart 9.104-3]

Generally, prime contractors are required to determine the responsibility of subcontractors. A contract may require the prime to provide written evidence of a subcontractor's responsibility. However, when the subcontract involves an urgent requirement or substantial subcontracting, the contracting officer may make a responsibility determination. These circumstances will require the same conformance to standards as required of the prime contractor. [Ref. 10:Subpart 9.104-4]

H. SUMMARY

This chapter has introduced the Army's PRAG Program, the Navy's RYG Program and the Air Force's CPARS. The Navy and Air Force Programs have been introduced to provide an insight to the procedures used by the other Services that could be included as part of the Army's PRAG Program. These data will be used in the analysis of the PPG in Chapter IV. Additionally, a summary of competitive negotiations, sealed

bidding and the determination of responsibility were introduced to correlate the use of past performance in these procedures.

III. INDUSTRY PROCEDURES

A. INTRODUCTION

This chapter presents the data and analysis of the results of interviews conducted with commercial organizations. Questions focused on the procedures used by industry, the evaluation factors and the recency and relevancy of data. Questions were selected so a correlation could be better made between industry results and the Army's PPG.

B. PROCEDURES USED BY COMMERCIAL ORGANIZATIONS

1. Vought Aircraft; Dallas, TX

a. *Background*

The programs at Vought Aircraft Company include the B-2 and the C-17. They manufacture components for the B-2 advanced technology bomber; C-17 engine nacelles and vertical and horizontal stabilizers for McDonnell Douglas and Boeing. [Ref. 1:p. 26] Mr. John Summit, the Manager; Composites, Tooling, Assemblies and Outside Processing Procurement, was interviewed to develop an understanding of procedures used at Vought Aircraft.

b. *Assessing Past Performance*

The methodology used by Vought Aircraft consists of the SRS (Supplier Rating System) and the SPIP (Supplier Performance Indicator Program). Past performance is an

integral part of their source selection process and is key in a number of a system's items. [Ref. 21]

(1) *Supplier Rating System.* The SRS looks at cost and on time delivery including appropriate paperwork and certification documents. A supplier's performance is not evaluated alone, rather it is compared to the performance of the supplier's peers. [Ref. 21]

(2) *Supplier Performance Indicator Program.* The SPIP includes quality which affects the cost of doing business with a supplier. In evaluating quality one must look at the commodity. Historically, some commodities may be prone to certain problems and defects. With the purchase of rivets for example, allowances could be made for a rejection rate of 10% out of 5000 pieces. In this instance it would be more costly to develop a process for reducing the rejection rates versus throwing out the bad rivets. So, a 90% quality rating would be acceptable. With a skin commodity though, like part of an aircraft wing, one may require a 97% rating. In this instance it is not practical to throw out the bad lots. [Ref. 21]

The SPIP includes system rework costs; the extra costs the company could expect to incur if a supplier is selected. In comparing two suppliers, it may be cheaper in the long run to buy a more expensive part if it requires less rework. Vought Aircraft is looking for the best value. Sometimes there is a known monetary value a proposal

can be adjusted to, while other times costs may be undefined. Costs are assigned by commodity. [Ref. 21]

When evaluating additional costs incurred it is important to look at where efforts are expended. If defects occur at the supplier's facility and he catches them, it at least shows that his system works. If on the other hand they are discovered at destination, additional costs are incurred for packing the item and returning it to the supplier. It also raises questions about the supplier's internal quality control system. [Ref. 21]

Costs are also incurred by withholding a product from manufacturing. These costs are hard to determine; an arbitrary cost is assigned normally based on overhead. Additionally, if a part does not meet the quality requirements for immediate use it will be identified with a withholding tag. Costs are incurred for additional tests that have to be performed before the cognizant officer will sign off on its use. This emphasizes the use of proper product quality certifications. [Ref. 21]

(3) *Lack of Performance History.* Consideration must be given to new suppliers who have no past performance data on file. Normally at Vought Aircraft they request a facilities and equipment list. They ask for information on products delivered by the supplier and whether the product is on a Qualified Products List. If so, to what process was it

approved? If a supplier claims he can perform to hot forming specifications but has no approvals it could be cause for suspicion. The company may even go into the supplier's facility to see what the process looks like and ascertain the quality at which they are able to perform. If control processes are in place they should be evaluated. These processes are hard to get and difficult to maintain. To ultimately be placed on an approved supplier list, Vought looks at quality assurance, technical support, management support, procurement support and may even conduct a capabilities survey depending on the complexity of the product. Once Vought is confident in the supplier's ability they will be sent a Request for Proposal (RFP). [Ref. 21]

When a manufacturer is unfamiliar with a supplier's past performance it is common to talk with industry counterparts to see how well a supplier is doing. If they are a quality supplier, other manufacturers will normally tell you so. If a company is non-committal to the quality of a supplier, it is normally an indicator that they should be avoided. [Ref. 21]

c. Recency

Mr. Summit noted past performance information cannot be used if it is more than three years old; whether it was good or bad. Facilities and equipment wear out over time. A manufacturer may have provided a quality product several

years ago, but that is no guarantee that he can provide the same product today. [Ref. 21]

There are also considerations other than time to determine if a company's past performance should be considered. Such situations as a change in the Chief Executive Officer (CEO), a high turnover of quality assurance personnel or a sellout could affect past performance information even though it is less than three years old. [Ref. 21]

d. Relevancy

Vought Aircraft does not necessarily look for similar products to determine whether past performance is relevant to a current purchase; rather they look at the similarity of the processes. If the process is the same, the supplier should be able to produce to the same quality. [Ref. 21]

e. Problems Associated with the use of Past Performance

Past performance evaluation does not necessarily show that the supplier may have financial problems or is pursuing Chapter 11 procedures. Additionally, it might not reflect that the supplier's equipment is deteriorating or wearing out. It also does not indicate if the supplier has the capacity to meet the required demand. Suppliers tend not to know their capacity limits. Equipment may not meet

required tolerances. A supplier may have the dollars to upgrade equipment, but can not afford to stop production to fix it. [Ref. 21]

Lastly, Mr. Summit made the point that Vought uses numerical scoring whenever possible. This really applies to the SPI. When audited, agencies like to see as little subjectivity as possible and an explanation of the thought process in selecting a supplier. Vought Aircraft uses good, fair, and poor to rate suppliers. [Ref. 21]

2. McDonnell Douglas; Mesa, AZ

a. Background

McDonnell Douglas manufactures the AH-64 Apache Attack Helicopter, the MD Explorer and MD-500 helicopter [Ref. 1:p. 20]. Mr. Dave Coleman, the Director of Procurement, was interviewed to develop an understanding of the procedures in place at McDonnell Douglas.

b. Assessing Past Performance

(1) *Supplier Rating System.* McDonnell Douglas relies on their Supplier Rating System (SRS) to evaluate past performance. The SRS includes such factors as quality and on time delivery to include the quality of paperwork accompanied with a product. Quality is broken out into source inspection, receiving inspection, and in line rejections. It is a running record of how well a supplier is doing by category of product. They rate suppliers based on a rolling average of their

previous 12 months experience and if required, can go back three years to gather data. A factor is applied automatically to a supplier's proposal based on data from the rating system to account for poor quality or late deliveries to ensure a best value selection. For suppliers that have no record of prior deficiencies, no additional points are added. Each supplier receives a report card four times a year. [Ref. 8]

McDonnell Douglas' next phase to the SRS is evaluating responsiveness: how well a company responds to their needs. With a smaller supplier base, they are looking for suppliers that have 100% quality, 100% delivery and are willing to work with them on a partnering basis. The drawback with this criterion is that it is very subjective in nature. [Ref. 8]

(2) *Procurement Review Board.* For larger procurements, those greater than \$500,000, a Procurement Review Board is convened to select a supplier. The board evaluates the proposal for best value to include: technical weighting, price weighting and management weighting. [Ref. 8]

(3) *Certified Suppliers.* During the source selection evaluation process, recognition is given to certified gold, silver, and bronze suppliers. Additional points are awarded to those suppliers that have received such ratings based on their past performance. To receive a gold, silver, or bronze certification, a supplier has had to go

through an assessment for his type of business. The supplier's processes are reviewed, to include his Statistical Process Control (SPC), and an assessment is made of how well he is doing. [Ref. 8]

3. Lockheed, Ft. Worth, TX

a. Background

Products at Lockheed, Ft. Worth Company include the F-16 Fighting Falcon; F-111 modernization and support and the F-22 development program [Ref. 1:p. 10]. Mr. Fred Ashabranner, the Chief; Production Equipment Procurement, was interviewed to develop an understanding of the procedures in place at Lockheed.

b. Assessing Past Performance

For Lockheed, past performance is a significant evaluation factor. First, a supplier's price and technical abilities are evaluated. If they have equal ratings, past performance is assessed to see what they have or have not done. [Ref. 4]

Lockheed has established a formal tracking and rating system that records the percent of on time deliveries and the number of rejections that may occur. The rating system concentrates on cost and technical capabilities to include quality and overall performance. [Ref. 4]

Supplier ratings are ongoing. Reports, referencing rejection rates and delivery schedule adherence,

are sent to buyers weekly for review. If a negative trend is developing they point it out to the supplier. If the supplier does not improve, no further orders will be placed or they may eliminate the supplier from their base altogether. [Ref. 4]

Lockheed's system looks at cost growth. They look at quality and where rejections occur. If rejections occur at the source, the impact is different than having the part delivered and pulled off an aircraft to be sent back to the supplier. These occurrences are included in the supplier's evaluation. Data in supplier evaluations are not always negative. Lockheed attempts to provide positive feedback as well. Lockheed uses the following adjectives for supplier performance: outstanding, above average, satisfactory, below average, and unacceptable. [Ref. 4]

Suppliers have a positive attitude about the evaluation system. They believe it is fair. It points out problems so corrective actions can be taken. In fact, it may point out problems that are not necessarily those of the supplier, but rather are problems internal to Lockheed. [Ref. 4]

For large purchases, Lockheed forms a procurement committee made up of top management and quality, engineering, and procurement personnel. The procurement personnel make a presentation of data and facts and the council makes the decision. [Ref. 4]

For raw materials and small purchases the process is less formal. Normally, the buyer and the manager make the final decision as to the source selected. Lockheed requires suppliers to be SPC certified. If a current supplier does not become SPC certified, they will eventually be dropped. A full time SPC group evaluates suppliers regularly; conducting on site audits and preparing quality reports. [Ref. 4]

Mr. Ashabranner emphasized that in this new environment, one must look at what is happening at the supplier's facility. What changes have been made in personnel? With downsizing, Lockheed is often finding that suppliers are keeping their best people and that there are no sharp decreases in the levels of efficiency they had previously maintained. In other cases, the most experienced people are leaving through early retirement programs. A supplier may be an old company, but if there are a lot of new employees there will be an effect on the learning curve. [Ref. 4]

Many suppliers have become different companies. They have diversified, looking for a larger business base. With these companies, Lockheed may find that they are no longer the largest buyer, consequently they may not get the same priorities they had previously enjoyed. As a result, time delays may occur. [Ref. 4]

When asked about whether suppliers tend to take on more work than for which they have the capacity, Mr.

Ashabranner stated that many suppliers, especially those where defense is a large part of their business, currently have excess capacity.

Mr. Ashabranner also emphasized that the goal of quality assurance is for the supplier to have a high enough rating that Lockheed can reduce the degree of oversight and thus reduce costs.

c. Problems Associated with the Use of Past Performance

With the changes in the defense industry, it may be difficult to ascertain a company's past performance. Companies are going out of business, causing the prime to go elsewhere. Suppliers are selling out and being acquired by larger companies that shut the facility down and move the operation to another location. This requires an entirely new survey in order to recertify the company's SPC. Sometimes, Lockheed must ignore previous past performance data since they are evaluating an entirely new supplier management. [Ref. 4]

d. Recency

For most procurements, recent data from supplier evaluations are readily available. For smaller buys however, performance data may be two to three years old. [Ref. 4]

e. Relevancy

In determining whether past performance is relevant, it frequently depends on the product. For products

previously purchased from a supplier, they look at how well they managed the last requirement. They look at how well the supplier came on line. Additionally, they look at the supplier's management style, the philosophy of the company, and whether the supplier has a good track record. They are looking for someone that will be committed to long term relations. Lockheed is concerned with the processes the supplier employs and the SPC philosophy pursued. [Ref. 4]

4. Boeing Aircraft; Seattle, WA

a. Background

Products at Boeing include bomber, tactical, tanker and airborne early warning and special purpose aircraft; offensive and defensive mission systems; and strategic and tactical missile systems [Ref. 1:p. 6]. Mr. Tom Roff, the Materials Operations Manager, was interviewed to develop an understanding of the procedures in place at Boeing.

b. Assessing Past Performance

The role past performance plays in a procurement is dependent on the dollar value and complexity of the buy. Typically, items procured fall into one of two categories. The first is low dollar, off-the-shelf type items. Second, are more complex units, which may include items that would require machining with high tolerances. Additionally included are the more sophisticated items procured; for example, the

radar for the Airborne Warning and Control System (AWACS).
[Ref. 19]

(1) *Off-the-Shelf Items.* Historically, for vendor off-the-shelf type items, price has been the primary determinate for source selection. Past performance is now becoming more important. Past performance data are evaluated from the last two years with a 12 month rolling average maintained. A supplier added index is assessed to the supplier's proposal to account for the costs that Boeing anticipates it might incur. This forms the basis of award with the winner being the supplier that provides Boeing with the best overall value. [Ref. 19]

(2) *Procurement of Complex and Highly*

Sophisticated Items. For the procurement of these items, past performance is very important. Although price is a consideration, award is based primarily on research and development capabilities, technical capabilities and the supplier's management capabilities. Factors evaluated include the supplier's record of deliveries, quality, cost control, risk, technical and engineering capabilities and his ability to integrate his product with the rest of the program. Boeing also evaluates a supplier's responsiveness to corrective action reports. The percent of weight assigned to an evaluation factor is commensurate with the degree of risk and complexity of the procurement. A lot of emphasis is placed on

capability, including the personnel in the supplier's organization. Many facets of the supplier's evaluation are objective, while others are subjective, especially with large procurements. [Ref. 19]

For each item, Boeing identifies the important characteristics upon which the supplier should concentrate his efforts. A prerequisite of an advanced quality system is the reduction in the variation of the characteristics identified by Boeing. The supplier's SPC is key to controlling variation in the process and can reduce the number of inspections required for delivery. [Ref. 19]

A source selection board is often convened at Boeing. The number of members on the board and areas represented depend on the complexity of the procurement. [Ref. 19]

c. Competition Considerations

The level of competition also determines the level at which past performance is evaluated. Sole source procurements offer very little opportunity to evaluate past performance in a competitive dimension. On the other hand, a very competitive environment offers the latitude to place greater emphasis on how well suppliers have historically performed. [Ref. 19]

d. Problems Associated with the Use of Past Performance

When past performance is used as an evaluation criterion, there is the possibility of a greater number of protests, especially if award is not placed with the lowest offeror. Additionally, things may have changed significantly since the last contract making the use of past performance less relevant. Mr. Roff also pointed out that if you place too much emphasis on past performance, you may not see that "a new source has developed a better mouse trap". Lastly, the FAR has historically limited the ability of placing greater emphasis on past performance because of the thrust to award contracts based on price. [Ref. 19]

5. Northrop; Pico Rivera, CA

a. Background

Products at Northrop include aircraft and electronic weapon systems [Ref 1.p. 20]. Mr. Tom Schoner, the Small Business Liaison Officer, was interviewed to develop an understanding of the procedures in place at Northrop. Additionally, their source selection procedures guide was provided to the researcher.

b. Assessing Past Performance

As with other commercial organizations interviewed, Northrop establishes an evaluation panel, a procurement review board, and a source selection board for

proposal evaluation and ultimate source selection. In the source selection procedures used by Northrop, experience and past performance are sub-factors of management. [Ref. 17:p. 23]

(1) *Experience.* In the area of experience, Northrop makes a determination of the offeror's normal Government and commercial business and how it relates to the proposed work. Also, what is the offeror's reputation in the field to which the proposed work relates. [Ref. 17:p. 23]

(2) *Past Performance.* Northrop makes a determination of whether the bidder or offeror has held previous contracts with the buyer or another Government agency. If so, the results are evaluated, particularly the degree to which the supplier has adhered to schedules. Additionally, if technical problems arose during the course of the contract, were they solved internally or was there heavy reliance on the buyer's technical staff. Northrop also determines if there was an unusually high number of contractual problems that may have resulted from inflexibility, naivete, or a lack of cooperation on the part of the supplier. Lastly, were cost over-runs involved? Were they attributed to initial low estimates or as a result of problems encountered during the course of the contract that could not have been anticipated? [Ref. 17:p. 23]

c. Recency

The age of past performance data evaluated for a procurement depends on the sophistication of the product. If an item is a non-production, non-flyable, it is not quite as critical. If however it is a major system, Northrop will review a supplier's past performance quite extensively, going back several years if required. [Ref. 20]

d. Relevancy

When an item is procured for which Northrop has no past performance data they will ask if the item had been produced for someone else. If so, they will evaluate how well the supplier performed for these other contractors. They also evaluate performance for similar type items. The degree of past performance data sought will be dependent upon the level of risk measurement associated with a product. [Ref. 20]

C. ANALYSIS

The companies surveyed all recognized the importance of using past performance in the source selection process. The weighting of past performance is commensurate with the level of complexity of the item being procured. The more complex an item, the greater weight past performance is assigned.

The procedures used by commercial organizations are similar to the procedures used by DoD. The underlying theme promoted by both is best value. Past performance is just one facet of best value.

The evaluation factors used to assess past performance were common among the companies surveyed. Quality and on-time delivery were predominate. Quality was measured by a supplier's ability to deliver a product that meets the customer's expectations. It must be evaluated by commodity, comparing rates to those of the supplier's peers. Boeing made the point that they identify the characteristics to which they desire suppliers to pay particular attention. In determining a supplier's ability to meet quality requirements, companies surveyed noted that they evaluate the processes at a supplier's facility, specifically the statistical process controls that are in place. On-time delivery was measured by a supplier's ability to meet schedule requirements. Companies surveyed were not only interested in the product delivered, but were additionally concerned that all accompanying paperwork and certification were accurate.

The primary discriminator between commercial and DoD procurement practices appears to be with the level of evaluations. The companies surveyed focused attention on their supplier rating systems. Not only do the data from evaluations become the basis for assessing past performance in future procurements, but they serve as a communication tool between the supplier and the company. Evaluations help ensure a quality product is delivered, while at the same time, provide information that may be useful to the company's own

internal operations. Suppliers have had positive feedback on the use of evaluations.

The procedures in place in the companies surveyed mirror procedures used under the Navy's RYG Program. Organizations are concerned with the costs associated of doing business with a supplier. They keep a record of the additional costs, e.g. rework, that are incurred under a particular contract. In particular, they look at where additional efforts are expended which may be an indicator of supplier or company problems. A supplier's proposal is adjusted to reflect the expected cost of doing business. Supplier's adjusted prices then become the basis for contract award with the winner being the supplier that is able to provide the best overall value.

All companies surveyed indicated that past performance data used to assess risk should be no more than three years old. Anything older would not be a true indicator of how well a supplier could perform. For items purchased on a recurring basis, however, companies require information that is no more than one year old. Oftentimes, assessments are made based on a rolling average from data for the last several months. Companies also noted that the volatility of the defense market will have an impact on the age of past performance data that are assessed. Because of rapid changes, a company today may not be the same company it was a year ago. Under these circumstances, past performance again may not be a valid

indicator of the level at which a supplier may be able to perform today.

In regard to relevancy, companies do not necessarily look for similar products, rather they look for similar processes. If the processes are similar, a supplier should be able to manufacture to the same quality as a previous product for which past performance data are available.

Problems experienced with the use of past performance varied from suppliers not knowing their own capacity limits to the overall difficulty of being able to ascertain a supplier's past performance because of a rapidly changing defense sector. No conclusions can be made in regard to the problems one should expect with the use of past performance.

D. SUMMARY

This chapter introduced the procedures used by commercial organizations that have to follow similar regulatory requirements of Government agencies. An analysis was presented depicting similarities of procedures used and unique initiatives developed by the aircraft industry. The information from this chapter will be used in analyzing the PPG in the following chapter.

IV. PAST PERFORMANCE GUIDE (PPG) ANALYSIS

A. INTRODUCTION

This chapter includes an analysis of the PPG which is attached as Appendix B. Data from Chapters II and III, as well as secondary source information, are used for analysis. The section headings depicted correspond to sections in the PPG. Most sections of the PPG are analyzed, except those few which have no bearing on this research.

B. PAMPHLET APPLICATION

Policy Letter 92-5 requires the evaluation of past performance on all competitively negotiated procurements over \$100,000. The PPG however states that the procedures outlined in the guide are optional for acquisitions under \$10,000,000.

In an interview conducted with Mr. Tappel, the CH47 and UH60 Production Management Branch Chief, Aviation and Troop Command (ATCOM), it was noted that the PPG is difficult to adopt to smaller procurements since many of the competitors may not have past experience in the proposed area to make a risk assessment. This is the issue of relevancy. Additionally, the PRAG would only add another layer of bureaucracy to a smaller dollar procurement that would seem to be unnecessary.

Currently, approximately 5%-10% of the procurements at ATCOM exceed the \$10,000,000 threshold [Ref. 22]. Stephen Kelman, OFPP Administrator, has stated that one of the two major reforms he will promote will be the increased use of past performance [Ref. 11:p. 34]. The procedures described in the PPG are designed for large procurements and do not necessarily apply to those procurements that make up a majority of a buying command's contract actions. The researcher believes that with the increased emphasis being placed on maximizing the use of past performance in the source selection process, a viable past performance guide should not be so narrowly defined.

C. PRAG APPROACH VERSUS PRE-AWARD SURVEYS

The PPG states that the pre-award survey, conducted by the Defense Logistics Agency (DLA), is used to determine whether a contractor has the capacity to perform a contract based on the analysis of many areas. Pre-award surveys are "go/no-go" as to the offeror's ability to complete the work. A past performance survey on the other hand, describes the degree of confidence in the work being performed. [Ref. 2:p. 3]

The PPG fails to discuss the PRAG's ability to conduct on-site visits which are also different from pre-award surveys. An on-site visit could be used to resolve issues that may surface during a risk assessment. [Ref 22] The issue arises, however, whether an on-site visit at one facility would

require a visit to all the offeror's facilities? This would appear to be especially true if an on-site visit afforded the offeror an opportunity to prove he has overcome past performance problems and would put him in a better standing had the visit not occurred. The researcher believes that an on-site would be appropriate and would not require a visit to all offeror's facilities as long as the visit is to clarify and gather past performance data and would not result in what could be interpreted as meaningful discussions.

An additional issue, not discussed by the PPG, is the contracting officer's responsibility towards overseeing the actions of the PRAG. During the source selection process, if an offeror is considered to be in the competitive range, the contracting officer shall conduct written or oral discussions. The content and extent of the discussions is left to the contracting officer's judgment. [Ref. 10:Subpart 15.610] If an on-site survey were conducted during discussions to clarify or gather additional past performance data, the researcher believes the contracting officer should oversee their actions to maintain the integrity of the system. If data collection is going on prior to determination of the competitive range, the contracting officer must make clear to the offerors that an on-site visit does not imply inclusion in the competitive range.

D. PRAG COMPOSITION AND STRUCTURE

Commercial organizations interviewed often use boards to evaluate and make a source selection decision. The number of personnel on the board and the hierarchical level of the members are commensurate with the dollar value of the procurement and the complexity of the item being purchased. At ATCOM, the PRAG is normally chaired by an industrial specialist with the remainder of the group consisting of a quality representative and an individual that can provide engineering support [Ref. 22].

The PPG permits each contracting activity to determine the appropriate membership of the PRAG. It recommends including members with procurement, cost, and technical experience as well as PRAG experience. The size of the PRAG should be related to the number of contractors and subcontractors expected to be evaluated. Additionally, the nature and complexity of the procurement will have a bearing on the PRAG composition. [Ref. 2:p. 4]

The PPG is very thorough in providing guidance on the proper composition of the PRAG. The guide was used in determining the composition of the PRAG at ATCOM. The group is able to satisfactorily perform its requirement of developing a risk assessment for each offeror. [Ref.22] The PPG is also consistent with comments from commercial organizations. Specifically, the PRAG composition is determined by the level of complexity of a procurement.

E. PAST PERFORMANCE SUB-FACTORS

Careful consideration must be given to the factors used to evaluate past performance. Although certain evaluation factors may be relevant to some procurements and not others, a thorough understanding of all factors to be considered not only enhances the past performance assessment, but will also help in developing the source selection plan.

The PPG describes the use of the offeror's record of on-time delivery, good technical quality, and cost control to determine the likelihood of success in meeting the requirements of the solicitation. Additionally, Policy Letter 92-5 suggests, as is also stated in the PPG, use of the contractor's record of conforming to specifications, standards of good workmanship, record of containing and forecasting costs, adherence to schedules including the administrative aspects of performance, history of reasonable and cooperative behavior, commitment to customer satisfaction and the contractor's concern for the interest of the customer. Lastly, Steven Kelman, has gone even further, stating that a contractor's ability to solve problems without litigation should also be a factor in a past performance rating [Ref 9:p. 60]. This factor should be contained in the PPG.

The primary factors used by commercial organizations were quality and on-time delivery to include the paperwork required to be delivered with a product. Although the verbiage may differ, these factors are included in the PPG. In a recent

study, approximately 100 American and British manufacturing firms were surveyed. The results, surveying supplier performance measures, indicated that delivery reliability, quality conformance, and response flexibility all rated higher than price. [Ref. 5:p. 26]

The Navy's RYG Program focuses predominately on quality. RYG does not specifically address factors but rather sets criteria for color classifications. These criteria, included in Appendix A, can support quality measurement by identifying reject rates, failed first article tests, and the number of Quality Deficiency Reports occurring over a time period.

The PPG recognizes that organizations have wide latitude in selecting evaluation factors and sub-factors. It does not, however, recognize that factors and sub-factors selected must be measurable and essential. More is not necessarily better. Additionally, the factors and sub-factors chosen must be independent of each other to prevent double counting. Lastly, it is important that factors are measured against measurable objective standards rather than only comparing proposals to each other. [Ref. 7:p. 775]

As noted by the previous paragraph, the PPG fails to address the development of standards. Standards serve as indicators of the minimum level of performance or compliance to meet the requirements of the solicitation. They serve as a guide to determine how well the offeror's response meets the Government's goals. The minimum acceptable standard must not

exceed the requirements of the specification, nor should it address requirements not addressed in the solicitation. [Ref. 7:p. 775]

F. PAST PERFORMANCE WEIGHTING

The PPG states that past performance should be given enough weight that it acts as a valid discriminator between proposals. Commercial organizations recognized that the weight given to past performance should be commensurate with the complexity of the procurement. Evaluations generally involve quality, delivery, service, and price weighted in accordance with the requirements of the purchase [Ref. 6:p. 35]. The importance of the criteria will vary from one procurement to the next [Ref. 12:p. 32]. The Analytical Hierarchy Process (AHP) can be a useful tool in determining the weight to assign to past performance. Basically, the AHP compares evaluation criteria and assigns weights depending on the degree of importance of one criterion to the next. [Ref. 12:pp. 32-33]

The Government can evaluate an offeror's experience and past performance. The PPG explains, however, the importance of not exaggerating the emphasis placed on past performance by evaluating it separately and then again as an aspect of experience. It is however, appropriate to separate personnel experience from company experience and evaluate both. To the

researcher however, the distinction, as discussed in the PPG, is not very clear.

The GSA (General Services Administration) Handbook describes past experience as the extent of the offeror's past experience in carrying out similar work. Past performance refers to the quality of the offeror's past performance in carrying out similar work, considering timeliness, cost control, and technical success.

The GSA Handbook further addresses qualifications of key personnel which refers to the availability, competency, pertinent education, and related experience of personnel. Personnel experience is important to the successful completion of the contract. Generally, the Government should address minimum qualification standards in the solicitation. [Ref. 7:pp. 773-774]

The researcher agrees with the PPG in recognizing that the amount of weight given to past performance should be enough that it acts as a valid discriminator between offers. The PPG, however, fails to recognize that there is an additional connection between the weight given to past performance and the complexity of a procurement, a point emphasized by commercial organizations. Lastly, it is important to recognize the exact difference between past performance and experience; both company and personnel. The GSA Handbook, as referenced above, does a good job of describing the differences between these terms. A thorough understanding of

the differences between past performance and experience is necessary in ensuring the importance of past performance is not exaggerated. Lastly, it is important for the SSEB and the PRAG to communicate the aspects of experience and past performance that each will evaluate.

G. RATING CATEGORIES

The PPG uses high performance risk, moderate performance risk, low performance risk, and unknown performance risk to categorize risk assessment. The Air Force uses the same terms with similar definitions. The Navy's RYG Program utilizes color codes, but the idea of dividing the level of risk is still generally the same. The PPG further recognizes subdividing categories to further enhance the comparative analysis of offerors. The researcher believes the PPG appropriately identifies the risk categories and is consistent with the definitions used by the other Services.

H. EVALUATING NO PAST PERFORMANCE

The PPG states that in the event no past performance data are available for an offeror, the lack of data should be treated as an unknown performance risk that is neutral and has no positive or negative evaluative significance. One of the practices used by commercial organizations is to ask for information on products delivered by the offeror and whether the product is on a Qualified Products Lists. If so, to what

process was it approved. [Ref. 21] Even though this appears that it may have application to non-developmental items only, if the processes expected to be used are similar, they may act as a valid indicator of an offeror's ability to deliver a quality product that had previously not been developed. If similar processes are expected to be used it is possible to use past performance data from the manufacturing of other products in making an overall risk assessment.

The researcher questions that even though the lack of performance data results in assignment of a neutral performance risk, how is a winner actually determined if past performance is a weighted factor? The PPG fails to discuss this issue.

The researcher believes that the likelihood of an offeror having no relevant past performance, either commercial or Governmental, is relatively small. If however, it does occur, a determination must first be made as to whether the offeror should be included in the competitive range based on his proposal. If the offeror is not included in the competitive range, the lack of past performance would have no bearing on the source selection. If the offeror is included in the competitive range, his proposal should be compared to other proposals from a cost and technical standpoint. If in the end, the offeror's proposal, who lacks past performance data, is determined to be the most advantageous to the Government, the offeror should be the apparent winner. The lack of past

performance data places greater emphasis on the pre-award survey to determine the offeror's ability of meeting the contract requirements. Lastly, the solicitation should clearly state that even though past performance is a weighted factor, the lack of past performance will not prohibit award to the most responsible offeror whose proposal is the most advantageous to the Government.

On rare occasions the Government must have a contractor with a proven performance record. In this situation, an offeror lacking proven past performance may represent a moderate or high risk ranking. When experience is evaluated by the PRAG, not the SSEB, the solicitation must clearly state that the PRAG will evaluate experience as well as past performance and the lack of experience may result in a high or moderate risk rating. [Ref. 2:p. 6] The researcher interprets this to mean that if the Government has no proven past performance data to evaluate, but the offeror has past experience in the expected area of contract performance, a risk rating will be assigned based on that experience versus a moderate or high risk rating occurring if the experience were ignored. The researcher believes this to be fair. If an offeror has experience in the expected area of contract performance, it should nullify the moderate or high risk rating that would occur if that experience were ignored.

I. WHAT TO INCLUDE IN THE SOLICITATION

The solicitation must state that the Government will conduct a performance risk assessment based on the past performance of the offeror and their proposed subcontractors. Additionally, the Government may use data provided by the offeror and obtained from other sources. Lastly, the burden of providing thorough past performance data rests with the offeror. [Ref. 2:p. 6]

The PPG discusses the areas in the above paragraph in sufficient detail. The previous section discussed the situation where the Government must have a contractor with a proven performance record and that the solicitation is to clearly state that the PRAG will evaluate experience as well as past performance and that the lack of experience may result in a high or moderate risk ranking. Additionally, the researcher had previously recommended that the solicitation clearly state that even though an offeror lacks a proven past performance record and past performance is a weighted criterion, the offeror whose proposal is the most advantageous to the Government will be awarded the contract even though the offeror may lack a proven performance record. The PPG should centrally locate solicitation requirements in one section to ensure none have been missed by the contracting officer.

J. SOURCES OF DATA

The primary sources of data available for use by the PRAG include DLA and Army Material Command (AMC) activities. References are also cited by the offeror which may include other commercial organizations. The PPG also recognizes the use of contract files which contain evaluations for all contracts that are expected to exceed \$100,000. [Ref. 2:p. 7] The researcher believes these evaluations are critical to a risk assessment. They provide factual data, in writing, that is not lost as personnel leave agencies.

Mr. Tappel noted that the buying agency has a great deal of knowledge about the past performance of its contractors since they deal with them periodically. The CIS data are not as comprehensive as the data available in the buying activity. He also recognized that contractor evaluations are done poorly. The researcher believes the evaluations are done poorly because there is no incentive for the contracting officer to spend a great deal of time on them. Since many of the contractors are dealt with on a repetitive basis, the contracting officer already has thorough knowledge of their performance record and sees no value added in a comprehensive evaluation. Just as contracts are not closed out in a timely manner, if administration is maintained by the procuring activity, evaluations are given very little time because of the urgency of the next procurement.

An additional area contained in this section includes the recency of data evaluated. Recency focuses on how long ago the past performance that is being evaluated took place. In general, the more recent a past contract, the better indicator it is of the expected performance of a contractor on a future contract. Contracts that occurred some time in the past may not be a valid indicator of the expected performance of a contractor right now.

Prior to OFPP Policy Letter 92-5, OFPP issued a draft policy on December 6, 1991 soliciting comments due by January 6, 1992. Agencies responding tended to feel that the retention period for past performance data should be for a period greater than three years, such as six years since contract compliance actions often can take a long time to resolve. Industry on the other hand indicated they do not want ratings held for any longer than three years. This is perhaps the result of the differences in the two environments. In the Government, changes tend to take a longer time to occur, compared to the commercial sector where changes can occur quite rapidly. It makes sense that a firm that may have had a poor rating four years ago does not want that to represent their company today. Changes in personnel, management and the manufacturing process could make it an entirely different organization. [Ref. 25:p. 9]

The researcher believes the ideal retention period is not only divided between Government and industry, but is also

divided among industry. In certain sectors of industry, changes in one commodity may occur quite rapidly as compared to others. For example, the computer industry is changing quite rapidly, whereas the airframe industry is rather stagnant. It follows that the organization to manage a particular commodity is going to change as the production process for that commodity changes. So, to say that three years may be an appropriate retention period for one industry, may not hold true for another. In some cases more than three years may be appropriate, while for others one year may suffice. The PPG properly identifies that the retention period should be determined on a case-by-case basis.

Since recency is discussed under this section, it would also be appropriate to discuss relevancy. Relevancy focuses on whether the past performance data are a solid indicator of what can be expected for future performance. The more similar the product, the more relevant the past performance could be. On the other hand, the more dissimilar a product is, the less likely the risk associated with the expected future performance could be accurately determined. Commercial organizations equate relevancy to the similarity of the processes used to manufacture a product. Although the PPG discusses relevancy, it never recognizes the importance of looking at processes to determine relevancy.

K. USE OF COMMERCIAL REFERENCES

The PPG states that the best practice is for the PRAG to rely on Government information, however it is permissible to use nongovernmental references. There may be cases where the Government has little, if any, performance history on an offeror. In these circumstances, it may be necessary to solicit other commercial organizations for which the offeror has done work as identified in response to Section L of the solicitation. [Ref. 2:p. 8]

The researcher believes there is nothing wrong with using commercial references as long as the data received are objective and can be verified. A push to purchase more commercial type items may increase the reliance on industry as a source of past performance data.

L. COLLECTING INFORMATION

The PPG states that the PRAG gathers information using questionnaires, telephonic inquires, or both. It identifies that questionnaires, although useful, provide incomplete information. The PPG recommends using a questionnaire initially and following up sources with promising information with an interview. [Ref. 2:p. 8]

The PPG discusses, quite thoroughly, how to conduct and document phone interviews and develop questionnaires. Commercial organizations use similar procedures, but often follow-up with on-site visits to make an assessment of a

supplier's expected performance. The Government conducts pre-award surveys, however these are only conducted at facilities of contractors that are likely to receive a contract award. The PPG fails to discuss the benefit of on-site visits as discussed previously. It might be useful to conduct an on-site visit if the Government is unfamiliar with the facilities of a contractor and is unable to make an assessment of performance risk without doing so. Additionally, not mentioned in the PPG, but periodical research (trade journals) may also prove useful to assess the expected performance of an offeror. This would be especially useful if the Government is not familiar with the products manufactured by the offeror. Overall, the PPG does a good job of discussing how to collect data but fails to mention on-site visits and periodical research that may prove to be useful.

M. ASSIGNING PERFORMANCE RISK RATINGS

The PPG states that the PRAG's assessment is usually based upon subjective judgment. It is not a mechanical process. The assessment should include the rationale for the conclusions reached. [Ref. 2:p. 11]

Overall, the PPG discusses how to assign rankings in a satisfactory manner. It does not, however, discuss the use of standards. The researcher believes the use of standards would eliminate some of the subjectivity involved in the PRAG process and would better define rating categories. The Navy

developed criteria for determining the color classification of a contractor based on previous performance. Similar procedures could be included in the PPG to eliminate some of the subjectivity and reduce the likelihood of protests occurring.

For example; a reject rate of 15% or more for two or more rejected lots in the last two years results in a contractor being assigned a "red" rating under the Navy's RYG Program. Similar criterion could be used as a measure of a high performance risk. Although there would be some subjectivity involved in determining the cutoff rates for each risk category, the subjectivity involved, as a whole, would be reduced. The researcher recommends developing rates for different commodities. As identified earlier in an interview with Mr. Summit, what may be an acceptable reject rate for one commodity may not be an acceptable rate for another.

Lastly, an additional issue not discussed by the PRAG is how to assign a rating to a teaming arrangement [Ref. 22]. Oftentimes, teaming arrangements will focus on making up one team's weaknesses by another team's strengths. Should the PRAG evaluate teams as a whole or only partially depending on the expected performance areas of each team member? The researcher believes that under a teaming arrangement, the expected areas of performance for each team should be evaluated since this may have been the primary reason for the arrangement occurring. Evaluating all areas of past

performance for each team places unnecessary emphasis on areas where a team member is not expected to perform. The PRAG's emphasis should be on the areas of expected performance in making an overall risk assessment.

N. THE ASSESSMENT REPORT

The PPG states that the PRAG should provide enough data for the source selection authority to make an informed judgment. In an interview conducted with Mr. Tappel, it was noted that oftentimes the SSA will ask for the entire PRAG assessment, especially to get a better understanding of specific past performance problems [Ref. 22].

The researcher concurs with the PPG in this area. The PRAG conclusions should be supported by facts addressing the areas for the SSA to make an informed decision. The amount of data provided by the PRAG should be commensurate to the number and severity of problems discovered and the impact of that performance on the offeror's ability of meeting contract requirements. Whether the SSA should be provided the entire assessment will predominately depend on the severity of past performance problems and the ability of the PRAG to summarize them in sufficient detail for the SSA to have a full understanding of what had occurred.

O. DISCLOSURE OF PRAG FINDINGS TO OFFERORS

The PPG states that in fairness to the offeror, past performance problems should be addressed during discussions if the offeror had not previously been apprised of these problems and provided an opportunity to respond. This process would validate information gathered during the risk assessment process. [Ref. 2:p. 12]

The researcher believes the PRAG should disclose negative past performance information to the offeror prior to discussions. This affords the offeror an opportunity to rebut data that may prohibit him from being included as part of the competitive range. The only time it should not be disclosed prior to discussions is if the performance data would have no bearing on the offeror being included in the competitive range.

The researcher believes that when disclosing data used by the PRAG, only the factual data used should be discussed. This point is not addressed in the PPG. It is not necessary to divulge how the PRAG came to their conclusions. Offerors should only have the opportunity to respond to the accuracy of the factual data. Although the extent of discussing proposal deficiencies, prior to award, is limited, the researcher believes past performance data evaluated by the PRAG are an exception since they are basically outside the scope of the proposal.

Disclosing PRAG findings supports an argument for an evaluation system, similar to CPARS, that allows the contractor the ability to respond to contract deficiencies. Such a system would prevent an offeror from not having prior knowledge of how well a Government agency may have thought they performed and the subsequent assessment they would likely receive from the PRAG if the evaluation was used in the future. With the Navy's RYG Program, a contractor is fully aware of his color classification.

The PPG also addresses performance problems arising with respect to subcontractors. OFPP Policy Letter 92-5 requires the subcontractor's consent prior to disclosing information to a private party. The prime contractor is considered a private party. The PPG suggests requiring the prime to submit its subcontractor's consent along with the proposal. This would alleviate the barrier to discussing subcontractor information during discussions. [Ref. 2:p. 12]

The researcher believes that if consent is given, once the Government becomes aware of negative past performance data on a subcontractor, the prime should be notified. This offers the prime the opportunity to select another subcontractor allowing enough time for the PRAG to do another assessment without delaying the procurement. A controversial issue arises when the subcontractor has not given consent to the prime and past performance problems are discovered that could possibly prevent the prime from winning the competition. The

researcher believes in this particular case the problem should be brought to the attention of the prime. The problem should not be initially disclosed, rather it should be brought to the attention of the prime that a disclosure statement from the sub-contractor was not included with the proposal and to verify whether this was a mistake or if the sub-contractor is purposely not permitting disclosure. If it was purposeful, the researcher believes that if the Government has superior knowledge pertaining to a sub-contractor, it should be disclosed and a decision left to the prime whether a new sub-contractor should be selected. It may have been more appropriate for Policy Letter 92-5 to have read third party rather than private party to prevent this problem from occurring.

P. TREATMENT OF PAST PERFORMANCE INFORMATION

As stated in the PPG, the information gathered by the PRAG should be treated as sensitive source selection information. An interview was conducted with ATCOM, referencing the disclosure of past performance information. Mr. Tappel noted that it would be appropriate for a buying activity to share the factual data of an offeror to other activities, but not the assessment made by the PRAG [Ref. 22].

The researcher believes the PPG does a very good job in discussing this area. The importance of safeguarding source selection information is paramount to the integrity of the

system. The records maintained by the PRAG are their own assessment and should not be disclosed to other buying activities. The information, if it were disclosed, may not be useful since it is developed around the requirements of the solicitation which will most always be different from one procurement to the next. The sharing of factual data after source selection should be encouraged since it may be useful to the PRAG assessment process at another activity that may have very little performance history on an offeror that it has not dealt with previously.

Q. GUIDE APPENDIXES

The appendixes, in many areas, are an application of the data previously presented in the PPG. An analysis of all appendixes is not necessary as many of them are straightforward or an analysis of the data has been completed in previous sections of this thesis.

1. Appendix A; Sample Section M Solicitation Provision

Appendix A contains a sample Section M Solicitation Provision. Section M identifies all factors and sub-factors that will be considered in awarding the contract. The researcher believes the sample provided is thorough and includes all requirements specified in the FAR [Ref 10:15.605], however section M.4(2)(b) which identifies the areas upon which the Government shall focus its efforts, is unclear. It is difficult to determine if these are all

intended to be sub-factors and if so, their relative importance. The researcher's interpretation of the FAR is that sub-factors, as well as evaluation factors, are to be listed in order of relative importance. Additionally, if a sub-factor is listed, it is expected to be evaluated. The researcher recommends including only the sub-factors that will be evaluated, listed by relative importance.

2. Appendix F and Appendix G; Sample Questions and Ideas

Appendixes F and G are very similar so they will be discussed concurrently. Appendix F lists guidelines for conducting telephone interviews and formulating questionnaires. Appendix G is a sample questionnaire. It may be appropriate to combine the two appendixes to reduce duplication.

Overall, both appendixes, as written, provide excellent guidelines for developing interview questions and questionnaires. It is important however, to recognize that the interviews conducted or questionnaires developed should support the goals of the procurement. Additionally, the depth of these activities should reflect the complexity of the item being purchased and the dollar value of the contract. These two points are not made in the Appendix.

From data gathered through the researcher's interview of commercial organizations and secondary sources, the following questions were developed and could be included in

the PPG as part of what is now Appendix G. These questions are included because they give a strong perspective of what is important to commercial organizations and may be useful to the PRAG process.

- Were there any disputes over the course of the contract? If so, was litigation used as a manner of resolving conflicts?

Stephen Kelman recently stated that the ability of a contractor to solve problems without litigation should be a factor considered in developing a risk assessment. The researcher concurs with Mr. Kelman's assessment and that the only way it will be implemented is through documentation similar to the PPG. Additionally, solving problems through means other than litigation can reduce overhead at a time of a decreasing defense budget.

- How well was the contractor able to integrate his product with the rest of the program?

This question is considered in Boeing's assessment of a supplier. The researcher believes it is important to Government procurement as well. The ability of a contractor to integrate his product with the rest of the program often results in the program staying on schedule.

- Was the documentation required to be delivered with a contractor's product accurate and complete?

The ability of a supplier in meeting a delivery schedule is important to commercial organizations. Equally important is the quality of the paperwork to be delivered with the product. This is especially true in the aircraft industry. Although the PPG recognizes the importance of schedule adherence and administrative matters, it is unclear if it specifically addresses the quality of paperwork to be delivered with a product.

- What feedback did the contractor have concerning any performance evaluations?

The researcher believes it is important to document performance problems either during the contract or immediately upon completion and afford the contractor the ability to provide feedback. Commercial organizations have recognized the importance of evaluations and allowing supplier feedback. Supplier feedback may prove that problems are not that of the supplier, rather are problems on the part of the prime. The feedback provided by contractors during evaluations, particularly in areas where they say they will make improvements, identify areas for the PRAG to focus its efforts. Additionally, if a consensus is not reached during the evaluation process between the contractor and the contracting officer, going back to the evaluation and noting the comments made by the contractor can give the PRAG a better understanding of the actual performance achieved.

- If defective parts were manufactured, where were they identified?

In interviews conducted with commercial organizations, they identified the importance of noting where deficiencies are found. If they are found before leaving the supplier's facilities, it at least shows the system is working. If they are not found until the part is received at the loading dock of the prime, not only are additional costs incurred, but it questions the supplier's systems that are in place.

R. SUMMARY

This chapter analyzed the PPG identifying major strengths and weaknesses. Overall, the PPG is an excellent document. It provides guidance in determining the appropriate composition and structure of the PRAG. It identifies important sub-factors to evaluate in making an assessment of past performance. The PPG discusses the appropriate weight to be placed on past performance. The rating categories depicted in the PPG are consistent with the categories used by the other Services. It discusses what should be included in the solicitation and the importance of the recency of data evaluated. The PPG discusses procedures for conducting and documenting telephone interviews in great detail. Lastly, it identifies the importance of treating PRAG information just as any other source selection material.

To the researcher, there are several weaknesses of the PPG. First, it is narrowly defined. Additionally, it fails to discuss the use of on-site visits and the responsibility of the contracting officer in overseeing PRAG actions. It does not address the use of standards, nor does it sufficiently address how a neutral rating is treated in the overall source selection process. The PPG fails to discuss how to evaluate teaming arrangements. Lastly, the PPG fails to identify looking at the processes used by an offeror in determining the relevancy of past performance data.

The strengths and weaknesses identified in this Chapter will be used in Chapter V. Chapter V contains the researcher's recommendations and conclusions and identifies areas for further research.

V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

This chapter will discuss the conclusions and recommendations resulting from the thesis research. After presenting the conclusions and recommendations, the research questions will be answered. Lastly, recommendations concerning areas for further research will be made.

B. CONCLUSIONS

1. The use of past performance in the source selection process is fundamental in ensuring a successful procurement.

Steven Kelman, OFPP Administrator, has stated that past performance will be one of the two reform issues he will promote [Ref 11: p. 34]. The Army's implementation of the Performance Risk Assessment Group is just one application of past performance that is being seen across the Department of Defense. All commercial organizations interviewed recognized the use of past performance as a critical element in the source selection process. As the industrial base gets smaller, maximizing the use of past performance can help weed out suppliers with a poor performance history. The Defense Personnel Support Center recently implemented efforts to place increased emphasis on past performance. Their default

terminations, by the close of FY93, had dropped nearly 90%.

[Ref 15:p. 12]

2. The emphasis placed on past performance, in both Government and industry, is commensurate with the level of complexity of the item being procured.

In interviews conducted, with both Government and commercial organizations, it was recognized that the role past performance plays is unique to every procurement. For off-the-shelf type items, past performance may have little or no bearing. For more complex procurements, past performance could be critical. The degree of emphasis placed on past performance is commensurate with the complexity of the item procured. The relative importance of past performance should be discussed during the development of the source selection plan.

3. Quality and on-time delivery are the areas of past performance most important to industry.

Every commercial organization interviewed indicated that quality and on-time delivery were the most important areas of past performance. Not only was on-time delivery important, but the quality of the paperwork to be delivered with a product was equally as important. A study of 100 American and British manufacturing firms indicated that quality conformance and delivery reliability were more important than price in evaluating a supplier's performance.

4. The overall utility of the PPG is excellent.

Although the PPG does have some shortfalls, its overall utility is excellent. It provides guidance in determining the appropriate composition and structure of the PRAG. It identifies important sub-factors in making an assessment of past performance that are consistent with factors used by commercial organizations. The PPG discusses how to assign the appropriate weight to be placed on past performance. It is also consistent with the rating categories used by the other Services. The PPG discusses what should be included in the solicitation and the importance of relevancy of data evaluated. Lastly, it discusses procedures, in great detail, for conducting and documenting telephone interviews.

5. There are a number of specific areas in the PPG requiring improvement.

There are several weaknesses to the PPG. First, it is narrowly defined. It fails to discuss the use of on-site visits and the responsibility of the contracting officer in overseeing PRAG actions. The PPG does not address the use of standards, nor does it sufficiently address how a neutral rating is treated in the overall source selection process. It fails to discuss how to evaluate teaming arrangements. Lastly, the PPG fails to identify examination of the processes used by an offeror in determining the relevancy of past performance data.

6. The use of past performance under sealed bidding is restricted to making a responsibility determination.

Current legislation limits the use of past performance in sealed bidding. In interviews, and research conducted, no material became available that permitted the use of past performance in sealed bidding other than in making a responsibility determination.

7. A number of potential problems exist with the use of past performance as an evaluation criterion.

A number of problems can occur with the use of past performance. First, an assessment of past performance does not always indicate the current abilities of a contractor. Additionally, it may not reflect that the contractor's equipment is deteriorating or wearing out. It may not reflect a contractor's current financial status. Also important is to recognize that in today's environment, even though you may have past performance data on a company, it may not be relevant. Lastly, there is the possibility for a greater number of protests, especially if award is not placed with the lowest offeror.

C. RECOMMENDATIONS

1. Incorporate procedures similar to the Navy's Red/Yellow/Green Program into the PPG.

The PPG, in its present form, discusses the use of the PRAG. The use of past performance however, can have much broader applications. The Navy's use of TEAs reflect the actual, expected costs of doing business with a contractor. This is similar to many of the systems used by commercial

organizations in adjusting a contractor's proposal to reflect best value. By adopting a similar system, a procurement would better reflect the actual costs expected to be incurred.

2. Buying organizations should develop standards against which to measure successful and unsuccessful past performance.

The PRAG does not rate an offeror as either a "go" or a "no-go". Rather, they measure the degree of risk based on an offeror's previous performance history. The contracting officer, though, is responsible for making a responsibility determination of an offeror under competitive negotiations and a bidder under sealed bidding procedures. It is imperative that standards be developed by the procuring agency, for making a responsibility determination based on past performance.

3. The Army should develop a supplier evaluation process, similar to that used by commercial organizations.

Every commercial organization interviewed has developed some kind of supplier rating system (SRS). Not only does a SRS serve as a data bank for performance history, but it identifies areas for a supplier to concentrate his efforts. It also serves as a mechanism that forces communication between the buyer and the supplier. OFPP Policy Letter 92-5 requires the use of evaluations on all contracts over \$100,000.

Mr. Tappel noted that contractor evaluations are often poorly done. A greater emphasis must be placed on the

expected benefits of conducting thorough evaluations. The use of contractor evaluations could help increase the level of communication between the Government and the contractor. It is important for the information to be timely. The evaluation period used by commercial organizations in rating suppliers varies. The same would hold true for military organizations.

4. The Army still needs a guide that is not so narrowly defined.

The procedures described in the PPG are designed for large procurements and do not necessarily apply to those procurements that make up a majority of a buying command's contract actions. With the increased emphasis being placed on maximizing the use of past performance in the source selection process, a guide needs to exist that addresses smaller dollar procurements; those between \$100,000 and \$10,000,000.

5. The PPG should emphasize the disclosure of negative past performance findings prior to discussions.

The PRAG should discuss negative past performance findings with the offeror prior to discussions. This affords the offeror an opportunity to rebut data that may prohibit him from being included in the competitive range. The only time it should not be disclosed is when the data have no bearing on the offeror's inclusion in the competitive range.

6. The PPG should include the use of standards in assigning risk categories.

The use of standards would eliminate some of the subjectivity involved in the PRAG process and would better

define rating categories. Although there would be some subjectivity involved in determining the cutoff rates for each risk category, the subjectivity involved, as a whole, would be reduced.

7. The PPG should provide guidance on what to do if negative past performance data are discovered on a subcontractor who has not signed a consent statement for disclosure of findings to the prime.

The PPG, as a result of Policy Letter 92-5, states that negative past performance findings on a subcontractor cannot be disclosed to a private party. The prime contractor is considered to be a private party. The PPG must provide guidance on this issue to prevent the unfair exclusion of the prime from the competitive range.

8. The PPG should provide guidance on how to rate teaming arrangements.

Teaming arrangements often focus on making up one team's weaknesses by another team's strengths. Evaluating all areas of past performance for both team members nullifies what may be the primary reason for the arrangement occurring. On the other hand, ignoring poor performance may not be fair to the other offerors. The PPG should provide guidance on how to rate teaming arrangements.

9. The PPG should address how to conduct scoring when no past performance data exist on an offeror and yet it is a weighted factor.

In the event no past performance data exist on an offeror, a neutral weighting is to be assigned. When a neutral weighting is assigned, how is the offeror's overall evaluation

to be compared to the other offerors for which past performance data exist? In fairness to all offerors, this issue should be addressed and guidance provided on how a winner is to be determined when past performance is used as an evaluation criterion.

10. The PPG should discuss the ability of the PRAG to conduct on-site visits.

The PPG fails to discuss the benefit of on-site visits. It might be useful to conduct an on-site visit if the Government is unfamiliar with the facilities of a contractor and is unable to make an assessment of performance risk without doing so. If on-site visits are conducted, the PPG should provide some guidance on how they should be conducted and the responsibility of the contracting officer in overseeing the PRAG's activities.

11. Appendix A, of the PPG, should note that Section M of the solicitation should disclose the relative weight of the sub-factors used to evaluate past performance.

The FAR requires that the factors to be used in evaluating a proposal are to be listed in the solicitation by the order of relative importance. The same holds true for sub-factors. The PPG lists a number of sub-factors, but it is unclear whether they are listed in order of relative importance and are to be evaluated, or are listed only to give the offeror an idea of the proposed areas to be assessed.

D. ANSWERS TO THE RESEARCH QUESTIONS

1. How can the Army maximize its use of past performance in the source selection process?

The PPG is a start to maximizing the use of past performance. It is the first past performance specific document addressing the issue. It, however, may have little application to procurements between \$100,000 and \$10,000,000. The Army still needs a guide, that is not so narrowly defined, to maximize the use of past performance.

2. What performance measures should be evaluated for source selection?

The two most widely used performance measures for evaluating past performance include quality and the ability of a supplier to meet the required delivery schedule to include the appropriate documentation that is to accompany a product. Additionally, Kelman has recognized that the degree to which a contractor solves problems without litigation should be a factor in rating past performance. Cost control, research and development capabilities, technical capabilities, and a contractor's management capabilities are also important in developing a risk assessment based on past performance.

3. What problems have been encountered with the previous use of past performance for source selection?

In interviews conducted, interviewees rarely noted problems, but recognized the potential for problems. An assessment of past performance does not always indicate the current abilities of a contractor. It might not reflect that

the contractor's equipment is deteriorating or wearing out. Additionally, it may not reflect a contractor's current financial status. It is also important to recognize that in today's changing environment, even though you may have past performance data on a company, it may not be relevant. As a result of downsizing, sell-outs, and other factors affecting organizations, the company the Government had previously done business with may not be the same company other than in name. Lastly, there is the possibility for a greater number of protests, especially if the award is not placed with the lowest offeror.

4. What information is available for use by the Performance Risk Assessment Group?

The information available for use by the PRAG includes data provided by the offeror and data obtained from other sources. Sources include references cited in the offeror's proposal, DLA and AMC, and information contained in the Contractor Information System. Evaluations are required at the completion of all contracts that exceed \$100,000 and are available for performance assessments. The methods used to collect data should be commensurate with the size, content, and complexity of the procurement.

5. What special conditions exist in the source selection process when past performance is used as an evaluation criterion?

The solicitation must specifically state that past performance will be used for all competitively negotiated

procurements that are expected to exceed \$100,000 except where the contracting officer determines it not appropriate. Additional statements must be included in the solicitation as stated in the PPG. With the increased use of past performance and the use of procedures with which offerors may not be familiar, it may be necessary to explain procedures during the pre-solicitation or pre-proposal conference.

6. How can past performance be used under sealed bidding procedures?

Current legislation limits the use of past performance in sealed bidding. Past performance is used in making a responsibility determination. The Navy has circumvented this somewhat with its RYG Program. The RYG Program allows award to be based on the best value to the Navy by including the expected costs of doing business in an offeror's proposal.

7. What modifications are necessary in order to maximize the use of the PPG?

- The PPG should emphasize the disclosure of negative past performance findings prior to discussions.
- The PPG should include the use of standards in assigning risk categories. The standards should be incorporated in the solicitation or in the PPG.
- The PPG should provide guidance on what to do if negative past performance data are discovered on a subcontractor who has not signed a consent statement for disclosure of findings to the prime.
- The PPG should provide guidance on how to rate teaming arrangements.
- The PPG should address how to conduct scoring when no past performance data exist on an offeror and yet it is a weighted factor.

- The PPG should discuss the ability of the PRAG to conduct on-site visits.
- Appendix A should note that Section M of the solicitation should disclose the relative weight of sub-factors used to evaluate past performance.

E. AREAS FOR FURTHER RESEARCH

1. Development of a Contractor Evaluation System (CES)

With the increased use of past performance in the source selection process it is necessary to develop a system that captures a contractor's performance history. A CES would provide a better source of data for use by the PRAG in developing a risk assessment and could be used by the contracting officer in making a responsibility determination.

2. An Evaluation of Legislation that Inhibits the use of Past Performance

With the current shift in maximizing the use of past performance, what legislation limits its use? The contracting officer is given some latitude in using past performance in competitive negotiations, but is limited under sealed bidding to using past performance in making a responsibility determination. What changes can be made to the FAR that would increase flexibility while at the same time not leave DoD open to an increased number of disputes and protests?

3. Contractor Certification and Awards Program

How can DoD develop a contractor certification program that would be widely used and would serve as an incentive to

contractors as something to achieve? What are the drawbacks of the current programs in use: the Air Force's Blue Ribbon Program, and the Army's Contractor Performance Certification Program? In addition to certification programs, is there an awards system that could be developed to recognize world-class suppliers? A certification and award program would support DoD's attempt to become a world-class customer. If neither a certification program or an awards system is appropriate, how or should DoD award contractors for their efforts other than through award and incentive fee contracts?

APPENDIX A: RED/YELLOW/GREEN CRITERIA

The Navy's RYG Program uses the following criteria for color classifications [Ref. 16:p. 13]:

A. RED

- B - Method C, D, and/or E in effect
- C - Latest quality Pre-Award Survey in last 2 years no award
- D - Latest Product-Oriented Survey in last 2 years unacceptable
- E - Latest Quality Systems Review in last 2 years unacceptable
- F - Latest Special Survey in last 2 years unacceptable
- G - Reject rate 15% or more for 2 or more rejected lots in last two years
- H - Latest 2 First Article Tests in last 2 years unsatisfactory
- J - 2 or more Category I QDRs in last 2 years
- K - 6 or more Category II action QDRs in last 2 years
- O - Yellow reject rate. Latest 5 or more lots rejected in last 2 years

B. YELLOW

- C - Latest quality Pre-Award Survey in last 2 years award with findings
- D - Latest Product-Oriented Survey in last 2 years acceptable with corrections
- E - Latest Quality Systems Review in last 2 years acceptable with corrections
- F - Latest Special Survey in last 2 years acceptable with corrections
- G - Reject rate 6-14% for 2 or more rejected lots in last 2 years
- H - Latest First Article Test in last two years unsatisfactory
- J - 1 Category I QDR in last 2 years
- K - 3-5 Category II action QDRs in last 2 years
- O - Green reject rate. Latest 5 or more lots rejected in last 2 years
- P - Red reject rate. Latest 5 or more lots accepted in last 2 years

C. GREEN

- C - Latest quality Pre-Award Survey in last 2 years acceptable
- D - Latest Product Oriented Survey in last 2 years acceptable
- E - Latest Quality Systems Review in last 2 years acceptable
- F - Latest Special Survey in last 2 years acceptable
- G - Reject rate less than 6% for 5 or more lots in last 2 years
- H - Latest two First Article Tests in last 2 years satisfactory
- K - C-2 Category II action QDRs in last 2 years and G applies
- P - Yellow reject rate. Latest 5 or more lots accepted in last 2 years

**Past
Performance
In
Source
Selection**

AN EVALUATION GUIDE



U.S. Army Materiel Command
AMC Pamphlet 715-3
Volume 4

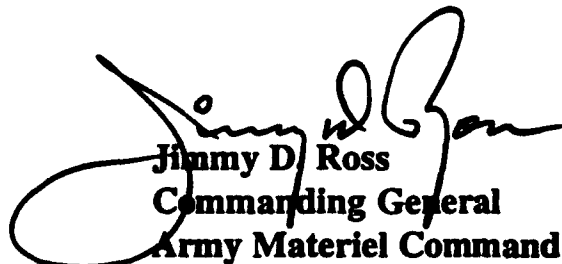
Foreword

For many years, the U.S. Army Materiel Command (AMC) acquisition community has recognized that the quality of a contractor's performance on previous contracts should be an evaluation factor in most of our competitively negotiated acquisitions. To fully realize the advantages of evaluating past performance, it is essential that we consider not only performance information that offerors may include in their proposals, but also information obtained from other sources. Uniform AMC procedures for obtaining and evaluating past performance information have been developed and successfully implemented.

This pamphlet is designed to help you participate in the evaluation of past performance during the source selection process. It updates the guidance developed during an initial pilot program, and contains the most up-to-date procedures for policy implementation. These procedures are based in large part on the "lessons learned" and suggestions submitted by personnel from AMC contracting activities who have been directly responsible for the successful implementation of the program. This pamphlet is an evolutionary document that will change and improve with your practical suggestions and the latest revisions to Department of Defense and Army acquisition policy.

Keep in mind that policy and procedures, no matter how well devised, are no substitute for innovative thinking and good judgment. This pamphlet provides a basic blueprint for conducting past performance evaluations within the traditional source selection process. You should use it, not rigidly, but as basic guidance to help you evaluate past performance and award contracts to those contractors who will deliver quality products and services, on time, and at reasonable prices.

I extend my personal thanks to the members of the Performance Risk Assessment Group (PRAG) Committee who were responsible for developing and implementing the PRAG program. I also extend thanks to the Major Subordinate Command (MSC) representatives who actively participated in the PRAG Workshop and made invaluable contributions to the drafting of this pamphlet.


Jimmy D. Ross
Commanding General
Army Materiel Command

"Contractor past performance, properly documented and considered, is a powerful tool for improving the quality and timeliness of Defense contracts."

— Report of Joint OSD-DOD Component Contractor Performance Review System Task Force

**PROCUREMENT
PAST PERFORMANCE IN SOURCE SELECTION**

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Program Overview

WHAT IS UNIQUE ABOUT THIS PROGRAM?

This pamphlet describes an innovative way to evaluate contractor past performance during the source selection process. AMC contracting activities helped to develop, test and implement this approach which results in smarter procurement decisions and better contracts.

The distinctive feature of this program is that it uses information that is outside of the offerors' proposals to evaluate past performance. No longer must contracting activities rely solely upon the very contractors being evaluated for past performance information. Now contracting officers can use independent sources of information to determine how well those contractors performed in the past. A thorough evaluation of past performance identifies the

relative performance risks associated with competing proposals and thereby serves to ensure that awards are made to good performers rather than to just good proposal writers.

A second unique aspect of this program is that it provides for an independent group of evaluators, called the Performance Risk Assessment Group (PRAG), to evaluate past performance separately from the proposal evaluators. This approach is simple and flexible. The traditional source selection process remains unchanged except that now the Source Selection Authority has additional information from the PRAG that will result in better award decisions.

WHEN DOES THIS PAMPHLET APPLY?

The procedures outlined in this pamphlet apply to competitively negotiated, best value procurements, in which the selection of a source is based on factors other than price alone, including best value competitions based only on price and past performance. In fact, contracting activities can use this process in a variety of procurements including services, supply, and research and development. The procedures would not be appropriate in negotiated procurements when the award is

based solely on low price, and they must not be used to circumvent the Certificate of Competency procedures for small businesses.

While the Office of Federal Procurement Policy (OFPP) Policy Letter 92-5 dated December 30, 1992, requires the evaluation of past performance on all competitively negotiated acquisitions over \$100,000, the procedures outlined in this pamphlet are optional for acquisitions under \$10,000,000.

HOW DOES THIS APPROACH DIFFER FROM PRE-AWARD SURVEYS?

It is important to distinguish past performance evaluations from pre-award surveys. The Defense Logistics Agency conducts pre-award surveys to determine whether a contractor is responsible. Responsibility is a broad concept that addresses whether a contractor has the *capability* to perform a particular contract based upon an analysis of many areas including financial resources, operational controls, technical skills, quality assurance and past performance. These surveys provide a "yes/no," "pass/fail," or "go/no-go" answer to the question, *can* this offeror do the work?

Unlike a pre-award survey, a past

performance evaluation during the source selection process is a very specific endeavor that seeks to identify the *degree of risk* associated with each competing offeror, thereby permitting a comparative assessment of offers. Rather than asking whether an offeror *can* do the work, a past performance evaluation asks, *will* it do that work successfully? In short, it describes the degree of confidence the government has in the offeror's likelihood of success. If properly conducted, the past performance evaluation and the pre-award survey will complement each other and provide a more complete picture of an offeror than either one could by itself.

PRAG Structure, Composition and Evaluation

WHAT IS THE FUNCTION OF THE PRAG?

The PRAG is responsible for conducting the past performance evaluation to determine the degree of risk involved in accepting a contractor's promises of performance. This determination is called performance

risk. The PRAG prepares a report that describes these risk assessments and identifies strong and weak points in each offeror's past performance.

WHAT IS THE PROPER PRAG COMPOSITION AND STRUCTURE?

Each contracting activity determines the appropriate membership and structure of its PRAGs. The quality of the PRAG report depends upon the quality of the PRAG. Ideally, the membership should include individuals who have procurement, cost, and technical expertise as well as PRAG experience. The individuals selected should also be capable of making sound and impartial judgments.

The heart of the PRAG assessment is the information gathering process. Through questionnaires and telephone interviews, the PRAG can obtain a detailed and useful picture of an offeror's past performance. Because of the importance of the information gathering process, it is absolutely critical that PRAG members have the ability to conduct meaningful telephone interviews. They should also be able to assimilate voluminous data, exercise sound judgment, arrive at conclusions that make common sense, and communicate those conclusions effectively both orally and in writing.

The size of the PRAG should reflect the

number of contractors and subcontractors expected to respond to the solicitation as well as the nature and complexity of the solicitation requirements. Experience indicates that a four-person team, including one administrative assistant, is a reasonable size for a solicitation with three to six offerors. The best practice is to have at least two members, one with procurement expertise and one with technical expertise, on each PRAG to allow for dialogue, brainstorming, and in-depth fact finding.

The PRAG structure should enhance its ability to independently evaluate performance risk. The PRAG may operate separately from the Source Selection Evaluation Board (SSEB) and report directly to the Source Selection Advisory Council (SSAC), or it may operate as a separate SSEB subgroup that reports to the SSEB chairperson. A PRAG assessment plan, like the sample at appendix C, should be developed early in the process and made a part of the source selection plan.

WHAT SUBFACTORS SHOULD BE USED?

The contracting activity has wide latitude in selecting evaluation factors and subfactors. The past performance subfactors, if any, need not mirror those of the proposal evaluation. In most cases the PRAG at least considers the offeror's record for on time delivery, good technical quality, and cost control to determine its likelihood of success in performing the solicitation's requirements.

OFPP Policy Letter 92-5 suggests that past performance include the contractor's record of conforming to specifications and to standards of good workmanship; the contractor's record of containing and forecasting costs on any previously performed cost reimbursable contracts; the contractor's adherence to contract schedules, including the administrative aspects of performance; the contractor's history for

reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the contractor's business-like concern for the interests of the customer.

Relevancy should not be described as a subfactor. Relevancy is a threshold question

when considering past performance, not a separate element of past performance. Irrelevant past performance should not form the basis of a performance risk assessment.

HOW MUCH WEIGHT TO GIVE PAST PERFORMANCE

Past performance should be given sufficient evaluation weight to ensure that it is meaningfully considered throughout the source selection process and will be a valid discriminator among the offers received.

The government can evaluate both the offeror's experience and past performance. However, it is improper to exaggerate the

importance of past performance by first evaluating it separately and then again as an aspect of experience. Simply put, neither past performance nor experience should be evaluated twice. It is proper, however, to distinguish company experience from personnel experience and evaluate both.

WHAT ARE THE RATING CATEGORIES?

The PRAG may use the following definitions of performance risk to describe the results of its assessment:

- **High Performance Risk** - Based on the offeror's performance record, significant doubt exists that the offeror will successfully perform the required effort.
- **Moderate Performance Risk** - Based on the offeror's performance record, some doubt exists that the offeror will successfully perform the required effort.
- **Low Performance Risk** - Based on

the offeror's performance record, little doubt exists that the offeror will successfully perform the required effort.

- **Unknown Performance Risk** - No performance record identifiable (This category is optional. See "How to Evaluate No Past Performance," page 6).

Note: Each of the high, moderate, and low risk categories may be further subdivided to enhance the comparative analysis of offerors.

HOW TO EVALUATE NO PAST PERFORMANCE

In most cases the PRAG will find some related past performance information for each contractor and subcontractor, especially if the PRAG applies a broad interpretation of relevancy. Occasionally, however, a PRAG cannot find any relevant information. In those cases, contracting activities should treat an offeror's lack of past performance as an unknown performance risk that is neutral, having no positive or negative evaluative significance. This approach allows the government to evaluate past performance in a manner that is fair to newcomers.

An alternative approach may be used on rare occasions when the government

must have a contractor with a *proven* performance record. In this situation, an offeror with no related past performance may represent a high or moderate performance risk to the contracting activity. This alternative approach should only be used if experience is evaluated by the PRAG, not the SSEB. In this case, the solicitation should clearly state that the PRAG will evaluate experience as well as past performance and that a lack of experience may result in a high or moderate risk rating. Even here the government can ease the impact on newcomers by including language in the solicitation that encourages them to team with proven performers.

WHAT TO INCLUDE IN THE SOLICITATION

The solicitation should clearly state that:

- (1) the government will conduct a performance risk assessment based upon the past performance of the offerors and their proposed subcontractors as it relates to the probability of successful accomplishment of the work required by the solicitation;
- (2) in conducting the performance risk assessment, the government may use data provided by the offeror and data obtained from other sources;
- (3) while the government may elect to consider data obtained from other sources, the burden of providing thorough and complete past performance information rests with the offeror. Appendix A contains a sample Section M provision for use in solicitations.

Section L of the solicitation should instruct offerors to submit information concerning contracts and subcontracts which are in any way similar to the work required by the solicitation, or which offerors consider relevant in demonstrating their ability to perform the proposed effort. Also, it is important that the offeror specifically describe the work that its subcontractors will perform so that the PRAG can conduct a meaningful performance risk assessment on each significant subcontractor. Appendix B contains a sample Section L provision for use in solicitations.

Presolicitation or preproposal conferences should explain the performance risk methodology to ensure that offerors understand the process and its overall significance.

PRAG Operations

How To BEGIN

The PRAG chairperson should hold a meeting of PRAG members as soon as possible prior to the receipt of proposals to outline the PRAG process, obtain signed nondisclosure statements, and distribute the evaluation plan and Request for Proposal (RFP). The requiring activity should brief the PRAG on the technical requirements of the acquisition. The PRAG chair may assign each PRAG member an offeror(s) for whom they will

screen the available data to select the most recent and relevant references for in-depth fact finding. However, some contracting activities prefer to assign the work by functional area rather than by offeror. In either event, the PRAG members will meet after gathering past performance information, to determine the performance risk ratings.

WHAT SOURCES OF DATA ARE AVAILABLE?

AMC established a centralized networking system to provide sources of past performance information to the PRAG. This device is called the Contractor Information System (CIS), and it contains only factual information pertaining to contractors. The CIS is basically an electronic telephone book. It does not contain report cards on contractors. Questions pertaining to the CIS or the PRAG methodology that cannot be answered by the source selection hierarchy at the MSC may be referred to the AMC Deputy Chief of Staff for Acquisition.

Although the PRAG may consider data available from many sources such as DLA and AMC, its main sources of information are often the references cited by offerors in their proposals. Upon receipt of proposals and the AMC report, the PRAG will determine which of the offeror's past contract efforts relate to the solicitation requirements. Although these determinations of relevancy are judgment calls, it is helpful to consider the offeror's explanation of relevancy contained in its proposal.

In some cases, previous contracts as a whole may be similar to the current contract while in others only portions of previous contracts may be relevant.

For example, the government uses Ada software language in many different systems. If a solicitation calls for the development of Ada software for an aircraft system, the contractor might identify a previous effort where it developed Ada software for a satellite terminal. The government may consider that previous effort to be relevant for purposes of assessing the contractor's ability to develop Ada software even though the underlying system is different from the current requirement. Another example is the evaluation of the contractor's management, planning, and scheduling of subcontractors on a past service contract for a current production requirement calling for integration skills.

The PRAG should consider the most recent data available. The best practice is to select efforts that are either still in progress or just completed, and that have

at least 1 year of performance history. The actual cut-off time is left blank in the sample Section L provision in appendix B because it should be determined by the contracting officer on a case-by-case basis. However, most activities have used 3 years with much success.

It is noted that OFPP Policy Letter 92-5 dated December 30, 1992, not only requires the evaluation of past performance during the source selection process,

but also requires contracting activities to prepare an evaluation of contractor performance *at the time the work under the contract is completed* for each contract in excess of \$100,000. These latter evaluations are then placed in the contract file. The PRAGs should use them during the source selection process to help arrive at their own assessment of an offeror's past performance.

CAN THE PRAG USE COMMERCIAL REFERENCES?

The best practice is to rely on government sources of information. However, it is permissible to use nongovernment references when necessary. The PRAG should verify information received from commer-

cial and foreign government sources to ensure accuracy. The use of such references for one offeror does not require the same for all offerors so long as sufficient information is available for them.

HOW TO COLLECT INFORMATION

The PRAG gathers information using questionnaires, telephonic inquiries, or both. Field experience indicates that questionnaires provide useful but incomplete information. A helpful approach is to start by sending a common questionnaire to each reference and to conclude by calling those who respond with the most

promising information. Experience indicates that whether you send questionnaires or not, you will most likely conclude by calling the reference to obtain more detail or clarification.

Samples of questions for telephone interviews and written questions are included in appendixes F and G.

WHERE TO CONDUCT TELEPHONE INTERVIEWS

Following the screening of previous contracts for further in-depth review, each PRAG member should send questionnaires and/or initiate telephone calls to the identified references for those efforts. The interviewing and reporting of results are usually individual efforts conducted by each PRAG member. However, it is sometimes helpful for the PRAG to collect information as a group through the use of conference calls. In any event, the environment in which this work is done significantly impacts both the time required to complete this portion of the process and the quality of the results. These activities are hampered severely if each PRAG member attempts to conduct tele-

phone interviews at their normal work site with all of its attendant interruptions, distractions, and security risks.

If, on the other hand, the PRAG members are able to assemble as a group for telephone interviews, they will be able to provide considerable reinforcement and instant feedback for one another. Each PRAG member should be able to devote their undivided attention to this initial assessment process. Although this approach requires a secure area that is large enough to accommodate all of the PRAG members, the resulting benefits are significant.

HOW TO CONDUCT TELEPHONE INTERVIEWS

The telephone interview process is an art form. Until a smooth conversation pattern is developed, it is an inherently uncomfortable situation for many people. There will be some difficulty learning how to start a telephone interview, keep it moving, and cover all important areas. As the interviewing process continues, the PRAG member usually uncovers special items of interest that he or she will want to pursue through follow up calls.

At least two references should be contacted on each previous contract effort selected for in-depth review. Additional references are often identified during the interviews. Maximum effectiveness occurs when the expertise of the PRAG interviewer

matches that of the reference.

Prior to initiating a telephone interview, a PRAG member should gather all available information on a specific effort and draft a list of questions. There may be a common group of questions for all offerors and/or tailored questions for each offeror, depending upon the circumstances. These questions can either be sent as questionnaires to each reference or be used by the PRAG member during the telephone interview.

At the start of each telephone interview, the PRAG member should explain the purpose of the call and request voluntary assistance from the reference. The PRAG member should explain that he or she will

document the results of the conversation and send a copy of the memorandum to the reference for verification. There is usually no need to divulge the solicitation number, program description, or other identifying information to the reference. If you do so, you need to obtain a nondisclosure statement.

In most instances the reference will willingly provide the information requested. In those rare cases when the reference refuses to participate, the PRAG member should request assistance through the source selection hierarchy at the MSC. Alternatively, the PRAG member may attempt to continue the interview

off-the-record to obtain data that may be validated on-the-record during interviews with other references.

It is important to pursue the underlying facts supporting any conclusionary statements received on a contractor, particularly if they are unusually positive or negative. The PRAG member can determine neither the magnitude of a reported problem nor its possible impact on the current risk assessment without first understanding the details surrounding the problem. It is helpful for the PRAG members to meet periodically to share information and ideas.

HOW TO DOCUMENT TELEPHONE INTERVIEWS

Immediately following a telephone interview, the PRAG member must prepare a narrative summary of the conversation and send it to the reference for verification preferably by certified mail return receipt requested. Datafax transmissions are also acceptable. The following step is *extremely* important. Extra care must be taken to ensure accuracy, clarity, and legibility because these summaries often represent the only written back-up supporting the opinions and conclusions of the final PRAG assessment report.

In order to maintain accurate records and facilitate verification, the telephone record form should include the reference's name, full mailing address and telephone number, the date and time of the call, and the description of the contract effort discussed. A sample telephone record form is attached at appendix D.

The PRAG should send the telephone

memorandum to the reference, stating explicitly that if the reference does not object to its content within the time specified, it will be accepted as correct. The amount of time allowed for a response depends on the circumstances of each procurement. A sample cover letter is attached at appendix E. Note that the reference need not sign a nondisclosure form if the PRAG member withholds the identity of the program and solicitation number.

If a reference indicates that the narrative is incorrect, then a corrected narrative must be sent for verification. Experience indicates that in most instances, changes are minor. If, however, a reference expresses opposition to a record and satisfactory corrections cannot be agreed upon, the PRAG should not rely on the record. Another source may provide the same information, however.

HOW TO ASSIGN PERFORMANCE RISK RATINGS

Once the telephone interviews are completed, the entire PRAG needs to assess all offerors and assign performance risk ratings. The PRAG should note instances of singularly good or poor performance and relate it to the solicitation requirements. Once again, it is helpful for the PRAG to review the statement of work and specifications. If the PRAG identifies past performance problems on a prior contract, it should consider the role government fault played in that result.

The PRAG should not limit its inquiry solely to the proposing entity if other corporate divisions, contractors or subcontractors will perform a critical element of the proposed effort. The performance record of those organizations should be assessed in accordance with the solicitation. Performance risk assessments should consider the number and severity of problems, the *demonstrated* effectiveness of corrective actions taken (not

just planned or promised), and the overall work record.

The PRAG's assessment is usually based upon subjective judgment. It is not a precise or mechanical process. The assessment should include a description of the underlying rationale for the conclusions reached. As long as that rationale is reasonable, it will withstand scrutiny even if other reasonable conclusions exist.

A word of caution is appropriate concerning offeror promises to correct past performance failures, as opposed to actions already taken to correct such failures. A promise to improve does not, by itself, improve past performance. However, *demonstrated* corrective actions reflect a commitment to rectify past performance problems, and therefore, can lower the risk of similar performance failures.

WHAT TO INCLUDE IN THE ASSESSMENT REPORT

The goal is to avoid saying too much or too little in the PRAG report. Although there is no need to restate everything contained in the telephone memoranda, the PRAG must provide the source selection authority with that information needed to make informed judgments. Conclusionary statements must be supported by the underlying factual basis. The best practice is to state the conclusion and provide specific examples that support that conclusion.

To ensure that the risk assessments

provide the necessary background information and are structured consistently, the entire PRAG should review and evaluate the report on each offeror. During this review, the PRAG should correct statements that appear unsupported, inconsistent, or unnecessary.

Occasionally the PRAG will be unable to arrive at a unanimous agreement on a particular risk assessment. If this occurs, the PRAG may include the dissenting opinion as part of the assessment report.

SHOULD THE PRAG BRIEF THE RESULTS?

The PRAG's submission of the assessment report usually completes the major portion of its work. However, because the PRAG concept is relatively new, the PRAG chair should remind the source selection officials of the importance and purpose of the

PRAG to ensure that everyone fully comprehends the significance of the results being briefed. Experience reveals that source selection officials are more apt to rely upon PRAG results if they thoroughly understand the process.

SHOULD PRAG FINDINGS BE DISCLOSED TO OFFERORS?

During discussions with offerors in competitively negotiated procurements, the contracting officer must disclose deficiencies in the offerors' proposals. Arguably, negative past performance information provided by a reference is generally not a "proposal deficiency" because it is based upon information outside of that proposal. Nonetheless, a past performance problem can be a significant shortcoming that must, in fairness, be brought to the attention of the offeror during discussions if the offeror has not previously been apprised of the problem and provided an opportunity to respond.

This practice validates any negative information relied upon during the risk assessment process, and ensures fairness for the competing offerors. The validation process is particularly important when the negative information is provided by only one reference, or when there is any doubt

concerning the accuracy of the information. It is noted, however, that while the government must disclose past performance problems to offerors' it need not disclose the identity of its sources.

A special problem arises with respect to subcontractors. Past performance information pertaining to a subcontractor cannot be disclosed to a private party without the subcontractor's consent (OFPP Policy Letter 92-5, Dec. 30, 1992). Because a prime contractor is a private party, the government needs to obtain the subcontractor's consent before disclosing its past performance information to the prime during negotiations. There are a variety of ways to obtain subcontractor consent. For example, the solicitation could require the prime to submit its subcontractor's consent along with the prime's proposal to the government.

HOW TO TREAT PAST PERFORMANCE INFORMATION

PRAG information concerning the past performance of an offeror or of its proposed subcontractors should be treated as sensitive source selection information. This information sometimes includes information that is proprietary, such as trade secrets and confidential commercial or financial data that would not be released under the Freedom of Information Act. Current laws, regulations, and policies governing storage, access, disclosure, and marking of source selection and proprietary information must be observed

at all times. Questions concerning the procedures for the handling of past performance information should be referred to the contracting officer or legal counsel for resolution.

The PRAG must retain the records of its activity throughout the source selection process. Upon contract award or cancellation of the solicitation, all PRAG records are provided to the contracting officer for retention along with the other source selection documents.

HOW TO IMPROVE THE PRAG METHODOLOGY

The PRAG methodology is a dynamic process that will evolve as our needs change and as our knowledge base expands. It is important for all of us to share information and ideas to ensure that this handbook remains current and useful.

Each MSC should establish a centralized focal point to capture and preserve the lessons learned from its PRAGs. Future AMC workshops will call upon the commands to share their experiences and improve this handbook.

"We owe it to our soldiers to ensure that the past performance of our contractors, good or bad, is meaningfully considered during the source selection process."

*— Commanding General,
U.S. Army Materiel
Command*

Appendix

APPENDIX A

SAMPLE SECTION M SOLICITATION PROVISION

M.1 Evaluation Factors For Award

(a) Selection of an offeror for award will be based on an evaluation of proposals in three factors: Technical, Cost, and Performance Risk. Each factor is separately described below in greater detail. The technical, cost, and performance risk factors will not be numerically scored but rather will be rated in an adjectival and narrative manner. The ultimate objective of the evaluation is to determine which proposal offers the best prospect for optimum attainment of the objectives of this program. Negotiations may be conducted with those offerors determined to be in a competitive range by the contracting officer.

(b) The technical factor is slightly more important than the cost factor which is slightly more important than the performance risk factor. However, to be considered for award an offeror must be determined to be acceptable in the technical factor. A deficiency could constitute a basis for rejection of a proposal. Award will be made to that offeror whose proposal represents the best overall buy for the government. The government reserves the right to award to other than the low offeror.

(c) Offerors are urged to ensure that their proposals are submitted on the most favorable terms in order to reflect their best possible potential, since less than the best potential could result in exclusion of the proposal from further consideration.

Offerors are reminded that unsupported promises to comply with the contractual requirements will not be sufficient. Proposals must not merely parrot back the contractual requirements but rather must provide convincing documentary evidence in support of any conclusionary statements relating to promised performance.

(d) The offeror's proposal is presumed to represent its best efforts to respond to the solicitation. Any inconsistency, whether real or apparent, between promised performance and price should be explained in the proposal. Unexplained inconsistencies resulting from the offeror's lack of understanding of the nature and scope of the work required may be grounds for rejection of the proposal.

M.2 Technical Factor

M.3 Cost Factor

M.4 Performance Risk Factor

(a) During the source selection process, the government will assess the relative risks associated with each offeror and proposal. It is important to note the distinction between proposal risk and performance risk.

(1) *Proposal risks* are those associated with an offeror's proposed approach in meeting the government's requirements. Proposal risk is assessed by the proposal evaluators and is integrated into the rating of each specific evaluation subfactor under the technical and cost factors.

Appendix A

(2) *Performance risks* are those associated with an offeror's likelihood of success in performing the solicitation's requirements as indicated by that offeror's record of past performance. Performance risk is assessed by the PRAG and is assigned a narrative rating in the performance risk factor of the evaluation.

(b) The government will conduct a performance risk assessment based upon the quality of the offeror's past performance as well as that of its proposed subcontractors, as it relates to the probability of successful accomplishment of the required effort. When assessing performance risk, the government will focus its inquiry on the past performance of the offeror and its proposed subcontractors as it relates to all solicitation requirements, such as cost, schedule, and performance, including the contractor's record of conforming to specifications and to standards of good workmanship; the contractor's record of containing and forecasting costs on any previously performed cost reimbursable contracts; the contractor's adherence to contract schedules, including the administrative aspects of performance; the contractor's history for reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the contractor's business-like concern for the interests of its customers.

(c) A significant achievement, problem, or lack of relevant data in any element of the work can become an important consideration in the source selection process. A negative finding under any element may result in an overall high performance risk rating. Therefore, offerors are reminded to include all relevant past efforts, including *demonstrated* corrective actions, in their proposal. The lack of a performance record may result in an unknown performance risk rating. *

(d) Offerors are cautioned that in conducting the performance risk assessment, the government may use data provided by the offeror in its proposal and data obtained from other sources. Since the government may not necessarily interview all of the sources provided by the offerors, it is incumbent upon the offeror to explain the relevance of the data provided. Offerors are reminded that while the government may elect to consider data obtained from other sources, the burden of providing thorough and complete past performance information rests with the offerors.

* *Alternatively, the contracting officer may elect to state: "The lack of a performance record may result in a high performance risk rating." (See page 6, "How to Evaluate No Past Performance.")*

"I believe that the consideration of past performance is helping the Army make better source selection decisions. The risk assessments add another dimension to our ability to identify the hidden risks in an otherwise attractive paper proposal. This has also enhanced the quality of our negotiations."

*— Assistant Secretary of the Army
(Research, Development and Acquisition)*

APPENDIX B

SAMPLE SECTION L SOLICITATION PROVISION

(Caution: Proposals that fail to contain the information requested in this paragraph may be rejected by the government.)

Performance Risk:

The offeror shall submit a description of its previous government contracts (all prime and major subcontracts received, or in performance, during the past ____ years) which are in any way relevant to the effort required by this solicitation. Commercial contracts may be included if necessary. The description shall include the following information in the following format:

- Identify in specific detail for each previous contract listed, why or how you consider that effort relevant or similar to the effort required by this solicitation
- Your (or your subcontractor's) CAGE and DUNNS numbers
- Government or commercial contracting activity, address, and telephone number
- Procuring Contracting Officer's (PCO's) name and telephone number
- Government or commercial contracting activity technical representative, or COR, and telephone number
- Government or commercial contract administration activity, and the name and telephone number of the Administrative Contracting Officer (ACO)
- Contract number
- Contract award date
- Contract type
- Awarded price/cost
- Final, or projected final, price/cost
- Original delivery schedule
- Final or projected final, delivery schedule
- A narrative explanation on each previous contract listed describing the objectives achieved and any cost growth or schedule delays encountered. For any government contracts which did not/do not meet original requirements with regard to either cost, schedule, or technical performance, a brief explanation of the reason(s) for such shortcomings and any demonstrated corrective actions taken to avoid recurrence. The offeror shall also provide a copy of any cure notices or show cause letters received on each previous contract listed and a description of any corrective action by the offeror or proposed subcontractor.
- The offeror shall also provide the above required information for any and all contracts it has had terminated in whole or in part, for default during the past ____ years, to include those currently in the process of such termination as well as those which are *not* similar to the proposed effort. The contractor shall list each time the delivery schedule was revised and provide an explanation of why the revision was necessary.

Appendix B

- New corporate entities may submit data on prior contracts involving its officers and employees. However, in addition to the other requirements in this section, the offeror shall discuss in detail the role performed by such persons in the prior contracts cited.

- Offerors shall provide an outline of how the effort required by the solicitation will be assigned for performance within the contractor's corporate entity and among proposed subcontractors. Information required in the above paragraphs shall be provided for each proposed subcontractor who will perform a significant portion of the effort. "Significant" is defined for these purposes in terms of estimated dollar amount of the subcontract (e.g., \$1,000,000 or more) and/or in terms of criticality of the subcontracted work to the whole. With regard to prime contract assignments that will be performed by you and not a proposed subcontractor, you shall indicate:

- 1) what internal corporate bodies/divisions will accomplish which portions of the effort,
- 2) whether or not those divisions were responsible for performance under the previous contracts cited for the instant proposal, and
- 3) if those divisions have relocated since the accomplishment of previous cited contract efforts, a description of any changes arising from that relocation in terms of key personnel, facilities and equipment.

- Offerors shall include in their proposal the written consent of their proposed significant subcontractors to allow the government to discuss the subcontractor's past performance evaluation with the offeror during negotiations.

Note: Offerors are reminded that both independent data and data provided by offerors in their proposals may be used to evaluate offeror past performance. Since the government may not necessarily interview all of the sources provided by the offerors, it is incumbent upon the offeror to explain the relevance of the data provided. The government does not assume the duty to search for data to cure problems it finds in proposals. The burden of providing thorough and complete past performance information remains with the offerors. Proposals that do not contain the information requested by this paragraph risk rejection or high risk rating by the government.

*"The purpose of PRAG is to evaluate performance risk —
to seek out and reward good performance."*

**— Deputy Commanding General
U.S. Army Materiel Command**

APPENDIX C

SAMPLE PRAG ASSESSMENT PLAN

Definitions

Performance Risks:

Performance risks are those associated with an offeror's likelihood of success in performing the solicitation's requirements as indicated by that offeror's record of past performance. Performance risk is assessed by the Performance Risk Assessment Group (PRAG) and is assigned a narrative rating in the Performance Risk Factor of the evaluation.

Performance Risk Assessment Group:

A PRAG is the source selection entity that assesses performance risk. The PRAG may either be separate from the SSEB and report directly to the SSAC, or operate as a separate group within the SSEB and report through the SSEB chairperson to the SSAC. Each contracting activity determines the appropriate composition and structure of its PRAGs, depending upon the size, nature, and complexity of a particular procurement.

Proposal Risks:

Proposal risks are those associated with an offeror's proposed approach in meeting the government's requirements. Proposal risk is assessed by the proposal evaluators and is integrated into the rating of each specific evaluation subfactor under the technical and cost factors.

The Performance Risk Assessment Group

Responsibilities:

The PRAG shall perform an in-depth review and evaluation of the performance data provided by offerors and obtained from other sources to:

- Assess each offeror's past and current performance as it relates to the solicitation requirements. The PRAG should consider the relevancy, recency and accuracy of the data in arriving at its overall assessment.
- Identify strong and weak points for use during negotiations and/or contract administration.

Performance Risk Assessment:

The performance risk assessment conducted by the PRAG assesses each offeror's record of performance to determine the offeror's likelihood of success in performing the required effort. The PRAG must focus its inquiry on the offeror's record of performance *as it relates to the performance of the solicitation requirements*. Therefore, the PRAG must become thoroughly familiar with the statement of work and specifications. Since the PRAG does not perform the proposal risk assessment (the SSEB's proposal evaluators do that), it does not normally review the offerors proposals.

The PRAG's performance risk assessment is not solely limited to the prime contractor division submitting the proposal when other divisions, corporate entities, critical subcontractors, or teaming contractors perform a critical element of the required effort. In such cases, the PRAG should evaluate the other organization's performance record.

Appendix C

Each performance risk assessment will consider the number and severity of problems, the effectiveness of corrective actions taken, and the overall work record. The assessment of performance risk is not intended to be the product of a mechanical or mathematical analysis of an offeror's performance on a list of contracts, but rather the product of subjective judgment of the PRAG after it considers all available, relevant and recent information. The following definitions of performance risk should be used:

- **High Performance Risk** - Based on the offeror's performance record, significant doubt exists that the offeror will successfully perform the required effort.
- **Moderate Performance Risk** - Based on the offeror's performance record, some doubt exists that the offeror will successfully perform the required effort.
- **Low Performance Risk** - Based on the offeror's performance record, little doubt exists that the offeror will successfully perform the required effort.
- **Unknown Performance Risk** - No performance record identifiable (this category is optional).

Note: Each of the high, moderate, and low risk categories may be further subdivided to enhance the comparative analysis of offerors.

[Insert Section M of the Solicitation here]

Documentation:

- The PRAG's performance risk assessment report will be provided directly to the contracting officer. The results of the PRAG evaluation will also be briefed to the contracting officer by the PRAG chairperson.
- The PRAG's documentation and presentations should address the following:
 - The sources of the performance data
 - The relevancy of the data to the program requirements
 - The currency of the data
 - The performance risk assessment of each offeror
 - The supporting rationale for each performance risk assessment
 - The strong and weak areas of each offeror for use during negotiations and/or contract administration
 - Any other matters deemed relevant

Gathering Performance Data

- The two primary sources of performance data are the contractor references contained in the performance risk volume of the offeror's proposal and the AMC CIS.

Appendix C

- The CIS does not contain a subjective analysis of past performance. Instead, it was designed to provide the PRAG with the key *factual* information needed to commence an investigation into the contractor's performance history. The actual assessment has been reserved for the PRAG members who can best determine which information is most relevant to the acquisition.

- Upon request, the CIS will provide the PRAG with a Contractor Information Report (CIR) on an offeror's contract history within AMC. In reviewing that data report, the PRAG should exercise its own judgment to determine which of the offeror's past efforts are most relevant to the solicitation's requirements. Key points of contact will be identified on the data report for direct telephonic contact.

- The PRAG will obtain whatever information it deems most relevant to the required effort by telephonic and/or written inquiry with the points of contact identified on the CIR. It is important that each discussion be accurately summarized on a PRAG Telephone Interview Report Form for it is this material which will later serve as back-up for the PRAG's performance risk assessment. *A copy of the Telephone Interview Report Form must be promptly sent by certified mail (return receipt requested) or by data fax to the point of contact for verification.* There is usually no need to divulge the solicitation number, or other identifying information to the reference. If you do so, however, you need to obtain a nondisclosure statement.

- The PRAG should also exercise its judgment in determining which, if any, of the contractor supplied references should be called for additional information or verification. Both negative *and* positive information should be corroborated before it is relied upon to any significant degree to ensure accuracy in the final PRAG report and fairness in the overall process. PRAG Telephone Interview Report Forms should be completed for these contacts as well.

- The key to the success of each performance risk assessment is the PRAG's willingness and ability to seek out the most relevant, recent, and accurate information available. Should a PRAG member be unable to obtain information for a reference, he or she may contact the PRAG chairperson who should seek assistance through the source selection hierarchy.

"I was the contracting officer...PRAG was a new initiative at that time. I used it and it worked! The contractor delivered a quality product, on time and within budget. The users were thrilled with it and it also played a major role in Desert Storm."

**— Contracting Officer, U.S. Army Communications-
Electronics Command, Vint Hill Farms Station**

APPENDIX D
SAMPLE FORMAT FOR TELEPHONE INTERVIEW REPORT

PRAG I.D. NUMBER:

CONTRACTOR: (Name & Address)

PERSON CONTACTED: (Name, Address, Phone #)

DATE & TIME OF CONTACT:

I am (*name*). My telephone number is (#). I am calling in reference to contractor (*name*). My questions will pertain to that contractor's record of past and current performance. The information that you provide will be used in the awarding of federal contracts. Therefore it is important that your information be as factual and accurate as possible. A summary of this discussion will be sent to you for your records. If that summary is inaccurate or incomplete in any way, please contact me immediately.

SUMMARY OF DISCUSSION:

Signature of PRAG Member

Telephone #

Reminders for PRAG Member:

- Discuss recency and relevance of information
- Read summary to person contacted
- Send copy to person contacted
- Withhold the identity of your program and solicitation number, if practicable, to avoid having to obtain a non-disclosure statement from the person contacted

APPENDIX E
SAMPLE FORMAT FOR TELEPHONE INTERVIEW REPORT COVER LETTER

[On letterhead]

Address

1. Attached is a summary of your telephone conversation with a member of the Performance Risk Assessment Group on *(date)*.
2. If this office does not hear from you by *(date)* we will assume that the summary of the discussion is correct. If you have any questions or comments you may address them to *(address)*. You may also call me directly at *(phone #)*.
3. We thank you for your time and assistance regarding this effort.

Encl.

Chairman, PRAG

"We need to remind our contractors that today's performance is tomorrow's past performance, and we will hold them accountable for their past performance in our source selections."

*— Command Counsel,
U.S. Army Materiel Command*

APPENDIX F

SAMPLE QUESTIONS AND IDEAS FOR TELEPHONE INTERVIEWS AND QUESTIONNAIRES

- Because the word "PRAG" is new, it may not be recognized by the references. To avoid confusion, simply state that the contractor's past performance is being assessed for a source selection. There is usually no need to divulge the solicitation number, program description, or other identifying information to the reference. If you do so, you need to obtain a nondisclosure statement.
 - Confirm the following data received from the contractor:
 - Contract number and type
 - Award amount and final or projected final amount
 - Award delivery schedule and final or projected final delivery schedule
 - Nature of the effort (i.e., the scope of the effort, the types of tasks involved and the product to be delivered)
 - If the award amount or delivery schedule has changed, find out what caused the change.
 - Discover what role the reference played (e.g., COR, contract specialist, ACO, etc.) and for how long.
 - If a problem is uncovered, discuss what the government and contractor did to resolve it.
 - Ask for a description of the types of personnel (skills and expertise) the contractor used and the overall quality of the contractor's team. Did the company appear to use personnel with the appropriate skills and expertise?
 - Ask how the contractor performed considering quality of performance, responsiveness, schedule, overall management, technical performance, and financial/cost management.
 - Ask whether the contractor was cooperative in negotiations and in resolving issues.
 - Inquire whether there were any particularly significant risks involved in performance of the effort.
 - Ask if the company appeared to apply sufficient resources (personnel and facilities) to the effort.
 - Ask if the company used subcontractors. If so, what was the relationship between the prime and the subcontractors? What was the management role of the prime and how well did it manage the subcontractors? Did the subcontractors perform the bulk of the effort or just add breadth or depth on particular technical areas? If the subcontractors worked on specific technical areas, what were those areas and why were they accomplished by the subcontractors rather than the prime?
 - If a problem is uncovered that the reference is unfamiliar with, ask for another individual who might have the information.
 - Inquire whether there are other past efforts by this firm with the reference's agency.
 - Inquire what the company's strong points are or what the reference liked the most about them.
 - Inquire what the company's weak points are or what the reference liked least about them.
 - Inquire whether the reference has any reservations about recommending a future contract award to this company.
 - Inquire whether the reference knows of anyone else who might have past performance information on the offeror.
-

APPENDIX G

SAMPLE QUESTIONNAIRE

Program Name:

Contract No.:

1. Please specify the contract requirements, purpose, and technology.

2. Did the contractor meet the original equipment performance requirements? Please explain:

3. Did the contractor request specification relief? If so, was there an impact on system performance, cost or delivery?

4. Did the contractor use Ada language? If yes, did the contractor meet the Ada language and software requirements? Please explain:

5. Did the contractor meet test schedule requirements? Please explain:

6. Were any Quality Deficiency Reports (QDR) or corrective action requests submitted to the contractor due to quality deficiencies? Please explain:

7. Opinion: Quality, reliability and maintainability of equipment delivered. Very Good ()
Good () Acceptable () Marginally Acceptable () Please explain:

8. Was the contractor's engineering management effective in controlling costs, schedule and performance requirements? Please explain:

9. Did the contractor successfully manage its subcontractors? Please explain:

10. Was human engineering/manprint a requirement? If so, was it satisfactory? Please explain:

11. Was logistics support satisfactory in meeting contract requirements? Please explain:

Appendix G

12. At completion of the contract, was the contractor committed to customer satisfaction? Please explain:

13. Rate the contractor's overall technical performance: Good () Fair () Poor () Would you recommend this contractor for other contracts? Please explain:

14. Were there any problems with Engineering Change Proposal, Requests for Waivers, or Requests for Deviations? Please explain:

15. Were there any problems with Logistics Support Documentation? Please explain:

16. During technical meetings, was the contractor cooperative and receptive to government concerns affecting production and/or performance requirements? Please explain:

17. With respect to design, engineering capability, and overall technical performance, would you recommend this contractor for similar government contracts? Please explain:

18. How would you rate the contractor's technical performance on this contract? Outstanding () Good () Poor () Please explain:

19. Do you know of anyone else who might have relevant information concerning this contractor's past performance? Please explain:

20. Please make any additional comments you wish here:

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LIST OF REFERENCES

1. Aerospace Industries Association, "AIA Member Company Product Directory," 1993-94: 1-29.
2. Army Material Command Pamphlet 715-3, Past Performance in Source Selection: An Evaluation Guide, AMC, 1993
3. Arnavas, Donald P. and Ruberry, William J., Government Contract Guidebook, Federal Publishing Inc.; Washington, D.C., 1987 w/1992 supplement.
4. Ashabranner, Fred. Chief; Production Equipment Procurement, Lockheed. Telephone Interview. 9 Mar. 1994.
5. Billesbach, T. J., and Croom-Morgan, S., and Harrison, A., "Supplier Performance Measures and Practices in JIT Companies in the US and UK," International Journal of Purchasing and Materials Management Oct. 1991: 26.
6. Brewer, D. J., and Giunipero, L. C., "Performance Based Evaluation Systems Under Total Quality Management," International Journal of Purchasing and Materials Management Jan. 1993: 35.
7. Cibinic, J. Jr., and Nash, R.C., Competitive Negotiation: The Source Selection Process, Washington, D.C.: The George Washington University, 1993.
8. Coleman, Dave. Director of Procurement, McDonnell Douglas. Telephone Interview. 10 Mar. 1994.
9. Corbin, L., "Contractors to be Judges by Record," Government Executive Mar. 1994: 60.
10. Federal Acquisition Regulation, Washington, D.C.: Government Printing Office, 1984.
11. Functional Director for Legislation and Regulations, "Final Edition," Contract Management Feb. 1994: 34.
12. Hill, R.P., and Nydick, R.L., "Using the Analytic Hierarchy Process to Structure The Supplier Selection Procedures," International Journal of Purchasing and Materials Management Apr. 1992: 32, 33.
13. Kaul, Larry. ASO. Phone Conversation. 6 Apr. 1994.

14. Kennedy, Robert J. and Sweeney, Daniel C., "Best Value Procurement", Briefings Paper, Mar. 1993.
15. Kitchenman, John W., "Why Best Value? A Business Perspective," Contract Management Mar. 1994: 11.
16. Naval Material Quality Assessment Office, "Product Deficiency Reporting and Evaluation Program, Contractor Evaluation System, Red/Yellow/Green Program Procedures", May 1992.
17. Northrop Aircraft Company, "Proposal Evaluation and Source Selection Guide." Jun. 1989: 23.
18. Packard Commission Report, A Quest for Excellence, 1986.
19. Roff, Tom. Materials Operations Manager, Boeing. Telephone Interview. 11 Mar. 1994.
20. Schoner, Tom. Small Business Liaison Officer, Northrop. Telephone Interview. 8 Mar. 1994.
21. Summit, John. Manager; Composites, Tooling, Assemblies, and Outside Processing Procurement, Vought Aircraft. Telephone Interview. 9 Mar. 1994.
22. Tappel, Joe. Chief; CH47 and UH60 Production Management, ATCOM. Telephone Interview. 6 Apr. 1994.
23. Thurston, Paul W., Definition of a Management Information System to Support Performance Risk Assessment, AFIT; Wright Patterson AFB, Dayton, OH, Sept. 1989.
24. United States Department of Defense Directive 5000.2 with Change 1, 26 Feb. 1993.
25. United States General Accounting Office, "Programs for Considering Vendor's Past Performance in Awarding Contracts," Jun. 1993: 5.
26. United States Office of Federal Procurement Policy, Policy Letter 92-5, Subject: Past Performance Information, 30 Dec. 1992.
27. Williams, R. H., "Acquisition Reform Guides Pentagon Reorganization," National Defense Sept. 1993: 9.

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