

# NAVAL POSTGRADUATE SCHOOL Monterey, California



## THESIS

**AN ANALYSIS OF THE AWARD FEE PROCESS AT  
NAVAL FACILITIES ENGINEERING COMMAND,  
SOUTHWEST DIVISION**

by

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December 2001

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**AN ANALYSIS OF THE AWARD FEE PROCESS AT NAVAL FACILITIES  
ENGINEERING COMMAND, SOUTHWEST DIVISION**

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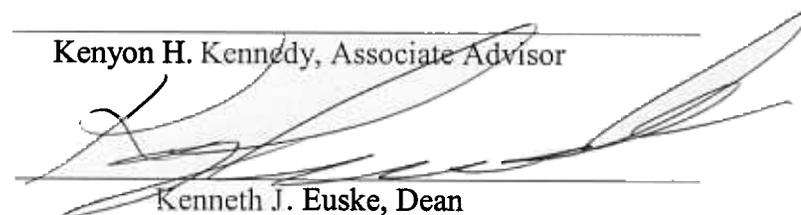
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## **ABSTRACT**

This research evaluates how effectively the award fee process has been in motivating contractor performance within the Southwest Division (SWD) of Naval Facilities Engineering Command (NAVFAC). It analyzes the effectiveness of the current process in motivating contractors to performance excellence, identifies obstacles to effective motivation in the current process, identifies positive aspects of current procedures, as well as provides action recommendations, where warranted, for greater success in effectively motivating contractors to performance excellence through the award fee process.

A survey revealed the current award fee process motivates contractors, but can be improved. There are a number of problems and barriers; however, there are solutions. Periodic reviews of the award fee process are the single, objective solution discovered by the research. A commitment to effective change by management is also important. Lastly, consistency through a streamlined process and specific evaluation criteria are critical.

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# I. INTRODUCTION

## A. BACKGROUND

The Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(A,T&L)) issued a Memorandum, on 27 February 1999, in which he expressed a concern that award fees earned by contractors are not always commensurate with their overall performance. He requested that agencies review their award fee contracts to determine whether award fee periods, evaluation factors, and award fees earned are commensurate with performance and are motivating performance excellence. If not, then consideration should be given to modifying the contract, changing factors, or changing evaluators. On 23 November 1999, the USD(A,T&L) issued a memorandum that forwarded a report by an Integrated Process Team (IPT) that outlined recommendations for structuring future incentives.

The Federal Acquisition Regulation (FAR) was recently amended to delete the statement that award fee determinations are not subject to the disputes clause of the contract and inserted a statement that such determinations and the methodology for determining award fee are unilateral decisions made solely at the discretion of the Government. However, award fees are now subject to the disputes clause, and as a result, there may be a change in the way evaluations are conducted and factors are structured at Southwest Division.

P.L. 106-79 limits to 35% of total cleanup obligations the amount of environmental restoration funding obligated under "indefinite delivery/indefinite quantity" contracts with a total value of \$130 million or higher. Previously, there was no such restriction. This will change the nature of the way Southwest Division manages its Installation Restoration (IR) Program. Much of our work will now likely go to fixed-price contracts. These contracts tend to be more rigid. Cost-Plus-Award-Fee contracts will likely be saved for use on projects that are highly complex and with a high technical risk.

In view of the above, it has become even more critical that we motivate our award fee contractors to performance excellence to receive as much value as possible for the limited funding available.

## **B. RESEARCH OBJECTIVE**

This research will evaluate how effectively the award fee process has been in motivating contractor performance within the Southwest Division (SWD) of Naval Facilities Engineering Command (NAVFAC). The objective is to clearly define the current award fee process and identify how and why it is structured in its current form. The research will analyze the effectiveness of the current process in motivating contractors to performance excellence, identify obstacles to effective motivation in the current process, identify positive aspects of current procedures, as well as provide action recommendations, if warranted, for greater success in effectively motivating contractors to performance excellence through the award fee process.

## **C. RESEARCH QUESTIONS**

1. The Primary Research Question: Is the current award fee process motivating performance excellence on the part of contractors for Southwest Division?
2. The following are the subsidiary research questions:
  - What are award fee contracts, how do they work, and when should they be used?
  - What are some of the difficulties encountered in using award fee contracts?
  - What motivates contractors to perform? How should this information be used in structuring an award fee process?
  - How is the current award fee process at Southwest Division structured, and how did it come to be structured in this manner?
  - What metrics, if any, are being used to measure the effectiveness of the award fee process at Southwest Division? What metrics can and should be used?
  - What recommendations and lessons do current literatures reveal?
  - What are some of the critical barriers to motivating contractor performance, through the award fee process, and how might these barriers be overcome?

- What actions might Southwest Division take to enhance its current award fee process?

#### **D. SCOPE OF THESIS**

The scope will include: (1) Definition and analysis of the award fee process and evaluation factors used on Environmental Cost Reimbursement Contracts at Southwest Division. (2) Analyze and evaluate whether or not the award fee process, as it is currently structured, is motivating performance excellence on the part of Southwest Division contractors. (3) Determine which areas of the current process are successful and which areas are not successful. (4) Assess how the current process and evaluation factors could be improved.

#### **E. ASSUMPTIONS**

This thesis is written with the following assumptions:

- The reader has a need for information on the award fee process—what works, what is problematic and suggestions for its improvement at Southwest Division.
- That the reader is in a position to influence the award fee process or recommend suggestions for its improvement, in order to motivate contractor performance excellence.
- That the reader holds a general knowledge and familiarity with Government contracting, and the award fee process.

#### **F. METHODOLOGY**

The methodology used in this thesis research to answer the primary and subsidiary research questions are the following:

- Conduct thorough Internet research and literature research of pertinent books, and other library information sources about cost reimbursement contracts and award fee incentive contracts.
- Conduct survey interviews with Southwest Division Contracting, Engineering, Field, and Support Team personnel involved in the award fee process in order to assess their views on the strengths and weaknesses of the current process and to obtain their conclusions and suggestions for improving the current process. These surveys will be performed via e-mail, with follow up phone calls, through several Southwest Division locations in San Diego in order to obtain the widest practical range of useful information.

- Examine current policies, procedures, regulations, and techniques for implementing the award fee process within the Southwest Division footprint.

## **G. ORGANIZATION OF THESIS**

This thesis contains six chapters. Chapter I is the introduction and provides the thesis background, research objective, primary and subsidiary research questions, scope, assumptions, methodology and how the thesis will be organized. This chapter establishes a framework for the reader. Chapter II provides a literature review in order that the reader becomes aware of contemporary research and of what others have done in implementing and analyzing the award fee process. Chapter III familiarizes the reader with how the award fee process is structured at Southwest Division, how it came to be structured in that manner, and compares its structure to those of some other organizations and against analysis research prepared by the Contractor Incentives Integrated Process Team. Chapter IV will describe the data and methodology. Issues such as defining award fee contracts, procedures and evaluation factors, and how the same are implemented at Southwest Division will be discussed in depth. The perception of the award fee process and how well it works based on the surveys of Southwest Division personnel will be presented. Chapter V will provide a data analysis, which will discuss barriers to motivating performance excellence, present alternative solutions and their associated cost, benefit and feasibility considerations. Chapter VI will provide the researcher's recommendations, conclusions and answers to the primary and subsidiary research questions. The researcher will provide specific recommendations as to whether Southwest Division should continue the award fee process in its current form or if it should consider implementing process improvements, and areas for further research are then identified and discussed.

## **II. LITERATURE REVIEW**

### **A. BACKGROUND**

It is increasingly critical that we motivate environmental Contractors to performance excellence, in the current environment of change. Budgets continue to decline and customers seek services elsewhere. As noted in Chapter I, recent legislation restricts the use of large cost-plus-award-fee (CPAF) contracts. We can no longer afford to spend huge sums on CPAF contracts, while the work proceeds slowly. It is imperative that we receive as much as we can from each dollar spent on our Comprehensive Long-term Environmental Action Navy (CLEAN) and Remedial Action Contract (RAC) contracts. In other words, we need to receive the biggest bang for the buck, both for our customers and the taxpayer. To do this we must become flexible, and be able to act with agility to leverage our capabilities with respect to changing our award fee structure in order to incentivize contractors to performance excellence.

Several organizations have recently studied their award fee process, identified some problem areas, and have made recommendations for improvement to their award fee contracts as a result. These organizations note that a study of the process should begin with knowing which type of contract to use.

The Federal Acquisition Regulation (FAR) defines cost-plus-award-fee contracts as a cost-reimbursement contract that provides for a fee consisting of (a) a base amount, which may be zero, fixed at inception of the contract and (b) an award amount, based upon a judgmental evaluation by the Government, sufficient to provide motivation for excellence in contract performance. (FAR 16.305)

FAR 16.405-2 states that CPAF contracts are suitable for use when it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance, or schedule; the likelihood of meeting objectives is enhanced by a contract that motivates exceptional performance and allows the Government flexibility in evaluating performance; and the additional administrative effort and cost is outweighed by the benefits to be derived.

The various types of contracts defined by the FAR can be described in terms of the associated cost risk to the contractor. Figure 1 below shows these contracts graphically moving from the least risk to the contractor on the left and the most risk to the contractor on the right. If the cost risk to the contractor is small, then it is greater to the Government. The contracts types include cost-no-fee (CNF) and cost-plus-fixed-fee (CPFF) where the Government assumes all cost risk, cost-plus-award-fee (CPAF), cost-plus-incentive-fee (CPIF), fixed-price-incentive-fee (FPI), fixed-price-award-fee (FPAF), and firm-fixed-price (FFP), where the contractor assumes all cost risk.



Figure 1. Contract Risk Continuum. Source: NASA PBC Award Fee Contracting Guide, June 2001.

Cibinic and Nash note that the major advantage of using CPAF contracts is improved communication between parties. This is due to the regular detailed evaluations, which point out deficiencies and weaknesses in addition to strengths. Cibinic and Nash also note that contractors find CPAF contracts advantageous because they usually yield higher fees than cost-plus-fixed-fee contracts. [Ref: 2]

A major disadvantage of CPAF contracts is the substantial increase in administrative costs due to the continuous evaluation process and the increased paperwork involved. At the same time, this increased paperwork leads to the increased communication. Therefore, this type of contract should be used in situations where the size and importance of the work justify the increased use of resources.

Under a CPAF contract, contractor performance is evaluated on a regular basis. The contractor may earn all or a portion of an available award fee pool, based on a subjective assessment by the Government. The purpose is to motivate the contractor to attain, or exceed performance objectives.

The FAR distinguishes award fee contracts from other incentive contracts because of the qualitative nature of the award fee criteria. Because the contractor is evaluated on

a regular basis, there is much more of an administrative burden for the Government, however, if the contractor is being motivated properly, the benefits outweigh the additional duties.

A CPAF contract provides a plan with stated criteria on which the contractor's performance will be evaluated. The plan provides for an award fee pool as a percentage of allowable *estimated* costs. The contractor may earn anywhere from a minimum percentage, which may be 0%, to the maximum amount of the pool, which is set by the agency and is generally 10%.

The plan also outlines how often the contractor's performance will be evaluated. The evaluation, award fee determination, and award fee plan are unilateral decisions of the Government. The Government may change the plan and the criteria, however, must notify the contractor.

Contracts must be designed to support the award fee structure and process. Lack of a well-defined structure will most likely cause conflicts that could undermine cooperation, weaken project commitment, and damage open communications. Therefore, the award fee plan should emphasize both accomplishments and weaknesses. Additionally, a trained staff is necessary to insure that evaluations are properly performed and that the process is functioning as intended.

## **B. RECENT STUDIES**

As noted earlier, a number of organizations have studied their award fee process. One of those is the National Aeronautics and Space Administration (NASA). As a variation on incentive fee arrangements, NASA developed award fee contracts in the 1960s. The CPAF contract is now the most commonly used contract at NASA. [Ref: 16]. In the early 1990's, a complete review of CPAF contracting at NASA was conducted. As a result of that study, changes were made in the requirements for use of, and in the structure of, CPAF contracts. The Agency's regulatory award fee policy can be found in the NASA FAR Supplement at 1816.405-2.

In late 1999 and early 2000, an Agency-wide Assessment of NASA's Performance Based Contracting Implementation was conducted. Included in the Assessment Team's report were recommendations concerning award fee contracts. The observations and recommendations of the team are summarized below. [Ref: 16]

The observations include:

- NASA is reluctant to make a connection between objective performance standards and objective performance. Objective performance standards have been incorporated into a number of NASA Award Fee contracts, but the contractor's performance against those objective standards has been subjectively assessed in the award fee process. If the standards are not exactly right, NASA might be locked into them for the life of the contract.
- Award Fee Plans allow for close control by NASA, through subjective evaluation criteria. These criteria include responsiveness to NASA directions, contractor's workforce utilization, and contractor's resource management. Subjective evaluations allow the "Level of Effort" mentality to continue and interfere with shifting performance risk to the contractor, since the contractor frequently waits for NASA direction in performing the contract.
- "Letters of Emphasis" are widely used throughout NASA. A letter is sent to the contractor prior to the start of the award fee period. However, the letters usually does not change the subjectiveness of the evaluation plan, but only update the current areas of interest or emphasis. These letters could be used to promote Performance Based Contracting. The letters would allow the projects to commit to an objective assessment for six months at a time on projects that are too risky to commit permanently. Numerous contracts were characterized as incentive fee or fixed fee, but in reality used subjective assessment in determining fee earned. In effect, these contracts should be characterized as award fee. The team concluded that the reason for these mischaracterizations was to avoid the burdensome and time-consuming aspects of administering award fee contracts.
- Contractors noted that award fees were assessed with excessive subjectivity. They expressed concern that they were being evaluated on what occurred during the last week of an award fee period, rather than on the entire period. Some contractors stated that even though all performance standards had been satisfied, they received a disappointing grade in the award fee process. The contractor community almost unanimously agreed that there is a need for increasing the level of objectivity in the award fee process. Some NASA centers made excellent use of "hybrid" contracts. The contracts were structured to have work performed under various arrangements, such as award fee, performance fee, and cost incentive fees, depending on the risk involved in the work.

The recommendations include:

- The Office of Procurement should revise the NASA FAR Supplement to address considerations for determining if an award fee (subjective) or a performance fee (objective) is appropriate. Consideration of risk assessment results and NASA's confidence level in the performance standards should also be included.
- Issue Performance Based Contracting Award Fee guidance or policy emphasizing a preference for using outcome or output AF evaluation factors instead of management process factors.
- Establish policy or guidance on the use of Letters of Emphasis.
- Review the award fee process for streamlining, especially for lower dollar value contracts or for less complex fee structures.
- Review the potential for issuing guidance for promoting the effective use of hybrid contracts and the need for awareness training.

Another organization that performed a study of its cost reimbursement contracts is the Department of Energy (DOE). DOE published the results as a Draft Staff Paper and posted it on the Internet in December 1995. A Contract Reform Team completed the study. The focus of the paper is on those elements relating to the management of environment, safety, and health (ES&H). The team noted the following weaknesses, remedies, and observations. [Ref: 6]

- Cost-reimbursement contracts included various routine functions that could more effectively be obtained fixed price. DOE was paying more for these routine, repetitive services or operations than necessary. Contractors had little incentive to seek out least cost sources.
- Broad and general statements of work that lacked any performance criteria or measures that would allow the DOE to evaluate the contractor's performance effectively and determine how much to award in fees. The fee determination process actually consisted of two processes. First, the costs incurred in the general management and operations of a facility were identified by the contractor, reviewed by the DOE, and, with few exceptions, were reimbursed. This was often called the base fee determination, and typically covered 80 to 90% of the contract costs. Second, the contractor's performance in a series of "performance evaluation areas" was evaluated (such as general management, facility operations, ES&H, etc.), a determination of possible award fee was developed by a Performance Evaluation Review Board, and then a final

award fee determination was made by a Contracting Officer. The team noted that the primary faults with this process were (1) The large base fees, and (2) the use of weighted, post-performance evaluation criteria that were often vague and subjective. Even if a contractor was rated poor in one area (such as ES&H) it could easily be outweighed by good performance in one or more other areas, or by the subjective evaluation process. There was limited accountability for performance and few objective measures to evaluate and reward contractors according to their performance. This situation was often aggravated by the vague, general contract scope of work. In the contract SOW, ES&H objectives were often vague and unclear regarding DOE expectations.

At the time of the Draft Paper, DOE developed the Necessary and Sufficient process to define the specific standards that apply to the ES&H operation of a facility. These can be boiled down into a document called a Standards/Requirements Identification Document (S/RID), which would be incorporated into the contract, thus clearly spelling out for the contractor the expected criteria, and performance can be judged based on performance of these expectations. Further efforts are aimed at developing clearly stated, results oriented performance criteria and measures.

The Reform Team also noted inappropriate cost-reimbursement policies and weak incentives for performance. DOE reimbursed the contractor for practically all costs incurred. Costs were disallowed only if the contractor demonstrated "...willful misconduct or lack of good faith."

The Reform Team stated that levels of contract funding were unrelated to contractor performance; instead the funding of the contract was related to the size of total operations and available budgets. Incentives were not structured to encourage superior performance and cost-effectiveness, or to encourage the contractor to assume more of the financial risk.

The Contract Reform Team recommended:

- Technical performance, delivery/schedule, and cost baselines in which the contractor would receive a graduated incentive based on performance which met, failed to meet, or exceeded these baselines;
- Future work and budget be established for a contractor based on a consideration of past performance (thus more closely tying the ES&H budget planning and program management);

- An element of the award fee process, which would consider the performance of a contractor, compared to similar contractors performing similar work;
- A Laboratory Directed Research & Development (LDRD) allocation as a means to reward laboratory performance;
- Performance based compensation for senior profit and nonprofit contractor personnel;
- Cost reduction/cost avoidance sharing incentives in which the contractor to share in any real savings realized;
- Provisions for a multiple fee structure -- fixed fee, award fee, etc. -- within the same contract. [Ref: 6]

Additionally, the Contract Reform Team recommended a change in DOE policy that would allow only one five year extension in any contract, based on performance. It also recommended a revised award fee structure to allow contract costs to be linked to the performance criteria and measures. These changes, together with the revisions which allow sharing of cost savings/cost avoidances, which would encourage the contractor to accept a larger proportion of the financial risk.

As noted in Chapter I, the Under Secretary of Defense (Acquisition, Technology, and Logistics) was concerned that contractors do not have incentives that focus on the outcomes the Government desires. As a result, he appointed an Integrated Product Team (IPT) to address the issue. The Contractor Incentives IPT prepared a report with recommendations. Their recommendations are summarized below. [Ref: 14]

- Contract incentives should be flexible and structured on a case-by-case basis.
- Award fee contracts should provide short evaluation periods with a limited number of evaluation criteria.
- Effective motivators were found to include allowances for special rewards for achievement of superior performance.
- An incentive fee arrangement with multiple incentives may be used when contract performance is measurable in objective terms. Regardless of contract type, earned fee should be commensurate to performance, and consistently applied among the varying arrangements.
- The correlation of award fee payments and performance evaluations would be enhanced by using an award fee evaluation that roughly

corresponds to achievements addressed in the performance evaluation, and by using consistent definitions for evaluation terms.

- Obtain support from the Comptroller early where the award fee plan contemplates retention of dollars in an award fee pool for long periods of time.

As can be seen from the IPT'S first recommendation above, incentives should be flexible and structured on a case-by-case basis. This report will define where the Southwest Division award fee procedures fit in the spectrum of cost-plus-award-fee contracts.

Southwest Division Environmental CPAF contracts are written with broad performance based Statements of Work (SOW), as are NASA and DOE contracts. The uncertain nature of environmental studies and cleanups requires such. The award fee plans are structured to measure cost, technical, and schedule parameters. As noted above, other agencies have had difficulties in linking broad performance based SOWs to precise evaluation criteria, with objectivity in mind. The Southwest Division contracts appear to have a similar problem; however, due to the uniqueness of the work, there is no "one size fits all" solution that will apply.

Improved award fee evaluation factors and procedures alone may not fully improve the effectiveness of Southwest Division's environmental CPAF contracts. The entire acquisition process plays a role in the success of these procedures. Additionally, effective contract and program management are essential. This analysis is but one element aimed at diagnosing the award fee process and in improving performance on the part of contractors.

### III. COST PLUS AWARD FEE AT SOUTHWEST DIVISION

#### A. AWARD FEE CONTRACTS

##### 1. Process

To fully grasp the consequences of structuring an award fee process, it is first necessary to give an overview of what an award fee process should entail. This information is derived from a variety of sources.

FAR 16.405-2 Cost-Plus-Award-Fee Contracts, summarizes CPAF contracts as follows:

(a) *Description.* A cost-plus-award-fee contract is a cost-reimbursement contract that provides for a fee consisting of

(1) A base amount fixed at inception of the contract and

(2) An award amount that the contractor may earn in whole or in part during performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and cost-effective management. The amount of the award fee to be paid is determined by the Government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract. This determination and the methodology for determining the award fee are unilateral decisions made solely at the discretion of the Government.

(b) *Application.*

(1) The cost-plus-award-fee contract is suitable for use when --

(i) The work to be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance, or schedule;

(ii) The likelihood of meeting acquisition objectives will be enhanced by using a contract that effectively motivates the contractor toward exceptional performance and provides the Government with the flexibility to evaluate both actual performance and the conditions under which it was achieved; and

(iii) Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits.

(2) The number of evaluation criteria and the requirements they represent will differ widely among contracts. The criteria and rating plan should motivate the contractor to improve performance in the areas rated,

but not at the expense of at least minimum acceptable performance in all other areas.

(3) Cost-plus-award-fee contracts shall provide for evaluation at stated intervals during performance, so that the contractor will periodically be informed of the quality of its performance and the areas in which improvement is expected. Partial payment of fee shall generally correspond to the evaluation periods. This makes effective the incentive which the award fee can create by inducing the contractor to improve poor performance or to continue good performance.

(c) *Limitations.* No cost-plus-award-fee contract shall be awarded unless --

(1) All of the limitations in 16.301-3 are complied with; and

(2) The contract amount, performance period, and expected benefits are sufficient to warrant the additional administrative effort and cost involved. [Ref: 10]

Cibinic and Nash note the elements of a CPAF contract are Estimated Cost, Base Fee, Maximum Fee, and Award Fee periods. [Ref: 2]. The award fee evaluation of each CPAF contract is subjective, however the process is methodical. The award fee plan spells out the areas to be evaluated, the type of rating system, and how the ratings are translated into award fees.

Determining the award fee amount begins with the preparation of an evaluation by personnel overseeing, or who are familiar with, the contractor's performance. These personnel should be the most knowledgeable of the strengths and weaknesses evidenced by the contractor's performance for the period and the project. The evaluation is then submitted to a board of personnel of a higher level.

The Board reviews each of the evaluations, determines if each is a fair view of the contractor's performance, and makes a recommendation on the overall ratings of the contractor for each evaluation. The Board may also consider any self-evaluations that the contractor may wish to submit.

The Fee Determining Official (FDO), who is at an even higher level than the Board, then determines the fee amount. Once the determination is made, the amounts and ratings are disclosed to the contractor. The contractor may ask for a debrief on any or all of the evaluations.

## **2. Evaluation Factors**

The project team that prepares the evaluation to be submitted to the Board must consider the factors determined for the contract. The project team provides adjectival ratings for each of the evaluation areas with sufficient narrative for review by the Board and the FDO.

Commonly used evaluation factors include technical, management, and cost control. Technical factors include the ability to satisfactorily meet the requirements of the project, it's milestones, and delivery dates.

Management factors include control of the project, compliance with contract provisions, and control of subcontractors. Again, ability to adhere to schedule may be included.

Cost control factors include accuracy of budget forecasts, cost savings, and control of overhead. Control of subcontractor costs, and performance of lease versus buy analysis, and competition effectiveness may be considered.

Some contracts show what the award fee criteria will be in the contract award. Others issue the criteria to the contractor after award and may change the criteria from time to time, with notice to the contractor.

Once the Board has reviewed the evaluation and made a numerical recommendation to the FDO, the adjectival rating must be translated into an award fee amount. The rating system used is up to the discretion of the agency. For example, the Project Team may evaluate a contractor's performance as Superior, which translates to a point rating range of 96-100. The Board then says makes a recommendation of 96%, which may translate to 100% of the award fee available for the period. Another agency might translate the 96% rating to only 90% of the award fee available in an attempt to motivate the most from the contractor.

### **B. SOUTHWEST DIVISION AWARD FEE**

#### **1. Process**

Guidance for current award fee procedures at Southwest Division comes from various sources. The most relevant guidance comes from two Naval Facilities

Engineering Command guidebooks. The first of these guidebooks is the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Manual. The second is the Remedial Action Contract (RAC) Manual.

The CLEAN and RAC Manuals were developed as handbooks that formalize the concepts, policies, and procedures to be used by personnel involved with preparing, administering, and managing the two major types of environmental cost reimbursement contracts used by NAVFAC.

The Navy participates in the Department of Defense (DOD) Environmental Restoration Program (DERP). This program covers the investigations and cleanups of military sites.

NAVFAC serves as the technical expert for the Navy. For NAVFAC, CLEAN contracts provide investigations, studies, and identification of cleanup alternatives. RAC contracts provide the actual cleanup of sites.

These investigations and cleanups contain many unknowns and cannot be fixed priced. Cost-plus-award-fee contracts have been the preferred contractual vehicle, because there are so many unforeseen conditions. The award fee process described in the CLEAN and RAC Manuals are similar, with important differences due to the nature of the work. That is studying and producing reports versus, remediating or cleaning up a site.

The award fee, as noted above, is payable at four to six month intervals, which is established and outlined as the Award Fee Plan in the contract at the time of award. This assumes a calendar basis rather than a milestone basis, as noted in Cibinic and Nash. [Ref: 2] The purpose of the award fee is to incentivize contractors to performance excellence.

Each project, as awarded by a Contract Task Order (CTO), has an award fee pool based on the negotiated amount. This pool may be a maximum of 10% of the negotiated cost, excluding travel. The contractor may earn a minimum up to a maximum. The minimum is 0% of this pool, while the maximum is the total available award fee pool.

The Navy Project Team for the CTO prepares a quarterly performance evaluation of the contractor's work for the previous three months. This serves as notice to the contractor of how well it is performing.

The Navy team prepares an award fee evaluation bi-annually that covers the previous six months. It consists of written comments on three elements. The evaluation notes the percentage of work completed. This forms the basis for the amount of the CTO award fee pool available for the instant period.

On the CLEAN contracts, Element A is for Technical Services and Products. Element B is for Task and Program Management Support. Element C is for Cost Control.

Under the RAC contracts, Element A is Technical Services and Quality Management. Element B is Effective Cost and Schedule Management. Element C is Professional Project Management Relationships and Customer Satisfaction.

Each of these broad categories is subdivided into several subcategories that serve as the evaluation criteria. The Navy team comments on areas of accomplishment and superior performance, and on areas needing improvement.

Each of the subcategories, categories and the overall CTO performance for the period is given a numerical and adjectival rating. The ratings available consist of four numerical levels that are levels 1 through 4. Level 1 is the highest, with level 4 being the lowest. Within each level, there are three adjectival sublevels; they are high, medium, and low.

As an example, major category Technical Services and Products may be rated a Level 1 High, yet the overall CTO evaluation may be rated as Level 2 High, depending on how all the other categories and subcategories are rated. The award fee evaluation is submitted to the Contracting Officer's Representative (COR), after it is reviewed and agreed upon by all members of the Project team. The members include the Remedial Project Manager (RPM) or Project Leader, the Contract Specialist (CS), the Navy Technical Representative (NTR), the Remedial Technical Manager (RTM), and the Business Line Team Leader (BLTL).

The COR consolidates all the CTO evaluations and submits them to an Award Fee Evaluation Board. The COR and the Administrative Contracting Officer (ACO), along with any input provided by project teams, evaluates the contractor on its Program Management Office (PMO) performance for the period for each CTO. 20% of the available award fee for a period for each CTO is set aside for the PMO evaluation. This evaluation is also submitted to the board.

The Award Fee Evaluation Board considers all the evaluations and their ratings, any self-evaluation provided by the contractor, and obtains any further information necessary to make a recommended rating and award fee amount to the Fee Determining Official (FDO). A recommendation is made for each CTO based on the Project team rating, its corresponding PMO rating, and an overall combined rating based on these two.

The contractor can earn 90% to 100% of the available award fee pool for a period for achieving a level one rating. Level two ranges from 61% to 89%. Level three ranges from 30% to 60%. Level four is 0%.

The Fee Determining Officials for NAVFAC are the Commanders of each Engineering Field Division (EFD) or Activity (EFA). The FDO makes the final award fee determination, and a letter is issued informing the contractor.

The ACO and/or the Project team will discuss the results with the contractor and note areas needing improvement and make recommendations on how improvement can be achieved. The contractor may request debrief for a particular CTO or CTO'S if the ACO or Project team have not covered them already.

The CS prepares a modification to deduct the unearned fee for the period, since the fee is not transferable to another period and is permanently lost.

The award fee evaluation process is summarized in Figure 2 below.

Award Fee Evaluation Process	
Performance Monitors	Prepare Evaluations
Performance Evaluation Board	Reviews Evaluations; recommends score
Fee Determining Official	Determines final award fee to contractor

Figure 2. Award Fee Evaluation Process. Source: Researcher.

## 2. Evaluation Factors

The evaluation factors, as noted above, are derived from the three major categories. They differ slightly between the CLEAN and RAC contracts.

Listed below are the Elements and their subcategories for CLEAN contracts at Southwest Division. The Navy Project team notes any significant accomplishments and any areas needing improvement for each of the elements and their evaluation factors on both a quarterly basis for progress review and bi-annually for award fee evaluation purposes.

### Element A. Technical Services

A.1 Technical competence and innovation

A.2 Clarity, thoroughness, and technical quality of deliverables and documentation

A.3 Responsiveness to Government comments on deliverables

A.4 Responsiveness to Government comments on fieldwork

**Level 1:** Thorough technical analysis and solutions. Deliverables with minor corrections. Achieves continuous improvement. Promotes and maintains teambuilding.

**Level 2:** Reasonable quality and effective management. Deliverables with some correctable weaknesses in products and services. Strives to make continuous improvements. Effective relations.

**Level 3:** Quality only acceptable with Government input. No continuous improvement efforts visible. Some deficiencies in products and services, which require Government input to correct. Adequate relations.

**Level 4:** Technical analysis does not support solutions proposed. Deficiencies so pervasive as to require substantial rework. Ineffective relations.

## **Element B. Task and Program Management Support**

B.1 Effective planning, scheduling, and reporting

B.2 Suitability of staffing and resources for work to be performed

B.3 Effective coordination of subcontractors and consultants

B.4 Responsiveness

**Level 1:** Thorough management analysis and solutions. Effective schedule control. Highly effective management of the subcontracted effort. Achieves continuous improvement. Promotes and maintains teambuilding.

**Level 2:** Reasonable technical quality and effective management. Schedule controls (some slippage). Strives to make continuous improvement. Effective relations.

**Level 3:** Changes in delivery schedule, which do not cause significant problems. Adequate management of the subcontracted effort with some inefficiencies. No continuous improvement efforts visible. Adequate relations.

**Level 4:** Failure to meet delivery schedule without notice or plan for correction. Failure to monitor subcontractors. Deficiencies so pervasive as to require substantial rework. Ineffective relations.

## **Element C. Cost Control**

C.1 Effective management of budget, accounting, and reporting system

C.2 Minimize costs including subcontractor and consultant costs

C.3 Accuracy and timeliness of current and projected cost reporting

**Level 1:** Control of costs yields some savings. Achieves continuous improvement.

**Level 2:** Effective cost control. Strives to make continuous improvement.

**Level 3:** Reasonable cost control with some increase in cost. No continuous improvement efforts visible.

**Level 4:** Significant cost increases due to inadequate performance. Deficiencies so pervasive as to require extensive rework. [Ref: 15]

Listed below are the Elements and their subcategories for CLEAN contracts at Southwest Division. The Navy Project team notes any significant accomplishments and any areas needing improvement for each of the elements and their evaluation factors on

both a quarterly basis for progress review and bi-annually for award fee evaluation purposes.

**A. Technical Services/Quality Management**

Compliance with scope of work and federal and state regulations and guidelines

Implemented technically innovative solutions to perform work sooner, more effectively, at a lower cost and with focus on closure of site

Implemented effective quality control and health and safety program

Pro-active in assisting Government to determine technical requirements (rules, regulations, and guidelines) to respond to changed field conditions

Provided timely, accurate, and complete deliverables

**B. Effective Cost and Schedule Management**

Implemented cost savings initiatives resulting in cost reductions and/or cost avoidance.

Utilized resources efficiently, including labor, equipment, and subcontractors.

Timeliness of performance of work.

Submitted timely, accurate, and complete monthly reports, cost proposals, invoices, and 75% budget notifications.

Minimized cost and schedule impact from changes in field conditions and requirements.

**C. Professional Project Management Relationships and Customer Satisfaction**

Maintained professional team relationships and provided sufficient communication.

Provided sufficient project planning to maximize efficiency and minimize impact of field/construction work on activity personnel and operations.

Provided proactive approach and responded to problems and issues.

Provided fast, effective reaction to problems. Maintenance of a neat/clean project site and lay-down area.

Responded timely to Government CTO physical closeout requirements.

Each of the contracts affords the contractor an opportunity to earn a percentage of the available award fee pool. The major categories of available award fee pool are described below and are taken from a Southwest Division CLEAN contract. [Ref: 22]

**Level 1 – 90-100% of available award fee:**

Technical performance which corrects the hazardous waste problem, which may have innovative elements.

Timely completion with minor corrections, or completion after increases due to additional requirements or regulatory changes.

Highly effective management of the subcontracted effort.

Control of costs yields some savings.

Results recognized from continuous improvement.

May include minor correctable weakness in products and services.

**Level 2 – 61-89% of available award fee:**

Reasonable technical quality and effective management.

Timely deliverables and schedule control with some corrections and slippage. Successful management of the subcontracted effort.

Effective cost control.

Strives to make continuous improvements.

May include some correctable weakness in products and services.

**Level 3 – 30-60% of available award fee:**

Quality only acceptable with Government input.

Changes in delivery schedule, which causes significant problems.

Adequate management of the subcontracted effort with some inefficiencies.

Reasonable cost control with some increase in cost.

No continuous improvement efforts visible.

Deficiencies in products and services which require Government input to correct.

**Level 4 – 0% of available award fee:**

Technical performance does not follow the design or record of decision and does not correct the hazardous waste problem.

Failure to meet delivery schedule without notice of plan for correction.

Failure to monitor subcontractors.  
Significant cost increases due to inadequate performance.  
Deficiencies so pervasive as to require substantial rework.  
Ineffective relations with Navy or regulators. [Ref: 23]

### **C. CONCLUSION**

The FAR notes that CPAF contracts provide for a fee that consists of a base fee and a maximum fee. The FAR also notes that the number of evaluation criteria and their requirements will vary amongst contracts, as will award fee periods. However, the FAR remains silent on what those criteria may be, and on how an award fee plan might be structured. A number of agencies have structured award fee plans, and Cibinic and Nash summarize a basic structure as noted above. [Ref: 2] Therefore, the purpose of this chapter is to describe how Southwest Division has structured its CLEAN and RAC contract award fee plans.

At Southwest Division, the adjectival ratings of the project team are translated into a numerical rating by the Board for recommendation to the FDO. For example, if the project team rates the contractor performance as Level 1 High, the Board may note a numerical rating of 96%. Southwest Division uses a one for one factor in translating the numerical score to an award fee amount. In this case, the contractor would be awarded 96% of the available award fee pool for the period.

The evaluation areas and factors noted above for Southwest Division CLEAN and RAC contracts can be generally characterized as “input” factors. That is, the efforts that the contractor puts forth in the various areas have effects that determine the quality of the “outputs.” The outputs then being the performance of the contractor, that is the quality of the products delivered by the contractor. These outputs may include providing quality deliverables, meeting significant milestones in a timely manner, and completing the project on time and on budget. In the current climate of performance based contracting, should the evaluations be focused on the outputs rather than the inputs, or some combination of both?

In general, the more exactly that work can be defined, the more possible and perhaps more desirable it is to use “output” factors. Contracts for routine services appear to be more suited to using performance factors. R&D contracts, which have less determinable end results, appear better suited to input factors.

Therefore, it is critical that proper evaluation factors be chosen for the performance evaluation plan. The selection depends on the contract at hand, but the goals of the criteria should be to get the best results from the contractor. The criteria should have as the overarching goal the end products or outputs of the project. However, input criteria may be the best way to get a contractor to give the best output. Also, while it may not be an output product, safety is of primary importance on any project, and should be evaluated. There are other inputs, such as safety, that an agency may not wish to disregard as evaluation factors.

## **IV. DESCRIBE DATA AND METHODOLOGY**

### **A. DATA COLLECTION RESEARCH METHODS**

Data for this study of the Southwest Division Award Fee process was obtained primarily using two methods. The first method involved gathering data from the latest award fee evaluations for one CLEAN contract and for one RAC contract. The purpose was to compare the project team evaluations to the final award fee ratings. Chapter I noted that contractors might be receiving high award fees, but not performing to an excellent standard.

The second method involved gathering data through a survey sent to a sampling of individuals involved in the award fee evaluation at various levels of the process. The survey was sent to fifteen individuals, ten of who responded. Additionally, several follow-up phone calls were made to gather information to clarify some of the responses given by some individuals.

The data collected using these two methods provided important information about the actual award fee process and the way the way the process is perceived by those who participate in the process throughout Southwest Division. The perception of the process is important because the way it is perceived is the “reality” for the individual. This information was helpful in determining actual problems with the process and perceived problems.

Survey respondents were guaranteed anonymity in order to facilitate their responses and the quality of their responses. Therefore, none of the names of respondents are used in this paper. Additionally, codes, team names, or other organizational specific identifying notations are not used. Therefore, the paper alludes only to the content of the individual’s responses.

Ten individuals responded to the survey. The following criteria were used to choose this representative sample of individuals: level in the organization regarding the award fee process, length of experience with the award fee process, and variety of

experience with CLEAN and RAC award fee processes. Also, it should be noted that individual availability due to workloads affected the number of respondents.

The respondents to the survey represent various engineering, administrative, contracts, and management disciplines. All respondents work on various teams at Southwest Division in San Diego. The ten respondents represent a cross section of personnel based on the selection criteria. Specifically, all respondents had at least several years experience working with both the CLEAN and RAC award fee processes, and covered various levels of award fee evaluation preparation and evaluation review/recommendation. In essence, the respondents had characteristics similar to that in general for Southwest Division personnel involved at various organizational levels, experience levels, and at the various stages of the award fee processes.

The survey consisted of fifteen questions. Fourteen questions were designed to elicit respondent perceptions of how well the award fee processes work, or if the processes are not working, what it is about the processes that do not work. Question fifteen was an open-ended question that allowed the respondents to make any comments about the award fee processes that may not have been covered by the other questions. The questions were designed to elicit responses beyond either yes or no. The surveys were sent via email. In all, ten completed surveys were received, and several follow up phone calls were necessary to clarify several responses.

To understand the respondents' interaction with the award fee process and consequently their responses, familiarity with the project team configuration and the award fee board configuration is necessary. The project team that performs the evaluation consists of at least three individuals. First, there is the Remedial Project Manager (RPM) or Project Leader responsible for the Project. This individual acts in an engineering capacity. Second, there is the Contract Specialist assigned to the team. Third, there is the Remedial Technical Manager (RTM), who acts in the capacity as an expert in a particular area relevant to the project. This individual may have very frequent or only occasional involvement in the project. Fourth, there may be a Navy Technical Representative (NTR) who assists the team by acting as the leader in fieldwork. Depending on the nature and complexity of the project, a NTR may be necessary.

Individuals are generally simultaneous members of various project teams. Therefore, team members have limited availability for project oversight, and are highly dependent on the award fee evaluation to notify contractors of problems, and to document significant accomplishments and strengths and weaknesses. This team is the closest to the contractor team in terms of day-to-day involvement and oversight of the various projects.

After an evaluation is completed and signed by the team members for an award fee evaluation period, it is reviewed and signed by the Business Line Team Leader (BLTL) responsible for the project. The completed evaluation is forwarded to the COR's office for coordination with the award fee board to review and make recommendations to the Fee Determining Official (FDO).

The award fee board consists of several members. These members are chosen for their level in the organization and for their experience. Some are former project leaders who have been promoted to various team lead or management positions. Additionally, for each contract a senior contract specialist is the Administrative Contracting Officer (ACO). The team also has a Contracting Officer one level above the ACO; and the Contracting Officer's Representative (COR) as members. This board reviews the evaluations from the project teams and makes recommendations for numerical award fee scores. Finally, there is the FDO, who meets with the Board to finalize the award fee amounts. The FDO for Southwest Division is the Commander.

## **B. DATA OBTAINED**

As noted above, the first data gathering method was to collect the award fee evaluations from the project teams and compare them against the final award fee evaluation determinations for a CLEAN and a RAC contract. The purpose was to compare the teams' evaluations with the Board recommendations and FDO ratings, to determine if there is consistency in how the ratings are applied. Table 1 below summarizes the information gathered in this manner for the last award fee period for a CLEAN contract.

CTO#    Team Rating    Board  
    Tech  
    Rating    Board  
    Mgmt  
    Rating

5	Level 2 M	79%	96%
8	Level 1 L	91%	96%
11	Level 2 M	75%	96%
17	Level 1 L	92%	91%
19	Level 1 M	95%	96%
21	Level 1 L	90%	96%
28	Level 2 H	85%	96%
29	Level 2 M	80%	96%
30	Level 2 M	82%	96%
31	Level 1 L	90%	91%
33	Level 1 L	90%	91%
41	Level 1 L	90%	91%
42	Level 1 L	90%	91%
50	Level 1 M	94%	96%
52	Level 2 M	72%	96%
57	Level 1 L	90%	96%
59	Level 1 L	90%	91%
65	Level 2 M	80%	91%
66	Level 1 L	90%	91%
67	Level 1 H	100%	91%
75	Level 1 L	90%	91%
81	Level 2 H	85%	96%
82	Level 2 H	87%	91%
83	Level 1 L	92%	96%
86	Level 1 M	93%	91%
89	Level 1 L	90%	91%
92	Level 1 M	95%	96%
95	Level 2 M	75%	91%
98	Level 1 M	93%	96%
102	Level 2 H	88%	91%
103	Level 1 L	90%	96%
105	Level 1 M	95%	96%
106	Level 2 H	89%	96%
108	Level 1 L	90%	96%
111	Level 1 L	90%	91%
112	Level 1 H	98%	96%
116	Level 2 M	78%	96%
118	Level 1 L	90%	91%
122	Level 3 M	51%	96%
125	Level 1 M	95%	96%
126	Level 1 M	95%	96%

Table 1.            CLEAN Award Fee.  
 Source: SWDiv CLEAN Evaluation.

Table 2 below summarizes the last award fee evaluation period for a RAC contract.

CTO#	Team Rating	Board Tech Rating	Board Mgmt Rating
2	Level 1 L	93%	95%
7	deferred	deferred	95%
10	Level 1 H	98%	95%
11	Level 1 M	95%	95%
12	Level 1 H	98%	95%
13	Level 1 H	98%	95%
14	Level 1 H	98%	95%
15	Level 1 M	93%	95%
16	PMO		95%
17	PAA		95%
18	Level 1 H	98%	95%
19	Level 1 M	96%	95%
21	Level 1 L	91%	95%
22	Level 2 H	89%	95%
24	Level 1 H	98%	95%
25	Level 1 M	95%	95%
26	Level 1 H	98%	95%
29	PMO		95%
30	PAA		95%
86	PMO		95%
88	Level 1 M	95%	95%
89	Level 1 M	95%	95%
90	Level 1 M	90%	95%

Table 2. RAC Award Fee. Source: SWDiv RAC Evaluation.

The second method of gathering data involved a survey emailed to respondents. Appendix A is a list of the questions sent to the respondents. As previously noted, the respondents were guaranteed anonymity; therefore, responses are not attributed to individuals.

The first question on the survey asked if the current process motivates contractors to performance excellence. Responses varied from absolutely not to yes, but the process needs improvement.

Question number two asked if the final award determinations reflect the contractor performance. There was no clear consensus and the response varied from no to yes, to it varies.

Question number three asked if the appropriate evaluation factors were being utilized to evaluate contractor performance. The responses were roughly split and were either no or yes, but should be tailored to each project.

Question number four asked if all relevant factors are utilized. Most concluded that factors need to be project specific and should be updated on a periodic basis.

Question number five asked what factors might be missing from the current process. Some responded that there were no factors missing. Other respondents noted that the contractors are evaluated on criteria that are different from the criteria that the customer uses to evaluate the project and that the award fee process should make room for the customer's criteria. Still others noted that the process does not allow for project specific criteria. Two stated that the contractor should be evaluated on customer/regulator/public satisfaction.

Question number six asked if the appropriate evaluation period length is utilized. Eight agreed that a six-month evaluation period was appropriate; however, two stated that the periods could be varied based on the complexity of the project or the amount of work completed. If the project was making significant progress, a shorter period could be used. If the project was not making significant progress, a longer period could be used.

Question number seven asked if the Government effectively communicated its objectives to the contractors. Most agreed that the objectives are made clear; however, the objectives change over time and vary from Project Leader to Project Leader, which leads to confusion on the part of the contractors. Two responded that the Government did not make project objectives clear.

The eighth question asked if the objectives conflict with the incentives. Most respondents agreed that the objectives and the incentives do not conflict; however, two respondents stated that the objectives and incentives do conflict. One noted that there is a major conflict in the area of cost. By saving costs, the contractor receives a higher fee;

however, the savings become available for additional work by the contractor without an opportunity to earn additional award fee on the increased work.

Question nine asked if we verify that contractors are being incentivized. All respondents agreed that there is no procedure in place to verify that the factors utilized are actually those that motivate the contractors.

Question ten asked if the structure of the current award fee process made contractors dependent on Government oversight and direction. The answers differed in that two respondents felt that it depended on the contractor, on how long they had worked with the contractor. Three stated that highly qualified contractor teams required less oversight, but those in which they had less confidence were given more oversight. Two others stated that oversight by the Government was necessary due to the nature of the work in order to get a quality product. The remaining three stated that the process did not make contractors more dependent.

The eleventh question asked if the process could include both short-term and long-term incentives. All agreed that it could include both short-term incentives for the specific project, and long-term incentives for the entire contract; however, no one responded with suggestions for the incentives.

Question twelve asked what difficulties were encountered using the award fee process. Six respondents noted that because of the organizational structure and differing goals, there was a communications gap between project teams and the Board. One individual noted that contractors might become complacent due to the subjectivity of the process, while expecting high award fees. One noted that they pay for both good and bad products. Another noted that the second rating level is too broad and should be split to add another category. One noted that due to the subjectivity of the process and the involvement of profit, contractors are reluctant to admit mistakes or take responsibility for mistakes.

Question number thirteen asked what changes, if any, would respondents make to the current process. The answers to this question were varied. Several respondents noted that the evaluation by the project team should be firm and not changed by the Board, and

that the system should support the project team more. One noted that contractors should be encouraged to come forward with errors without fear of reprisal during the award fee evaluation. Another respondent noted that award fee penalties should be deeper for poor performance. One noted that more evaluation factors could be added. Finally, one respondent noted that the project team should be invited to sit with the Board during the review process. Three did not respond with any changes that they would make.

The fourteenth question asked respondents what barriers they see to implementing change to the award fee process. Some noted that changes to the basic contract would be required. Others noted that the organization might lack support for extensive changes. Some noted that politics might play a part, and that contractors would protest changes that are not in their favor. Finally, some noted that the opinions on what needs to be changed are so divergent that a consensus might not be reached.

The final question asked respondents for other comments or recommendations. Some noted that there is great variation in objectives depending on the Project Leader, which leads to confusion not only for the contractor, but for the Navy too. Others noted that there is room for improvement, and that management should be made aware. The remaining respondents had no further comments or recommendations.

The next chapter discusses and analyzes in more detail the data presented here. Key findings are discussed, and their possible implications for the award fee process are outlined.

## V. ANALYSIS OF DATA

### A. SUCCESSFUL PROCEDURES AT SOUTHWEST DIVISION

This chapter analyzes the data presented in previous chapters. The researcher also presents observations as to whether or not the data gathered and presented is sufficient to answer the primary research question and the subsidiary questions, and where the data is ambiguous, contrasts and comparisons with other studies are made.

The researcher holds that while identifying and defining successful procedures is not easy, definite distinctions do emerge. To establish which procedures are successful, the researcher gathered data from the FAR, previous studies, current award fee evaluations, and through a survey.

FAR 16.405-2 states the award fee evaluation factors in very broad and general terms and includes technical quality, cost, and schedule. What the FAR does not describe or prescribe is the way in which agencies structure their award fee evaluation plans. Therefore, agencies have wide discretion, as long as they include the factors noted in the FAR. Southwest Division cost-plus-award-fee contracts include these factors in their award fee plans.

Cibinic and Nash note that there is great flexibility in selecting award fee criteria. The type and number of criteria, under the broad factors, are left to the agency to decide, based on their own specific needs. [Ref: 2] Southwest Division CPAF contracts have been tailored to meet the broad objectives of its environmental projects. The criteria, as noted in Chapter III, contain both inputs, and outputs together. For example, on CLEAN contracts, the contractor is rated on technical competence and innovation; and on clarity, thoroughness, and technical quality of deliverables and documentation. This supports the position that the overarching goals of the Southwest Division award fee structure are both program and project results oriented; and that the criteria were chosen accordingly. In Chapter II, the criteria that suggest this results orientation were laid out.

The Contractor Incentives IPT, noted in Chapter II, recommended that award fee contracts should provide short evaluation periods, with a limited number of evaluation criteria.

Southwest Division evaluates its contractors twice during an award fee period. The first is a quarterly evaluation at the end of the first three months and the second is given at the end of the first six months. The purpose is to give regular feedback to the contractor on its strengths and weaknesses on a project. The second evaluation is the evaluation submitted to the Award Fee Board for review and recommendation to the FDO.

Question number six of the survey asked if the appropriate evaluation period length is utilized. Eight agreed that a six-month evaluation period was appropriate; however, two stated that the periods could be varied based on the complexity of the project or the amount of work completed. If the project was making significant progress, a shorter period could be used. If the project was not making significant progress, a longer period could be used. The researcher surmises that the survey data show that this is a long enough period to formally notify contractors of performance, but not so long as to inappropriately withhold payment of award fee earned.

The survey data outlined in Tables 1 and 2 of Chapter IV suggest that the ratings given by the project team are given commensurate numerical ratings by the Board and FDO, and are consistently applied. This is in direct contrast to several of the responses to question number thirteen of the survey. Several respondents noted that the evaluation by the project team should be firm and not changed by the Board, and that the system should support the project team more. This suggests that there are times when the Board or FDO change the rating by the project team; however, this is wholly within the discretion of the Board or FDO. Tables 1 and 2 suggest that there were no changes to project team ratings for these two rating periods.

Tables 1 and 2 also suggest that the correlation of award fee payments corresponds with the performance evaluations. Because the ratings are consistently

applied, they translate into award fee payments commensurate with the contractor's performance as evaluated by the project team.

Chapter IV noted that a survey of Southwest Division personnel involved in the award fee process was conducted. The survey consisted of fifteen questions. Fourteen questions were designed to elicit respondent perceptions of how well the award fee processes worked or if the processes were not working, and what it is about the processes that do not work. Question fifteen was an open-ended question that allowed the respondent to make any comments about the award fee processes that may not have been covered by the other questions.

Question number two asked if the final award determinations reflect contractor performance. There was no clear consensus and the responses varied from no to yes, to it varies. The data outlined in Tables 1 and 2 suggest that there is a direct correlation between the project team rating, the Board recommendation, the FDO determination, and therefore the award fee paid the contractors. The team responsible for the project prepares the evaluations; therefore, it is reasonable to assume they should reflect the most accurate assessment of the contractor's performance.

Survey question number seven asked if the Government effectively communicated its objectives to the contractors. Eight respondents agreed that the objectives are made clear, however, since objectives change over the length of the project, and vary from Project Leader to Project Leader; there may be some confusion on the part of the contractors. Southwest Division cost contracts give great flexibility to the project team to adjust criteria as necessary and give greater or lesser weight over time as projects progress. At any given time, the project team may change the importance between cost, schedule, or quality. The research shows that the objectives are clearly communicated; however, there may be times where there is communication breakdown. This is a normal part of project administration.

The eighth question asked if the objectives conflict with the incentives. Eight of the ten respondents agreed that the objectives and the incentives do not conflict. This

shows that contractors try to satisfy the Government's needs in hopes of being rewarded with the award fee incentive.

Question ten asked if the structure of the current award fee process made contractors dependent on Government oversight and direction. The answers differed in that two respondents felt that it depended on the contractor, depending on how long they worked with the contractor. Three stated that highly qualified contractor teams required less oversight, but those in which they have less confidence are given more oversight. Two others stated that oversight by the Government was necessary due to the nature of the work in order to get a quality product. The remaining three stated that the process did not make contractors more dependent. The research suggests that due to the complexity of environmental projects, much oversight of contractors by the Government is necessary.

The current climate in the Government contract administration arena is less oversight of contractors, which is what the contractors also prefer. The researcher concludes that contractors should be clearly notified that performance excellence results in less Government oversight in future evaluation periods. By doing so, both parties achieve their goal – less administrative oversight.

## **B. PROCEDURES NEEDING IMPROVEMENT**

The Contractor Incentives IPT Report noted in Chapter II, recommended that contract incentives should be flexible and structured on a case-by-case basis. Effective motivators were found to include allowances for special rewards for achievement of superior performance. Southwest Division incentives are structured on the award fee arrangement. This suggests that contractors are motivated by the profit incentive

While contractors are motivated by profit, other incentives also motivate contractors. These include extra-contractual considerations such as: expanding company operations, increased future business, enhanced company image and reputation, benefits to non-defense business, keeping skilled personnel, and a narrow base for fixed costs.  
[Ref: 8]

The IPT Report also noted an incentive fee arrangement with multiple incentives may be used when contract performance is measurable in objective terms. Some aspects of Southwest Division projects have performance elements that are measurable in objective terms. An example is meeting key milestones and the overall schedule for a project. These areas could be rated separately and be given appropriate weight depending on the project.

The first question on the survey asked if the current process motivates contractors to performance excellence. Responses varied from absolutely not to yes, but the process needs improvement. The answers are varied, so no definitive conclusion can be drawn as to whether or not the contractors are motivated to excellence. What can be concluded is that while the process works, it needs some improvement.

Question number three asked if the appropriate evaluation factors were being utilized to evaluate contractor performance. Question number four asked if all relevant factors are utilized. The responses to these two questions were that the appropriate factors are used; however, they need to be project specific and should be updated on a periodic basis. This suggests that the generic award fee plan must be tailored for each project. For example, those factors not important to the project can be ignored, thus giving greater weight to the remaining criteria.

Question number five of the survey asked what factors might be missing from the current process. Some responded that the contractors are evaluated on criteria that are different from the criteria that the customer uses to evaluate the project; therefore, the award fee process should make room for the customer's criteria. Two stated that the contractor should be evaluated on customer/regulator/public satisfaction, because the Southwest Division team is "evaluated" on these factors. This suggests that they should include criteria that are important to the customer, regulators, and public, because their satisfaction also determines the success or failure of a project. The researcher notes, through experience in this area, that cost and schedule performance are often hampered by lengthy regulatory review of documents. This is often due to lack of regulator involvement up front in the project planning stage, and lack of knowledge of regulatory criteria. This suggests a need to clearly define those criteria that will satisfy regulators,

customers, and the public, and integrate them into the specific project, and hold the contractor responsible for those criteria over which he clearly has control.

Question eight of the survey asked if objectives and incentives conflicted. Most agreed that they did not; however, one respondent noted that there is a major conflict in the area of cost. By saving costs, the contractor receives a higher fee; however, he is then given more work in order to spend the savings. The problem is that the award fee pool is not increased to give the contractor an opportunity to earn additional award fee on the increased work. This means that the contractor does not have a true incentive to save costs. The contractor receives more work, but not more profit. Therefore, the incentive is really to expend all the funds on a project. Expending all the funds on the project, and having none left over to return, satisfies the program objectives. However, the project team wants to receive as much work as possible for the funds allotted, but program goals may win out over project goals.

Therefore, the researcher concludes that in order to satisfy both the program goals and the project goals, an incentive is needed. For example, a portion of the savings achieved, could be subtracted from the cost portion and added to the award fee pool, as long as it does not go above the contract maximum allowable fee. The contract could be structured to allow for this share in savings. The majority of the risk would be on the contractor, and the savings would need to be proved, not just projected. In addition, the savings would need to be substantial to make it worth the efforts required to modify the task order.

Question nine asked if we verify that contractors are being incentivized. All respondents agreed that at this time there is no procedure in place to verify that the factors being utilized actually are those that motivate the contractors. A system to track and verify if incentives are effective should be developed and implemented. Since contractors are currently evaluated based on cost, schedule, and technical quality, methods of verification should be based on the same.

In the area of cost, the contractor could be measured on the actual cost of work performed compared to the cost of the work performed on previous similar projects. For

example, Southwest Division could develop a database where historical cost data are stored. When a project is contemplated, the actual costs of previous similar work could be accessed. The contractor costs could be compared against this data and the negotiated cost. Additionally, contractors should be tracked to note the number and amount of cost overruns, and increases such as cost growth.

Contractors are also evaluated based on schedule, however, most projects have numerous modifications, and contractors are rarely penalized for schedule slippages. Milestone data, like the historical cost data, could be collected in a database, and the contractor could be measured against how well he compared against this data, and the agreed upon project schedule.

Technical quality may be more difficult to verify that a contractor is being incentivized. Southwest Division keeps an Administrative Record that includes all documents prepared under its contracts. Quality of similar documents for similar projects could be compared. For remediation work, verification that the contractor is being incentivized will rely on the experience of the project team, including the customer and regulators.

The consequences of a verification process could be substantial for the Government. It could result in an increase in cost savings, technical quality, reduced schedule, and greater customer satisfaction.

The eleventh question asked if the process could include both short-term and long-term incentives. All agreed that it could include both short-term incentives for the specific project, and long-term incentives for the entire contract; however, no one responded with suggestions for the incentives. As noted above, contractors are motivated by extra-contractual incentives in addition to profit. Some of these could be included in Southwest Division contracts. This could include the possibility of future work, by using phases to award portions of a project at a time. In order to receive the next phase of work, the contractor must perform well on the previous phase. Another way would be to award additional time on the contract to the contractor for overall superior performance. This is called award term contracting. Rather than award fee, the contractor may earn

additional time. [Ref: 8] Publicizing successful projects in the environmental community could enhance company image and reputation, as could special recognition awards.

Question twelve asked what difficulties were encountered using the award fee process. Six respondents noted that because of the organizational structure and differing goals, there is a communications gap between project teams and the Board. One individual noted that contractors might become complacent due to the subjectivity of the process, while expecting high award fees. One noted that we pay for both good and bad products. Another noted that the second rating level is too broad and should be split to add another category. One noted that due to the subjectivity of the process and the fact that profit is involved; contractors are reluctant to admit mistakes or take responsibility for mistakes.

This data suggests an internal barrier to efficiency exists. The researcher concludes that while the organizational structure may remain the same, the project team, evaluation board, and the FDO do not communicate unless necessary. They should communicate more. As noted earlier, the project team should be invited to sit with the evaluation board and the FDO during the recommendation and determination process. Additionally, program goals can be updated and communicated through periodic training for project teams. The enhanced communication will narrow the current gap, thereby fostering a closer working relationship, and lessening internal friction.

Because the evaluation process is subjective, contractors will always perceive unfairness on the part of the Government, and they will try to hide mistakes. There is not very much that can be done in this area. A diligent project evaluation team must strive to detect these mistakes, and decide how much priority to give between projects. Due to the nature of cost contracts, as long as the contractor is putting forth his best effort, and the costs are allowable, allocable, and reasonable, the Government pays, even if the product is bad and needs to be reworked.

Question number thirteen asked what changes, if any, would respondents make to the current process. The answers to this question were varied. Several respondents noted that the evaluation by the project team should be firm and not changed by the Board, and

that the system should support the project team more. One noted that contractors should be encouraged to come forward with errors without fear of reprisal during the award fee evaluation. Another respondent noted that award fee penalties should be deeper for poor performance. One noted that more evaluation factors could be added. Finally, one respondent noted that the project team should be invited to sit with the Board during the review process. Three did not respond with any changes that they would make.

The researcher concludes that there are both internal and external communication issues. The project team may want deeper penalties for poor performance, but may at times have their evaluation changed by the Board and the FDO. This suggests that the contractor will first hide errors, but if discovered, may appeal to the Board or FDO with explanations for why the errors occurred. The Board may then request further information from the project team, or it may not, and change the evaluation or leave it alone. The contractor comes to view the Board as a “higher” authority than the project team, if the evaluation is upgraded. This could be devastating to the project team trying to complete a project in the field. The contractor may then fail to communicate with the project team, and go to the Board as a preemptive strike. The Board, however, is not the best authority when it comes to evaluating the day-to-day performance of the contractor. Additionally, the Board has no contact with the customer whom the project team is trying to satisfy, and may undermine customer satisfaction and project leader authority. Therefore, it is necessary to clarify for the contractor the roles and responsibilities, and the divisions of authority between the Project Team, the Board, and the FDO.

The fourteenth question asked respondents what barriers they see to implementing change to the award fee process. Some noted that changes to the basic contract would be required. Others noted that the organization might lack support for extensive changes. Some noted that politics might play a part, and that contractors would protest changes that are not in their favor. Finally, some noted that the opinions on what needs to be changed is so divergent that a consensus might not be reached.

The researcher concludes that there are numerous individuals responsible for the award fee process, which is not conducive to gaining support for change, or gaining a consensus as to what the change should entail. Changes to the basic contract are not

necessarily difficult in and of themselves, but support for extensive change is particularly difficult when the potential benefits for improvement are not readily evident, or are not perceived to outweigh the costs of the change.

The final question asked respondents for other comments or recommendations. Some noted that there is great variation in objectives depending on the Project Leader, which leads to confusion not only for the contractor, but for the Navy too. Others noted that there is room for improvement, and that management should be made aware. The remaining respondents had no further comments or recommendations.

This suggests to the researcher that the variation is due to the subjectivity of the process and of the individuals. This makes this type of contract difficult, but not unmanageable. Increased communication by the Government to the contractor can help alleviate some of the confusion, and as a result lead to increased efficiency. The comment that management should be aware suggests that concerns have been voiced, however they have not been addressed satisfactorily. As noted before, increased internal communication can reduce friction, and foster an enhanced working relationship.

The next chapter discusses conclusions, recommendations, and suggestions for improvement of the award fee process at Southwest Division. In addition, the primary and subsidiary research questions are answered.

## **VI. CONCLUSIONS, RECOMMENDATIONS, AND ANSWERS TO RESEARCH QUESTIONS**

### **A. SUMMARY OF RESEARCH**

There is a concern that award fees earned by contractors are not always commensurate with their overall performance. Therefore, a review of award fee contracts is necessary to determine whether award fee periods, evaluation factors, and award fees earned are commensurate with performance and are motivating performance excellence.

The FAR was recently amended to delete the statement that award fee determinations are not subject to the disputes clause. P.L. 106-79 limits to 35% of total cleanup obligations the amount of environmental restoration funding obligated under "indefinite delivery/indefinite quantity" contracts with a total value of \$130 million or higher. Therefore, it has become even more critical that we motivate our award fee contractors to performance excellence to receive as much value as possible for the limited funding available.

FAR 16.405-2 states the award fee evaluation factors in very broad and general terms and includes technical quality, cost, and schedule, but does not prescribe the way in which agencies should structure their award fee evaluation plans. Therefore, agencies have wide discretion.

Southwest Division CPAF contracts have been tailored to meet the broad objectives of its environmental projects. The award fee plans contain both inputs and outputs together. Southwest Division contracts are both program and project results oriented, and the criteria were chosen accordingly.

A comparison of evaluations and final ratings was prepared, and award fee payments correspond with the performance evaluations. Because the ratings are consistently applied, they translate into award fee payments commensurate with the contractor's performance as noted by the project team.

A survey was conducted that revealed a number of results. Southwest Division award fee periods are six months in length and are appropriate for its contracts. The

current award fee process motivates contractors, but can be improved. Over time complacency has set in, and business as usual without rocking the boat is normal.

The award fee process at Southwest Division, like all CPAF plans, is subjective and therefore, the perception of performance excellence differs between players. Consistency between teams in evaluating performance can be improved. In addition, contractors have come to know how the system works, and use that knowledge to their advantage. There are a number of problems and barriers; however, there are solutions.

## **B. CONCLUSIONS**

**There is no consensus as to what extent contractors are being motivated.** Given the current budget constraints, and the concern that contractors receive award fees higher than they have earned, the researcher attempted to determine if award fees are consistent with evaluations. The award fees are consistent with the evaluations earned. However, survey respondents also noted that the award fee process needs improvement due to complacency.

**Evaluation factors include both program goals and project goals.** The evaluation criteria generally include the appropriate factors, but are not periodically updated. Objectives change over time; therefore, evaluation criteria change.

**Contractors do not always have incentives to cut costs.** Because all allowable, reasonable, and allocable costs are covered under the cost contract, contractors do not always look to save costs. Contractors expect a high fee and the extra efforts to save costs may not result in significantly higher evaluations to justify the effort.

## **C. RECOMMENDATIONS**

**Combat complacency in the award fee process.** The process has become more like a routine chore. The evaluations require: much thought and input from the teams; much review and oversight by the Board and FDO; and encompasses many different projects within a program. The process should be streamlined to minimize the factors and criteria. Some criteria may be for routine services and can be objectively evaluated, requiring no narrative comments. Once evaluated, the team evaluation should not be shared with the contractor and then changed. Contractors should be held accountable for outcomes as much as possible.

**Allow for other incentives in the contracts.** Contractors are motivated by other factors, in addition to profit. Include allowances for special rewards for achievement of superior performance. The contracts could include incentives such as additional time on the contract, rather than awarding fee alone. Winning additional time satisfies the need for future work, enhances the contractor's reputation, and allows the contractor to retain skilled human capital, thereby enhancing consistency of personnel working on a program.

**Focus more on outcomes.** The current award fee structures focus heavily on inputs and management processes. However, they should allow room to note accomplishments or weaknesses on deliverables (the outcomes). The current climate is to focus more on Performance Based Contracting and to allow contractors to define for themselves how best to accomplish the project requirements. Although this is best suited for routine services, there are many services performed as part of cost reimbursement contracts that can be evaluated objectively.

**Inject more objectivity into the current process.** Review the contracts to determine if routine services are being performed and can be objectively evaluated. Review the award fee process for streamlining, especially for low dollar value contracts and for less complex projects. After identifying routine services, employ the use of a check-off list without narrative comments, as appropriate.

**Periodically review the award fee process.** The process should be reviewed on a regular basis to determine if the process still meets the needs of the users. Additionally, the review can reveal if factors and criteria are appropriate as objectives change.

**Ensure that contractors are being incentivized.** The current award fee process does not validate whether contractors are being motivated. The reliance is on the project team to know if the contractor is motivated, based on the evaluation. The evaluation process has become somewhat complacent; therefore, this is not necessarily a foolproof method. Two things to do are to perform market research and ask the contractors what motivates them.

**Perform training of personnel.** Some personnel may not be fully aware of the program goals or the project goals. In addition, program goals and project goals change

over time; therefore, the evaluation criteria should change or they become irrelevant. Because the current process is wields and difficult to manage, regular training sessions will help streamline the process and help focus users on a more consistent way to evaluate contractors.

**Allow project team to set objectives for each period.** The project team should be allowed and encouraged to set specific objectives as evaluation criteria for award fee periods as necessary. For example, if a project has moved into a phase where there is monitoring of wells on a quarterly basis, the objective criteria would be that the contractor successfully performed the monitoring. Little or no accompanying narrative would be required. The contractor may still be evaluated on inputs, but they are held accountable for accomplishing the milestones. These are both objective and measurable.

#### **D. ANSWERS TO RESEARCH QUESTIONS**

This section discusses the primary and subsidiary research questions posed in Chapter I. All the questions are answered as fully as possible.

##### **The Primary Research Question: Is the current award fee process motivating performance excellence on the part of contractors for Southwest Division?**

The current award fee process motivates contractors, but is imperfect and can be improved. When a program is first put in place, the award fee process is applied with vigor and usually yields good results. As programs mature, the vigor with which they were initiated tends to wane. As a result, some complacency may develop on the part of both the Government and the contractor. Some teams come to depend on relationships developed rather than on the award fee process, and performance outcomes may be uneven and may even mask unseen pathologies.

The award fee process is subjective and the perception of performance excellence differs between Program Managers, and between Project Teams. As noted above, the relationships between the teams and contractors may become a factor in the evaluation process. Therefore, at times, the quality or quantity of the contractor's work may not be the only factor influencing the evaluation.

In addition, contractors understand that there is a review process above the Project Team. Contractors may submit self-evaluations for the award fee period after receiving the Project Team evaluation, but the evaluation is submitted to the Board, and not the Project Team. Many Project Team members conclude that the contractor is being given an opportunity to rebut the evaluation.

The following are the subsidiary research questions:

**What are cost-plus-award-fee contracts, how do they work, and when should they be used?**

Cost-plus-award-fee contracts are a type of cost-reimbursement contract where the contractor can earn a fee, consisting of a minimum and a maximum, based on a judgmental evaluation by the Government. The fee should be sufficient to provide motivation for contractor performance excellence. CPAF contracts are suitable when they enhance the likelihood of meeting contract objectives, motivate exceptional performance by the contractor, and allow the Government flexibility in evaluating performance. Additional administrative effort and cost is outweighed by the benefits derived from the use of the CPAF contract.

**What are some of the difficulties encountered in using award fee contracts?**

Difficulties include complacency because it is easier to give an evaluation that is average, rather than one that is below average. A bad evaluation means more work for the team. The project teams are working on many projects simultaneously, and to give a bad evaluation means the team has to justify the bad evaluation. If the Board and the contractor challenge it, the project teams will have to rebut and fortify their position, and may still have their evaluation overridden by the Board and/or FDO. Therefore, contractors see the Board and the FDO in charge of the project, rather than the team. This creates internal friction, as the project teams perceive that their concerns are set aside for program concerns. Contractors are aware of all of this and expect high evaluations, whether their work has earned it or not. Therefore, the Government pays for both good and bad performance.

Contractors are reluctant to take responsibility for their mistakes and attempt to hide them because profit is at stake, and they will refute bad evaluations. It is difficult to make poor evaluations stick and the project suffers because communication is stifled and trust is eroded.

**What motivates contractors to perform? How should this information be used in structuring an award fee process?**

Contractors are motivated by the profit incentive. However, other factors also motivate contractors. These include extra contractual considerations such as expanding company operations, increased future business, enhanced company image and reputation, benefits to non-defense business, keeping skilled personnel, and a narrow base for fixed costs.

The Government could use this information to structure contracts to add incentives such as additional time on the contract for superior performance rather than awarding fee alone. Winning additional time could also satisfy some of the other incentives such as enhanced reputation, and keeping skilled personnel working.

**How is the current award fee process at Southwest Division structured, and how did it come to be structured in this manner?**

Guidance for current award fee procedures at Southwest Division comes from two Naval Facilities Engineering Command guidebooks. The CLEAN Contract Manual, and the RAC Manual.

CLEAN contracts provide investigations, studies, and identification of cleanup alternatives. RAC contracts provide the actual cleanup of sites. These investigations and cleanups contain many unknowns and cannot be fixed priced. Cost-plus-award-fee contracts have been the preferred contractual vehicle because there are so many unforeseen conditions.

Each CTO has an award fee pool based on the negotiated amount. The minimum is 0%, while the maximum may be up to 10% of the negotiated cost, excluding travel.

The Project Team prepares a performance evaluation quarterly, and an award fee evaluation bi-annually that covers 6 months. The contractor is rated on Technical, Management, and Cost.

Each of the categories, subcategories and the overall CTO performance for the period is given a numerical and adjectival rating. The award fee evaluation is submitted to an Award Fee Evaluation Board for review and recommendation to the FDO. The FDO makes the final award fee determination and a letter is issued informing the contractor.

**What metrics, if any, are being used to measure the effectiveness of the award fee process at Southwest Division? What metrics can and should be used?**

Currently, there are no real metrics in place to measure the effectiveness of the award fee process itself. Research for this project revealed that a number of survey respondents feel the process has problems and needs improvement.

A survey of personnel involved in the process, on a periodic basis, should be conducted. We evaluate the contractors on a periodic basis, and we should evaluate the process on a periodic basis. The goal of the survey would be to measure if the current process continues to meet the needs of the users.

**What recommendations and lessons do current literatures reveal?**

Recent studies reveal that there is concern, by contractors and Government, due to the subjective nature of the award fee process. This reveals a need for increased objectivity in the process.

Cost-reimbursement contracts include various routine functions that could more effectively be obtained fixed price. The Government pays more for routine, repetitive services or operations than is necessary. Contractors have little or no incentive to seek ways to minimize costs.

Recommendations include reviewing contracts to determine if an award fee is even appropriate, reviewing the process for streamlining, especially for low dollar value contracts and for less complex projects, and issuing award fee guidance emphasizing a

preference for using objective outcome or output evaluation factors instead of management process factors.

**What are some of the critical barriers to motivating contractor performance, through the award fee process, and how might these barriers be overcome?**

The first barrier is complacency on the part of the contractor and the Government. The second is that due to the subjectivity of the process and because profit is at stake, contractors tend to satisfy the team rather than the objectives of the project. These two barriers can be overcome by injecting more objectivity into the process, by holding contractors to the objectives, and by encouraging contractors to come forward with their errors before it is too late.

A third barrier is that there are competing project and program goals. Both the goals of the project at hand and the goals of the overarching program are important and must be met. To overcome this barrier there must be integration of program and project management, which requires some changes. A matrix organizational structure prevents effective integration and management of the process. As one survey respondent noted, the project team and the Board should meet together.

A fourth major barrier is that there may be little organizational support for change, as it requires time, energy, and resources. The award fee process can be effective, both in theory and in practice. However, to gain support for change from the organization, it must be shown that increased performance from contractors results in greater efficiencies that will result in savings, and enhanced customer satisfaction. Savings and enhanced customer satisfaction are crucial in the current environment. Without them, the organization will not provide the necessary resources and accountability to gain effective and significant change.

**What actions might Southwest Division take to enhance its current award fee process?**

Periodic reviews of the award fee process are the single, objective solution discovered by the research. A commitment to effective change by management is also

important. Lastly, consistency through a streamlined process and specific evaluation criteria are critical.

#### **E. AREAS FOR FURTHER RESEARCH**

Several key areas for further research have emerged from this investigation. The need for further research stems directly from the survey of personnel. A number of patterns and issues emerged from the data collected, and warrant further focus.

The current climate in the Government contracting arena is to move toward the increased use of Performance Based Contracts (PBC). The data collected suggests that there is a tendency to focus on inputs in the evaluation process, rather than on the outputs or outcomes. The researcher concludes that part of the reason for complacency is that contractors are not held accountable. The environmental CPAF contracts include routine services that might lend themselves well to PBC. Further research could investigate and determine those tasks or elements that may be separated as PBC elements. Once identified, further research could determine if those elements should or could remain on the CPAF contract and be fixed priced, or moved to a separate firm-fixed-price contract arrangement. The feasibility for PBC and/or fixed price arrangement would need to be determined, along with identifying any possible increases or decreases in administrative burdens, and any loss of control over contract performance.

Another area for further research is to investigate the use of non-monetary incentives. Some non-monetary incentives include reduced oversight by the Government, increased positive performance evaluations, award-term contracting, publication of successful projects in appropriate trade journals, and command letters of appreciation to individual contractor employees.

A final area suggested for research is to perform an analysis of the market and a survey of contractors to determine what motivates contractors, and why. The purpose would be to define what motivates contractors in the environmental industry and seize opportunities for incentives from the data. Then determine how an award fee plan could be structured to incorporate these incentives, which may mean multiple incentives on a contract, and determine what additional resources might be necessary to incorporate these incentives.

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## **APPENDIX A: SURVEY**

### **SOUTHWEST DIVISION SURVEY QUESTIONS**

1. Does the current award fee process motivate contractors to performance excellence?
2. Do final award fee board ratings reflect contractor performance?
3. Are appropriate evaluation factors being used?
4. Are all relevant factors utilized?
5. If not, what factors are missing?
6. Is the appropriate evaluation period length utilized?
7. Does the government effectively communicate its objectives to contractors?
8. Do objectives conflict with incentives?
9. Do we verify that contractors are being incentivized?
10. Does the current structure “make” contractors more dependent on government oversight?
11. Can we use both short term and long-term incentives?
12. What difficulties do you encounter in using the award fee process?
13. How would you change the current process, if necessary?
14. What barriers do you see if any, in implementing changes to the current procedures?
15. Other comments or recommendations.

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## LIST OF REFERENCES

1. Brandis, Margaret, Another Look at Award Fee Contracting, Contract Management, February 2001.
2. Cibinic and Nash, Cost Reimbursement Contracting, Second Edition, 1993.
3. Contract Pricing Reference Guides, Volume 4 - Advanced Issues in Contract Pricing.
4. Department of Defense Guidebook for Performance-Based Services Acquisition (PBSA) in the Department of Defense, December 2000.
5. Department of Defense Inspector General Audit Report, Contracts for Professional Administrative, and Management Support Services, 10 March 2000.
6. Department of Energy, Draft Staff Paper, Contracting Reform at the U.S. Department of Energy.
7. Dickinson, Tom, A Case for Multiple Incentives, Contract Management February 2001.
8. Edwards, Vernon J., Award-Term: The Newest Incentive, Contract Management February 2001.
9. Edwards, Vernon J., The Challenge of Service Contracting, Contract Management October 2001.
10. Federal Acquisition Regulations (FAR) June 2001.
11. Under Secretary of Defense for Acquisition and Technology, Memorandum Award Fees, 27 February 1999.
12. Under Secretary of Defense for Acquisition and Technology, Memorandum Contractor Incentives, 23 November 1999
13. GAO/RCED-97-18, Department of Energy: Contract Reform Is Progressing, but Full Implementation Will Take Years (Chapter Report, 12/10/96).
14. GAO/RCED-98-223, Department of Energy: Lessons Learned Incorporated Into Performance-Based Incentive Contracts (Letter Report, 07/29/98).
15. Integrated Process Team Contractor Incentives, 18 November 1999.

16. National Aeronautics and Space Administration Award Fee Contracting Guide, 2 December 1997.
17. Naval Facilities Engineering Command Memorandum Contractor Incentives, 23 May 2000.
18. Naval Facilities Engineering Command Memorandum Improved Contractor Performance, 17 July 1996.
19. Naval Facilities Engineering Command Policy Memorandum, 10 June 1999.
20. NAVFAC P-1070, CLEAN Contract Manual, July 1992.
21. NAVFAC P-1092, RAC Contract Manual, October 1995.
22. Southwest Division CLEAN contract.
23. Southwest Division RAC contract.
24. Under Secretary of Defense for Acquisition and Technology, Memorandum for Service Acquisition Executives, Incentive Strategies for Defense Acquisitions, 5 January 2001.
25. Wright, Dennis L., Service Systems Contracting A Time For Change, August 1999.

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