THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND
TECHNOLOGY

23 NOV 1999

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
ATTENTION: SERVICE ACQUISITION EXECUTIVES

SUBJECT: Contractor Incentives

During the Contractor Assessment Reviews that I conducted earlier this year, it was apparent that contractors do not always have an incentive to focus their attention on the outcomes that the government desires most. I asked the Director, Defense Procurement to establish an Integrated Process Team to address this issue. The team established several principles which I believe you will find useful when structuring future contract incentives:

- 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.

The report of the Contractor Incentives IPT is attached for your information. I appreciate the support each of you afforded to this effort, and I am encouraged that there is continuing activity to improve the process. I urge you to continue to evaluate your experience with contract incentives, and to publish effective incentive arrangements for potential application throughout the Department.

J. S. Gansler

Attachment:
As stated

CONTRACTOR INCENTIVES IPT
Final Report of Findings
November 18, 1999

CHARTER:

Director, Defense Procurement (DDP) established an IPT to improve contractor incentives to ensure that the outcomes the Government desires most receive the contractors' highest priority. The IPT and its Action Plan were established on July 23, 1999, (Tab A).

BACKGROUND:

USD(A&T) reviewed the status of several contracts during the Contractor Assessment Review on June 5, 1999. This was the first of several reviews planned with individual defense contractors. Several management actions were determined at the review, including the need for DDP to establish an IPT to address contractor incentives. This report describes the analysis performed by the Components to assess the Government's use of contractor incentives to accomplish acquisition program objectives.

METHODOLOGY:

Seven research goals were identified in the action plan for the IPT. The research goals were designed to document the current process, to assess the contribution of contract incentives to the accomplishment of acquisition program objectives, to understand the relationship with other contract management processes, to recognize the potential for process improvements from related studies, and to consider specific opportunities for improvement.

A questionnaire was used to document the decision processes being practiced (Tab B). Detailed interviews were conducted with contracting officers to understand how contract incentives for a selection of contracts were operating. Subject matter experts analyzed the results, discussed the potential for process improvements from other studies, and assessed the feasibility of new process improvements.

IPT RESEARCH GOAL/FINDINGS:

1. Define how the government decides which contract outcomes are most important.

The IPT collected information from selected Program Executive Officers through its questionnaire to address this research goal, and the second goal which concerns their process for defining contract incentives. The Army summary is at Tab C; the Navy summary is at Tab D; and the Air Force summary is at Tab E.

In general, the Components rely on formal program documentation (e.g., Operational Requirements Document, Acquisition Program Baseline) to determine the program objectives. Contract performance requirements, or the contract objectives, are generally established with a view toward achieving the program objectives. While program objectives are rooted in the requirement, previous contractor performance is sometimes considered when the contract objectives are established. For example, a higher emphasis may be placed on improving management systems for software development where a contractor has a record of difficulty delivering software on time.

Field procedures vary for determining the objectives for individual contracts, or their relative priority. One variable is the extent of research performed to prepare new contracts, including the degree of communication with program sponsors, end users, and oversight officials. Contractors participate in defining the desired outcomes of contracts for some programs.

2. Define the current process for defining contract incentives and their administration.

The government's priorities are reflected in the description of work for the contract. An IPT process is used to prepare coordinated documentation, and to ensure that all government requirements have been met. For example, care is taken that the critical performance parameters are explicitly linked to the work statement. On a case-by-case basis, the work to be performed is analyzed in terms of design maturity, technical complexity, dollar value, schedule, and potential for competition. This analysis is relied upon to develop the source

selection plan, including the choice of contract incentives and contract type.

A senior level review is generally conducted to establish consensus for the long term goals of a program, as reflected by the work statement, source selection plan, and other program documentation. This review provides guidance for balancing the cost, performance, and risk factors of an acquisition, and to ensure that probable work products of the contractor may be realistically measured. Contract incentives are selected which are believed to be the most effective for accomplishing the program objectives.

Where possible, contract incentives are selected where the short term contribution of a contractor's work product is linked directly with a long term objective of the program. For example, some Navy activities use a "System Design Decisions" clause to encourage the selection of technologies which may require a higher than budgeted investment in the near term when justified by projected savings in production or in operations and support. A similar feature was used in some Army contracts through a Value Engineering program where shared savings are anticipated for accepted design changes to reduce life cycle costs. Incremental growth of a program over time was cited as another means of balancing the long term interests of life cycle management with the near term demands of diminished budgets, but it leads to a near term focus for contract incentives.

Stable program funding is an important ingredient for an effective contract incentive arrangement. The alternative is that work packages are forced into allotted schedule increments, which may not promote the most effective performance. There was one exception where it was believed that the real incentive lay in the promise of future work for the contractor, in which case stretching programs would be desirable.

There is high interest in linking contract incentives to demonstrated performance of the system. This can be in the extreme, where payment of a bonus is dependent upon system performance that is measured after deployment of the system, or in more discrete segments where award fees are linked to significant program milestones. Contractors do not favor waiting excessively long periods to earn contract incentives, but long term incentives can be effective where there is a significant amount of money at stake, and where the government can benefit from superior performance. For example, the use of On-Orbit incentives for some satellite programs is given credit

for achieving higher reliability, which defers the point in time where a satellite must be replaced.

In general, short evaluation periods with a limited number of evaluation criteria are preferred, because the contractor tends to focus on performance of these few items at the expense of other program requirements. This emphasizes the need for the evaluation scheme to be flexible from one period to the next. Even where the criteria are constant throughout the life of a contract, the relative weightings of the criteria may vary with each evaluation period to encourage the solution of program issues, or to otherwise provide for a mid-course correction.

3. Determine how well government priorities correlate with contract incentives. In determining this correlation, consider how well government priorities for the instant contract and for the total acquisition are reflected in contract incentives.

The IPT collected information from Contracting Officers through an interview process to address this research goal. The Army summary is at Tab F; the Navy summary is at Tab G; the BMDO summary is at Tab H; and the Air Force is at Tab I.

In general, award fee criteria were found to be an accurate reflection of program objectives, and the contract incentives were believed to be effective tools for meeting the program objectives. The program managers are faced with conflicting goals, such as wanting to address the long term issues associated with life cycle management while having to address the short term reality of diminished budgets, and they try to optimize satisfaction of as many program objectives as possible. There is a clear understanding that the primary contributor to program success is meeting the exit criteria so that the Milestone Decision Authority will approve entry of the program into the next phase of its life cycle. The award fee criteria tend to mirror what the program manager believes is necessary for his program to succeed.

The survey noted that contracting officers tend to question the effectiveness of award fee criteria for programs with "Red" overall performance ratings. One example was a Cost Plus Incentive Fee (CPIF) contract for development of a new item where there is a large overrun, and the contractor is continuing performance while investing private funds. In a similar situation, the award fee portion of a Cost Plus Award Fee (CPAF)

contract was being used to supplement the cost overrun. In another example, low award fees were earned, but performance has remained unsatisfactory. On the other hand, successful programs tend to see a high correlation between the program objectives, contract performance, and the award fee criteria. One program observed that the combined use of an IPT with the contractor and highly tailored award fee criteria provided an effective tool for insight to manage contract details.

The key ingredient for success was viewed to be the flexibility inherent in the CPAF type of contract to adapt the award fee criteria (or the weightings of the criteria) to respond to program issues during the course of contract performance. One Agency measured a tendency for contractors to earn increased award fees after criteria weights were revised to better reflect program goals, which had changed during the course of contract performance. Another Agency noted a tendency for cost and schedule criteria to be given added emphasis after funding issues developed for programs. The contractors respond to these shifts in emphasis in an effort to satisfy their customers.

Other features of award fee plans were considered to provide effective incentives for meeting program objectives, including the business aspects of the program. Where possible, meaningful goals are used which link award fee determinations with the schedule for critical program milestones and the timing of key events. By the same token, the duration period for an ideal award fee evaluation was considered to be a year or less, since contractors tend to focus on measurable accomplishments. Incentives for the business aspects of a program (e.g., plans for competition, realistic production rates, design to cost programs) help keep programs affordable over the life cycle while the short term attention may be focused on resolving technical issues. It is believed that the contractor's motivation to meet the government's program objectives is enhanced when unearned award fees are made available for superior accomplishments in future award fee periods. Another effective motivator is where individuals are permitted to share in the award fee based on individual contributions to contract performance. Contrariwise, the use of negative award fees and the withholding of award fee payments can be recognized as effective motivators also.

4. Describe how contract incentives should be related to quarterly contractor performance assessments, individual

contractor past performance evaluations, value engineering, or other interests.

Government contracting relationships are based on the premise that the contractor is motivated to maximize profitability.

Each contract includes a collection of incentives that are intended to encourage achievement of the technical objectives of the contract. The fee arrangement is one incentive that is directly related to profit realized on the instant contract. The fee may be objectively determined based on actual cost incurred, as in the case of contracts with incentive fees or multiple incentives, or it may be subjectively determined, as in the case of contracts with award fees. The potential for future profitability may be addressed in contracts through accepted value engineering changes or through rights in technical data (and related royalty or licensing agreements) that are established in the course of contract performance.

Another aspect is the evaluation of contractor performance. The FAR requires that contractor performance be evaluated at least annually. These evaluations are considered when future contracts are awarded. In addition, these evaluations provide feedback to the contractor so that it may improve aspects of performance to satisfy its customer - the government. These evaluations can impact contractor profitability by influencing the amount of fee earned under award fee contracts and by influencing the potential to receive future business through the evaluation of contractor past performance. In addition, a quarterly contractor performance assessment is a less formal early warning tool for program managers to communicate impressions about the quality of contractor performance so that adjustments may be made in contract performance before official performance evaluations or fee determinations will affect the contractor's bottom line.

When structuring incentives for contracts, it is important to correlate the potential award fee pay-out with the evaluation of contractor performance. It can be confusing to have a contractor, which is rated poorly in its performance assessment, be rewarded highly under the award fee plan. The award fee criteria and the performance evaluation criteria should be closely linked, while allowing the flexibility to adjust the criteria during the course of the contract to address specific issues as necessary. Tying the evaluation periods to specific events is one method of ensuring an evaluation of like things

under each process. By using an event-based definition of evaluation periods, care must be exercised to ensure that an award fee evaluation occurs at least every 6-12 months to maintain interest by the contractor in the potential effect on its profit and loss statement. Linking award fee evaluations with the quarterly performance assessments may provide a basis for relating performance and reward more closely. Assuming it did not create an administrative burden, use of quarterly award fees may provide an additional incentive by improving a contractor's cash flow. As a minimum, it is helpful to have an award fee evaluation that roughly corresponds to achievements addressed in the annual performance evaluation.

In addition to establishing a common basis for measurement of contract performance, the award fee criteria can make allowances for special rewards for achievement of superior performance or negative fees to recognize the effects of sub-standard performance. For example, unearned fee may be retained in a bonus pool for recognition of significant accomplishments (i.e., roll-over). Long term rewards can be established to influence trade studies during design and development (e.g., demonstrated reliability through on-orbit incentives or achievement of design to cost goals represented by future contract prices). Where negative fees are considered, care must be taken to avoid use as a penalty. Rather, a negative fee for sub-standard performance should reflect the reduced value or increased cost of the performance delivered under the contract.

When conditions permit an objective measurement of contract performance, a CPIF contract with multiple incentives for achieving cost, schedule, and technical goals may provide an effective business arrangement. As a rule of thumb, a contractor can expect to earn a fee of 8 - 9% for satisfactory performance under a Cost Plus Fixed Fee (CPFF) contract. Likewise, target performance under a CPIF contract should translate into a fee of approximately 8 - 9%. Above target performance could earn a higher fee of up to 15%, and below target performance could earn a lower or even a negative fee. The award fee criteria on CPAF contract could be structured with this metric in mind. For example, for a contract with the usual base fee of 3% and an award fee pool of 12%, a contractor with only satisfactory performance should earn only 40 - 50% of the award fee pool. This would be equivalent to the amount of fee that would have been expected for satisfactory performance of the work under a CPFF contract.

Two issues must be resolved as incentives are structured to mirror contract performance objectives. The first issue is recognizing the difference between program objectives, which tend to be long term, and contract objectives, which may be building blocks with a view toward achieving the program objectives at a future time. Where there is a gap between the two, and the incentives are structured with the program objectives in mind, the contractor and the government are likely to be frustrated as the measure of contract performance falls short of the objective. The second issue is to structure award fee plans so that earned fee may be viewed consistently with other performance evaluation systems.

5. Assess Army's potential new decision matrix under its "Innovation in Contractual Incentives" study.

The Army's contracted study was completed at the end of October. An Army IPT was assigned the following actions to build on the results of the study:

SHORT TERM.

- Review the final report and identify the range of incentives that can be implemented in the near term;
- Review and analyze incentive success stories and make them available to the workforce via the DoD Acquisition Deskbook and Best Practices website;
- Determine what additional functional representation is needed on the IPT and enlist their support;
- Develop an Incentive User Guide;
- Develop training;
- Coordinate with DAU on upgrading their treatment of incentives in existing courses;
- Identify potential pilot programs; and Identify constraints that may impede the implementation of innovative processes and possible solutions.

LONG TERM.

- Assess the need for an automated tool and develop if necessary;

- Review findings and recommendations of external analyses;

- Analyze the results of pilot programs and make lessons learned available to the workforce; and

- Develop a methodology for assessing the effectiveness of the Army's Incentive program.

The lessons learned and training materials will have potential application throughout the Department. The Army should be encouraged to make these products available to the other Components as they become available. Similarly, the Air Force should share the results of its "Reinvention Team" study of "Contractor Incentives for Development Schedules". The Air Force study objective is to develop methods for program offices and contractors to reduce project schedules effectively and appropriately through the use of a pre-approved menu of contract incentives.

6. Consider development of a feedback process to measure how well incentives achieved contract goals.

There is general agreement that it could be worthwhile to assess how well incentives achieved contract goals when structuring incentives for new contracts. The correlation of performance evaluations and the corresponding award fees earned was viewed as the best measure of incentive effectiveness. It was noted that contract goals may change over time, such as when funding shortages lead to increased emphasis to contain cost growth, but the incentive structure may not be adjusted to correspond to revised goals. Another complication is that a long period of time may occur between observed contract performance, such as design trade studies, and payment of incentives based on observed performance of the weapon system (e.g., on-orbit incentives). An ad hoc, retrospective consideration of experience under individual contracts seems preferred to creation of a formal lessons learned process to understand the effectiveness of incentives.

7. Address retention of unexpended incentive payments to manage program issues.

There is general agreement that making unearned fee available for bonus pools or for future award fee periods, commonly referred to as rollover, provides significant motivation for a contractor to improve contract performance. It is understood that the Comptroller may withhold program funds because of unexpended fee payments. It is important to obtain support of the Comptroller during development of the award fee plan when rollover of fee is contemplated.

CONCLUSIONS:

- 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.

- A CPIF 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.

- Lessons learned and training materials that the Army plans to develop for contract incentives should be assessed for potential application throughout the Department.

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

ACQUISITION AND
TECHNOLOGY

July 23, 1999

DP/DSPS

MEMORANDUM FOR DIRECTOR SYSTEMS ACQUISITION

SUBJECT: Action Items from the June 5, 1999, Contractor Assessment Review

Action item #5 from the Contractor Assessment Review required me to establish an IPT concerning contractor incentives. The action plan for the IPT is attached.

Eleanor Spector

Eleanor R. Spector
Director, Defense Procurement

Attachment:
As stated

CONTRACTOR INCENTIVES IPT
ACTION PLAN

TASK: PDUSD(A&T) directed that DDP establish an IPT to improve contractor incentives to ensure that the outcomes the Government desires most receive the contractors' highest priority.

IPT PARTICIPANTS:

Tom Colangelo	Army	OASA(ALT)
Nancy Cunningham	BMDO	BMDO Contracts
Michael McDonald	Navy	OASN(RDA)ABM
Pat Hansley	OSD	OUSD(A&T)S&TS/AW
Don Reiter	DCMC	DCMC
Matthew Schaffer	OSD	OSD PA&E (CAIG)
Frank Ford	Navy	OASN(RDA)ABM
David Powell	Air Force	SAF/AQCP
Verne McKamey (lead)	OSD	OUSD(A&T)DP/DSPS

STATEMENT OF PROBLEM: The government's goal in contracts is to achieve a required performance capability on time and at affordable prices. Contract performance issues can develop as tradeoffs are made among cost, performance, and schedule. Contract incentives are viewed as a method by which the government can influence the achievement of specific objectives that otherwise might be sacrificed. There may be improvements to the process for determining and managing incentive arrangements so that contract incentives contribute to achievement of the acquisition objectives.

PLANNED APPROACH

IPT Research goals:

- Define how the government decides which contract outcomes are most important.
- Define the current process for defining contract incentives and their administration.
- Determine how well government priorities correlate with contract incentives. In determining this correlation, consider how well government priorities for the instant contract and for the total acquisition are reflected in contract incentives.
- Describe how contract incentives should be related to quarterly contractor performance assessments, individual

ATTACHMENT

contractor past performance evaluations, incentives on other contracts, value engineering, or other interests.

- Assess Army's potential new decision matrix under its "Innovation in Contractual Incentives" study.
- Consider development of a feedback process to measure how well incentives achieved contract goals.
- Address retention of unexpended incentive payments to manage program issues.

Provide results of IPT's research to PDUSD(A&T) with recommendations for any new policy direction prior to next Contractor Assessment Review (September 25, 1999).

B

Contractor Incentives IPT Questionnaire

I am a member of the Integrated Product Team on Contractor Incentives. This is a joint service team established by the Director of Defense Procurement at the direction of the Principal Deputy Undersecretary of Defense for Acquisition and Technology. We are to look into ways to improve contractor incentives to ensure that the outcomes the Government desires most receive the contractors' highest priority.

It is generally understood that the government's goal in contracting is to achieve a required performance capability on time and at an affordable price. Further, when contracting for development, tradeoffs are often required between cost, performance, and schedule considerations. Contract incentives are viewed as a method by which the government can influence the achievement of specific objectives that otherwise might be sacrificed. To help understand how effectively current incentive arrangements are working, the IPT is interested in learning how the government decides which contract outcomes are most important, and then how the resulting contract incentives are designed and administered to help meet that end.

With that in mind, I would like to solicit your help by asking you to respond to the following questions as they apply to ACAT I and II development programs under your cognizance. Please feel free to provide as much information as you think will help the IPT understand the issue. If in addition to responding to these questions, you would like to meet with the IPT to discuss your answers further, please let me know.

1. Please describe the method by which the program objectives and the relative priority of cost, performance, and schedule considerations are determined for programs under your cognizance. Are the program objectives documented through a formal procedure? If so, please describe.
2. The development of incentives for a contract is a collaborative process between the program manager and the contracting officer. Multiple incentives may be at work on any given contract, such as the form of fee determination, shared savings through value engineering or single process initiatives, or the potential for future business through past performance report cards or strategies for competition. How do programs under your cognizance select and manage the incentives to be used for an individual contract?
3. How do you ensure that the contract work statement and source selection plan reflect the government's priorities for a program?
4. When establishing priorities, how do you tend to balance interest in instant contract performance as compared to the long term effectiveness of a program?

Thank you for your help with this survey.

C

"Thomas W. Colangelo" <tcolangelo@erols.com> on 09/19/99 03:18:11 PM

To: Verne McKamey
Subject: Contract Incentives Survey

Verne,

I am forwarding the PEO responses (2) to our survey as well as input received from KO's on the additional survey questions (attached).

PEO - [redacted]

1. Please describe the method by which the program objectives and the relative priority of cost, performance, and schedule considerations are determined for programs under your cognizance. Are the program objectives documented through a formal procedure? If so, please describe.

Acquisition Program Baselines are prepared for all programs. In addition, exit criteria are established and most be met before completion of a successful milestone review.

2. The development of incentives for a contract is a collaborative process between the program manager and the contracting officer. Multiple incentives may be at work on any given contract, such as the form of fee determination, shared savings through value engineering or single process initiatives, or the potential for future business through past performance report cards or strategies for competition. How do programs under your cognizance select and manage the incentives to be used for an individual contract?

Various forms and types of contract incentives are used. The final selection is generally based on the contract type and risk. However, I feel he real incentive to industry is future work.

3. How do you ensure that the contract work statement and source selection plan reflect the government's priorities for a program?

The ultimate authority for the source selection plan is the Source Selection

Authority. The source selection authority has the right to appoint advisors as needed. These advisors usually include both the Project Manager and TRADOC System Manager.

4. When establishing priorities, how do you tend to balance interest in instant contract performance as compared to the long term effectiveness of a program?

Life Cycle Cost is used whenever possible.

PEO - [redacted]

1. Please describe the method by which the program objectives and the relative priority of cost, performance, and schedule considerations are determined for programs under your cognizance. Are the program objectives documented through a formal procedure? If so, please describe.

The program objectives (cost, performance and schedule) and their relative priority are determined by the Program Manager, with the aid of the User (developer of the Operational Requirements Document (ORD), which establishes the performance parameters/objectives). The Acquisition Program Baseline (APB), which is initially approved at Milestone I and updated for each subsequent milestone, formally documents the established cost, performance and schedule objectives. These objectives (APB) are monitored through submissions of the Defense Acquisition Executive Summary (DAES) and the Selected Acquisition Report (SAR) reports which are submitted quarterly to OSD and annually to Congress, respectively. The PM prepares the APB, the Program Executive Officer (PEO) and the Component Acquisition Executive (CAE) concur and approval is granted by the Milestone Decision Authority (MDA).

2. The development of incentives for a contract is a collaborative process between the program manager and the contracting officer. Multiple incentives may be at work on any given contract, such as the form of fee determination, shared savings through value engineering or single process initiatives, or the potential for future business through past performance report cards or strategies for competition. How do programs under your cognizance select and manage the incentives to be used for an individual contract?

Selection of contractor incentives (e.g., fee and sharing arrangements) is based on several factors, such as the maturity of the program, contractor capability and experience, technical complexity, and schedule concerns. All such arrangements, both the type of arrangement and the precise fee structure, are developed by an IPT and are negotiated with the contractor. Award Fees are utilized to incentivize optimum performance by monitoring the significant program milestones and awarding fee based on those levels of performance.

One current initiative that the [redacted] Project Office is employing is the development of a value engineering life cycle cost reduction program which would decrease the unit cost of all missile variants over the life of the program and result in shared savings.

Note: See the excerpt from the PEO, [redacted] Best Practices Manual provided separately. This Best Practice is being considered for elevation to PEO, [redacted] Preferred Practice status, i.e. required under PEO policy.

3. How do you ensure that the contract work statement and source selection plan reflect the government's priorities for a program?

All program documents, including statements of work and evaluation factors that will be utilized in the Source Selection Plan, are a coordinated effort among all functional elements (IPT Concept). A comprehensive review of the completed statement of work and evaluation factors reveals any deficiencies or concerns. This comprehensive review takes the form of a Functional Requirements Authentication Board (FRAB) which is chaired by either the PM or the Deputy PM. This FRAB is composed of senior management within the Project Offices, and is supplemented with senior functional experts from the contracting and legal offices. The FRAB assures that all priorities are met, balanced with cost, performance and risk.

Source selection plans are developed by functional specialists and are thoroughly coordinated with the requiring office to ensure that all appropriate areas are addressed and that proper weights are assigned to each area.

4. When establishing priorities, how do you tend to balance interest in instant contract performance as compared to the long-term effectiveness of a program?

Balance is achieved by incremental growth. For example, using the basic [redacted] Block I design, and modifying it to suit differing needs such as extended range. Achievement of realistic goals is emphasized for the instant contract, but future growth potential is constantly investigated. The [redacted] Block IA program variant was an engineering change to the basic [redacted] Block I missile. The [redacted] is a second variant of the Block I, using most of the design and many of the same components as the basic Block I. The P3I [redacted] warhead is a variant of the basic [redacted] and will be used with both the [redacted] and the Block IIA programs.

Another example is being pursued by the [redacted] Project Office. This office has chosen to use an improved warranty provision to assure continued performance of managed missile systems. Contractors are under significant pressure to reduce the life cycle cost of the system, particularly the production costs. To balance that cost pressure, the government and the contractor have jointly developed a reliability-based warranty clause for production contracts. This warranty is in effect for 10 years from acceptance (the missile shelf life), has an incentive provision (reduced the contractor's total liability for better than anticipated reliability), covers fielded missiles and those subjected to

post-acceptance tests, and includes no additional cost to the Government for covered repairs.

A third example is the use of award fees for operational Readiness used on the [redacted] This method is the result of extended cooperative efforts with the contractor and logistics community. Under this arrangement, the contractor receives award fees on their CLS contract based on the degree to which the User's operational readiness exceeds minimum requirements. The contractor was informed of customer requirements throughout the program and involved in structuring the incentive structure during LRIP through Alpha contracting and other teaming efforts. Since the [redacted]rogram is performance based, the contractor was incentivized early to provide a design and to effect production which would optimize potential earning of fees by superior long term weapon performance and supportability.

Hope this helps.

Tom

 - Combined.doc

 - BPincentives.doc

"Colangelo, Thomas Mr SARDA" <thomas.colangelo@sarda.army.mil> on 09/21/99 03:18:05 PM

To: Verne McKamey
Subject: FW:

Verne,

This is a late response to our survey of PEO's. It may be helpful.

Tom

----Original Message----
From: [redacted]
Sent: Tuesday, September 21, 1999 3:30 PM
To: 'thomas.colangelo@sarda.army.mil'
Subject:

Question 1. Program objectives are typically established through an IPT like process. Initially the user, PM, and PEO discuss the various objectives for a system in terms of cost, schedule and performance. Through the use of acq reform initiatives such as CAIV, the initiative become more refined and tailored. As a system matures, the IPT member community evolves to include the contractor, DA, and OSD; as appropriate. The objectives for a program become formalized in an Acquisition Program Baseline(APB), which is formally reviewed at each Milestone; and informally as needed.

Question 2. Incentives are tailored to our programs on a case by case basis, determined by what is most likely to be effective. Life cycle phase(RDTE/Procurement), ACAT Level, Dollar Value, type of contract, and whether competition is involved all weigh into the decision. Typically this is a coordinated effort between the contacting officer, PM, and PEO offices.

Question 3. The PM Office is the primary point for ensuring the contract work statement and source selection plan reflect the government's priorities for a program. As mentioned above, the PM works though an IPT process to clearly define the objectives of a program. Early on the user and ODCSOPS are key members of the IPT process. Since the PM Office is responsible for putting together the contract work statement and source selection plan, they have the greatest opportunity to ensure the governments priorities are reflected.

Question 4. Balancing instant contact performance and long term effectiveness may be conflicting priorities for a PM. Again, an IPT with membership from the user, ODCSOPS, PM, and even the contractor help drive this answer and create a win win solution. Current emphasis on Life Cycle Management has increased the long term vision, however diminishing budgets require focus on near term performance. An effective government/industry team is the most effective way of dealing with these issues, many times

using the Acq Reform initiatives in place today. Ultimately, the user, PM, and Milestone Decision Maker need to come to an unified position.

Following are specific comments from PMs as to their incentives structure and rationale. If you use any of this in a For Attribution way, please check with me first. Thanks.

[redacted]

[redacted]

Contractor Incentives IPT Questionnaire

Answers

1. Please describe the method by which the program objectives and the relative priority of cost, performance, and schedule considerations are determined for programs under your cognizance. Are the program objectives documented through a formal procedure? If so, please describe.

- Based upon previous contractor performance and the most critical requirements.
- Documented in the Mission Needs Statement Acquisition, Operational Requirements Document, Program Baseline Agreement, Acquisition Strategy, Acquisition Plan, TOC Management Plan, the Source Selection plan and a System Requirements Review
- Set by the PM
- Head of the Contract Activity approval
- Determined jointly by the OPNAV Sponsor, ASN RDA, NAVSEA (01,02,03,08), and PEO [redacted]
- The IPT with primary consideration given to fleet user requirements
- Decided by consultation with the user and the acquisition community
- extensive communication occurs with the contractor
- varies per Program Office

Set to reasonably provide the required performance capability.

- Based upon upcoming requirements, the Program Office develops an award structure to achieve desired results.
- monitored informally based on customer and IPT input
- [redacted] Response - they use multiple incentive contracts to a large extent:

Incentives should interact - identify WHAT the program is trying to accomplish on the contract - translate program aims into an incentive - Meaningful/Measurable/control of the contractor. Define target outcome and a range of acceptable outcomes – the Range of Incentive Effectiveness (RIE) - define the fee values of increments of each technical attribute performance element, of schedule milestones, and of cost (for which the term cost share defines the increment).

[redacted]

2. The development of incentives for a contract is a collaborative process between the program manager and the contracting officer. Multiple incentives may be at work on any given contract, such as the form of fee determination, shared savings through value engineering or single process initiatives, or the potential for future business through past performance report cards or strategies for competition. How do programs under your cognizance select and manage the incentives to be used for an individual contract?

- Short evaluation periods
- Limited criteria
- Criteria based on a consensus
- Flexible - "specific criteria were avoided - incentivized the prime contractor to concentrate on those areas to the exclusion of other areas"
- Low base fee
- Involve senior level officials
- Schedule incentives based on ship delivery schedules.
- Unofficial midyear CPARS to tell the contractor how they are doing.
- Single process initiatives, earned value management, and shared savings opportunities
- Contractor independent self-assessment.
- [redacted] Comment:

  Requires a fundamental understanding of the program - define what cost, performance, and schedule parameters pertain, determine which are of primary importance - understand their mutual priorities, know the expected and minimally acceptable values of each, understand reasonable outcomes of contractor effort, and be able to measure these outcomes realistically. One has to know the ultimate objective to be reached.

3. How do you ensure that the contract work statement and source selection plan reflect the government's priorities for a program?

- developed by the Navy team that establishes the government's priorities
- Tied to the Key Performance Parameters in the Acquisition Program Baseline Agreement
- By IPT/SAE review.
- [redacted] Comment - *based on performance in the deployed fleet under conditions of actual use - apply over several years of deployment, emphasizing the long term importance of the incentive element being measured, and better enabling test of a statistically significant sample of the population.*

4. When establishing priorities, how do you intend to balance interest in instant contract performance as compared to the long-term effectiveness of a program?

- Stable funding a critical aspect
- mid-course correction
- Character and Integrity
- Senior buy in to long term goals is the key.
- Contribution of the short term objective in supporting the long term goal
- Total Ownership Cost Program. This program requires the contractor consider the effect of the design on O&S Costs.
- A System Design Decisions clause - incentive for the contractor to choose technologies that would cost more than their budget at the outset but result in future savings in production or in Operations and Support
- Performance Based Payments provide ample cash flow for the contractor in return for timely, measurable progress on the statement of work.
- [redacted] - overlapping of incentive measurement periods; a reliability maintenance feature that pertains to all subsystems. It becomes possible for SSP contractors to choose to accept fee loss in their instant contract in order to ensure, for example, a recovery or

improvement of reliability which will be profitable in future contracts. Under this arrangement, the contractor becomes program-oriented and his short and long term goals mirror those of the Program Manager. This atmosphere reflects the Government - industry partnering arrangement that has been fostered by [redacted] since its inception.

E

Contractor Incentives IPT Questionnaire

1. Please describe the method by which the program objectives and the relative priority of cost, performance, and schedule considerations are determined for programs under your cognizance. Are the program objectives documented through a formal procedure? If so, please describe.

- Cost as an independent variable (CAIV) is used to track and evaluate progress towards program objectives in relation to cost, performance, and delivery schedule. Frequent contact with the contractor is used to keep informed on progress and the contractor provides monthly Cost Performance Reports. The monthly reports are used to analyze schedule and cost variances in an effort to detect and correct potential problems before they get out of control.
- The main objective of this program is the maintenance and changes to existing software. The users state their requirements for the future of the software; i.e. changes, upgrades, performance requirements. The IPT then goes through formal review of these requirements to determine cost and schedule. The IPT conducts Joint Technical Reviews all along the process from design to delivery to ensure the requirements are met or are satisfactory to the user.
- The contract's award fee plan addresses Affordability, Commonality, and Capability as program objectives. These were derived from the SAMP guidance and ORD requirements. The ASC Strategic Roundtable process was used to validate these objectives in 1996. This process involved a systematic series of reviews of the details of a program's acquisition strategy by a panel of seasoned experts assigned to key ASC staff functions.

- The Engineering Manufacturing Development (EMD) contract is predominately cost-plus-award-fee. The award fee periods are 6 months in duration and a revised or new award fee plan is prepared for each period. Within the plan, specific areas of emphasis (generally cost, schedule, and performance related), grading criteria, and critical program events are presented to communicate near and long term objectives. Throughout each grading period, the contractor receives formal feedback through monthly reports, and mid-term and final assessments. All feedback is coordinated jointly at the lowest levels of IPT management structure before escalating into the formal, documented responses. This "jointness" of our process not only acts as an effective mechanism for SPO-contractor communication, but also serves as an avenue for the contractor co-leads to elevate difficult issues within their management structure.
- Cost, performance, and schedule are all interrelated and receive equal priority on an as need basis. For example, if one area is experiencing a problem, more management attention is focused in that specific area. However, the ultimate goal is to have a technically sufficient, on cost, on schedule, weapon system. In the award fee plan, program management and technical each receive 50% weighting.
- One program had a clear order of priorities:
  - Production price (which includes O&M costs because of our comprehensive warranty)
  - Schedule or risk
  - Performance

  We did not document those through a formal procedure, but distilled them from interaction with the user, OSD and the contractors. Importantly the way we have treated performance has been, in effect, to get the best we could for a production price. It is essential to treat price as a technical

requirement in both the requirements documentation and the systems performance specification. That way the engineers have an incentive to meet the price as well as the performance.

- The program objectives and the relative priority of cost, performance, and schedule are determined in various ways. These ways or methods depend upon the program, the stage the program is in (usually EMD through full-scale production) and whether or not the program is just being initiated via a new contract or is an on-going mature program. In all instances the process is iterative and involves a great deal of interaction among the user, the SPO Cadre and industry. The SPO Cadre, of course, includes all of the necessary disciplines such as program management, engineering, logistics, and contracting to illustrate a point. Whether or not the above are formally designated as integrated product teams (IPTs) or less formal associations the goal is the same to determine the proper balance of cost, schedule and performance for the program. The following examples illustrate the point. We took over a program from the Navy during the completion of the EMD stage. The object of the program was to go directly into production after selecting a qualified contractor via the source selection process. The SPO Cadre worked directly with the user and with industry to define performance, cost and schedule. At least two open industry days were held to solicit information from the market place. This turned out to be very successful with the contractors providing valuable data to help us firm up our requirements. We were able to work with the user letting him know any limits or concerns expressed by industry and together the SPO, industry and user members were able to prioritize the essential elements of cost, performance and schedule into a usable document permitting us to then solicit industry through the RFP process. These parameters were formally entered into

the Simplified Acquisition Management Plan and in the Source Selection Plan documenting the results of the process. Additionally, since our program is a PEO program we briefed the results of our teams' work to the PEO during one of his periodic visits to our SPO. In another instance with an on-going program, problems arose with a failed critical component. This program had already established program objectives and the priority of cost, performance and schedule and had placed them on contract. Here we are assessing the impact on the above because of a change in the program brought on by failures in a test program. Again the same principle applied, much interaction with the user, SPO Cadre and the contractor. With an on-going program, however, the contractor has much greater responsibility for cost schedule and performance since he is on contract to perform to those established previously. The contractor must now determine a fix and coordinate that with the SPO and user to make sure the original objectives of the program are met. This is documented in briefings, papers and finally updates to the SAMP/Acquisition Plan/Program Management Plan as the program progresses and, of course, updates to the PEO.

2. The development of incentives for a contract is a collaborative process between the program manager and the contracting officer. Multiple incentives may be at work on any given contract, such as the form of fee determination, shared savings through value engineering or single process initiatives, or the potential for future business through past performance report cards or strategies for competition. How do programs under your cognizance select and manage the incentives to be used for an individual contract?

- This program contract is a cost plus award fee (CPAF) contract. An award fee review team (Program Manager,

Functional Manager, and Contracting Officer) rates the contractor in seven areas (Schedule (20%), Technical Quality(20%), Product Quality(20%), Thoroughness of Performance(18%), Subcontractor Management(12%), COTS Cost Savings to the Government(5%), and COTS Technical Merit of Solution(5%)). The weighted ratings are combined to arrive at an overall contractor performance score. The overall score is applied to the award fee pool to determine the recommended award fee, which is then reviewed by the Fee Determining Official for final approval.

- Past performance report cards are also used to rate the contractor's performance to aid the Contracting Office in determining future potential contract awards.
- The award fee is the primary incentive for the EMD contract. In addition to the award fee process, Contractor Performance Assessment Reports (CPARs) are prepared each year. The information in the CPARs reflects of the information contained in the award fee determinations. This way there are no surprises.
- Incentives are managed through the award fee plan for the form of fee determination. The plan gives weighted percentage points for value engineering and initiative on the part of the contractor. Also at work here, is the desire on the part of the contractor to be chosen for a follow on contract.
- Contract incentives were developed on the original contracts and focused on areas the contractor must successfully execute for the program to be a success. Award Fee periods are six months in length. Current strategy for an upcoming rebaselining effort is to adjust award fee periods to develop higher pool amounts geared to government priorities, such as flight test. Acquisition planning for future effort(s) includes strategies for award term incentives. Furthermore, the program issued a new Task Order Contract with a

performance incentive clause. This clause considers the timeliness and quality of the end products—normally reports. The clause also considers the contractor cost control, rewarding the contractor for completion of task efforts within the original cost estimates.

- Program incentives were selected using the process described in 1 above. They are documented in the contract's award fee plan. This plan is reviewed semi-annually at the end of each award fee period, and updated according to the contractor's performance in the previous period. The government has the option to make unilateral changes to the plan, but has typically made bi-lateral changes only to ensure the contractor understands and will comply with those changes. Contractor performance against these incentives is evaluated every six months by a panel of program functional leads that provide input to the Award Fee Decision Authority on how much incentive has been earned that period.
- The SPO uses the Award Fee process to incentive the contractor. As part of the award fee process there is a special emphasis appendix that the government uses to focus the contractor's efforts for each award fee period. This special emphasis area(s) is revised each award fee period. The SPO also completes the Contract Performance Assessment Report yearly on the contractor team as another method of feedback. Finally, the SPO provides feedback during the bi-monthly IPT Council meetings, Quarterly Design Reviews, and at the mid-point of the award fee period.
- The belief that the Government (PCO/program manager) should unilaterally determine incentives is fatally flawed. Most Government people do not understand what truly incentivizes contractor behavior. The right thing to do is for the Government to determine desired outcomes and then work with

the contractor(s) to determine how best to incentivize those outcomes.

With regard to other incentives it is important to comprehend all the effects of an incentive. For example, an award fee incentive presumably motivates contractor performance in selected areas, but can be absolutely destructive to teaming between the Government and the contractor. The VECP process is a theoretical incentive that sometimes breaks down in practice because it is so cumbersome and so much of the savings accrue to the Government.

For the majority of companies the most effective incentive is the promise of a long-term business relationship (stability) and the potential for future business. If the DAE adopts the recent recommendation of the Price-Based Acquisition Team to elevate the importance of past performance in DoD source selections we will have a very powerful incentive for performance on every contract--one that doesn't cost any money.

- Incentives are selected for individual contracts much in the same way as program objectives, and performance, schedule and cost are chosen as indicated above-by teamwork. The process usually begins with the program manager or contracting officer identifying a need for a contract incentive. Most of the times an incentive will be needed on cost but delivery incentives are also being used. Research is then done gathering information from other SPO's on what incentives are being used and how effective they are. Further contacts are made with the contract policy and committee offices to find out about the latest policy and examples that are available. The Internet is used to search the appropriate web sites to complete the investigation. The applicable contractor, in the

case of an on-going contract, is also brought into the picture to work the incentive to make sure it is acceptable and workable with the contractor. All these players are then brought in to negotiate the final terms and conditions of the incentive and then it is placed on contract. The performance of the incentive or management of the incentive is monitored during the performance of the contract. Some cost incentives are not finally settled until all of the contract performance is complete. Other incentives, such as schedule incentives may have to be monitored on a periodic basis to insure that the event has taken place successfully and payment made accordingly.

3. How do you ensure that the contract work statement and source selection plan reflect the government's priorities for a program?

- The contractor had this contract and the previous one. The work is specialized software development and the source selection plan reflected the direction the users desired to take the software into the future. The initial contract work statement was changed to reflect changes that were necessary due to the Command, Air Force, Navy and Department of Defense requirements. The PM works with the contracting officer to ensure these changes are agreeable for both the government and the contractor.
- ORD requirements were used to generate the System Requirements Document (SRD). This SRD and a program Statement of Objectives were included in the Request for Proposal (RFP). As part of the response to the RFP, the contractor developed a draft Statement of Work. The program team evaluated the draft SOW to ensure that program requirements, objectives and priorities were appropriately reflected prior to contract award.

- The ORD, Acquisition Program Baseline, and Program Management Directives define the system requirements. Reviews during the acquisition process (i.e. roundtables, PEO, Air Staff and OSD reviews) ensure that the SOW and SSP address and satisfy the requirements stated in the aforementioned documents. During development and production, DABs and forums such as the Joint Requirements Oversight Council ensure that the requirements, the SOW, and the threats are in concert. Due to the congressional mandated cost caps, an integrated risk assessment (IRA) process was established to examine performance, cost and schedule priorities, and tradeoffs.
- For one contract, the SPO combined the Integrated Master Plan with the traditional Statement of Work, which created The Integrated Task and Management Plan (ITAMP). The ITAMP is on contract and specifies specific events, accomplishments and tasks that must be completed. The ITAMP, together with the Integrated Master Schedule, provides the basis for award fee.
- The source selection plan must have weightings that are both totally in accord with the Government's priorities and are focused on only a few key discriminators. Evaluating a contractor in several areas, mostly equally weighted, satisfies the consensus mentality but does little to help the contractor understand what the true priorities are. Moreover, the priorities need to be absolutely explicit and unambiguous. For our contract we had the contractors participate in the developing of the source selection plan. They were able to point out several instances where our plan did not match what we had stated were our priorities.

  We didn't use a work statement, but used a statement of objectives. As with the source selection plan, the objectives had to clearly state what the priorities were.

The difficulty is to get agreement on what really are the Government's priorities. Typically, the user places the highest priority on performance and schedule and a relatively low priority on cost. This doesn't play. The program manager determined the priorities with inputs (but not coordination) from all stakeholders. Those were the priorities reflected in the source selection plan and the statement of objectives.

- After the IPT lead has communicated to the IPT members the requirements and their priorities the next step is to insure that the priorities are reflected in the statement of work (or statement of objectives) and the source selection plan. This is done through reviews; two of the most popular are explained as follows: The first review method is called the "murder board". In this process the documents are put in draft form and members of the IPT as well as invited experts gather in a conference room and review the documents page by page. When all of the functionals are present at these "murder boards" changes and corrections can be made real time thus producing completed coherent documents. The other method sometimes used in conjunction with the "murder board" is a final review by senior personnel. Here an individual or team of individuals who have an experience level higher than the individuals who initially wrote the document reviews the document or documents.

4. When establishing priorities, how do you tend to balance interest in instant contract performance as compared to the long-term effectiveness of a program?

- Our priorities go hand and hand with the long-term effectiveness of the program. When a new priority (user requirement) surfaces, it is boarded at the IPT level (Users, Functional Managers, and Program Managers) to rate its level

of severity against all other open requirements and assign a required date the new capability is desired/required. The open requirements are then mated against the available funding to determine if the need by date can be met within the cost profile. If the requirement can be satisfied within our budgeted Contract Line Items (CLIN), program management through the contracting office directs the contractor to perform the work. If the requirement will exceed our contracted CLIN, but not our budgeted funds the proposal is briefed to the Program Manager, Financial Management Office (FMO), and the Change Control Board (CCB) for approval to obligate funds against that requirement. If the requirement exceeds funding within the budget, then the requirement is added to the unfunded list.

During the briefings given to the Program Manager, FMO, and CCB, Activity Program Management will offer different options to satisfy the requirement. Cost benefits for each of the option will be described. If due to fiscal constraints the PM, FMO, and the CCB chooses to not allow the AA PM to obligate the money, then the aforementioned process begins again.

Anytime a task is added to our contract, Program Management conducts a rigorous study of the contractor's ability to perform the task within the scheduled time and budget. Factors like the contractor's staffing requirements, past performance on similar tasks, and execution time remaining under the current contract to allow for follow on maintenance deliveries are all weighed in before an execution recommendation is made. "The most bang for the buck" is the goal.

- The user establishes the requirement priorities. Statement of Work items reflect the long-term development program items and these have to be met along with the users requirements. The IPT as a whole determines the balance between the short term and the long-term objectives. Overall, the award fee plan mandates the Statement of Work items must be completed.
- The award fee plan evaluation criteria includes a balance of near term and long term elements that allow the evaluation team to balance current performance and long term effectiveness. The program has also developed a Cost as an Independent Variable (CAIV) plan that allows the government to conduct long term performance impact trade studies based on current system design performance. Updates to the CAIV analysis are required as part of each award fee evaluation.
- Within the award fee plan, specific criteria have been established to serve as a check and balance to discourage the neglect of long term affordability, for near term cost and schedule goals. For example, we established an Affordability Criterion, for this purpose. It states:

"CRITERION P1: Program Affordability.
a). Continue to implement the affordability management process defined during period xx. Expand the definition of the various elements of this top-level process to the next lower level of detail (subprocesses) to clearly describe specific roles and responsibilities of program personnel in the establishment of affordability goals, the generation and implementation of cost reduction initiatives, and a recurring assessment of cost performance through the use of jointly established metrics. The total process must address the affordability of the weapon system from a LCC/Total Ownership Cost (TOC) perspective, balanced across development, production and sustainment.

b). Develop an implementation plan for the management processes and tools that will enable flexibility in the Field Support and Training Contract (FS&T) to achieve maximum operational utility as a function of cost. "

Furthermore, the program established a Target Price Curve (TPC) in the EMD contract that leads to an affordable average unit

production price. This global incentive, in concert with the award fee on the instant EMD contract, provides the overall incentive for the program.

- One of the primary criteria during the PDRR phase is the scalability and traceability of the weapon system to EMD. For example, if there is a weight increase on the aircraft in PDRR, it is carried over to the EMD phase.
- Instant contract performance will always take precedence over the long term because without instant performance there may not be a long term. Too, it is too hard to ascertain what is going to happen in the long term because of budget instabilities, requirements changes, technology changes, etc. Many of our instant contract incentives are not successful because we try to use incentives to reach objectives that are many times unrealistic. The Government, in competition, encourages unrealistic proposals by forcing contractors to bid to unrealistic budgets, performance parameters or schedules. A major focus should be on how do we incentivize contractors to make realistic promises instead of how we incentivize their performance against a set of unrealistic standards after we are on contract.
- Balancing instant contract performance to the long-term effectiveness of a program is a consideration in the formulation of the acquisition strategy. There is no pat answer here for every program is different but suffice it to say that long-term and short-term goals are considered by the team or IPT. For example, acquisition strategy formulation of late has placed, rightfully so, emphasis on cost both instant contract cost (short-term) and the cost of production (long-term). The team must be careful to look at overall best value. An unrealistically low instant contract cost may leave the contractor to consider proposing "changes" to make up for the lost revenue. It may also cause the contractor not to

incorporate the most efficient design for production, thereby designing an item that is not optimized for production which in turn drives up production costs. Parallel development and EMD contracts with a down-selection for production has been successful for this challenge.

F

Army Contract No. [redacted] Version 1, 2, and 2.1 (CPAF) - (Green)

1. What award fee criteria were used in the contract?

Award Fee Period	1	2	3
Technical/Programic Mgt	10%	10%	20%
Software Rqmts Analysis	0%	15%	0%
System Performance	0%	30%	40%
Cost	45%	20%	15%
Program Schedule	45%	25%	25%

2. What weights were applied to each criteria? See Above

3. What percent of award fee has been made?

   For Period 1 the ktr earned an award fee percentage of 77%

   For period 2 the ktr earned an award fee percentage of 84%

   Period 3 has not been completed.

4. Did the actual award fee criteria match the original program objectives? Yes, the award fee criteria has matched original program objectives.

5. Have the incentives been effective? Yes, the award fee incentives have encouraged exceptional performance as related to the award fees paid.

6. Is there anything that the KO/PM would have done differently? Nothing of significance relating to award fee.

Army Contract No. [redacted] Block II P3I (CPIF) – (Green)

1. What award fee criteria were used in the contract? N/A - this is an incentive contract, not award fee.

2. What weights were applied to each criteria? N/A - this is an incentive contract.

3. What percent of award fee has been made?

Target fee = 15%
Maximum fee = 15%
Minimum fee = 2%
Share ratio = 50/50

Target Cost =	$67,484,385
Cost of Money =	$ 932,420
Total Cost (at Target) =	$68,416,805
Contractor Investment =	(-$16,400,000)
Fee (at Target) =	$ 5,270,712
Target Cost + Target Fee =	$57,287,517

4. Did the actual award fee criteria match the original program objectives? N/A/ - this is an incentive contract.

5. Have the incentives been effective? This is an EMD effort for three new systems. The incentive was cost. The contractor has not stayed within cost, even though this contract is utilizing CAIV, EVM and IPTs with Government participation. In addition, there was a contractor investment of $16.4M in the contract, so the contractor is really taking a loss. Technical problems arose.

6. Is there anything that the KO/PM would have done differently? No.

Army Contract No. [redacted] (CPAF) (Red)

1. What award fee criteria were used in the contract?

   Performance to Schedule - 40%
   Technical Performance - 20%
   Performance to Cost Estimate - 20%
   Design to Unit Production Cost - 20%

2. What weights were applied to each criteria?

   See above

3. What percent of award fee has been made?

   2.347%

4. Did the actual award fee criteria match the original program objectives?

   Yes (otherwise we would not have selected them)

5. Have the incentives been effective?

   No, since the contractor's performance has not been satisfactory to the project manager

6. Is there anything that the KO/PM would have done differently?

   Defer response to PM Soldier

Army Contract No. [redacted] (Green)

1. What award fee criteria were used in the contract?

There are three performance evaluation categories/disciplines that cover the contract requirements and form the basic evaluation structure.

Technical/Producibility
Supportability
Cost/Program Management

For each evaluation period (a calendar year), the government identifies areas of emphasis within one or all categories. The Government may also identify areas of emphasis that are multi-disciplinary and encompass more than one category/discipline. The areas of emphasis are specific elements of contract execution that the government will evaluate for the purpose of determining if the contractor's performance warrants an award for that evaluation period. The award fee criteria are selected to provide early identification and management level evaluation of those significant tasks/events determined to represent critical paths for successful contract performance and if not accomplished will adversely impact program success/schedule. The areas of emphasis are provided to the contractor approximately 30 days prior to the beginning of each evaluation period. Attached is the criteria provided to the contractor for the current year.

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1. What weights were applied to each criteria?

The weights applied for the current evaluation period (1999) were Technical/ Producibility (40%); Supportability (25%); and Cost/Program Management (35%).

2. What percent of award fee has been made?

Based on evaluations performed to date, the contractor has averaged a yearly score between 90-95%. Based upon this consistent performance, it is expected that the contractor will earn the entire negotiated fee of 10% by the end of the Demonstration/
Validation phase contract in March 2000.

3. Did the actual award fee criteria match the original program objectives?

Yes the award fee criteria matches the original program objectives. The categories assessed each year have not changed since the beginning of the contract. The percentages allotted to each category have changed. The criteria within each of these categories is provided to the contractor approximately 30 days prior to the beginning of the award fee period and tracks with the significant events/tasks determined to represent the critical path for successful contract performance for that year.

4. Have the incentives been effective?

The Dem/Val contract is CPAF. The [redacted] Program Office believes that award fee used in conjunction with the IPT process has been an effective tool and has provided the oversight necessary to manage contract details without necessarily having hands-on involvement. The IPT process has provided the government insight to ensuring the contractor applies appropriate techniques to manage and mitigate risk. The managers of the IPT process and the evaluators of

the award fee are the Division Chiefs within the [redacted] PMO. With performance evaluations provided at this level, immediate attention of the contractor's management is provided when award fee is withheld.

5. Is there anything that the KO/PM would have done differently?

Had there been additional funds available to allocate, additional award fee to incentivize performance to exceed contract requirements would have been established rather than 10% for meeting contract requirements.

[redacted] Contract [redacted] is a Cost Plus Award Fee (CPAF) Contract. The base fee of the estimated target cost is 3% with an award fee pool consisting of 7% to be reviewed/awarded on an annual basis. The CPAF instrument offers the contractor the maximum incentive to exceed contract goals and objectives, by encouraging the offeror to devise creative solutions to increase submunition performance, while effectively managing program milestones/schedules and the overall unit cost of the [redacted] projectile.

[redacted] LRP Production Contract [redacted] with [redacted] is Firm Fixed Price with no incentive clause.

[redacted] E&MD Contract [redacted] is Cost Plus Incentive Fee. The contract was awarded via Formal Source Selection procedure to [redacted] consisting of:

a. No Fee for [redacted] E&MD
b. [redacted] Commitment to expending approx. $9,923,941 in specific IR&D activities
c. [redacted] cost share of $21,200,000

1. [redacted] Program- Contract [redacted] was awarded to [redacted] LP on 29 December 1994 on a Cost Plus Incentive Fee (CPIF) basis. In addition, the contract incorporates an Award Fee provision to monitor the program. Further details of the Incentive Fee and Award Fee incentives are explained below:

a. The Incentive Fee portion of the contract, offers [redacted] an opportunity to increase his profit potential by controlling costs, and his performance. This type of incentive was selected due to the technical uncertainty of the program.

b. The Award Fee is semi-annual for a period of 6 years. The amount of award fee changes per period and is determined by the Award Fee Determination Official (COL , [redacted]. Prior to the beginning of each period, the OPM updates the Award Fee Criteria as needed. Examples of the evaluation criteria include; Mission Objectives, Life Cycle Management, and Software Management. This award fee feature contains a 'Look Back" provision with the unearned fee for each evaluation period being carried over to the end of performance.

The Award Fee portion was selected because it allows the OPM to further

manage the overall program and to motivate the contractor to execute the program as planned.

Below is information on the incentives utilized on PM-[redacted]ystem contracts.

The [redacted] Engineering and Manufacturing Development (EMD) effort is a Cost Plus Incentive Fee with Award Fee (CPIF/AF) Contract. The award fee is meant to encourage offerors to develop ways for implementing the IPT successfully, accelerating schedule, and exceeding threshold criteria for Terminal Lethality, Accuracy, and [redacted]Service Life. The incentive fee is meant to encourage offerors to minimize Unit Production and Life Cycle Costs.

The [redacted]ontracts are firm fixed price production contracts. The contractor's goal is to perform the work below or at cost so that he/she can attain the associated profit.

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G

Implementation of Award Fee Incentives on Navy Contracts
A Sample Review

Incentives IPT
14 September, 1999

I assessed how well contract incentives are being used to accomplish program objectives by asking a series of six questions of Procuring Contracting Officers on twelve major Navy contracts. The twelve major Navy contracts involved one Yellow and two Green with Boeing, one Yellow and two Green with Lockheed Martin, one Yellow and two Green with Northrup Grumman and one Yellow and two Red with Raytheon. The programs were chosen because they were award fee or award fee/incentive contracts and then by dollar size, contractor and color rating. The six questions asked were:

1. What award fee criteria were used in the contract?
2. What weights were applied to each criteria?
3. What percent of award fee pay out has been made?
4. Did the criteria match program objectives?
5. Have they been effective?
6. Is there anything you would have done differently?

Regarding the response to question one, the review found a wide variety of criteria. The expected four criteria group of Technical, Management, Cost and Schedule was used on only two of the 11 programs reviewed. In a number of cases, neither Schedule nor Cost were initially considered as criteria, although they were later added as the contracts encountered either schedule or cost difficulties. Examples of other criteria used include: Program Management, Design Performance, Quality of Work, Design-to-Cost, Producibility, Infrastructure Reduction, Logistics, and various explicit period objectives such as Successful Flight Test. No contract provided less than three criteria nor more than five, with most providing four criteria. In two cases, both involving Yellow contracts, the criteria changed during contract performance to include evaluation criteria dealing with Cost and Schedule which in neither case had been criteria at contract award.

Regarding the second question, in every case but one, which was a Red contract, the technical criteria, to include Program Management, were weighted heavier than cost and schedule combined at the time of contract award. For the exception, the Red contract initially weighted Cost at 44%, but is still incurring a large cost overrun. In a number of other cases, low weightings were given to Cost and Schedule, but they were

significantly increased as Cost or Schedule issues developed. In one case involving a Yellow contract, Cost was increased from 5% to 30%, and Schedule, which had not been a criterion, was added at 40%.

Regarding the third question, the average pay out for the eight contracts that responded to this question was 85%. Three Green and one Yellow contract reported pay outs of 90% or more, the two Reds reported pay outs of 80% or more, one Yellow reported a 77% pay out and one Green reported a 60% pay out.

Regarding the fourth question, in every case the criteria were reported to match program objectives, particularly given the flexibility to change criteria and to change criteria weightings.

Regarding the fifth question, as might be expected, the Red programs tended to question the effectiveness of their criteria. In many cases the criteria were changed in reaction to program events rather then as an incentive to drive program events. Also, one contracting officer questioned the effectiveness by noting that the award fee dollars were not being distributed to the individuals who drove the program's success. With only one exception, the Contracting Officers for the Green and Yellow programs thought the criteria were effective. In the one exception, the contracting officer has shortened the evaluation period from cycles of up to 17 months to only a 10 month duration to make the process more effective. It should be noted that in the data base is one Yellow contract that has been converted from a cost-plus-award-fee arrangement to a cost-only arrangement with the award fee pool being used to fund a cost overrun.

Regarding the sixth question, the answer from many programs was clearly "yes" as the flexibility of the system allowed them to make adjustments during contract performance.

Some significant concepts noted during the review are the following:

1. Allow for a negative award fee. Don't simply provide for a reduced award fee.
2. Tie award fee evaluations to critical milestone events.
3. Tie the bulk of the award fee to successful completion of key events such as Development Testing.
4. Provide for roll over of unused fee to be provided at the Fee Determination Official's discretion.
5. Provide a bonus in addition to the award fee for outstanding accomplishments.
6. Control changes.

7. Pay constant attention to cost and schedule performance indicators and to the program's critical elements.
8. Have a common basis for all program information, and share the data.
9. Flexibility - re-set period objectives as required.
10. Focus only on meaningful program goals.
11. Provide for individual recognition noting that award fee dollars are often not distributed to the individuals who drive the program's success.
12. Involve senior management.

Other thoughts:

1. Not discussed as part of the survey, but interesting to note, at the Navy Facilities Engineering Command they tend to choose disinterested individuals from outside the Program Office to serve as an unbiased Fee Determination Officer.
2. As noted above, the two Red programs reported pay outs of over 80% while a Green program reported a pay out of only 60%. Clearly, incentive pay outs would be more effective if they were more consistent. One approach to make incentive pay outs more consistent would be to use a more objective basis such as that found under a Multiple Incentive Fee arrangement.

Michael McDonald

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BMDO Review of Contract Incentive Implementation

Incentives IPT
16 September, 1999

To provide an assessment of how well contract incentives correlate with program objectives, I reviewed about seven contracts, including three Army contracts. The group status consisted of two reds, one yellow, and four greens. The contractors included Lockheed Martin, Boeing, and several smaller support service contractors. The contracts were award fee or award fee/incentive fee contracts.

The award fee evaluation criteria for the major programs' contracts were technical, schedule, cost (including CAIV on one program), and management, or program management. In one instance the purpose of the award fee provision was to provide an incentive for coordination between two primary contractors. The criteria for the support services contracts were varied, including such elements as responsiveness, compliance, timeliness, contract management, team management, cost management, sufficiency of facilities. The criteria did not change in any of the contracts; but in the major program contracts, the weighting of criteria was changed occasionally for a specific evaluation period, to reflect specific areas or changes in emphasis in the program objectives. The weighting for evaluation criteria for the support services contracts was not changed. Most program offices took advantage of the ability to advise the contractors by letter of significant areas within the evaluation criteria in which they desired emphasis in a future evaluation period.

Regarding award fees earned, the range for the major programs reflected percentages primarily in the 80's, with one program receiving 71% during the first evaluation period of the contract. The percentages seemed to improve when the weights of criteria were revised to better reflect program goals which changed during the performance of the contract. The award fees earned for the support services contracts were usually in the 90%-95% range.

One program contract included a cost sharing incentive provision, in which the contractor shares cost incurred as a result of an identified number of flight test failures or successes. The provision also provides for the contractor to recoup some of the shared costs under certain provisions.

In all cases, the contracts were said to include criteria which appropriately reflected program objectives. The contracts personnel believed the criteria were effective, although there was a general feeling in most instances that award fees earned were a little high overall.

Air Force Review of Award Fee Incentives on Sample Contracts

Several contracts were reviewed to assess how well contract incentives correlate to or promote program objectives. This review was limited to development contracts that are listed in the Lockheed Martin, Boeing, and Northrop-Grumman Contractor Assessment Review program summaries. The contracts were award fee or incentive type. This information was obtained from the contract personnel.

The award fee evaluation criteria were all based on the areas of management, technical, cost and schedule. The names of the award fee evaluation criteria were slightly different, as they were program specific. Examples are: program management (management, contract cost, maintaining schedule), technical management, cost control, overall program affordability, overall cost control, overall schedule performance, performance, design, cost and schedule performance, and small business utilization. Each contract plan has two to four evaluation criteria. All of the award fee plans have the capability to change evaluation criteria or add areas of emphasis during the program. The award fee criteria weightings vary. One plan has 50 percent apiece for a contract that has two evaluation criteria. Another contract has a plan in which all four evaluation criteria are generally equal and another plan changes depending on the stage of the contract. For example, design is no longer as important as performance at the end of the program.

All programs generally believed that the contract incentive criteria promoted the program objectives. Especially important is the capability to revise the evaluation criteria emphasis.

Only one CPAF contract had a base fee, the remainder had no base fee as the contractors were required to earn every dollar of award fee.

In the award fee earned area, the cumulative percentage amounts ranged from 85%-91% for all programs. There were several periods that the contractor received a zero award fee, but that award fee was rolled over into another award fee period. We would generally expect a program rated with a better color to receive a larger award fee than one rated lower.

An interesting comment was that the Government and contractors look at award fees from different viewpoints. The Government believes the award fee starts at zero and the contractor earns its way up to 100%, and the contractor believes the award fee starts at 100% and is reduced accordingly.