THE ADMINISTRATION OF SERVICE CONTRACTS

by

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ABSTRACT

During the Carter Administration the Office of Management and Budget Circular A-76 was brought back as an important program to reduce Government spending. This emphasis increased the number of service contracts within the Department of the Navy. This thesis looks at the administration of installation support service contracts in the Department of the Navy by dividing administration into three areas. They are: contract type and incentives, education and training of Government personnel, and the tasks involved in administration. It recommends that the present emphasis on fixed-price contracts continues, but that the Government use negotiations instead of sealed bids and contractors obtain performance bonds. Additionally, it reinforces the importance of proper preparation of the statement of work, and recommends changes to the Government education and training programs.
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I. INTRODUCTION

A. GENERAL

During the Carter Administration, the Office of Management and Budget Circular A-76 was brought back as an important Government program for reducing spending. A-76 established that the Government should not perform work in-house that could be completed by the private sector. Any product or service that is required by the Government should be purchased commercially unless the Government can perform the service at a competitive price.

This thrust has increased the use of service contractors to perform many functions previously accomplished by Government employees. These contracts range from individual grass cutting, fire fighting and medical service contracts, to large umbrella contracts that provide most of the support services on an installation.

Installations have had varied success with these contracts, ranging from successful completions to terminations due to contractor defaults.

B. OBJECTIVES OF THE RESEARCH

The objective of this thesis is to look at the present system of service contract administration in Department of the Navy (DON) and recommend improvements to the process. Administration is broken into three areas. These are:
specific tasks to administer a service contract, contract types and incentives that encourage successful contract performance, and the level of education and training achieved by Government technical representatives and contract administrators.

Service contracts were chosen because they are an area on which very little research has been done. However, more and more service contracts are awarded each year and the results are not always acceptable.

C. RESEARCH QUESTIONS

The primary research question is: What is required to successfully administer service contracts in a military installation support environment?

The secondary questions are:

- What tasks must be accomplished to administer a service contract?
- What incentives can be used by the Government to encourage the contractor to perform in an acceptable manner?
- What type of training is given to contracting officer's technical representatives and what do they need?
- What is the average level of education of contract administrators and what should it be?

D. SCOPE AND LIMITATIONS

The service contracts that will be looked at are those normally associated with operating and maintaining a military installation. Examples include grass cutting, pest control, garbage collection and maintenance contracts. Specifically
excluded are professional service contracts such as medical services and consulting.

E. METHODOLOGY

The initial research material was collected from a literature search conducted through the Defense Technical Information Center, Defense Logistics Studies Information Exchange and the Dudley Knox Library at the Naval Postgraduate School. From this information, the research questions were developed.

A telephone survey was conducted to develop data that would help answer the research questions. This method was considered the most appropriate way of conducting the research because it allowed the researcher to speak with the people that were actively involved in service contracting. The survey questions were framed in a way that did not restrict the participants answers. The researcher chose to frame the questions in that manner to find new ideas from the field activities and contractors.

The survey population was 120 contracting offices in the Department of the Navy. From the population, a random sample of 30 offices was selected. Half of the Navy offices had contracting authority through the Naval Facilities Engineering Command (NAVFAC) and the others through the Naval Supply Systems Command (NAVSUP). The other offices had authority through Headquarters Marine Corps. Each sample consisted of questions for a contracting officer, a contracting officer's
technical representative (COTR) or quality assurance evaluator (QAE), and a service contractor.

The contracting officer that was responsible for service contract administration at the sample installation was the first person asked to participate. The names of a COTR/QAE and contractor to participate were provided by the contracting officer.

After the surveys were completed the results were collated and then analyzed using a managerial analysis. From that analysis conclusions and recommendations were developed.

F. ORGANIZATION OF THE THESIS

The thesis consists of five chapters. Chapter I is an introduction to the thesis. Chapter II provides the reader with general information about service contracts and how they are administered. The third chapter presents the survey questions and the responses given by each of the three types of participant (contracting officers, COTR/QAEs and service contractors). Chapter IV is the analysis and Chapter V is the conclusions and recommendations.
II. SERVICE CONTRACTING

A. BACKGROUND

This chapter will provide the reader with a general overview of service contracting. It will cover some basic definitions, laws, and the administrative processes that are involved in service contracting.

1. Service Contracts Defined

The Federal Acquisition Regulation (FAR) defines a service contract as: [Ref. 1:part. 37.101]

...a contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply. A service contract may be either a nonpersonal or personal contract. It can also cover services performed by either professional or nonprofessional personnel whether on an individual or organizational basis.

These contracts are normally for maintenance, housekeeping, transportation, research and development, or similar services.

The distinction between personal and nonpersonal service contracts can be subtle, however, it must be understood. A nonpersonal services contract is one in which the [Ref. 1:part. 37.101]

...personnel rendering the services are not subject, either by the contract's terms or by the manner of its administration, to supervision and control usually prevailing in relationships between the Government and its employees.

On the other hand, a personal services contract "makes the contractor personnel appear, in effect, Government employees."
Contracting personnel must fully understand these differences. The FAR prohibits the use of personal services contracts unless authorized by 5 U.S.C. 3109. Normally, the Government must obtain its employees by directly hiring under the civil service laws.

2. Service Contract Act of 1965

In 1965 Congress passed the Service Contract Act. The Act requires that for certain types of service contracts the employees must be paid the prevailing wage and given specific fringe benefits. Specifically it states that: [Ref. 2]

Every contract (and any bid specification therefore) entered into by the United States or the District of Columbia in excess of $2,500, except as provided in section 7 of this Act, whether negotiated or advertised, the principal purpose of which is to furnish services in the United States through the use of service employees, as defined herein, shall contain the following:

(1) A provision specifying the minimum wages to be paid . . . in accordance with the prevailing rates for such employees in the locality, which in no case shall be lower than the minimum . . .

(2) A provision specifying the fringe benefits to be furnished . . . benefits shall include medical or hospital care, pensions on retirement or death, compensation for injuries or illness resolution from occupational activity, . . .

(3) A provision that no part of the services covered by this Act will be performed in buildings or surroundings . . . which are unsanitary or hazardous or dangerous to the health or safety of the service employees. . . .

The effect of this act was to provide the same protection to service employees that the Walsh-Healey Public Contracts Act and Davis-Bacon Act gave to supply and construction employees.
B. PRE-AWARD CONSIDERATIONS

1. Preparation of the Statement of Work

As soon as the decision is made to contract a service, the installation should start to prepare the statement of work (SOW). A statement of work is defined as: [Ref. 3:p. 4]

A document that describes accurately the essential and technical requirements for items, materials, or services including the standards used to determine whether the requirements have been met.

The SOW is prepared by the activity that requires the work be performed, with help from the contracting office and the base management office. For example, a SOW for grass cutting is prepared by the base maintenance/public works activity on the installation. They are the organization that has the responsibility for grass cutting and has the ability to define the requirements.

Statements of work should not contain detailed instructions on how the contractor is to accomplish his work. Rather, it should be performance oriented, stating the desired output in simple, enforceable terms. This approach gives contractors more freedom to find innovative ways to accomplish their work. Additionally, if the Government specified a specific procedure, it would be liable should the procedure not produce the desired output. [Ref. 3:pp. 5-9]

2. Quality Assurance

The responsibility for quality control rests solely with the contractor. The Government will inspect the work but
only to ensure contract compliance by the contractor. This Government inspection is known as quality assurance (QA).

QA is a difficult area that must be planned for while the SOW is being developed. Again, the activity that requires the service is responsible for the Quality Assurance or Surveillance Plan. This plan is: "An organized written document used for quality assurance surveillance. The document contains sampling guides, checklists, and decision tables." [Ref. 3:p. 4] The plan is developed along with the statement of work. A good plan can be difficult to create, but is easy to administer and is fair to the contractor. These plans are normally based on statistical sampling techniques, therefore, writing the plans requires some expertise.

The plan should include a sampling guide that states what will be checked, the required standard of performance or acceptable quality level (AQL), decision tables that assist in determining who is at fault for deficiencies, and a checklist. [Ref. 3:p. 15]

The government uses five different methods of monitoring contractors' performance. They are random sampling, planned sampling, 100% inspection, validated complaints and unscheduled inspection.

Random sampling uses a statistical approach to choose a percentage of the total work that a contractor is performing and inspecting that work. The amount sampled is determined
from a sample size table found in MIL-STD-105D. It is based on the number of times an item occurs and the AQL for the item. Individual samples are chosen by using a random number table.

Planned sampling is used when the Government personnel monitoring the contract want to put specific emphasis on a certain portion of the contract. To use this method, the Contracting Officer's Technical Representative (COTR) or Quality Assurance Evaluator (QAE) develops a schedule of which area they will look at and at what frequency.

One hundred percent inspection is a system used only on contracts that contain infrequent, highly critical work items. Since the Government inspects all the contractors' work, it is very time consuming and should only be specified when that level of supervision is required. If a work item is critical and frequent analysis must be done, a decision must be made that weighs the costs of 100% inspection against the risks of not looking at each item.

Customer awareness is the key to using the validated complaints method. Customers notify the Quality Assurance Evaluator when the contractor is not performing properly and the COTR/QAE verifies the complaint.

Unscheduled inspection is done by the COTR/QAE simply conducting an inspection whenever he feels there is a need to do so. Because the contractor may consider unscheduled inspections arbitrary, this type of inspection should be
avoided unless there are specific reasons why the others cannot be used.

Each of these types of inspection should be considered as the quality assurance plan is being developed and the best combination chosen to support the SOW.

3. **Deductions**

Deductions are used to reimburse the Government for work that was not performed or not performed within the AQL by the contractor. The amount of the deduction should represent the cost of the item of work in question. The deduction is figured using a deduction formula normally found in the quality assurance plan.

4. **Contract Type**

Presently the FAR requires that service contracts be awarded through sealed bidding if the requirements for this method of solicitation exist. [Ref. 1:part. 37.105] By definition then, the contract awarded will be either firm-fixed-price or fixed-price with economic price adjustment. Using sealed bidding and a firm-fixed-price contract for services has the advantage of pushing the majority of the financial risk onto the contractor. Additionally, it promotes competition between the different contractors.

Although competition is considered very important by Congress, this type of contract does not always provide the best service to the installation. Contractors tend to sacrifice quality in order to hold down their costs when they
are responsible for most of the financial risk. This, coupled with the problem that service contract statements of work tend to be inaccurate or at least subject to multiple interpretations, highlights the potential difficulty of blindly using sealed bidding and firm-fixed-price contracts for all services. [Ref. 4:p. 17]

In an article in *Contract Management*, Douglas K. Ault suggests using firm-fixed-price contracts only for simple functions that will not require a lot of changes. He goes on to suggest that for complex service contracts, cost-plus-award-fee contracts are more appropriate: [Ref. 4:p. 18]

Although cost-plus contracts do place more risk on the government than fixed-price contracts, that assumption of risk is warranted in some cases. The cost-plus arrangement provides the flexibility that is often needed when requirements are difficult to quantify exactly (as with many installation support services) and when missions and contingency requirements change.

The use of cost-plus-award-fee contracts for all but the simplest service contracts is routine in the National Aeronautics and Space Administration. [Ref. 5:p. 3] Further, a Center for Naval Analysis study concluded that: [Ref. 5:p. 3]

In cases where requirements are difficult to specify, cost contracts may make more sense than FFP contracts. Because cost contracts provide for payments for work performed, they remove the incentive to scrimp on services provided—an incentive that often arises when a contractor has incorrectly bid on a FFP contract, or when a contractor needs to make higher profits by doing less or lower quality work. Cost contracting removes the need for negative incentives imposed by items of deductions. It also removes the burden of certification of individual items of work that the QA inspector must provide in connection with payments under firm fixed-price contracts.
Conversely, the General Accounting Office has stated that installations are using too many cost type contracts and are not justifying the decision fully in accordance with law and regulation [Ref. 6:pp. 30-39]. The answer to these contradictory signals may be for the contracting officer to make the best business decision he can, given the facts. For their part, GAO and other audit agencies need to realize that two competent managers can look at the same contracting situation and disagree on the appropriate contract type.

These two contract types are the extremes of the contractual vehicles available to the contracting officer. As contracting offices prepare to solicit for services they need to consider the whole range of contracts.

C. CONTRACTING OFFICERS

1. Contracting Officer Authority

The Department of Defense gives agent authority to contracting officers to enter into contracts on behalf of the Government. In the Marine Corps and Navy, service contracts are normally awarded and administered by officers warranted through either the Naval Supply Systems Command (NAVSUP), the Naval Facilities Engineering Command (NAVFAC) or Headquarters Marine Corps (HQMC). The responsibilities between NAVSUP and NAVFAC are distributed as follows: [Ref. 7:pp. 6-7]

NAVFAC is responsible for the administration of all contracts for public and civil works and for the civil works portions of facilities and other contracts, for all construction work otherwise accomplished, . . .
NAVSUP contracting responsibilities include (i) providing Navy wide policy and procedures for small purchase as defined in FAR Part 13, (ii) contracting for supplies and services throughout the Department of the Navy for which no other contracting activity, office, or command is otherwise delegated contracting authority, and (iii) management of the Navy Field Contracting System (NFCS).

This division of responsibilities means that NAVFAC handles contracts for maintenance and repair of base facilities (real property), janitorial and grass cutting for example. NAVSUP handles operations and maintenance of equipment that is not real property. For example, food service and maintenance of office equipment are handled by NAVSUP.

Marine Corps Bases have contracting officers that are warranted through the Installations and Logistics Directorate of HQMC. These officers normally have more authority than a base contracting officer under NAVSUP and will award and administer service contracts for most base activities including the USMC Facilities Maintenance Department.

2. Procurement and Administration of Services

The contracting officer that solicits for and awards a contract is known as the Procuring Contracting Officer (PCO). The contracting officer that administers the contract is called the Administrative Contracting Officer (ACO). In some service contract situations the same person performs both these functions and is located at the installation where the service is to be performed. However, very often the contract price is beyond the authority of the local contracting officer
and must be awarded and administered at a regional level, quite often by a different PCO and ACO.

When the contract PCO and ACO are not located at the installation where the service is to be performed the COTR becomes the only Government representative on the installation. He must manage the contract without daily guidance and support from the ACO. This less than desirable situation requires as much communication as possible between the ACO, COTR and contractor's representative.

D. ADMINISTRATION OF SERVICE CONTRACTS

Contract administration can broadly be defined as "those activities, on the part of the government contracting agency, that take place during performance of the contract." [Ref. 8:p. 138] From the Government standpoint contract administration has two purposes. First: "The broad goals of contract administration are to assure that the government obtains the needed work on time and that the contractor receives proper compensation." [Ref. 9:p. 1] The secondary purpose of contract administration is to "protect the public trust." [Ref. 9:p. 8]

Contract administration can be broken down into the following activities: [Ref. 8:p. 141]

- Orienting the contractor.
- Processing invoices for payment.
- Modifying the contract.
- Resolving disputes.
- Interpreting the contract.
- Contract monitoring.

Each of these requirements, as they relate to service contracts, will be discussed below.

1. Orienting the Contractor

   This function is critically important for service contractors. Unlike the large contractors that provide equipment and construction to the Government, service contractors are likely to be small businesses. Proper contract administration includes ensuring that the contractor fully understands all the contract requirements and possesses the capability to perform. Some explanation of contract requirements should be accomplished during pre-award negotiations, if they are conducted. Additionally, after the contract is awarded, a post-award conference covering all contract requirements must take place.

   Orientation for service contractors is also important because they, more than any other contractor, will be working all over the installation. The potential for problems with other activities on the installation is much higher with service contractors.

   The orientation should include:
   - a discussion of all the locations that will be affected by the contract.
   - the contractor's limits in moving about the installation.
   - an introduction to the contracting officer's technical representative or Quality Assurance Evaluator.
2. Processing Invoices for Payment

Processing invoices involves assuring that the contractor receives payment in a timely manner. The Prompt Payment Act, 31 U.S.C. 3901 et seq. requires: [Ref. 9:p. 877]

Government payment of interest for delays in payment for a "complete delivered item of property or service," the "required payment date" is stated to be the date of payment specified in the contract or "thirty days after receipt of a proper invoice . . . if a specific date on which payment is due is not established by contract."

This is a very important concept that must be adhered to if the Government is to be a responsible customer and live within its laws. However, recent research has shown that contractors feel that the Government does not pay its bills on time. In a 1988 article in the National Contract Management Journal entitled "Why Firms Refuse DOD Business: An Analysis of Rationale," Dr. D.V. Lamm reports finding that 21.1% of firms surveyed listed late payment as a significant problem with the procurement process. [Ref. 10:p. 49] These results suggest that timely payment has lost its place of importance in the administration process.

3. Modifying the Contract

Contract modifications or changes are covered in the changes clause of the contract. This clause gives the
Government the unilateral right to make changes to the contract. The contractor is obligated to perform the change and will be given an equitable adjustment for increased costs. FAR 52.243-1 lists the types of changes allowed to contracts that provide nonprofessional services without supplies. The following may be changed within the scope of a service contract: [Ref. 1:part. 52.243-1]

1. Description of services to be performed.
2. Time of performance (i.e., hours of the day, days of the week, etc.).
3. Place of performance of the services.

The changes clause provides the contracting officer with one of the most powerful tools for managing the contract. An important area of contract administration is finding the performance areas that were either left out of the contract or not defined adequately. The contracting officer should always attempt to resolve these areas with a bilateral supplemental agreement. However, if agreement cannot be reached, the changes clause provides the mechanism for getting the contractor to do the required work. As with any of the contract administration issues, a professional business relationship between the contractor and the administrator is the key to successful contract completion.

4. Resolving Disputes

The Contract Disputes Act of 1978, 41 U.S.C 601 et seq. is implemented in Federal Government contracting by including a disputes clause in the contract. The clause is
listed in FAR 52.233-1. A dispute arises when a disagreement about the contract cannot be resolved and a formal claim is made to the contracting officer.

When a dispute cannot be resolved through negotiation, the contracting officer makes a final decision on the matter and informs the contractor. If the contractor is not satisfied with the contracting officer's decision, the contractor can appeal to the judicial system or Board of Contract Appeals for relief. Throughout the appeal process the contractor must continue to perform the contract in the manner set forth in the contracting officer's final decision. Should the appeal be sustained and find the contracting officer in error, the contractor will be given an adjustment to compensate him for his effort.

5. Interpreting the Contract

Contract interpretation is basically the same for service, supply or construction contracts. "The basic objective of contract interpretation is to determine the intent of the parties." [Ref. 9:p. 103] Because the Government writes the contract and the Government contracting officer makes final decisions on interpretation, the Government should take extreme care in clearly wording service contracts to prevent ambiguity problems. This is especially true in service contracting because the contractors tend to be less sophisticated.
6. **Contract Monitoring**

Contract monitoring is where the Government uses the Quality Assurance Plan that was developed before the contract was awarded. This function is delegated by the Contracting Officer to the Contracting Officer's Technical Representative who executes it through Quality Assurance Evaluators.

a. **Contracting Officer's Technical Representative**

Service contracts are normally monitored by a contracting officer's technical representative (COTR), if it is a NAVSUP or HQMC contract, or quality assurance evaluator (QAE) if it is a NAVFAC contract. The primary requirement for a COTR/QAE is that they be technically knowledgeable in the service for which they are responsible. The specific duties of a COTR are: [Ref. 11:pp. xviii-3]

(A) COTR is to ensure that services performed by the contractor remain nonpersonal in nature. In order for services to remain nonpersonal, the tasks accomplished by the contractor must be performed in an independent manner without direction, supervision or guidance from any Government employee.

(B) COTR is to ensure that the contractor does not exceed the defined statement of work set forth in the delivery order. Specifically, the contractor can perform those tasks only within the number of hours or time and dollars set forth for the performance of work.

(C) COTR is to monitor contract performance and to report all problems related to the contract to the contracting officer of record. Any violation or deviation from the terms and conditions set forth in the contract shall be reported promptly to the contracting officer first verbally and then confirmed in writing.

(D) COTR is to provide the contracting officer with a brief monthly report concerning contractor's performance.

(E) COTR is to notify the contracting officer of any anticipated overrun of the estimated or ceiling price delivery order placed under the basic contract. Periodic contacts concerning progress of work and funds expended
should be made with the contractor in order to keep informed on this matter.

(F) COTR is to accomplish on-site surveillance and status reporting of performance of services in accordance with terms and conditions of the contract. The on-site surveillance must include the review of labor categories being used by the contractor to ensure that qualified contractor employees are being utilized. Frequency of surveillance should be based on the complexities of the work being performed.

(G) COTR is to perform inspections and to certify or have certified acceptance or nonacceptance of work performed by the contractor. In order to perform this function adequately, the COTR must perform on-site inspections to determine that work has been performed in accordance with the statement of work, that the appropriate level of expertise, as specified in the delivery order, was used by the contractor, and that the final product has been adequately tested. The invoices submitted by the contractor must be accomplished by time cards or a record of time worked by the contractor showing the individuals used, hours worked and amount charged. Any charges on the invoices not compatible with work performed as authorized by the delivery order shall be identified and brought to the attention of the contracting officer who signed the delivery order.

(H) The use of government furnished material (GFM) and equipment must be monitored. GFM not consumed by the contractor must be documented and returned to the Government. The COTR must maintain or cause to be maintained adequate records in order to ensure the appropriate disposition of GFM.

Even a cursory glance at this list of duties will reveal the importance and complexity of a COTR's job in contract monitoring. Since COTRs are technical experts and not contracting specialists they have to be trained to perform their duties. COTR training can be a weak link and so must be planned well in advance. Installations should have an established program to assure that the COTR is well prepared to perform his duties.
b. Quality Assurance Evaluators

Both NAVSUP and NAVFAC use the term quality assurance evaluator. NAVFAC QAEs perform the same tasks as NAVSUP COTRs. In NAVSUP contracts, the COTR may be assisted by quality assurance evaluators, not NAVFAC QAEs. They are normally experts in the area of the service being provided. For example, in a food service contract on a military base they would normally be Non-Commissioned Officers with several years experience in the food service field. In performing their duties as QAEs, they report to the COTR for technical guidance and daily problem solving.

COTRs and QAEs are the people who manage the contract for the contracting officer on a daily basis. They represent the government on a daily basis with the contractor's personnel. Normally the contracting officer only gets into the relationship to solve problems.
III. PRESENTATION OF THE DATA

A. INTRODUCTION

The data presented in this chapter were gathered by a telephone survey of 30 contracting offices within the Department of the Navy. The sample was randomly taken from a list of 120 DON contracting offices. Of the 30 offices in the sample, half the Navy contracting officers contacted had contracting authority through NAVFAC and the others through NAVSUP. The Marine Corps officers had authority through HQMC. Included in the sample were Marine Corps and Navy Air Stations, Marine Corps and Navy Bases, Naval Hospitals, Navy Supply Centers, Naval Regional Contracting Centers and Naval Weapons Stations.

Each installation in the sample was asked to provide a warranted contracting officer, a contracting officers's technical representative or quality assurance evaluator, and a contractor to answer questions pertaining to the administration of service contacts. The final number of participants involved was 26 contracting officers, 23 COTR/QAEs and 21 contractors.

Of the 30 contracting officers, two were not available to participate, one chose not to take part and one showed up twice in the sample. Showing up twice is possible because of NAVSUP's use of centralized contracting activities.
The number of COTR/QAEs was further reduced because two of the bases did not have any active COTR/QAEs, and one base contracting officer did not allow his inspectors to take part because they were "already overworked."

Five of the contractors were not available to take part in the survey, one showed up twice and three bases did not provide a contractor.

B. SURVEY RESULTS

The survey results will be presented by listing each question in the order in which it was asked of the participants. The questions were asked without prompting any specific answers. The questions were grouped by the investigator into the categories reported. The number in front of the answers indicates the number of times that answer occurred. The contracting officer results will be listed first, followed by the COTR survey and then the service contractor survey.

1. Government Contracting Officer Survey

The contracting officers selected at each installation were those that worked on service contracts and were available when the survey was conducted. NAVFAC contracting officers have the authority to award most contracts. NAVSUP contracts larger than $25,000 are normally awarded at a centralized contracting activity such as Naval Regional Contract Center (NRCC) or Naval Supply Center (NSC). Therefore, for many of the installations in the sample, interviewing a contracting
officer meant a contracting officer at its supporting NRCC or NSC.

The contracting officers interviewed had a mean time of 5.4 years holding a warrant. Figure 1 is the distribution of years the participants have held a warrant. Figure 2 is a distribution of the number of service contracts that the installations administer in a year.

![Figure 1. Years as a Contracting Officer](image)
a. Contracting Issues Questions and Answers

A1. What contract type(s) do you use for service contracting?

25 Firm Fixed Price
4 Cost plus Fixed fee
1 Fixed price award fee
A2. What types of incentives are you presently using in your service contracts?

   20 No incentives
   6 Award Fees

A3. Are there any incentives for service contractors that you would like to try in the future?

   14 None
   10 Award fee
   3 Fixed Price Incentive Firm Contract

A4. In your opinion, what is the most important thing the government can do to ensure successful contractor performance?

   12 Good Specifications/Statement of Work
   8 Good Surveillance
   4 Proper training of Government contracting personnel
   3 Proper contract type
   2 Award the contract on something other than low bid
   1 Good cost controls written into the contract
   1 Educate contractor in his responsibilities
   1 Treat the contractor fairly
   1 Nothing
A5. Have you considered using re-performance vice deduction clauses?

17 Presently using
9 No

A6. What is your opinion of using a clause that allows a deduction to be reduced if the defect is corrected within a specified period of time?

12 Presently Using
9 Do not like it
3 Good idea
2 No opinion

A7. If you use Award fee contracts, how is the performance that rates the award defined in the contract?

20 Do Not Use
3 COTR/QAE scores performance based on weighted criteria. Award based on score
2 Based on decision of award fee board
1 No answer

A8. What is the major difficulty with quality assurance?

10 COTR/QAE Ability
8 Poor statements of work and quality assurance plans
5 Limited Inspection Resources
3 Incompetent contractors
3 Variation between different inspector's ideas of what constitutes quality and what is expected
2 Poor documentation by COTR/QAE
1 People other than the COTR/QAE or contract administrators telling the contractor what is acceptable
1 Numerous changes

A9. How are acceptable quality levels defined in your contracts?
10 By an maximum allowable error percentage
7 Specific standards list what should or should not be done
5 No answer
2 Not defined in contract
1 Follow Mil-Std 105

A10. What steps do QAEs/COTRs use to determine the reason that a contractor is not meeting the AQL?
17 Meet with the contractor
5 No answer
2 None
2 Review the contract AQL requirements
b. Contract Monitoring Questions and Answers

B1. What are the most important duties of the COTRs/QAEs that work for you?

13 Surveillance
8 Ensuring the Government gets what it pays for
4 Understanding Contract Requirements
4 Being a liaison with the customer
2 Documentation
2 Keeping abreast of contract changes
1 Establishing a good communication with the contractor
1 Technical direction of the contractor

B2. How do you prepare these representatives to perform their responsibilities?

13 Send to formal training and provide in-house guidance
8 Ensure the COTR/QAE has a background in the technical area of the contract
5 No answer
3 Very poorly
1 In-house audit team that monitors their performance
1 Refresher training once a year
B3. What training have your COTRs participated in?

12 NAVSUP COTR Course
10 NAVFAC QAE Course
 3 In-house training
 3 No answer
 2 NAVFAC Engineered Performance Standards Course
 1 None

B4. Was this training adequate?

14 Yes
 8 No
 4 No answer

B5. What was not properly covered?

13 No answer
 4 Need a refresher
 3 More on how to inspect
 3 Too much emphasis on contracting
 1 Specific details on each trade
 1 Cover more on constructive changes
 1 How to write
 1 More detail required for Base Operating Support contracts
B6. What is the normal relationship between COTRs/QAEs, contract administrators and yourself?

13 Contact on a daily basis
8 COTR/QAEs work for different office, correspond by letter/phone with contract administrators
3 No answer
2 Talk when problems arise
1 Discuss problems at least weekly

B7. Do COTRs/QAEs have difficulty understanding the sampling plan?

11 No
5 Yes
4 No answer
4 New people do
1 Difficulty agreeing with the plan
1 I don't know

c. Service Contract Administrators (GS 1102)

C1. What is the grade level of your service contract administrators?

9 GS 11
4 GS 9
4 GS 5-11
3 GS 9-11
2 GS 7-11
2 GS 12
C2. What are the educational requirements to be a service contract administrator in your organization?

- 13 No educational requirement
- 7 College degree
- 4 Some college required
- 2 No answer

C3. In your opinion, what should be the educational requirement for a service contract administrator?

- 12 High School and a Government training program (5-7-9-11)
- 12 College degree
- 1 2 years of college
- 1 No answer

C4. I will read a list of subjects that are studied in business schools, after each one please tell me if you think the subject is very important, important or not important for contract administrators to study.

<table>
<thead>
<tr>
<th>Subject</th>
<th>VI</th>
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<tbody>
<tr>
<td>Accounting</td>
<td>9</td>
<td>12</td>
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<tr>
<td>Economics</td>
<td>4</td>
<td>10</td>
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<tr>
<td>Calculus</td>
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<td>3</td>
<td>20</td>
</tr>
</tbody>
</table>

32
Computer training 12 11 0
Management 10 11 2
Contract Law 18 4 1
Statistics 4 13 6
Writing 23 0 0
3 No answer

C5. Do your personnel receive all the training called for in DOD 1430.10-1m-1? If not is their training supplemented by other equivalent training?
18 Yes
4 No. Not enough TAD funds
4 No answer

C6. Do contract administrators have difficulty understanding the sampling plan?
11 No
8 Yes
4 No answer
3 Not required of a contract administrator
d. Contract Tasks Questions and Answers

D1. What are the three most important tasks done by your organization to successfully administer a service contract?

14 Write a good statement of work/QA plan
13 Good surveillance
11 Good communications with the customer and contractor
4 Ensure contract administrators know their contract
3 Enforce contract requirements
3 Find a good contractor
3 Process payment on a timely basis
2 Document problems
1 Negotiate price adjustments
1 Use a team approach to acquisition planning
1 Pre-award audit
1 Negotiate changes
1 Contract Interpretation

D2. What tasks require help from outside agencies?

12 Audits from Defense Contract Audit Agency
7 Pre-award survey from Defense Contract Administration Services
6 Wage surveys from the Department of Labor
6 Certificates of competency from the Small Business Administration
6 None
1 Big contracts awarded by centralized contracting activities
2. COTR/QAE Survey

The COTR/QAEs were referred to the researcher by the contracting officers that participated in the survey. The questions were asked of these COTRs/QAEs if they were available when called. If they were not available, the survey was completed by any available COTR/QAE on the installation. Since most of the participants were referrals, the sample most likely contains the opinions of COTR/QAEs that are considered above average by the contracting officer.

NAVFAC QAEs are civilians that work full time as quality assurance evaluators for the installation that is receiving the service. They normally work in the same office as the contracting officers and have daily contact with the facility support contract manager and the contracting officer.

The NAVSUP COTRs perform the COTR responsibilities as a collateral duty. For example, an installation food service officer might also be the COTR for the dining facility contract. Since the contracting officer is located at a NRCC or NSC, the COTR rarely, if ever, sees him. Business is normally conducted by letter and phone calls.

Figure 3 shows the experience level of the COTR/QAEs in the sample. It is noteworthy that almost all the COTR/QAEs have five years or less experience.
a. Contracting Issues Questions and Answers

Al. What types of incentives have been the most productive in encouraging contractors to successfully meet their obligations?

18 All contracts are FFP
2 Award fee
2 Financial incentives
1 No answer
A2. Are there any incentives for service contractors that you would like to try in the future?
   16  No
   .
   6  Award Fee
   2  Cash award for early completion of line items
   1  Cost Plus Incentive Fee

A3. In your opinion, what is the most important thing the government can do to ensure successful contractor performance?
   7  Good communications/cooperation
   5  Monitor the contract/inspection
   4  Write a Good Statement of work
   4  Ensure the contractor has enough money in his bid
   2  Be consistent in inspection
   1  No answer

A4. Are you using reperformance vice deduction clauses?
   19  Presently using
   .
   4  No

A5. What is your opinion of using a clause that allows a deduction to be reduced if the defect is corrected within a specified period of time?
   10  Presently using
   .
   4  It is worth trying
   .
   4  No opinion
A8. What is the major difficulty with quality assurance?

7 Hiring enough manpower/time to do inspections
5 Training people to do complete QA inspections
3 Deciding what is quality
2 Ensuring sampling technique is correct
2 Ensuring the contractor has done all the work
1 Good Communication
1 Poor statement of work
1 Contractor schedule changes
1 Getting the contractor's attention
1 Ensuring decisions are objective

A9. How are acceptable quality levels defined in your contracts?

10 Contractor is required to complete each task to a maximum allowable error percentage
6 Each item has a paragraph describing what is acceptable
4 No answer
2 COTR makes decision based on his judgment
1 The contractor passes or fails based on a performance plan
A10. What steps do QAEs/COTRs take to determine the reason that a contractor is not meeting the AQL?

13 Discuss the problem with the contractor
4 Research into problem and contract to find the cause
3 Review the QA plan
3 No answer
1 Never had the problem

b. Contract Monitoring Questions and Answers

B1. What are the most important duties of a COTR?

11 Ensure the Government gets what it pays for/look out for the Government's interest.
4 QA inspection
3 Documentation
3 Ensure they understand the contractor's duties
3 Communicate with the contractor
2 Understand the contract requirements
1 Provide the contracting officer with accurate, non-biased results of what happened
1 Identify and solve problems

B2. How do you prepare to perform your responsibilities?

9 Formal COTR/QAE Training
6 Technical training/background
3 Follow a monthly inspection schedule and document through some reporting procedure
2 No answer
2 In-house training
1 An understanding of how people think
1 Study the contract and discuss it with the administrator and contractor

B3. What training have you participated in?
14 NAVFAC QAE course
2 Local workshops
1 Individual trade training
2 Engineered Performance Standards training
9 NRCC COTR course
1 U.S. Army COTR course
1 No answer

B4. Was this training adequate?
14 Yes
9 No

B5. What was not properly covered?
9 No answer
3 The course did not cover how to develop a proper QA plan
3 Need more detail on all aspects
3 Proper inspection techniques
1 USMC regulations were not covered
1 Need practical exercises
1 Need a refresher
1 Reporting procedures
1 More emphasis on the COTR options to problems
1 Invoicing
1 Not enough information about Base Operating Support Contracts

B5. What is the normal relationship between COTR/QAE-contract administrators and the contracting officer?

12 Very close. Personal contact on a daily basis
7 Mainly written reports to the contract administrator
2 Call when I have problems. More than once per week
2 No answer

C. Contracting Tasks

D1. What are the three most important tasks done by your organization to successfully administer a service contract?

9 Evaluate the contractor's performance
9 Communication/Work together with the contractor
6 Documentation
6 Ensure a good statement of work is developed
3 Find a good contractor
2 No answer
2 Read contract
1 Hire sufficient staff
1 Keep the contractor moving
1 Follow up
1. Post-award conference
2. Process invoices on time

D2. What tasks require help from outside agencies?

18 None
2 Disposal of hazardous waste
1 Pre-award survey from DCAS
1 Certificates of competency from SBA
1 DCAA audits

3. Survey of Service Contractors

The contractors involved were also referred by the contracting officer that represented each installation. They were not constrained in any way in making their choice. Therefore, the contractors in the survey are considered at least as successful as the average.

The contractors have a wide variance in the number of contracts that they perform yearly as shown in Figure 4. Some deal only with the Federal Government and others have work with state government and industry. Figure 5 is a distribution of the years of experience of the contractors. It is noteworthy to compare the level of experience of the contractors to that of the Government personnel.
Figure 4. Number of Contracts Last Year

a. Contracting Issues

A1. What type of contractual incentives are being used by the government in their dealings with your organization?

12 None
5 Award Fee
2 No answer
1 Cost Plus Award Fee
1 Cost Plus Fixed Fee
Figure 5. Years of Contractor Experience

A2. In your opinion, what is the most important thing the government can do to ensure successful contract completion?

5  Cooperation/Communication

4  Ensure the contractor's bid contains enough money to complete the work

2  Ensure Government furnished supplies are available

1  Specific specifications

1  Use deductions

1  Use proper random sampling

1  Fully man quality assurance staffs
1. Cut through the military and civilian layering
1. Ensure salaries are high enough
1. Make the contract more controllable by the contractor
1. The Government needs to do better estimates of the work
1. Train the QAE
1. Prompt payment of invoices
1. Establish and apply fair and reasonable standards
1. Use cost-plus-incentive-fee contracts
1. Require the contractor to get a performance bond

A3. What is the most powerful incentive the government has to ensure contract compliance?

5. No answer
4. Money
3. Contract option years
3. Termination
2. Withholding
2. Inspection
1. Allow contractors to be rewarded for good performance through preferences in future contracts
1. Cost Plus award fee contract with ample funds in the award fee
A4. What incentives are used by industry or state government the Federal Government should use?

13 None
5 No answer
1 Less administrative requirements. Compliance is costly
1 Cost reimbursement contracts
1 Early completion bonus

A5. Do you also have contracts with industry? If so what is the difference between your relationship with industry and the government?

6 No contracts with industry
3 The relationship with the Government is closer
2 No real difference
2 With industry selection for a job is political, with the Government it is based on performance.
2 Industry and state inspectors have the authority to make a decision, not so with the Federal Government
1 Industry much less formal
1 The government pays on time, not so with industry
1 Government does not always pay on time
1 Industry focused on the end result vice detail
1 Industry wants favors, the Government pays for what it needs
1 Industry only hires a contractor every 3-5 years, the Government re-bids each year.
IV. ANALYSIS OF THE DATA

A. INTRODUCTION

This chapter will analyze the data presented in Chapter III and serve as the foundation for the conclusions presented in Chapter V. The technique employed is a managerial analysis. That is, the researcher will look at the results of the survey and draw conclusions based on the participants' responses.

The areas considered in the analysis are contract types, training and education of Government employees that work with service contracts, and the major tasks involved in service contract administration. The researcher considers these the primary subsets of the administration process. Therefore, by understanding problems associated with these areas, conclusions and recommendations can be made to improve service contract administration.

To ensure the conclusions are valid the following assumptions were used in performing the analysis:

- the responses of the sample represent the responses of the population.

- the responses represent the experiences and prejudices of each group about the Department of the Navy's service contract procurement system.

- it is human nature for each group to place most or all of the blame for problems on another group or the system.
B. CONTRACT TYPE AND INCENTIVES

Contract type is considered of importance to administration because it drives how the administration is done and what motivates the contractor to perform successfully. The goal of the researcher was to determine how services were presently being contracted, determine if it was successful, and seek innovative ways to use contract types to motivate higher standards of contractor performance.

The overwhelming preference was for fixed price contracts. Ninety-six percent of the contracting officers said that they are presently using some or all FFP for service contracts. When questioned about incentives 77% of the contracting officers and 78% of the COTR/QAEs stated that they do not use any incentives in service contracting. Only 50% of the contracting officers and 39% of the COTR/QAEs stated that they would like to try incentives in the future.

These results reflect the official positions of both NAVFAC and NAVSUP. In letters to the Chief of Naval Operations both commands stated that, for commercial activities contracts, firm-fixed-price contracts are the preferred type. [Refs. 12,13] Additionally the General Accounting Office has been critical of DOD for failing to use fixed-price FFP contracts whenever possible. [Ref. 6:pp. 18-21]

Cost-type contracts require contractors to possess a complex accounting system that will meet the Government's
standards for claiming costs. The Federal Acquisition Regulation states: [Ref. 1:part. 16.104]

Before agreeing on a contract type other than firm-fixed-price, the contracting officer shall ensure that the contractor's accounting system will permit timely development of all necessary cost data in the form required by the proposed contract type. This factor may be critical when the contract type requires price revision while performance is in progress, or when a cost-reimbursement contract is being considered and all current or past experience with the contractor has been on a fixed-price basis.

Under this requirement, using cost-reimbursement contracts will both limit the Government's ability to award contracts to small business without substantial accounting systems and require additional administration on the part of the contractor and the Government. Using fixed-price contracts eliminates this requirement.

One reason given for not using incentive contracts is the increased administrative burden on the Government. Contracting officers and COTR/QAEs cited a lack of time and/or people power to perform the administration tasks as an existing problem. Using incentive contracts will only make this situation worse.

When service contractors were asked what the Government could do to ensure successful contract completion the second most frequent answer was to ensure the contractor has enough money in his bid. This answer, along with comments made by contractors throughout the research, leads the researcher to the opinion that fixed-price contracts and competition are driving the prices down to unreasonable levels. The end
result of this cycle of underbidding is that contractors operate at a loss and performance declines unless they can increase the price of the contract through change orders.

The research found that using negotiation is one method that could help competition but keep the bids at reasonable levels. In negotiations, vice sealed bid procedures, the Government can ensure the contractor understands the requirements of the contract and can perform at a profit. Negotiated fixed price contracts will require more work up front by the Government but should reduce problems after award.

The research suggested that performance bonds are another potential solution to problems with contractors under-bidding fixed price contracts. The Government presently requires bonds for fixed price construction contracts but not service contracts. The bonding process should weed out many contractors that do not have the financial backing or the management expertise to do the job. Additionally, requiring contractors to obtain bonds before submitting a fixed price bid would put pressure on contractors to submit bids that are realistic due to the impact of defaulting. One problem with requiring bonding is the potential adverse impact on socioeconomic programs. Minority, small businesses and disadvantaged businesses that are trying to enter the market could be hampered if bonding companies are unwilling to provide them with bonds. Bonding companies may very well
consider the risks associated with these firms too great to assume.

C. EDUCATION AND TRAINING

Education and training is considered important for this research because it reflects on the ability of Government employees to do the required administration tasks. The goal of the research is to consider whether experienced contract administrators considered education and training as critical to successful performance as administrators.

For this analysis, education is defined as formal education, such as that given in universities. It normally consists of a series of courses that lead to a degree. Training is normally short courses that are designed to prepare individuals to perform some task directly related to the job that they perform.

In an effort to establish the minimum educational requirements that should be established for Government service contract administrators, the contracting officers were asked to give their opinion of the basic education that should be required of the GS-1102 series. Fifty percent of the contracting officers said a degree should be required. The other 50% said that high school and a training program should be the minimum requirements. It is important to remember that most of the contracting officers questioned were GS 1102s that had been hired without a college degree.
Most of the survey responses that favored a degree felt that business should be the area of concentration. However, some of the contracting officers stated that any degree is a good indicator of successful performance as a GS-1102. These people felt that the ability to comprehend college level work was the indicator of success.

The subjects that were considered most important were writing, computer classes and contract law. Writing was the only subject that was considered very important by all the participants that answered the question.

Contract administrators receive training throughout their career. The primary driving force behind the amount of training that they receive is funding. Many of the contracting officers stated that their 1102s receive all the training that they should, but it takes longer than required. Those that were getting all the required training on time stated that it was important to the command, and so funding was made available.

Training for the COTR/QAE is done through NAVSUP or NAVFAC. The research shows that they all get some basic training and it is considered adequate. However, due to the wide variety of contracts at the various locations, some informal follow on training should be conducted at the installation. The installations that are conducting this type of training now normally pair a freshly trained COTR/QAE with someone more experienced.
The research disclosed that although both NAVFAC and NAVSUP are administering service contracts, they have completely separate training programs for training the COTR/QAE. Yet, both NAVFAC and NAVSUP are looking for the same results in their service contracts. The major difference is that NAVSUP tends to award more professional services contracts. For example, a large percentage of the NAVSUP contracts are for doctors and engineering services. Another difference that may require special training is that NAVSUP's contracting officers are not normally physically located at the site of contract performance. In spite of these differences, a single DON course could be developed that would meet the needs of both groups and ensure consistent performance throughout the department.

The research brought out a major problem with retaining people that have been trained. They remain with the government as administrators for a rather short period of time. The contracting officers had held a warrant for an average of 5.4 years and almost all of the COTR/QAEs have less than six years experience. The implication for the educational process is that there will always be a need to train new people, and the number of trainers available may be limited. This problem supports the requirement for college level business education.
The research was designed to ascertain the tasks that are involved in administration of a service contract. Determining the primary tasks involved in administration was considered important because by doing so recommendations could be made to improve the process in the most important areas.

When questions were asked concerning important administration tasks, the researcher was expecting attention to focus on post-award activities. However, the task most frequently mentioned by the contracting officers was writing a good statement of work. This answer was also very common in the COTR/QAE responses.

Without a solid statement of work the administration agency will spend an inordinate amount of time negotiating changes to the contract to satisfy the customer's needs. The implication is that the buying agency should ensure that the administration agency and the COTR/QAE have a large part in developing the statement of work. The important thing to be considered in developing the statement of work is that it must not only cover all the tasks that the contractor is required to perform, it must also be enforceable.

Good surveillance was the second most frequently mentioned task. This job falls primarily on the COTR/QAE. The discussions with the contractors concluded that the Federal Government conducts more detailed inspections than either state government or industry customers. This is a finding
that should be considered whenever the Government is preparing a service contract. By holding contractors to a higher level of inspection, the Federal Government increases its administrative burden. The impact on the Government administration agency is that they need a larger staff of COTR/QAEs to perform all the required inspections.

The final task that will be discussed is good communication between the contractor and the administration agency. Good communication was the most frequent answer provided by contractors when asked what the Government can do to ensure successful contract completion. Sixty-five percent of the contracting officers and 57% of the COTR/QAEs said it was how they solved problems with the contractor. Without an open line of communication the only solution to differences is through the dispute process. Communication is a simple idea that must be continually stressed. The procuring agency needs to make an effort to ensure the contractor understands his responsibilities and can solve problems during contract performance. Both the contractor and the Government need to find ways to enhance communication. For example, using negotiations vice sealed bidding and conducting scheduled meetings during contract performance are two ways that the Government can keep good communications with the contractor.
V. CONCLUSIONS AND RECOMMENDATIONS

This chapter takes the analysis that was done in Chapter IV and makes conclusions and recommendations. They are presented by looking at the secondary research questions and providing the results of the research.

A. RESEARCH CONCLUSIONS AND RECOMMENDATIONS

The first question asked what incentives should the Government use to encourage the contractor to perform in an acceptable manner? Based on the results of the research the researcher has arrived at the following conclusions:

- The present emphasis on fixed-price contracts for services should continue. This is the overwhelming choice of all the Government employees surveyed and is present NAVFAC and NAVSUP policy. Additionally, it reduces the administrative burden on the government.

- The use of sealed bid procedures is not effective in service contracts. Sealed bidding is the primary reason that many of the survey participants felt that the final prices were too low. Negotiation, vice sealed bid, gives the Government an opportunity to ensure the contractor understands all the requirements of the contract. Additionally, the negotiation source selection criteria could include quality, past performance and other source selection criteria besides price. Selecting a contractor based on many source selection criteria provides the Government best value vice best price.

Based on the conclusions, the researcher recommends the following actions:

- Use negotiation vice sealed bidding procedures. This will give the Government a better opportunity to ensure the contractor understands the requirements of the contract and can perform for the price he is quoting.
- Require service contractors to obtain performance bonds before they are determined qualified to win the contract. Obtaining Bonds may weed out the weaker contractors and will be an incentive to contractors to ensure they have enough money in their bid.

The next questions concerned training for COTR/QAEs and education for the contract administrators. The conclusions from this question are:

- GS-1102 employees are the Government's business people and should receive the same education as their counterparts in industry. Contracting is becoming a more complex process that requires a wide variety of business skills and judgment. Experience alone cannot provide these people all the skills required.

- COTR/QAEs require training before they can perform successfully in the field. All the organizations surveyed are giving these technical experts some type of formal training before they start to deal with contractors.

- Present training programs, although adequate, are disjointed. The two week program given by NAVFAC is completely divorced from NAVSUP's three day program. However, the general feeling from the respondents was that the training is acceptable.

- NAVFAC QAES and NAVSUP COTRS do basically the same thing. Both represent the Government in the day-to-day management of a service contract. Their differences lie in the different areas of responsibilities of NAVFAC and NAVSUP.

The researcher recommends the following actions based on the conclusions:

- Require GS-1102s to possess a business degree before they are hired. This will give them the background required to become business managers for the Government.

- Provide the resources, time and funding, for existing GS-1102s, without formal education, to get their degree. These people have experience gained over years of service to the Government. Allowing them the time to get higher education will provide the Government a better business manager and a loyal employee.
- NAVFAC, NAVSUP and the Marine Corps should establish one COTR/QAE course for the Department of the Navy. A single course would ensure consistent performance throughout the Department.

- All Department of the Navy activities should establish follow-on training for new COTR/QAEs once they complete the COTR/QAE course. Each installation has different ways to accomplish the COTR/QAEs tasks. Placing new COTR/QAEs with someone experienced for a short period of time will give them an opportunity to build on the skills learned in the training course.

The last question asked what must be accomplished to successfully administer a service contract? The following tasks were considered most important to the survey participants. Therefore, the researcher concludes that they are of primary important to service contract administration. The tasks are:

- Writing the statement of work. Although it is not an administration task, it is the foundation on which contract administrations rests. This is especially true with the present emphasis on firm-fixed-priced contracts.

- Thorough surveillance of the contractor's performance throughout the life of the contract.

- Maintaining good communications between the government and the contractor.

The researcher recommends the following actions based on the conclusions:

- Statements of work should be considered critical when preparing to award a contract. Therefore, they must be given proper attention by all organizations involved to include the contracting office, the COTR/QAE and the customer. Throughout the research this point was made clear by the participants.

- Use negotiations vice sealed bidding to enhance communication early in the contracting process. Negotiations will begin the contracting process with more communication than sealed bidding and can help set the stage for understanding throughout the contract.
- Set up routine performance reviews during administration to enhance communication. This is another simple idea that can be missed in the urgency of day-to-day operations. The first of these should be the post-award or orientation conference.

- The government should consider the level of service required and inspect accordingly. Many of the service contractors stated that the Government conducts more detailed inspections than their other customers. If industry and state governments can get acceptable performance with less inspection, then so should the Federal Government.

B. RECOMMENDATIONS FOR FURTHER STUDY

The following areas should be studied to determine their impact on the service contract process:

- The impact of requiring performance bonds on the ability of small and disadvantaged businesses to get Government contracts.

- Why the contract administrators and COTR/QAEs are not remaining in their jobs for long periods of time.

- Develop source selection criteria for negotiations with service contractors that would emphasize criteria other than price.
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